REGULAR COUNCIL MEETING
TUESDAY
DECEMBER 7, 2021

COUNCIL CHAMBERS
211 WEST ASPEN AVENUE
3:00 P.M.

All City Council Meetings are live streamed on the city's website (https://www.flagstaff.az.gov/1461/Streaming-City-Council-Meetings)

PUBLIC COMMENT

Verbal public comments may be given through a virtual public comment platform or in-person

If you want to provide a verbal comment during the Council Meeting, use the link below to join the virtual public comment room.

VIRTUAL PUBLIC COMMENT WAITING ROOM

Written comments may be submitted to publiccomment@flagstaffaz.gov. All comments submitted via email will be considered written comments and will be documented into the record as such.

AGENDA
A M E N D E D

1. CALL TO ORDER

NOTICE OF OPTION TO RECESS INTO EXECUTIVE SESSION

Pursuant to A.R.S. §38-431.02, notice is hereby given to the members of the City Council and to the general public that, at this regular meeting, the City Council may vote to go into executive session, which will not be open to the public, for legal advice and discussion with the City's attorneys for legal advice on any item listed on the following agenda, pursuant to A.R.S. §38-431.03(A)(3).

2. ROLL CALL

NOTE: One or more Councilmembers may be in attendance through other technological means.

MAYOR DEASY
VICE MAYOR DAGGETT
COUNCILMEMBER ASLAN
COUNCILMEMBER MCCARTHY
COUNCILMEMBER SALAS
COUNCILMEMBER SHIMONI
COUNCILMEMBER SWEET

3. PLEDGE OF ALLEGIANCE, MISSION STATEMENT, AND LAND ACKNOWLEDGEMENT

MISSION STATEMENT

The mission of the City of Flagstaff is to protect and enhance the quality of life for all.

LAND ACKNOWLEDGEMENT

The Flagstaff City Council humbly acknowledges the ancestral homelands of this area's Indigenous nations and original stewards. These lands, still inhabited by Native descendants, border mountains sacred to Indigenous peoples. We honor them, their legacies, their traditions, and their continued contributions. We celebrate their past, present, and future generations who will forever know this place as home.

4. PUBLIC PARTICIPATION

Public Participation enables the public to address the Council about an item that is not on the agenda. Comments relating to items that are on the agenda will be taken at the time that the item is discussed. If you wish to address the Council at tonight's meeting, please complete a comment card and submit it to the recording clerk as soon as possible. Your name will be called when it is your turn to speak. You may address the Council up to three times throughout the meeting, including comments made during Public Participation. Please limit your remarks to three minutes per item to allow everyone an opportunity to speak. At the discretion of the Chair, ten or more persons present at the meeting and wishing to speak may appoint a representative who may have no more than fifteen minutes to speak.

5. CITY MANAGER REPORT

A. City Manager Report

STAFF RECOMMENDED ACTION:

Information Only

6. COVID-19 UPDATE

A. COVID-19 Update

STAFF RECOMMENDED ACTION:

This presentation is for informational purposes only.

7. COUNCIL LIAISON REPORTS

8. APPOINTMENTS

Pursuant to A.R.S. §38-431.02, notice is hereby given to the members of the City Council and to the general public that the City Council may vote to go into executive session, which will not be open to the public, for the purpose of discussing or considering employment, assignment, appointment, promotion, demotion, dismissal, salaries, disciplining or resignation of a public officer, appointee, or employee of any public body...., pursuant to A.R.S. §38-431.03(A)(1).

A. Consideration of Appointments: Parks and Recreation Commission.

STAFF RECOMMENDED ACTION:

Make two appointments to terms expiring August 2022.
Make two appointments to terms expiring August 2024.

B. **Consideration of Appointments:** Tourism Commission.

STAFF RECOMMENDED ACTION:

Make one appointment to a term expiring January 2024.
Make three appointments to terms expiring January 2025.

C. **Consideration of Appointments:** Water Commission

STAFF RECOMMENDED ACTION:

Make three appointments to terms expiring December 2023.
Make three appointments to terms expiring December 2024.

9. LIQUOR LICENSE PUBLIC HEARINGS

A. **Consideration and Action on Liquor License Application:** Chad Earl Doyle "Chevron," 1785 S. Railroad Springs Blvd., Series 09 (liquor store - all spirituous liquor), Owner Transfer.

STAFF RECOMMENDED ACTION:

Hold the public hearing.

The City Council has the option to:
(1) Forward the application to the State with a recommendation for approval;
(2) Forward the application to the State with a recommendation for denial based on information from staff, the testimony received at the public hearing and/or other factors.

10. CONSENT ITEMS

All matters under Consent Agenda are considered by the City Council to be routine and will be enacted by one motion approving the recommendations listed on the agenda. Unless otherwise indicated, expenditures approved by Council are budgeted items.

A. **Consideration and Approval of Grant Application (acceptance, etc.):** Buffalo Park - Nate Avery Trail Accessibility Enhancements through the Arizona State Parks Heritage Fund

STAFF RECOMMENDED ACTION:

Approve the application to Arizona State Parks Heritage Fund for grant funds in the amount of $100,000 with a city match and in-kind contribution of $135,453.

B. **Consideration and Approval of Final Plat PZ-17-00175-05:** Miramonte Birch & Verde, LLC requests Final Plat approval for Miramonte at Birch Avenue. The subdivision consists of 24 residential condominiums units, located at 304-316 E Birch Avenue. The condominium plat is on 0.53 acres in the T4N.1 (Transect) Zone.

STAFF RECOMMENDED ACTION:

Staff recommends approving the Final Plat, and authorizing the Mayor to sign both the Plat and City/Subdivider Agreement when notified by staff that all documents are ready for recording.

C. **Consideration and Approval of Agreement:** Assignment of Development Agreement and Waiver which transfers the Development Agreement between the City and Flagstaff at 4th, LLC to Flagstaff ~~Flagler~~ Elkwood Partners LP.

STAFF RECOMMENDED ACTION:

Approve the Assignment of Development Agreement and Waiver.

D. ~~**Consideration and Adoption of Resolution No. 2021-59 and Resolution No. 2021-60 to Settle Pending Litigation:** Proposed Settlements of Pending Litigation in two separate cases, *City of Phoenix v. Orbitz Worldwide Inc.*, 247 Ariz. 234 (2019) and *Terry v. City of Flagstaff, et. al., CV2018-00150* are before the Council for Consideration.~~

Moved to the REGULAR AGENDA (Item 13D)

11. ROUTINE ITEMS

A. **Consideration and Possible Action:** Cancelation of the Regular Meeting of December 21, 2021

STAFF RECOMMENDED ACTION:

Cancel the Regular Meeting of December 21, 2021

B. **Consideration and Approval of Contract:** Professional Services Contract with Makers Architecture & Urban Design, LLP in the amount of $70,518.00.

STAFF RECOMMENDED ACTION:

1. Approve the Professional Services Contract with Makers Architecture & Urban Design, LLP in the amount of $70,518.00;
2. Authorize the City Manager to execute the necessary documents.

12. PUBLIC HEARING ITEMS

A. **Public Hearing and Consideration and Adoption of Resolution No. 2021-58:** Carbon Neutrality Major Regional Plan Amendment

STAFF RECOMMENDED ACTION:

Hold Public Hearing

1) Read Resolution No. 2021-58 by title only
2) City Clerk reads Resolution No. 2021-58 by title only (if approved above)
3) Adopt Resolution No. 2021-58

13. REGULAR AGENDA

A. **Consideration and Adoption of Resolution No. 2021-55:** A resolution to adopt the Coconino County Multi-Jurisdictional Hazard Mitigation Plan

STAFF RECOMMENDED ACTION:

1) Read Resolution No. 2021-55 by title only
2) City Clerk reads Resolution No. 2021-55 by title only (if approved above)
3) Adopt Resolution No. 2021-55

B. **Consideration and Adoption of Resolution No. 2021-57:** A resolution to approve an Intergovernmental Agreement (IGA) between the City of Flagstaff and Maricopa County for the Police Training and Certification of Police Recruits at the Maricopa County Sheriff's Office Training Academy

STAFF RECOMMENDED ACTION:

1) Read Resolution No. 2021-57 by title only
2) City Clerk reads Resolution No. 2021-57 by title only (if approved above)
3) Adopt Resolution No. 2021-57

C. **Consideration and Adoption of Resolution No. 2021-56:** A resolution of the City Council of the City of Flagstaff, Arizona authorizing the execution of a Pre-Annexation Agreement between Robert Hoffa and Christine Newell and the City of Flagstaff related to the future annexation of approximately 0.18 acres of real property generally located at 221 South Dunnam Street ***(requiring future annexation as a condition for a connection to the city sewer system).***

STAFF RECOMMENDED ACTION:

1) Read Resolution No. 2021-56 by title only
2) City Clerk reads Resolution No. 2021-56 by title only (if approved above)
3) Adopt Resolution No.2021-56

D. **Consideration and Adoption of Resolution No. 2021-59 and Resolution No. 2021-60 to Settle Pending Litigation:** Proposed Settlements of Pending Litigation in two separate cases, *City of Phoenix v. Orbitz Worldwide Inc.*, 247 Ariz. 234 (2019) and *Terry v. City of Flagstaff, et. al., CV2018-00150* are before the Council for Consideration.

STAFF RECOMMENDED ACTION:

1) Read Resolution No. 2021-59 by title only
2) City Clerk Reads Resolution No. 2021-59 by title only (if approved above)
3) Adopt Resolution No. 2021-59

4) Read Resolution No. 2021-60 by title only
5) City Clerk Reads Resolution No. 2021-60 by title only (if approved above)
6) Adopt Resolution No. 2021-60

E. **Consideration and Approval of Parking Demand Study:** Request by Mountain Line to approve a Parking Demand Study for the new Downtown Connection Center subject to the issuance of a Conditional Use Permit.

STAFF RECOMMENDED ACTION:

Staff recommends the City Council approve the Parking Demand Study as presented.

F. **Consideration and Possible Approval:** Deviate from existing out of City Limits Water Policy and offer water service in exchange for acquiring easements, rather than purchase property rights for water line easements, for areas adjacent and surrounding Phases IV and V of the Switzer Canyon Water Transmission Main Project - OR - not deviate from policy, not offer water service, and move forward with purchase of property rights for water line easements.

STAFF RECOMMENDED ACTION:

Accept the Water Commission's recommendation *not* to deviate from policy, *not* to offer water service in exchange for property rights, and to move forward with purchase of property rights for waterline easements outside City limits along the Switzer Canyon Water Main Transmission Project, Phase IV & V.

G. **Consideration and Adoption of Ordinance No. 2021-23:** An ordinance of the City Council of the City of Flagstaff, amending the Flagstaff City Code, Title 3 Business Regulations, Chapters 3-10 User Fees, to establish airport parking fees, and amending Title 8 Public Ways and Property, Chapter 8-06, Airport Rules and Regulations, Section 001-8-06-001-0006.3 to provide for enforcement of airport parking and exemptions from parking fees; providing for penalties, repeal of conflicting ordinances, severability, and establishing an effective date

STAFF RECOMMENDED ACTION:

At the December 7, 2021 Council Meeting:
1) Read Ordinance No. 2021-23 by title only for the first time
2) City Clerk reads Ordinance No. 2021-23 by title only (if approved above)
At the December 28, 2021 Council Meeting:
3) Read Ordinance No. 2021-23 by title only for the final time
4) City Clerk reads Ordinance No. 2021-23 by title only (if approved above)
5) Adopt Ordinance No. 2021-23

H. **Consideration and Adoption of Ordinance No. 2021-24:** An ordinance of the Flagstaff City Council authorizing the acquisition of drainage easements, temporary construction easements, and any other necessary property rights for drainage and flood control improvement to the Spruce Avenue Wash; providing for delegation of authority, subsequent Council approvals, severability, authority for clerical corrections, and declare an emergency

STAFF RECOMMENDED ACTION:

1) Read Ordinance No. 2021-24 by title only for the first time
2) City Clerk reads Ordinance No. 2021-24 by title only (if approved above)
3) Read Ordinance No. 2021-24 by title only for the final time (requires unanimous vote)
4) City Clerk reads Ordinance No. 2021-24 by title only (if unanimously approved above)
5) Adopt Ordinance No. 2021-24 (requires unanimous vote)

14. **PUBLIC PARTICIPATION**

15. **INFORMATIONAL ITEMS TO/FROM MAYOR, COUNCIL, AND STAFF, AND FUTURE AGENDA ITEM REQUESTS**

16. ADJOURNMENT

CERTIFICATE OF POSTING OF NOTICE

The undersigned hereby certifies that a copy of the foregoing notice was duly posted at Flagstaff City Hall on _____, at _____ a.m./p.m. in accordance with the statement filed by the City Council with the City Clerk.

Dated this _____ day of _____, 2021.

_____
Stacy Saltzburg, MMC, City Clerk

5. A.

CITY OF FLAGSTAFF

STAFF SUMMARY REPORT

To:	The Honorable Mayor and Council
From:	Stacy Saltzburg, City Clerk
Date:	12/01/2021
Meeting Date:	12/07/2021

TITLE

City Manager Report

STAFF RECOMMENDED ACTION:

Information Only

EXECUTIVE SUMMARY:

These reports will be included in the City Council packet for regularly scheduled Council meetings, excluding Work Session meetings. The reports are intended to be informational, covering miscellaneous events and topics involving the City organization.

INFORMATION:

Attachments:

City Manager Report
Economic Vitality Monthly Report
Sustainability Monthly Report
Water Services Monthly Report

City Manager's Report

December 4th, 2021

Council and Colleagues, greetings. These reports will be included in the City Council packet for regularly scheduled Council meetings, excluding Work Session meetings. The reports are intended to be informational, covering miscellaneous events and topics involving the City organization.

Also, this report will include our monthly report from Economic Vitality, Sustainability, and Water Services.

In no particular order,

Interim Recreation Manager

Amy Hagin has graciously agreed to take on the role of Interim Recreation Manager (Jon Wilson's previous position) in addition to her existing Parks Manager duties for the next several months. Guess there will be no more trekking in the Sierra Nevadas for while!

This interim arrangement allows us time to review our organizational structure and determine the best path forward for our new Division. The organization has been greatly reliant upon these interim leadership roles during these times of high vacancy, recruitment challenges, and organizational restructuring. We very much appreciate Amy's assumption of these extra leadership responsibilities.

Human Resources & Risk Management

- The Division is working on the implementation of the temporary pay plan and minimum wage changes for January 1st.

- We are grateful for Brandi Suda and her interim role with HR. Interviews are currently underway for the permanent position.

Community Development

With the departure of Mark Stento earlier this year, we had a vacancy that needed to be filled to continue to provide services in our Dark Sky Program. We are pleased to announce that Ms. Janice Hakala has been hired as our new Dark Sky Specialist. She began working in this capacity on Monday, November 15. Please join us in welcoming her to her new work family in Community Development. Welcome Janice!!

Fire Department

- New recruits continue with training on ladders and hoses, here are some pictures showing what they are currently experiencing in their training efforts.

- The B shift crews responded to a structure fire on Oak Ave in the early morning hours this week. Further information enroute was that there were seven-foot flames and smoke coming from one of the apartments in the duplex. First arriving crews found heavy smoke in an apartment with an active fire in the water heater/furnace room. Crews were able to extinguish the fire before it extended into the attached apartment. This fire caused significant damage to the apartment, but fortunately there were no injuries. An investigation of this fire is underway.

Police Department

- The Police Association and Leadership brought in food for Officers working to keep the community safe on the Thanksgiving Holiday last week.

- Patrol and Detectives were able to investigate and make arrests of two subjects who were found to be involved in the thefts of catalytic converters from several victims in our community. Both suspects were from Las Vegas. Apparently there is a high demand for catalytic converters in Vegas. Anyway, great work by all!

- The Police Department hosted a Vera Vaccine Clinic in our Auditorium for willing staff to receive the COVID booster.

- Several staff assisted in taking the award of four (4) Advanced Electronic Defibrillators, to be carried in our supervisor's patrol cars.

- Officer Dustin Eberhardt who was a patrolling the Sunnyside neighborhood came upon a subject who had overdosed. Eberhardt recognized this and administered Narcan which likely saved the individual's life. Thank you to Officer Dustin Eberhardt for your heroic actions. Well done, Sir!

PROSE

- Yep, it's a drainage thing. Parks have been busy performing some self-repairs to the FUTS segments damaged by the flooding events this past summer with infill, regrading, and some debris cleanup. The trail segments include off the Foxglenn Trail and the Sinclair Wash Trail behind Sawmill. One of the locations that was an area where both the Stormwater Team and Parks Team worked together toward a solution as sheet flow was impacting the rear yard of one our residents. The accompanying image shows the handy work … very cool to see a collaborative approach to solve a problem for a community member.

- Recreation Assistant Danny Neal used his community connections to bring a new bonus to the youth at the center. The first Wednesday of the month, IHOP will donate food for 50 students. This is another example of the support our great community shows the Rec. Center!

Public Works

- Fleet completed repairs this week which including testing the unit's ability to draft water at Fleet Services. With the assistance of FFD, we set up a temporary simulated water pond with a tender and drafted water using the unit, which passed the test. The truck was put back into service. The second picture shows the line of Solid Waste Collections vehicles being repaired. Another very busy week for Fleet Services.

- Facilities is upgrading the Airport rental area lighting and the interior of the Joe C Montoya facility lighting to LED lighting.

Management Services

Two awards are worth noting here.

First, the City of Flagstaff received this award for the 27th consecutive year for the annual financial report ending fiscal year June 30, 2020! The Certificate of Achievement is the highest form of recognition in governmental accounting and financial reporting, and its attainment represents a significant accomplishment by a government and its management.
Reports submitted to the COA program are reviewed by selected members of the Government Finance Officers Association (GFOA) professional staff and the Special Review Committee which comprises individuals with expertise in public sector financial reporting. GFOA continually looks at improving governmental financial reporting and frequently issue new standards which the city must comply with to continue our award-winning document. Congratulations to Management Services and the Finance team for this continued achievement!

The second award goes to the Purchasing team which achieved the prestigious Achievement of Excellence in Procurement (AEP) for 2021 from the National Procurement Institute, Inc. This year marks 11 consecutive years that the Purchasing Section has received the AEP award. The AEP Award, which kind of resembles the Washington Monument, is earned by public and non-profit agencies that demonstrate a commitment to procurement excellence. The achievement is based upon 33 criteria with a weighted point value. There are a total of 200 points possible for all criteria, and this year the City of Flagstaff received 155 points for its submission.

For 2021, there were 181 successful organizations that received the award nationally. Congratulations to our Purchasing team for this amazing achievement!

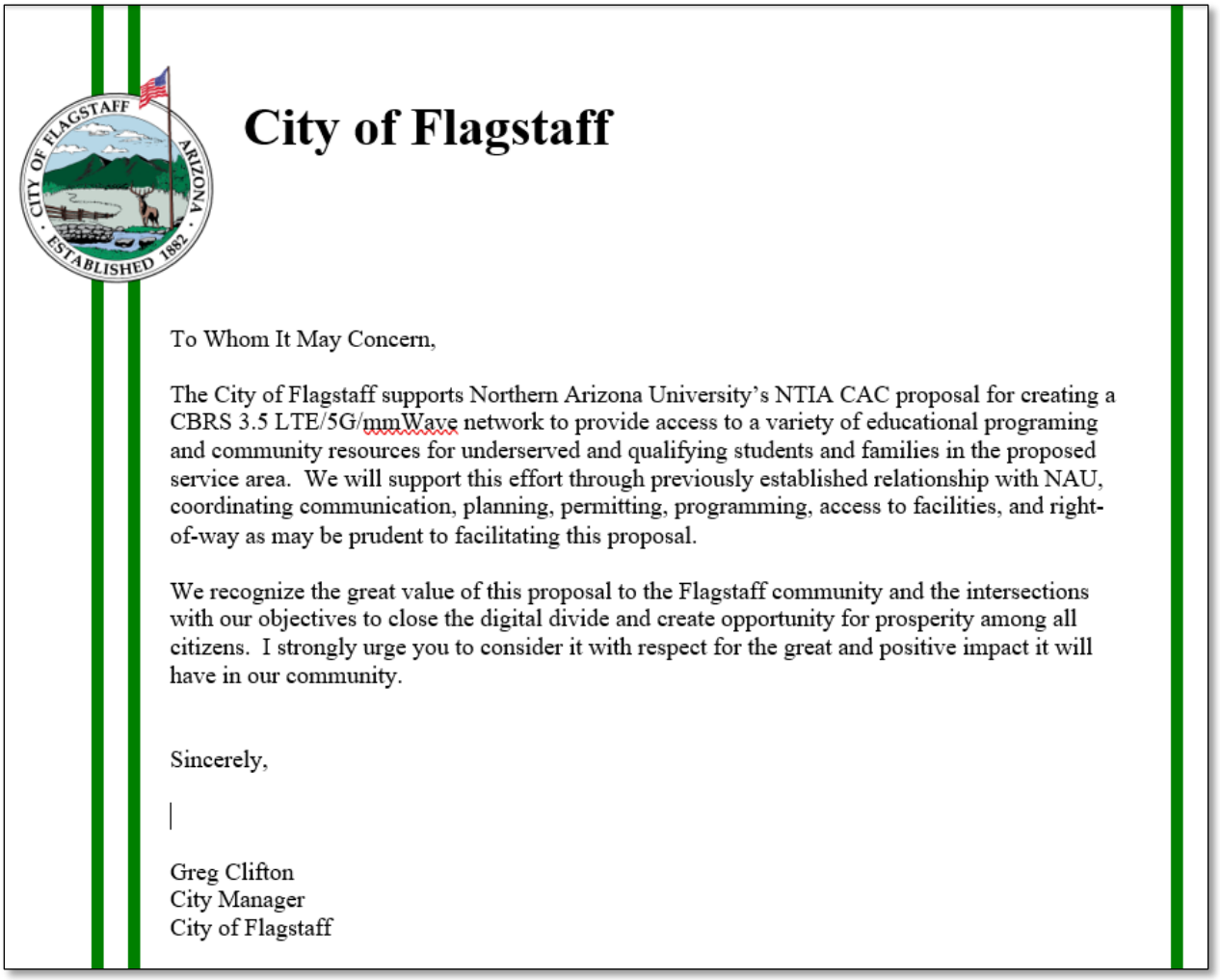
Appended Monthly Reports

Council attached hereto are the October monthly reports from Sustainability, Economic Vitality, and Water Services.

Letter of Support for NAU

Below is a cut and paste of a letter that was sent from our office to support NAU's provision of network services to allow access for a variety of educational programming to underserved individuals.

That is all for now. Thanks!



City of Flagstaff

To Whom It May Concern,

The City of Flagstaff supports Northern Arizona University's NTIA CAC proposal for creating a CBRS 3.5 LTE/5G/mmWave network to provide access to a variety of educational programing and community resources for underserved and qualifying students and families in the proposed service area. We will support this effort through previously established relationship with NAU, coordinating communication, planning, permitting, programming, access to facilities, and right-of-way as may be prudent to facilitating this proposal.

We recognize the great value of this proposal to the Flagstaff community and the intersections with our objectives to close the digital divide and create opportunity for prosperity among all citizens. I strongly urge you to consider it with respect for the great and positive impact it will have in our community.

Sincerely,

Greg Clifton
City Manager
City of Flagstaff

OCTOBER 2021

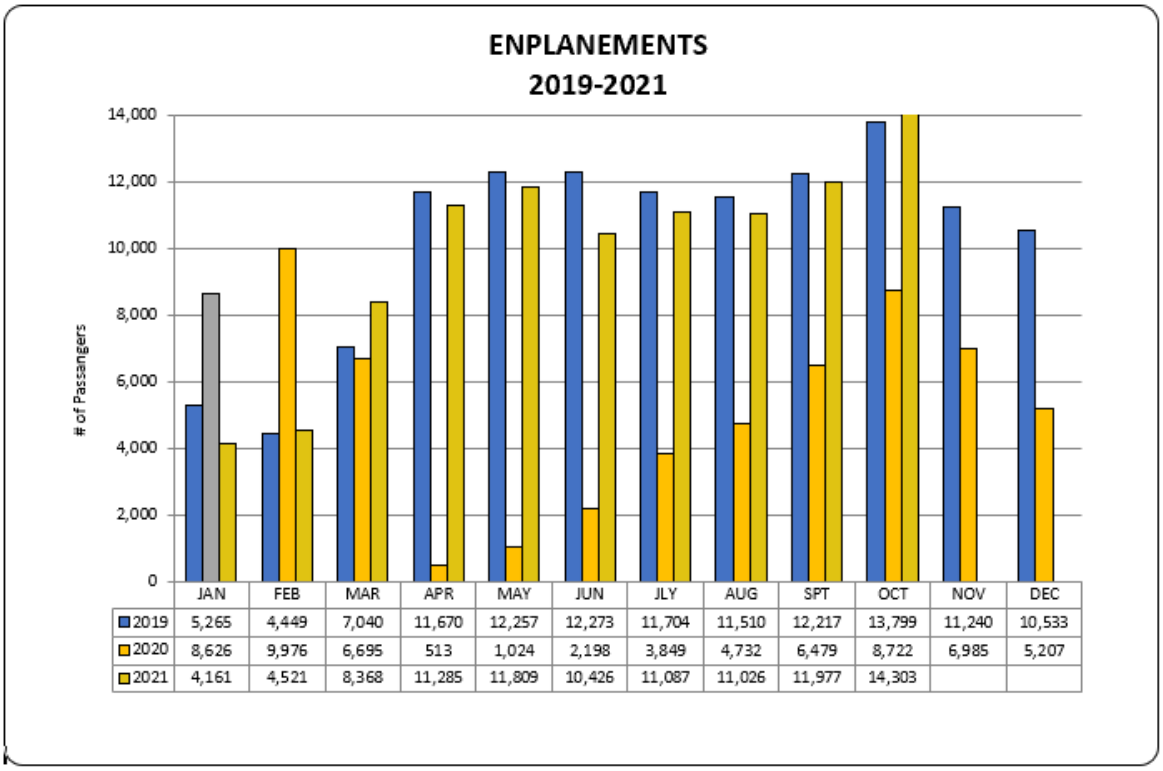
AIRPORT

AIRPORT STATS:

Each month the Flagstaff Airport receives and tracks information on **passenger enplanements, fuel sales, and operations**. This information is presented to the Airport Commission for questions, comments, or further explanations on variations. Each tracking has importance to our airport for the following reasons shared below.

ENPLANEMENTS assist in showing growth which is important to an air carrier when looking to add routes, more days, etc.

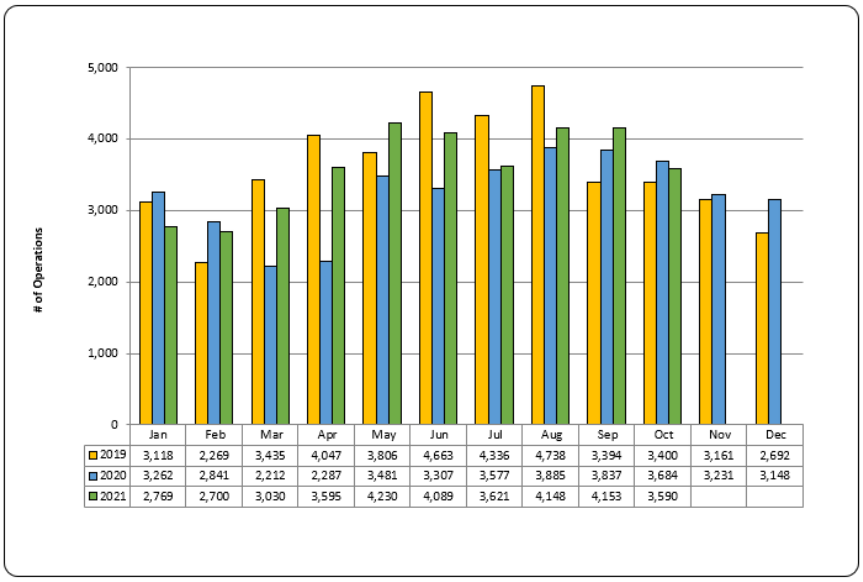
- **14,303 total enplanements for OCTOBER…BEAT 2019 and 2020 numbers!!!**
- 11 flights daily - 3 to Denver, 3 to Dallas Fort Worth, and 5 to Phoenix – **Please Fly Flagstaff First!**



	JAN	FEB	MAR	APR	MAY	JUN	JLY	AUG	SPT	OCT	NOV	DEC
2019	5,265	4,449	7,040	11,670	12,257	12,273	11,704	11,510	12,217	13,799	11,240	10,533
2020	8,626	9,976	6,695	513	1,024	2,198	3,849	4,732	6,479	8,722	6,985	5,207
2021	4,161	4,521	8,368	11,285	11,809	10,426	11,087	11,026	11,977	14,303		

98,963: this is the second highest year ever.

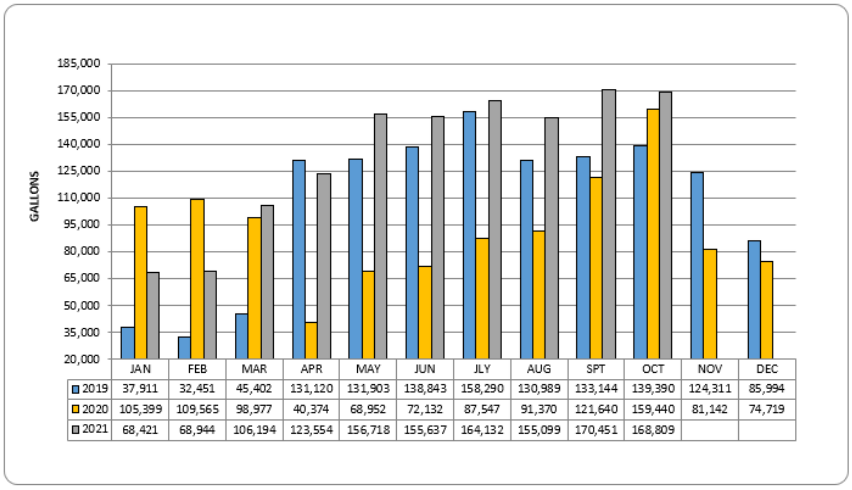
OPERATIONS, which is either one take-off or one landing, show just how busy the airport is from month to month. ***Total was 3,590 which beat our 2019 numbers!***



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2019	3,118	2,269	3,435	4,047	3,806	4,663	4,336	4,738	3,394	3,400	3,161	2,692
2020	3,262	2,841	2,212	2,287	3,481	3,307	3,577	3,885	3,837	3,684	3,231	3,148
2021	2,769	2,700	3,030	3,595	4,230	4,089	3,621	4,148	4,153	3,590		

Figure 1Tower Operations 35,925 Operations.

FUEL SALES is an economic indicator for business traffic and air carrier traffic, which tend be an indicator for which direction the economy is going. ***Fuel sales continue to beat 2019 and 2020 numbers!***



	JAN	FEB	MAR	APR	MAY	JUN	JLY	AUG	SPT	OCT	NOV	DEC
2019	37,911	32,451	45,402	131,120	131,903	138,843	158,290	130,989	133,144	139,390	124,311	85,994
2020	105,399	109,565	98,977	40,374	68,952	72,132	87,547	91,370	121,640	159,440	81,142	74,719
2021	68,421	68,944	106,194	123,554	156,718	155,637	164,132	155,099	170,451	168,809		

Fuel Flow 1,337,809 Gallons, this is the most of any year.

AIRPORT MARKETING ONGOING: New static advertisement placed in the NAU Skydome promoting to FLY FLAGSTAFF, our three routes and to VISIT. DISCOVER. GROW.

STAFF TRAININGS:

- Staff attended the Volunteer Fireman's Insurance Services, Drivers training this month.
- The Airport Director and Airport Programs Manager attended the annual Arizona Airports Association Fall Conference this month. During this visit they spoke with the FAA about funding for the Snow Removal Equipment Building (SREB). Funding may have to come in phases to cover the costs.
  Also, during this meeting guest speakers included Chad Makovsky the Director of Sky Harbor Airport, Don Kriz the Arizona Department of Transportation Aeronautics Division Director and a case study on the Scottsdale Airport Runway project. **It was announced that the 2023 Arizona Airports Association Spring Conference will be held in Flagstaff. The last time it was held here over 200 attendees came to the event.**

AIRPORT NEWS ON VACCINATIONS: The State Transportation Security Director visited the Flagstaff Airport this month to look at operations by their staff and talk with supervisors about the impacts of mandatory vaccinations. They anticipate losing 4 of the 15 staff members due to this Executive Order. If this happens we anticipate increased wait times during the holiday rush.

HANGAR DEVELOPMENT DISCUSSION: Staff met with a Developer that currently is building private hangars at Prescott Airport and would like to build private hangars at the Flagstaff Pulliam Airport. We have several steps to follow, but this could be a positive project for both tenants and the Airport. The Real Estate Manager is working with procurement to look at what would be next steps in the process.

TAXIWAY ALPHA ENHANCEMENTS: Staff worked with our Job Order Contractors this month to fix a crack on the runway and to place crack sealant on Taxiway Alpha. The crack on the runway appears to be over a slab of concrete and sublayer of asphalt separating. The patch of hot asphalt covered by tar sealcoat will hold until next year when we plan an Arizona Department of Transportation Grant to do a complete seal coat of the runway and taxiway. (see attachment photos)

NEW PARKING LOT PAVING: Eagle Mountain finished the paving in October and will continue with striping and internal sidewalk work in November.

CHOOSE FLAGSTAFF

COMMUNITY INVESTMENT

PARKFLAG:

STAFFING:

- During the month of October ParkFlag conducted interviews and made offers to two candidates for our open Parking Aide position. Both candidates accepted the initial offers and have moved on to the background investigation process.
- Stefanie Vaughn accepted the Lead Aide roll position! Stefanie served as interim Lead Aide for 18 months where she performed above and beyond the call of duty. **Congratulations Stefanie Vaughn!**

EQUIPMENT UPDATES:

- ParkFlag received 102 4G modems to replace the outdated 3G modems in our parking Kiosks. These new 4G modems will improve communications between the kiosks and enforcement software as well as shorten the duration customers spend at kiosks paying to park.
- ParkFlag ordered and received Data Packs to make repairs on "out of order" kiosks in the pay to park district. We have updated and repaired 2 of the 4 down kiosks.
- Team members completed necessary updates and repairs on enforcement handheld printers and completed the implementation and testing process of dynamic citations. Dynamic citations make it easier for enforcement staff to issue escalating citation fees to repeat offenders.

PROGRAM UPDATES:

- The Old Municipal Court house is gone, and lot construction is underway.
- ParkFlag staff attended the yearly SWPTA (Southwest Parking and Transportation) conference this past week. We were able to meet and gain insight from multiple parking industry gurus from around the country, including Salt Lake Director of Compliance, Albuquerque Director of Municipal Development, Springdale PD, and our friends from NAU.

BEAUTIFICATION AND ARTS & SCIENCE:

COMPLETED PROJECTS

The City provided restoration funds for the iconic and highly visible Murdoch Center Mural along Butler Avenue (pictured below, left). The Southside Community Association also unexpectedly stretched the funding to help support **three new murals** as well, providing bright surprises! (One of the new murals is pictured below, right). Participating artists include locals Dr. Ricardo Guthrie and Duane Koyawena.

PROGRAMS & OUTREACH

- **Beautification and Public Art Commission (BPAC) Annual Retreat Held** to determine priorities for the 5-year workplan.
- **Beautification in Action Grants Awarded for Fall Deadline**: The Commission approved a mural by a local artist and the rotary club on Peace Surplus (pending approval of final design) and a mural and little library for Willow Bend Environmental Education Center (pending approval of a modified budget).
- **'Live from the Theater Basement' Interview:** Staff were interviewed for this Theatrikos virtual video and podcast series on beautification and public art in Flagstaff.
- **Project Grants with Creative Flagstaff:** Art and Science grant recipients were determined by the Creative Flagstaff committee for Arts and Sciences. Two representatives from the City currently sit on this committee.

PROJECT UPDATES

- **Airport Parking Lot Piece:** Design team meeting held. The artists' new proposed process for the medallion footnotes will go forward with a modification proposed by Eagle Mountain (the main contractor for the project).
- **Courthouse Artwork**: Site work completed to replace background green panel to align them and close gaps (addressing errors in the first installation). It went superbly.
- **Downtown Connection Center Artwork**: Staff worked with artist team on milestones for the art glass project, and the team created a schedule for art glass integration. Materials were submitted for the Planning and Zoning Commission meeting on November 24.
- **Downtown and Southside Tree Plantings:** As part of the seasonal plantings project and the Expanded Use of Right-of-Way (EUROW), Community Investment, Sustainability and Parks staff planted over 20 Blue and Colorado Spruce trees in the Southside, Heritage Square (and nearby areas) to replace the warm season plantings. These trees will sparkle with lights during the Holidays!
- **Downtown Tree Wells**: The City team met to discuss aesthetic and technical options for retrofitting tree wells downtown, as grates are removed (as trees grow larger, the grates and hardscape buckle).
- **Historic Southside Community Garden**: Staff presented the project to Property and Development and the group approved the project to move forward for a $10,000 call for 'Artists and Creatives' for the space. Staff met with Sustainability on site to envision where beautification aspects might be placed and to check on site constraints.
- **Library Entry**: On-site review with upper management of two final color schemes for book sculptures.

  Design team met to address all outstanding details for City Plan Review submittal for the project.

- **Lone Tree Aesthetics:** Met with city consultants on inclusion of public art process in their design work focusing on community input, review by BPAC, and potentially adding a public artist to the design team as a sub to one of the consultants. A community survey was drafted for team input to be posted on Community Forum. The goal of the survey is to tap into community feelings and hopes about this location, to get a sense of place, and to help inspire the design team.
- **Traffic Signal Cabinets 2021**: Staff presented Beaver and Butler design to City Council through three-minute comment and met with artist on the 4th Street & 3rd Ave cabinet to resolve design issues.

ECONOMIC DEVELOPMENT: (Business Attraction, Retention & Expansion)

BUSINESS ATTRACTION:

ARIZONA ASSOCIATION OF ECONOMIC DEVELOPMENT (AAED) AWARDS:

- ECONA and the City of Flagstaff won the **Golden Prospector Award for the Best Deal of the Year** for Whitehall's Attraction.
- **Jack Fitchett** also graduated from the Arizona Association for Economic Developers Academy as an **AAED-Pro** which is a great achievement.
- Congratulations to the ECoNA BUSINESS RETENTION & EXPANSION Team for winning a Golden Prospector award for their **digital brochure,** "Encouraging Entrepreneurship at a Higher Elevation,". The brochure, as described by ECoNA, is a guide to the rich array of resources available in our region for start-up businesses. The Economic Development Team is proud to participate as a member of the BRE Team and congratulates them for their success.

ATTRACTION EFFORTS:

- *UACJ Whitehall Industries* – Continues to grow their team and make additional improvement to the former Walgreens location. They are continuing to ship products to their partners and are receiving additional machinery to ramp up production. Whitehall has requested City staff to begin looking for additional space as they already foresee an expansion on the horizon. With all these moving pieces, a grand opening ceremony has been put on hold but will occur hopefully by the beginning of the new year.

Airport 31.45 Acre Parcel:

- The **Airport 31.45-acre master development** process is continuing to progress. Staff has been meeting with Genterra regularly for the past several months, negotiating a ground lease agreement. The ground lease for this project is nearing finalization and staff will then bring this agreement to Council for approval. This ground lease will outline many important aspects of this parcel's development and will also include the revenue structure that will ultimately benefit and support our growing airport. Staff and Genterra are excited to finish this phase on the project soon and begin working on the overall development plan for this parcel.

OTHER ATTRACTION HIGHLIGHTS:

- Staff has been meeting with **Placer.AI** regularly over the past month to learn how to take advantage of all their software's capabilities. Placer.AI is taking the place of Buxton which was the City's former consumer data tracking software. This new software also appears to have potential to assist our regional planning efforts and staff is exploring this opportunity.
- Our Economic Development Team and ECoNA hosted the **Pipes Trade Association** on a site tour this month and showed them several potential locations. This association was pleased with the properties that they were shown and expect to sign a lease soon. This organization helps develop skills in a variety of trades including welding, machining, etc. We will be hosting a tour with them on 10/11 to show them various potential sites.
- **Two Hands** – Is a new restaurant that has a fun take on the classic corn dog. They will be opening at Aspen Sawmill soon and I can tell you from my own experience this will be something you have to try!
- **A complete list of all the ongoing and scheduled development** in Flagstaff can be found **here**. This Development Status Report was updated this August by our Community Development Division.

BUSINESS RETENTION & EXPANSION:

PROJECT UPDATES

ECoNA BR&E TEAM: The ECoNA BR&E Team met in October to celebrate Manufacturer's Month.

- A strong lineup of manufacturers from around the region from as far as Fredonia were invited to participate in a celebratory event about manufacturing in Northern Arizona.
- Electric Torque Machines (ETM) participated sharing that they were recently acquired by a larger company that has a global presence and access to all elements of a global supply chain. Research and development will remain in Flagstaff as ETM is looking to hire more employees now.

PROGRAM UPDATES

BUSINESS RETENTION AND EXPANSION INCENTIVE: Katalyst Space Technologies and Dark Sky Brewing successfully applied to the program and will be awarded through the Business Retention and Expansion Incentive program.

- Every business that operates in Flagstaff was welcomed to participate in the BR&E Incentive. Eight separate businesses submitted applications to the program proposing a total of 35 positions either retained or created, requesting a total of $220,000 which would be matched by a total of $761,000 private dollars.
- Staff has contacted the businesses that were not awarded and offered to meet with them directly to provide feedback on their applications.
- Staff will work with interdepartmental staff and the awarded businesses to put the appropriate contracts in place so that the businesses may continue their growth in Flagstaff.

LIBRARY
City & County

LIBRARY MONTHLY STATS: From SEPTEMBER and OCTOBER 2021…

	September	October	Difference
Unique Borrowers	4,293	4,059	-5.5%
Total Circulation	29,224	27,534	-5.8%
Reference Help	3,145	2,921	-7.1%
Door Count	16,315	15,975	-2.0%
Downtown Computer Sessions	1,520	1,308	-13.9%
Note: these numbers are a month behind due to reporting timeframes			

- **EAST FLAGSTAFF COMMUNITY LIBRARY (EFCL) NEW STAFF:** We are excited to welcome Nizhoni Le back to EFCL! She was previously a federal work-study student Aide, but she applied for and was hired as a PT Temporary Clerk. We will be hiring a new work-study Aide in the coming months.

- **EFCL SEED DISPLAYS+ACTVITY KITS:** to promote our seed library and to expand our very popular activity kits for pickup, we are using the bulletin board in the children's room for gardening displays! In August 10 Germination activity kits went out, In September, 11 bean dissection kits went out (to coincide with Science Festival), and so far in October, 7 seed paper activity kits have gone out.

- **EFCL PLANTERS!** We purchased self-watering planters with funds from our BIA grant, and they are now outside of EFCL making our entrance much more welcoming. Thanks to our staff Kristi and Michele who took the lead on choosing what to put in our planters and doing the leg work! Michele also crafted informational signs so folks can learn about the plants included.

- **EFCL BETWEEN THE LINES:** Between the Lines is an all-ages virtual drawing club that has been running for several program sessions now. The last session drew two new participants, and one long-time member shared that, "It's the highlight of our day!".
- **EFCL PATRON THANKS:** One of our patrons, that has been living in his truck and using the Wi-Fi in EFCL's parking lot regularly, just came up to the front desk to not only thank us for the Wi-Fi use and general library help but to also let us know that he got a job!
- **LIBRARY DATABASE OUTREACH:** Reference staff delivered two outreach presentations in October on online databases and research resources available through the Library. Staff presented to four students/faculty at the Indian Bible College on October 5th and presented to 105 students/faculty at the Northland Preparatory Academy on October 26th.
- **HALLOWEEK CRAFT KITS:** Reference staff created take-home craft kits for Halloweek and passed out 35 Halloween spiderweb craft kits and 14 Die de los Muertos Offrenda kits to patrons at the Downtown Library.
- **LIBRARY IT HELPDESK:** Library IT implemented a new online HelpDesk on September 9, 2021: HTTPS://FLAGSTAFFPUBLICLIBRARY.HESK.COM/ The HelpDesk is cloud-based and accessible by all library staff in the county. So far, 95 tickets have been opened. 55 have been resolved; 40 remain open. New tickets open daily.
- **LIBRARY INTERNET SPEED INCREASE:** The Flagstaff Libraries increased internet speed from 200Mbps to 1Gbps on October 27, 2021, a five-fold speed increase. (Cost increase: $2,136/year, after E-Rate discount.)
- **LIBRARY E-RATE FUNDING:** E-Rate Funding for the current fiscal year: Flagstaff (60%) = $15,408; County Branches (60%) = $15,286.90; County Affiliates (80%) = $288,604.24 ($286,752.02 of this is for Page Public Library, where they did a major fiber construction project this year.) Without Page, the overall total is $32,547.12, which is average for the Library District.
- **PALSmobile:** First outreach school event, "Under the Stars," at Knoles Elementary on Oct. 27th and had over 100 parents and kids come to the PALSmobile
- **YOUTH SERVICES:** Annual "Locked in the Library" program on Oct. 28 – 17 kids and some parents played in the library from 5:00-6:30pm. They listened to scary stories, ghost hunted with iPads, and went through the Haunted Blue Room!

TOURISM & VISITOR SERVICES

ECONOMIC VITALITY DIVISION ANNUAL STAKEHOLDER & PARTNER MEETING: This annual meeting was held at the High-Country Conference Center in October where we had 85 in-person attendance with several others tuning in virtually. During the annual event, we went over all areas of the Economic Vitality Division as well as gave out three eco-tourism awards.

A special thank you to our councilmembers and city staff who were able to join us that day: Nicole Antonopoulos, Mayor Deasy, Councilmember Aslan, and Councilmember Salas…CM Salas also gave an opening speech to the stakeholders and shared her support for tourism and economic vitality.

Below are the pictures of the **eco-tourism awards** that go to tourism stakeholders who are practicing eco-friendly, sustainable efforts daily in their organizations.

Pictured: Councilmember Aslan, Councilmember Salas, Economic Vitality Director - Heidi Hansen, & CVB Director, Trace Ward

This year's winners were:

BRIX: Outstanding programming for a **restaurant/venue**
MUSEUM OF NORTHERN ARIZONA: Outstanding programming for an **attraction**
DRURY INN AND SUITES: Outstanding programming for an **accommodation**

Another highlight of the event was our local word poet – she did a poem on Flagstaff which is attached to the email.

LODGING METRICS:
(From OCTOBER 2021 – *Note: we always report a month behind*)

- **Occupancy:** -1.1% from 2020
- **Average Daily Rate (ADR):** 29.4% over 2020
- **Revenue per available room (RevPAR):** 28% over 2020

In October, Flagstaff continued to shine as a destination that folks want to explore, and this demand has kept the tourism economy strong in our amazing mountain town. The accommodations industry in Flagstaff took a strong stance on rate again for the month of October which did influence the occupancy, but the overall RevPAR number is excellent.

October	2019	2020	2021	Diff
OCC	78.5%	78.2%	77.4%	-1.1%
ADR	$106.46	$101.22	$130.99	+29.4%
RevPAR	$83.56	$79.14	$101.46	+28%

VISITOR SERVICES:

- **WALK-INS** still down compared to 2019 but over 2020
- **RETAIL** is up compared to 2019 and 2020
- **MODEL TRAIN:** Model Train ran 203 times in the month of October.
- **STAFFING:** New part-time weekend employee, **ELLEN ROSHER** started at the Visitor Center. She came to us with knowledge of local attractions and events and customer services skills.

October	2019	2020	2021	Changeover 2020	Changeover 2019
Walk-ins	15,424	9,650	10,746	11%	-30%
Retail Sales	$30,316	$23,996	$30,757	28%	1%

MEETINGS/EVENTS/CONFERENCES:

CONFERENCE/ROOMS LEADS/BOOKINGS: 1 Lead was sent out and booked in the month of October for a total of 70 room nights and total estimated economic impact of $17,430.

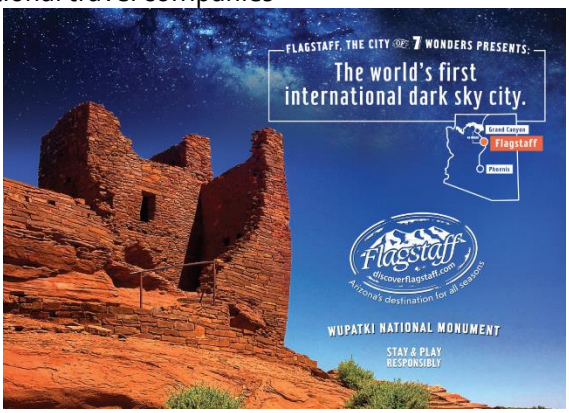
MEETINGS: Staff attended Creative Flagstaff Committee Meetings and Board Meeting, FLP Board Meetings, a Group Coaching Intensive, and planning meetings for two upcoming trips/sales presentations.

DISC GOLF WORLD CHAMPIONSHIP BID: Staff assisted the local Flagstaff Disc Golf Club with information to submit a proposal to be host city for the Disc Golf World Championships in July 2023. Selection will be made by the end of the year and leads will follow if Flagstaff is selected to secure space and room blocks.

TRAVEL TRADE:

MEETINGS/EVENTS:

- Brand USA Travel Week London – 33 appointments with international travel companies
- London Client Luncheon
- Brand USA Webinar
- US Travel Webinar
- AOT Webinar – Northern AZ update
- IPW Trade Show follow-up with 75 travel companies
- Flagstaff Sister Cities Survey Eblast



MARKETING & MEDIA:

- Visit USA Germany – Content submitted for monthly newsletter
- Visit USA Parks Campaign Strategy finalized (Germany, UK, USA Winter Campaign)
- Visit USA UK – ½ page ad content submitted for 2022 UK Travel Planner
- USA-Reisen Germany – October 18 podcast on Flagstaff to travel companies/consumers

London Client (Travel Companies) Luncheon – October 30

Happenstance Restaurant

MARKETING & MEDIA RELATIONS:

October featured haunted Flagstaff, Wupatki's ancient creatures, Lowell's re-opening announcement, Oktoberfest, Overland Expo, fall colors with more LEAF-ometer mentions as well as Flagstaff accolades. Broadcast featured several programs including Seeing the USA, Most Terrifying Places and state and national news covering attractions, fall colors

and Flagstaff's first snow. Print included several stories on awards, ghost stories, Wupatki and fall colors. Digital was also bustling with the same great articles as broadcast and print with Freaky Foot Tours gaining attention.

Discover Flagstaff procured three stories and had five media assists in the month of October.

Print (circ: 1.5m/value: $14k) Broadcast (reach: 7.3m/value: $67K) Digital (reach: 904m/value: $8.6m) International Coverage (circ. 770m/value: $7.1M). October showcased increases across all platforms and resulted in a 623% increase in AVE compared to 2019 and a 182% increase in REACH compared to 2019.

Notable Accolades:

- Elden Pueblo program manager receives Governor's Heritage Award (Lisa Deem)
- Flagstaff-brewed porter wins silver at prestigious Great American Beer Festival (Lumberyard's Pumphouse Porter)
- TripSavvy Announces Fourth Annual Editors' Choice Award Winners (Walnut Canyon)

Please enjoy the highlights below:

*News programs from around the state mentioned "The LEAF-ometer from **Discover Flagstaff**"*

<u>Please enjoy the highlights below:</u>

3 Best Dog-Friendly Road Trips in The U.S.:https://www.thedodo.com/dodowell/dog-friendly-road-trips

TripSavvy Announces Fourth Annual Editors' Choice Award Winners (Walnut Canyon): https://finance.yahoo.com/news/tripsavvy-announces-fourth-annual-editors-140000609.html

The best scenic drives for fall color in America and when to go: https://www.foxnews.com/travel/scenic-drives-fall-foliage-america

Freaky Foot Tours Flagstaff: Haunted history prospers during pandemic: https://www.marketwatch.com/press-release/freaky-foot-tours-flagstaff-haunted-history-prospers-during-pandemic-2021-10-11?tesla=y

The 32 Most Haunted Places in America (Monte Vista): https://www.yahoo.com/lifestyle/30-most-haunted-places-america-205300054.html

Hundreds of weird three-eyed 'dinosaur shrimp' spotted at national monument: Hundreds of weird three-eyed 'dinosaur shrimp' emerge after heavy rain - CNET

13 Bucket-List Fall Weekend Trips to Take In The US (And What To Do Once You Get There) (Flagstaff #3): https://www.buzzfeed.com/hannahloewentheil/best-usa-fall-vacation-destinations

Break Out the Lederhosen and Head North, Flagstaff Oktoberfest Returns Oct. 2: https://www.citysuntimes.com/destinations/break-out-the-lederhosen-and-head-north-flagstaff-oktoberfest-returns-oct-2/article_abod9362-22be-11ec-a81b-83331a53bae0.html Top 10 Outdoor Six Elite Storylines to Watch at the 2021

Chicago Marathon (Sara Hall of Flagstaff): https://www.runnersworld.com/news/a27412249/who-is-running-chicago-marathon/

Lowell Observatory to reopen for general admission Nov. 15: https://www.12news.com/video/tech/science/lowell-observatory-to-reopen-for-general-admission-nov-15/75-ec765dbf-c929-4a71-aa27-4729b510121f

By the Bottle: Flagstaff-brewed porter wins silver at prestigious Great American Beer Festival: https://www.dailyadvent.com/news/161391ad5ba02f9ddf731ae5a29625e6-By-the-Bottle-Flagstaffbrewed-porter-wins-silver-at-prestigious-Great-American-Beer-Festival

WEBSITE:

Analytics compare 2021 to pre-COVID 2019:

- **Domestic visits increased 15.5%: Metro-Phoenix is up 47%, Los Angeles area increased 29%, TX was up 8%, NV up 44%.**
- **Fall content performed very well on landing pages: leaf-ometer increased views by 86%, fall blog increased to 8,090 views, fall drives increased to 6,900 views, things to do content increased 18%. Where to stay page increased 348%, 910 views.**

EMAIL CAMPAIGN:

Email campaign benchmarks are set at 17% open rate and 3% CTR by trustworthy sources such as Mail Chimp and Campaign Monitor. The Flagstaff Local email campaign will reach its year anniversary in February 2022, when I can then begin reporting on YoY comparisons.

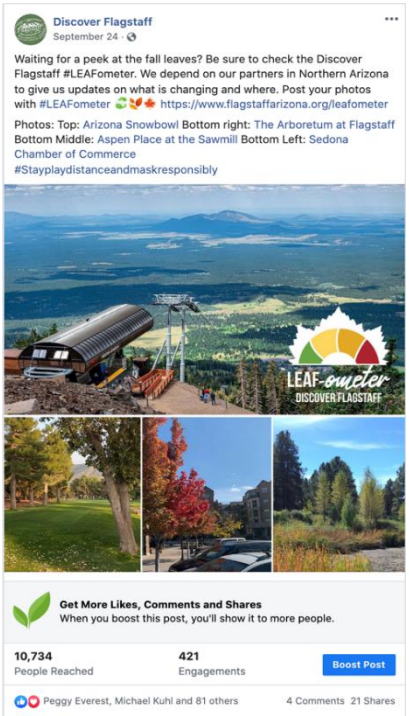
- **The October email drip was sent to our master list of 18,593 contacts with a focus on Fall happenings and events**
    - Year-over-Year comparison
        - October 2020
            - Reach 11,430
            - Open 22%
            - CTR 3%
        - October 2021
            - Reach 18,593
            - Open 23%
            - CTR 1%
        - MoM
            - Compared to September, there was a decrease in both open rate and click-through rate. This is due to the September email being made up of three different emails with content targeting segment-based groups with different interests.

- **The Flagstaff Local e-newsletter** continues to perform strongly with people continuously scrolling to the bottom of the newsletter, with the click-through rate to prove it. The open rate improved MoM, however, the CTR dropped slightly. A send-time of 9am is performing the strongest over any other launch time for this email campaign.
    - Plan to remove photo submission contest while not running, CTR is lower due to new algorithm
  - October 2021
    - Open rate 28%
    - Click-through rate 1%
      - MoM
        - Open rate 26%
        - CTR 2%
  - MoM increase to open rate and decrease to CTR
- All email campaigns are seeing a decrease in click-through rates due to a change in algorithm. Click-through used to count opens as clicks and that is no longer the case.

SOCIAL MEDIA:

Analytics compare 2021 to 2020 and pre-COVID 2019 (Looking at MOM rather than YOY):

- Facebook's growth has dropped in comparison to 2020 growth due in part to pent-up demand which was even higher than 2019.
- YouTube does not show growth without current videos produced this last month.
- Instagram just barely topped 2020 and is not quite back to 2019 numbers.
- Twitter did not fare as well as September 2020 in impressions possibly due to pent-up demand.
- Flagstaff 365 Page views have grown by 133% and the Discover Flagstaff Events page has grown by 202% since 2020.



CREATIVE SERVICES:

ADVERTISING:

- **AZ REPUBLIC WINTER INSERT:** Worked on the Stay and Play AZ Republic insert
- **ANNUAL MEETING POWERPOINT:** Designed the PowerPoint presentations for the Annual Meeting
- **EMAIL BLAST:** Created a "Thank You for Attending the Annual Meeting" Constant Contact email blast
- **ATP TRAVEL AD:** Designed a full-page ad for ATP Travel
- **VISIT USA UK AD:** Created a half-page ad for Visit USA UK
- **LOCAL PRINT ADS:** Designed the November ads for FBN (Walk this Talk) and AZDS (Flagstaff Airport)
- **FLAGSTAFF BUSINESS NEWS AD:** Designed a full-page ad for Flag Live featuring the Flagstaff Airport

CITY JOBS:

- **2022 MINIMUM WAGE POSTER:** Created the 2022 OLS Minimum Wage materials
- **THE BUDGET TEAM LOGO:** Designed the Budget Team logo and PowerPoint template

The Budget Team
CITY OF FLAGSTAFF

- **ALTERNATIVE RESPONSE LOGO:** Continue working on the branding for the Alternative Response Vehicle
- **AIRPORT:** Created table signs for the airport promoting upcoming paid parking
- **ENGINEERING:** Created business card designs for the Engineering Division
- **AIRPORT WEBSITE:** Working with staff to put a new website together for the airport.

PHOTO & VIDEO:

- **PHOTOSHOOT:** Scheduling photoshoot for Road Trip themed creative
- **VIDEO:** Conducted video shoot for the "Yep that's Flagstaff" campaign
- **VIDEO:** Worked on "Yep, that's Flagstaff" video production
- **PHOTOSHOOT:** Conducted photo shoot for Nostalgic Road Trips - FS151/Galaxy Diner/Museum Club
- **VIDEO:** Created a "brag video" for the Discover Flagstaff annual event

WEBSITE:

- **FALL:** Updated website with fall content

THANK YOU for your continued support of the Economic Vitality Division for the City of Flagstaff!
We work to enhance your quality of life 365 days a year!!!

Sustainability Section

Month in Review: October, 2021.

HOT TOPICS:

- Sustainability staff and interns are assisting with the Active Transportation Master Plan Open House series.
    - So far, there have been four Open Houses, as well as 144 survey responses on the Flagstaff Community Forum.
    - Staff will continue engagement efforts by working with community members to create videos about the benefits of active transportation.
    - One more Open House will be at 5:30 pm on Wednesday, October 27th, via Zoom.

CLIMATE ACTION:

- The Carbon Neutrality Regional Plan Amendment dates at the Planning and Zoning Commission have changed:
    - Citizens Review Session: October 27th, via Teams (4:00 pm)
    - Public Hearing One: November 10th, via Teams and at the Aquaplex (4:00 pm)
    - Public Hearing Two: November 17th, via Teams and at the Murdoch Center (4:30 pm)
- Staff presented the Carbon Neutrality Plan to the Coconino Board of Supervisors and invited the County to join our efforts. County staff were directed to develop a climate action plan.
- The Climate Science and Solutions Program is currently hosting a survey on resilience for their Advancing Resilience in Flagstaff Project.
    - This survey will be open until November 1st: https://www.opentownhall.com/11232.
- Jillian Goulet will be leaving her position as the Climate Engagement Coordinator on October 30th. We would like to thank her for all her amazing work with us for the past 2+ years and wish her the best in her future endeavors.

COMMUNITY STEWARDS/LITTER PREVENTION:

- This year, Sustainability staff teamed up with Water Services, Open Space, United Way, and the County to host Make A Difference Day and help those impacted in the Museum Flooding area. 31 volunteers attended, making quick work of cleaning up debris from two homes.

- Staff hosted their annual Flagstaff 15 Minute Makeover.
    - Thank you to everyone who participated! Participants included Water Services, the Aquaplex, the Housing Authority, Hal Jensen, and City of Flagstaff residents. Those who tagged the Sustainability Office on social media were entered into a drawing to win tickets to Jay Lively Ice Rink, the Aquaplex, and Snowbowl.

- Sustainability staff also continue to do litter clean ups after their monthly team meetings.

- October Litter Cleanup Data:

Date	# of Volunteers	Total Hours	Bags of Trash	Bags of Recycling
10/2	6	9	6	0
10/2	20	20	8	1
10/8	6	6	4	0
10/9	5	8	10	0
10/9	20	40	5	0
10/10	18	18	10	2
10/10	1	1	1	0
10/10	50	50	21	0
10/16	5	15	14	5
10/23	3	6	8	0
10/24	2	3	2	0
10/24	3	3	2	0
10/24	20	40	6	0
10/24	20	30	6	1
10/24	3	3	5	0
10/26	3	3	2	0
Totals	185	255	110	9

ENERGY:

- 56% of funds for the Energy Rebate Program have been distributed.
- Work on the Electric Vehicle Charging stations at the Flagstaff Airport is expected to begin in November.
- Staff will be going to City Council on November 2nd to request the relocation of one of the previously approved Electric Vehicle Charging Station locations due to the Rio de Flag project.
- Staff will also present on the Energy Savings Contract (ESCO) to City Council on November 2nd.

FOOD SYSTEMS:

- The Residential Food Scraps Drop Off is transitioning to self-service drop-off stations starting this week through June 2022.
    - Locations include the Flagstaff CSA and Hal Jensen.

- Community members will be able to bring acceptable items to either drop-off station at any time during the week after taking a short participation survey.

- Worm Composting Workshop
  - Staff partnered with Willow Bend to host a free workshop on vermicomposting on October 23rd. They discussed worm anatomy, ecology, diet, and how to build and maintain a worm compost bin. There were 16 participants in attendance with 6 of them being youth. We were able to provide free worm bins to each family thanks to a generous donation of worms and 3 bins from several volunteers in the community.

- The Final Garden Workshop & Food Stories Series took place on October 9th.
  - This session was a Fall Wrap Up for High Altitude Gardening and had 9 attendees.
- Staff have hosted 3 Community Compost Hub 101 Sessions throughout the month of October on Wednesday afternoons.
  - Sessions educated community members on composting using a 3-bin system, how flip bins, and how to get involved as a consistent volunteer at each of the hub locations.

- There are 12 total participants in this program.

MATERIALS MANAGEMENT:

- Drop off day took place on October 23rd at the Flagstaff Police Department
  - 261 attendees came to drop off hazardous waste.
- The fall 2021 Flagstaff Sustainability Leaders course is underway!
  - Participants have been gathering weekly on Thursdays in the Sustainability garage and online to hear presentations from Sustainability Staff, as well as other local sustainability leaders around Flagstaff on topics such as climate change, climate communication, climate justice and equity, composting, and recycling.

SUSTAINABILITY COMMISSION:

- In the meeting on October 28th, Sustainability Commissioners collaborated on a letter with recommendations for the 10-Year Housing Plan and heard presentations from 8 of the top scoring Neighborhood Sustainability Grant applicants. The remaining top scoring applicants for the Neighborhood Sustainability Grant and Water Conservation Research Grant will present in the November 18th meeting where awards will also be decided.
- We have three new Commissioners! Welcome Molly McCormick, April Smith, Margaret Steiger!
- Next meeting: Thursday October 28th, 2021, 4:30pm-6:30pm

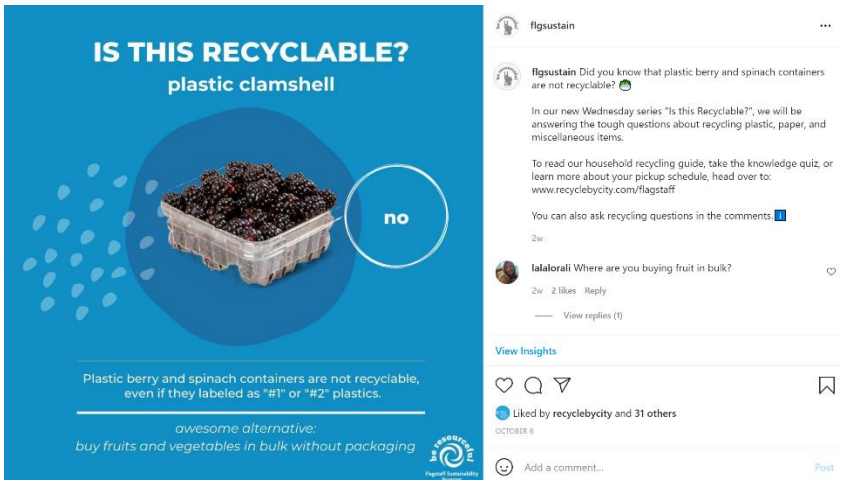
UPCOMING SUSTAINABILITY COMMUNITY EVENTS:

- Electric Car Guest Drive Event, Saturday, November 6th from 10:00 am – 4:00 pm.
    - The Sustainability Office and APS are teaming up for an Electric Car Guest Drive Event! Join us on Saturday, November 6th from 10 am - 4 pm by the Thorpe tennis courts. Participants will be able to test out electric vehicles, such as a Tesla Model 3! RSVP here: https://aps.evnavigator.com/flagstaff.html

- Fix-it Clinic, Saturday, November 20th from 10:00 am – 2:00 pm.
    - Our next Fix-it Clinic will be at Joe C. Montoya Community & Senior Center. Bring an item for repair and a volunteer will help you fix it for free!
    - Make an appointment at https://bit.ly/fix-it-clinic or email kaeli.wells@flagstaffaz.gov.

SOCIAL MEDIA

- Our top post on Instagram was a post about plastic berry and spinach containers not being recyclable. This post received 32 likes and 5 comments.



- Our top post on Facebook was a post thanking all the participants for the Flagstaff 15 Minute Makeover. It received 15 reactions, one comment, and one share.

WS Monthly Update
October 2021

Director

- Our Director and Stormwater staff hosted a tour and presentation to an "ad hoc" legislative committee on post wildfire/flood mitigation.
- The Water Services step pay plan has been completed to replace skill-based pay. Thanks to Mark, Jeannie, Jim, Brian for their work on this.
- The next all-staff meeting will be a holiday meeting, with recognitions.
- Andy is ready to get out in the field with staff to become more familiar with the work in each section.
- The recent Citizen Survey ranked Water Services favorably. Go Team!
- The next step from the Council retreat on infrastructure needs will be a bond discussion or other funding options.
- Andy joined Peter Bruce to interview on KAFF radio in mid-October. Our outreach plan has come a long way in development.

Recruitments

- Gary Miller has accepted the Engineering Section Director position, effective Nov 15. He will provide a great interface with the City's Engineering-Capital group.
- We are recruiting for a Regulatory Compliance Lab Supervisor and Wastewater Collections technicians. We are releasing new job postings for Stormwater Projects Managers and a SCADA Analyst- Electrical.

Safety

- The Rio de Flag WRP safety project is wrapping up, with the final walk through in early November. This provides fall protection for the influent pump and clarifiers.

Accolades

Lisa Deem was awarded a Governor's Heritage Preservation Honor Award, for her work as a volunteer for 20 years with the Elden Pueblo Project.

Water Commission Agenda

- Regulatory Compliance provided an update on Emergency Response Plan (ERP) revisions
- Staff presented an out of city sewer services request.

Administration Offices
2323 N. Walgreens St., Suite 1
Flagstaff, Arizona 86004

- Commission was updated on the Council Retreat / infrastructure presentation.

Lake Mary Water Station with new Flow point Controls

<u>Section Updates</u> (alphabetically)

Customer Service

- The load out stations got a software upgrade. New keypads were installed as part of phase one. The next phase, planned for completion by end of December, will feature instant payment posting and an online customer portal.

Operations

- Red Gap Ranch now has cattle grazing, rotating around the ranch. Staff brought the twin tanks well up and running. They are waiting on pumps and motors to get the stock tanks filled. The grazing lease will be aligned with the Arizona State Land lease renewals.
- The land purchase for the Lake Mary Water Treatment Plant is waiting on a cost-share document from U.S. Forest Service. We are hoping to complete the purchase by the end of the year.
- The national WARN network (Water and Wastewater Area Response Network) reports shortages on chemicals that impact the water treatment processes. Transportation shortages are also an issue. We are urged to place orders early.
- Distribution crews will turn on reclaimed water to Snowbowl at midnight November 1.
- Tim (SCADA IS) and CJ (IT) will join an update with Department of Homeland Security (DHS) on cyber security. The city partners with DHS on security matters.
- Access to Water Services buildings will use new employee badges with photo ID's and can be programmed for use at various city facilities.
- Water Services will pay their share to fund new valve (water) and manhole (sewer) covers for the ADOT -Milton Road Improvement contract. We'll use cast iron material, for longevity.

Regulatory Compliance

- The water lab tested chlorine levels at the Railroad Springs reservoir.
- Pretreatment has one more annual inspection of Significant Industrial Users. They conducted follow up meetings with one user to discuss exceedances.
- Pretreatment staff have successfully renewed their backflow testing certifications.

- Reminder notices are going out to backflow device-owners delinquent in their testing requirements.
- Changes to the ERP presented to the Water Commission will include backflow tester requirement. Code amendments are scheduled for approval on December 7.
- Staff is adding discharge points to the de minimis permits to include reclaimed water flow for hydrant and system flow testing.
- The reclamation plants are due for quarterly and semi-annual sampling.

SCADA Information Systems

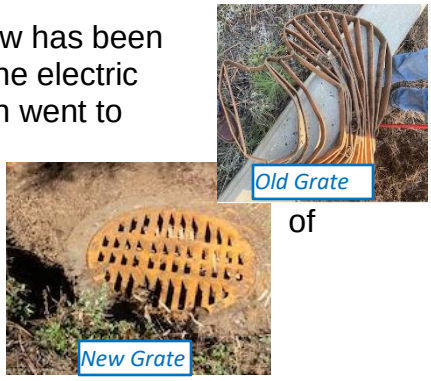
- Radio Network upgrades. We are implementing UHF network sites with master radio sites to solidify communications. Letters went out for Planning & Zoning on a master tower radio site at the Public Works building.
- We're working on the county permitting process for Lake Mary #2, with two towers planned to be operational by spring.
- North Reservoir Plant site and Woody Mountain #4 well are getting communication equipment upgrades.
- SCADA is assisting with the PEPS (Primary Effluent Pump Station) design specifications for Water Reclamation plants, to call out operator needs in the design. The intent is to create a document for future design teams incorporating our standards in projects. We are also developing consistent tags (names) for assets across the Division.
- The Continental Well upgrades posed new challenges to SCADA programming staff, in developing new standards and wiring solutions to interface different models of Variable Frequency Drives (VFDs) into our system.
- Ft. Tuthill #2 well is undergoing flow tests. Ft. Tuthill #1 well is being monitored to identify trends- how the existing #1 Well is affected by Well #2.
- Live testing was performed on McAllister well and it performed as programmed in SCADA, shutting down in response to appropriate signals/alarms.
- We are still revising job descriptions to hire an electrician with SCADA-specific skills.
- Staff met with ESRI, the GIS asset management software manufacturer to plan presentations at a few conferences, including hosting one in the next year.
- We are using flow level sensors to identify total flow coming into the Rio de Flag Water Reclamation Plant. We'll utilize this information for Influent Pump Station re-design.

Stormwater

- While Ed Schenk, Stormwater Manager, took a well-deserved vacation, Water Services and Grants staff covered the site visit review with FEMA/ Arizona Department of Emergency Management (ADEM) personnel. There is a six-month reimbursement window, for 123 damaged sites; we're trying to repair to pre-damage condition with financial support from ADEM.
- Staff is working with WARF- Watershed Alliance for the Rio de Flag. They have an EPA Watersmart grant to create a prioritized watershed plan.
- We're still working on finalizing payments related to last summer's Museum Flood events. Emergency services were called in by the EOC and we're circling back with P.O.'s and invoices for payment.
- Frances Short Pond draft Operations and Maintenance Manual is undergoing review and revisions, clarifying the roles of Stormwater and Parks to maintain this community amenity.
- Staff is still short-handed and covering needed tasks, such as development review.
- Chris Palmer was reclassified to a Project Manager, a well-earned promotion. Congrats, Chris!
- Arizona Department of Environmental Management (ADEM) is finally releasing pre-disaster mitigation funds from 2019, starting with the FUTS low water crossing project.
- The Spruce Wash- Dortha inlet channel project is moving forward with Christine Cameron as Project Manager.
- Ed Schenk co-authored a Geological Society of America presentation in Portland, on stormwater monitoring methods.

Wastewater Collections

- The Stormwater Closed channel maintenance crew has been systematically clearing culverts making repairs. The electric mini-dozer got lighting and cameras installed, then went to work cleaning out culverts on Cedar Ave, Lone Tree near CCC, Fanning Wash and the Country Club box culverts. It can clear out 12-18" depth debris; a slow and steady process. Two storm drains on Rockridge were cleared before the truck went out of service, waiting on a new harness.



- Collections did presentative maintenance on Empire. Maintenance in the wastewater collections system is minimized, due to COVID.
- Four flow meters were installed in the system, for IS asset management.

- The TV van is inspecting collections systems at new multi-housing units on Butler. It was also used to inspect piping at Lake Mary dam.

Water Distribution

- The utility locator (blue stake) job description is under review. A proposal was submitted to HR, as this position requires a high level of knowledge of the distribution and collection systems.
- Parts shortages are driving crews to closely track inventory lists, and place orders well in advance.
- Two crews worked on a damaged fire hydrant replacement along El Paso Road, as identified in the ongoing hydrant inspection program. Over 3,800 hydrants are inspected annually.
- Patrick O'Connor, Distribution Supervisor, is helping out with IDS plan reviews, until the position is filled.
- We are finally receiving a large water meter order, which was months in coming. We'll resume the meter replacement program.
- Crews completed abandonment of a 16" sliding gate valve at the North Reservoir plant that had been consistently bleeding by, allowing small flows to seep past the valve.
- Crews were assisting with flow tests on reclaimed hydrants for the reclaim water modeling project – 16 city-owned and three NAU hydrants.

Water Production

- Woody Mountain #9 well is back up and running. Woody Mountain #4 well functionality is down; it needs a SCADA upgrade.
- McAllister well is running with a drawdown near 500 feet, though still within an acceptable distance above the pump. We're monitoring drawdown with alarms set if water drops to a certain depth, thanks to SCADA personnel.
- Railroad Springs tank has not undergone a fill cycle since September, as nearby McAllister Well is meeting the demand in A+ zone. Water quality checked out just fine at the tank, although after an APS power outage, the well will be left off until demand increases in the zone.
- Christmas Tree, Paradise and the Main Storage tank levels were not reading correctly. At Paradise, we found graffiti and vandalism; someone threw boulders at the solar panels, which impacted the batteries and level sensors. All three tanks received new level sensors.
- Due to the Paradise vandalism, and graffiti seen there and elsewhere, we will be installing signage at all Water production locations, advising that vandalism to a water system is a federal offense.
- After issues maintaining the clearwell level and running the booster pump, the Shop well variable frequency drive (VFD) was replaced with a back-up on hand.

- The Continental well project is waiting on a pump and motor. The contractor was given a time extension to complete the project due to material shortages.
- Upon initial aquifer testing at Ft. Tuthill #2, the well did not perform as expected, with only an estimate of 300 gpm flows (rather than the 1,000 gpm anticipated). We will need to downsize the column pipe diameter and submersible equipment for reduced flows. We do have some smaller equipment on hand and most of the smaller column pipe as well (an additional 200 ft was ordered). We will resume aquifer testing in November, with Empire Pump and other contractors after swapping out column pipe, equipment and generator.
- The semi-annual basin cleaning is going well. We were able to conduct repairs to some of the infrastructure, including paddle straps, influent and drain valves. We also pulled our master meter at the Lake Mary Water Treatment Plant, which has not been working correctly for a while. The meter, only 1-1/2 years old – has been sent to the manufacturer for testing. Upper Lake Mary is currently 24% full, approaching target of at least 20% full by the end of the year.
- The Arizona Department of Water Resources (ADWR) conducted a dam inspection at Lake Mary. Only minor findings or maintenance was mentioned or recommended including concrete repairs and small tree removals. Collections assisted in videoing, to check out a drainpipe at the dam as requested by the inspector.
- Distribution assisted in abandonment of a leaking valve at the North Reservoir plant. Valve and associated piping are slated for abandonment with new Zone A lines, though early abandonment should save the city significant water on an annual basis.
- We received final plans on the 27” raw water pipeline mitigations, to protect the pipeline during Forest Service thinning project. Plans were shared with Forest Services and Fire personnel. A contractor should be selected to complete the work soon.
- Two operators passed Grade 3 certifications with ADEQ.

Water Reclamation Plants

- Plants running well.
- NAU labs are finding a low level of covid with delta variant at the influent, so staff is taking extra precautions, with 12-hour shifts and crew isolation practices.
- Concrete has been poured for the Safety project at Rio, providing fall protection at the clarifiers and bar screens.
- Staff did an in-house project, rehabbing the laundry room. They replaced damaged walls, floors, cabinets, with a separate dirty washer and dryer

from the clean washer and dryer. There were a few plumbing issues, but it looks nice!

- All crews are receiving the first of “Saving your Assets” training.
- ADEQ did a testing session at the Rio de Flag WRP. Another test session is scheduled for December.
- Reclaimed is preparing for Snowbowl to go online at midnight, Nov. 1.
- It’s dredging season, for the biosolids drying ponds. The old truck used for this purpose and inherited from Distribution has finally died, but Fleet has a dump truck we can use for transporting the geo bags.
- We are beginning reclaimed pressure testing to establish a current reclaimed flow model; Flow and pressure testing was last done in 2012. Calibrations and testing will provide data to connect the reclaimed tanks and improvements in planning stages for the system.

Water Resources and Conservation

- Water Resources is contracting geophysics work in areas slated for future development, to determine if a suitable well site location exists before land development begins.
- Water Resources has a new technician working on the aquifer monitoring program and Upper Lake Mary Watershed Monitoring Program.
- Erin gave a webinar for AZ Water on the Future of Reclaimed Water in Flagstaff. She also did a water presentation on Indigenous People’s Day.
- Water Resources re-submitted a water rights claim at Red Gap Ranch for the stock ponds, transferring into the City’s name.
- A Five-year update is due to ADWR on the drought contingency plan.
- A Water Sewer Impact Analysis is underway for the Northern Arizona healthcare campus. It’s a complicated project, as they are still determining their needs.
- Water Resources is assisting with reimbursement to the county for the upsizing of the new sewer line.
- City’s vice mayor attended the Northern Arizona Municipal Water Users Association (NAMWUA) board meeting with a focus on Water Resources history of the member organizations.

Conservation

- Project WET Water Festival stats: 443 students from 20 classes, with 20 teachers from 6 schools. We had over 60 volunteers from NAU.
- Our Conservation Specialist, Emily Melhorn, conducted three school classroom presentations for 120 students.
- Project Wet may be doing an “on-demand” Water Festival for other classes with assistance from Lorie Cavalli (who has a part-time position with Project WET that we partially fund)

- The non-revenue water audit is underway, with some follow up data still being collected.
- School/business water audits: We've been working with Flagstaff Junior Academy, providing them with 5-7 new toilets and aerators for most of their faucets.
- Facilities has agreed to install 11 efficiency (Stealth) toilets at various City buildings.
- Conservation staff is working with the Aquaplex on efficient water use strategies.

CITY OF FLAGSTAFF

STAFF SUMMARY REPORT

To:	The Honorable Mayor and Council
From:	Shannon Anderson, Deputy City Manager
Date:	12/01/2021
Meeting Date:	12/07/2021

TITLE
COVID-19 Update

STAFF RECOMMENDED ACTION:

This presentation is for informational purposes only.

EXECUTIVE SUMMARY:

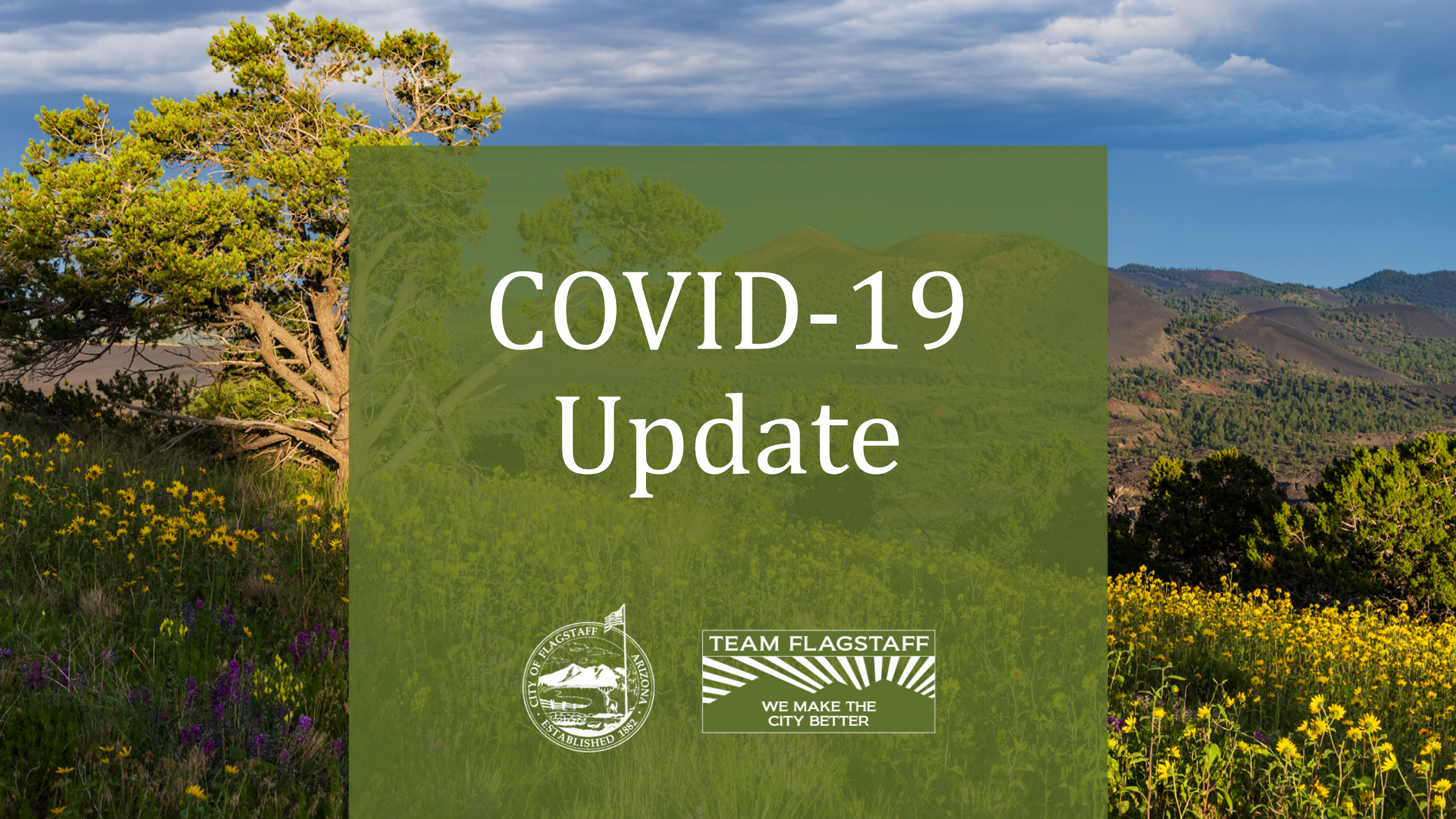
City staff will present the updated COVID-19 dashboard data and an update on Navajo and Hopi Tribal Nations situation with COVID-19.

INFORMATION:

The COVID-19 dashboard includes information on new cases, hospitalization, COVID-related deaths, community transmission level, vaccination status and variants.

The Navajo and Hopi Tribal Nations update will include information about the number of cases, any emergency orders, and related press releases.

Attachments: Presentation


COVID-19
Update
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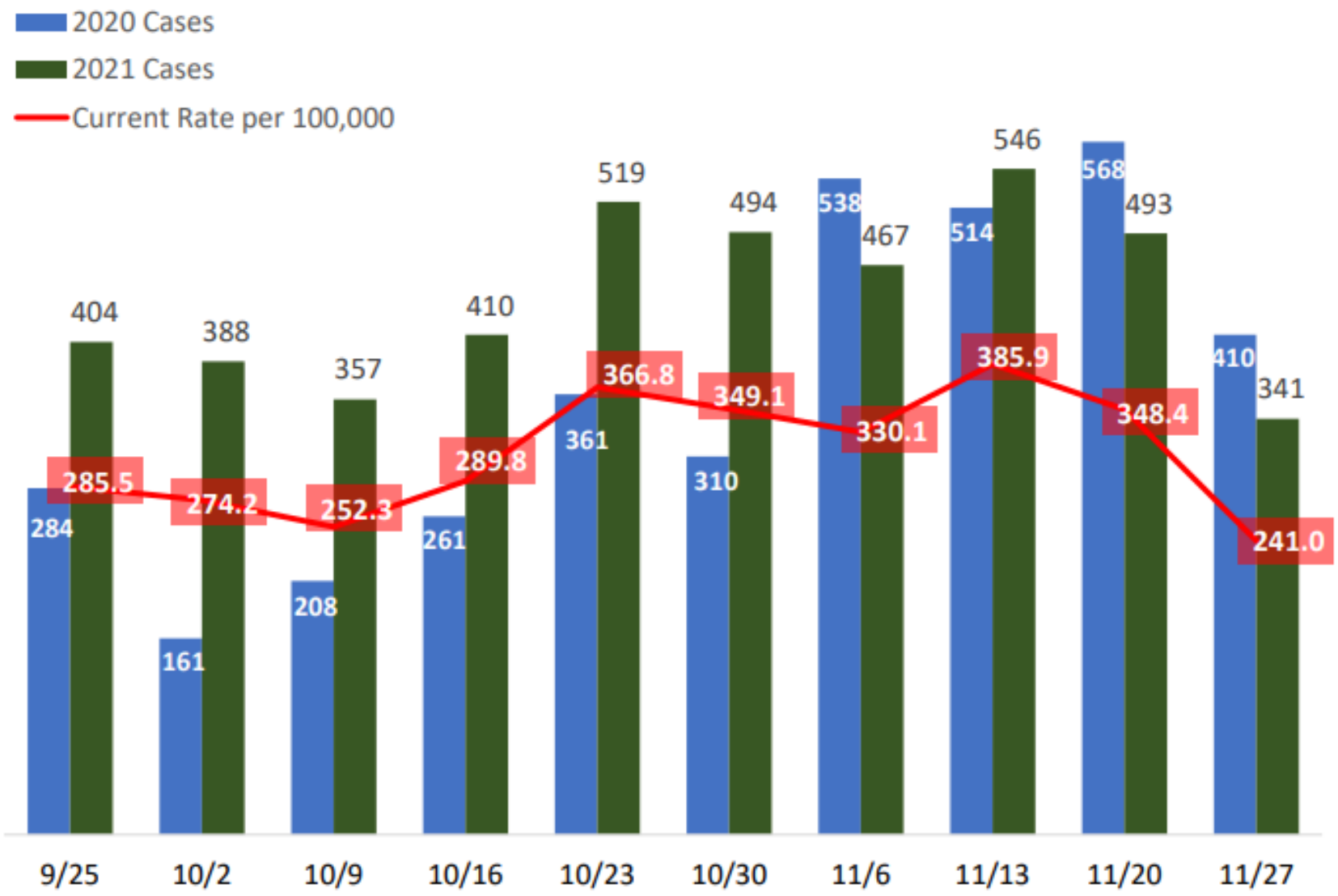
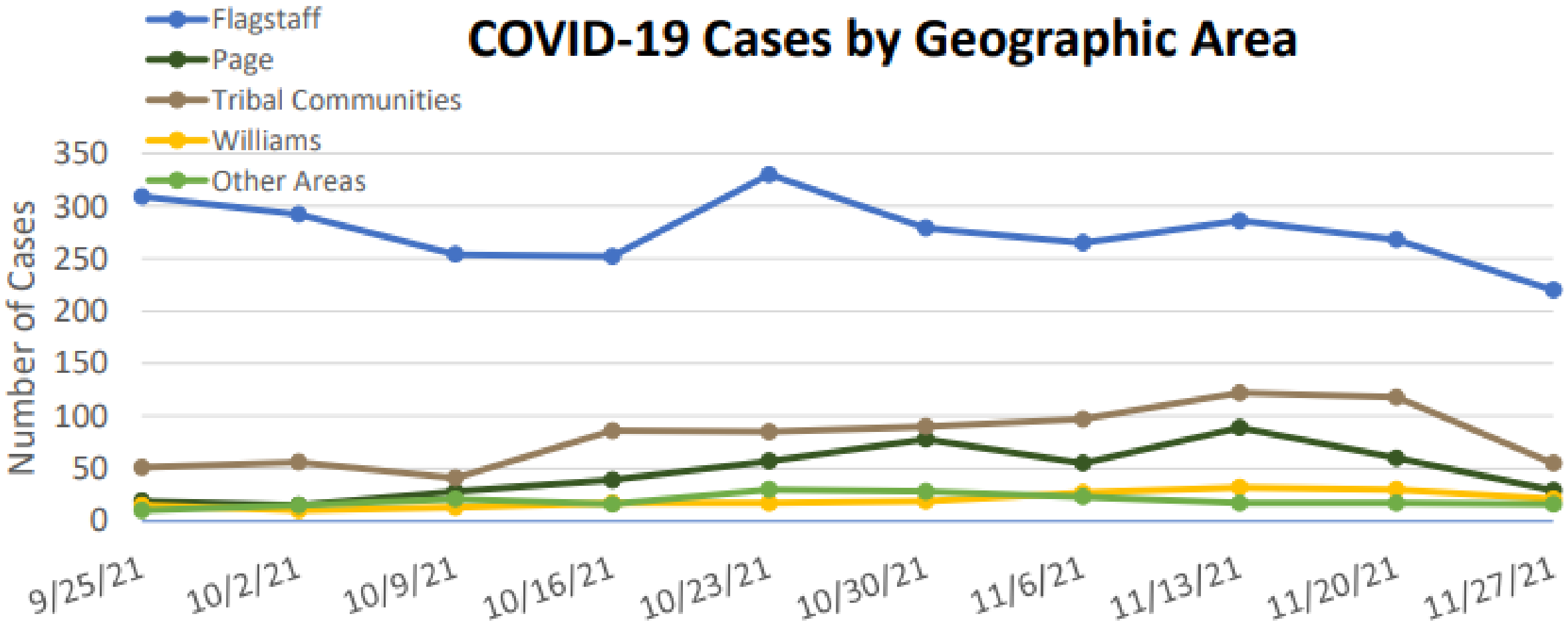
Agenda

- The Data
  - Coconino County Health and Human Services (CCHHS) dashboard
  - Northern Arizona Healthcare (NAH) hospital census
  - Navajo Nation
  - Hopi Tribe
- Indigenous Nations Update

CCHHS: COVID-19 Weekly Cases

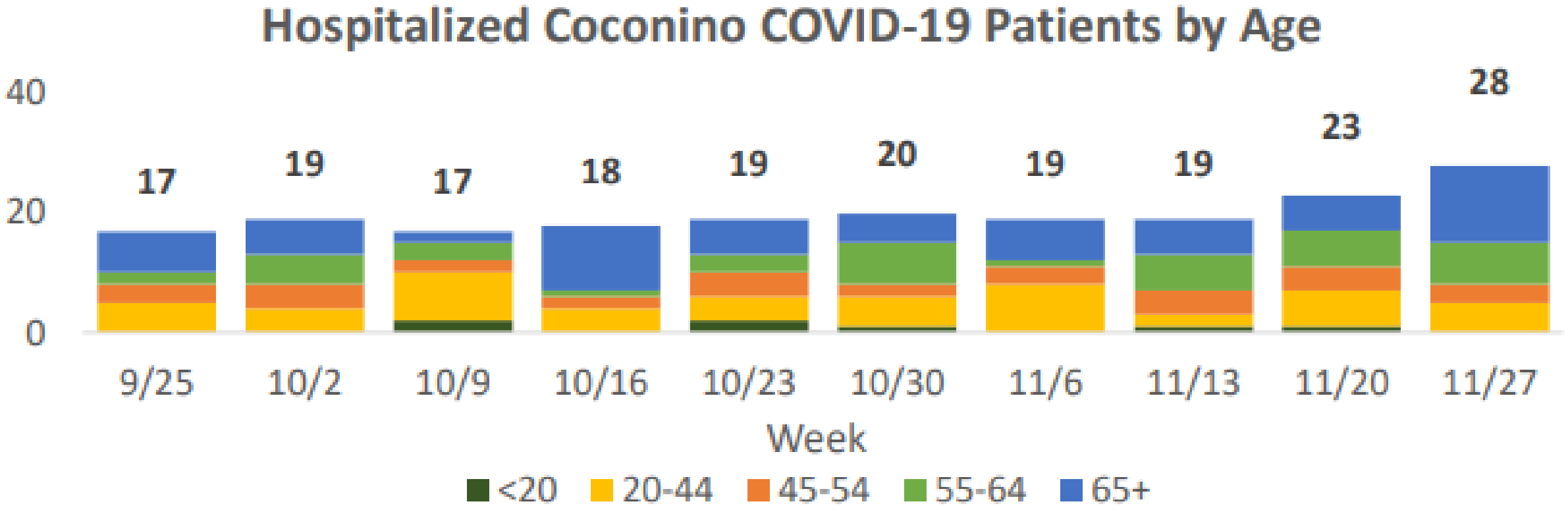


CCHHS: COVID-19 Weekly Cases



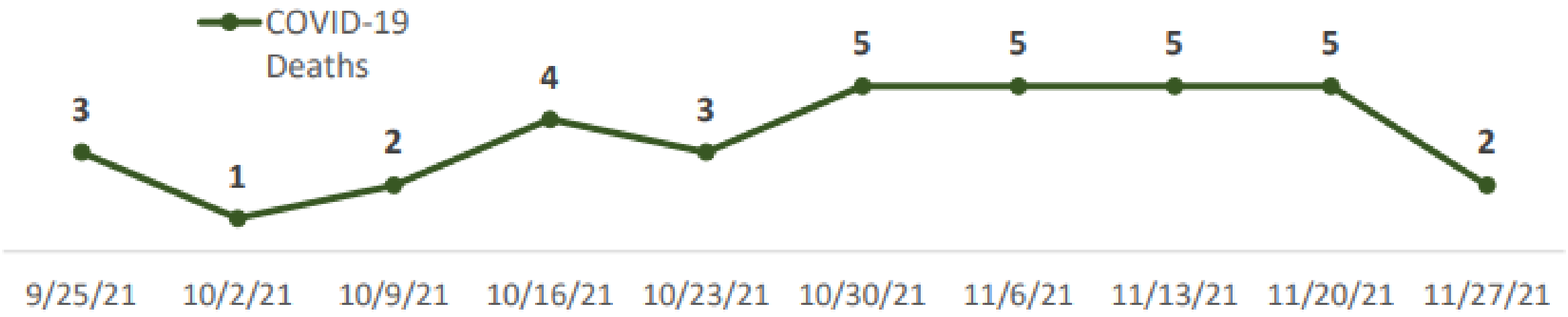
CCHHS: Hospital Admissions

Weekly Case Counts Among Coconino County Residents:



CCHHS: COVID-19 Related Deaths

Weekly COVID-19 Deaths Among Coconino County Residents:



CCHHS: Community Transmission

Community Transmission

Coconino County is currently at a **High** ** level of community transmission.

Indicator	Low Transmission	Moderate Transmission	Substantial Transmission	High Transmission
Total new cases per 100,000 persons in the last 7 days	0-9	10-49	50-99	≥100
Percentage of PCR tests that are positive during the past 7 days	<5.0%	5.0% - 7.9%	8.0% - 9.9%	≥10.0%

CCHHS: Community Vaccination

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Doses in Coconino

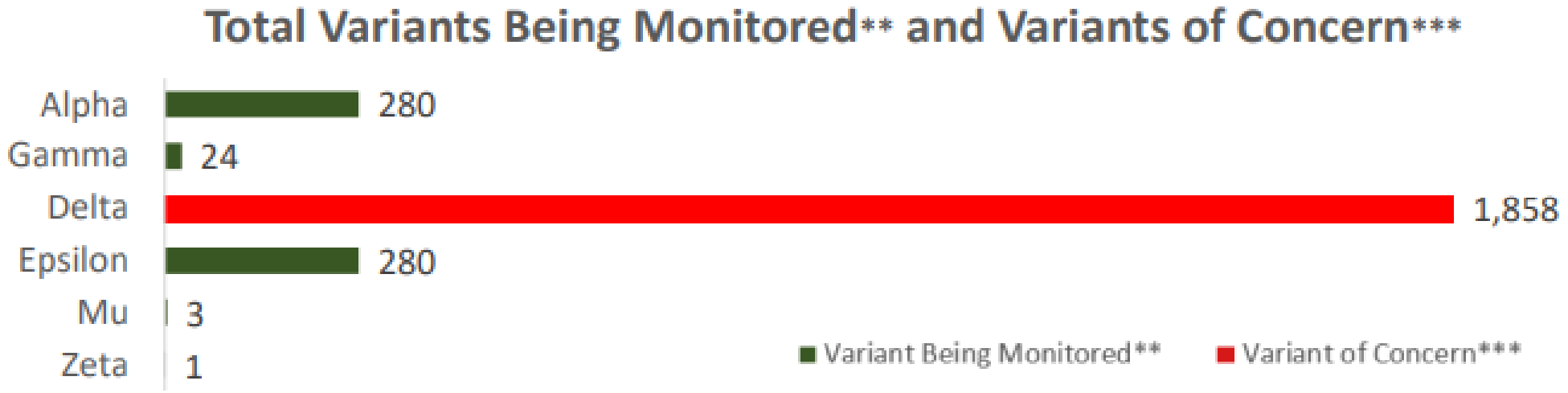
Total number of COVID-19 vaccine **doses administered:**	193,192
Total number of **doses reported yesterday:**	727

People in Coconino

Total number of **people** who have received **at least one dose** of COVID-19	92,603
Percent of people vaccinated:	62.9%
Percent of *eligible* people vaccinated:	66.5%
Number of people who are **fully vaccinated** against COVID-19:	81,438

CCHHS: Variants

COVID-19 Variants:



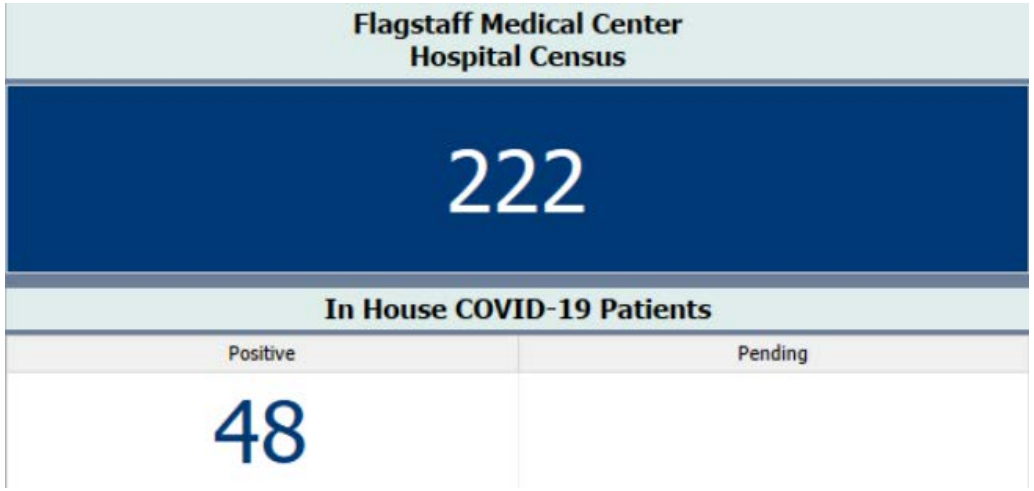
***Variants Being Monitored include variants for which there are data indicating a potential or clear impact on approved or authorized medical countermeasures or that has been associated with more severe disease or increased transmission but are no longer detected or are circulating at very low levels in the U.S, and as such, do not pose a significant and imminent risk to public health in the U.S.*

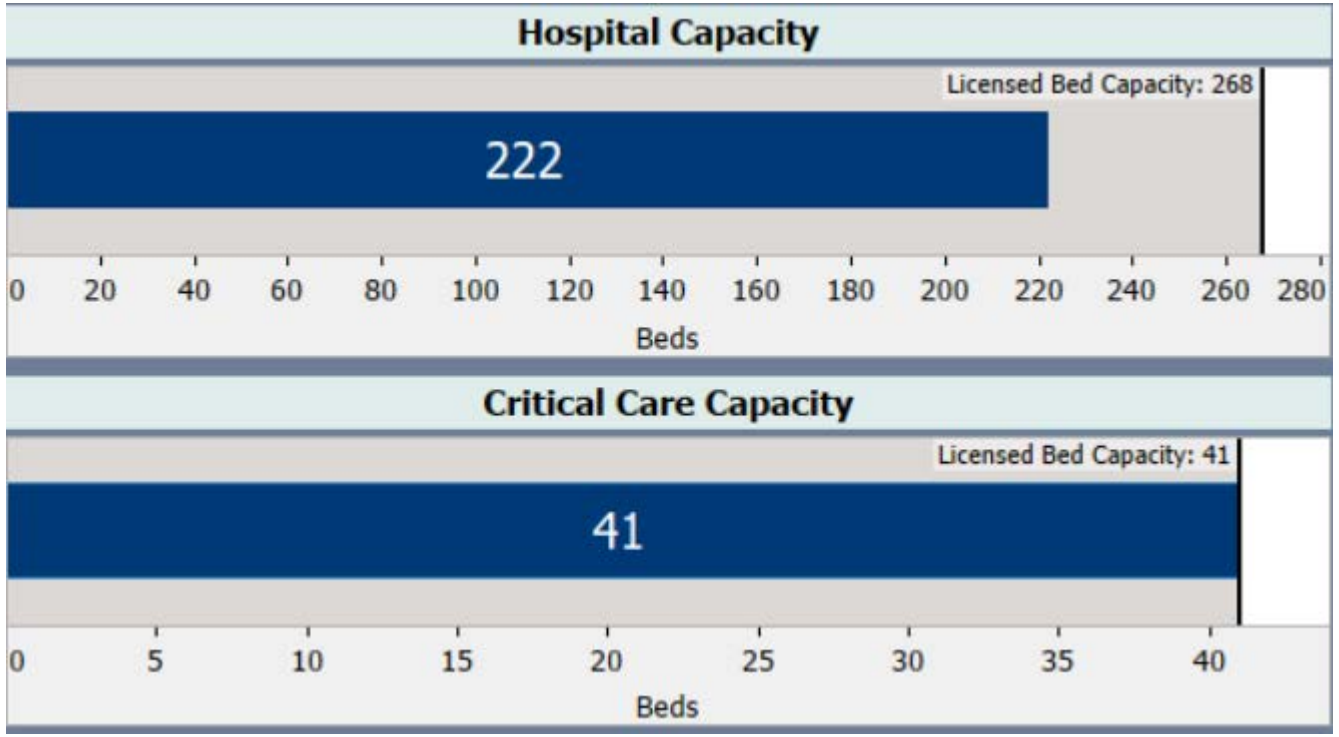
**** Variants of Concern include variants for which there is evidence of an increase in transmissibility, more severe disease (e.g., increased hospitalizations or deaths), significant reduction in neutralization by antibodies generated during previous infection or vaccination, reduced effectiveness of treatments or vaccines, or diagnostic detection failures.*

For more information about SARS-CoV-2 variants, please visit the CDC webpage:

SARS-CoV-2 Variant Classifications and Definitions (cdc.gov)

NAH: Hospital Census





Data as of December 5, 2021

Indigenous Nations Data

Navajo Nation

NN Health Facilities Data	Difference in 21 days	Current Week 12/1/21	Previous Date 11/10/21
Total Tested	+ 22,329	396,362	374,033
Negative Cases	+ 17,662	323,729	306,067
Confirmed Positive Cases	+ 1,824	39,561	37,737
Recoveries	+ 2,063	37,504	35,441
Deaths	+ 35	1,542	1,507

Indigenous Nations Data

Hopi Tribe

Hopi Health Care Center Data	Difference in 9 days	11/30/21 KUYI Radio FB	11/2/21 KUYI Radio FB
Total Tested	+		11,981
Negative Cases	+		10,227
Positive Cases	+ 10	1,642	1,632
Hopi Tribal members (includes #s from Tuba Hospital)	+		1,530

Indigenous Nations Update

- Navajo Nation
  - COVID cases attributed to variant of concern
  - Public Health Emergency Orders remain the same
  - Health Advisory for 65 communities
  - Issued health advisory about booster for ages 18 and older

Indigenous Nations Update

- Hopi Tribe
  - Recommending vaccinations and boosters
  - Continuing with third part of phased reopening
  - COVID variant testing

Council Questions & Discussion

TEAM FLAGSTAFF

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CITY OF FLAGSTAFF

STAFF SUMMARY REPORT

To:	The Honorable Mayor and Council
From:	Stacy Fobar, Deputy City Clerk
Date:	12/01/2021
Meeting Date:	12/07/2021

TITLE:

Consideration of Appointments: Parks and Recreation Commission.

STAFF RECOMMENDED ACTION:

Make two appointments to terms expiring August 2022.
Make two appointments to terms expiring August 2024.

Executive Summary:

The Parks and Recreation Commission consists of seven (7) citizen members. The Parks and Recreation Commission makes recommendations to the Council regarding City parks and recreational programs, the annual budget and capital improvements for the Parks and Recreation Divisions. There are currently three available seats. It is important to fill vacancies on Boards and Commissions quickly so as to allow the Commission to continue meeting on a regular basis.

There are eight applications on file for consideration by the Council, they are as follows:

- Autumn Layden (new applicant)
- Michael Patrick Ley (new applicant)
- Brenda Linskey (new applicant)
- Stephen Parsons (current commissioner)
- Dana Rowden (new applicant)
- Josh Stackhouse (new applicant)
- Warren Stone (new applicant)
- Linda Stricker (new applicant)

COUNCIL APPOINTMENT ASSIGNMENT: Councilmember Sweet, Councilmember Shimoni, Vice Mayor Daggett, and Councilmember Salas

Financial Impact:

These are voluntary positions and there is no budgetary impact to the City of Flagstaff.

Policy Impact:

None

Connection to PBB Priorities/Objectives, Carbon Neutrality Plan & Regional Plan:

- Foster community pride & civic engagement by increasing opportunities for public involvement, in line with best practices & legal requirements
- Enhance community involvement, education & regional partnerships to strengthen the level of public trust

Has There Been Previous Council Decision on This:

None

Options and Alternatives:

1) Appoint three Commissioners: By appointing a member at this time, the commission will be at full membership and able to continue to meet and provide recommendations to the City Council.
2) Table the action to allow for further discussion or expand the list of candidates.

Community Benefits and Considerations:

The City's boards, commissions, and committees were created to foster public participation and input and to encourage Flagstaff citizens to take an active role in city government.

Community Involvement:

INFORM: The vacancies are posted on the City's website and individual recruitment and mention of the openings by Board members and by City staff have occurred, informing others of these vacancies through word of mouth.

Attachments: Parks and Recreation Commission Authority

CHAPTER 2-03
PARKS AND RECREATION COMMISSION

SECTIONS:

2-03-001-0001 COMMISSION CREATED; MEMBERS:
2-03-001-0002 TERMS; VACANCIES; COMPENSATION:
2-03-001-0003 ORGANIZATION AND RULES:
2-03-001-0004 POWERS AND DUTIES:

2-03-001-0001 COMMISSION CREATED; MEMBERS:

There is hereby created a Parks and Recreation Commission for the City, consisting of seven (7) members appointed by the City Council. (Ord. No. 2007-11, Amended 02/06/2007; Ord. 2014-28, Amended, 11/18/2014)

2-03-001-0002 TERMS; VACANCIES; COMPENSATION:

Terms of the appointed members shall be for three (3) years.

The Council shall fill vacancies for the unexpired term of any of the members of the Commission and no member of the Commission shall receive compensation for services thereon. (Ord. 1475, 2-3-87)

2-03-001-0003 ORGANIZATION AND RULES:

Upon the taking effect of this Chapter, and when appointed, the members shall meet and organize and elect a Chairman to serve for one year with a new Chairman being elected each succeeding year. The Commission may adopt by-laws, procedures and standards for the operation of the Commission not inconsistent with the provisions of this Chapter. A quorum shall consist of four (4) voting members. The Commission shall meet not less than four (4) times each year.

(Ord. No. 2007-11, Amended 02/06/2007)

2-03-001-0004 POWERS AND DUTIES:

A. The duties of the Commission shall be to advise the Council, through periodic written reports to the Council, recommending policy direction on City lands, structures and facilities that are set aside or should be set aside or dedicated to recreational purposes, including but not limited to parks, swimming pools, playgrounds, playing and sports fields and golf courses. The scope of the activities of the Commission shall also include but not be limited to advising and recommending policy direction in activities involving recreational and cultural pursuits of the elderly and the young and to otherwise employ in constructive and wholesome manner leisure time of the citizens.

B. The City Council may consider the advice and recommendation of the Commission and thereafter give direction through the City Manager to implement the recreational program as they see fit.

C. The Commission shall review and make recommendation on the annual budget of the Parks Section and Recreation Section prior to the submittal thereof to the City Manager.

D. With respect to the parks and recreation portion of the Bed, Board and Booze Tax allocated under Chapter 3-06, Hospitality Industry Tax Revenues, the Commission shall make recommendations to the Council concerning the annual budgetary allocation of the parks and recreation portion of this tax, to include but not be limited to:

1. Developing parks and recreation facilities, and programs as needed to benefit the community and its visitors.

2. Funding for the Flagstaff urban trails system development and maintenance.

3. Developing, acquiring and distributing material to promote parks and recreation.

4. Retaining of appropriate staff to implement approved programs.

E. For purposes of subsection (D) of this section, "parks and recreation" means the development and management of public parks, recreational facilities, and programs which are available to the residents and visitors including funding the Flagstaff urban trail system. (Same meaning as set forth in Section 3-06-001-0001.) (Ord. 865, 12-12-72; Ord. 1335, 10-16-84; Ord. 2015-22, Amended, 01/05/2016)

CITY OF FLAGSTAFF

STAFF SUMMARY REPORT

To:	The Honorable Mayor and Council
From:	Stacy Fobar, Deputy City Clerk
Date:	12/01/2021
Meeting Date:	12/07/2021

TITLE:

Consideration of Appointments: Tourism Commission.

STAFF RECOMMENDED ACTION:

Make one appointment to a term expiring January 2024.
Make three appointments to terms expiring January 2025.

Executive Summary:

The mission of the Tourism Commission is to develop, promote, and maintain Flagstaff as a year-round visitor destination with professional visitor services that will benefit the community economically, environmentally, and socially. The Tourism Commission makes recommendations to the Council concerning expenditure of the tourism portion of the Bed, Board and Booze ("BBB") tax, a 2% local transaction privilege tax. The Tourism Commission consists of seven citizens serving three-year terms. There are currently four seats available. It is important to fill vacancies on Boards and Commissions quickly to allow the Commission to continue meeting on a regular basis.

There are six applications on file for consideration by the Council, they are as follows:

- George Averbeck (new applicant)
- Terry Madeksza (current commissioner)
- Jennifer Rolley (current commissioner)
- Scott Sawyer (new applicant)
- Jonathan Stone (new applicant)
- Jamie Thousand (new applicant)

In an effort to reduce exposure to personal information the applicant roster and applications will be submitted to the City Council separately.

COUNCIL APPOINTMENT ASSIGNMENT: Councilmember Shimoni, Councilmember Aslan, Vice Mayor Daggett, and Councilmember Sweet

Financial Impact:

These are voluntary positions and there is no budgetary impact to the City of Flagstaff.

Policy Impact:

None.

Connection to PBB Priorities/Objectives, Carbon Neutrality Plan & Regional Plan:

Inclusive and Engaged Community

- Foster community pride & civic engagement by increasing opportunities for public involvement, in line with best practices & legal requirements
- Enhance community involvement, education & regional partnerships to strengthen the level of public trust

Has There Been Previous Council Decision on This:

None.

Options and Alternatives:

1) Appoint four Commissioners: By appointing four members at this time, the Tourism Commission will be at full membership, allowing the group to meet and provide recommendations to the City Council.

2) Table the action to allow for further discussion or expand the list of candidates.

Community Benefits and Considerations:

The City's boards, commissions, and committees were created to foster public participation and input and to encourage Flagstaff citizens to take an active role in city government.

Community Involvement:

INFORM: The vacancies are posted on the City's website and individual recruitment and mention of the opening by Commission members and City staff has occurred, informing others of this vacancy through word of mouth.

Attachments: Tourism Commission Authority

CHAPTER 2-13
TOURISM COMMISSION

SECTIONS:

2-13-001-0001 CREATION OF THE COMMISSION:
2-13-001-0002 COMPOSITION AND TERM OF OFFICE:
2-13-001-0003 COMPENSATION OF COMMISSION MEMBERS:
2-13-001-0004 ORGANIZATION:
2-13-001-0005 MEETINGS:
2-13-001-0006 DUTIES:

2-13-001-0001 CREATION OF THE COMMISSION:

There is hereby established a City Tourism Commission. There shall be seven (7) voting members of said Commission who shall meet as hereinafter provided to consider and recommend programs for the expenditure of the tourism portion of the Bed, Board and Booze Tax allocated under Chapter 3-06, Hospitality Industry Tax Revenues.

“Tourism” means the guidance, management, marketing, accommodation, promotion and encouragement of tourists (same meaning as set forth in Section 3-06-001-0001). (Ord. No. 1579, Enacted, 08/02/88; Ord. 2001-27, Amended, 11/20/2001; Ord. 2014-28, Amended, 11/18/2014; Ord. 2015-22, Amended, 01/05/2016)

2-13-001-0002 COMPOSITION AND TERM OF OFFICE:

The composition of the membership shall consist of:

A. Seven (7) members to be appointed by the City Council. Each member shall serve for three (3) years, on a staggered term basis.

B. The City Manager or the Manager’s designee shall be an ex officio member of the Commission. The member shall have no voting privileges.

The City Manager shall be responsible for staff support of the Tourism Commission.

The Council shall fill vacancies for the unexpired term of any of the members of the Commission.

A member’s term in office shall commence with the first regular Commission meeting following the appointment and terminate with the regular Commission meeting at which the successor takes office. No voting member of the Commission may be appointed to more than two (2) consecutive full terms. (Ord. No. 1579, Enacted, 08/02/88; Ord. No. 1674, Amended, 09/18/90; Ord. 2001-27, Amended, 11/20/2001; Ord. No. 2006-09, Amended 04/10/2006; Ord. 2014-28, Amended, 11/18/2014; Ord. 2015-22, Amended, 01/05/2016)

2-13-001-0003 COMPENSATION OF COMMISSION MEMBERS:

Members of the Commission shall serve without compensation.

(Ord. No. 1579, Enacted, 08/02/88)

2-13-001-0004 ORGANIZATION:

The Commission shall elect a Chairperson from among its members. The term of the Chairperson shall be one year with eligibility for reelection. Commission members may not serve more than two (2) consecutive terms as Chairperson. The Council representative shall not be eligible for the Chair.

(Ord. No. 1579, Enacted, 08/02/88)

2-13-001-0005 MEETINGS:

A. The Commission shall hold at least one (1) regular meeting per month, which shall at all times be open to the public. The time and place of said meeting shall be posted in accordance with the applicable Arizona State Statutes.

A quorum consisting of a minimum of four (4) voting members shall be required to conduct business.

B. The Chairperson of the Commission shall meet with the Chairpersons of the Economic Development Commission and the Beautification Commission at least once per month. The purpose of the meeting is for coordination of the three (3) commissions only. The intent is not to create another commission. The meeting shall at all times be open to the public. The time and place of said meeting shall be posted in accordance with applicable Arizona State Statutes.

C. If a member is absent for three (3) meetings within a twelve (12) month period, excused or unexcused, that member may be replaced by the City Council. (Ord. No. 1579, Enacted, 08/02/88; Ord. 2001-27, Amended, 11/20/2001; Ord. 2014-28, Amended, 11/18/2014)

2-13-001-0006 DUTIES:

The duties of the Commission shall be to:

A. Prepare a Five (5) Year Master Plan. The Five (5) Year Plan shall be used as a guideline for future programs. Said Plan shall be presented to the Council prior to April 1st of each year.

B. Develop and present to City Council an Annual Plan outlining the Commission’s program recommendations for the upcoming fiscal year. Said plan shall be presented to the Council prior to April 1st of each year.

C. Make recommendations to the City Council concerning the annual budgetary allocation of the tourism portion of the Bed, Board and Booze Tax to include, but not be limited to:

1. Providing funding to the qualified, established public or private agency to administer, on a contract basis, tourism programs as required.

2. Developing and implementing a marketing plan. Major elements of the marketing plan will include, but not be limited to, developing a specific image for Flagstaff, identifying target market segments, and implementing a promotional plan directed to target market segments.

3. Establishing visitor information center(s) to include, but not be limited to, a high profile location, easy visitor access, adequate staffing, a toll-free telephone number for visitor information, and develop other facilities as needed to benefit visitors and the community.

4. Establishing an educational program to include, but not be limited to, scholarships for hospitality education at Northern Arizona University.

5. Promoting activities that enhance the community's image and the overall quality of life.

6. Retaining of appropriate staff to implement approved programs.

D. Perform any additional duties as determined by the City Council related to tourism activities. (Ord. No. 1579, Enacted, 08/02/88; Ord. 2015-22, Amended, 01/05/2016)

CITY OF FLAGSTAFF

STAFF SUMMARY REPORT

To:	The Honorable Mayor and Council
From:	Stacy Fobar, Deputy City Clerk
Date:	12/01/2021
Meeting Date:	12/07/2021

TITLE:

Consideration of Appointments: Water Commission

STAFF RECOMMENDED ACTION:

Make three appointments to terms expiring December 2023.
Make three appointments to terms expiring December 2024.

Executive Summary:

The Water Commission consists of seven citizens and a representative from the Planning and Zoning Commission. It reviews extensions of the water and sewer collection systems, treatment and use of water furnished by the City, treatment and disposal of the City's sewage system effluent, and water/sewer rates. There are currently six seats available. It is important to fill vacancies on Boards and Commissions quickly so as to allow the Commission to continue meeting on a regular basis.

There are seven applications on file and they are as follows:

- Malcolm Alter (current commissioner)
- Donald Bills (new applicant)
- Robert Burr Dilday (new applicant)
- Joe Loverich (new applicant)
- John Nauman (new applicant)
- Randall Pellatz (new applicant)
- Kurt Riegelman (new applicant)

In an effort to reduce exposure to personal information the applicant roster and applications will be submitted to the City Council separately.

Council Appointment Assignment: Mayor Deasy, Vice Mayor Daggett, Councilmember Salas, Councilmember Sweet, Councilmember Aslan, Councilmember McCarthy, and Councilmember Shimoni

Financial Impact:

These are voluntary positions and there is no budgetary impact to the City of Flagstaff.

Policy Impact:

None

Connection to PBB Priorities/Objectives, Carbon Neutrality Plan & Regional Plan:

There is no Council goal that specifically addresses appointments to Boards and Commissions; however, boards and commissions provide input and recommendations based on City Council goals that may pertain to the board or commission work plan.

Has There Been Previous Council Decision on This:

None

Options and Alternatives:

1) Appoint six Commissioners; by appointing a Commissioner at this time, the Water Commission will be at full membership, allowing the group to meet and provide recommendations to the City Council.

2) Table the action to allow for further discussion or expand the list of candidates.

Community Benefits and Considerations:

The City's boards, commissions, and committees were created to foster public participation and input and to encourage Flagstaff citizens to take an active role in city government.

Community Involvement:

INFORM: Board members and City staff have informed the community of these vacancies through word of mouth in addition to the vacancies posting on the City's website.

Attachments: Water Commission Authority

CHAPTER 2-04
WATER COMMISSION

SECTIONS:

2-04-001-0001 PURPOSE AND EFFECT:
2-04-001-0002 DEFINITIONS
2-04-001-0003 DECLARATION OF POLICY
2-04-001-0004 WATER COMMISSION
2-04-001-0005 OFFICERS OF THE COMMISSION
2-04-001-0006 MEETINGS
2-04-001-0007 APPLICATION; PROCEDURE FOR
2-04-001-0008 ACTION ON APPLICATION
2-04-001-0009 EXTENSION OF URBAN SERVICE BOUNDARY
2-04-001-0010 CHANGES IN WATER, SEWER, RECLAMATION SYSTEM
2-04-001-0011 INVESTIGATIONS

2-04-001-0001 PURPOSE AND EFFECT:

The provisions of this Chapter shall be deemed to be the minimum requirements for the promotion of public health, safety, convenience and public welfare. These provisions shall govern whenever they are more stringent than any other statute, provision of this Code, legal covenant, agreement or contract, but shall not abrogate any other requirement which is more stringent or restrictive than the provisions of this Chapter.

2-04-001-0002 DEFINITIONS:

Whenever any of the following words are used in this Chapter, they shall have the meaning herein ascribed to them:

BUSINESS USE: The use of water which is primarily for business or commercial purposes, including the occasional furnishing of water to travelers or tourists by hotels, motels or other owners of places of public convenience.

COMMISSION: The Commission as designated and established by this Chapter.

COUNCIL: The Council of the City of Flagstaff.

RECLAIMED WASTEWATER: The treated effluent which is the product of the municipal wastewater system, which although not suitable for human consumption, may be used for certain industrial or commercial purposes. (Ord. 1789, 01/05/93)

RESIDENTIAL USE: The use of water which is primarily for the persons and property residing in a building or a portion thereof designed to be occupied as an abode. (Ord. 447, 8-26-58)

STORMWATER RUNOFF: The direct response of a watershed or drainage area to precipitation from a storm event and/or snowmelt and includes surface and subsurface runoff or drainage

that enters a watercourse, street, storm drain or other concentrated flow during and following precipitation.

SEWER SYSTEM: All the facilities within and without the City required or convenient for the collection and treatment of sewage including the disposal, recycling or utilization of the resulting effluent by the City, within or without the corporate limits. (Ord. 980, 12-7-76)

STORMWATER MANAGEMENT DESIGN MANUAL: A manual of technical hydrologic and hydraulic calculations and computations by which all designs of stormwater facilities shall adhere.

STORMWATER MASTER PLAN: A comprehensive plan for all city watercourses that sets forth necessary plans and improvements to improve or mitigate the effects of flooding throughout the community.

STORMWATER QUALITY PROGRAM: A program that involves best management practices that result in an improvement to stormwater quality and that includes the National Pollutant Discharge Eliminations System (NPDES) as mandated United States Environmental Protection Agency (USEPA) and other improvements as may be necessary and approved by the Council.

STORMWATER MANAGEMENT ACTIVITIES: All activities associated with the Stormwater Management Design Manual, the Stormwater Master Plan, the City's Stormwater Quality Program, and the National Flood Insurance Program (NFIP).

URBAN SERVICE BOUNDARY: The boundary established by the City Council that surrounds vacant land areas bypassed by urban growth and immediately adjacent to urban growth that can be most efficiently and effectively provided facilities and services by the City. (Ord. 1789, 01/05/93)

WATER SYSTEM: All the facilities within and without the City required or convenient for the production and distribution of water by the City within or without the corporate limits. (Ord. 447, 8-26-58)

(Ord. No. 1789, Amended, 01/05/93)

2-04-001-0003 DECLARATION OF POLICY:

The Mayor and Council of the City declare that one of the most important duties of the City is to furnish its citizens with water, to collect, treat and dispose of sewage, to reclaim and distribute wastewater, and to develop and implement and effective stormwater management program. It is further declared that production and distribution of water, and collection, treatment, reclamation and disposal of sewage, and management of stormwater within and without its corporate limits requires special investigation and sound recommendations. In order to insure these objectives, both from the standpoint of economy and convenience, a Commission is required to investigate extensions, and priority of extensions, of the water, sewer, and reclaimed wastewater systems; the use and priority of use of water furnished by the City; the treatment, reclamation, and ultimate disposal of the resultant effluent of the sewage system of the City; the management of

stormwater; and make appropriate recommendations. (Ord. 1789, Amended, 01/05/1993; Ord. 2009-08, Amended, 03/03/2009)

2-04-001-0004 WATER COMMISSION:

There is hereby established a Water Commission. There shall be seven (7) voting members of said Commission, who shall consist of:

A. Seven (7) voting members to be appointed by the Council of the City, who shall serve for three (3) year terms on a staggered basis.

B. The Chair of the Planning and Zoning Commission, or a member of the Planning and Zoning Commission, to serve as a nonvoting member during his or her term of office.

C. Repealed by Ord. 2014-28.

D. Membership on the Commission shall terminate if any member has two (2) consecutive unexcused absences. The Chair shall determine, prior to any meeting, if a member's absence is excusable. (Ord. 1789, Amended, 01/05/1993; Ord. 1926, Amended, 12/17/1996; Ord. 2007-12, Amended, 02/06/2007; Ord. 2009-08, Amended, 03/03/2009; Ord. 2014-28, Amended, 11/18/2014)

2-04-001-0005 OFFICERS OF THE COMMISSION:

A. Ex-Officio Members: The following persons shall be ex- officio members of the Commission, but shall have no vote:

The City Manager;

The City Attorney;

The City Engineer;

The City Utilities Director; and

The Coconino County Manager or designated representative.

B. At the first meeting held in any calendar year, the members of the Commission shall elect a Chair and a Vice Chair from among its voting members. (Ord. 1789, Amended, 01/05/1993; Ord. 2009-08, Amended, 03/03/2009)

2-04-001-0006 MEETINGS:

The meetings of the Commission shall be held at the time and place adopted for the regular monthly meetings of the Commission.

Meetings shall be conducted in accordance with the Board and Commission Members' Rules and Operations Manual adopted by resolution of the Flagstaff City Council, and in compliance with all other local, State, and Federal laws.

A quorum shall consist of four (4) voting members of the Commission. (Ord. 1789, 01/05/93; Ord. 2007-12, Amended 02/06/2007; Ord. 2009-08, Amended, 03/03/09; Ord. 2014-28, Amended, 11/18/2014; Ord. 2016-30, Amended, 07/05/2016)

2-04-001-0007 APPLICATION; PROCEDURE FOR:

Any person, corporation or association desiring a water connection or tap, reclaimed wastewater connection, or sewer connection outside the limits of the City shall first apply to the Commission for such connection or tap. The application shall be in writing and shall be filed with the Clerk of the City, who shall forthwith submit it to the Commission or to a person designated by the Commission to receive the same. The Commission shall thereupon, at the next regular or special meeting called for the purpose, consider the application and may, in its sole discretion, require a public hearing before granting said application. In the event that a public hearing is thus required, notice thereof shall be given in writing to those persons designated by the Commission and notice containing the time, place and purpose of the meeting shall be published at least once in the official newspaper of the City, which publication shall be at least five (5) days prior to the time set for such hearing. At such hearing, the Commission may hear such testimony as it may deem advisable and may, at its discretion, permit cross-examination of the applicant and other witnesses by any party interested; however, the scope of the cross-examination shall at all times be discretionary with the Chairman of the Commission.

After any hearing provided by this Section, the Commission shall, within five (5) days thereafter, advise the Mayor and Council, in writing, of the nature of the application, whether a public hearing was held and the recommendations of the Commission on said application.

With the consent of the Mayor and Council, the Commission may give the City Manager or his or her designee authority within a prescribed area and within prescribed limits to allow water connections, sewer connections, and reclaimed wastewater connections for business and residential uses; provided, however, that such uses are in accordance with the regulations theretofore adopted by the Commission or Council. (Ord. 1789, 01/05/93)

(Ord. No. 1789, Amended, 01/05/93; Ord. No. 2009-08, Amended, 03/03/09)

(See Title 7, Chapter 3 of this City Code for additional water regulations.)

2-04-001-0008 ACTION ON APPLICATION:

After receipt of the application and the action thereon as provided in the preceding Section, the Council shall consider recommendations of the Commission at its next regular meeting, or at such meeting as may be determined by the Mayor and Council, whether regular or special, but in any event the application shall be acted upon not later than thirty (30) days after receipt of the recommendations of the Commission by the Mayor and Council. The Council may thereupon grant or reject the application and may provide such hearing or hearings as the Mayor and Council may, in their sole discretion, determine and shall give such notice of such hearing as may be determined to be advisable or convenient. (Ord. 244, Amended 8-26-58; Ord. 1541, Amended 1-5-88)

2-04-001-0009 EXTENSION OF URBAN SERVICE BOUNDARY:

Any application for a water or sewer connection to serve a business, residence, or development in an area which would require an extension of the Urban Service Boundary, whether within or without the corporate limits of the City, shall be considered by the Water Commission and the recommendation of the Commission shall be forwarded to the Planning and Zoning Commission and the City Council. Impact on adjacent areas shall also be considered when evaluating applications for extension of the Urban Service Boundary. (Ord. 1789, 01/05/93)

(Ord. No. 1789, Amended, 01/05/93; Ord. No. 2009-08, Amended, 03/03/09)

2-04-001-0010 CHANGES IN WATER, SEWER, RECLAMATION SYSTEM:

No extension, replacement, maintenance or repair of the production or distribution water system or collection of sewage, treatment thereof, reclamation or disposal of resulting effluent of the City, whether within or without its corporate limits, which requires a bond levy, shall be undertaken until the same has been submitted to the Commission for its recommendation in accordance with Section 2-04-001-0007 of this Chapter, and the Mayor and Council shall have approved the same in accordance with the procedure established in Section 2-04-001-0009 of this Chapter. (Ord. 1789, 01/05/93)

(Ord. No. 1789, Amended, 01/05/93; Ord. No. 2009-08, Amended, 03/03/09)

2-04-001-0011 INVESTIGATIONS:

In addition to those other duties, as provided by this Chapter, the Commission shall study and be responsible for the evaluation of the long range water needs of the City as well as the review and evaluation of the City water conservation program. It shall, on request after investigation and upon consideration of an orderly, normal increase of the population of the City, make recommendations to the Council regarding exploration and development and new and additional water resources. The Commission shall recommend to the City Council measures it deems necessary to protect existing and potential water resources.

The Commission shall request or study, evaluate, and from time to time make recommendations to the Council on sewage disposal, the degree of purification treatment, and the ultimate disposition and utilization of the resultant effluent and reclaimed wastewater, within guidelines and mandates of Municipal, State and Federal regulations and laws governing such activities. (Ord, 1789, 01/05/93)

(Ord. No. 1789, Amended, 01/05/93)

The Commission shall provide input to City staff; provide a forum for public comment and input; and study, evaluate, and make recommendations to the City Council regarding new initiatives and revisions, additions, and variance requests to Stormwater Management Activities. (Ord. No. 2009-08, Amended, 03/03/09)

CITY OF FLAGSTAFF

STAFF SUMMARY REPORT

To:	The Honorable Mayor and Council
From:	Stacy Fobar, Deputy City Clerk
Date:	12/01/2021
Meeting Date:	12/07/2021

TITLE:

Consideration and Action on Liquor License Application: Chad Earl Doyle "Chevron," 1785 S. Railroad Springs Blvd., Series 09 (liquor store - all spirituous liquor), Owner Transfer.

STAFF RECOMMENDED ACTION:

Hold the public hearing.

The City Council has the option to:
(1) Forward the application to the State with a recommendation for approval;
(2) Forward the application to the State with a recommendation for denial based on information from staff, the testimony received at the public hearing and/or other factors.

Executive Summary:

The liquor license process begins at the State level and applications are then forwarded to the respective municipality for posting of the property and holding a public hearing, after which the Council recommendation is forwarded back to the State. Series 09 licenses are a quota licenses and must be obtained through the person/location transfer of an existing license from another business. This license was purchased from THAT Flagstaff Butler Chevron, LLC by Doyle Custom Creations, LLC.

Chevron is an existing business in Flagstaff. If approved, it will be the 37th active series 09 liquor license in Flagstaff. To view surrounding liquor licenses, please visit the Active Liquor Licenses Map.

The property has been posted as required, and the Police and Community Development divisions have reviewed the application and provided their respective reports.

Financial Impact:

There is no budgetary impact to the City of Flagstaff as this is a recommendation to the State.

Policy Impact:

Not applicable.

Connection to PBB Priorities/Objectives, Carbon Neutrality Plan & Regional Plan:

Liquor licenses are a regulatory action and there are no Community Priorities that directly apply.

Has There Been Previous Council Decision on This:

Not applicable.

Key Considerations:

Because the application is for a owner transfer, consideration may be given to only the personal qualifications of the applicant.

The deadline for issuing a recommendation on this application is January 4, 2022.

Community Benefits and Considerations:

This business will contribute to the tax base of the community. We are not aware of any other relevant considerations.

Community Involvement:

The application was properly posted on November 16, 2021. No written protests have been received to date.

Attachments:

Letter to Applicant
Hearing Procedures
Series 09 Description
PD Memo
Zoning Memo
Map

City of Flagstaff

OFFICE OF THE CITY CLERK

11/22/2021

Chad Earl Doyle
10458 W. Via Montoya Drive
Peoria, AZ 85353

Dear Mr. Doyle:

Your application for a new Series 9 Liquor License for Chevron located 1785 S. Railroad Springs Boulevard, Flagstaff, AZ was posted on November 16, 2021. The City Council will consider the application at a public hearing during their regularly scheduled City Council Meeting on **Tuesday, December 7, 2021 which is scheduled to begin at 3:00 p.m.**

It is important that you or your representative attend this Council Meeting via video conference (Microsoft Teams Meeting) or in person and be prepared to answer any questions that the City Council may have. The invitation to join the online meeting will be emailed to you prior to the hearing. Failure to be available for questions could result in a recommendation for denial of your application. We suggest that you contact your legal counsel or the Department of Liquor Licenses and Control at 602-542-5141 to determine the criteria for your license. To help you understand how the public hearing process will be conducted, we are enclosing a copy of the City's liquor license application hearing procedures.

The twenty-day posting period for your liquor license application is set to expire on December 6, 2021, and the application may be removed from the premises at that time.

There is an $815 application fee which needs to be received prior to the hearing date. Payment can be made online at https://www.flagstaff.az.gov/2452/E--Services under Business Licensing Payment Online Services by clicking Liquor License Request Payment, in person at the payment window, or you can send a check to my attention at 211 W. Aspen Ave., Flagstaff, AZ 86001.

If you have any questions, please feel free to call me at 928-213-2077 (office) or 928-220-5995 (cell).

Sincerely,

Stacy M. Fobar

Stacy M. Fobar
Deputy City Clerk

Enclosures

City of Flagstaff

Liquor License Application
Hearing Procedures

1. When the matter is reached at the Council meeting, the presiding officer will open the public hearing on the item.

2. The presiding officer will request that the Applicant come forward to address the Council regarding the application in a presentation not exceeding ten (10) minutes. Council may question the Applicant regarding the testimony or other evidence provided by the Applicant.

3. The presiding officer will then ask whether City staff have information to present to the Council regarding the application. Staff should come forward at this point and present information to the Council in a presentation not exceeding ten (10) minutes. Council may question City staff regarding the testimony or other evidence provided by City staff.

4. Other parties, if any, may then testify, limited to three (3) minutes per person. Council may question these parties regarding the testimony they present to the Council.

5. The Applicant may make a concise closing statement to the Council, limited to five (5) minutes. During this statement, Council may ask additional questions of the Applicant.

6. City staff may make a concise closing statement to the Council, limited to five (5) minutes. During this statement, Council may ask additional questions of City Staff.

7. The presiding officer will then close the public hearing.

8. The Council will then, by motion, vote to forward the application to the State with a recommendation of approval, disapproval, or shall vote to forward with no recommendation.

R19-1-702. Determining Whether to Grant a License for a Certain Location

A. To determine whether public convenience requires and the best interest of the community will be substantially served by issuing or transferring a license at a particular unlicensed location, local governing authorities and the Board may consider the following criteria:

1. Petitions and testimony from individuals who favor or oppose issuance of a license and who reside in, own, or lease property within one mile of the proposed premises;

2. Number and types of licenses within one mile of the proposed premises;

3. Evidence that all necessary licenses and permits for which the applicant is eligible at the time of application have been obtained from the state and all other governing bodies;

4. Residential and commercial population of the community and its likelihood of increasing, decreasing, or remaining static;

5. Residential and commercial population density within one mile of the proposed premises;

6. Evidence concerning the nature of the proposed business, its potential market, and its likely customers;

7. Effect on vehicular traffic within one mile of the proposed premises;

8. Compatibility of the proposed business with other activity within one mile of the proposed premises;

9. Effect or impact on the activities of businesses or the residential neighborhood that might be affected by granting a license at the proposed premises;

10. History for the past five years of liquor violations and reported criminal activity at the proposed premises provided that the applicant received a detailed report of the violations and criminal activity at least 20 days before the hearing by the Board;

11. Comparison of the hours of operation at the proposed premises to the hours of operation of existing businesses within one mile of the proposed premises; and

12. Proximity of the proposed premises to licensed childcare facilities as defined by A.R.S. § 36-881.

B. This Section is authorized by A.R.S. § 4-201(I).

License Types: Series 09 Liquor Store License (All spirituous liquors)

Transferable (From person to person and/or location to location within the same county only)
Off-sale retail privileges
Note: Terms in **BOLD CAPITALS** are defined in the glossary.

PURPOSE:
Allows a spirituous liquor store retailer to sell all spirituous liquors, only in the original unbroken package, to be taken away from the premises of the retailer and consumed off the premises.

ADDITIONAL RIGHTS AND RESPONSIBILITIES:
A retailer with off-sale privileges may deliver spirituous liquor off of the licensed premises in connection with a retail sale. Payment must be made no later than the time of **DELIVERY**. The retailer must complete a Department approved "Record of Delivery" form for each spirituous liquor retail delivery.

On any original applications, new managers and/or the person responsible for the day-to-day operations must attend a basic and management training class.

A licensee acting as a **RETAIL AGENT**, authorized to purchase and accept delivery of spirituous liquor by other licensees, must receive a certificate of registration from the Department.

A **PREGNANCY WARNING SIGN** for pregnant women consuming spirituous liquor must be posted within twenty (20) feet of the cash register or behind the bar.

FLAGSTAFF POLICE DEPARTMENT
911 SAWMILL RD • FLAGSTAFF, ARIZONA 86001• (928) 779-3646
ADMIN FAX (928)213-3372
TDD 1-800-842-4681

Chief of Police
Dan Musselman

MEMORANDUM

Memo #21-083

TO: **Chief Dan Musselman**

FROM: **Sgt. Ryan Turley**

DATE: **November 5th, 2021**

RE: **Liquor License Application – Series 9- for "Chevron"**

On November 5th, 2021, I initiated an investigation into an application for a series 9 (Liquor Store) liquor license filed by Chad Doyle (Controlling Person and Agent) This is an owner transfer application, and the application number is 1167695. It is for the Chevron gas station located at 1785 S. Railroad Springs Blvd.

I conducted a query through local systems and public access on the applicant and discovered no derogatory records. I conducted a search for any current or previous liquor licenses held by the applicant and found none. I did not find any current or historical liquor violations for the applicant or the business. This business is not located within 300 feet of a school or church.

I spoke to Chad who advised he would be present for the December 7th Council meeting.

Planning and Development Services Memorandum

To: Stacy Fobar, Deputy City Clerk

From: Reggie Eccleston, Code Compliance Manager

CC: Alaxandra Pucciarelli, Interim Planning Director

Date: November 17, 2021

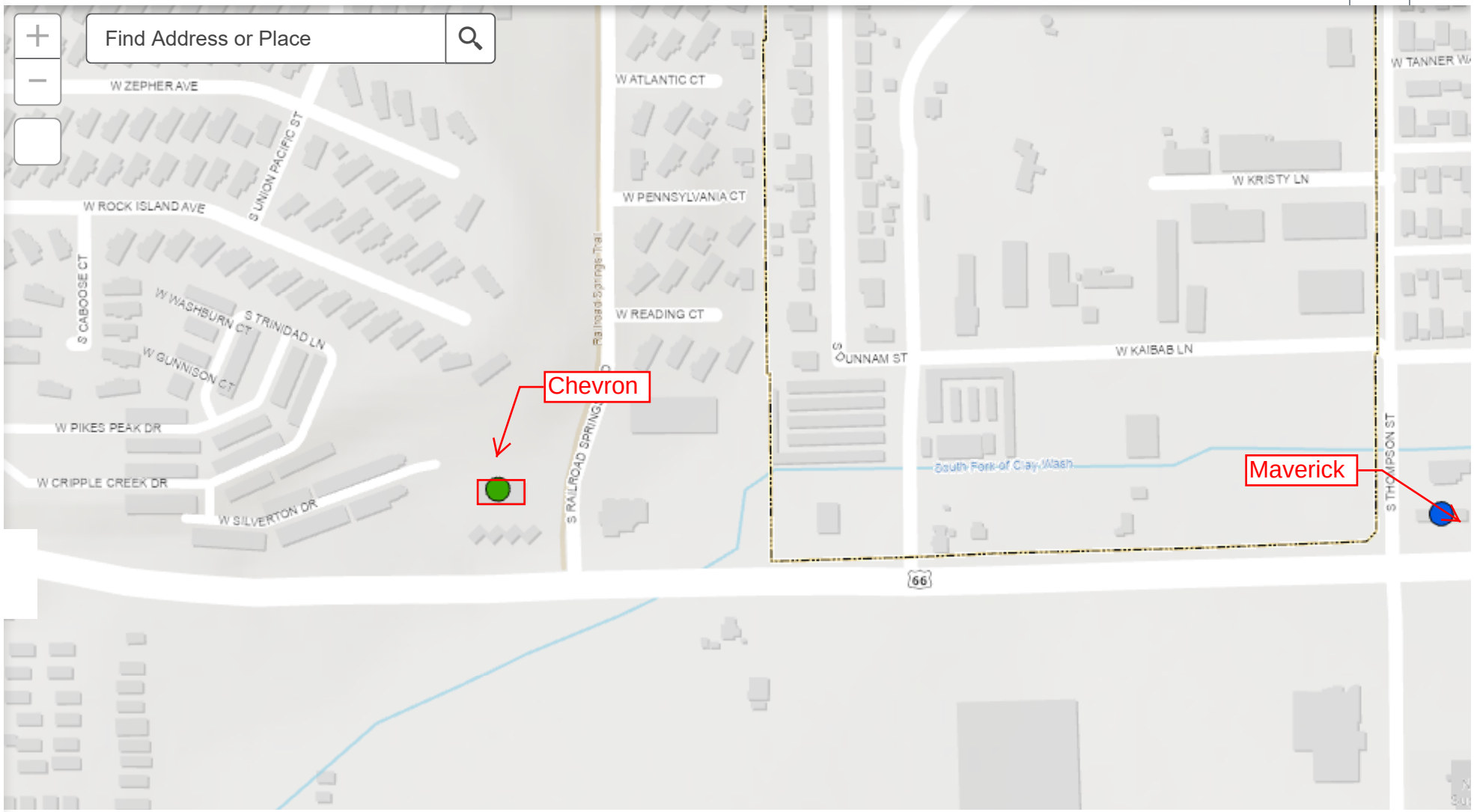
Re: Application for Liquor License #167695
1785 S. Railroad Springs Blvd., Flagstaff, Arizona 86001
Assessor's Parcel Number 112-49-125A
Chad Earl Doyle on behalf of Chevron

This application is a request for a new Series 9 Liquor Store liquor license by Chad Earl Doyle on behalf of Chevron. This business is located within the Highway Commercial district. This district does allow for this use.

There are no active Zoning Code violations associated with the applicant or the property at this time.

Active Liquor Licenses

City of Flagstaff GIS



CITY OF FLAGSTAFF

STAFF SUMMARY REPORT

To:	The Honorable Mayor and Council
From:	Amy Hagin, Parks Manager
Co-Submitter:	Martin Ince
Co-Submitter:	Stacey Brechler-Knaggs
Date:	12/01/2021
Meeting Date:	12/07/2021

TITLE:

Consideration and Approval of Grant Application (acceptance, etc.): Buffalo Park - Nate Avery Trail Accessibility Enhancements through the Arizona State Parks Heritage Fund

STAFF RECOMMENDED ACTION:

Approve the application to Arizona State Parks Heritage Fund for grant funds in the amount of $100,000 with a city match and in-kind contribution of $135,453.

Executive Summary:

This Staff Summary seeks approval of the grant application and approval upon award to Arizona State Parks Heritage Fund for the Buffalo Park - Nate Avery Trail Accessibility Enhancements. Parks and Multi-Modal Transportation are requesting grant funds in the amount of $100,000 to enhance accessibility for the Nate Avery Flagstaff Urban Trail System (FUTS) Trail in Buffalo Park. The intent is to make the trail and other features of the park more accessible so that a broader segment of the community including those with mobility limitations can more easily use the trail and access the natural area. The city match and contribution of $135,453 will be accomplished with funds from both Parks operating capital, FUTS capital, and in-kind services.

Financial Impact:

The expenditures on the city match and contribution have been accounted for in the Parks operating capital in the amount of $52,000, in FUTS capital in the amount of $25,877 and in-kind work through labor, equipment and materials estimated at $57,576.

Policy Impact:

None

Connection to PBB Priorities/Objectives, Carbon Neutrality Plan & Regional Plan:

Priority Based Budget Key Community Priorities and Objectives

Inclusive and Engaged Community through ensuring city facilities, services and programs are accessible for all residents and representative of Flagstaff's diverse community.

Regional Plan

Pedestrian Infrastructure and Goals Policy T.5.3 by identifying specific pedestrian mobility and

accessibility challenges and develop a program to build and maintain necessary improvements

Has There Been Previous Council Decision on This:

No

Options and Alternatives:

1. Approve the grant application
2. Not approve the grant application

Background/History:

City Parks and Multi-Modal Transportation began discussing the concept of making the 2-mile loop trail known as the Nate Avery FUTS Trail at Buffalo Park accessible in 2019, with the idea of making the trail accessible to all users. After the completion of the accessible permanent restrooms at the park, the team began to discuss how we could bring this concept to an inclusive and equitable project with city funding as well as any grant opportunities. The Heritage Fund through Arizona State Parks is providing the grant opportunity should the City of Flagstaff be successful in this application.

The application, if approved, would consist of resurfacing the Nate Avery FUTS Trail with the current aggregate mix that is suitable for wheeled devices such as wheelchairs. It would also repair existing drainage issues on the trail, provide signing and information to trail users regarding the accessible route, add accessible parking spaces and an accessible route to the entrance, expand the concrete entrance at the park to the existing accessible restrooms, modify the existing exercise stations along the trail loop for wheelchair access, and replace up to six (6) exercise stations to new accessible/universal design stations.

Key Considerations:

The Flagstaff community deserves to have the 215-acre Buffalo Park inclusive and accessible for all to enjoy.

Community Benefits and Considerations:

The outdoor passive recreational space and natural area is one of our community's most iconic locations with over 380 visitors per day walking the Nate Avery FUTS Trail.

Community Involvement:

Inform. Presentations have been made to the Parks and Recreation Commission, the Commission on Inclusion and Adaptive Living, and the Pedestrian Advisory Committee.

Attachments:

Draft resolution
Heritage Fund pre-application
Heritage Fund grant application
Vicinity and site maps
Project area photos
Project budget
Letters of support

RESOLUTION NO. 2021-XX

A RESOLUTION OF THE FLAGSTAFF CITY COUNCIL, APPROVING SUBMISSION OF AN APPLICATION TO ARIZONA STATE PARKS AND TRAILS FOR A HERITAGE FUND TRAILS GRANT TO MAKE ACCESSIBILITY ENHANCEMENTS AT BUFFALO PARK AND THE NATE AVERY FUTS TRAIL

RECITALS:

WHEREAS, the State of Arizona has authorized the Arizona State Parks Heritage Fund to provide grant opportunities for trail projects, outdoor environmental education programs, local, regional, and state parks, as well as historic preservation projects through legislatively appropriated funds; and

WHEREAS, Arizona State Parks and Trails is responsible for the administration of the Heritage Fund Trails Program within the State, setting up necessary rules and procedures governing application by eligible project sponsors under the program; and

WHEREAS, the adopted procedures established by Arizona State Parks and Trails require the project sponsor to certify by resolution the approval of applications, signature authorization, the availability of local matching funds, and authorization to sign a Project Agreement with Arizona State Parks and Trails prior to submission of the application to Arizona State Parks and Trails; and

WHEREAS, the City of Flagstaff has prepared a Heritage Fund grant application for a variety of accessibility enhancements at Buffalo Park, including resurfacing the Nate Avery Trail to make it usable for wheelchairs, adding accessible parking spaces and an accessible route into the park, retrofitting existing parcourse exercise stations to make them accessible, and replacing six existing stations with universal design equipment.

ENACTMENTS:

NOW, THEREFORE, BE IT RESOLVED THAT THE COUNCIL OF THE CITY OF FLAGSTAFF HEREBY:

SECTION 1. Approves the filing of an application for non-motorized assistance through the Arizona State Parks and Trails Heritage Fund Trails Program in the form attached to this resolution as **Exhibit A** and incorporated herein, and

SECTION 2. Certifies that the application is consistent and compatible with all adopted plans and programs for non-motorized trails facility development; and

SECTION 3. Agrees to comply with all appropriate procedures, guidelines, and requirements established by Arizona State Parks and Trails as a part of the application process; and

SECTION 4. Certifies that the City of Flagstaff will comply with all appropriate state and federal regulations, policies, guidelines, and requirements as they relate to the application; and

SECTION 5. Certifies that the City of Flagstaff has matching funds for the project, and

SECTION 6. Authorizes the City Manager of the City of Flagstaff to conduct all negotiations, execute and submit all documents including, but not limited to, applications, agreements, amendments, billing statements, and so on which may be necessary for the completion of the aforementioned project.

PASSED AND ADOPTED by the City Council of the City of Flagstaff this [day] day of [Month], 2021.

_____
MAYOR

ATTEST:

_____
CITY CLERK

APPROVED AS TO FORM:

_____
CITY ATTORNEY

Exhibits:
Exhibit A – Application for Non-Motorized Assistance

Non-Motorized Grant Application

Section I. Grant Pre-Application

Please be sure to fill out the budget section before submitting the pre-application. For help with filling out the budget section, see the budget portion of the eCivis help doc by Clicking Here (https://azstateparks.com/gallery/0004/0044/9A99B1F2836A4D029E12A49AAA9312BF/eCivis%20Help%20Do%20Applicant%20Version%20Revised%20October.pdf)

•Current Volunteer Rate: $28.54

•Current Mileage Reimbursement Rate $0.445/mile

Are you a local/ state agency or a non profit seeking the Heritage Fund for Trails?

Yes

Project Title:

Buffalo Park - Nate Avery Trail Accessibility Enhancements

Organization Name:

City of Flagstaff

Project Sponsor Address:

211 West Aspen Avenue

City:

Flagstaff

Zip code:

86001

Company/Agency/Organization Website:

https://www.flagstaff.az.gov/

Project Coordinator Name:

Amy Hagin

Job Title:

Parks Manager

E-mail:

ahagin@flagstaffaz.gov

Phone:

928-326-1559

Secondary Project Coordinator Name:

Martin Ince

Job Title:

Multimodal Transportation Planner

E-mail:

mince@flagstaffaz.gov

Phone:

928-213-2685

Section II. Project Information

Click on this link to verify your Congressional and Arizona Legislative Districts (https://azredistricting.org/Maps/Final-Maps/default.asp)

Program/Project Congressional District (check all that apply)

1

Program/Project AZ Legislative District (check all that apply)

6

County (select all that apply):

Coconino County

Project Request Amount:

This is the amount you are requesting from the grant

$100,000.00

Summarize the project proposal including scope and nature of what will be accomplished with the funds that you will receive:

This project will enhance accessibility for all users of the Nate Avery FUTS Trail in Buffalo Park. The intent is to bring the trail and other features of the park into alignment with the Americans with Disabilities Act so that a broader segment of the community – including people with mobility limitations and those who use wheelchairs – can use the trail and enjoy the natural area.

The improvements were identified as part of an accessibility audit of all 58 miles of Flagstaff Urban Trails System (FUTS) trails conducted by the City's Commission on Inclusion and Adaptive Living. The audit identifies concerns and recommends improvements to make FUTS trails accessible to more users.

The following improvements to the trail and park are planned as part of this project:

Resurface the Nate Avery Trail with a hard-packed aggregate mix suitable for wheelchair use
Repair existing drainage issues on the trail
Provide signing and information for trail users at the trailhead and along the trail
Add accessible parking spaces and an accessible route into the park
Expand the concrete entrance plaza
Extend a concrete sidewalk to existing accessible restrooms
Remove railroad ties around 18 exercise stations and provide a more wheelchair-friendly surface
Replace up to six existing exercise stations with new accessible/universal design stations

Buffalo Park is 215-acre City park and natural area on Switzer Mesa that is one of the most popular areas in Flagstaff for walking, bicycling, and enjoying the outdoors. The Nate Avery Trail is a 2-mile loop around the park that provides panoramic views of the mountains to the north. The trail is 10 feet in width and surfaced with an aggregate material.

Providing better accessibility to Buffalo Park and the Nate Avery Trail is an important step for inclusion and equity in our recreation and natural areas.

Upload Project Timeline:

Buffalo Park Timeline.pdf

Please be sure to fill out the budget section before submitting the pre-application.

2020–2025 NON-MOTORIZED CRITERIA RESPONSE

Non-Motorized Recommendations/Possible Points

For additional instructions on how to complete this form, please see:

Grants Manual (https://d2umhuunwbec1r.cloudfront.net/gallery/0004/0052/3500AA844B064EACAED3F311770AE3BD/2018 19%20Grant%20Manual%2010-12-18.pdf)

First Level Priorities and Scope Items – Maximum 10 Points Each

1. Complete Environmental and Cultural Clearance and Compliance

Yes

Upload trail map showing work zone

Heritage grant - project components.pdf

2. Maintain Existing Trails

Yes

3. Prevent or Restore Damage to Environmental and Cultural Sites near trails

No

4. Provide Trail Signs

Yes

Second Level Priorities – Maximum 7 Points Each

1. Connect Trails to Other Trails, Parks, and Communities

No

2. Develop Trails and Facilities to Increase Accessibility

Yes

Explain how you will increase accessibility

The project will bring Buffalo Park and the Nate Avery Trail into ADA compliance in several ways:
The 2-mile Nate Avery Trail will be resurfaced with an aggregate material to be more suitable for wheelchairs.
New universal design parcourse equipment will be added, and the existing exercise equipment will be made more accessible.
Accessible (paved) parking spaces and an accessible route into the park will be added.
Access paths to the restrooms and ramada near the park entrance will be paved or resurfaced to be more accessible
Information about accessibility will be provided via new signage at the trailhead and around the loop.

3. Enforce Existing Rules and Regulations

No

4. Promote Safe and Responsible Recreation

No

5. Provide Facilities Near Trails

Yes

Please attach map/plan

Heritage grant - combined maps.pdf

6. Provide Trail Maps and Information

No

Third Level Priorities – Maximum 4 Points Each

1. Construct new trails

No

2. Obtain land for trails and trails access

No

Bonus

1. Project located in Rural Arizona (4 Points)

No

2. Diversity of Trail Uses (2 Points)

Yes

If yes, select all that apply

Bike, Hike

3. Youth Corps Involvement (2 Points)

No

4. Need Identified in Planning Document (2 Points)

Yes

Please provide document if available

Flagstaff Regional Plan 2030 - Flagstaff Regional Trails Strategy - excerpts.pdf

Categorical Exclusion

Instructions

I. Project Identification

Project Sponsor:

City of Flagstaff

Project Title:

Buffalo Park - Nate Avery Trail Accessibility Enhancements

Grant Request Amount:

$100,000.00

Sponsor Match Amount:

$135,453.00

Total Project Cost (Request+Match):

$235,453.00

Is this an education only project?

No

II. CE Checklist

To assist in answering questions concerning potential impacts on resources in the project area please follow the below link to the Arizona Game and Fish Environmental Review Tool. Please complete and submit your project through the Arizona Game and Fish Environmental Review Tool. Shortly after submitting your project, a completed report will be emailed to you. This report contains information that will assist in the completion of your application. This report also contain a series of maps that are required for subsequent sections of the application. Please complete this report before completing this section of the application.

For instructions on how to complete this form, please refer to the AZ State Parks & Trails Grants Manual (https://d2umhuunwbec1r.cloudfront.net/gallery/0004/0052/3500AA844B064EACAED3F311770AE3BD/2018 19%20Grant%20Manual%2010-12-18.pdf)

Link: AZ Game and Fish Environmental Review Tool (https://ert.azgfd.gov/)

If the answer to all of the below questions is NO, the proposed action qualifies for processing as a C-list Categorical Exclusion action under 23 CFR 771.117(c)(23). If the answer to any of the below question is YES, contact the Grants Staff to confirm the level of environmental documentation.

Please attach completed Game and Fish Report:

project_report_buffalo_park_nate_avery_tra_46082_47563.pdf

1. Does the project involve any permanent easement or acquisition of right-of-way?

No

2. Are there National Register listed or eligible sites in the Project Area?

No

3. Will the project affect any National Register listed or eligible sites?

No

4. Does the project involve construction in, across or adjacent to a river component?

No

5. Are there threatened or endangered species or critical habitat designated or proposed under the Endangered Species Act present?

No

6. Will the project result in 1 or more acres of ground disturbance?

No

7. Does the project involve any other impacts that may be considered unusual?

No

Cultural Clearance

Instructions

Check here if this is an education only project and no disturbance will occur (Note: installing signs & trash-removal are considered disturbance)

Checking Education Only completes this form.

In Arizona, the Arizona Department of Transportation (ADOT), the Federal Highway Administration (FHWA) and the State Historic Preservation Office (SHPO) participate in a process to determine the effect, if any, a proposed project may have on significant archaeological and/or historical cultural resources. Significant cultural resources are those that are eligible for listing on the Arizona or National Registers of Historic Places. Each grant application recommended for funding will be reviewed as part of this process. To assist in this review, the applicant is required to submit the following information with each application for funding assistance.

For additional instructions on how to complete this form, please follow the attached links :

Grants Manual
(https://d2umhuunwbec1r.cloudfront.net/gallery/0004/0052/3500AA844B064EACAED3F311770AE3BD/2018
19%20Grant%20Manual%2010-12-18.pdf)

Section I. Attachments

If these documents are missing, your project cannot be reviewed, and your application and funding will be delayed.

Is the applicant a signatory to the Programmatic Agreement Pursuant to Section 106 of the National Historic Preservation Act Regarding Implementation of Federal-Aid Transportation Projects in the State of Arizona (PA)?

No

To view the most recent Programmatic Agreement (Section 106) Click Here (https://azdot.gov/sites/default/files/media/2021/03/programmatic-agreement.pdf)

A copy of the cultural resources survey report(s) if a survey of the property has been conducted must be uploaded.

Buffalo Park-Nate Avery Trail AE Cultural Inventory - Summary Report.pdf

A copy of any comments regarding eligibility, findings of effect, and any conditions associated with findings made by the land managing agency/landowner and archaeologist (i.e. state, federal, county, municipal) on potential impacts of the project on archaeological and/or historical cultural resources.

Heritage Memo Buffalo Park ADA review.pdf

A copy of SHPO comments, if the survey report has already been reviewed by SHPO.

If applicable to the project, attach a current agency Decision Memo.

Additional Documents: Upload additional surveys and any other documents related to cultural resources here:

Additional Document:

Section II.

Please answer the following:

Biggest Mistake Made: Failure to list all land managers within the project area. Example: Applicant submits trail project and all trails exist within land owned by applicant except for a 1/4 mile section of one of the project trails. A small section crosses over a small parcel owned by ASLD (or Reclamation). If an agreement allowing you to develop/maintain that ASLD-owned parcel exists between your agency and ASLD please attach document directly above (Additional Documents). If

no agreement is in place or the agreement has expired please stop working on the application and contact ASPT to discuss issue. Projects must be shovel ready-if you do not have permission from all land managers to conduct work your project is not shovel ready.

Current Land Owner/Manager(s):

City of Flagstaff

Project Location, including Township, Range and Section:

Sections 10 and 11, Township 21 North Range 7 East

Total project area in acres (or total miles if trail):

Buffalo Park is 215 acres, the Nate Avery Trail and the accessible cutoff are 2.25 miles in length

Does the proposed project have the potential to disturb the surface and/or subsurface of the ground?

Yes

Please provide a description (what, where, why, and how) of the proposed project, and specifically identify any surface and/or subsurface impacts that are expected.

The project includes the following components:

Resurface the Nate Avery Trail with an aggregate mix suitable for wheelchair use. The new material will be placed on top of the existing trail, so no new disturbance will be created.

Repair existing drainage issues on the trail, generally this involves installing 12-18 inch culverts under the trail at locations where water flows cross the trail. This work will require small areas of excavation for culvert end sections and inflow/outflow on both sides of the trail.

Provide signing and information for trail users at the trailhead and along the trail. New signs require excavation for a concrete base approximately 12 inches in diameter and 18 inches in depth.

Add accessible parking spaces and an accessible route into the park, expand the concrete entrance plaza, and extend a concrete sidewalk to the accessible restrooms. this work involves pouring concrete in areas that are already disturbed. No new disturbance is anticipated or needed.

Remove railroad ties around 18 exercise stations and provide a more wheelchair-friendly surface, and replace up to six existing exercise stations with new accessible/universal design stations. These areas are already disturbed, and no new disturbance is anticipated or needed.

Provide measurements for anticipated surface (areal) and subsurface (depth) disturbances that will be part of the proposed project.

The total estimated area of work for this project is 3.3 acres. Almost all of the work will occur on land that is already disturbed. New disturbance will be limited to approximately 2400 square feet, which corresponds to the culvert end sections for 12 new drainage crossings along the trail.

Sources of disturbance are detailed below:

Trail resurfacing: area = 118,640 sf / 2.72 acres | depth = 0 inches
New drainage culverts: area = 3120 sf / 0.07 acres | depth = 24 inches
Unauthorized trail naturalization: area = 12,420 sf / 0.29 acres | depth = 6 inches
New sign posts: area = 36 sf | depth = 24 inches
New concrete: area = 4552 sf / 0.10 acres | depth = 12 inches
Rehab/new exercise stations: area = 5184 sf / 0.12 acres | depth = 6 inches

Discuss both direct and indirect impact areas, such as staging areas and access routes that will be used as part of the project.

Construction staging and any materials storage will use the existing aggregate parking lot. Access for construction vehicles will be limited to existing trails, which are 10 feet in width.

Describe the condition of the current ground surface within the entire project boundary area (for example, is the ground in a natural undisturbed condition, or has it been bladed, paved, graded, etc.).

Buffalo Park's parking lot, entry vestibule, and access routes are all compacted aggregate surfaced. The Nate Avery Trail and the Arizona Trail through the park are also compacted aggregate. Base materials at the existing exercise stations are wood chips within a railroad tie frame. The remainder of the park is natural undisturbed land including open grassland and stands of Ponderosa pines at a variety of densities.

Estimate horizontal and vertical extent of existing disturbance

Existing disturbance at Buffalo Park is estimated at 7 acres. This area includes trails, parking, the entry vestibule and buildings, and the water tank.

Has the project area been previously surveyed for cultural resources by a qualified archaeologist?

Yes

Please submit a copy of the survey report. Please attach any comments on the survey report made by the land managing agency and/or SHPO

Buffalo Park-Nate Avery Trail AE Cultural Inventory - Summary Report.pdf

Are there any known prehistoric and/or historical archaeological sites in or adjacent to the project area?

No

Are there any buildings or structures (including mines, bridges, dams, canals, etc.) that are 50 years or older in or adjacent to the project area?

Unknown

Is your project area within or adjacent to a historic district?

No

Section III

Will your project involve any of the following activities? (please check all that apply)

Signs, kiosks, and markers replacement or installation, Upgrading the trail and or parking lot from dirt to stone or woodchips, or stone or woodchips to paved (asphalt, concrete, etc.), Drainage

Compliance under the Americans with Disabilities Act (ADA) including the following:

Resurfacing (to pavement or boardwalk), Parking and Trail Access, Signage, Permanent installation of ancillary facilities (ex. port-a-potties, bike racks, lighting, benches, trash receptacles, etc.), Renovation and restoration of trails and trail access routes, in-kind within an established path or trail way, Regrading of trail and/or parking areas within established trail way

If yes to any items from SECTION III please provide a short description of the work to be done.

Signs: Directional signs will be placed to guide users at both ends of the accessible cut-off trail. Accessibility information about the trail will be added to the main sign kiosk near the entry.

Upgrading the trail: The existing loop trail and accessible cut-off will be resurfaced from loose aggregate to a hard-packed, small aggregate material that is more suitable for wheelchair use.

Drainage: Existing drainage and erosion problems along the trail will be fixed, typically by installing new culverts under the trail to keep water off the trail.

Resurfacing: The trail will be resurfaced with a hard-packed aggregate material that is suitable for wheelchair use.

Parking and trail access: The project includes new concrete accessible parking spaces and a concrete accessible route into the park.

Signage: Directional signs will be placed to guide users at both ends of the accessible cut-off trail. Accessibility information about the trail will be added to the main sign kiosk near the entry.

Portable toilets: Accessible toilets were recently installed near the park entrance. This project will connect extend a concrete sidewalk to better connect the toilets to the entry.

Ancillary facilities: The project includes installation of six new universal design parcourse stations, and rehabilitation of the remaining 12 station bases to make them more accessible. A series of benches are also being installed around the trail to provide resting and viewing spots for users.

Renovation and restoration of trails and trail access routes, in-kind within an established path or trail way. Project components include resurfacing the main loop trail to make it more accessible and fixing drainage problems.

Regrading of trail and/or parking areas within established trail way. The main loop trail will be resurfaced, and a portion of the existing parking lot will be paved for accessible spaces.

Signatures

NOTE: *This form must be reviewed and electronically signed by the archaeologist for agencies that have a staff archaeologist. Please have the archaeologist register in eCivis by contacting parks staff at 602-542-7124.*

Archaeologist Printed Name and Title Here:

Lynn Neal, Historic Preservation Specialist/Archaeologist, LA Neal Consulting, LLC

Agency Archaeologist must provide a short statement, on agency letterhead, indicating support for the project. Archaeologist must sign the letter. Note: Non-profits must have the land manager's archaeologist complete this step.

Archaeologist Approval Letter (Application will not be processed and reviewed by Park staff, committees and Parks Board if a signed letter of approval from agency's archaeologist is not provided here.)

ArchaeologistProjectApprovalLetter_11-18-21.pdf

Applicant Printed Name and Title Here:

Martin Ince, multimodal transportation planner

Resolution and ADA Compliance

Resolution

Is your organization a federal, state, or tribal agency?

No

RESOLUTION

Sponsors MUST incorporate items 1 through 6 from the sample resolution below in their resolution and it MUST be signed by the appropriate official authorized to commit funds. (For Non-Federal Entity Project Sponsors ONLY)

APPROVING THE APPLICATION FOR A NON-MOTORIZED OR MOTORIZED GRANT

WHEREAS, the Congress of the United States has authorized the Recreational Trails Program (RTP) as a federal-aid assistance program to help states provide and maintain recreational trails for motorized and non-motorized recreational use, and the State of Arizona has established the Off-Highway Vehicle Recreation Fund to fund a variety of off-highway vehicle recreations projects, and these funds are available to eligible project sponsors for acquiring lands and developing facilities for public off-highway vehicle purposes; and

WHEREAS, Arizona State Parks (Parks) is responsible for the administration of the Statewide OHV and RTP Programs within the State, setting up necessary rules and procedures governing application by eligible project sponsors under the program; and

WHEREAS, said adopted procedures established by Parks require the project sponsor to certify by resolution the approval of applications, signature authorization, the availability of local matching funds (if applicable), and authorization to sign a Project Agreement with the Parks prior to submission of said applications to the Parks; and

NOW, THEREFORE, BE IT RESOLVED THAT THE PROJECT SPONSOR'S GOVERNING BODY hereby:

1. Approves the filing of an application for motorized or non-motorized assistance, and
2. Certifies that the application is consistent and compatible with all adopted plans and programs of: for motorized/non-motorized trails facility development; and
3. Agrees to comply with all appropriate procedures, guidelines, and requirements established by the Parks as a part of the application process; and
4. Certifies that Project Sponsor will comply with all appropriate state and federal regulations, policies, guidelines, and requirements as they relate to the application; and
5. If applicable, certifies that Project Sponsor has matching funds

6. Appoints the agent listed below as agent of (Project Sponsor's Governing Body) to conduct all negotiations, execute and submit all documents including, but not limited to, applications, agreements, amendments, billing statements, and so on which may be necessary for the completion of the aforementioned project.

I, the undersigned being the duly appointed and qualified project sponsor, certify that the foregoing Resolution No. is a true, correct and accurate copy of the Resolution No. Passed and adopted at a regular meeting of the Project Sponsor, held on the date listed below at which a quorum was present and voted in favor of said Resolution.

Resolution Number:

Project Sponsor Name:

City of Flagstaff

Project Sponsor's Governing Body (if different from Sponsor Name) :

Project Title:

Buffalo Park - Nate Avery Trail Accessibility Enhancements

Signed by:

Date:

A draft resolution may be submitted with the application. The final resolution must be provided before the Project Sponsor Agreement can be signed. The application will be ineligible if a resolution is not submitted.

If you have a completed Resolution please upload it here:

Resolution No 2021-XX (002).pdf

Disabilities Act and Compliance

DISABILITIES ACT AND COMPLIANCE Title II, Americans with Disabilities Act of 1990__P.L. 101-336, 42 U.S.C. Chapter 126__THE UNDERSIGNED ACKNOWLEDGES AWARENESS OF AND THE RESPONSIBILITY TO COMPLY WITH THE FOLLOWING: *Title II, of the Americans with Disabilities Act, ("ADA") and federal department regulations on its implementation.**It is understood that recipients of Arizona State Park motorized project funds are required to comply with Title II of the ADA and those regulations of federal departments and agencies on its implementation. The ADA and federal department regulations mandate that: No qualified individual with a disability shall, on the basis of disability, be excluded from participation in or be denied the benefits of the services, programs or activities of a public entity, or be subjected to discrimination by any public entity. See 28 CFR Part 35.**This assurance is effective as of the date of state approval of funds and throughout the period during which real or personal property is used.*

Authorized Agent:

Martin Ince

Title

Multimodal transportation planner

Date

11/19/2021

Nonprofit Certification Statement

Is your agency a non-profit or club?

No

Mark this form as complete as it only pertains to non-profit organizations and clubs.

Instructions

All projects are required to submit an updated species map list and attach to the NEPA Form (separate form in your application).
The species list is generated by using the AZ Game and Fish's Environmental Review Tool-which produces the required map. In addition, the Game & Fish tool also includes many other mapping features to add layers, identify Section, Township, Range; land ownership and to draw/identify trails, trailheads, location of projected signage, etc.

We recommend that applicants consider using this Tool to develop all maps required in this Section and in other specific areas of the application.

Grant Manual (https://d2umhuunwbec1r.cloudfront.net/gallery/0004/0052/3500AA844B064EACAED3F311770AE3BD/2018-19%20Grant%20Manual%2010-12-18.pdf)

Arizona Game and Fish Environmental Review Tool (https://ert.azgfd.gov/)

Map & Photo Examples for Project Sponsors (https://d2umhuunwbec1r.cloudfront.net/gallery/0004/0052/B56754DB878641FDBC7A5BB28DFDFC7A/Maps%20&%20Photos%20Guid

Is this an education only project?

No

Project Area Maps & Photos

Please download the State Map Form (https://d2umhuunwbec1r.cloudfront.net/gallery/0004/0052/A2669D0C09D94776B4FD61C9946F70AA/ArizonaStateMap.pdf) & mark the location of your project area; when complete upload the State Map below.

State Map:

5a Arizona State Map.pdf

Provide a legible and detailed series of maps showing the project area in close detail.

-Please identify all project activities and any other related project actions including the location of signs, access roads, and staging areas.
-Please combine all maps into 1 file, convert to pdf and upload below.
**See instructions above on map support and recommendations using the Game & Fish map program.*

Combined Maps:

Heritage grant - combined maps.pdf

Please upload a series of color photographs that show the project area, land acquisition or specific features. -Photographs should document as many of the proposed scope items as possible. -Please provide a short, written description of each photo. -Attach photos of project area to document condition, particularly of those areas that have experienced impacts. **If there any buildings or structures (including mines, bridges, dams, canals, etc.) that are 50 years or older in or adjacent to (within 100 yards) the project area please include photos of the building/structure and identify as such.*-Submit all your pictures on one (1) PDF file, save to your computer and upload PDF here.

Color Photographs:

Buffalo Park Photos.pdf

Trail Information Table

Purpose of Section: Every trail that will receive funds for activities related to building/maintenance must be identified and listed here separately.

Trail Name/Number:

Nate Avery Trail
Nate Avery Cutoff
Arizona Trail

Kiosks, Signs & Support Facilities

Section Instructions

-Projects involving the installation of signs, kiosks, and or support facilities (Trailheads, Restrooms) must provide a map and or photo(s) showing the location of each.

-Below, please provide trail name and information on what signs, kiosks, and/or support facilities will be added to trails/ staging areas.

We do not need maps for fiberglass trail markers/signs that result in less than 12-18 inches of ground disturbance.

Trail Name/ Number:

Nate Avery Trail

List as bullet points: Signs/Kiosks/Support Facilities and quantity for above trail/staging area

Existing parcourse exercise stations: 18 existing stations around the loop will be retrofitted to remove railroad tie bases and replace groundcover to make them more accessible
New universal design parcourse exercise stations: replacement of 6 existing stations with new universal design equipment
Trailhead sign: add information and maps to existing trail sign with accessibility and route information
Directional signs: placed along the trail to direct users to the accessible cutoff trail

Upload Maps Here

Heritage grant - project components.pdf

Tenure of Property and Additional Documents

The applicant is responsible for operation and maintenance of grant assisted facilities or equipment and retention of land acquisitions according to the Term of Public Use established in the General Provisions. The Term of Public Use must be at least 25 years for equipment over $50,000 (personal property), 25 years for facilities (real property) and 99 years for acquired land.

The applicant MUST submit documentation to demonstrate the control (i.e., deed, lease, easement, etc.) and tenure (i.e., 25 years, 50 years, etc.) of the land where the project site is located. For a development project, the applicant must include copies of the document which evidences control and tenure of the proposed project site. Evidence of control and tenure can be shown by submitting copies of the required documents listed in either #1 or #2 below.

1. Title or Deed -- If the land proposed for development is owned by the applicant, the following must be submitted with the application:

• copy of the recorded title or deed
• legal description of the deed with an attached map
• updated copy of title insurance for the property or a title opinion

In lieu of title insurance, a “title opinion” of the applicant’s legal representative may be submitted. This opinion will certify that the title is vested in the applicant and there are no outstanding liens or encumbrances imposed against the property, which would adversely affect the proposed development.

1. Leases, Easements, Permits, or Special Use Agreements -- Lands not owned by the applicant may be developed with grant assistance if provisions exist in a lease or use agreement. The lease, permit, or special use agreement must adequately safeguard the long-term use of the land for public recreation. AN APPLICATION WILL BE CONSIDERED INELIGIBLE IF A LEASE OR SPECIAL USE AGREEMENT IS NOT INCLUDED IN THE APPLICATION. The following must be submitted with the application:

• copy of the signed lease, easement, permit, or special use agreement.
• map depicting the area(s) existing or proposed for lease, easement, permit, or agreement

*NOTE: For a development project, an applicant must have a minimum of a 25-year lease with at least 20 years remaining at the time an application is submitted. The lease must include the provisions that (1) the lessee has the first right of lease renewal, and (2) the lessor cannot cancel the lease without cause. If the a 25-year lease has at least 20 years remaining, the application must include a letter of intent to exercise the option to renew (page 20). Proposed projects on State Trust Land leases will be considered on a case-by-case basis, however; must comply with the 25-year Term of Public Use.

Upload Tenure of Property/ Evidence of Control here:

Current Vesting Deed.pdf

Additional Tenure of Property Upload:

Buffalo Park land exchange.pdf

Additional Tenure of Property Upload:

Additional Documents

Upload Any Additional Documents Here:

Heritage Fund - Letters of Support.pdf

Additional Documents:

CIAL - FUTS for All - City Council - 2020-09-22.pdf

Additional Documents:

Additional Documents:

Additional Documents:

Certification Form

The authorized official for your agency must sign (Type) in the spaces provided below. We no longer need a handwritten signature on these documents or a hard copy of the application. However, for the electronic signature process to work the authorized official must also be registered in eCivis with their own unique username and password.

Check the box below each section to confirm acknowledgement

If your supervisor is required to sign grant documents please have your supervisor contact Parks staff at 602-542-7130 for assistance. You cannot sign (Type) on-behalf of your supervisor.

Certification & Authorized Signature Requirements:

1. The certified application form can be electronically signed and dated by the individual authorized to act on behalf of the project sponsor entity / organization in conducting all official business related to the project

EXCEPTION:

1. FOREST SERVICE APPLICANTS: Per request, Forest Service staff may opt out of electronic signature and provide a hard copy signature of this form. Print this form, collect required signature from the District Supervisor and upload sign Certification Form in the space provided.
2. BUREAU OF LAND MANAGEMENT APPLICANTS: District/Field Manager signatures are required. BLM District/Field Managers may register in eCivis and sign this form electronically or follow the FS signature process If needed.

I acknowledge and understand that this grant program operates on a reimbursement basis. Reimbursement occurs only after an expense is paid.

Reimbursement Acknowledgment

I acknowledge and understand that our agency will comply with all appropriate state and federal regulations, policies, guidelines, and requirements as they relate to the application.

Compliance Acknowledgement

I acknowledge and understand that our agency has the required matching funds for each reimbursement.

Matching Funds Acknowledgement

INSURANCE REQUIREMENTS

PROJECT SPONSOR and sub-contractors must procure and maintain occurrence-based insurance policies that cover claims for injury or death to persons or damage to property that may arise from or in connection with the performance of the work hereunder by the PROJECT SPONSOR, its agents, representatives, employees or sub-contractors.
The insurance requirements herein are minimum requirements for this Contract and in no way limit the indemnity covenants contained in this Contract. The State of Arizona in no way warrants that the minimum limits contained herein are sufficient to protect the PROJECT SPONSOR from liabilities that might arise out of the performance of the work under this contract by the PROJECT SPONSOR, its agents, representatives, employees or sub-contractors, and PROJECT SPONSOR is free to purchase additional insurance.

Minimum Scope and Limits of Insurance: PROJECT SPONSOR shall provide coverage with limits of liability not less than those stated below.

1. Commercial General Liability – Occurrence Form
   Policy shall include bodily injury, property damage, personal injury and broad form contractual liability coverage.
   • General Aggregate $2,000,000
   • Products – Completed Operations Aggregate $1,000,000
   • Personal and Advertising Injury $1,000,000
   • Blanket Contractual Liability – Written and Oral $1,000,000
   • Fire Legal Liability $50,000
   • Each Occurrence $1,000,000

a. The policy must be endorsed to include the following additional insured language: “The State of Arizona, its departments, agencies, boards, commissions, universities and its officers, officials, agents, and employees shall be named as additional insureds with respect to liability arising out of the activities performed by or on behalf of the PROJECT SPONSOR."

b. Policy shall contain a waiver of subrogation against the State of Arizona, its departments, agencies, boards, commissions, universities and its officers, officials, agents, and employees for losses arising from work performed by or on behalf of the PROJECT SPONSOR.

I acknowledge and understand that our agency is required to provide proof of liability insurance at the time of project signature.

Insurance Acknowledgement

Please provide Proof of Liability Insurance here:

Excess Policy 21-22 Flagstaff.pdf

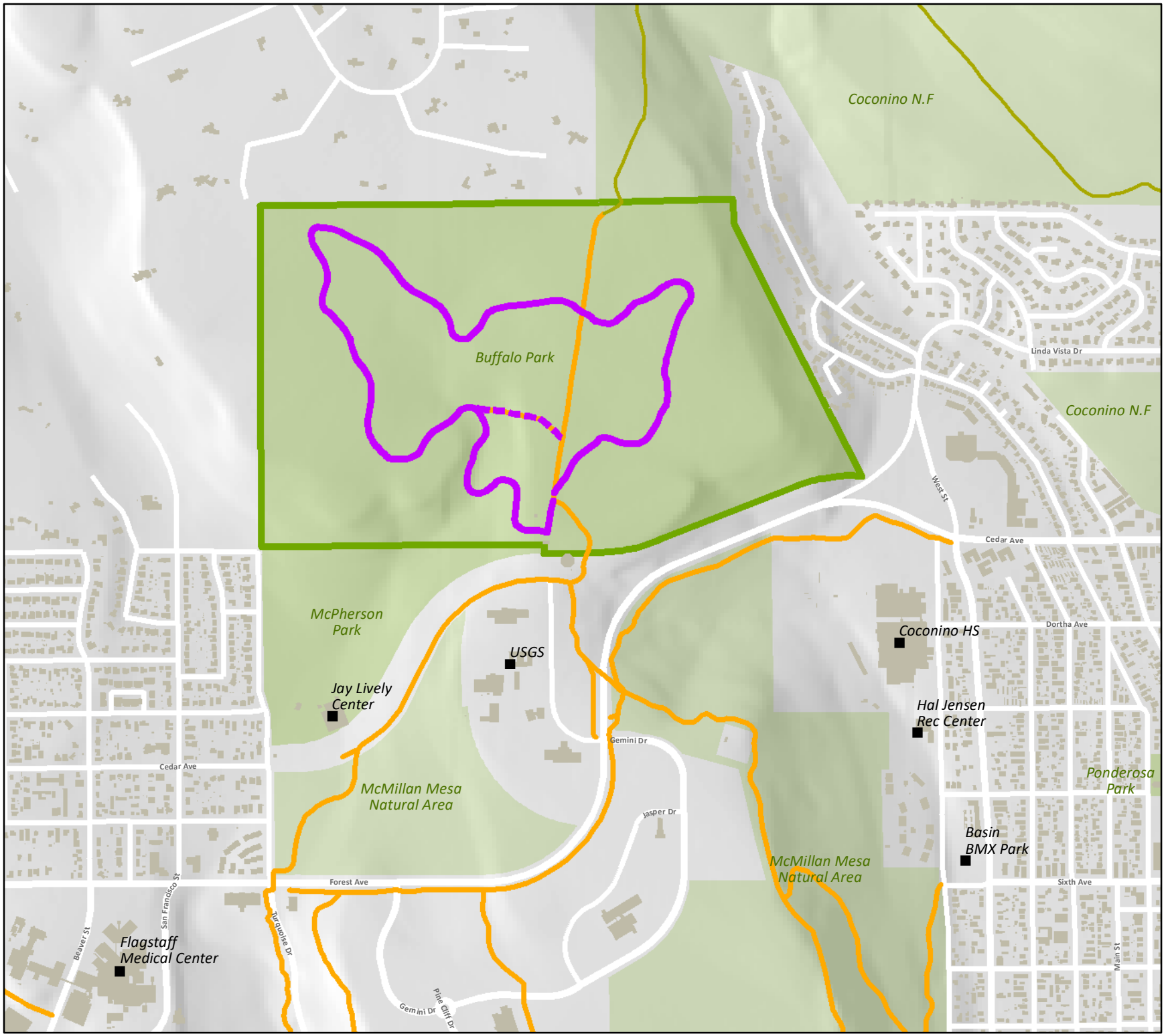
A signature page with the following information must be signed by the Authorized Agent and uploaded below to complete this application

I hereby certify that the information in this application is true and correct and that our agency agrees to comply with all appropriate procedures, guidelines, and requirements established by Arizona State Parks & Trails.

Project Sponsor Name:
Authorized Agent:
Title:
Contact Information:
Date:

Authorized Agent Signature Page

Cover letter - LWCF grant - Buffalo Park - 2021.pdf



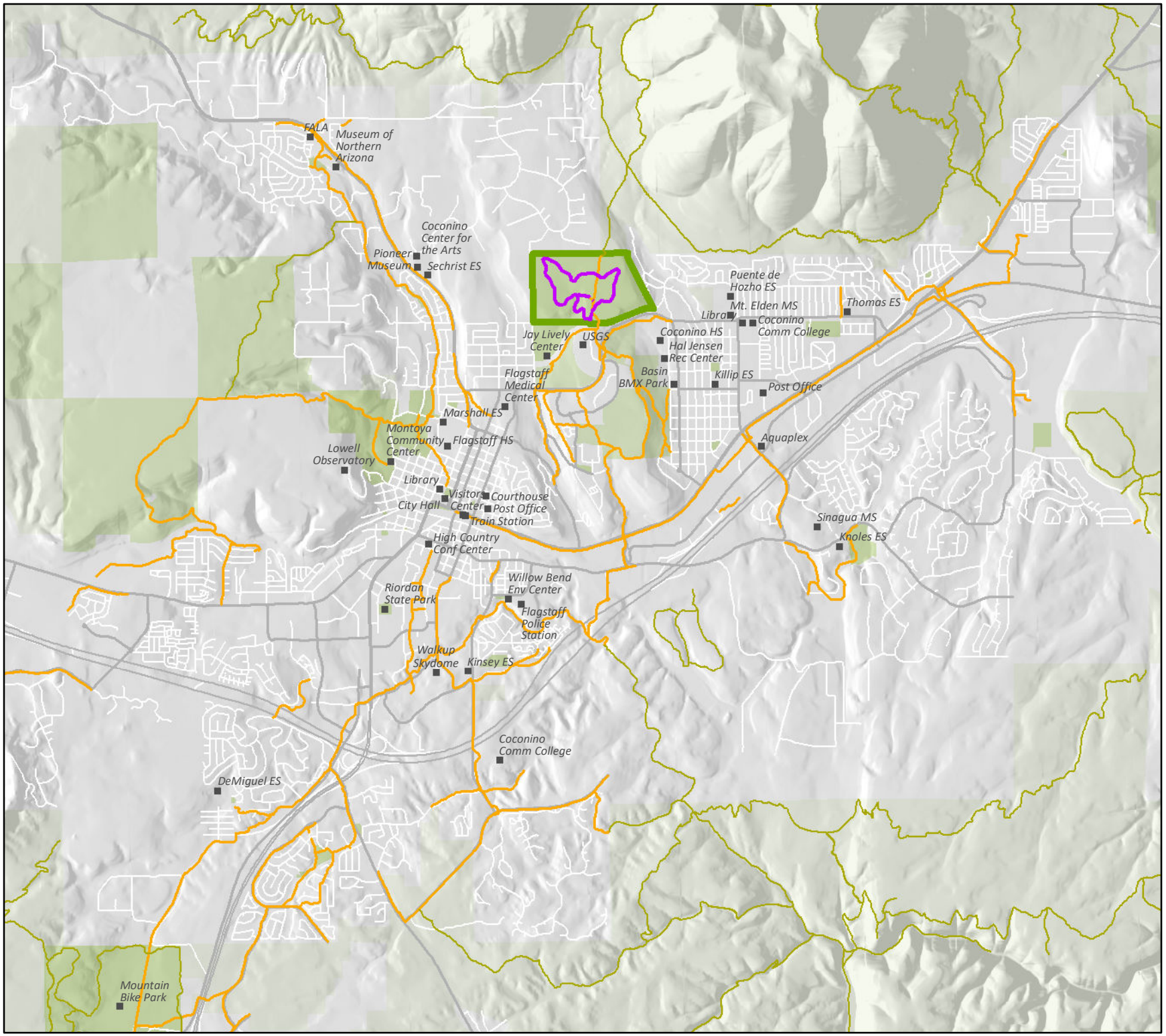
Vicinity map

Buffalo Park
Nate Avery Trail

- Singletrack
- Nate Avery Trail
- Accessible cutoff
- Existing FUTS
- Buffalo Park

1,200
Feet

City of Flagstaff
November 2021



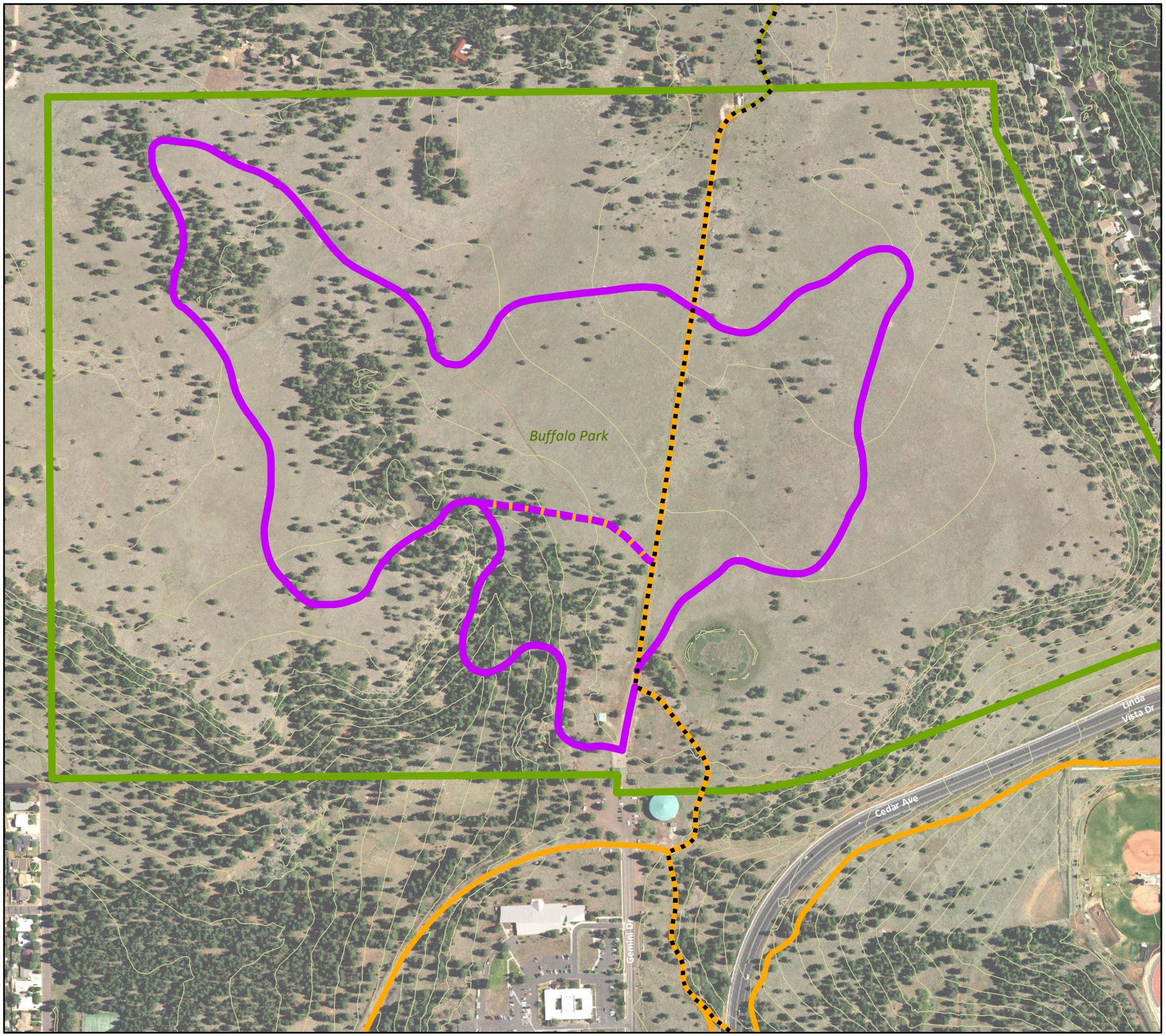
Community map

Buffalo Park
Nate Avery Trail

Singletrack
Nate Avery Trail
Accessible cutoff
Existing FUTS
Buffalo Park

1
Miles

City of Flagstaff
November 2021



Site map

Buffalo Park
Nate Avery Trail

- Arizona Trail
- Singletrack
- Nate Avery Trail
- Accessible cutoff
- Existing FUTS
- Buffalo Park

N

500
Feet

City of Flagstaff
November 2021

Project components

Buffalo Park
Nate Avery Trail

Parcourse

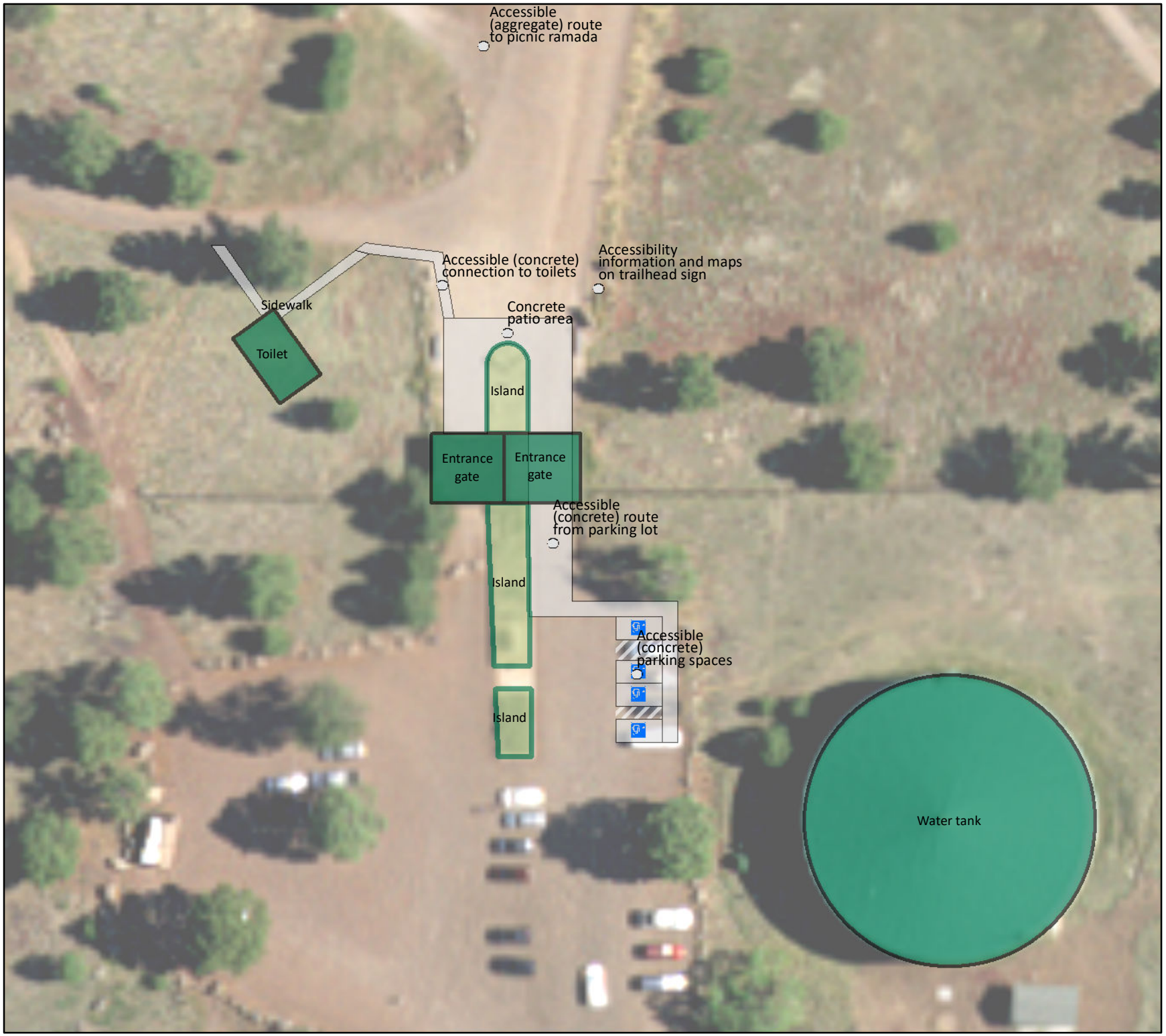
Drainage imp

Resurface

400

Feet

City of Flagstaff
November 2021



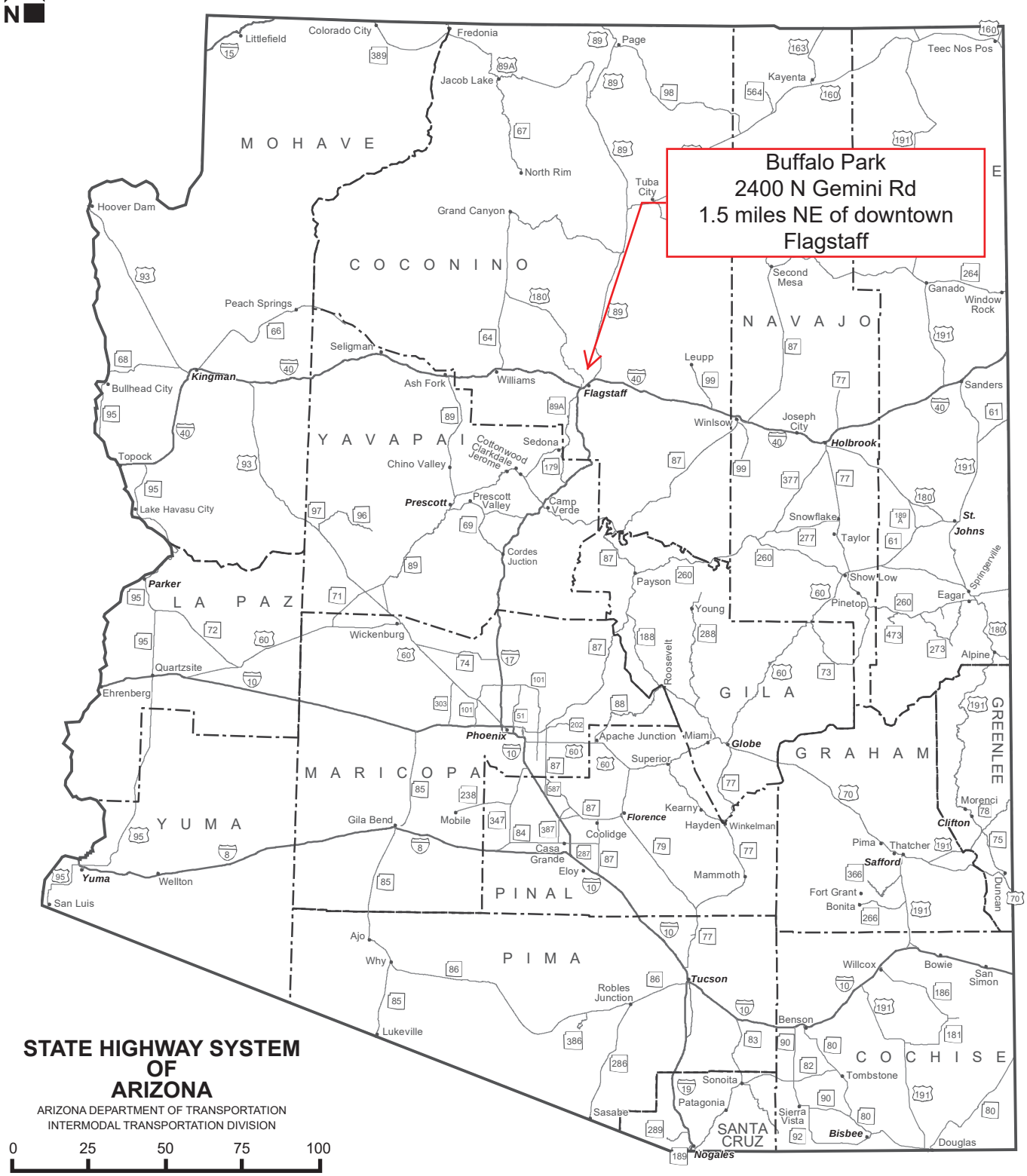
Entry detail

Buffalo Park
Nate Avery Trail

50
Feet

City of Flagstaff
November 2021

STATE MAP



STATE HIGHWAY SYSTEM OF ARIZONA

ARIZONA DEPARTMENT OF TRANSPORTATION
INTERMODAL TRANSPORTATION DIVISION

0 25 50 75 100
MILES

ADOT

PROJECT NAME Buffalo Park - Nate Avery Trail Accessibility Enhancements

PROJECT NUMBER Official Use only

TRACS NO. Official Use Only

FIGURE _____

View from Arizona Trail in Buffalo Park north to the San Francisco Peaks, Dry Lake Hills, and Mt Elden

The Nate Avery Trail is a 2-mile loop around Buffalo Park that is very popular with walkers and joggers

Buffalo Park includes open grassland as well as stands of Ponderosa pines

View north towards the Dry Lake Hills along the Arizona Trail. The trail continues north into the Coconino National Forest

There is one steep descent and ascent along the Nate Avery Trail; however it can be bypassed via an accessible cutoff

Locations along the trail where water is causing erosion will be fixed via the grant

Railroad ties at existing parcourse stations will be removed to make them accessible to wheelchair users

Parking lot and entryway. Accessible parking will be installed along the right side where vehicles are parked

Looking through the entryway back to the parking lot

View of the entryway from inside the park. New concrete at the entry will help make it more accessible. Sign kiosk is at left

The aggregate trail surface of the Nate Avery Trail is often loose and not suitable for wheelchairs

Budget Report

Passthrough Agency: Arizona
Program: FY 21: Heritage Fund - Non-Motorized Trails Grant
Stage: Pre-Award

Report Date: 11/22/2021
Requested By: Martin Ince
mince@flagstaffaz.gov

Budget Items

Category	Title	Description	Units	Unit Cost	Extended Cost	Direct Cost	Indirect Cost	GL Account	Cost Share	Type
Complete Environmental & Cultural Clearance & Compliance (10 pts)										
	Cultural survey	Consultant (LS)	1	$1,763.00	$1,763.00	$1,763.00	$0.00		$0.00	Direct Cost
	Cultural survey	Consultant (LS)	1	$2,387.00	$2,387.00	$0.00	$0.00		$2,387.00	Cost Share
Complete Environmental & Cultural Clearance & Compliance (10 pts) Total			**2**	**$4,150.00**	**$4,150.00**	**$1,763.00**	**$0.00**		**$2,387.00**	
Maintain Existing Trails (10 pts)										
	Repair drainage/install culverts	Culverts and end sections (EA)	12	$529.19	$6,350.00	$6,350.00	$0.00		$0.00	Direct Cost
	Repair drainage/install culverts	Culverts and end sections (EA)	12	$716.81	$8,602.00	$0.00	$0.00		$8,602.00	Cost Share
Maintain Existing Trails (10 pts) Total			**24**	**$1,246.00**	**$14,952.00**	**$6,350.00**	**$0.00**		**$8,602.00**	
Prevent or Restore Damage to Environmental & Cultural Sites (10 pts)										
	Edit & Insert Title	Edit & Insert Description	0	$0.00	$0.00	$0.00	$0.00		$0.00	Direct Cost
Prevent or Restore Damage to Environmental & Cultural Sites (10 pts) Total			**0**	**$0.00**	**$0.00**	**$0.00**	**$0.00**		**$0.00**	
Provide Trail Signs (10 pts)										
	Directional signing for accessible route	Signs (EA)	4	$151.20	$605.00	$605.00	$0.00		$0.00	Direct Cost
	Directional signing for accessible route	Signs (EA)	4	$204.80	$819.00	$0.00	$0.00		$819.00	Cost Share
Provide Trail Signs (10 pts) Total			**8**	**$356.00**	**$1,424.00**	**$605.00**	**$0.00**		**$819.00**	
Connect to Other Trails, Parks, & Communities (7 pts)										
	Edit & Insert Title	Edit & Insert Description	0	$0.00	$0.00	$0.00	$0.00		$0.00	Direct Cost
Connect to Other Trails, Parks, & Communities (7 pts) Total			**0**	**$0.00**	**$0.00**	**$0.00**	**$0.00**		**$0.00**	
Develop Trails & Facilities to Increase Accessibility (7 pts)										
	Accessible parking spaces and route	Concrete (SF)	2617	$7.13	$18,665.00	$18,665.00	$0.00		$0.00	Direct Cost
	Accessible parking spaces and route	Concrete (SF)	2617	$9.66	$25,283.00	$0.00	$0.00		$25,283.00	Cost Share
	Accessible parking signs and marking	Signs (EA)	4	$360.00	$1,441.00	$1,441.00	$0.00		$0.00	Direct Cost
	Accessible parking signs and marking	Signs (EA)	4	$488.00	$1,951.00	$0.00	$0.00		$1,951.00	Cost Share
	Accessible patio extension/sidewalk at entrance	Concrete (SF)	1935	$7.46	$14,428.00	$14,428.00	$0.00		$0.00	Direct Cost
	Accessible patio extension/sidewalk at entrance	Concrete (SF)	1935	$10.10	$19,544.00	$0.00	$0.00		$19,544.00	Cost Share
	Resurface trail with new aggregate material	FUTS mix (CF)	29700	$1.05	$31,153.00	$31,153.00	$0.00		$0.00	Direct Cost
	Resurface trail with new aggregate material	FUTS mix (CF)	29700	$1.42	$42,197.00	$0.00	$0.00		$42,197.00	Cost Share
Develop Trails & Facilities to Increase Accessibility (7 pts) Total			**68512**	**$884.82**	**$154,662.00**	**$65,687.00**	**$0.00**		**$88,975.00**	

Enforce Existing Rules & Regulations (7 pts)										
	Edit & Insert Title	Edit & Insert Description	0	$0.00	$0.00	$0.00	$0.00		$0.00	Direct Cost
Enforce Existing Rules & Regulations (7 pts) Total			**0**	**$0.00**	**$0.00**	**$0.00**	**$0.00**		**$0.00**	
Promote Safe & Responsible Recreation (7 pts)										
	Edit & Insert Title	Edit & Insert Description	0	$0.00	$0.00	$0.00	$0.00		$0.00	Direct Cost
Promote Safe & Responsible Recreation (7 pts) Total			**0**	**$0.00**	**$0.00**	**$0.00**	**$0.00**		**$0.00**	
Provide Facilities Near Trails (7 pts)										
	New accessible fitness stations	Stations (EA)	6	$2,293.00	$13,761.00	$13,761.00	$0.00		$0.00	Direct Cost
	New accessible fitness stations	Stations (EA)	6	$3,107.00	$18,639.00	$0.00	$0.00		$18,639.00	Cost Share
	Replace RR ties, grade surface at exercise stations	Stations (EA)	18	$264.00	$4,760.00	$4,760.00	$0.00		$0.00	Direct Cost
	Replace RR ties, grade surface at exercise stations	Stations (EA)	18	$358.00	$6,448.00	$0.00	$0.00		$6,448.00	Cost Share
Provide Facilities Near Trails (7 pts) Total			**48**	**$6,022.00**	**$43,608.00**	**$18,521.00**	**$0.00**		**$25,087.00**	
Provide Trail Maps & Information (7 pts)										
	Trailhead information and map	Signs (EA)	1	$367.00	$367.00	$367.00	$0.00		$0.00	Direct Cost
	Trailhead information and map	Signs (EA)	1	$497.00	$497.00	$0.00	$0.00		$497.00	Cost Share
Provide Trail Maps & Information (7 pts) Total			**2**	**$864.00**	**$864.00**	**$367.00**	**$0.00**		**$497.00**	
Construct New Trails (4 pts)										
	Edit & Insert Title	Edit & Insert Description	0	$0.00	$0.00	$0.00	$0.00		$0.00	Direct Cost
Construct New Trails (4 pts) Total			**0**	**$0.00**	**$0.00**	**$0.00**	**$0.00**		**$0.00**	
Obtain Land for Trails & Trail Access (4 pts)										
	Edit & Insert Title	Edit & Insert Description	0	$0.00	$0.00	$0.00	$0.00		$0.00	Direct Cost
Obtain Land for Trails & Trail Access (4 pts) Total			**0**	**$0.00**	**$0.00**	**$0.00**	**$0.00**		**$0.00**	

Other

Category	Title	Description	Units	Unit Cost	Extended Cost	Direct Cost	Indirect Cost	GL Account	Cost Share	Type
Other										
	Design	Engineering consultant (LS)	1	$6,707.00	$6,707.00	$6,707.00	$0.00		$0.00	Direct Cost
	Design	Engineering consultant (LS)	1	$9,086.00	$9,086.00	$0.00	$0.00		$9,086.00	Cost Share
Other Total			**2**	**$15,793.00**	**$15,793.00**	**$6,707.00**	**$0.00**		**$9,086.00**	
Grand Total			**68598**	**$29,315.82**	**$235,453.00**	**$100,000.00**	**$0.00**		**$135,453.00**	

Budget Report, Created by Martin Ince, mince@flagstaffaz.gov, 11/22/2021
Source: eCivis™ Portal
http://www.ecivis.com/

City of Flagstaff

October 22, 2021

Arizona State Parks and Trails
Mickey Rogers, Chief of Grants and Trails
23751 North 23rd Avenue, Suite 190
Phoenix, Arizona 85085

Dear Mr. Rogers,

The City of Flagstaff's Commission on Inclusion and Adaptive Living (CIAL) is writing to express its support for the City's application to Arizona State Parks and Trails for a Land and Water Conservation Fund (LWCF) grant to fund a series of accessibility enhancements for Buffalo Park and the Nate Avery Trail.

This project was initiated as a direct result of an accessibility audit of the FUTS system conducted by members of the CIAL, and the commission has subsequently worked closely with City staff on project planning and development. The proposed modifications address accessibility issues identified in the audit and will greatly expand access to the park and trail for members of our community who are differently abled.

The CIAL consists of seven citizen volunteers who have been appointed by the City Council to serve the disabled community and advise on all issues affecting individuals who are differently abled. The commission's goals are to expand educational opportunities, improve access to housing, buildings, and transportation, have greater participation in recreational, social, and cultural activities, and encourage greater opportunity for employment and expand and strengthen rehabilitative programs and facilities.

We are excited to see this important project move forward. Thank you for the opportunity to express our support.

Sincerely,

Jamie Martinez

Jamie Martinez, Chair
Commission on Inclusion and Adaptive Living

211 West Aspen Avenue
Flagstaff, Arizona 86001
(928) 774-5281

A 501(c)3 nonprofit organization
81-3359695

Northern Arizona Adaptive Sports Association
P.O. Box 1903
Flagstaff, AZ 86004
928-266-2494

October 13, 2021

Martin Ince
Multimodal Transportation Planner
City of Flagstaff
211 West Aspen Avenue
Flagstaff, AZ 86001

Re: Letter of Commitment
Buffalo Park/Nate Avery FUTS Trail Accessibility Enhancements

Dear Mr. Ince,

I am pleased to write this Letter of Support on behalf of the Northern Arizona Adaptive Sports Association (NAASA) with regards to your grant proposal to make Buffalo park more accessible for all people in our community. Your proposal, Buffalo Park/Nate Avery FUTS Trail Accessibility Enhancements will help to improve accessible community approaches and commitment to the health and wellbeing of people with disabilities.

NAASA provides accessible recreation for people of all abilities in our community and utilizes Buffalo Park three times a week to provide outdoor hiking excursions to people with intellectual, developmental and physical disabilities. The proposal directly supports our mission: Enriching lives through adaptive recreation. Successful completion of this project will make our community more inclusive and will have a positive impact on people living with and touched by disability. We wish you well in the process of your proposal and are committed to helping in any way you need.

Respectfully,

Alexander Davenport
Founder

City of Flagstaff

14 October 2021

Mickey Rogers, Chief of Grants and Trails
Arizona State Parks and Trails
23751 North 23rd Ave, Suite 190
Phoenix, Arizona 85085

Mr. Rogers,

At its regular meeting of April 8, 2021, the City of Flagstaff's Pedestrian Advisory Committee approved a motion to submit a letter in support of the City's application to Arizona State Parks and Trails for a Heritage Fund Trails Program grant.

This grant will fund a variety of accessibility enhancements for Buffalo Park and the Nate Avery Trail. The Pedestrian Advisory Committee supports the project because it will enable more of the community to use the trail and access the park and natural area.

Because Buffalo Park and the Nate Avery Trail are centerpieces in Flagstaff's parks and urban trails system, making them more universally accessible is an important step in our efforts to be more inclusive.

Thank you for the opportunity to express our support.

Sincerely,

Brandon Cruickshank
Chair, Pedestrian Advisory Committee

211 West Aspen Avenue
Flagstaff, Arizona 86001
(928) 774-5281

CITY OF
FLAGSTAFF

To whom it may concern,

The Flagstaff Parks & Recreation Commission is happy to provide this letter of support for Parks & Recreation Department for the Land & Water Conservation Fund. The Flagstaff Parks and Recreation Commission consists of seven citizens, and makes recommendations to the Council regarding City parks and recreational programs, the annual budget and capital improvements for the Parks and Recreation Divisions. The Commission works to ensure accountability, voice and advocate on behalf of the public in regards to City Parks & Recreation.

The Flagstaff Parks & Recreation Department is renowned throughout Arizona for its high elevation training, beautiful scenic views and quality recreation opportunities for all seasons. The departments mission is to enhance the Flagstaff community through people, parks and programs. Recreation Services is dedicated to providing people with and without physical and mental challenges the opportunity to participate in recreation and leisure programs.

Funds generated through this grant will continue to support Flagstaff recreation for all citizens; really shining the light on inclusivity. The entire project would enable the City to designate Buffalo Park as 100% accessible creating a host of new visitors within and outside of the community.

Thank you for your time and consideration. Feel free to contact us with any questions by email.

Sincerely,

The Flagstaff Parks & Recreation Commission

November 4, 2021

Arizona State Parks and Trails
Mickey Rogers, Chief of Grants and Trails
23751 North 23rd Avenue, Suite 190
Phoenix, Arizona 85085

Dear Mr. Rogers,

The Board of Directors of the Flagstaff Trails Initiative (FTI) wishes to express its support for the City of Flagstaff's grant application to Arizona State Parks for accessibility enhancements to Buffalo Park and the Nate Avery Flagstaff Urban Trail System Trail.

The Flagstaff Regional Trails Strategy, which was prepared by FTI in 2020 following an extensive public process, acknowledges the need to provide a diversity of trail experiences for all users. A community survey conducted as part of the planning process indicates that options for users with mobility limitations were rated as the least adequate aspect of trails in the Flagstaff area. The trails strategy recommends providing a range of trail experiences and addressing gaps in the current system, including mobility-impaired and accessible trails. The proposed project at Buffalo Park will help further this goal and promote accessibility for all.

The Flagstaff Trails Initiative is a 501c3 trail-centric non-profit whose mission is to elevate trails in and around Flagstaff from good to extraordinary. The purpose of FTI is to develop and implement a collaborative, cross-jurisdictional strategy for recreational trails in the Flagstaff region of Coconino County, Arizona that will improve upon the old trail system to create an extraordinary trail network for the community.

Thank you for the opportunity to provide comments.

Sincerely,

Justin Inglis

Justin Inglis
Interim Coordinator

CITY OF FLAGSTAFF

STAFF SUMMARY REPORT

To:	The Honorable Mayor and Council
From:	Tiffany Antol, Senior Planner
Date:	12/01/2021
Meeting Date:	12/07/2021

TITLE:

Consideration and Approval of Final Plat PZ-17-00175-05: Miramonte Birch & Verde, LLC requests Final Plat approval for Miramonte at Birch Avenue. The subdivision consists of 24 residential condominiums units, located at 304-316 E Birch Avenue. The condominium plat is on 0.53 acres in the T4N.1 (Transect) Zone.

STAFF RECOMMENDED ACTION:

Staff recommends approving the Final Plat, and authorizing the Mayor to sign both the Plat and City/Subdivider Agreement when notified by staff that all documents are ready for recording.

Executive Summary:

Miramonte at Birch Avenue is a residential condominium subdivision development that consists of 24 dwelling units on 0.53 acres located at 304-316 E Birch Avenue. The project is a 3-story building in the T4 Neighborhood (T4N.1) Zone. City staff approved the Site Plan for the development (PZ-17-00175-02) on June 7, 2019. Civil plans were approved on April 13, 2020.

Financial Impact:

No financial impacts are anticipated with this Final Plat.

Policy Impact:

There are no policy impacts affiliated with this Final Plat.

Connection to PBB Priorities/Objectives, Carbon Neutrality Plan & Regional Plan:

Priority Based Budget Key Community Priorities and Objectives

Robust Resilient Economy - Grow and strengthen a more equitable and resilient economy.

Regional Plan

Policy LU.5.1. Encourage development patterns within the designated growth boundaries to sustain efficient infrastructure projects and maintenance.
Policy LU.5.2. Promote infill development over peripheral expansion to conserve environmental resources, spur economic investments, and reduce the cost of providing infrastructure and services.
Goal NH.1. Foster and maintain healthy and diverse urban, suburban, and rural neighborhoods in the Flagstaff region.
Policy WR.4.3 Development requiring public utility services will be located with the Urban Growth Boundary.

Has There Been Previous Council Decision on This:

The City Council approved the Preliminary Plat for this subdivsion on September 7, 2021.

Options and Alternatives:

1. Approve the Final Plat with no conditions.
2. Approve the Final Plat with conditions.
3. Deny the Final Plat based on non-compliance with the Zoning Code, the Subdivision Code, and/or the Engineering Design Standards and Specification for New Infrastructure.

Background/History:

The project is a 3-story building in the T4 Neighborhood (T4N.1) Zone. City staff approved the site plan for the development (PZ-17-00175-02) on June 7, 2019. Civil plans were approved April 13, 2020. City approvals were based on conformance with all relevant City Development Standards.

The project is being developed according to the standards for the T4 Neighborhood (T4N.1) Zone, the Apartment Building Type, and the Forecourt Private Frontage Type. There are 14 one-bedroom and 10 two-bedroom units in the building.

Key Considerations:

This application is for a condominium plat, which takes a multi-unit complex, such as the subject property, and creates the potential for individually owned units. The Final Plat delineates all the elements affiliated with the individual units. In this case, the units are defined as the airspace within each unit. The vertical boundaries start at the finish floor elevation (FFE) of each unit and extend to the ceiling of that unit. The horizontal boundaries start at the inside of the walls enclosing each unit. Each unit also has one or two decks associated with it, which are being platted as limited common elements.

All parking spaces on the lot - including those inside the garage and on a surface lot to the north of the building - are being platted as limited common elements.

All common areas in the building, including the spaces between walls and floor plates, the trash chute, stairwell, elevator, hallways, the drive aisle between parking spaces in the garage, the ADA space in the garage, and mechanical rooms, etc., are common elements. All areas outside of the building and the limited common elements are part of Tract A, which is a dedication to the HOA and as a private utility and drainage easement.

Community Benefits and Considerations:

The community benefits of this project are encapsulated in the PBB Key Community Prioriteis/Objectives and the Regional Plan goals and policies that it meets, such as providing new housing within the urban growth boundary.

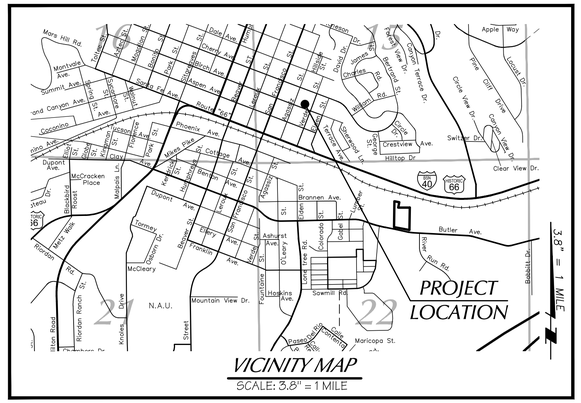
Community Involvement:

Inform. The existing zoning of the subject property allows for the proposed subdivision. No public hearings or public outreach are required by either the Zoning Code or the Subdivision Code as part of the Final Plat review process.

Attachments: Miramonte @ Birch Final Plat

FINAL PLAT
FOR
BIRCH AVENUE CONDOMINIUMS

LOCATED IN A PORTION OF THE SW1/4 OF SECTION 15,
TOWNSHIP 21 NORTH, RANGE 7 EAST, G&S.R.M.
FLAGSTAFF, COCONINO COUNTY, ARIZONA



VICINITY MAP
SCALE: 3.8" = 1 MILE

INDEX TO SHEETS

1	COVER SHEET and PROJECT INFORMATION
2	SITE PLAT
3	FIRST FLOOR PLAT - WEST
4	FIRST FLOOR PLAT - EAST
5	SECOND FLOOR PLAT - WEST
6	SECOND FLOOR PLAT - EAST
7	THIRD FLOOR PLAT - WEST
8	THIRD FLOOR PLAT - EAST
9	FOURTH FLOOR PLAT - WEST
10	FOURTH FLOOR PLAT - EAST

RESOURCE PROTECTION PLAN

THERE ARE NO RESOURCES PRESENT ON THE SITE.

ADEQUATE WATER SUPPLY

THE CITY OF FLAGSTAFF PROVIDES WATER (UTILITY) SERVICE PURSUANT TO STATE LAW AND IS CURRENTLY OPERATING UNDER A DESIGNATION OF ADEQUATE WATER SUPPLY GRANTED BY THE ARIZONA DEPARTMENT OF WATER RESOURCES, APPLICATION No. 41-900002.0002.

CIVIL ENGINEER OF SUBDIVISION

THE PREPARATION OF ENGINEERING DRAWINGS FOR THIS SUBDIVISION HAS BEEN PERFORMED BY CIVIL DESIGN & ENGINEERING, INC., 618 E. ROUTE 66, FLAGSTAFF, AZ. 86001. CHRISTINE A. LAGUNA (CERTIFICATE NO. 29327)

OFF-SITE IMPROVEMENTS

ALL OFF-SITE FRONTAGE SUBDIVISION IMPROVEMENTS SHALL BE CONSTRUCTED BY THE SUBDIVISION DEVELOPER IN ACCORDANCE WITH THE APPROVED CITY OF FLAGSTAFF PUBLIC AND PRIVATE IMPROVEMENT PLANS FOR MIRAMONTE AT BIRCH AVE., PREPARED BY CIVIL DESIGN AND ENGINEERING, INC., SEALED BY CHRISTINE A. LAGUNA, SEAL DATE 4/22/20

PRELIMINARY
NOT FOR CONSTRUCTION OR RECORDING

LEGAL DESCRIPTION: Lots 1 through 8 inclusive, Block 30, Railroad Addition to the Town of Flagstaff, as shown on the plat thereof, recorded

PLAT PREPARED BY: MOGOLLON ENGINEERING AND SURVEYING
411 W. SANTA FE
FLAGSTAFF, AZ. 86001
(928) 214-0214

DEDICATION:

STATE OF ARIZONA }SS.
COUNTY OF COCONINO }

KNOW ALL MEN BY THESE PRESENTS: THAT MIRAMONTE BIRCH & VERDE, LLC, HAS SUBDIVIDED UNDER THE NAME BIRCH AVENUE CONDOMINIUMS, A SUBDIVISION LOCATED IN A PORTION T21N R7E, INSTRUMENT 3881539, COCONINO COUNTY, ARIZONA AS SHOWN AND PLATTED HEREON AND DOES PUBLISH THIS PLAT AS AND FOR THE PLAT OF BIRCH AVENUE CONDOMINIUMS AND DECLARES THAT THIS PLAT SETS FORTH THE LOCATION AND GIVES THE DIMENSIONS OF EACH UNIT, TRACT, STREET, AND EASEMENT CONSTITUTING SAME, AND THAT EACH UNIT, TRACT, STREET AND EASEMENT SHALL BE KNOWN BY THE NUMBER, LETTER, AND/OR NAME GIVEN TO EACH RESPECTIVELY AS SHOWN ON THIS PLAT.

PUBLIC RIGHT OF WAY: GRANTOR HEREBY DEDICATES TO THE CITY OF FLAGSTAFF, IN FEE SIMPLE, ALL PUBLIC RIGHT-OF-WAY SHOWN ON THE PLAT FOR PUBLIC USE. GRANTOR OR SUCCESSOR IN INTEREST AS ABUTTING PROPERTY OWNER SHALL MAINTAIN THE SIDEWALK AND LANDSCAPING WITHIN THE RIGHT-OF-WAY BETWEEN THE STREET CURB AND THE ABUTTING PROPERTY IN COMPLIANCE WITH THE FLAGSTAFF CITY CODE.

EASEMENTS: GRANTOR HEREBY DEDICATES TO THE CITY OF FLAGSTAFF, ARIZONA, AN ARIZONA MUNICIPAL CORPORATION, PERPETUAL NON-EXCLUSIVE EASEMENTS OVER, UNDER, UPON, AND ACROSS ALL EASEMENT AREAS DESIGNATED ON THE PLAT FOR THE EASEMENT PURPOSES, INCLUDING ANY RELATED FACILITIES AND EQUIPMENT AS FOLLOWS: PUBLIC UTILITY EASEMENT FOR PUBLIC USE, FOR UTILITY PURPOSES, INCLUDING WITHOUT LIMITATION, CONSTRUCTION, OPERATION, MAINTENANCE, MODIFICATION, REPLACEMENT AND REPAIR OF ELECTRICITY, ENERGY, GAS, WATER, SEWER, PUBLIC STORM WATER SYSTEM, TELECOMMUNICATIONS, INTERNET SERVICES, CABLE TELEVISION, AND OTHER UTILITIES.

EASEMENT GENERAL CONDITIONS: ALL EASEMENTS GRANTED HEREIN ARE SUBJECT TO THE FOLLOWING GENERAL CONDITIONS: (A) GRANTOR SHALL NOT ALLOW USE OF THE EASEMENT AREA IN A MANNER THAT INTERFERES WITH EASEMENT. (B) GRANTOR OR SUCCESSOR IN INTEREST SHALL MAINTAIN EASEMENT AREAS FREE AND CLEAR OF VEGETATION OR OBSTRUCTIONS THAT INTERFERE WITH THE EASEMENT, PER THE FLAGSTAFF CITY CODE AS AMENDED; AND (C) GRANTEE MAY MAINTAIN VEGETATION AND REMOVE OBSTRUCTIONS THAT INTERFERE WITH THE EASEMENT; (D) IN THE EVENT THE CITY OF FLAGSTAFF HAS NOTIFIED GRANTOR AND PROVIDED REASONABLE OPPORTUNITY TO MAINTAIN THE SLOPE, VEGETATION AND/OR REMOVE OBSTRUCTIONS THAT INTERFERE WITH THE EASEMENT, CITY OF FLAGSTAFF MAY ISSUE AN ASSESSMENT AGAINST GRANTOR TO RECOVER THE CITY'S ACTUAL, REASONABLE MAINTENANCE COSTS AND RECORD IT AS A LIEN AGAINST GRANTOR'S PROPERTY UNTIL THE ASSESSMENT AND ANY STATUTORY INTEREST IS PAID; (E) GRANTEE SHALL HAVE A LIMITED, TEMPORARY RIGHT OF ACCESS ACROSS GRANTOR'S ADJACENT PROPERTY FOR EASEMENT PURPOSES IF ACCESS CANNOT BE REASONABLY ACHIEVED BY OTHER MEANS.

BINDING EFFECT: THE EASEMENTS GRANTED WITHIN THIS DEDICATION ARE PERMANENT AND PERPETUAL AND SHALL RUN WITH THE LAND AND BE BINDING UPON OWNER AND ITS HEIRS, ASSIGNS, AND SUCCESSORS IN INTEREST TO THIS PLAT OR ANY PARCEL OR LOT THEREOF.

IMPROVEMENTS: GRANTOR HEREBY DEDICATES TO THE CITY OF FLAGSTAFF ALL IMPROVEMENTS INSTALLED OR CONSTRUCTED BY GRANTOR FOR CITY PUBLIC RIGHTS-OF-WAY AND CITY UTILITIES WITHIN THE EASEMENT AREAS, AND SUCH DEDICATION SHALL BE EFFECTIVE WHEN FORMALLY ACCEPTED BY THE CITY ENGINEER.

INTERIM LIABILITY: MIRAMONTE BIRCH & VERDE LLC, DOES HEREBY RELEASE AND DISCHARGE THE CITY OF FLAGSTAFF, AND INDEMNIFY, DEFEND, AND HOLD HARMLESS THE CITY OF FLAGSTAFF, OF AND FROM ANY LIABILITY AND ALL CLAIMS FOR DAMAGES OF ANY KIND TO PERSONS OR PROPERTY THAT MAY ARISE AT ANY TIME IN THE FUTURE OVER NEWLY DEDICATED PUBLIC RIGHTS-OF-WAY AS DEPICTED ON THIS PLAT UNTIL THE RIGHT-OF-WAY IS IMPROVED TO CITY STANDARDS AND THOSE IMPROVEMENTS ARE APPROVED AND FORMALLY ACCEPTED BY THE CITY ENGINEER. GRANTOR OR SUCCESSOR IN INTEREST SHALL MAINTAIN THE NEWLY DEDICATED PUBLIC RIGHTS-OF-WAY UNTIL THE ACCEPTANCE DATE.

NOW, THEREFORE, IN WITNESS WHEREOF, MIRAMONTE BIRCH & VERDE, LLC, HAS CAUSED ITS NAME TO BE SIGNED AND THE SAME TO BE ATTESTED BY THE SIGNATURE OF ITS REPRESENTATIVE, THEREUNTO AUTHORIZED.

DONE AT _____, ARIZONA, THIS ____ DAY OF _____ 20___.

BY: _____
CHRISTOPHER KEMMERLY (MANAGING MANAGER)

STATE OF ARIZONA }SS.
COUNTY OF COCONINO }

ON THIS _____ DAY OF _____ 20___, BEFORE ME PERSONALLY APPEARED CHRISTOPHER KEMMERLY, THE MANAGING MANAGER.
FOR AND ON BEHALF THEREOF, WHOSE IDENTITY WAS PROVEN TO ME ON THE BASIS OF SATISFACTORY EVIDENCE TO BE THE PERSON WHO HE OR SHE CLAIM TO BE, AND ACKNOWLEDGED THAT HE OR SHE SIGNED THE ABOVE DOCUMENT.

_____
NOTARY PUBLIC

OCCUPANCY:

NO CERTIFICATE OF OCCUPANCY FOR ANY RESIDENCE MAY BE ISSUED NOR MAY ANY RESIDENCE ERECTED IN THIS TRACT BE OCCUPIED UNTIL THE REQUIRED WATER, SEWER, AND ALL OTHER ESSENTIAL UTILITIES ARE INSTALLED AND AN ALL-WEATHER ACCESS ROADWAY TO THE RESIDENCE IS CONSTRUCTED AND APPROVED OR ACCEPTED BY THE CITY ENGINEER.

NOTES:

EXCEPT FOR CONSTRUCTION AND IMPROVEMENTS BY GOVERNMENTAL ENTITIES AND CERTIFIED PUBLIC UTILITIES, CONSTRUCTION AND IMPROVEMENTS WITHIN UTILITY EASEMENTS SHALL BE LIMITED TO ONLY THE FOLLOWING:
A. REMOVABLE WOOD, WIRE, OR SECTION-TYPE FENCING
B. CONSTRUCTION, STRUCTURES, OR BUILDINGS EXPRESSLY APPROVED IN WRITING BY ALL PUBLIC UTILITIES WHICH USE OR SHALL USE THE UTILITY EASEMENT.

CONSTRUCTION OF LANDSCAPING WITHIN CLEAR VIEW ZONES IS RESTRICTED PER THE CITY OF FLAGSTAFF ENGINEERING DESIGN & CONSTRUCTION STANDARDS & SPECIFICATIONS FOR NEW INFRASTRUCTURE (2017 EDITION) – SECTION 13-10-006-0002, INTERSECTION SIGHT TRIANGLES, CLEAR VIEW ZONES.

NO FENCING, RE-GRADING, DISTURBANCE OF NATURAL GROUND, PLACEMENT OF FILL OR ANY OTHER OBSTRUCTIONS ARE PERMITTED WITHIN THE DRAINAGE EASEMENTS.

FIRE APPARATUS ACCESS ROADS SHALL BE PROVIDED ON SITE WHEN ANY PORTION OF THE FACILITY OR BUILDING IS BEYOND 150 FEET FROM APPROVED FIRE APPARATUS ACCESS ROADWAYS AS MEASURED BY AN APPROVED ROUTE AROUND THE EXTERIOR OF THE BUILDING OR FACILITY. ALTERNATIVE FIRE PROTECTION MEASURES MAY BE SUBSTITUTED FOR MEETING THIS REQUIREMENT WHEN APPROVED BY THE FIRE DEPARTMENT. CONFER WITH THE FLAGSTAFF FIRE DEPARTMENT FIRE PREVENTION OFFICER TO DETERMINE THE SPECIFIC MEANS OF COMPLIANCE.

THE PROPERTY OWNERS ASSOCIATION SHALL BE SOLELY RESPONSIBLE FOR THE OPERATION, MAINTENANCE, AND LIABILITY FOR PRIVATE DETENTION FACILITIES AND PRIVATE DRAINAGEWAYS.

THE CITY OF FLAGSTAFF SHALL HAVE THE RIGHT TO PERIODICALLY INSPECT SAID DETENTION FACILITIES TO VERIFY THAT REGULAR MAINTENANCE ACTIVITIES ARE BEING PERFORMED ADEQUATELY.

CITY OF FLAGSTAFF:

IT IS HEREBY CERTIFIED THAT THIS PLAT HAS BEEN OFFICIALLY APPROVED FOR RECORD BY THE COUNCIL OF THE CITY OF FLAGSTAFF, ARIZONA ON THE

_____ DAY OF _____, 20___

BY: _____
MAYOR

ATTEST: _____
CITY CLERK

IT IS HEREBY CERTIFIED THAT THIS PLAT HAS BEEN OFFICIALLY APPROVED FOR RECORD BY THE PLANNING DIRECTOR AND CITY ENGINEER, CITY OF FLAGSTAFF, COCONINO COUNTY, ARIZONA ON THE _____ DAY OF _____, 20___

BY: _____
PLANNING DIRECTOR

BY: _____
CITY ENGINEER

A.R.S. 33-1212. UNIT BOUNDARIES
EXCEPT AS PROVIDED BY THE DECLARANT.

1. IF WALLS, FLOORS OR CEILINGS ARE DESIGNATED AS BOUNDARIES OF A UNIT, ALL LATH, FURRING, WALLBOARD, PLASTERBOARD, PLASTER, PANELING, TILES, WALLPAPER, PAINT, FINISHED FLOORING AND ANY OTHER MATERIALS CONSTITUTING ANY PART OF THE FINISHED SURFACE ARE A PART OF THE UNIT, AND ALL OTHER PORTIONS OF THE WALLS, FLOORS OR CEILINGS ARE A PART OF THE COMMON ELEMENT.

2. IF ANY CHUTE, FLUE, DUCT, WIRE, CONDUIT, BEARING WALL, BEARING COLUMN, OR OTHER FIXTURE LIES PARTIALLY WITHIN AND PARTIALLY OUTSIDE THE DESIGNATED BOUNDARIES OF A UNIT, ANY PORTION SERVING ONLY THAT UNIT IS A LIMITED COMMON ELEMENT ALLOCATED SOLELY TO THAT UNIT AND ANY PORTION SERVING MORE THAN ONE UNIT OR ANY PORTION OF THE COMMON ELEMENTS IS A PART OF THE COMMON ELEMENTS.

3. SUBJECT TO THE PROVISIONS OF PARAGRAPH 2, ALL SPACES, INTERIOR PARTITIONS AND OTHER FIXTURES AND IMPROVEMENTS WITHIN THE BOUNDARIES OF A UNIT ARE A PART OF THE UNIT.

4. ANY SHUTTERS, AWNINGS, WINDOW BOXES, DOORSTEPS, STOOPS, PORCHES, BALCONIES, ENTRYWAYS, OR PATIOS, AND ALL EXTERIOR DOORS AND WINDOWS OR OTHER FIXTURES DESIGNED TO SERVE A SINGLE UNIT, BUT LOCATED OUTSIDE THE UNIT'S BOUNDARIES, ARE LIMITED COMMON ELEMENTS ALLOCATED EXCLUSIVELY TO THAT UNIT.

TRACT "A":

8,363 S.F., SHALL CONTAIN ALL AREA OUTSIDE OF THE UNITS.

TRACT A IS A PART OF THE COMMON ELEMENTS AS DEFINED IN THE DECLARATION. A PRIVATE UTILITY EASEMENT FOR UTILITY SERVICES TO THE UNITS, LANDSCAPE AND IRRIGATION INSTALLATION, AND PRIVATE DRAINAGE EASEMENT IS RESERVED FOR THE BENEFIT OF THE UNIT OWNERS AND THE PROPERTY OWNERS ASSOCIATION OVER TRACT A.

RIGHT OF WAY LEGAL DESCRIPTION:

The following is a description of a parcel of land, being a portion of the parcel of land described in Instrument 3881537 of Coconino County Records, lying in section 15, Township 21 North, Range 7 East, G.& S.R.M., Flagstaff, Coconino County, Arizona, being more particularly described as follows:

Beginning at the NW corner of said parcel, a ½" rebar w/cap LS16630;

Thence South 69°14'56" East along the north boundary of said parcel and which is the south line of a 16 foot alley a distance of 200.71 feet;

Thence South 20°46'32" West along the east boundary of said parcel and which is the west Right-of-Way line of Elden Street a distance of 134.04 feet;

Thence North 69°12'26" West along the south boundary of said parcel and which is the north Right-of-Way line of Birch Avenue a distance of 201.13 feet;

Thence North 20°57'23" East along the west boundary of said parcel and which is the east Right-of-Way line of Verde Street a distance of 133.89 feet to the Point of Beginning of this description.

Said parcel contains 26,916 sq. ft. of land more or less.

EXCEPTING THEREFROM THE FOLLOWING PARCEL;

Commence at the NW corner of said parcel; Thence South 03°02'01" East a distance of 9.84 feet to the Point of Beginning of this description.

Thence South 69°13'45" East a distance of 189.11 feet;

Thence South 20°46'32" West a distance of 117.47 feet;

Thence South 65°46'29" West a distance of 5.70 feet;

Thence North 69°13'34" West a distance of 177.94 feet;

Thence North 24°07'59" West a distance of 10..63 feet;

Thence North 20°57'36" East a distance of 113.97 feet to the Point of Beginning of this description.

Said exception parcel contains 22,964 sq. ft. of land more or less.

Remaining parcel 26,916 – 22,964 = 3,952 sq. ft. of land more or less.

AREA OF RIGHT OF WAY DEDICATED TO THE CITY OF FLAGSTAFF = 0.0907± ACRES

CONDOMINIUM DECLARATION, Instrument No: _____

UTILITY COMPANY ACKNOWLEDGMENT

MARTIN CONBOY	6/28/21	
UNISOURCE ENERGY	DATE	
DONALD EYMANN		
CENTURYLINK	DATE	
CHAD BROOKS		
ARIZONA PUBLIC SERVICE	DATE	
SANFORD YAZZIE		
SUDDENLINK	DATE	

SURVEY WAS PERFORMED BY APEX LAND SURVEYS, JOB No. 2020 MIRAMONTE BIRCH-VERDE, DATED 6/24/20 AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE. DEDICATION LANGUAGE SHOWN HEREON IS FROM THE CITY OF FLAGSTAFF PLANNING DEPARTMENT AND THIS CERTIFICATION DOES NOT COVER THE DEDICATION LANGUAGE.

PROJECT INFORMATION

PROJECT NAME:	BIRCH AVENUE CONDOMINIUMS	
PROJECT LOCATION:	304 - 316 BIRCH AVE. FLAGSTAFF, AZ. 86001	
APN NUMBER:	101-16-009, 010 & 011	
TITLE CONVEYED BY INSTRUMENT No:	3881539	(COCONINO COUNTY RECORDER)
TOTAL SQUARE FOOTAGE:	26,916	(PRE R.O.W. DEDICATION)
TOTAL ACREAGE:	0.61791±	(PRE R.O.W. DEDICATION)
TOTAL SQUARE FOOTAGE:	22,964	(POST R.O.W. DEDICATION)
TOTAL ACREAGE:	0.52718±	(POST R.O.W. DEDICATION)
TOTAL NUMBER OF UNITS:	24	
UNITS PER ACRE:	38.8	
BUILDING FOOTPRINT:	14,601 S.F.	
LOT COVERAGE:	14,601 / 26,916 = 54.2%	
REGIONAL PLAN DESIGNATION:	URBAN EXISTING	
CURRENT ZONING DISTRICT:	(CB) CENTRAL BUSINESS	
PROPOSED ZONING DISTRICT:	T4N.1	
BULIDING TYPE:	APARTMENT	
SPECIFIC TO PRIVATE FRONTAGES:	FORECOURT	
MAXIMUM LOT COVERAGE:	60%	
MAX BUILDING HEIGHT:	45'	
CURRENT USE:	VACANT, OFFICE & RESIDENTIAL	
PROPOSED USE:	CONDOMINIUMS	
LOCATED WITHIN R.P.O. ZONE:	NO	
F.E.M.A. ZONE:	ZONE X (NO SHADING)	
OWNER/DEVELOPER:	MIRAMONTE BIRCH & VERDE, LLC 2502 E. RIVER ROAD TUCSON, AZ. 85718 MR. JACK KEMMERLY (520) 237-6116	

Mogollon Inc
ENGINEERING & SURVEYING
411 W Santa Fe Avenue
Flagstaff, Arizona 86001
Phone: 928-214-0214

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
23950
KENT V.
HOTSENPILLER
PRELIMINARY
NOT FOR CONSTRUCTION OR RECORDING

11/15/21
FINAL PLAT
BIRCH AVENUE CONDOMINIUMS
COVER SHEET & PROJECT INFORMATION
MES# 18296

DATE: 11/15/21 | REVISIONS:
DESIGNED BY:
DRAWN BY:
CHECKED BY: KVH/RC
PROJECT NO. 1829e
FN: SHEET-01
VERT SCALE: N/A
HOR SCALE: N/A

SCALE: 1"=10'

0 5 10 20

CALCULATED POINT, NOTHING FOUND OR SET

CHERRY AVENUE

FOUND 2" ALUMINUM CAP IN HANDWELL "MATRIX RLS 25083"

PROJECT BENCHMARK: IS A FOUND 2" ALUMINUM CAP AT THE INTERSECTION OF BIRCH AVE. and ELDEN ST. = 6907.65 (NAVD88)

BASIS OF BEARING: IS FROM THE INTERSECTION OF BIRCH AVE. and VERDE ST., A FOUND ALUMINUM CAP "ILLEGIBLE" TO THE INTERSECTION OF BIRCH AVE. and ELDEN ST., A FOUND 2" ALUMINUM CAP "MATRIX RLS 25083". BEARING OF N69°12'26"W - 251.14'

EX 16' R.O.W.

NEW 25'± R.O.W.

S69°14'56"E 200.71'

S 03°02'01" E 9.84'

6.00'

4.00'

15' SETBACK

S69°13'45"E 189.11'

R.O.W. DEDICATED TO THE CITY OF FLAGSTAFF 0.09073± ACRES

9.07'

7.63'

TRACT A 8,363 sq. ft.

S20°01'07"E 16.27'

COMMON ELEMENT

S69°13'34"E 22.46'

S69°13'34"E 23.62'

S69°13'34"E 29.27'

S69°13'34"E 36.40'

S69°13'34"E 22.00'

S69°13'34"E 24.04'

S69°13'34"E 22.13'

N31°41'08"E 15.29'

BUILDING CONTROL POINT

EX 25' R.O.W.

10' SETBACK

S20°46'26"W 51.99'

N20°46'26"E 46.22'

N20°57'23"E 359.92'

VERDE STREET

ELDEN STREET

S20°46'33"W 359.92'

BIRCH AVENUE CONDOMINIUMS
26,916 S.F. (PRE R.O.W. DEDICATION)
22,964 S.F. (POST R.O.W. DEDICATION)

N20°57'23"E 133.89'

N20°57'36"E 113.97'

L18 L19 L18 SEE BUILDING DETAIL "A"

R.O.W. DEDICATED TO THE CITY OF FLAGSTAFF 0.09073± ACRES

N20°46'26"E 40.12'

UNIT 101 GARDEN (L.C.E.) 494 S.F.± (SEE SHEET 3)

N69°13'34"W 31.98'

S20°46'26"W 20.73'

15.47'

5.26'

N69°13'34"W 30.90'

N20°46'26"E 14.64'

SEE BUILDING DETAIL "B"

S20°46'26"W 10.86'

N69°13'34"W 14.06'

N69°13'34"W 25.72'

N20°46'26"E 11.89'

S20°46'26"W 15.74'

N69°13'34"W 9.49'

N69°13'34"W 19.42'

N69°13'34"W 36.72'

17.30'

N20°46'26"E 20.12'

UNIT 205 GARDEN (L.C.E.) 347 S.F.± (SEE SHEET 6)

N20°46'26"E 19.29'

SEE BUILDING DETAIL "C"

N69°13'34"W 16.56'

N69°13'34"W 6.90'

9.54'

29.00'

12.56'

N69°13'34"W 8.90'

10.83'

29.73'

10.00'

L25 L24 UNIT 205 (L.C.E.) 177 S.F.± N69°13'34"W 12.89' L22 7.63'

L23 16.94'

3.99'

N24°07'39"W 10.63'

3.46'

S65°46'29"W 5.70'

TRACT A 8,363 sq. ft.

15' SETBACK

P.U.E. TO BE DEDICATED

6.00' 5.00' 6.00' 5.00'

R.O.W. DEDICATED TO THE CITY OF FLAGSTAFF 0.09073± ACRES

103.56' N69°13'34"W 177.94' N69°12'26"W 201.13' 68.38'

N69°13'34"W 17.35' 6.08' S69°13'34"E 17.35'

SEE BUILDING DETAIL "D"

R.O.W. DEDICATED TO THE CITY OF FLAGSTAFF 0.09073± ACRES

EX 30' R.O.W.

BIRCH AVENUE

N69°12'26"W 251.14'

BASIS OF BEARINGS

BASIS OF BEARINGS

FOUND ALUMINUM CAP IN HANDWELL "ILLEGIBLE"

PROJECT BENCHMARK: FOUND 2" ALUMINUM CAP IN HANDWELL "MATRIX RLS 25083"

BUILDING DETAIL "A"

SCALE: N.T.S

L4 L3 L16 N20°46'26"E 40.12' L17 L18 L4

L4 L3 L21 N20°46'26"E 46.22' L20 L18 L4

BUILDING DETAIL "B"

SCALE: N.T.S

N69°13'34"W 30.90' L13 L14 L15 N20°46'26"E 14.64' N69°13'34"W 14.06' L11 L12 L4 L10 S20°46'26"W 10.86' L3

BUILDING DETAIL "C"

SCALE: N.T.S

N69°13'34"W 16.56' L7 L8 L9 N20°46'26"E 19.29' L6 N69°13'34"W 29.73' L4

BUILDING DETAIL "D"

SCALE: N.T.S

N69°13'34"W 17.35' L5 L4 S20°46'26"W 51.99' L2 L3 L4

S69°13'34"E 17.35' L5 L4 L3 L2 S20°46'26"W 34.36'

LEGEND & ABBREVIATIONS

- AC ALUMINUM CAP
- FOUND MONUMENT AS NOTED
- CORNER TO BE SET
- CALCULATED POINT
- EXISTING RIGHT OF WAY
- NEW RIGHT OF WAY

EX	EXISTING
R.O.W.	RIGHT OF WAY
S.F.	SQUARE FEET
L.C.E.	LIMITED COMMON ELEMENT
C.E.	COMMON ELEMENT

LINE DATA

#	BEARING	DISTANCE	#	BEARING	DISTANCE	#	BEARING	DISTANCE
L1	S20°46'26"W	3.06'	L9	S69°13'34"E	0.74'	L17	N20°46'26"E	1.15'
L2	S69°13'34"E	1.00'	L10	S69°13'34"E	0.97'	L18	S69°13'34"E	5.69'
L3	S20°46'26"W	2.00'	L11	N20°46'26"E	1.07'	L19	N20°46'26"E	6.22'
L4	S69°13'34"E	2.00'	L12	N20°46'26"E	0.99'	L20	N20°46'26"E	1.05'
L5	S20°46'26"W	1.04'	L13	N20°46'26"E	1.17'	L21	S69°13'34"E	1.12'
L6	N20°46'26"E	1.41'	L14	N20°46'26"E	0.83'	L22	S20°46'32"W	1.38'
L7	N20°46'26"E	1.17'	L15	S69°13'34"E	1.08'	L23	N20°46'26"E	5.91'
L8	N20°46'26"E	0.83'	L16	S69°13'34"E	1.12'	L24	S69°13'34"E	2.75'
						L25	N20°46'26"E	6.22'

PRELIMINARY NOT FOR CONSTRUCTION OR RECORDING

ARIZONA 811 MON - FRI 6am - 5pm KNOW WHAT IS BELOW CALL BEFORE YOU DIG

SHEET NO. 2 OF 10

COF PROJECT # PZ-17-00175

Mogollon Inc ENGINEERING &SURVEYING
411 W. Santa Fe Avenue
Flagstaff, Arizona 86001
Phone: 928-214-0214

REGISTERED LAND SURVEYOR CERTIFICATE NO. 23950 ARIZONA U.S.A.

PRELIMINARY NOT FOR CONSTRUCTION OR RECORDING

11/15/21
MES# 18296

FINAL PLAT
BIRCH AVENUE CONDOMINIUMS
SITE PLAT

DATE: 11/15/21
DESIGNED BY:
DRAWN BY:
CHECKED BY: KVH
REVISIONS:
PROJECT NO. 18296
FN: SHEET-02
VERT SCALE: N/A
HOR SCALE: 1"=10'

BUILDING CONTROL POINT

PARKING SPACE No. 11 (L.C.E.) — 19.00' × 9.00'
PARKING SPACE No. 10 (L.C.E.) — 19.00' × 9.00'
PARKING SPACE No. 9 (L.C.E.) — 19.00' × 9.00'
PARKING SPACE No. 8 (L.C.E.) — 19.00' × 9.00'
PARKING SPACE No. 12 (L.C.E.) — 20.00' × 9.00'
PARKING SPACE No. 13 (L.C.E.) — 20.00' × 9.00'
PARKING SPACE No. 14 (L.C.E.) — 20.00' × 9.00'
PARKING SPACE No. 15 (L.C.E.) — 20.00' × 9.00'
PARKING SPACE No. 16 (L.C.E.) — 20.00' × 9.00'
PARKING SPACE No. 17 (L.C.E.) — 20.00' × 9.00'
PARKING SPACE No. 18 (L.C.E.) — 20.00' × 9.00'
PARKING SPACE No. 7 (L.C.E.) — 20.00' × 9.00'
PARKING SPACE No. 6 (L.C.E.) — 20.00' × 9.00'
PARKING SPACE No. 5 (L.C.E.) — 20.00' × 9.00'
PARKING SPACE No. 4 (L.C.E.) — 20.00' × 9.00'
PARKING SPACE No. 3 (L.C.E.) — 20.00' × 9.00'
PARKING SPACE No. 2 (L.C.E.) — 20.00' × 9.00'
PARKING SPACE No. 1 (L.C.E.) — 20.00' × 9.00'

COMMON ELEMENT
FFE=6916.18 - 6917.11
5,428 S.F.±
HT=8.72' - 9.65'

UNIT 101
FFE=6912.00
755 S.F.±
10,442 C.F.±
HT=13.83'

UNIT 101 GARDEN (L.C.E.)
494 S.F.±

UNIT 101 PORCH (L.C.E.)
44 S.F.±

STAIRWAY (C.E.)

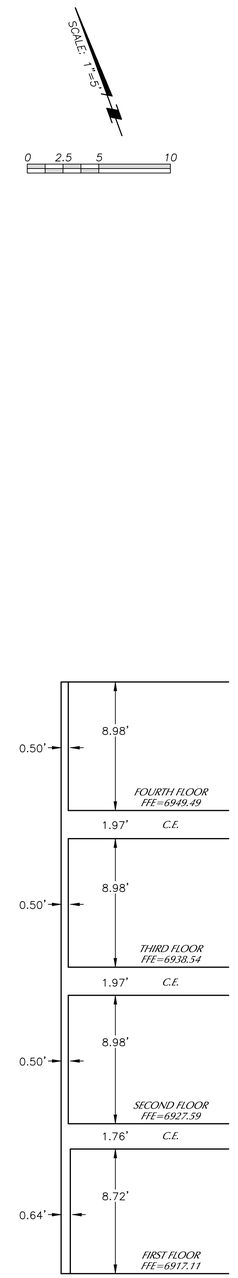
TRASH CHUTE (C.E.)

ELEVATOR SHAFT (C.E.)

MATCH SHT 4

SCALE: 1"=5'
0 2.5 5 10

FIRST FLOOR PLAT - WEST
SCALE: 1"=5'



BUILDING ELEVATIONS
SCALE: 1"=5'

PRELIMINARY
NOT FOR CONSTRUCTION OR RECORDING

SHEET NO. 3 OF 10

COF PROJECT # PZ-17-00175

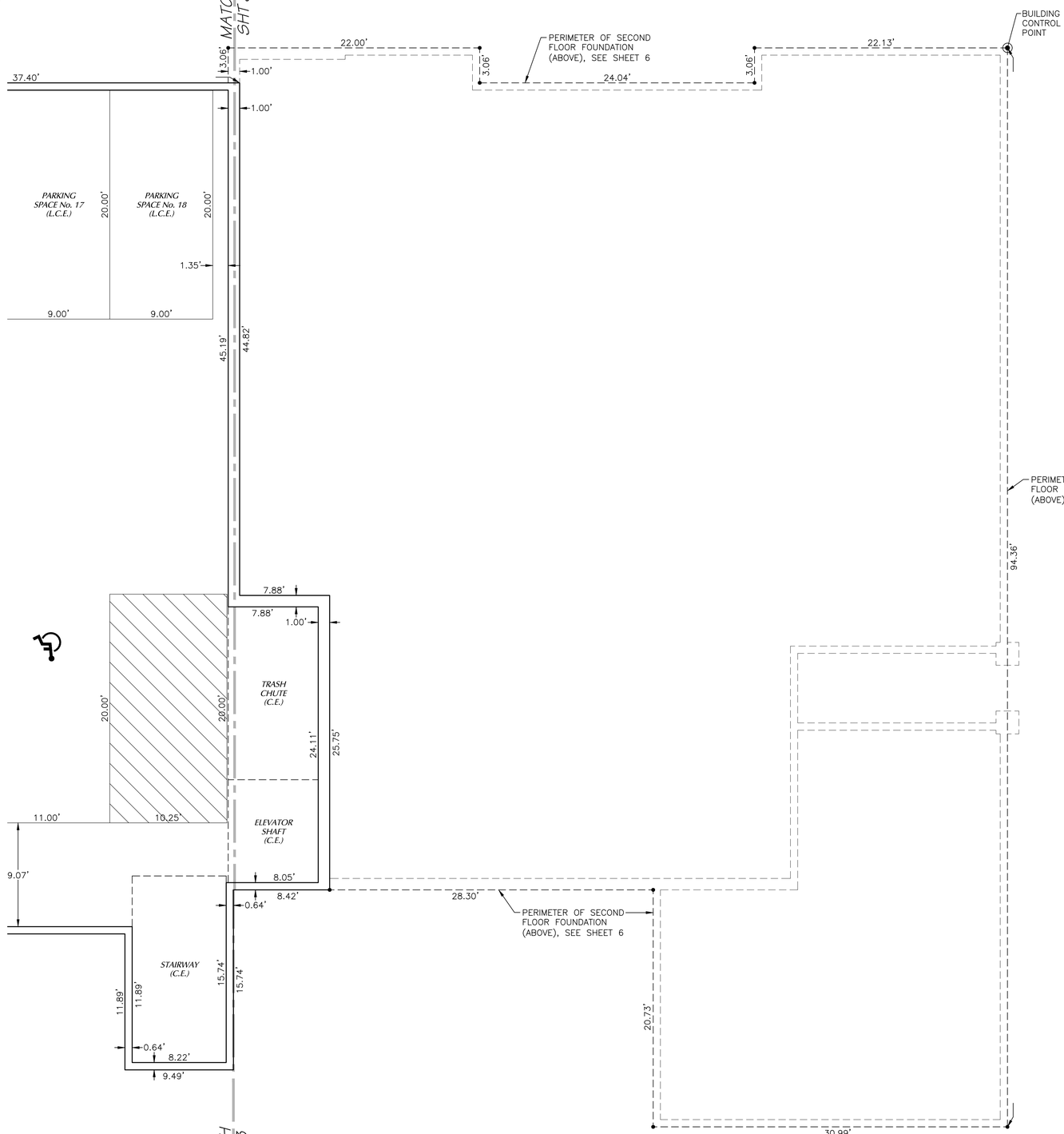
Mogollon Inc
ENGINEERING & SURVEYING
411 W. Santa Fe Avenue
Flagstaff, Arizona 86001
Phone: 928-214-0214

REGISTERED LAND SURVEYOR
CERTIFICATE NO. 23950
PRELIMINARY
NOT FOR CONSTRUCTION OR RECORDING
ARIZONA, U.S.A.

11/15/21
MES# 18296

FINAL PLAT
BIRCH AVENUE CONDOMINIUMS
FIRST FLOOR PLAT - WEST

DATE: 11/15/21
DESIGNED BY:
DRAWN BY:
CHECKED BY: KVH
PROJECT NO. 18296
FN: SHEET-03
VERT SCALE: N/A
HOR SCALE: 1"=5'
REVISIONS:

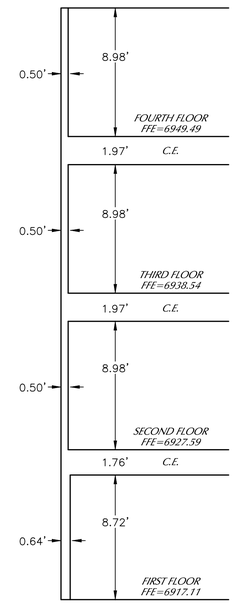


FIRST FLOOR PLAT - EAST

SCALE: 1"=5'

SCALE: 1"=5'

0 2.5 5 10



BUILDING ELEVATIONS

SCALE: 1"=5'

PRELIMINARY
NOT FOR CONSTRUCTION OR RECORDING

SHEET NO. 4 OF 10

COF PROJECT # PZ-17-00175

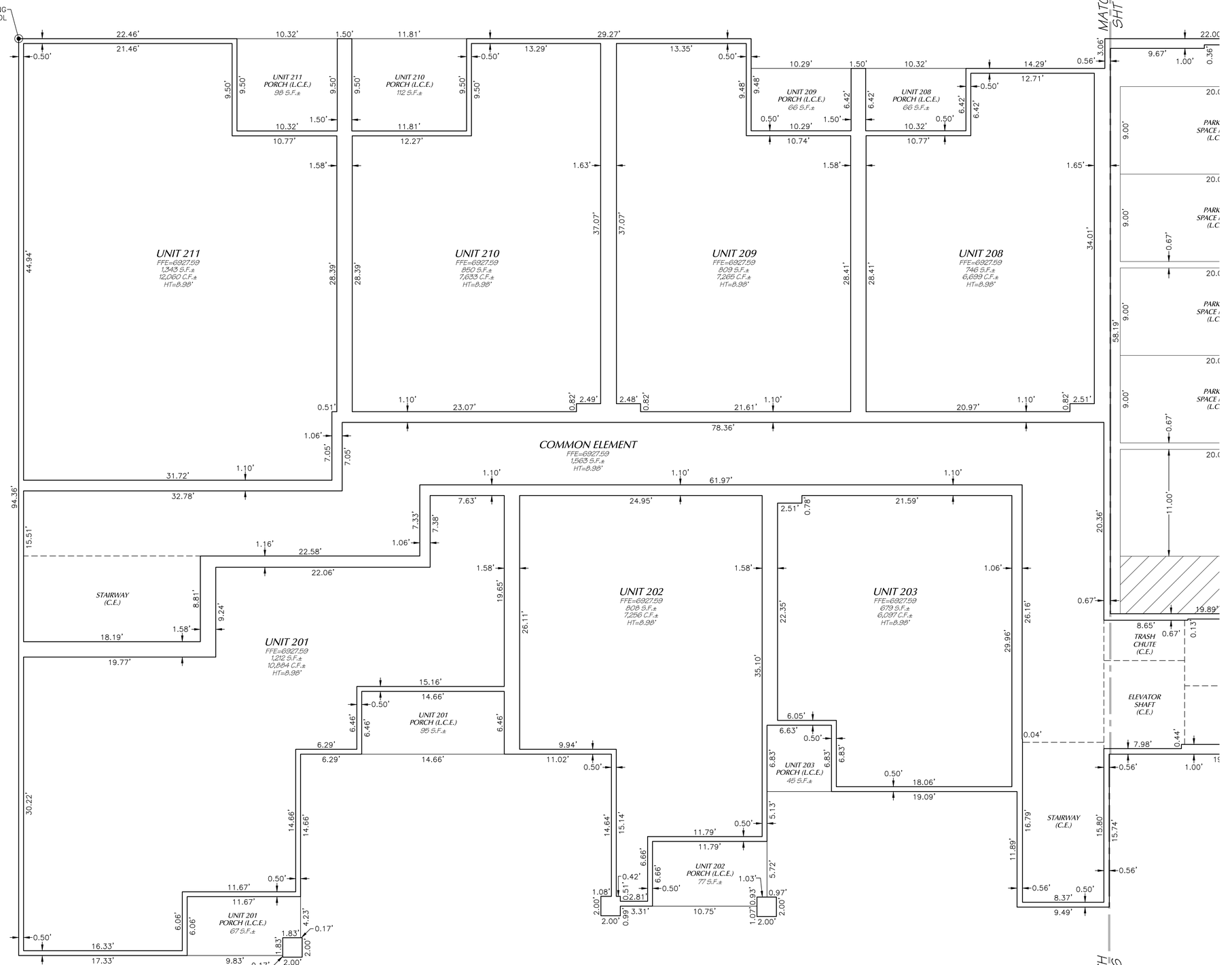
Mogollon Inc
ENGINEERING & SURVEYING
411 W. Santa Fe Avenue
Flagstaff, Arizona 86001
Phone: 928-214-0214

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
23950
KEVIN VANN
ARIZONA U.S.A.
PRELIMINARY
NOT FOR CONSTRUCTION OR RECORDING

11/15/21
MES# 18296

FINAL PLAT
BIRCH AVENUE CONDOMINIUMS
FIRST FLOOR PLAT - EAST

DATE: 11/15/21
DESIGNED BY:
DRAWN BY:
CHECKED BY: KVH
PROJECT NO. 18296
REVISIONS:
FN: SHEET-04
VERT SCALE: N/A
HOR SCALE: 1"=5'



SECOND FLOOR PLAT - WEST

SCALE: 1"=5'

BUILDING ELEVATIONS

SCALE: 1"=5'

PRELIMINARY
NOT FOR CONSTRUCTION OR RECORDING

SHEET NO. 5 OF 10

COF PROJECT # PZ-17-00175

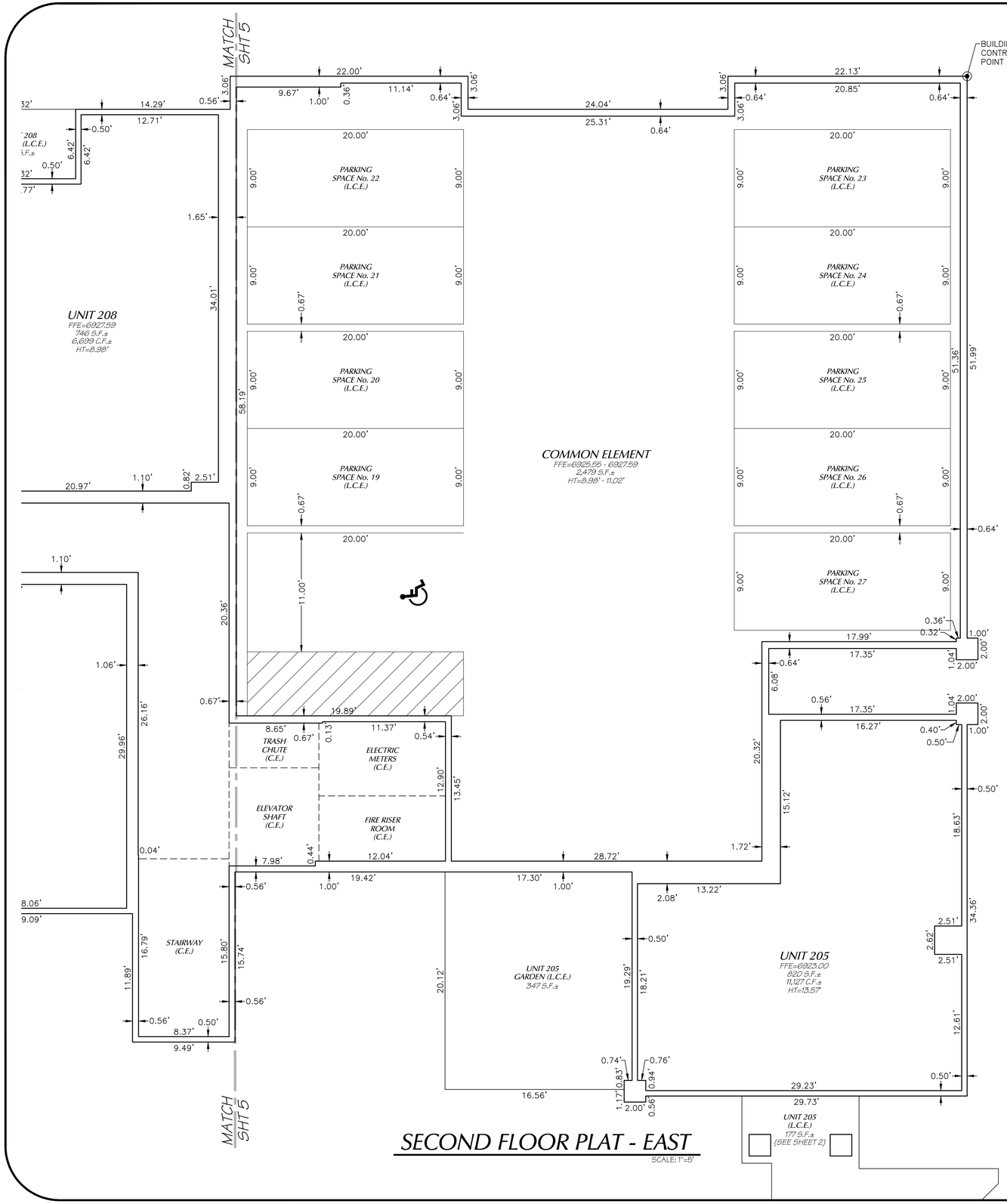
Mogollon Inc
ENGINEERING
&SURVEYING
411 W. Santa Fe Avenue
Flagstaff, Arizona 86001
Phone: 928-214-0214

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
23950
KENT
ARIZONA U.S.A.
PRELIMINARY
NOT FOR CONSTRUCTION OR RECORDING

11/15/21
MES# 18296

FINAL PLAT
BIRCH AVENUE CONDOMINIUMS
SECOND FLOOR PLAT - WEST

DATE: 11/15/21
DESIGNED BY:
DRAWN BY:
CHECKED BY: KVH
REVISIONS:
PROJECT NO. 18296
FN: SHEET-05
VERT SCALE: N/A
HOR SCALE: 1"=5'

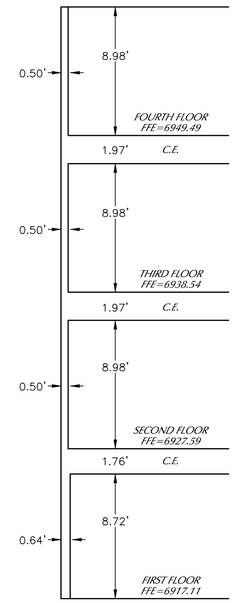


SECOND FLOOR PLAT - EAST

SCALE: 1"=5'

SCALE: 1"=5'

0 2.5 5 10



BUILDING ELEVATIONS

SCALE: 1"=5'

PRELIMINARY
NOT FOR CONSTRUCTION OR RECORDING

SHEET NO. 6 OF 10

COF PROJECT # PZ-17-00175

Mogollon Inc
ENGINEERING & SURVEYING
411 W. Santa Fe Avenue
Flagstaff, Arizona 86001
Phone: 928-214-0214

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
23950
KEVIN VANN
ARIZONA U.S.A.

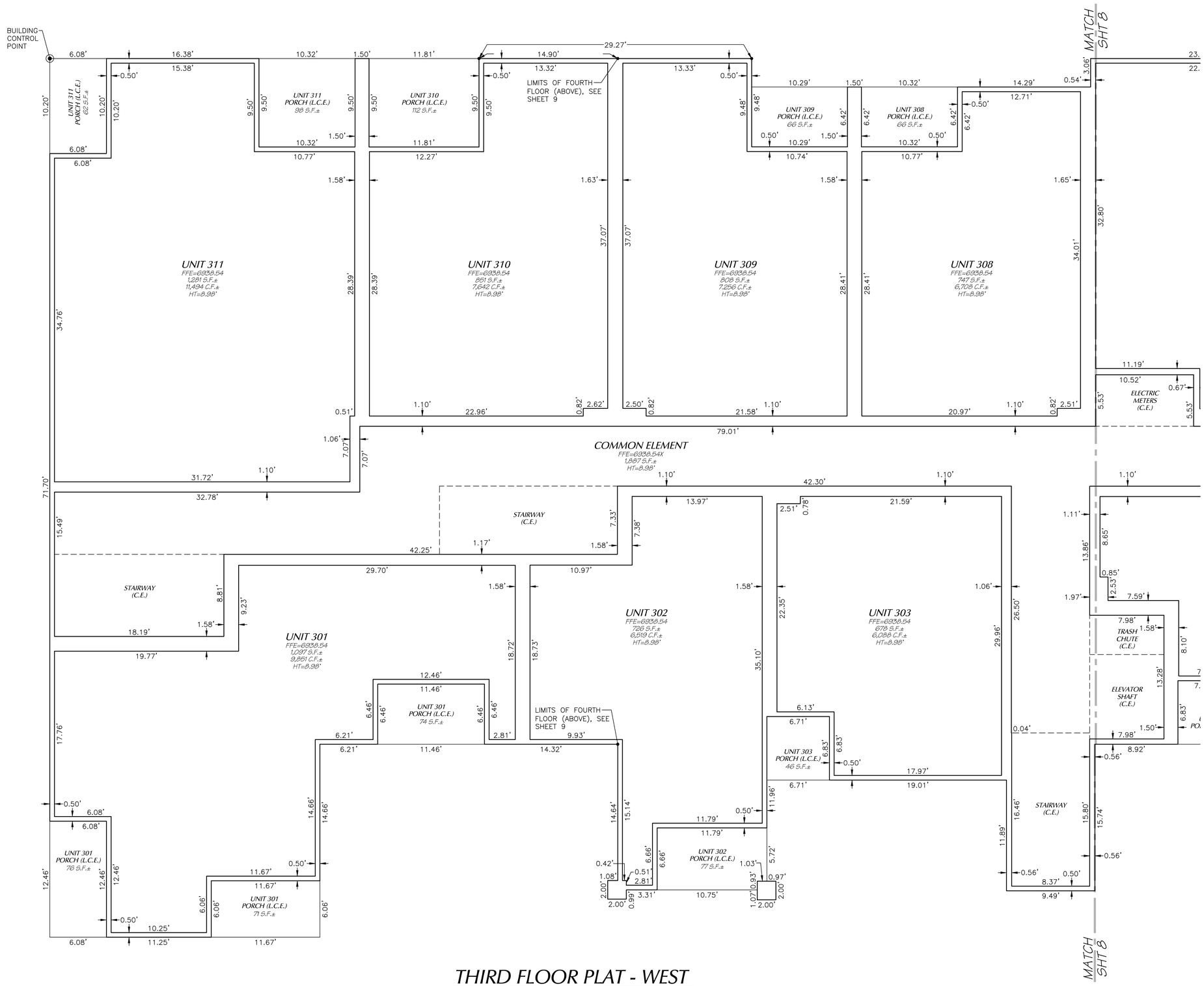
PRELIMINARY
NOT FOR CONSTRUCTION OR RECORDING

FINAL PLAT
BIRCH AVENUE CONDOMINIUMS
SECOND FLOOR PLAT - EAST

11/15/21
MES# 18296

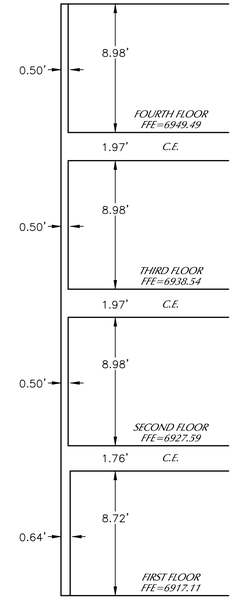
DATE: 11/15/21	PROJECT NO. 18296
DESIGNED BY:	FN: SHEET-06
DRAWN BY:	VERT SCALE: N/A
CHECKED BY: KVH	HOR SCALE: 1"=5'

REVISIONS:



THIRD FLOOR PLAT - WEST

SCALE: 1"=5'



BUILDING ELEVATIONS

SCALE: 1"=5'

PRELIMINARY
NOT FOR CONSTRUCTION OR RECORDING

SHEET NO. 7 OF 10

COF PROJECT # PZ-17-00175

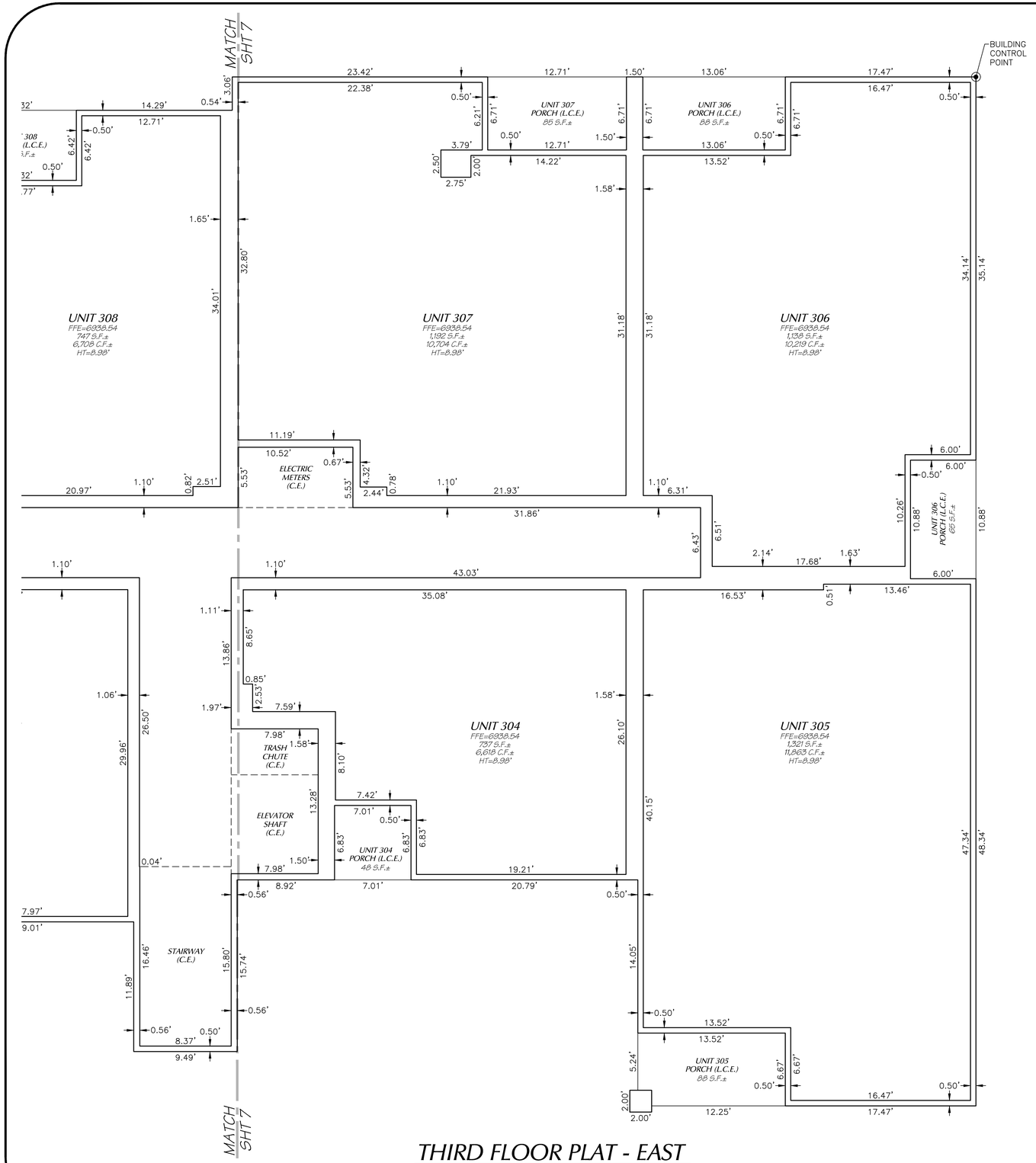
Mogollon Inc
ENGINEERING & SURVEYING
411 W. Santa Fe Avenue
Flagstaff, Arizona 86001
Phone: 928-214-0214

REGISTERED LAND SURVEYOR
CERTIFICATE NO. 23950
KENT V. HOTTLE
PRELIMINARY
NOT FOR CONSTRUCTION OR RECORDING
U.S.A.

11/15/21
MES# 18296

FINAL PLAT
BIRCH AVENUE CONDOMINIUMS
THIRD FLOOR PLAT - WEST

REVISIONS:
PROJECT NO. 18296
FN: SHEET7-07
VERT SCALE: N/A
HOR SCALE: 1"=5'
DATE: 11/15/21
DESIGNED BY:
DRAWN BY:
CHECKED BY: KVH

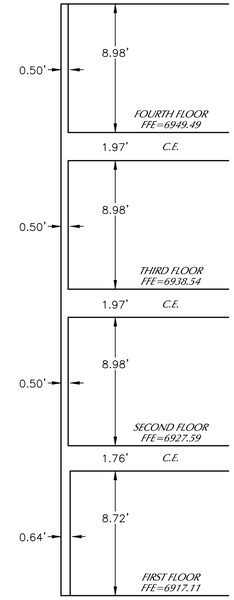


THIRD FLOOR PLAT - EAST

SCALE: 1"=5'

SCALE: 1"=5'

0 2.5 5 10



BUILDING ELEVATIONS

SCALE: 1"=5'

PRELIMINARY
NOT FOR CONSTRUCTION OR RECORDING

SHEET NO. 8 OF 10

COF PROJECT # PZ-17-00175

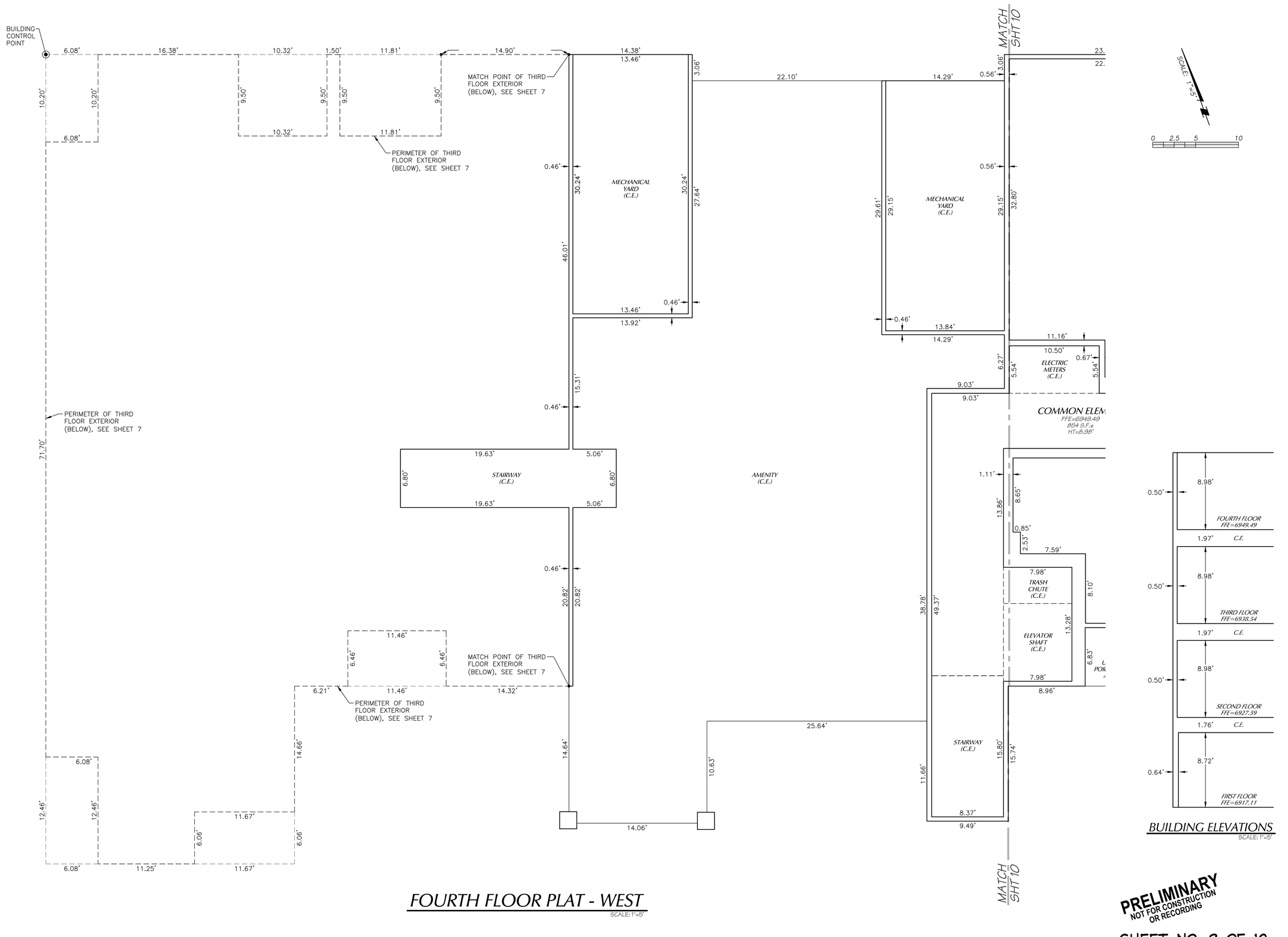
Mogollon Inc
ENGINEERING & SURVEYING
411 W. Santa Fe Avenue
Flagstaff, Arizona 86001
Phone: 928-214-0214

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
23950
KENT V. HOTTLE
PRELIMINARY
NOT FOR CONSTRUCTION OR RECORDING
U.S.A.

11/15/21
MES# 18296

FINAL PLAT
BIRCH AVENUE CONDOMINIUMS
THIRD FLOOR PLAT - EAST

DATE: 11/15/21
DESIGNED BY:
DRAWN BY:
CHECKED BY: KVH
PROJECT NO. 18296
FN: SHEET-08
VERT SCALE: N/A
HOR SCALE: 1"=5'
REVISIONS:



FOURTH FLOOR PLAT - WEST

SCALE: 1"=5'

BUILDING ELEVATIONS

SCALE: 1"=5'

PRELIMINARY
NOT FOR CONSTRUCTION OR RECORDING

SHEET NO. 9 OF 10

COF PROJECT # PZ-17-00175

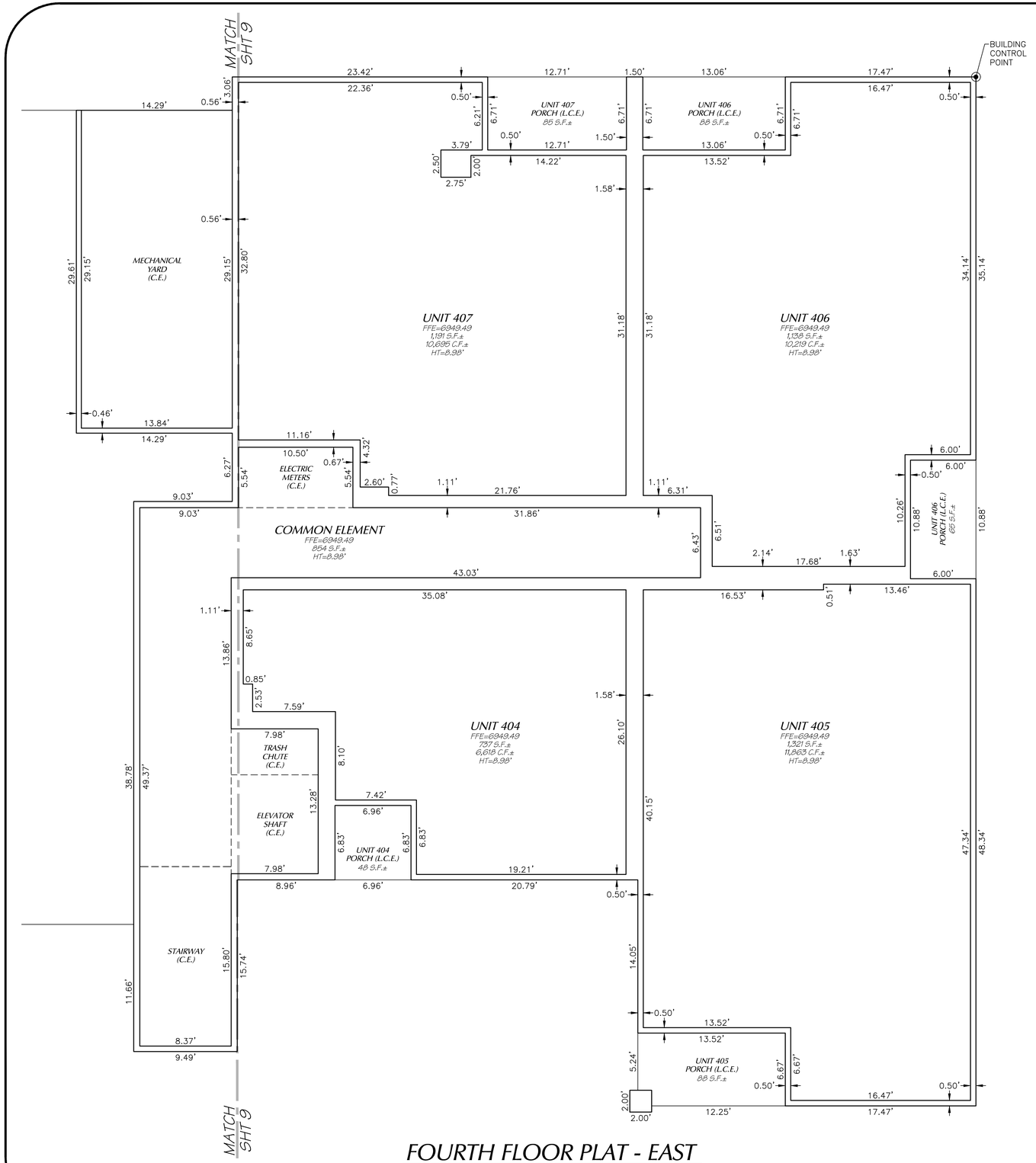
Mogollon Inc
ENGINEERING & SURVEYING
411 W. Santa Fe Avenue
Flagstaff, Arizona 86001
Phone: 928-214-0214

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
23805
PRELIMINARY
NOT FOR CONSTRUCTION OR RECORDING
ARIZONA U.S.A.

11/15/21
MES# 18296

FINAL PLAT
BIRCH AVENUE CONDOMINIUMS
FOURTH FLOOR PLAT - WEST

DATE: 11/15/21
DESIGNED BY:
DRAWN BY:
CHECKED BY: KVH
REVISIONS:
PROJECT NO. 18296
FN: SHEET-09
VERT SCALE: N/A
HOR SCALE: 1"=5'

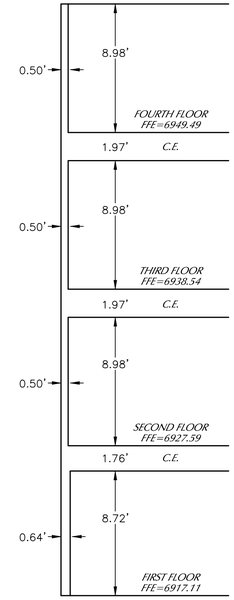


FOURTH FLOOR PLAT - EAST

SCALE: 1"=5'

SCALE: 1"=5'

0 2.5 5 10



BUILDING ELEVATIONS

SCALE: 1"=5'

PRELIMINARY
NOT FOR CONSTRUCTION OR RECORDING

SHEET NO. 10 OF 10

COF PROJECT # PZ-17-00175

Mogollon Inc
ENGINEERING
&SURVEYING
411 W. Santa Fe Avenue
Flagstaff, Arizona 86001
Phone: 928-214-0214

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
23950
ARIZONA U.S.A.

PRELIMINARY
NOT FOR CONSTRUCTION OR RECORDING

FINAL PLAT
BIRCH AVENUE CONDOMINIUMS
FOURTH FLOOR PLAT - EAST

11/15/21
MES# 18296

DATE: 11/15/21
DESIGNED BY:
DRAWN BY:
CHECKED BY: KVH
REVISIONS:
PROJECT NO. 18296
FN: SHEET-10
VERT SCALE: N/A
HOR SCALE: 1"=5'

10. C.

CITY OF FLAGSTAFF

STAFF SUMMARY REPORT

To:	The Honorable Mayor and Council
:	
Date:	12/01/2021
Meeting Date:	12/07/2021

TITLE:

Consideration and Approval of Agreement: Assignment of Development Agreement and Waiver which transfers the Development Agreement between the City and Flagstaff at 4th, LLC to Flagstaff ~~Flagler~~ Elkwood Partners LP.

STAFF RECOMMENDED ACTION:

Approve the Assignment of Development Agreement and Waiver.

Executive Summary:

Flagstaff at 4th, LLC wishes to transfer the rights and obligations of its development project to Flagstaff Elkwood Partners LP, a Delaware limited partnership. Flagstaff at 4th, LLC is asking the City to approve the assignment, transfer the obligations under the Development Agreement to Flagstaff Elkwood Partners LP, and release Flagstaff at 4th, LLC from any further obligations under the Development Agreement. The terms of the Development Agreement will not change and any development that occurs on the Property still must comply with the terms and conditions of the Development Agreement.

Financial Impact:

None.

Policy Impact:

None.

Connection to PBB Priorities/Objectives, Carbon Neutrality Plan & Regional Plan:

None.

Has There Been Previous Council Decision on This:

No.

Options and Alternatives:

City Council may:

1. Approve the Assignment of Development Agreement and Waiver, transferring responsibility to Flagler Elkwood Partners LP.
2. Deny the Assignment of Development Agreement and Waiver.

Background/History:

Flagstaff at 4th, LLC wishes to transfer the rights to its development project to Flagler Elkwood Partners LP, a Delaware limited partnership. Under the terms of the Development Agreement between the City of Flagstaff and Flagstaff at 4th, LLC, the City must approve the assignment of the Development Agreement to a new party and the City's approval cannot be unreasonably withheld. In addition, the assignment does not release Flagstaff at 4 th, LLC from its obligations under the Development Agreement unless specifically agreed to by the City. Flagstaff at 4th, LLC is asking the City to approve the assignment, transfer the obligations under the Development Agreement to Flagler Elkwood Partners LP, and release Flagstaff at 4 th, LLC from any further obligations under the Development Agreement.

The terms of the Development Agreement will not change and any development that occurs on the Property must comply with the terms and conditions of the Development Agreement.

The following information has been provided by Flagler Elkwood Partners LP for consideration by the City Council:

> There are two groups that will be behind our ownership of this project, including Wexford Developments and Wexford Real Estate Investors. Wexford Developments LP is the developer. Wexford Real Estate Investors is the LP equity partner.
>
> Here is a brief overview of each firm:
>
> Wexford Developments
>
> Wexford Developments is a real estate investment, development, and management company with over $500 million of assets under management, with offices in West Palm Beach, FL, New York, NY, and Calgary, Alberta, CA. Wexford has approximately 1,000,000 square feet under management, with a development pipeline exceeding 2.2 million square feet at a value of over $835 million.
>
> Wexford Real Estate Investors
>
> Wexford Real Estate Investors ("WREI") was formerly the private market real estate investing arm of Wexford Capital LP ("WCLP") and in 2020 was spun out of WCLP as a dedicated, standalone real estate platform. WREI sources, invests, and executes in value and growth driven real estate transactions using an opportunistic investment philosophy. WREI currently focuses its investments in sunbelt markets with an emphasis on residential rental and condominium investments, and has invested north of $650 million in equity since 2010 in real estate transactions with a total value north of $1.4 billion. For more information, visit https://www.wexfordrei.com

---

Attachments: Assignment and Waiver

WHEN RECORDED, RETURN TO:

(The Above Space For Recorder's Use Only)

ASSIGNMENT OF DEVELOPMENT AGREEMENT AND WAIVER

This Assignment of Development Agreement and Waiver (this "**Assignment**") is made as of the ____ day of December, 2021, by and between the City of Flagstaff, an Arizona municipal corporation ("**City**"), Flagstaff at 4th, LLC, a Delaware limited liability company ("**Assignor**"), and Flagstaff Elkwood Partners LP, a Delaware limited partnership ("**Assignee**") (individually and collectively, "Party" and "Parties").

The following recitals of fact are a material part of this Agreement:

A. City and Assignor are parties to a certain Development Agreement and Waiver, dated November 10, 2020, and recorded on November 30, 2020 at Instrument No. 3896757, Official Records of Coconino County, Arizona (the "**Development Agreement**");

B. The Development Agreement addresses the development of certain real property more particularly described in the Development Agreement (the "**Property**");

C. Assignee is acquiring the Property from Assignor, and Assignor desires to assign the Development Agreement and all of Assignor's rights and obligations under the Development Agreement, to Assignee, and Assignee desires to accept the assignment and assume all of Assignor's obligations thereunder;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

Section 1. Effectiveness of Assignment. This Assignment shall be effective upon recordation, provided that simultaneously therewith, Assignor has conveyed title to the Property to Assignee (the "**Effective Date**").

Section 2. Assignment and Assumption. Assignor hereby irrevocably assigns, sets over, transfers and conveys to Assignee, all of Assignor's rights, title, interest and obligations (as Assignor and as Developer) in, to and under the Development Agreement.

Assignee hereby accepts this assignment and the rights granted in the Development Agreement and hereby expressly assumes all of the duties, obligations and liabilities, fixed and contingent, under or related to the Development Agreement arising and accruing from and after the date of this Assignment. Assignee acknowledges its acceptance of the Development Agreement and all terms and conditions therein. Assignor and Assignee hereby provide record and constructive notice of the transfer and assignment, and acceptance by Assignee, of Assignor's and Developer's rights and obligations under the Development Agreement.

Section 3. Release. The City hereby acknowledges Assignor's assignment to Assignee as set forth in Section 2 and releases Assignor from any and all obligations arising under the Development Agreement from and after the Effective Date.

Section 4. Modifications to General Provisions. Section 7.2 of the Development Agreement is amended to delete any requirement to send notices to Assignor, and to set forth the following as the notice address for Assignee:

Flagstaff Elkwood Partners LP
777 S. Flagler Drive
Suit 602 East
West Palm Beach, Florida 33401
Attn: Sam Gordon
Email: sgordon@wexforddevelopments.com
cgoode@wexforddevelopments.com

With a copy to:

Osborn Maledon, P.A.
2929 N. Central Avenue, Suite 2100
Phoenix, Arizona 85012
Attn: Thayne Lowe
Email: tlowe@omlaw.com

Section 5. General.

5.1 Arizona Law. This Assignment shall be governed by, and construed in accordance with, the laws of the State of Arizona.

5.2 Captions. The descriptive headings of the Articles and the Sections of this Assignment are inserted for convenience only and shall not control or affect the meaning or construction of any of the provisions hereof.

5.3 No Agency Created. Nothing contained in this Assignment creates any partnership, joint venture, or agency relationship between the City and Developer. No term or provision of this Assignment is intended to be for the benefit of any person, organization, or corporation not a party hereto, and no other person, firm, organization, or corporation may have any right or cause of action hereunder.

5.4 Additional Documents. City, Assignor, and Assignee each agree to execute and deliver all documents and take all actions reasonably necessary to implement this Assignment.

5.5 Counterparts. This Assignment may be executed in counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same Assignment.

5.6 Capitalized Terms. All capitalized terms in this Assignment shall have the same meaning as set forth in the Development Agreement unless defined herein.

[Signature Pages to Follow]

SIGNATURE PAGE 1 OF 3 TO
ASSIGNMENT OF DEVELOPMENT AGREEMENT

CITY OF FLAGSTAFF

By: _____
Paul Deasy, Mayor

ATTEST:

_____
City Clerk

APPROVED AS TO FORM:

_____
City Attorney

STATE OF ARIZONA)
) ss
County of _____)

I, _____ a Notary Public in and for said County, in the State aforesaid, do hereby certify that_____, who is personally known to me to be the same person whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that he signed and delivered the said instrument as his own free and voluntary act and as the free and voluntary act of the City of Flagstaff, for the uses and purposes therein set forth.

GIVEN under my hand and notarial seal, this _____ day of _____ _____, 2021.

_____
NOTARY PUBLIC

(SEAL)

SIGNATURE PAGE 2 OF 3 TO
ASSIGNMENT OF DEVELOPMENT AGREEMENT

FLAGSTAFF AT 4TH, LLC,
a Delaware limited liability company

By: _____

Print: _____

Its: _____

STATE OF ARIZONA)
) ss
County of _____)

I, _____ a Notary Public in and for said County, in the State aforesaid, do hereby certify that_____, who is personally known to me to be the same person whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that he signed and delivered the said instrument as his own free and voluntary act and as the free and voluntary act of Flagstaff at 4th, LLC, for the uses and purposes therein set forth.

GIVEN under my hand and notarial seal, this _____ day of _____ _____, 2021.

_____
NOTARY PUBLIC

(SEAL)

SIGNATURE PAGE 3 OF 3 TO
ASSIGNMENT OF DEVELOPMENT AGREEMENT

FLAGSTAFF ELKWOOD PARTNERS LP,
a Delaware limited partnership

By Flagstaff Elkwood Advisors LLC,
a Delaware limited liability company

By: _____

Print: _____

Its: _____

STATE OF _____)
) ss
County of _____)

I, _____ a Notary Public in and for said County, in the State aforesaid, do hereby certify that_____, who is personally known to me to be the same person whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that he signed and delivered the said instrument as his own free and voluntary act and as the free and voluntary act of Wexford US Development Corp LP, for the uses and purposes therein set forth.

GIVEN under my hand and notarial seal, this _____ day of _____ _____, 2021.

_____
NOTARY PUBLIC

(SEAL)

CITY OF FLAGSTAFF

STAFF SUMMARY REPORT

To:	The Honorable Mayor and Council
From:	Stacy Saltzburg, City Clerk
Date:	12/01/2021
Meeting Date:	12/07/2021

TITLE:

Consideration and Possible Action: Cancelation of the Regular Meeting of December 21, 2021

STAFF RECOMMENDED ACTION:

Cancel the Regular Meeting of December 21, 2021

Executive Summary:

On November 23, 2021, a request was made for the Council to consider canceling the Regular Meeting of December 21, 2021 to allow for a break for the holiday. Should Council wish to cancel this meeting an official vote is needed.

To note, there are a couple of items that were scheduled for consideration on December 21, 2021; a consent item to approve the purchase of the alternate response mobile unit vehicle as well as the 2nd reading and adoption of the Airport Parking Rates. There is minimal impact on both items should they be postponed to a Special Meeting on December 28, 2021. The Airport Parking Rates would be implemented one week later on January 28, 2022 as opposed to January 21, 2022.

Financial Impact:

None

Policy Impact:

None

Connection to PBB Key Community Priorities/Objectives & Regional Plan:

None

Previous Council Decision on This:

None

Attachments:

CITY OF FLAGSTAFF

STAFF SUMMARY REPORT

To: The Honorable Mayor and Council

:

Co-Submitter: Brian Eilerts

Date: 12/01/2021

Meeting Date: 12/07/2021

TITLE:

Consideration and Approval of Contract: Professional Services Contract with Makers Architecture & Urban Design, LLP in the amount of $70,518.00.

STAFF RECOMMENDED ACTION:

1. Approve the Professional Services Contract with Makers Architecture & Urban Design, LLP in the amount of $70,518.00;
2. Authorize the City Manager to execute the necessary documents.

Executive Summary:

Approval of the Professional Services Contract in the amount of $70,518.00 with Makers Architecture & Urban Design, LLP will allow the consultant to begin working on updates to the Zoning Code to implement the related provisions of the La Plaza Vieja Neighborhood Specific Plan. As part of the fiscal year 2021 - 2022 adopted budget, the City Council authorized approximately $258,566 for professional consultant services to assist staff with updates to the Zoning and Subdivision Code.

The City's Purchasing Section issued a formal Request for Statements of Qualifications (RSOQ) solicitation for Zoning and Subdivision Code updates. The formal solicitation closed on August 18, 2021, and the City received five (5) total submissions. The scores each firm received from the evaluation committee are discussed below in the Background/History section. The Professional Services Contract in front of Council for approval today is with Makers Architecture & Urban Design, LLP.

Because there are multiple intended projects under this single RSOQ, the top two scoring firms, Matrix Design Group, Inc. and Makers Architecture & Urban Design, LLP, were selected to move forward in the contracting process. The contract with Makers Architecture & Urban Design, LLP is the first contract of multiple separate contracts to be sent before the Council for approval under the same RSOQ. Due to the complexity and ongoing development of the scope of work for the second contract with Matrix Design Group, Inc., the highest-scoring firm, staff decided to present the Makers Architecture & Urban Design, LLC contract for La Plaza Vieja first. This method of separate contracts for approval at separate City Council meetings under the same solicitation will speed the process and efficiency of the La Plaza Vieja project.

Financial Impact:

As part of the fiscal year 2021-2022 adopted budget, the City Council authorized approximately $258,566 for professional consultant services to assist staff with updates to the Zoning and Subdivision Code. The Professional Services Contract, in the amount of $70,518.00, will utilize a portion of the allocated amount. It is anticipated that the remaining fiscal year 2021 - 2022 adopted budget allocation will be used for other professional service contracts to update the Zoning and Subdivision Code. When these contracts are prepared for the different code update projects, they will also be brought separately to City Council for consideration of award of the contract.

Policy Impact:

City Council Goal: Align Building Codes, Zoning Codes and Regional Plan

- In conjunction with the Regional Plan, the La Plaza Vieja Neighborhood Specific Plan is the neighborhood's primary City of Flagstaff policy document. The proposed Purchase of Services Contract is for professional consultant services to assist staff with updating the Zoning and Subdivision Code to implement the goals, policies, and strategies of the Regional Plan and La Plaza Vieja Neighborhood Specific Plan.

Connection to PBB Priorities/Objectives, Carbon Neutrality Plan & Regional Plan:

Priority Based Budget Key Community Priorities and Objectives

- Ensure the built environment is safe through the use of consistent standards, rules & regulations, & land use practices.
- Achieve a well-maintained community through comprehensive & equitable code compliance, & development that is compatible with community values.

Regional Plan

The Services Contract is for professional consultant services to assist staff with updating the Zoning and Subdivision Code to implement the Regional Plan's and La Plaza Vieja Neighborhood Specific Plan's goals, policies, and strategies.

Has There Been Previous Council Decision on This:

As part of the adoption of the fiscal year 2021 - 2022 budget, City Council approved approximately $258,566 to be used for professional consultant services to update the Zoning and Subdivision Code. In addition, on January 26, 2021, City Council provided direction to staff on the 2021 - 2022 Zoning and Subdivision Code Work Program (Attachment 2 - Work Program), which includes the order of priority for the zoning and subdivision code amendments. The Work Program includes a graphical summary of the staff's approach regarding these priorities. The purpose of the Professional Services Contract is to assist staff in implementing the La Plaza Vieja Neighborhood Specific Plan, which is letter F in the Work Program. For informational purposes, page 2 of the Work Program includes a summary of the status of the other zoning code amendments that have been identified by staff as priorities.

Options and Alternatives:

1. Authorize the award of the Professional Services Contract with Makers Architecture & Urban Design, LLP for professional services; or
2. Reject the recommended Professional Services Contract with Makers Architecture & Urban Design, LLP for professional services and re-solicit for the services; or
3. Reject the recommended Professional Services Contract with Makers Architecture & Urban Design, LLP for professional services and instruct staff to amend the Zoning Code to implement the La Plaza Vieja Neighborhood Specific Plan without the assistance of a consultant.

Background/History:

The La Plaza Vieja Neighborhood Specific Plan was adopted in October 2015. In addition to the goals and policies of the Regional Plan, the La Plaza Vieja Neighborhood Specific Plan includes goals, policies, and implementation strategies that are intended to implement that neighborhood's objectives and vision. Several of the Zoning Code-related items include neighborhood-specific provisions, including maximum lot sizes and building height, proportions, massing, stepped back upper floors, consistent front setbacks, primary entrances facing the street, front porches, landscaping, and facade characteristics that are consistent with the surrounding context.

On July 7, 2021, the Purchasing section issued a formal RSOQ for Zoning and Subdivision Code updates (#2022-05). The solicitation notice was posted on the City's PlanetBids website and was published Sunday, July 11, 2021, and Sunday, July 18, 2021, in the Arizona Daily Sun, and closed on August 18, 2021. A total of five submissions were received. The evaluation committee evaluated and scored the statements of qualification, and the two top-scoring firms are being recommended to the City Council for an award of contracts, one now, and one in the upcoming months once a separate scope of work is finalized. The Services Contract currently recommended for the award by Council is with Makers Architecture & Urban Design, LLP.

The following are the scores of each firm:

1. Matrix Design Group, Inc.	696
2. Makers Architecture & Urban Design, LLP	691
3. Houseal Lavigne Associates	671
4. Design Workshop	653
5. ZoneCo, LLC	517

The top two scoring firms, Matrix Design Group, Inc. and Makers Architecture & Urban Design, LLP, were selected to move forward in the contracting process. The contract with Makers Architecture & Urban Design, LLP is the first contract of multiple contracts to be sent before the Council for approval under the same RSOQ. Due to the ongoing development of the scope of work for the second contract with Matrix Design Group, Inc., staff decided to present the Makers Architecture & Urban Design, LLC contract for La Plaza Vieja first. This method of presenting two separate contracts for approval at separate City Council meetings under the same solicitation will speed the process and efficiency of the La Plaza Vieja project.

Key Considerations:

The RSOQ sought consultants with demonstrated expertise and experience in providing zoning update professional services to implement Flagstaff’s Regional Plan and Specific Plans. The solicitation provided that up to four consultants may be selected to assist the City’s staff on various projects pertaining to all aspects of the review, modification, and creation of provisions for the Zoning and Subdivision Code, related design guidelines, and other related City Codes.

To manage the available funds, timelines, and staff and consultant resources, separate contracts will be negotiated for each project to update the Zoning and Subdivision Code. The Services Contract with Makers Architecture & Urban Design, LLP will assist with updates to the Zoning Code to implement the La Plaza Vieja Neighborhood Specific Plan.

Expanded Financial Considerations:

The costs associated with providing notification, facilities, etc., are anticipated to be paid for by City from the budgeted allocations for administering the Zoning and Subdivision Code Program.

Community Benefits and Considerations:

Authorizing the award of the Professional Services Contract with Makers Architecture & Urban Design, LLP, will allow staff and the consultant to begin work on implementing the goals, policies, and implementation strategies of the La Plaza Vieja Neighborhood Specific Plan (adopted in 2015) related to the Zoning Code. The Zoning Code related modifications recommended in the goals, policies, and implementation strategies of the referenced plan are intended to preserve and enhance the character of the neighborhood. Therefore, one of the primary objectives of the adopted plan's goals, policies, and implementation strategies is to establish provisions for new and existing developments that build upon the neighborhood's distinguished character and encourage the development of characteristically compatible structures.

Community Involvement:

Included in the scope of work for the Professional Services Contract, the consultant will arrange for public participation and community involvement as part of the Zoning Code amendment to implement the La Plaza Vieja Neighborhood Specific Plan. The City will provide notification, facilities, etc., as part of administering the Zoning and Subdivision Code Program.

Attachments: Contract
Zoning Code 2021-2022 Work Program

CITY OF FLAGSTAFF
CONTRACT FOR PROFESSIONAL SERVICES
Contract No.: 2022-05

This Contract is entered into this _____ day of _____, 20___ by and between the City of Flagstaff, a political subdivision of the State of Arizona ("City"), and Makers Architecture & Urban Design, LLP, a Washington State Limited Liability Partnership ("Consultant").

WHEREAS, the City desires to receive and Consultant is able to provide professional services;

NOW THEREFORE, in consideration for the mutual promises contained herein, the City and Consultant (the "parties") agree as follows:

SERVICES

1. Scope of Work: Consultant shall provide the professional services generally described as follows:

ZONING AND SUBDIVISION CODE UPDATE
FOR THE LA PLAZA VIEJAS NEIGHBORHOOD SPECIFIC PLAN 2021

and as more specifically described in the scope of work attached hereto as *Exhibit A.*

2. Special Terms and Conditions: The City of Flagstaff Special Terms and Conditions, attached hereto as *Exhibit B*, shall apply to performance of this Contract, except to the extent modified in *Exhibit A.*

3. Key Personnel/Subcontractors: Consultant's Key Personnel, Subcontractors (if any), and contact information are designated in *Exhibit A.* Key Personnel are those employees whose license number and signature will be placed on key documents and those employees who have significant responsibilities for completion of the services. The City Representatives for this Contract have the right to approve any proposed substitution of Key Personnel or Subcontractors.

CITY RESPONSIBILITIES

4. City Representative: The City Representatives are Daniel Symer, Zoning Code Manager and Daniel Folke, Community Development Director. All communications to the City shall be through the City Representative. The City Representatives are responsible for bringing any request for a Contract amendment or price adjustment to the attention of the Procurement Agent.

5. City Cooperation: The City will cooperate with Consultant by placing at its disposal all available information concerning the City, City property, or the City project reasonably necessary for Consultant's performance of this Contract.

CONTRACT TERM

6. Contract Term: The Contract term is for a period of three (3) years unless terminated pursuant to the Standard Terms and Conditions. This Contract shall be effective as of the date signed by both parties.

7. Renewal: This Contract may be renewed for up to two (2) additional one (1) year terms by mutual written consent of the parties. The City Manager or his designee (the Purchasing Director) shall have authority to approve renewal on behalf of the City.

8. Termination: This Contract may be terminated pursuant to the Special Terms and Conditions attached hereto as *Exhibit B.*

PAYMENT

9. Compensation: In consideration for the Consultant's satisfactory performance, City shall pay Consultant Seventy Thousand Five Hundred Eighteen Dollars and Zero Cents **($70,518.00)** as defined by the Scope of Work attached hereto as *Exhibit A.*

10. Price Adjustment: Any price adjustment must be approved by the City in writing as a formal Contract Amendment. The City Manager, or his designee, (the Purchasing Director) may approve an adjustment if the annual Contract price is less than $49,999; otherwise, if the annual Contract price exceeds $50,000, City Council approval is required.

DATA AND RECORDS

11. City Ownership of Document and Data: Any original documents prepared or collected by Consultant in performance of this Contract such as models, samples, reports, test plans, survey results, graphics, tables, charts, plans, maps, specifications, surveys, computations and other data shall be the property of City ("City's work product"), unless otherwise agreed by the parties in writing. Consultant agrees that all materials prepared under this Contract are "works for hire" within the meaning of the copyright laws of the United States and hereby assigns to the City all rights and interests Consultant may have in the materials it prepares under this Contract, including any right to derivative use of the material.

12. Re-Use: The City may use Consultant's work product without further compensation to Consultant; provided, however, that the City's reuse without written verification or adaption by Consultant for purposes other than contemplated herein is at the City's sole risk and without liability to Consultant. Consultant shall not engage in any conflict of interest nor appropriate any portion of the City's work product for the benefit of Consultant or any third parties without the City's prior written consent.

13. Delivery of Document and Data: Upon termination of this Contract in whole or part, or upon expiration if not previously terminated, Consultant shall immediately deliver to the City copies all of the City's work product and any other documents and data accumulated by Consultant in performance of this Contract, whether complete or in process.

MISCELLANEOUS

14. Notice: Any notice concerning this Contract shall be in writing and sent by certified mail and email as follows:

To the City:

Daniel Symer
Zoning Code Manager
211 W. Aspen Ave.
Flagstaff, AZ 86001
Daniel.Symer@flagstaffaz.gov

Daniel Folke
Community Development Director
211 W. Aspen Ave.
Flagstaff, AZ 86001
dfolke@flagstaffaz.gov

With a copy to:

Brian Eilerts
Senior Procurement Specialist
211 W. Aspen Ave.
Flagstaff, AZ 86001
Brian.Eilerts@flagstaffaz.gov

To the Consultant:

Bob Bengford
Makers Architecture & Urban Design
500 Union Street #700
Seattle, WA 98101
Bobb@makersarch.com

15. Authority: Each party warrants that it has authority to enter this Contract and perform its obligations hereunder, and that it has taken all actions necessary to enter into this Contract.

(SIGNATURES ON THE FOLLOWING PAGE)

CONSULTANT

_____

Print name: _____

Title: _____

CITY OF FLAGSTAFF

_____

Print name: _____

Title: _____

Attest:

_____
City Clerk

Approved as to form:

_____
City Attorney's Office

EXHIBIT A

CITY OF FLAGSTSAFF

SCOPE OF WORK

SECTION 1 – INTRODUCTION

Project Background and Purpose

The La Plaza Viejas Neighborhood Specific Plan (Specific Plan or Plan) was adopted by the City Council on October 20, 2015. Serving as a roadmap to implement the community's vision for the neighborhood, the Plan includes goals, policies, and strategies to guide the development and preservation of the neighborhood. To assist in the implementation of the Plan, the purpose of the project is to conduct a Zoning Code Text Amendment and Zoning Map Amendment to create a new "character" overlay zone that would be applied to the specific areas of the neighborhood. Through the character overlay zone requirements and the associated design guidelines and a "pattern book", the objective is to create provisions for new development that reinforce the neighborhood's historical residential architectural forms, features, and landscaping. The design guidelines are also to address provisions enhanced urban design criteria for the commercial edge and transition areas identified in the Specific Plan.

SECTION 2 – SCOPE OF WORK

Task 1 Initial Project Introduction

A. Research, Review of Public Information and Familiarity. In preparation to commence the project, the Consultant will review and become familiar with the Specific Plan, the historic context analysis, applicable zoning standards and design guidelines. Consultant will also review city staff's research on pattern books examples.

B. Neighborhood Tour & Familiarity. Consultant shall conduct an on-site field tour of the neighborhood to become familiar with the physical forms details of La Plaza Viejas Neighborhood, including its historic patterns of urbanism and architecture.

C. Team meetings. Consultant shall participate in up to three meetings with the Project Manager and City Staff to discuss their approach and concepts for the project associated with this task. This includes two remote meetings to discuss our approach to this task and preliminary research findings and prepare for the neighborhood tour, and one on-site meeting together with the neighborhood tour to discuss tour findings and discuss next steps.

   Timing: November – December.

   Products:

   - Project context memo, which notes project goals, introductory meeting notes, site analysis notes, and a matrix document notable plans and studies plus outcomes notable to this effort.

   - Memo of relevant pattern book examples.

- Copies of all photographs/videos taking from the tour.

- Team meeting notes.

Task 2 Public Participation Plan

A. Public Participation Plan (PPP). Consultant shall develop a PPP for approval by the City's Project Manager. The PPP shall outline steps, processes, and public neighborhood meetings that are to be utilized to accommodate, notify and receive comments and input from the neighborhood stakeholders (property owners, residents, business, etc.) the Planning and Zoning Commission, Heritage Preservation Commission and the City Council.

   At minimum the methods of notification, neighborhood meetings, and work sessions and public meeting/hearing with the Planning and Zoning Commission, Heritage Preservation Commission and the City Council shall comply with requirements the Flagstaff Zoning Code.

B. Communication. Consultant shall draft a notification flier, newspaper ad, sign, press release, and to inform the La Plaza Viejas neighborhood, adjoining community and public about the planning efforts to be undertaken and each public meeting and hear. The PPP shall include provisions for :

   - Project notification flier design.

   - Project notification flier mailing.

   - Newspaper advertisement design.

   - Press releases.

   - Public Notice sign design.

   The format of the notification flier, newspaper advertisement, sign design shall be a designed as template that the City's Project Manager will update for each notification and site posting. The City will separately pay for the notification mailings, publishing the newspaper advertisements, and the sign productions and site postings. In addition, the City will publish the press release information and webpage publications.

C. Social media and site posting support. Consultant shall provide information to the City's Project Manager to be utilize on the City's website, signs, and site posting. This information shall include text, photographs, maps, renderings, and other images. This material shall describe the project, the process to create the necessary information for character overlay zone and associated Zoning Code Text Amendment and Zoning Map Amendment, neighborhood meeting and public meeting(s)/hearing(s) and adoption process.

   Timing: November - December for (A) and (B) and (C) for entire scope.

   Products:

   - PPP as set for in (A) above.

- Communications products as set forth in (B) above.

- Social media and site posting support as set forth in (C) above.

Task 3 Neighborhood Meeting/Workshop and Stakeholder Interviews

A. Public Participation Meeting/ Workshop. Upon familiarity, Consultant shall hold at least one public meeting/ workshop with stakeholders (elected officials, property owners, residents, neighborhood representatives, neighborhood business owners, and City staff) that will be involved with the project. The meeting/workshop will be conducted in person.

B. Stakeholder interviews. Consultant shall conduct targeted stakeholder interviews with groups and individuals that are familiar with the neighborhood and its history. The City Project Manager will assist in identifying the individuals to be interviewed. This task assumes up to six interviews to be conducted via phone or video.

   The public meeting, workshop and interviews are intended to publicly announce the start of the project, verify the stakeholders' desires and the historical architectural forms, features and landscaping. In addition, the objective is to gather ideas, concepts and strategies to create the best possible character overlay zone, design guidelines and pattern book.

   Timing: December (possible for some stakeholder interviews) – January, 2022.

   Products:

   - Meeting materials, including handouts, presentation materials, and results of workshop activities.

   - Stakeholder interview notes.

Task 4 Draft Development of the Character Overlay Zone, Design Guidelines and Pattern Book

A. Character Overlay Zone Zoning Code Text Amendment. With the assistance of the City's Project Manager, Consultant shall development the text, graphics, maps and figures to create the overlay zone that is to be part of the Zoning Code Text Amendment.

B. Design Guidelines and Pattern Book. To accompany the Character Overlay Zone Zoning Code Text Amendment, Consultant shall development text, graphics, maps and figures to create the Design Guidelines and Pattern Book.

C. Review of Draft(s) and Revisions. Consultant shall provide working drafts of the proposed Character Overlay Zone Zoning Code Text Amendment, Design Guidelines and Pattern Book, and Character Overlay Zone Zoning Map Amendment to the City's Project Manager and City Staff for review. Consultant shall make revision to the Character Overlay Zone Zoning Code Text Amendment, Design Guidelines and Pattern Book, and Character Overlay Zone Zoning Map Amendment.

   This task includes remote meetings every other week to discuss progress and next steps.

Timing: January - April, 2022.

Products:

- Character Overlay Zone Zoning Code Text Amendment as set forth in (A) and (C) above.
- Design Guidelines and Pattern Book as set forth in (B) and (C) above.
- Meeting notes.

Task 5 Public Review of the Character Overlay Zoning Code Text Amendment and Zoning Map Amendment and Revisions (this task overlaps with Task 6)

A. Neighborhood Meeting(s). Consultant shall hold at least two on-site public meetings with stakeholders to receive comments and input on the first final draft of the Character Overlay Zoning Code Text Amendment and Zoning Map Amendment. It's assumed these meetings may be conducted on consecutive days.

B. Planning and Zoning Commission, Heritage Preservation, City Council Work Session Meetings (up to three total, all of which are anticipated to be remote/video conferencing). For the purpose of gathering comments and making revision to the draft, Consultant shall present the first final draft of the Character Overlay Zoning Code Text Amendment, Design Guidelines and Pattern Book, and Zoning Code Map Amendment to the Planning and Zoning Commission, Heritage Preservation Commission, City Council and Work Session meetings. The presentation may be made before a joint gathering of commissions and/or City Council.

C. Notification. Consultant shall provide notification, communication, and social media and site posting for the in accordance Public Participation Plan.

D. Revisions to the first final draft. Consultant shall revise the first final draft to address public, commission, staff, and City Council comments.

This task includes remote meetings every other week as needed to discuss progress and next steps.

Timing: April - September, 2022.

Products:

- Meeting materials, including handouts, presentation materials, and results of meetings.
- Revisions to draft as noted in (D) above.
- Meeting notes.

Task 6 Application for the Character Overlay Zoning Code Text Amendment and Zoning Map Amendment (this task overlaps with Task 5)

A. Narrative. Consultant shall provide a separate project narrative for Character Overlay Zoning Code Text Amendment and Zoning Map Amendment. Each narrative shall include an analysis of the general plan and specific plan with regards to the goals and policies the Zoning Code Text Amendment and Zoning Map Amendment comply with and conflict with.

B. Public Participation Report. Consultant shall provide a Neighborhood Involvement Report that summarize all public meetings and work session held. In addition, the Neighborhood Involvement Report shall include all comments received and the Consultant and City staff's response to the comments.

C. Zoning Map. Consultant shall provide text, maps and figures to necessary to identify the location of the Zoning Map Amendment.

D. Final Draft of the Character Overlay Zone Zoning Code Text Amendment. Consultant shall provide a final draft of the text, graphics, maps and figures for the Character Overlay Zone Zoning Code Text Amendment and the associated guidelines and pattern book.

E. Final Draft of the Zoning Map Amendment. Consultant shall provide a final draft of the text, graphics, maps and figures for the Character Overlay Zone Zoning Map Amendment.

This task includes remote meetings every other week as needed to discuss progress and next steps.

Timing: April - August, 2022.

Products:

- Items (A-E) as set forth above.
- Meeting notes.

Task 7 Public Hearings and Adoption

A. Public Hearing Presentations. Consultant shall make present the second final draft to Planning and Zoning Commission, Heritage Preservation, City Council Meetings (up to four total, all of which are anticipated to be remote/video conferencing). Consultant shall provide all text, graphics, maps and figures for a Microsoft PowerPoint presentation.

B. Additional Revisions. Consultant will be responsible for revisions to the Character Overlay Zoning Code Text Amendment and Zoning Map Amendment are request by the Planning and Zoning Commission, Heritage Preservation, City Council Meetings

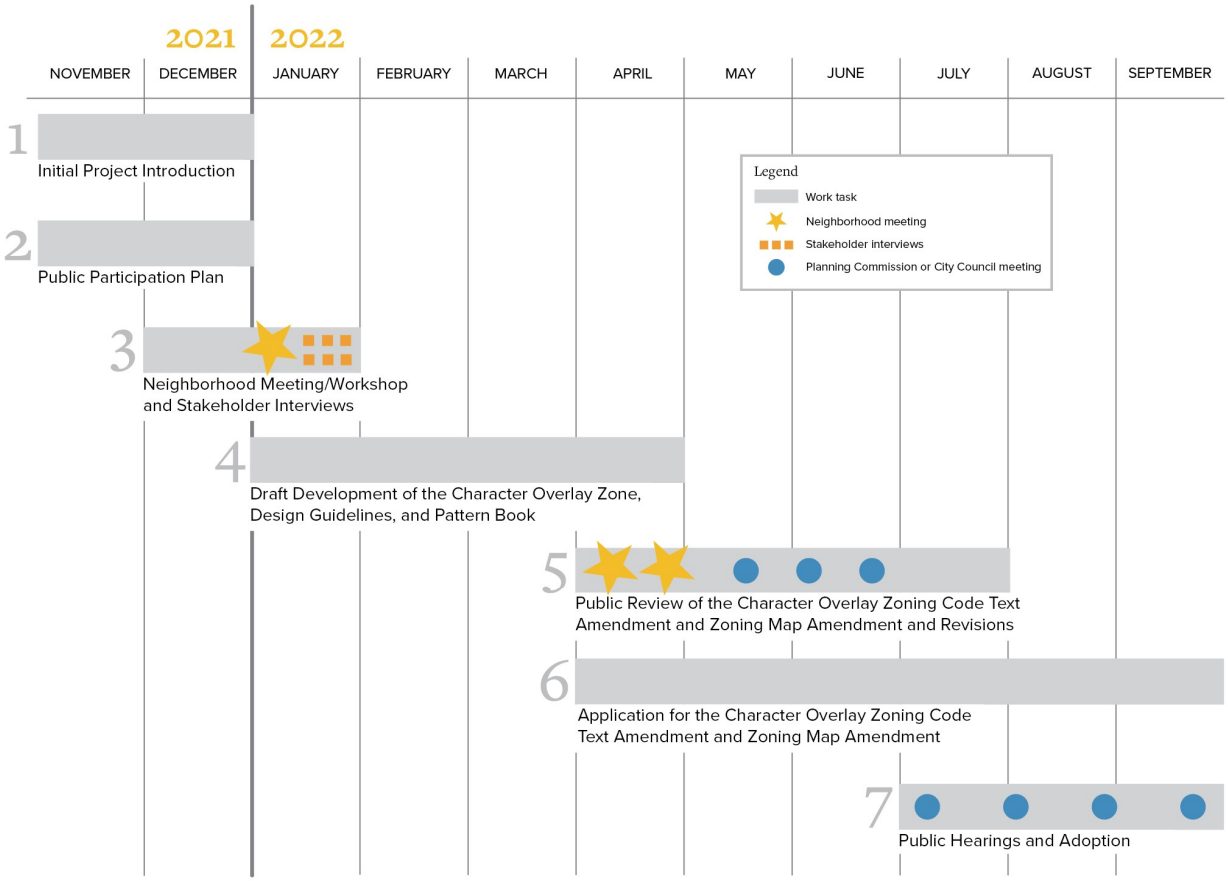
This task includes remote meetings every other week as needed to discuss progress and next steps.

Timing: July - September 2022.

Products:

- Items (A-B) as set forth above.
- Meeting notes.

Scope of Work Schedule



Scope of Work Budget
Estimated Travel Cost Per Person

Flagstaff La Plaza Viejas Character Overlay Zone

		MAKERS						
Team member		Bob Bengford, Partner	Scott Bonjukian	Yifan Xing				
Billing rate		$215	$130	$130	**Amount**	**Persons Traveling**	**Travel Cost**	
Task		Hours						
1	**Initial Project Introduction**	16	24	2	$ 6,820	2	$ 1,358.00	
2	**Public Participation Plan (and ongoing support)**	8	32	6	$ 6,660	0		
3	**Neighborhood Meeting(s) and Workshop(s)**	28	40	8	$ 12,260	2	$ 1,358.00	
4	**Draft Development of the Character Overlay Zone, Design Guidelines and Pattern Book**	24	32	40	$ 14,520	0		
5	**Public Review of the Character Overlay Zoning Code Text Amendment and Zoning Map Amendment and Revisions**	40	24		$ 11,720	1	$ 1,038.00	two days for the two meetings
6	**Application for the Character Overlay Zoning Code Text Amendment and Zoning Map Amendment**	10	10		$ 3,450	0		
7	**Public Hearings and Adoption**	20	10		$ 5,600	1	$ 734.00	budgeting for one trip just in case
	SUBTOTAL	**146**	**172**	**56**	**$ 61,030**			
	Travel or remote engagement support expenses				**$ 4,488**			
	Contingency				**$ 5,000**			
	TOTAL				**$ 70,518**			

See next tab for travel calculations that assume one-night stays

Estimated trip cost for one person

Item	Cost	Quantity
Typical hotel night	$120.00	1
Typical roundtrip flight	$430.00	1
Typical car rental, daily	$110.00	1
Federal per diem (meals and incidentals)	$74.00	1
Federal mileage rate	$0.00	0
Total per trip per person cost estimate	$ 734.00	

Estimated trip cost for two people

Item	Cost	Quantity
Typical hotel night	$120.00	2
Typical roundtrip flight	$430.00	2
Typical car rental, daily	$110.00	1
Federal per diem (meals and incidentals)	$74.00	2
Federal mileage rate	$0.00	0
Total per trip per person cost estimate	$ 1,358.00	

Estimated trip cost for three people

Item	Cost	Quantity
Typical hotel night	$120.00	3
Typical roundtrip flight	$430.00	3
Typical car rental, daily	$110.00	1
Federal per diem (meals and incidentals)	$74.00	3
Federal mileage rate	$0.00	0
Total per trip per person cost estimate	$ 1,982.00	

Estimated trip cost for one person @ two nights

Item	Cost	Quantity
Typical hotel night	$120.00	2
Typical roundtrip flight	$430.00	1
Typical car rental, daily	$110.00	2
Federal per diem (meals and incidentals)	$74.00	2
Federal mileage rate	$0.00	0
Total per trip per person cost estimate	$ 1,038.00	

EXHIBIT B

CITY OF FLAGSTAFF

SPECIAL TERMS AND CONDITIONS FOR PROFESSIONAL SERVICES

*The term "Contractor" may substitute for the term "vendors," "consultants," or "firms," depending on the purpose of the underlying Contract.

IN GENERAL

1. **NOTICE TO PROCEED:** Contractor shall not commence performance until after City has issued a Notice to Proceed.

2. **LICENSES AND PERMITS:** Contractor its expense shall maintain current federal, state, and local licenses, permits and approvals required for performance of the Contract, and provide copies to City upon request.

3. **COMPLIANCE WITH LAWS:** Contractor shall comply with all applicable federal, state and local laws, regulations, standards, codes and ordinances in performance of this Contract.

4. **NON-EXCLUSIVE:** Unless expressly provided otherwise in the Contract, this Contract is non-exclusive and the City reserves the right to contract with others for materials or services.

PAYMENT

5. **INVOICES:** A separate invoice shall be issued for each shipment and each job completed. Invoices shall include the Contract and/or Purchase Order number, and dates when goods were shipped or work performed. Invoices shall be sent within 30 days following performance. Payment will only be made for satisfactory materials and/or services received and accepted by City.

6. **LATE INVOICES:** The City may deduct up to 10% of the payment price for late invoices. The City operates on a fiscal year budget, from July 1 through the following June 30. Except in unusual circumstances, which are not due to the fault of Contractor, City will not honor any invoices or claims submitted after August 15 for materials or services supplied in the prior fiscal year.

7. **TAXES:** Contractor shall be responsible for payment of all taxes including federal, state, and local taxes related to or arising out of Contractor's performance of this Contract. Such taxes include but are not limited to federal and state income tax, social security tax, unemployment insurance taxes, transaction privilege taxes, use taxes, and any other taxes or business license fees as required.

   Exception: The City will pay any taxes which are specifically identified as a line-item dollar amount in the Contractor's bid, proposal, or quote, and which were considered and approved by the City as part of the Contract award process. In this event, taxes shall be identified as a separate line item in Contractor's invoices.

8. **FEDERAL EXCISE TAXES:** The City is exempt from paying certain Federal Excise Taxes and will furnish an exemption certificate upon request.

9. **FUEL CHARGES:** Contractor at its own expense is liable for all fuel costs related to performance. No fuel surcharges will be accepted or paid by City.

10. **AMOUNTS DUE TO THE CITY:** Contractor must be current and remain current in all obligations due to the City during performance. Payments to Contractor may be offset by any delinquent amounts due to City or fees and charges owed to City under this Contract.

11. **OFAC:** No City payments may be made to any person in violation of Office of Foreign Assets Control regulations, 31 C.F.R. Part 501.

SERVICES

12. **INDEPENDENT CONTRACTOR:** Contractor shall be an independent contractor for purposes of all laws, including but not limited to the Fair Labor Standards Act, Federal Insurance Contribution Act, Social Security Act, Federal Unemployment Tax Act, Internal Revenue Code, Immigration and Naturalization Act; Arizona revenue and taxation, workers' compensation, and unemployment insurance laws.

INSPECTION, RECORDS, ADMINISTRATION

13. **RECORDS:** The City shall have the right to inspect and audit all Contractor books and records related to the Contract for up to five (5) years after completion of the Contract.

14. **RIGHT TO INSPECT BUSINESS:** The City shall have the right to inspect the place of business of the Contractor or its subcontractor during regular business hours at reasonable times, to the extent necessary to confirm Contract performance.

15. **PUBLIC RECORDS:** This Contract and any related materials are a matter of public record and subject to disclosure pursuant to Arizona Public Records Law, A.R.S. § 39-121 et seq. If Contractor has clearly marked its proprietary information as "confidential", the City will endeavor to notify Contractor prior to release of such information.

16. **CONTRACT ADMINISTRATION:** Contractor will be required to participate in the City's Contract Administration Process. Contractor will be closely monitored for contract compliance and will be required to promptly correct any deficiencies.

INSURANCE & IDEMNIFICATION

17. **GENERAL INDEMNIFICATION:** Contractor shall indemnify, defend and hold harmless the City, its council, boards and commissions, officers, employees from all losses, claims, suits, payments and judgments, demands, expenses, attorney's fees or actions of any kind resulting from personal injury to any person, including employees, subcontractors or agents of Contractor or damages to any property arising or alleged to have arisen out of the negligent performance of the Contract, except any such injury or damages arising out of the sole negligence of the City, its officers, agents or employees. This indemnification provision shall survive termination or expiration of the Contract.

18. **INTELLECTUAL PROPERTY INDEMNIFICATION:** Contractor shall indemnify and hold harmless the City against any liability, including costs and expenses, for infringement of any patent, trademark or copyright or other proprietary rights of any third parties arising out of contract performance or use by the City of materials furnished or work performed under this Contract. Contractor shall promptly assume full responsibility for the defense of any suit or proceeding which is, has been, or may be brought against the City and its agents for alleged infringement, or alleged unfair competition resulting from similarity in design, trademark or appearance of goods, and indemnify the City against any and all expenses, losses, royalties, profits and damages, attorneys' fees and costs resulting from such proceedings or settlement thereof. This indemnification shall survive termination or expiration of the Contract.

CONTRACT CHANGES

19. **PRICE INCREASES:** Except as expressly provided for in the Contract, no price increases will be approved.

20. **COMPLETE AGREEMENT:** The Contract is intended to be the complete and final agreement of the parties.

21. **AMENDMENTS:** This Contract may be amended by written agreement of the parties.

22. **SEVERABILITY:** If any term or provision of this Contract is found by a court of competent jurisdiction to be illegal or unenforceable, then such term or provision is deemed deleted, and the remainder of this Contract shall remain in full force and effect.

23. **NO WAIVER:** Each party has the right insist upon strict performance of the Contract, and the prior failure of a party to insist upon strict performance, or a delay in any exercise of any right or remedy, or acceptance of materials or services, shall not be deemed a waiver of any right to insist upon strict performance.

24. **ASSIGNMENT:** This Contract may be assigned by Contractor with prior written consent of the City, which will not be unreasonably withheld. Any assignment without such consent shall be null and void. Unless expressly provided for in a separately executed Consent to Assignment, no assignment shall relieve Contractor (Assignor) from any of its obligations and liabilities under the Contract with respect to City. The Purchasing Director shall have authority to consent to an assignment on behalf of City.

25. **BINDING EFFECT:** This Contract shall be binding upon and inure to the benefit of the parties and their successors and assigns.

EMPLOYEES AND SUBCONTRACTORS

26. **SUBCONTRACTING:** Contractor may subcontract work in whole or in part with the City's advance written consent. City reserves the right to withhold consent if subcontractor is deemed irresponsible and/or subcontracting may negatively affect performance. All subcontracts shall comply with the underlying Contract. Contractor is responsible for Contract performance whether or not subcontractors are used.

27. **NONDISCRIMINATION:** Contractor shall not discriminate against any employee or applicant for employment or person to whom it provides services because of race, color,

religion, sex, national origin, disability, genetic information, veteran's status, pregnancy, familial status and represents and warrants that it complies with all applicable federal, state and local laws and executive orders regarding employment. In addition, any Contractor located within City of Flagstaff limits shall comply with the City Code, Chapter 14-02, Civil Rights, which also prohibits discrimination based on sexual orientation, or gender identity or expression.

28. **DRUG FREE WORKPLACE:** The City has adopted a Drug Free Workplace policy for itself and those doing business with the City to ensure the safety and health of all persons working on City contracts and projects. Contractor personnel shall abstain from use or possession of illegal drugs while engaged in performance of this Contract.

29. **IMMIGRATION LAWS:** Pursuant to A.R.S. § 41-4401, Contractor hereby warrants to the City that Contractor and each of its subcontractors will comply with, and are contractually obligated to comply with, all State and Federal Immigration laws and regulations that relate to its employees and A.R.S. § 23-214(A) (hereinafter "Contractor Immigration Warranty"). A breach of the Contractor Immigration Warranty shall constitute a material breach of this Contract and shall subject the Contractor to penalties up to and including termination of this Contract at the sole discretion of the City. The City retains the legal right to inspect the papers of any Contractor or subcontractor employee who works on this Contract to ensure compliance with the Contractor Immigration Warranty. Contractor agrees to assist the City in regard to any such inspections. The City may, at its sole discretion, conduct random verification of the employment records of the Contractor and any subcontractors to ensure compliance with Contractor's Immigration Warranty. Contractor agrees to assist the City in regard to any random verification performed. Neither Contractor nor any subcontractor shall be deemed to have materially breached the Contractor Immigration Warranty if Contractor or subcontractor if Contractor or subcontractor establishes that it has complied with the employment verification provisions prescribed by sections 274A and 274B of the Federal Immigration and Nationality Act and the E-verify requirements prescribed by A.R.S. § 23-214(A).

DEFAULT AND TERMINATION

30. **TERMINATION FOR DEFAULT:** Prior to terminating this Contract for a material breach, the non-defaulting party shall give the defaulting party written notice and reasonable opportunity to cure the default, not to exceed thirty (30) days unless a longer period is granted by the non-defaulting party in writing. In the event the breach is not timely cured, or in the event of a series of repeated breaches the non-defaulting party may elect to terminate Contract by written notice to Contractor, which shall be effective upon receipt. In the event of default, the parties may execute all remedies available at law in addition to Contract remedies provided for herein.

31. **CITY REMEDIES:** In the event of Contractor's default, the City may obtain required materials and/or services from a substitute Contractor, and Contractor shall be liable to the City to pay for the costs of such substitute service. The City may deduct or offset the cost of substitute service from any balance due to Contractor, and/or seek recovery of the costs of substitute service against any performance security, and/or collect any liquidated damages provided for in the Contract. Remedies herein are not exclusive.

32. **CONTRACTOR REMEDIES:** In the event of the City's default, Contractor may pursue all remedies available at law, except as provided for herein.

33. **SPECIAL DAMAGES:** In the event of default, neither party shall be liable for incidental, special, or consequential damages.

34. **TERMINATION FOR NONAPPROPRIATION OF FUNDS:** The City may terminate all or a portion of this Contract due to budget constraints and non-appropriation of funds for the following fiscal year, without penalty or liability to Contractor.

35. **TERMINATION FOR CONVENIENCE:** Unless expressly provided for otherwise in the Contract, this Contract may be terminated in whole or part by the City for convenience upon thirty (30) days written notice, without further penalty or liability to Contractor. If this Contract is terminated, City shall be liable only for payment for satisfactory materials and/or services received and accepted by City before the effective date of termination.

36. **TERMINATION DUE TO INSOLVENCY:** If Contractor becomes a debtor in a bankruptcy proceeding, or a reorganization, dissolution or liquidation proceeding, or if a trustee or receiver is appointed over all or a substantial portion of the property of Contractor under federal bankruptcy law or any state insolvency law, Contractor shall immediately provide the City with a written notice thereof. The City may terminate this Contract, and Contractor is deemed in default, at any time if the Contractor becomes insolvent, or is a party to any voluntary bankruptcy or receivership proceeding, makes an assignment for a creditor, or there is any similar action that affects Contractor's ability to perform under the Contract.

37. **PAYMENT UPON TERMINATION:** Upon termination of this Contract, the City will pay Contractor for satisfactory performance up until the effective date of termination. The City shall make final payment within thirty (30) days from receipt of the Contractor's final invoice.

38. **CANCELLATION FOR GRATUITIES:** The City may cancel this Contract at any time, without penalty or further liability to Contractor, if the City determines that Contractor has given or offered to give any economic opportunity, future employment, gift, loan, gratuity, special discount, trip, favor, or service to a public servant ("Gratuities") in connection with award or performance of the Contract.

39. **CANCELLATION FOR CONFLICT OF INTEREST (A.R.S. § 38-511):** The City may cancel this Contract within three (3) years after its execution, without penalty or further liability to Contractor.

MISCELLANEOUS

40. **ADVERTISING:** Contractor shall not advertise or publish information concerning its Contract with the City, without the prior written consent of the City.

41. **NOTICES:** All notices given pursuant to this Contract shall be delivered at the addresses as specified in the Contract or updated by Notice to the other party. Notices may be: (a) sent via certified mail, postage prepaid, with receipt deemed effective four (4) days after being sent; or (b) sent by email.

42. **THIRD PARTY BENEFICIARIES:** This Contract is intended for the exclusive benefit of the parties. Nothing herein is intended to create any rights or responsibilities to third parties.

43. **GOVERNING LAW:** This Contract shall be construed in accordance with the laws of Arizona.

44. FORUM: In the event of litigation relating to this Contract, any action at law or in equity shall be filed in Coconino County, Arizona.

45. ATTORNEYS' FEES: If any action at law or in equity is necessary to enforce the terms of this Contract, the prevailing party shall be entitled to recover its reasonable attorneys' fees, costs, professional fees and expenses.

46. FORCE MAJUERE:

a. There may be events that occur during the term of the Contract that are beyond the control of both the City and Contractor, including events of war, floods, labor, disputes, earthquakes, epidemics, pandemics, adverse weather conditions not reasonably anticipated, forest fires, and other acts of God ("Events"). These Events may result in a temporary delay of contractual deliverables, or the permanent inability to provide the contractual deliverables that are the subject of the Contract.

b. There shall be no claims arising from a temporary delay of contractual deliverables, or the permanent inability to provide the contractual deliverables caused by the Events and the City shall not pay additional costs incurred by Contractor as a result of such Events.

c. The Parties shall act in good faith to extend the Contract completion date without any penalty to Contractor and that the extension will be in an amount of time equal to any temporary delay. This provision of the Contract supersedes all other terms regarding temporary delay, permanent shut down, or increased costs.

47. NO BOYCOTT OF ISRAEL: Pursuant to A.R.S. §§ 35-393 and 35-393.01, if a Party has over ten employees and the Contract is worth at least $100,000, the Party shall certify that it is not currently engaged in, and agrees, for the duration of the Contract, will not engage in a boycott of Israel.

EXHIBIT C

CITY OF FLAGSTAFF

STANDARD INSURANCE REQUIREMENTS

*The term "Contractor" may substitute for the term "vendors," "consultants," or "firms," depending on the purpose of the underlying Contract.

1. **IN GENERAL:** Contractor shall maintain insurance against claims for injury to persons or damage to property, arising from performance of or in connection with the Contract by Contractor, its agents, representatives, employees, and/or subcontractors.

2. **REQUIREMENT TO PROCURE AND MAINTAIN:** Each insurance policy required by the Contract shall be in effect at, or before, commencement of work under the Contract and shall remain in effect until all of Contractor's obligations under the Contract have been met, including any warranty periods. Contractor's failure to maintain the insurance policies as required by the Contract, or to provide timely evidence of renewal, will be considered a material breach of the Contract.

3. **MINIMUM SCOPE AND LIMITS OF INSURANCE:** The following insurance requirements are minimum requirements for the Contract and in no way limit the indemnity covenants contained in the Contract. The City does not represent or warrant that the minimum limits set forth in the Contract are sufficient to protect Contractor from liabilities that might arise out of the Contract, and Contractor is free to purchase such additional insurance as Contractor may determine is necessary.

   Contractor shall provide coverage at least as broad and with limits not less than those stated below.

   a. Commercial General Liability - Occurrence Form

General Aggregate	$2,000,000
Products/Completed Operations	$1,000,000
Each Occurrence	$1,000,000

   b. Umbrella Coverage $2,000,000

   c. Automobile Liability

Any Automobile or Owned, Hired, and Non-owned Vehicles Combined Single Limit Per Accident for Bodily Injury & Property Damage	$1,000,000

   d. Workers' Compensation and Employer's Liability

Workers' Compensation	Statutory
Employer's Liability: Each Accident	$500,000
Disease - Each Employee	$500,000
Disease - Policy Limit	$500,000

e. Professional Liability $2,000,000

f. Network Security and Privacy Liability

Per claim	$1,000,000
Annual Aggregate	$1,000,000

4. NETWORK SECURITY AND PRIVACY LIABILITY: Contractor shall maintain the requisite insurance requirements covering all acts, errors, omissions, negligence, infringement of intellectual property (except patent and trade secret); network security and privacy risks, including but not limited to unauthorized access, failure of security, breach of privacy perils, wrongful disclosure, collection, or other negligence in the handling of confidential information, privacy perils, and including coverage for related regulatory defense and penalties; data breach expenses, including but not limited to, consumer notification, whether or not required by law, computer forensic investigations, public relations and crisis management firm fees, credit file or identity monitoring or remediation services in the performance of services for the City. The insurance policy shall include coverage for third-party claims. The insurance policy shall contain an affirmative coverage grant for contingent bodily injury and property damage emanating from the failure of the technology services or an error or omission in the content/information provided.

5. SELF-INSURED RETENTION: Any self-insured retentions must be declared to and approved by the City. If not approved, the City may require that Contractor reduce or eliminate such self-insured retentions with respect to the City, its officers, agents, employees, and/or subcontractors. Contractor shall be solely responsible for any self-insured retention amounts. The City at its option may require Contractor to secure payment of such self-insured retention by a surety bond or irrevocable and unconditional letter of credit.

6. OTHER INSURANCE REQUIREMENTS: The insurance policies shall contain, or be endorsed to contain, the following provisions:

a. Additional Insured: In Commercial General Liability and Automobile Liability Coverages, the City of Flagstaff, its officers, officials, agents, employees, and/or subcontractors shall be named and endorsed as additional insureds with respect to liability arising out of the Contract and activities performed by or on behalf of Contractor, including products and completed operations of Contractor, and automobiles owned, leased, hired, or borrowed by Contractor.

b. Broad Form: Contractor's insurance policy shall contain broad form contractual liability coverage.

c. Primary Insurance: Contractor's insurance coverage shall be primary insurance with respect to the City, its officers, officials, agents, employees, and/or subcontractors. Any insurance or self-insurance maintained by the City, its officers, officials, agents, employees, and/or subcontractors shall be in excess of the coverage of Contractor's insurance and shall not contribute to it.

d. Each Insured: Contractor's insurance policies shall apply separately to each insured against whom a claim is made or suit is brought, except with respect to the limits of the insurer's liability.

e. Not Limited: Coverage provided by Contractor shall not be limited to the liability assumed under the indemnification provisions of the Contract.

f. Waiver of Subrogation: The insurance policies shall contain a waiver of subrogation against the City, its officers, officials, agents, employees, and/or subcontractors for losses arising from work performed by Contractor for the City.

7. NOTICE OF CANCELLATION: Each insurance policy required by the insurance provisions of the Contract shall provide the required coverage and shall not be suspended, voided, cancelled, and/or reduced in coverage or in limits unless prior written notice has been given to the City. Notices required by this section shall be sent directly to the Procurement Agent and shall reference the Contract Number.

8. ACCEPTABILITY OF INSURERS: Contractor shall place insurance hereunder with insurers duly licensed or approved unlicensed companies in the State of Arizona and with a "Best's" rating of not less than A-: VII. The City does not represent or warrant that the above required minimum insurer rating is sufficient to protect Contractor from potential insurer insolvency.

9. CERTIFICATES OF INSURANCE: Contractor shall furnish the City with certificates of insurance (ACORD form) as required by the Contract. The certificates for each insurance policy shall be signed by a person authorized by that insurer to bind coverage on its behalf. Any policy endorsements that restrict or limit coverage shall be clearly noted on the certificate of insurance. The City Contract number shall be noted on the certificates of insurance. If requested by the City, all certificates of insurance and endorsements must be received and approved by the City before the Contractor commences work.

10. POLICIES: The City reserves the right to require, and receive within ten (10) days, complete, certified copies of all insurance policies and endorsements required by the Contract. The City shall not be obligated, however, to review any insurance policies or to advise Contractor of any deficiencies in such policies and endorsements. The City's receipt of Contractor's policies or endorsements shall not relieve Contractor from, or be deemed a waiver of, the City's right to insist on strict fulfillment of Contractor's obligations under the Contract.

11. MODIFICATIONS: Any modification or variation from the insurance requirements in the Contract must have the prior approval of the City's Attorney's Office in consultation with the City's Risk Manager, whose decision shall be final. Such action will not require a formal Contract amendment but may be made by their handwritten revision and notation to the foregoing insurance requirements.

2021 – 2022 Zoning and Subdivision Code Work Program

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Council Direction Provided on January 26, 2021

TIER 1 (URGENT)

- **A** Smart and Safe Act (Recreational Marijuana)
- **B** High Occupancy Housing – Part 1a
- **C** Affordable Housing Incentives and IPAH
- **D** Forty-Five Foot Building Height
- **E** Outdoor Lighting

TIER 2 (PRIORITY)

- **F** La Plaza Viejas Specific Plan **Implementation**
- **G** Transect Zones
- **H** Resource and Wildlife Protection
- **I** Southside Specific Plan Implementation
- **M** Heritage Preservation

TIER 3 (WHEN AVAILABLE)

- **J** Zoning Code Misc. Modifications
- **K** Subdivision Code
- **L** **Planning Policy Plan Requirements**

TIER 4 (DELAY)

- **N** Transfer of Development Rights
- **O** Planned Area Zone
- **P** High Occupancy Housing – Part 2 and 3
- **Q** Resource Protection Overlay
- **R** **Design Guides**

2021 - 2022 Zoning and Subdivision Code Work Program Status Summary

A. Smart and Safe Act (Recreational Marijuana)

- The City Council has adopted the related Zoning Code amendment.

B. High Occupancy Housing – Part 1a

- Staff is near completion of a draft to address revisions to the Zoning Code pursuant to the City Council March and October 2021 direction. In summary, the direction is to allow 100% affordable housing developments that would otherwise be considered High Occupancy Housing to be developed without a Conditional Use Permit, and to increase the Average Monthly Income (AMI) for the household from 60% to 80% AMI or less. This amendment is anticipated to be provided to the City Council for consideration in the 2021 – 2022 winter/spring 2022.
- Staff has begun discussing methods to address the October 2021 City Council direction to receive input from the public, Sustainability Commission, and Housing Commission regarding any suggested modifications to the High Occupancy Housing ordinance.

C. Affordable Housing Incentives and Incentive Policy for Affordable Housing (IPAH)

- As an incentive, the City Council has adopted modifications to the Zoning Code to allow developments that provide 100 percent of the dwelling units to persons or families with a household income equal to 80 percent or less of the AMI. The AMI is based on the published annually by the U.S. Department of Housing and Urban Development for the City of Flagstaff.
- Staff has been meeting with the IPAH and Zoning Code Incentives Working Group [1], and members of the development community (hereafter the "Stakeholders"), to review the existing IPAH and Zoning Code Incentives. In addition, staff has been discussing new and revised IPAH and Zoning Code concepts that may be included as part of the update process with the stakeholders . It is anticipated that staff will be requesting a City Council Work Session in the first quarter of 2022 to receive direction pertaining to updating.

Notes: IPAH and Zoning Code Working Group: that consisting of members of the Housing and Planning and Zoning Commission, the development community working on revisions to IPAH, the members of the development community, and the IPAH and Zoning Code Incentives.

D. Forty-Five Foot Building Height

- The City Council has adopted the Neighborhood Community Commercial (NCC) zone to address the item.

E. Outdoor Lighting

- Staff has been meeting with the Outdoor Lighting Working Group on revisions to the Zoning Code. The reference revision will assist in implementing the Joint Land Use Study and to simplify the requirements. It is anticipated that the amendment will be completed in December 2021. The public outreach and adoption process for this amendment is anticipated in the spring of 2022.

F. La Plaza Viejas Specific Plan Implementation

- A contract with a consultant to complete the related amendment is scheduled in December 2021.

G. Transect Zones

- Staff is anticipating that a consultant will be used complete the related amendments.

H. Resource and Wildlife Protection

- In October 2021, staff started meeting with the petitioners for the City Code amendment that would require the relocation of prairie dogs prior to the development of certain properties. A timeframe for this amendment has not been determined.
- Staff has had initial discussions with the petitioners who have requested Zoning Code amendments to protect wildlife corridors, boulder outcroppings, and seep and springs. A completion timeframe has not been determined.

I. Southside Specific Plan Implementation

- It is anticipated that there will be multiple amendments to implement the plan. The related amendments will be completed by staff and a consultant.
- Staff has completed the working draft of an amendment to allow commercial uses, regardless of a change of use, to be parked based on the parking spaces that the property currently has. This amendment will allow the parking requirements that apply to the Downtown to be used in most areas of the Southside neighborhood, north of Butler Avenue. The public outreach and adoption process for this amendment is anticipated in the spring of 2022.
- Staff has begun discussing the scope of work for an amendment to implement a Character Overlay zone in certain areas of the Southside neighborhood that is indicated in the plan. The City Council reviewed a citizen's petition to create the character overlay on October 26, 2021. A City Council work session regarding the petition and overlay is scheduled for December 13, 2021.

J. Zoning Code Misc. Modifications

- Public Outreach for Development Agreements
  - Staff is nearing completion of a working draft of the amendment. The public outreach and adoption process for this amendment is anticipated in spring of 2022.
- RV Parking on Driveways in the Front Yard of Residential Properties.
  - Staff is nearing completion of a working draft of the amendment. The public outreach and adoption process for this amendment is anticipated in the spring of 2022.
- Sustainability Incentive for an all-electric development.
  - Staff is nearing completion of a working draft of the amendment. The public outreach and adoption process for this amendment is anticipated in the winter of 2021 - 2022.

K. through M.

- Staff has not started working on the K. through M. amendments.

City Council Meeting - FINAL (AMENDED) **12. A.**

Meeting Date: 12/07/2021

From: Sara Dechter, AICP, Comprehensive Planning Manager

Information

TITLE:

Public Hearing and Consideration and Adoption of Resolution No. 2021-58: Carbon Neutrality Major Regional Plan Amendment

STAFF RECOMMENDED ACTION:

Hold Public Hearing

1) Read Resolution No. 2021-58 by title only
2) City Clerk reads Resolution No. 2021-58 by title only (if approved above)
3) Adopt Resolution No. 2021-58

Executive Summary:

This application proposes a major amendment to the Flagstaff Regional Plan 2030. The proposed amendment is within the Climate Change and Adaptation section of the Environmental Planning & Conservation Chapter (pages IV-11 and IV-12). The proposed changes to pages IV-11 and IV-12 include:

- Changes to the narrative
- Revisions to goals E&C.2 and E&C.3
- Revisions to policies E&C.2.1, E&C.2.2, E&C.3.2, and E&C4.1
- Addition of three policies: E&C.2.3, E&C.3.5, and E&C.3.6

In addition to the text revisions on the Climate Change and Adaptation pages, this amendment also includes a wording revision to policy T.8.1, in the Transportation chapter (located on page X-19). This change is being made because of the compatibility review among the proposed revisions to the climate pages and the existing Regional Plan goals and policies. This revision will clarify the meaning of T.8.1 and align with how staff understands the meaning of the policy.

The Planning and Zoning Commission on Wednesday, November 17, 2021 recommended approval (4-0) of the Major Plan amendment with the condition that the word "Attempt" be changed to "Commit" in Policy E&C 3.6 to strengthen the language. The plan replacement pages attached reflect this recommendation.

Financial Impact:

Achieving the objective of a carbon-neutral community by 2030 will have both costs and benefits as outlined in the staff report. The cost of the plan amendment itself has been mainly staff time and application fees.

Policy Impact:

Adopting the major plan amendment will ensure alignment of the Carbon Neutrality Plan and consideration of this objective in discretionary development cases and when the Flagstaff Zoning Code is being amended. This amendment also supports the Active Transportation Master Plan and minor plan amendment that is under development.

Connection to PBB Priorities/Objectives, Carbon Neutrality Plan & Regional Plan:

Key Community Priorities

- Implement, maintain & further the Climate Action & Adaptation Plan (CAAP) with awareness of social inequities
- Foster community-wide clear & consistent communication strategies & products
- Promote environmental justice & the fair distribution of environmental benefits

Key Regional Plan Goals and Policies

- Goal E&C.3. Strengthen community and natural environment resiliency through climate adaptation efforts.
- Policy PF.1.1. Consider climate resiliency and preparedness in community planning and development to be better prepared for changing conditions.

Has There Been Previous Council Decision on This:

The Flagstaff City Council declared a Climate Emergency on June 23, 2020.

The Planning and Zoning Commission accepted the recommendation of the Sustainability Commission on April 14, 2021 and initiated the major plan amendment to the Flagstaff Regional Plan 2030 in anticipation of the Carbon Neutrality Plan's adoption.

The Flagstaff City Council adopted the Flagstaff Carbon Neutrality Plan on June 15, 2021.

Background/History:

The proposed text amendment will update the Flagstaff Regional Plan 2030's discussion of climate change and climate action to align with the City of Flagstaff's climate action goals. The climate action work of the City has evolved rapidly since the 2014 adoption of the Regional Plan, creating a gap between the guidance provided in the Regional Plan and the City's declared climate goals and the ambition of its climate actions. In June 2020, following the declaration of a climate emergency, the Flagstaff City Council adopted the Flagstaff Carbon Neutrality Plan.

Key Considerations:

The application has met all submittal and notification requirements and meets all the findings for a major plan amendment. The Planning and Zoning Commission on Wednesday, November 17, 2021, recommended approval (4-0) of the major plan amendment. A major plan amendment must have a two-thirds majority vote for approval and must be completed within the same calendar year as the application. This is the only major plan amendment under consideration for 2021.

Attachments

Presentation

Staff Report

Major Plan Amendment Application

Regional Plan Text Revisions
Narrative
Impact Analyses
Citizen Participation Plan
Public Participation Report
Approval of Waiver
Waiver of Submittal Requirements
Res 2021-58
Resolution Exhibit A
Resolution Exhibit B

Carbon Neutrality Major Plan Amendment

City of Flagstaff 2021

PZ-21-00124

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Major Plan Amendment

Category

9) Text Amendments - Add or delete a goal or policy in any chapter of the Plan

Additional Procedures

- 60 public review
- Notification of specific agencies and utilities
- A citizen review session
- 2 hearings with Planning and Zoning in different locations
- A 2/3 majority of Council must approve the amendment

Plan Amendment Proposal

The proposed changes to pages IV-11 and IV-12 include:

- Changes to the narrative,
- Revisions to goals E&C.2 and E&C.3,
- Revisions to policies E&C.2.1, E&C.2.2, E&C.3.2, and E&C4.1,
- Addition of three policies: E&C.2.3, E&C.3.5, and E&C.3.6, and
- a wording revision to policy T.8.1, in the Transportation chapter (located on page X-19)

Plan Amendment Proposal

Revised and new E&C.2

Goal E&C.2. ~~Reduce greenhouse gas emissions~~ Achieve carbon neutrality for the Flagstaff community by 2030.

Policy E&C.2.1. Encourage the reduction of ~~all~~ energy and material consumption~~, especially fossil fuel generated energy, in public, commercial, industrial, and residential sectors~~.

Policy E&C.2.2. Promote investments that create a more connected and efficient community, decrease emissions from transportation and building energy, and strengthen climate resiliency.

Policy E&C.2.3. Review and revise existing regulations, standards, and plans (codes, ordinances, etc.) to reduce community greenhouse gas emissions.

Policy E&C 2.4. Promote developments that help the community achieve carbon neutrality through strategies that reduce the project's emissions from transportation, energy, and consumption.

Plan Amendment Proposal

Revised E&C.3

Goal E&C.3. Prepare Flagstaff's ~~Strengthen~~ community systems and resources to be more resilient to climate change impacts ~~natural environment resiliency through climate adaptation efforts.~~ and address climate change in a manner that prioritizes those most impacted and ensures the costs and benefits of climate adaptation and mitigation are equitably distributed.

Policy E&C.3.1. Develop and implement a comprehensive and proactive approach to prepare the community for and to minimize the impacts of climate change induced hazards.

Sara Dechter (sdechter@flagstaffaz.gov) is signed in

Policy E&C.3.2. Review and revise existing regulations, standards, and plans (codes, ordinances, etc.) to reduce the community's vulnerability to climate change impacts and reduce the disproportionate impacts on vulnerable communities.

Policy E&C.3.3. Invest in forest health and watershed protection measures.

Policy E&C.3.4. Increase the region's preparedness for extreme climate events.

Plan Amendment Proposal

New Policies under E&C.3

Policy E&C.3.5. Improve the ability of vulnerable community members to adapt and thrive amidst the pressures of climate change.

Policy E&C.3.6. Attempt to equitably distribute the burdens and benefits of climate action policies and investments to all segments of the community.

Plan Amendment Proposal

Revised E&C.4

Goal E&C. 4. Integrate available science into policies governing the use and conservation of Flagstaff's natural resources.

Policy E&C. 4.1. Assess vulnerabilities and risks of Flagstaff's natural resources in the context of anticipated climate changes and resulting changes to Flagstaff's systems.

Policy E&C. 4.2. Develop water use policies that attempt to integrate current best projections of climate change effects on the Colorado Plateau's water resources and emphasize conservation.

Plan Amendment Proposal

Wording revision to policy T.8.1

Policy T.8.1. Promote efficient ~~transportation~~ network connectivity to and within major trade corridors, employment centers, and special districts that enhances the region's standing as a major economic hub.

Why is a plan amendment necessary?

The climate action work of the City has evolved rapidly since the 2014 adoption of the Regional Plan, creating a gap between the guidance provided in the Regional Plan and the City's declared climate goals and the ambition of its climate actions.

This will reduce confusion, increase transparency, and provide decision-makers with support when making decisions based on the City's climate action goals.

Required Public Process and Notice

Prepare Application

- Preapplication Meeting
- Review with Commissions
- Prepare draft amendment language and impact analyses
- Inter Division Staff review application
- Application deemed complete

60 day public review

- Transmit application to other government agencies, utility companies, and the public
- Hold a neighborhood meetings
- Application deemed substantively complete

P&Z and Council Hearings

- 2 Planning and Zoning Commission Hearings in 2 locations
- Council Hearing

Impact Analysis Summary

- No impact on Regional Plan area-place types or supply of zoning
- Water and Wastewater Impact Analyses, Cultural Resource Studies, and School Impact Analysis were waived by the Planning Director
- Transportation – promotes transportation options and active transportation, impacts to vehicle traffic in line with overall Regional Plan goals
- Housing – Prepare for impacts of climate change critical to maintaining affordable housing in the face of climate migration.

Impact Analysis Summary

- Public Services and Facilities – Increase resiliency and preparedness. Reduced energy costs after initial investment
- Economic Development – Implementing carbon neutrality will have a variety of costs and benefits. Action now is less expensive than waiting for future impacts. Collaborative coordination with businesses and service providers will be important in ensuring a positive economic outcome.
- Police and Fire – No impact

Plan Conformance

Finding #1

Most goals and policies support the amendment

Substantial conformance

- Improved alignment on carbon neutrality
- Quality of open space can be maintained
- Water resources and energy use will be more sustainable

Plan Conformance

Finding #1

Potentially conflicting policies and recommendations for mitigations

- The protections of dark skies should be maintained even if it is a challenge for carbon neutrality (E&C.5)
- Increasing densities may lead to some loss in views which are an element of community character. Viewshed management and identification of priority viewsheds could be a mitigation (CC.1)
- T.8.4 and T.8.5 can be mitigated by consideration of emissions in transportation improvement design

Community Benefits

Finding #2

- Increased understanding and policy alignment with community priorities
- Increased transparency
- Improved resilience and preparation for climate change
- Additional acknowledgement of equity considerations and disparate vulnerability of community members
- Strong basis for action on climate issues.

Plan Amendment Proposal

Planning and Zoning Commission Recommendation

Recommend that the City Council approve the Carbon Neutrality Major Plan amendment, case PZ-21-00124 with the condition of changing the words “Attempt to” from E&C.3.6 to “Commit to…”

<u>P&Z rewording</u>

Policy E&C.3.6. Commit to equitably distribute the burdens and benefits of climate action policies and investments to all segments of the community.

PLANNING AND DEVELOPMENT SERVICES REPORT
MAJOR REGIONAL PLAN AMENDMENT

PUBLIC HEARING
PZ-21-00129-01

DATE: October 6, 2021
MEETING DATE: October 28, 2021
REPORT BY: Sara Dechter, AICP

REQUEST:
Major Regional Plan Amendment, by the City of Flagstaff, to amend pages IV-11, IV-12 and X-19 of the Flagstaff Regional Plan 2030 to reflect the City's Carbon Neutrality Plan.

STAFF RECOMMENDATION:
Staff recommends the Planning and Zoning Commission, in accordance with the findings presented in this report, forward the Major Regional Plan Amendment request to the City Council with a recommendation for approval.

I. Project Introduction

A. Background/Introduction

The proposed text amendment will update the Flagstaff Regional Plan 2030's discussion of climate change and climate action to align with the City of Flagstaff's climate action goals. The climate action work of the City has evolved rapidly since the 2014 adoption of the Regional Plan, creating a gap between the guidance provided in the Regional Plan and the City's declared climate goals and the ambition of its climate actions. In June 2020 following the declaration of a climate emergency, the Flagstaff City Council adopted the Flagstaff Carbon Neutrality Plan. The Carbo0n Neutrality Plan "establishes a vision for how Flagstaff will create a carbon neutral future" through climate actions that support adaptation, mitigation, and equity.

The Carbon Neutrality Plan has three goals:

1. Achieve carbon neutrality by 2030.
2. Prepare Flagstaff's communities, systems, and resources to be more resilient to climate change impacts.
3. Address climate change in a manner that prioritizes those most impacted and ensures the costs and benefits of climate adaptation and mitigation are equitably distributed.

The Flagstaff Regional Plan 2030's goals do not reflect the urgency of the new policy or the strength of the community's objectives for more aggressive climate action. This amendment will restore alignment between the Regional Plan and the declared climate goals, clarifying the carbon neutrality goal and the types of climate action the City will take.

B. Proposed Amendment

This application proposes a major amendment to the Flagstaff Regional Plan 2030. The proposed amendment is within the Climate Change and Adaptation section of the Environmental Planning & Conservation Chapter -pages IV-11 and IV-12. The proposed changes to pages IV-11 and IV-12 include:

- Changes to the narrative
- Revisions to goals E&C.2 and E&C.3
- Revisions to policies E&C.2.1, E&C.2.2, E&C.3.2, and E&C4.1
- Addition of three policies: E&C.2.3, E&C.3.5, and E&C.3.6

In addition to the text revisions on the Climate Change and Adaptation pages, this amendment also includes a wording revision to policy T.8.1, in the Transportation chapter (located on page X-19). This change is being made because of the compatibility review among the proposed revisions to the climate pages and the existing Regional Plan goals and policies. This revision will clarify the meaning of T.8.1 and align with how staff understand the meaning of the policy.

II. Evaluation

The Inter-Department Staff (IDS) deemed the application for the Major Plan Amendment to be complete on June 1, 2021 and to be substantively complete on July 29, 2021.

The applicant began the required 60-day public review and review by federal, state, and local agencies and utilities, on July 13, 2021.

A. Impact analysis

Major regional Plan amendments are required to have qualitative impact analysis completed so that the implications of the policy changes being considered can be understood by the Planning and Zoning commission and City Council. Because this is a text amendment with city wide implications, the Planning Director has waived the requirements for: Water and Wastewater Impact Analyses, Cultural Resource Studies, and School Impact Analysis

i. Public Services and Facilities Analysis

This amendment supports a more equitable and resilient response and preparedness for stormwater events, which are expected to increase in frequency and scale due to climate change. It will also help prepare for securing the water system in case of draught and other climate events.

In terms of public facilities, the energy efficiency and cost of energy will be reduced by improving efficiency and reducing the reliance on fossil fuels.

ii. Traffic Analysis

The revised climate goals and policies will further the City's already-existing goals to encourage active transportation, support transit use and operations, and reduce congestion. Because transportation emissions are a major contributor to greenhouse gas emissions, achieving carbon neutrality will required strengthened collaboration among City of Flagstaff Community Development Division, Engineering Division, and the Sustainability Section to analyze emissions reduction opportunities and take appropriate action. This objective will be operationalized and bolstered by the Active Transportation Master Plan which is under development.

iii. Economic Development Analysis

Taking climate action and avoiding the worst impacts of climate change makes sense economically and morally. Action is far less expensive and far more beneficial than inaction. Like forest health measures taken to avoid catastrophic wildfire, climate action is an investment in our future.

Implementing carbon neutrality will have a variety of costs and benefits. Benefits will come from the investment in community infrastructure and preparation to reduce the costs of future climate events. It will also come from the jobs created in new energy production, energy efficiency retrofits and construction activities. Many local businesses and hotels are already taking climate action and committing to carbon neutrality. For instance, Arizona Public Service (APS), which is Flagstaff's electric utility company, has committed to transitioning to a 100% carbon-free electric grid by 2050. The ultimate balance of the costs and benefits will depend on the implementation decisions of Council, Flagstaff business and residents over the next 15 years.

iv. Police and Fire Protection Analysis

The revised climate goals and policies will not impact policing or Fire Protection in Flagstaff.

III. Findings

An application for a Major Plan Amendment shall be submitted to the Planning Director and shall be reviewed and a recommendation prepared. The Planning Director's recommendation shall be transmitted to the Planning and Zoning Commission in the form of a staff report prior to a scheduled public hearing. The recommendation shall include: an evaluation of (1) the consistency and conformance of the proposed amendment with the goals and policies of the General Plan and any applicable specific plans; (2) a statement of community benefit; and whether the amendment should be granted, granted with conditions to mitigate anticipated impacts caused by the proposed development, or denied.

Major Plan Amendments shall be evaluated based on the following findings:

A. Finding #1:

The proposed amendment must be found to be consistent with and in conformance with the goals and policies of the General Plan and any applicable specific plans. If the application is not consistent with the General Plan, and any other applicable specific plan, the applicable plan must be amended in compliance with the procedures established in Chapter 11-10 of the City Code (Title 11: General Plans and Subdivisions) prior to considering the proposed amendment.

i. General Plan/Flagstaff Regional Plan (FRP 2030) Process and Analysis Summary

When staff performs a Regional Plan (the "Plan") analysis, staff reviews all maps, text, and goals and policies to determine which are the most relevant in relation to the proposed application. The Plan's Future Growth Illustration on Maps 21 and 22 (same map; one is regional scale and one city scale) and the text of the Plan provide supplemental information for the interpretation of goals and policies.

This Major Plan amendment proposes text amendments to E&C.2, E&C.3. E&C.4 and related policies, the Creation of three new policies under E&C 2 and E&C.3 and a change to Policy T.8.1. While these changes do not alter any of the maps in the Regional Plan, they will all be used in conformity findings for future development cases.

Important to this amendment is the introduction of the concept of equity in protecting vulnerable communities from the impacts of climate change and in considering how the costs and benefits of climate change action are distributed in the community. The current Regional Plan goals and policies do not have a direct statement on equity except in the Chapter X which calls for equity in the distribution of transportation improvements and projects (Policy T.11.4). There are not many direct policies against which to assess this addition. Staff finds that it is fitting with the overall vision of the regional plan to "encourage and advance intellectual, environmental, social, and economic vitality for today's citizens and future generations" (p. I-1).

ii. Applicable General Plan Goals and Policies

As part of its review, staff identified relevant Regional Plan Goals and Policies that could be applied to support or not support the proposed Zoning Map Amendment. These goals and policies are located in an attachment to this report and within the developer's narrative. The following is a discussion of how the project generally meets or conflicts with goals and policies in each chapter.

a. Environmental Planning & Conservation

The City of Flagstaff is strengthening the language to protect the regions air quality and to increase the collaboration and effectiveness of climate change action in the Region. This aligns with the Carbon Neutrality Policy and the Climate emergency declared by the Flagstaff City Council.

One area of compromise is the protection of dark skies. There are some instances where dark-sky friendly lighting is not the most energy efficient lighting option. This resource will need to be balanced as the city makes lighting investments and updates to the City Zoning and Building Codes. The City can reduce energy use in several areas, whereas the Flagstaff community has limited ways to reduce dark sky pollution due to

technology, the scarcity of the resources and the value of the scientific and cultural contributions of dark skies to our Region. While the dark skies goal (E&C.5) of the Regional Plan does not conflict with carbon neutrality. It requires additional mitigation for both goals to be achieved.

b. **Open Space**

The increased emphasis on carbon neutrality is in conformance with the goals and policies on Open Space in the Flagstaff Regional Plan 2030. The Regional Plan's goals and policies and future growth illustration are already calibrated to lower-greenhouse gas-emissions land use by promoting density in activity centers and already-developed land (infill). While some may perceive a conflict between open space preservation and development, climate-focused, compact development can support the creation of more legally designated open space properties. The emphasis is not on open space at the maximum quantity but at a quality and location that preserves natural resources and increases the community's resiliency to climate events such as flooding, increasing temperatures and increased risk of wildfires. In summary, dense, climate-friendly development allows more people to live in smaller areas, better utilizing Flagstaff's limited land resources.

c. Water Resources

The water resources goals and policies are linked to climate change and climate action, and are well-supported by the proposed amendment. Climate change will require nimble planning and adaption to maintain our water supply and its quality, manage water demand, prepare water infrastructure and to plan for increased frequency and intensity of extreme weather. The addition of equity considerations to this work is already something the City has been doing in efforts such as the Southside Community Plan and the response to the Museum Fire flood events of 2021. These efforts will be enhances by the increased emphasis in the Regional Plan.

d. Efficient Use of Energy Goals and Policies

All the goals and policies in the Energy Chapter of the Regional Plan support carbon neutrality. The climate emergency and the proposed Regional Plan amendment will require faster implementation of these goals and work across departments to achieve these objectives in new building construction.

e. Community Character

The Community Character Chapter of the Regional Plan has several policies that overlap with the preservation of open space (CC.1.3 and CC.1.6). Both of these policies can be achieved within the context of the the carbon neutrality amendments proposed.

Likewise, Heritage Resources protection and adaptive reuse (CC.2.10) are supportive of reducing emissions as are managing great streets and transportation corridors to be context sensitive and serve all modes of travel (CC.4.1 and CC.4.4). Water efficient management of urban forests and landscaping will also contribute to reduce energy consumption and preservation of the City's resiliency to climate impacts on our water systems.

Managing scenery and views (CC.1.1) can be a tricky value when trying to address carbon neutrality and there are many perceived conflict depending on what your values are related to these features. The goal in the Regional Plan is intended to convey that "significant" landmarks and other features should be preserved and provides some guidance that significance can attributed to a view for its cultural importance, or the importance of the place from which it is being viewed (i.e. a public park, plaza or Great Street). Preserving the natural setting while increasing the density and intensity of existing areas within the community does not promise that individual views will be preserved. Adding emphasis on carbon neutrality does not change this dilemma. It does increase the importance of identifying significant viewsheds and doing what is legally

feasible to preserve them coincident with the changes the community will need to make to achieve carbon neutrality.

f. Growth Areas & Land Use

The Growth and Land Use chapter envisions a community whose land uses promote connectivity, walkability, efficiency, health, and housing options. Well-planning neighborhoods, activity centers and corridors support by the Growth and Land Use Chapter of the Regional Plan can further the City's proposed carbon neutrality amendments because they focus on compact, efficient development. Neighborhood planning processes can also build resilience by increasing connections among neighbors and adding to neighborhood self-reliance. These land use policies are designed to create a built environment that reduces travel distances and creates opportunities to live and work without needing to rely on an automobile for those who want those housing choices. The Chapter provides guidance on balancing new development with existing neighborhoods and with open space values. All of these goals closely align to the carbon neutrality plan's objectives for future land uses and redevelopment within the City and County.

g. Transportation

The proposed amendment is compatible with the goals and policies of the Transportation Chapter, with the exception of one policy: T.8.1. The applicant proposes to revise this policy to improve clarity and ensure compatibility between the policy T.8.1 and the proposed text amendment; this policy revision is described starting in section II.3, Description and Need.

Many of the goals and policies of this chapter, from those aiming for improved mobility (Goal T.1) to improvements in safety (Goal T.2) to improved transportation infrastructure for all modes (Goals T.3, 4, 5, 6, and 7) are closely linked to climate action. The proposed text amendment in Chapter IV includes more ambitious greenhouse gas emissions goals that will only be achieved through significant changes to Flagstaff's current transportation planning, investments and operations. However, the goals and policies of the Transportation Chapter are pointing in the same direction but the approach to implementing them in the first 7 years of the plan has been more moderate.

T.8.1 under Automobile goals and policies, as currently written, could refer to long distance regional transportation connections that are economically efficient or to network level connections that produce economic activity and vibrancy. The former interpretation is not in line with the carbon neutrality goals and policies being revised in Chapter IV and staff's understanding is that the intent was not to encourage highways or transportation projects that prioritize cars over the multimodal system. The proposed clarifying changes to the text therefore point to the need for network connectivity and not just the most efficient route from one place to another. This is an important concept for carbon neutrality as highly connected street networks are more walkable and produce more equitable access for all members of the community.

There is potential for conflicts to arise when implementing policy *T.8.4. Protect rights-of-way for future transportation corridors* and *T.8.5. Support the area's economic vitality by improving intersection design for freight movements*, because implementation involves choices among competing values when land and budgets are limited –decisions inherent to any transportation project. For T.8.4, the City can mitigate potential climate impacts by conducting evaluations of greenhouse gas emissions and considering route and network alternatives and their relative impacts. For T.8.5, the need for enlarged intersections and turns for freight can be managed using context sensitive solutions and a careful prioritization of modes when considering widening and redesign of intersections.

h. Cost of Development

Goal CD.1 and related policies are about the ability of the City to set fair and reasonable development fees and practices in a transparent manner that considers robust discussions and economic data. Climate action may impact the overall cost of development in Flagstaff but preparing for climate change and improving our infrastructure's resiliency to extreme weather events will in the long term save the public money and reduce the impacts of these expected changes on future residents.

i. Public Buildings, Services, Facilities, & Safety

Goals under Public Buildings, Services, Facilities, & Safety support climate resiliency and forward looking operation and maintenance in a manner that is aligned with the proposed amendments. The chapter also incorporates preparedness and public safety in a manner that anticipates further disruption from climate change and considers ways to mitigate these events proactively.

j. Neighborhoods, Housing, and Urban Conservation

The proposed text of Chapters IV and X support increased incorporation of equity in the support of Flagstaff's most vulnerable, a shared goal with the Neighborhoods, Housing and Urban Conservation chapter. Affordability, accessibility, and safety of all residents in Flagstaff is an important contribution to the climate action.

The proposed text amendments have considered the possibility of conflicts with nearly every goal and policy in the Flagstaff Regional Plan 2030 and have demonstrated that the proposed amendments are in substantial conformance to the plan.

B. Finding #2

To meet the finding the proposed amendment must be determined not to be detrimental to the public interest, health, safety, convenience, or welfare of the City of Flagstaff (the "City"), and will add to the public good as described in the General Plan.

The applicant has identified the following Community Benefits and Public Good:

- Reinforcement the connections between climate action and the vision of the Regional Plan,
- Increased transparency,
- incorporating stronger environmental features and benefits into land use planning and developments,
- Stronger rationale to lower air pollution, a wider range of options and more support for healthy and inexpensive modes of travel, better connections and more diversity and attainability in neighborhoods, increased energy efficiency in homes and buildings, and reduced waste,
- Increased emphasis on equity and activity to support the resilience of Flagstaff's vulnerable community members.

Planning and Development Service staff concurs with these findings of community benefits.

IV. Citizen Participation

Public hearings before the Planning and Zoning Commission and City Council are conducted in conjunction with requests for a Major Plan Amendment. In accordance with Arizona State Statute, The Planning and Zoning Commission must conduct 2 public hearings in two different locations within the jurisdiction. Notice of the public hearing was provided by placing an ad in the Arizona Daily Sun, posting notices on the property, and mailing a notice to everyone on the list of interested parties. City Council must approve a major plan amendment with a two-thirds majority vote.

City staff conducted a 60 day comment period which notified all the parties and government agencies listed in ARS 9.461, and any person or entity that requests in writing to receive a review copy of the proposal. During the 60 day public review, staff conducted 3 open houses (2 virtual and one in person) and posted a topic on the Flagstaff Community Forum.

All comments received during the 60 day public review are documented in the Public Participation Report (attached).

RECOMMENDATION:

Staff believes that the proposed Major Plan Amendment is in substantial conformance with the required findings and recommends the Planning & Zoning Commission forward the request to the City Council with a recommendation approval.

Attachments:

Major Plan Amendment Application
Regional Plan Text Revisions
Narrative
Impact Analyses
Citizen Participation Plan
Public Participation Report
Mailing lists (2)
Waiver of Submittal Requirements

City of Flagstaff — Community Development Division

211 W. Aspen Ave
Flagstaff, AZ 86001
www.flagstaff.az.gov

Sara Dechter, CPM
(928) 213-2631
SDechter@flagstaffaz.gov

PMPA

Date Received 4/30/2021	**Application for Major Regional Plan Amendment**	File Number

Property Owner(s)	Title	Phone	Email
City of Flagstaff		928-213-2150	
Mailing Address			**City, State, Zip**
211 W. Aspen Ave, Flagstaff, AZ 86001			
Applicant(s)	**Title**	**Phone**	**Email**
Tiffany Antol, Planning Director		928-213-2605	JNiemann@Flagstaffaz.gov
Mailing Address			**City, State, Zip**
211 W. Aspen Ave, Flagstaff, AZ 86001			
Project Representative(s)	**Title**	**Phone**	**Email**
Jenny Niemann, Climate and Energy Specialist		928-213-2150	JNiemann@Flagstaffaz.gov
Mailing Address			**City, State, Zip**
211 W. Aspen Ave, Flagstaff, AZ 86001			

Requested Review

☐ **Proposed Change to Urban Growth Boundary (UGB)** ☐ **Proposed Change to Area Types**

☐ **Proposed Change to Activity Centers and/or Corridors (Place Types)** *Text amendment*

If the space below is insufficient for a complete response, please attach additional documentation.

Site Address	Parcel Number(s)	Subdivision, Tract & Lot Number
N/A	N/A	N/A

Existing Regional Plan Area Type(s) *Text amendment*	**Proposed Regional Plan Area Type(s) and acreage** N/A
Existing Regional Plan Place Type(s) N/A	**Proposed Regional Plan Place Type(s) and acreage** N/A
Other type of Map Amendment and Map Number *Text amendment*	**Description of Map Amendment** N/A
Property Information:	☐ Yes ☒ No Located in an existing Local/National Historic District? (Name:_____) ☐ Yes ☒ No Existing structures are over 50 years old at the time of application? ☐ Yes ☒ No Subject property is undeveloped land?
Requested UGB Change (If Applicable) N/A	**Has a utility analysis been completed?** N/A
Relevant Specific Plan (If Applicable) N/A	**Amendments needed to Specific Plan (If Applicable)** N/A

Property Owner Signature(required)	Date:	Applicant Signature	Date:
City of Flagstaff	4/30/21		4/30/21

For City Use

Staff Assignments:	Planning	Engineering	Fire	Public Works/Utilities	Stormwater

For City Use			
Date Filed:	**File Number(s):**		
P & Z Hearing Date:	**Publication and Posting Date:**		
Council Hearing Date:	**Publication and Posting Date:**		
Fee Receipt Number:	**Amount:**	**Date:**	

Recommendation by Planning and Zoning Commission:	**Action by City Council:**
☐ **Approved**	☐ **Approved**
☐ **Denied**	☐ **Denied**
☐ **Continued**	

Application for Major Regional Plan Amendment

The information included below is intended to help an applicant complete the necessary forms and provide the required information in support of an application for a Major Amendment to the Flagstaff Regional Plan 2030. Major Plan Amendments are processed once per year as stipulated in ARS 9-461.06 (H).

In order to file an application, the applicant must have completed a pre-application meeting with the Planning Director and Comprehensive Planning Manager by April 1 of the year that the application is filed. Pre-application meetings held more than 6 months before April 1st do not meet the requirement. Applications must be submitted for completeness review by May 1. The application must be found to be complete by July 1 in order to be processed in the same calendar year. Incomplete applications or applications submitted after the May 1st deadline and not deemed complete by July 1st will not be processed. The City Council will decide on all applications in one meeting held in December.

Major Regional Plan Amendments shall be submitted in compliance with the submittal requirements established in City Code Title 11-10.20.020. B (Supplemental Procedures for Major Plan Amendments). Minor plan amendments and Specific Plan Amendments may be processed simultaneously to a Major Plan Amendment, but Zoning Map amendments may not. If a Specific Plan Amendment is also required for the application, it must meet the content requirements of City Code Title 11-10.30.030.D (Format and Contents of Specific Plan).

Processing Information

1 Application(s) shall be made on the forms provided by the City which shall bear the signature of the owner of the property. If the applicant is other than the owner, the applicant shall also sign the application.

2 If an applicant submits modifications to a proposal that are more intensive than the original submittal and/or include a different area or place type, the modified application is subject to denial if all statutory (i.e. 60-day review), City noticing, public participation procedures and application submittal requirements cannot be met in a timely fashion to ensure their consideration at Planning and Zoning Commission and City Council public hearings in the same calendar year.

3 All applications shall be reviewed by staff to determine the completeness of the application prior to being released for the 60 day review period.

4 The Planning Director may request any additional information that is relevant to assist in the review of the Major Regional Plan Amendment or request that the required notifications be sent out to a larger area.

5 At least 60 days before notice of the first hearing of the Planning and Zoning Commission on a new, comprehensive update, an element, or a major amendment to the General Plan, the Planning Director shall transmit the proposal to the Planning and Zoning Commission and the City Council and shall submit a copy for review and further comment to:

a. Coconino County;
b. The Regional Planning agency within which the City is located;
c. The Arizona Department of Commerce or any other state agency that is subsequently designated as the general planning agency for the state;
d. The Arizona Department of Water Resources for review and comment on the water resources element, if a water resources element is required; and
e. Any person or entity that requests in writing to receive a review copy of the proposal.

6 Each request for a Major Regional Plan Amendment is required to be advertised in the Arizona Daily Sun at least 15 calendar days but not more than 30 days prior to the first public hearing with the Planning and Zoning Commission.

7 A Major Plan Amendment application is required to have two public hearings before the Planning and Zoning Commission at two locations. The Planning and Zoning Commission meets the second and fourth Wednesday of each month.

8 The requested Major Regional Plan Amendment will be scheduled for a public hearing by the City Council in December of the year the application is submitted. A two-thirds majority vote of the City Council is needed for approval.

Overview of Submittal Requirements

1. An applicant is required to submit the following; the Planning Director may require the submittal of additional materials to assist in the review of the Regional Plan amendment:
    a. An executive summary clearly stating the proposed amendment with a description of the section of the Regional Plan for which the amendment is requested.
    b. An analysis of the site, including a map, in terms of its physical characteristics, surrounding uses, adjacent streets and properties within 1,000 feet of the subject property, and the existing character of the area.
    c. A land use analysis providing information about the proposed development, plans for any exception parcels, and a land use compatibility analysis.
    d. A detailed narrative, as described in Title 11
    e. Analysis of consistency with the goals and policies in the Regional Plan
        (1) Cumulative impact of the proposal on land use categories within the City based on the Regional Plan Land Use map;
        (2) Cumulative impact of the proposal on the supply of land zoned in the same category within the City;
        (3) Impact on transportation and service needs;
        (4) Impact and/or benefit to housing which may result from the proposal; and
        (5) Impact on the implementation of the Regional Plan goals and policies resulting from the proposal.
    f. Conceptual site or development plan at a size and scale as determined by the Planning Director to generally illustrate the development intended under the requested amendment
    g. Impact studies for traffic, water/wastewater, police and fire services, schools, and public facilities and services
    h. An economic development analysis
2. Fees established in the adopted fee schedule (Zoning Code Appendix 2, Planning Fee Schedule), are payable with the application, and are non-refundable**.** Additional fees for impact analyses are set by the responsible division.
3. The applicant shall provide a plan to carry out a neighborhood meeting that meets the requirements of City Code Title 11-10.20.020.D.1; Neighborhood Meeting, which shall be conducted at the cost of the applicant.
4. A correct and approved legal description and map of the property is required. Please note that legal descriptions must have been approved by the City before the requested amendment will be considered by the City Council. A legal description and map must be submitted on paper and an electronic copy of text/drawings (.pdf or .tiff file format) must be submitted on a CD.
5. All maps submitted shall include: scale and north arrow, legend, date prepared, and subject property boundary.
6. Provide hard copies as stated in the checklist and one electronic copy of the complete application and supplemental information.

DRAFT

CITY OF FLAGSTAFF	**Major Regional Plan Amendment** Application Checklist

Minimal Submittal Requirements:
As part of the Impact Analysis Scoping Meeting (required), the Comprehensive Planning Manager (CPM) assigned to your project will identify those items from this Application Checklist that will be required for Plan Amendment application submittal. An application that does not include all required items will be rejected. By signing the application, the applicant acknowledges that all required documents/information are included within the application.

If you have any questions regarding the information above or items indicated on this checklist, please contact your CPM at the contact information listed on Page 1 of this application checklist.

PART I – GENERAL REQUIREMENTS

Staff Use Only		**Description of Documents Required for Complete Application.** No application shall be accepted without all items marked below.
Req'd	Sub'd	
☒	☐	**I.1 Major Regional Plan Amendment Application Checklist** (this list)
☒	☐	**I.2 Application Fee** (check all that apply) ☒ Regional Plan Amendment - Land Use ☐ Regional Plan Amendment - Specific Plan Base fee $_4,290.00_____ + (Per acre fee $_____ x Number of acres _____) = ***TOTAL: $__4,290.00_____** ***Note: Fee is due at the date of application, please refer to the adopted fee schedule (Zoning Code Appendix 2, Planning Fee Schedule).**
☒	☐	**I.3 Completed Application for Major Plan Amendment Review** – 1 copy The application must be signed by the applicant and the current property owner of record. If the property owner is unavailable to sign the application, a Letter of Authorization must be submitted.
☒	☐	**I.4 Legal Description** – 2 copies [Waived by Planning Director] A correct and approved legal description (metes and bounds) and sketch of the subject property is required. Please note that legal descriptions must have been approved by the City before the requested amendment will be considered by the City Council. The legal description must be submitted as a hard copy and in an electronic (.pdf or .tiff) format.
☒	☐	**I.5 Title Report – No older than 30 days from the submittal date** – 1 copy [Waived by Planning Director] Include complete Schedule A and Schedule B.
☒	☐	**I.6 Citizen Participation Plan** – 1 copy A plan for how the applicant intends to conduct the neighborhood meeting. This plan shall include the following information: • Property owners, citizens, jurisdictions, and public agencies within 300 feet of the development or that may be affected by the application, or a larger area if it is determined that the potential impact of the development extends beyond the required notification boundary by the Planning Director; • Proposed notification methods (e.g. mail, e-mail, newspaper, or posting of the subject property with a 4 foot by foot sign 10 day prior to the meeting) for persons and organizations identified above. • Form, structure, and agenda of the meeting (e.g. town meeting, workshop, charrette, or other appropriate public outreach technique). • Opportunities for those particularly affected parties to discuss and provide input on the applicant's proposal. • Location, date, and time of the neighborhood meeting. • Methods to keep the Planning Director informed of the status and results of the neighborhood meeting.
☒	☐	**I.7 Neighborhood Notification** – 1 copy Neighborhood notifications must include: • A list of all property owners and addresses (the Planning Director may expand this notification area) within 300 feet of the subject property, Homeowners Associations (HOAs) within 1,000 feet of the subject property as well as all organizations, associations and other interested persons or groups that have registered their names and addresses with the City as being interested in receiving such; • Pre-addressed stamped envelopes to such property owners, Homeowners Associations and citizens.
☒	☐	**I.8 Coconino County Assessor's Map** – 1 copy [Waived by Planning Director] A map indicating book, map, and parcel numbers of the subject property as well as surrounding properties located within a minimum of 300 feet or a larger area as determined by the Planning Director.
☒	☐	**I.9 Electronic Submittal** – 1 copy An electronic copy of all submitted information (.pdf or .tiff format)

PART II – Major Plan Amendment

Staff Use Only		**Description of Documents Required for Complete Application.** No application shall be accepted without all items marked below. All plans shall be plotted at a scale for ease of reading and reproduction. The city's GIS topographic and other data, as well as the city's aerial photographs, are appropriate for use as the base layer for maps.
Req'd	Sub'd	
☒	☐	**II.1 Cover Sheet** – 10 copies (minimum 8.5" x 11") The cover sheet of the Major Regional Plan Amendment shall include the following: **Administrative Data:** • Property owner's name, address, and phone number • Developer's name, address, and phone number • Preparers name, address, and phone number • The name, address, and phone number of all consultants assisting with the application • Date of plan preparation **Property Data:** • Site address • Assessor's parcel number(s) • Site area (acres) • Existing area and place type(s) • Proposed area and place type(s) **Project Data:** • Development name • Residential – General computation of proposed number of dwelling units by type and density • Commercial – General computation of proposed non-residential (commercial/industrial) square footage, and use types • Open Space – General description of proposed open space types • Proposed Development Phasing and timing
☒	☐	**II.2 Executive Summary** – 10 copies The executive summary shall include the following: • A summary of the reason(s) for the request; • Identification of supporting key points discussed in the narrative or other submitted studies; • Statement of community benefits to be accrued as through the proposed amendment; and • An introduction to the applicant's team (i.e. owner, developer, and/or representative), including contact information.
☒	☐	**II.3 Description and Need for Proposed Amendment** – 10 copies
☒	☐	**II.4 Vicinity Map** – 10 copies (minimum 8.5" x 11") [Waived by Planning Director] The vicinity map, which may be divided into separate sheets, shall include the following: • The location of the subject property within the city relative to interstate highways, major arterials and collectors • Surrounding parcels and streets within 1,000 feet • An aerial photograph with the subject property highlighted with street names
☒	☐	**II.5 Physical Characteristics Analysis Map(s)** – 10 copies (minimum 11" x 17") [Waived by Planning Director] The context analysis map(s) shall be drawn on an aerial photograph and shall identify the following within 1,000 feet of the subject property: • Subject property boundaries • Street names • Contour lines (minimum 2-foot intervals) • Significant natural resources (See Flagstaff Regional Plan Maps 7 and 8) • Topography of the site – Areas of slope (i.e. 0 to 16.99%, 17 to 24.99%, 25 to 34.99%, 35% and steeper) • Gateways and view corridors – Analysis to determine view corridors to and from the subject property • Drainage swales and stream corridors

☒	☐	**II.6 Land Use Analysis Map(s)** – 10 copies (minimum 11" x 17") [Waived by Planning Director] The Land Use analysis map(s) shall be drawn on an aerial photograph and shall identify the following: • Built environment and land use context • Subject property boundaries • Existing Area and Place Types, Urban Growth Boundary and Corridors • Gateways identified in the Community Character Element • Existing zoning • Existing uses • Existing structures and other built improvements including residential building footprints built before 1946 or during the period of significance if established by an area plan and commercial building footprints that are over 50 years old at the time of application • Prehistoric and historic sites, structures, and routes • FEMA flood plain categories, if applicable
☒	☐	**II.7 Concept Plan** – 10 copies (minimum 11" x 17") [Waived by Planning Director – detailed summary of text revisions to Regional Plan pages is included]. A Conceptual plan must be provided at a size and scale as determined by the Planning Director to generally illustrate the development intended under the requested amendment; The Concept Plan should be a combination of maps and supporting documentation that should include the following: • Contour lines (minimum 2-foot intervals) • List of all uses proposed on the subject property • Identification of maximum building envelope for all proposed uses (identification of proposed building footprints is optional) • Location of existing improvements, buildings, and uses on the subject property • Conceptual representation of areas proposed for natural resource preservation (if the subject property is located within an area identified as having Significant Natural Resources on Map 7) • Conceptual representation of areas proposed for open space, civic space, parks, etc. • Conceptual representation of areas proposed for stormwater detention and description of Low Impact Development mitigations • Location, size, and type of existing and proposed utilities with a conceptual representation of points of connection and identification of high water demand uses • Land use buffering techniques, if applicable, • Incompatibility issues and proposed solutions • Any other information the applicant would like to submit in support of the requested amendment
☒	☐	**II.7 Proposed Circulation Map** – 10 copies (minimum 11" x 17") [Waived by Planning Director] The Proposed Circulation Map shall be drawn on an aerial photograph and shall include the following • The Road Network Illustration (Map 25) from the Regional Plan and any proposed changes to corridors and activity centers • Existing and proposed internal and external circulation and pedestrian opportunities (include circulation plan); • Rights-of-way with street names, pedestrian facilities, transit facilities, FUTS, etc. • Conceptual representation of points of connection to rights-of-way, pedestrian facilities, FUTS, etc. • Proposed intersection improvements and signals
☒	☐	**II.8 Project Narrative** – 10 copies The narrative should include the following • Project title and date • Description of the applicable section of the Regional Plan for which the amendment is requested; • Statement of current zoning, and proposed zoning if applicable; • An explanation of why the proposed amendment is necessary and the public benefit that will be realized by the amendment; • An explanation of how the proposed amendment(s) will affect the vision expressed in the written goals, objectives, and policies of the Regional Plan that are most relevant to the proposed amendment. When a proposed amendment(s) is inconsistent with Regional Plan goals, objectives, and policies, the proposed amendment(s) must include one of the following: o Justification for an exception to the written goals, objectives and policies; or o A proposal to modify or eliminate the inconsistent goals, objectives and policies. • Cumulative impact of the proposal on area and place types within the City based on the Future Growth Illustration; • Cumulative impact of the proposal on the supply of land zoned in the existing category for the property within the City; • Land Use buffering techniques, if applicable. • Incompatibility issues and proposed solutions. • Impact on transportation and service needs; • Impact and/or benefit to housing which may result from the proposal; and • Impact on the implementation of the Regional Plan goals and policies resulting from the proposal. • A description of how essential public services (i.e. water, wastewater, stormwater, solid waste) will be provided • An analysis of how the proposed amendment will benefit the community • Any additional information the applicant would like to submit in support of the requested amendment

PART III – REQUIRED REPORTS, STUDIES, ANALYSIS, & RELATED DATA		
Staff Use Only		**Description of Documents Required for Complete Application.** No application shall be accepted without all items marked below.
Req'd	Sub'd	
☒	☐	**III.1 Public Services and Facilities Analysis** - 5 copies Part 1: Address the current condition and configuration of stormwater infrastructure in the drainage basin. Analyze proposed on-site mitigations and discuss their impacts on the location, density and intensity of uses, and the estimated downstream impact of the proposed development. Scoping meeting with Stormwater staff is required. Part 2: Address parks and open space, and any other relevant public facility or service as determined by the Planning Director.
☒	☐	**III.2 Traffic Analysis or Report** – 5 copies Address trip generation for existing and proposed place and area types, distribution/circulation, transit, intersection improvements, signals, impacts on local and arterial road planned capacities, and conformance with the all transportation goals and policies and the Road Network Illustration (Map 25). Scoping meeting with Traffic and Comprehensive Planning staff is required.
☒	☐	**III.3 Water and Wastewater Impact Analysis** – 5 copies [Waived by Planning Director] Address capacity of the existing situation and required improvements, and conformance with the Water Resources goals and policies, the effect of the development on the 100 year water supply, use of reclaimed water and the City's water and sewer master plan. Scoping meeting with Utilities staff is required.
☒	☐	**III.4 School Impact Analysis** – 2 copies [Waived by Planning Director] Provide a letter from the Flagstaff Unified School District that describes the impact of the proposed amendment on school enrollment and facilities. Please contact Comprehensive Planning staff for any additional submittal requirements.
☒	☐	**III.5 Police and Fire Protection analysis** – 3 copies Please contact Police and Fire staff for submittal requirements.
☒	☐	**III.6 An Economic Development Analysis** – 2 copies The Economic Development analysis analyzes and weighs the cumulative economic impacts of the proposed amendment, including if requested by the Planning Director, an economic impact study conducted by an economic consultant may be required.
☐	☐	**III.7 Cultural Resource Study** – 2 copies [Waived by Planning Director] A Phase 1 cultural resource study or letter report may be required to show consistency with Regional Plan Goal CC.1. Even if it is not required, it is encouraged because it is a requirement of rezoning and in some cases could require changes to the concept plan in order to mitigate effects. All Phase 1 cultural resource studies must include the following information: • Introductory information (identification of the development, property owners, clients, study preparers, contents, and index) • A description of the study area and context and a description of the study boundaries and how these were determined • A description of existing conditions • A description of proposed work • A summary of research results; review of literature and records (AZSITE, ASLD, Government Land Office Maps, and Sanborn Maps, land use records and so forth) • A detailed description of the site history • A complete description and evaluation of the significance and integrity of actual and potential cultural resources • An evaluation of potential impacts of proposed work on actual or potential cultural resources including any indirect or residual impacts • Specific recommendations for mitigation of major impacts on actual or potential cultural resources • When appropriate, specific recommendations for additional research and documentation

PART IV – OTHER SUBMITTAL REQUIREMENTS

Staff Use Only		**Description of Documents Required for Complete Application.** No application shall be accepted without all items marked below.
Req'd	Sub'd	
☐	☐	**IV.1 Other Requirements** Please provide the following: _____ _____ _____ _____ _____ _____ _____ _____

PART V – Comprehensive Planning Manager

No application shall be accepted without a **Comprehensive Planning Manager** signature below.

V.1 Comprehensive Planning Manager Contact Information

If you have any questions regarding this application checklist, please contact your **Comprehensive Planning Manager** (CPM). If you did not receive a completed copy of this checklist as part of your Major Plan Amendment review, please contact the CPM assigned to your Major Plan Amendment application.

CPM Name (print): Sara Dechter **Phone:** 928-213-2631

CPM E-mail: SDechter@Flagstaffaz.gov **Date:** 4-30-21

CPM Signature: _____

City of Flagstaff

Community Development Division

211 W. Aspen Ave
Flagstaff, AZ 86001
www.flagstaff.az.gov

Sara Dechter, CPM
(928) 213-2631
SDechter@flagstaffaz.gov

Date Received	Application for Impact Analysis Scoping Meeting		File Number
Site Address:	Project Name:		Parcel Number
Property Owner(s)	Title	Phone	Email
Mailing Address			City, State, Zip
Applicant(s)	Title	Phone	Email
Mailing Address			City, State, Zip
Project Representative	Title	Phone	Email
Mailing Address			City, State, Zip

Existing Regional Plan Area and Place Type	Subdivision, Tract & Lot Number

Zoning District	Proposed Plan Area and Place Type	Flood Zone	Size of Site (Sq. ft. or Acres)

Property Information:	☐ Yes ☐ No Located in an existing City of Flagstaff Historic District? (Name:_____)
	☐ Yes ☐ No Existing structures are over 50 years old at the time of application?
	☐ Yes ☐ No Existing structures are pre-World War II housing?
	☐ Yes ☐ No Subject property is undeveloped land?

Estimation of proposed use(s) within Regional Plan Map Amendment[1]:

Use:	Number of Units	# of Affordable Units	# of Acres Per Use	Building Square Feet
Single Family				
Duplex:				
Multi-Family:				
Mixed Use				
Commercial: Office				
Commercial: Retail				
Commercial: Restaurant				
Commercial: Service				
Commercial: Hotel				
Commercial: Other				
Industrial:				
Institutional:				
Other:				

1. These estimations are the basis for impact analyses required for a Regional Plan amendment.

Submittal Requirements: Incomplete Submittals will not be accepted	☐ **Physical Characteristics Analysis Map**	☐ **Vicinity Maps**
	☐ **Concept Phasing Map**	☐ **Land Use Analysis Map**
	☐ **Concept Plan**	☐ **Proposed Circulation Map**

Property Owner Signature	Date:	Applicant Signature	Date:

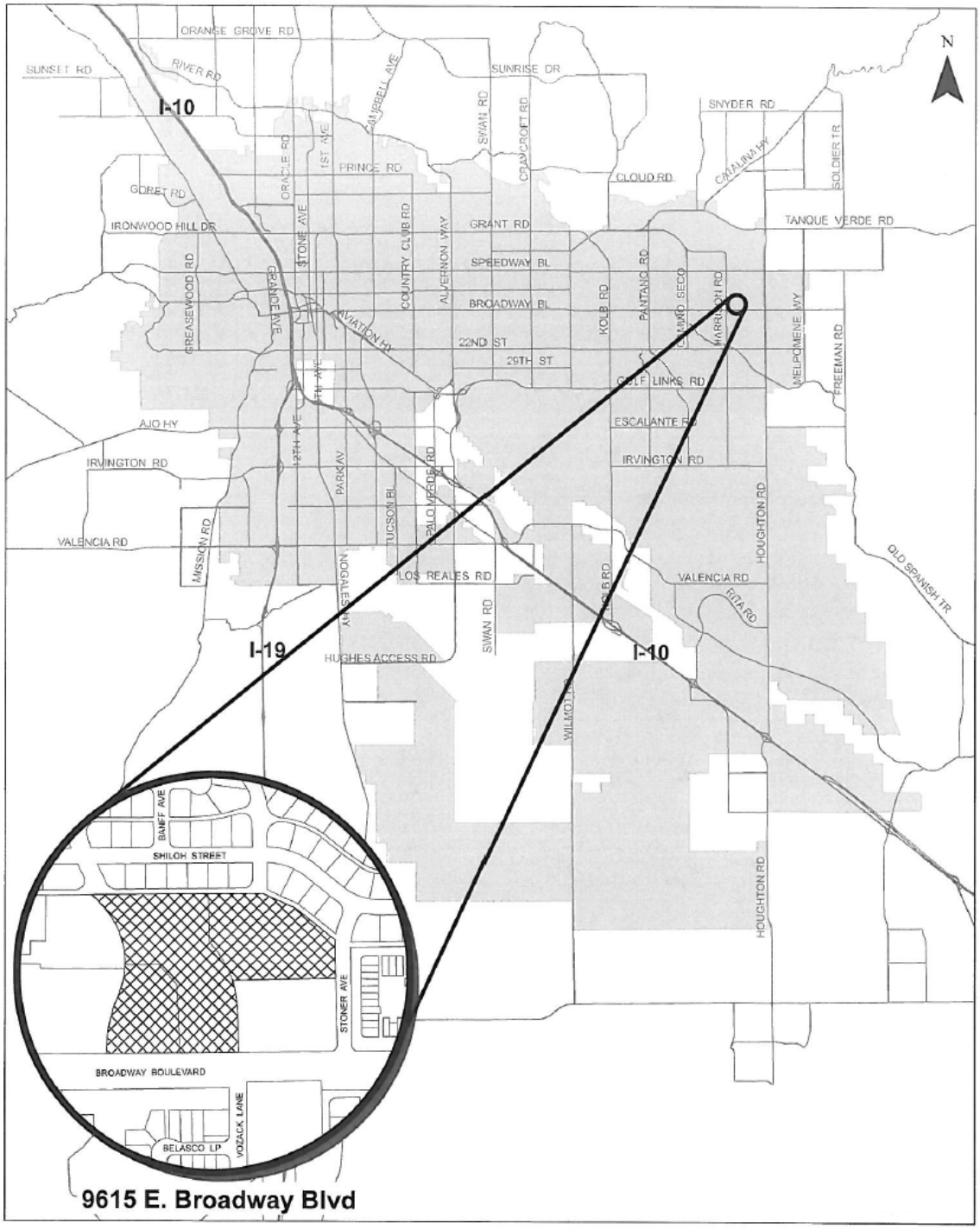
For City Use

Staff Assignments	Planner	Public Works/Utilites	Engineer	Fire	Stormwater

For City Use			
File Number	Fee Receipt #		Date
Action:			

Sample Vicinity Map, Sheet 1:

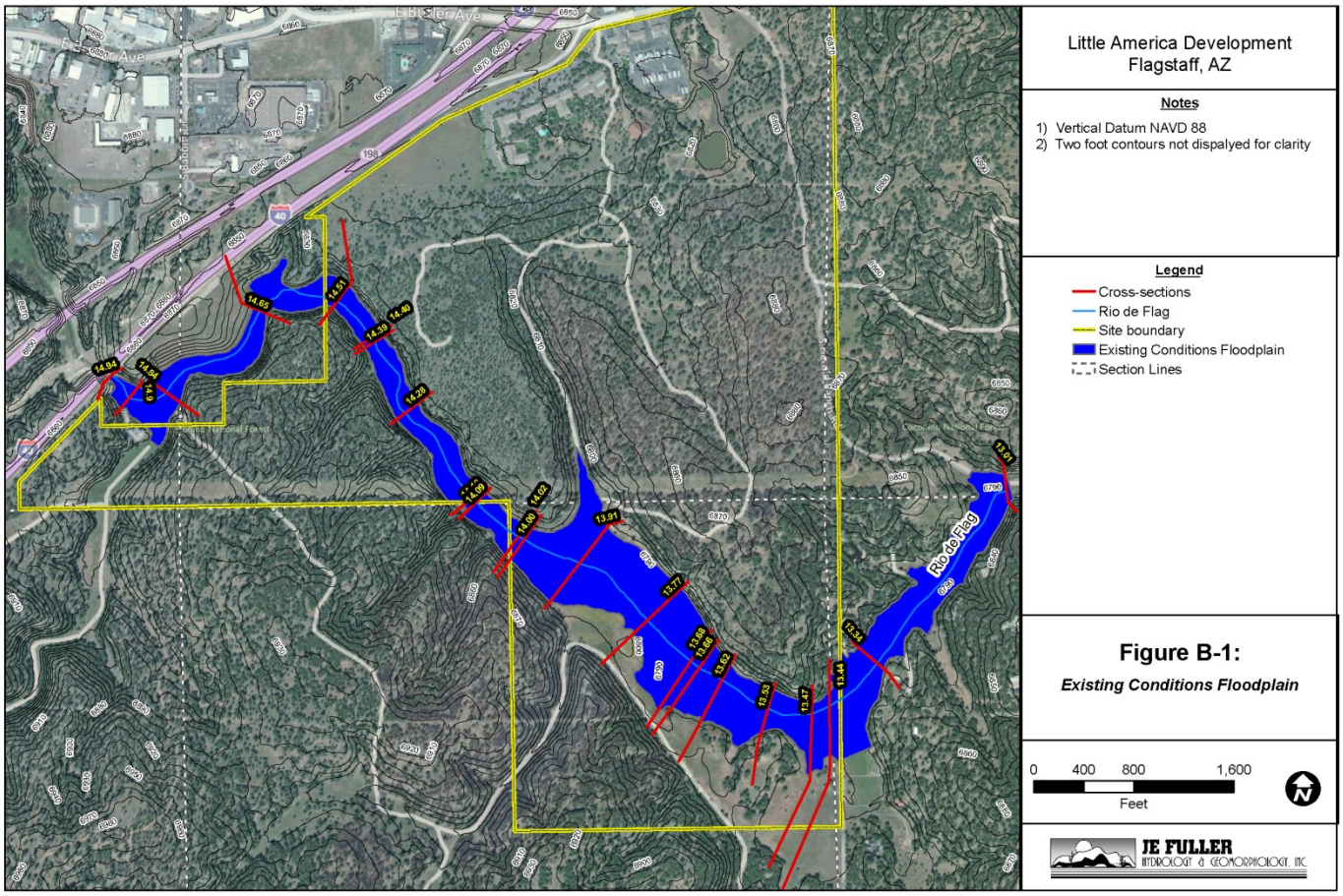
PROJECT NAME: Street Address



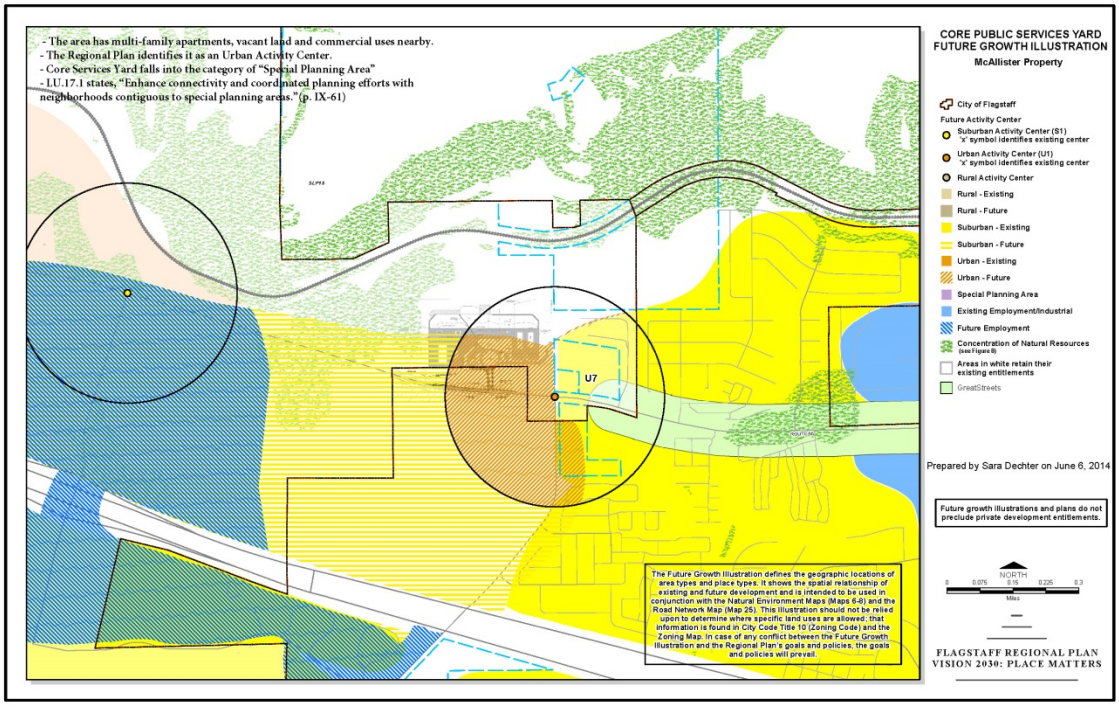
Sample Vicinity Map, Sheet 2:

PROJECT NAME: Street Address

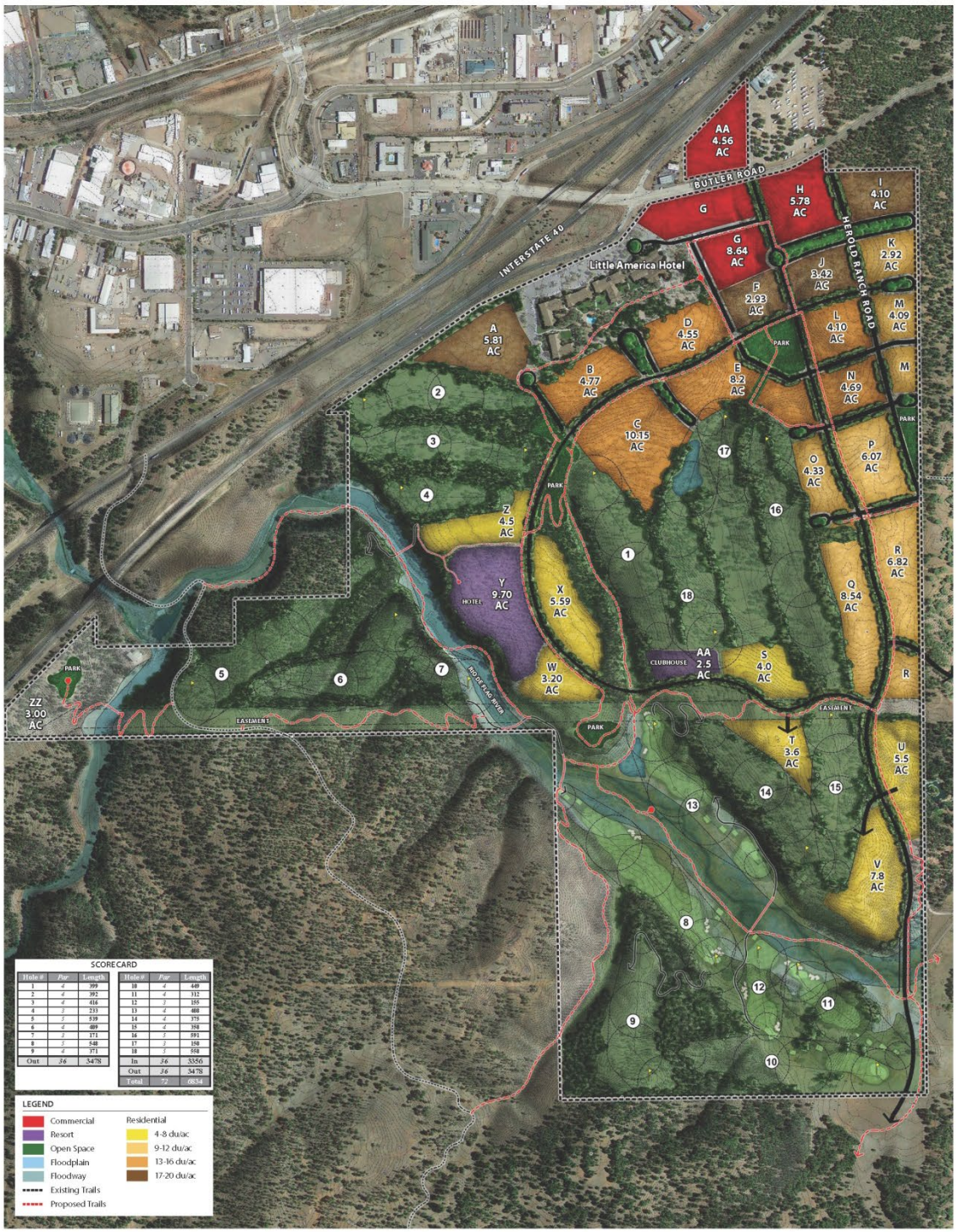
Sample Physical Characteristics Map:



Sample Land Use Analysis Map:

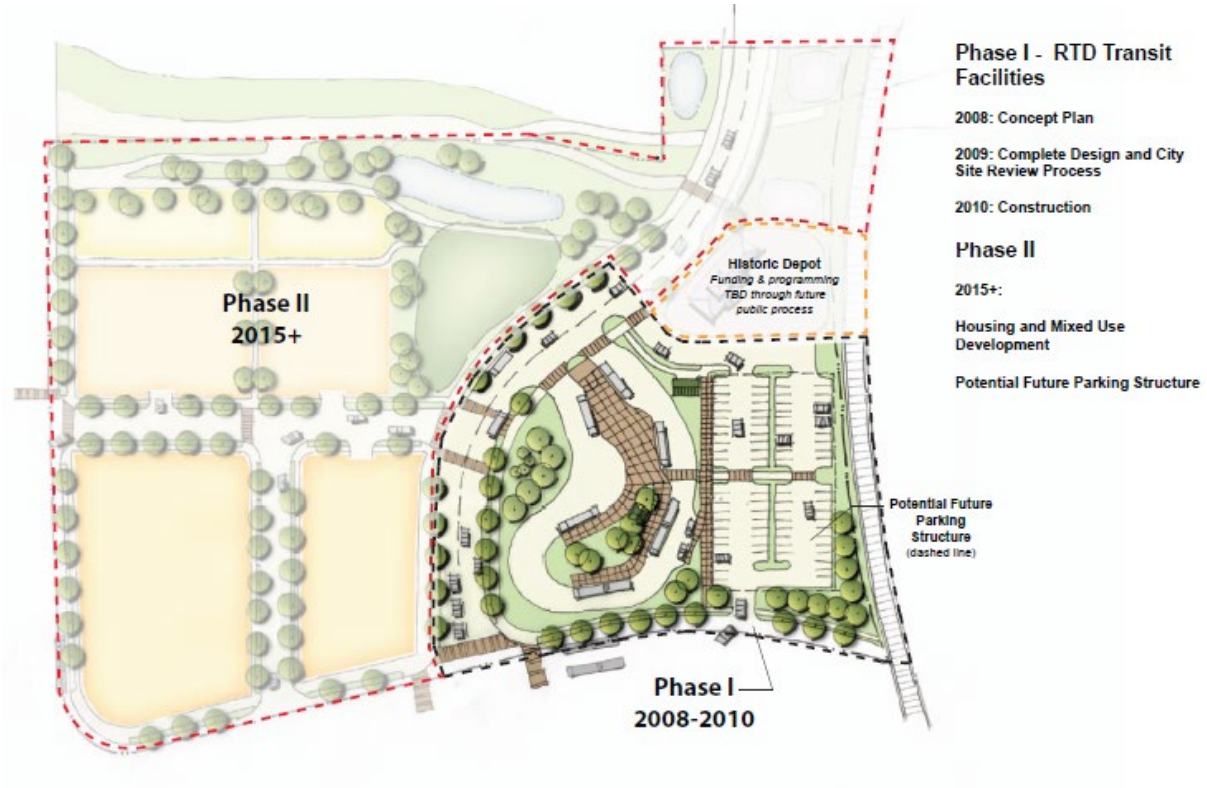


Sample Concept Land Use Plan:



Little America Flagstaff
Little America Hotels and Resorts, Inc.
17 April 2013

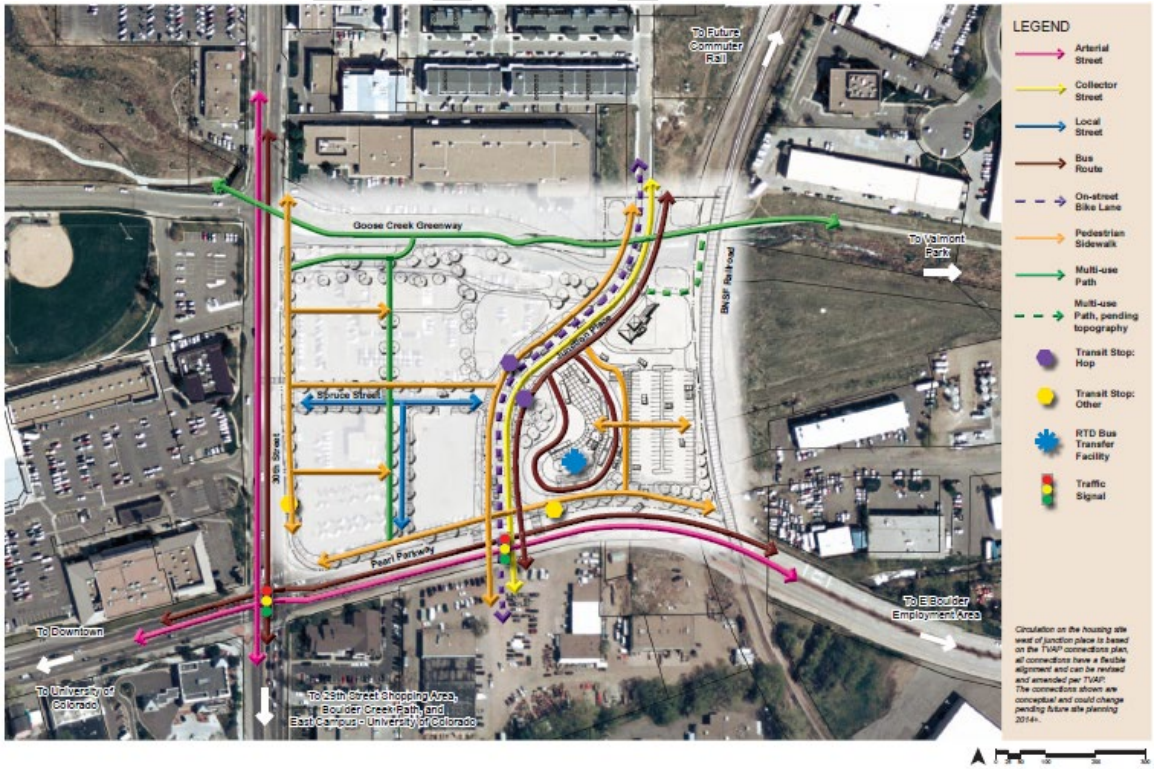
Sample Concept Phasing Map

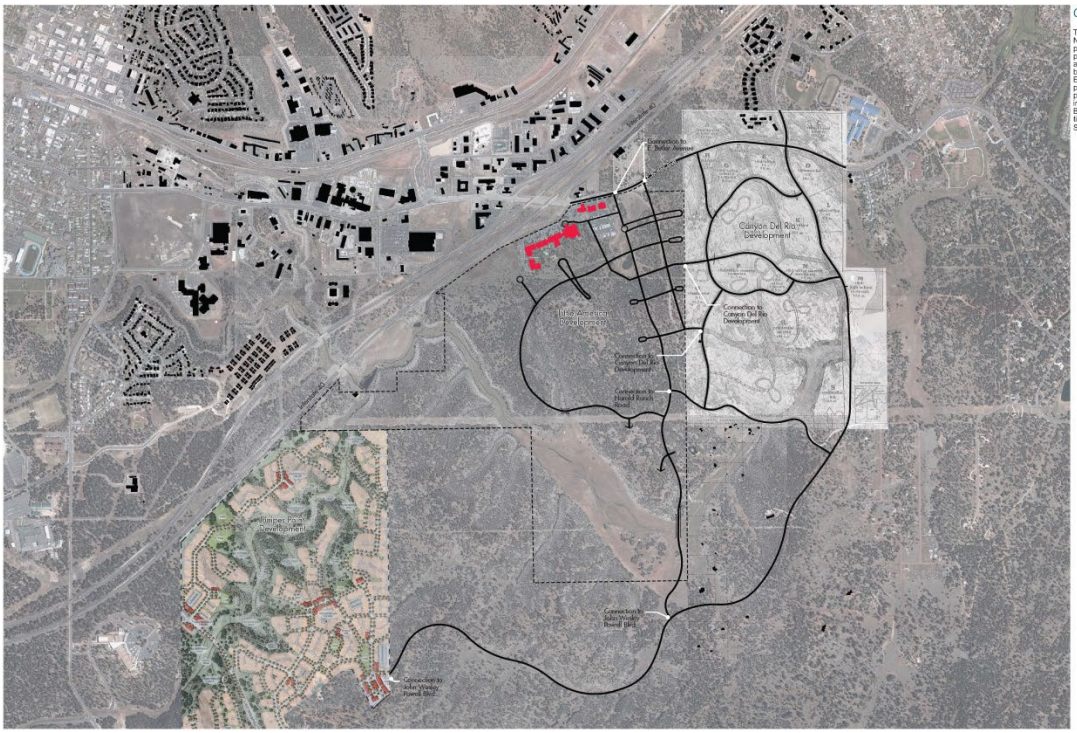


Samples of Proposed Land Uses

Samples of Proposed Open Space, Civic Space and Parks

Sample Proposed Circulation Map





CIRCULATION PLAN (2.1.12)

The road network within the Little America Neighborhood has been designed to provide connectivity to the areas within the property boundary as well as to existing and proposed developments outside the boundary. The roads connect to E. Butler Ave., to the north as well as to the proposed roads within the Canyon del Rio property to the east. Discussions regarding the extension of John Wesley Powell Boulevard are underway and the potential connection to the extension to Fourth Street has been included.

DRAFT

Carbon Neutrality Amendment to the Flagstaff 2030 Regional Plan

November 18, 2021

This document details the proposed text revisions for this major plan amendment. The pages to be revised are Regional Plan pages IV-11, IV-12 and X-19.

This document contains several versions of the revised plan pages:

- **Pages 2-4:** The proposed amended pages of the Regional Plan: pages IV-11, IV-12 and X-19 of the Regional Plan, in final formatting.

- **Pages 5-6:** A summary of proposed changes to goals and policies.

- **Pages 7-10:** A comparison document showing the exact proposed changes to the text, via tracked changes.

- **Pages 11-13:** The current Regional Plan pages, prior to any amendment.

Climate Change and Adaptation

Climate change is disrupting global weather patterns and threatening communities across the world. While climate shifts have occurred in the past, today's climate is changing at a faster rate than ever recorded, due to the high concentration of human-caused greenhouse gas emisisons. Changes to the climate system have been noted through observations of increases in global average air and ocean temperatures, widespread melting of snow and ice, and rising global average sea level (Intergovernmental Panel on Climate Change 2019). At the same time, weather patterns have become more extreme, with more intense and longer droughts, more extreme precipitation events, and increased heat waves.

Climate models predict further decreases in annual precipitation and a 5°F increase in the average temperature in Coconino County by 2050 (CLIMAS 2017). The projected increases in temperature and volatility are expected to lead to changes to Flagstaff's regional forests, our vegetation and animal communities, and our community's systems and infrastructure.

Photo credit: Coconino National Forest

Local Climate Change Impacts

Flagstaff and Coconino County have seen warming since the mid-1980's, and will continue to see increased temperatures and aridity, or dryness. Key issues that the Flagstaff region must address include the following:

- Increasing temperatures, particularly an increase in minimum temperatures, or overnight lows;
- An increase in aridity and drought, leading to depleted soil moisture;
- Decreasing water supplies, reductions in annual snowpack, and decreases in snowmelt;
- Increasing risk of wildfire and tree mortality, and an increased frequency and altered timing of flooding;
- Impacts on the region's unique tourism and recreation opportunities and its land use systems, housing, and infrastructure;
- Increased risk to public health and increased vulnerabilities of lower income families, Black communities, Indigenous communities, communities of color, and the elderly, among other vulnerable groups.

Climate Action: Mitigation, Adaptation and Equity

The Flagstaff region has historically faced climate risks, including forest fires, record high temperatues, snow storms, high winds, flooding, and drought. These events affect every resident, though different communities experience climate change in different ways. As the regional climate changes, these risks will become more severe.

The impact of these changes can be reduced with preventative measures. Flagstaff's climate objectives in mitigation, adaptation and equity were established in the Flagstaff Climate Action and Adaptation Plan (2018) and then updated in the Flagstaff Carbon Neutrality Plan (2021). These documents outline three types of climate action:

- **Mitigation** actions reduce the severity of climate change by decreasing greenhouse gas emissions and limiting their concentration in the atmosphere. The Flagstaff region has the opportunity to help mitigate the changes in climate by reducing emissions from transportation, building energy use, water use, consumption of goods and waste disposal.
- **Adaptation** actions prepare for the effects of climate change by understanding and preparing for the increaed potential of wildfire, flooding, drought, and major community change, and then building resilence to short-term hazards and long-term change.
- **Equity** actions reduce the unequal burdens created by climate change. Flagstaff can address climate change in a manner that prioritizes the vulnerable communities most impacted and ensures the costs and benefits of climate adaptation and mitigation are equitably distributed.

At the community level, mitigation investments include efforts to **decrease dependence on cars**, embrace **electric mobility**, produce **clean electricity**, facilitate **fuel switching** in buildings, **reduce building energy use**, improve **sustainable consumption and waste management**, and undertake **carbon dioxide removal**. Adaptation will require building **community resilience** and investing in critical infrastructure such as stormwater and transportation systems, to prepare for increases in volatility, extreme weather events, flooding, wildfires, and community change (2012 City of Flagstaff Resiliency and Preparedness Study). **Equitable systems** investments include initiatives to protect vulnerable residents from the negative impacts of climate change and ensuring all residents can access the benefits of climate action. For the purposes of the Flagstaff Regional Plan, how we develop land will have a significant impact on our greenhouse gas emissions and the mitigation of climate change.

CLIMATE CHANGE AND ADAPTATION GOALS AND POLICIES

Goal E&C.2. Achieve carbon neutrality for the Flagstaff community by 2030.

Policy E&C.2.1. Encourage the reduction of energy and material consumption.

Policy E&C.2.2. Promote investments that create a connected and efficient community, decrease emissions from transportation and building energy, and strengthen climate resiliency.

Policy E&C.2.3. Review and revise existing regulations, standards, and plans (codes, ordinances, etc.) to reduce community greenhouse gas emissions.

Policy E&C 2.4. Promote developments that help the community achieve carbon neutrality through strategies that reduce the project's emissions from transportation, energy, and consumption.

Goal E&C.3. Prepare Flagstaff's community systems and resources to be more resilient to climate change impacts, and address climate change in a manner that prioritizes those most impacted and ensures the costs and benefits of climate adaptation and mitigation are equitably distributed.

Policy E&C.3.1. Develop and implement a comprehensive and proactive approach to prepare the community for and to minimize the impacts of climate change induced hazards.

Policy E&C.3.2. Review and revise existing regulations, standards, and plans (codes, ordinances, etc.) to reduce the community's vulnerability to climate change impacts and reduce the disproportionate impacts on vulnerable communities.

Policy E&C.3.3. Invest in forest health and watershed protection measures.

Policy E&C.3.4. Increase the region's preparedness for extreme climate events.

Policy E&C.3.5. Improve the ability of vulnerable community members to adapt and thrive amidst the pressures of climate change.

Policy E&C.3.6. Commit to equitably distribute the burdens and benefits of climate action policies and investments to all segments of the community.

Goal E&C.4. Integrate available science into policies governing the use and conservation of Flagstaff's natural resources.

Policy E&C.4.1. Assess vulnerabilities and risks of Flagstaff's natural resources in the context of anticipated climate changes and resulting changes to Flagstaff's systems.

Policy E&C.4.2. Develop water use policies that attempt to integrate current best projections of climate change effects on the Colorado Plateau's water resources and emphasize conservation.

Corridors serve many roles, and these roles may be understood as:

- Carrier of goods and people – how many, how far, what kind, what means
- Connector of activities – how active, what scale, what purpose, relationships
- Space and Shelter for activities within the public realm – how often, vulnerable, duration, solitude
- Symbol for the understanding of place – identity, purpose, behaviors as it applies to specific roads or corridors, not to classes of corridors.
- Builder and destroyer of city and place – corridors may be perceived as supporting a sense of place, or destroying it.

Photo credit: City of Flagstaff

To fully implement the Regional Plan's vision for Flagstaff's roadways a Flagstaff "Streets Master Plan" should be developed to serve as the specific plan that bridges the City's *Engineering Design Standards and Specifications* and the *Flagstaff Regional Plan*. Until such a Plan is developed, functional classifications for roads and their definitions can be found in the *Engineering Design Standards and Specifications.*

Corridors in the Regional Transportation Plan

The Regional Transportation Plan (RTP) is a five year planning document developed by the Flagstaff Metropolitan Planning Organization. It is used to identify roadway projects that are eligible for federal funding. Some of the future roads identified on Map 25 are also identified in the RTP, however, these two documents are not required to match. The RTP provides more detail about the stage of planning for each roadway. Some future corridors are considered "conditional roads" in the RTP, which means that further study is required before proceeding with a project. Examples include the Clay Avenue Extension, the US 89 Bypass, the Metz Walk Extension, etc.

AUTOMOBILE GOALS AND POLICIES

Goal T.8. Establish a functional, safe, and aesthetic hierarchy of roads and streets.

Policy T.8.1. Promote efficient network connectivity to and within major trade corridors, employment centers, and special districts that enhances the region's standing as a major economic hub.

Policy T.8.2. Maintain the road and street classification system that is based on context, function, type, use, and visual quality.

Policy T.8.3. Design neighborhood streets using appropriate traffic calming techniques and street widths to sustain quality of life while maintaining traffic safety.

Policy T.8.4. Protect rights-of-way for future transportation corridors.

Policy T.8.5. Support the area's economic vitality by improving intersection design for freight movements.

Policy T.8.6. Maintain the City's street infrastructure in a cost effective manner to ensure the safety and convenience of all users.

SUMMARY OF REVISIONS – REGIONAL PLAN TEXT AMENDMENT

Pages IV-11, IV-12, and X-19

This section summarizes the proposed text revisions for this major plan amendment.

Climate Change and Adaptation pages: IV-11 and IV-12

Revisions to goal two and associated policies

Goal: E&C.2

Current: Reduce greenhouse gas emissions

Proposed revision: Achieve carbon neutrality for the Flagstaff community by 2030.

Policy E&C.2.1

Current: Policy E&C.2.1. Encourage the reduction of all energy consumption, especially fossil-fuel generated energy, in public, commercial, industrial and residential sectors.

Proposed revision: Policy E&C.2.1. Encourage the reduction of energy and material consumption.

Policy E&C.2.2

Current: Promote investments that strengthen climate resiliency

Proposed revision: Promote investments that create a more connected and efficient community, decrease emissions from transportation and building energy, and strengthen climate resiliency.

NEW Policy E&C.2.3

Review and revise existing regulations, standards, and plans (codes, ordinances, etc.) to reduce community greenhouse gas emissions.

NEW Policy E&C.2.4

Promote developments that help the community achieve carbon neutrality through strategies that reduce the project's emissions from transportation, energy, and consumption.

Revisions to goal three and associated policies

Goal E&C.3

Current: Strengthen community and natural environment resiliency through climate adaptation efforts.

Proposed revision: Prepare Flagstaff's community systems and resources to be more resilient to climate change impacts, and address climate change in a manner that prioritizes those most impacted and ensures the costs and benefits of climate adaptation and mitigation are equitably distributed.

Policy E&C.3.2

Current: Review and revise existing regulations, standards, and plans (codes, ordinances, etc.) to reduce the community's vulnerability to climate change impacts.

Proposed revision: Review and revise existing regulations, standards, and plans (codes, ordinances, etc.) to reduce the community's vulnerability to climate change impacts and reduce the disproportionate impacts on vulnerable communities.

NEW Policy E&C.3.5

Improve the ability of vulnerable community members to adapt and thrive amidst the pressures of climate change.

NEW Policy E&C.3.6:

Commit to equitably distribute the burdens and benefits of climate action policies and investments to all segments of the community.

Revisions to goal four and associated policies

Policy E&C.4.1

Current: Assess vulnerabilities and risks of Flagstaff's natural resources

Proposed revision: Assess vulnerabilities and risks of Flagstaff's natural resources in the context of anticipated climate changes and resulting changes to Flagstaff's systems.

In addition, a revision is proposed for policy T.8.1, in the Transportation Chapter.

Policy T.8.1:

Current: Promote efficient transportation connectivity to major trade corridors, employment centers, and special districts that enhances the region's standing as a major economic hub.

Proposed revision: Promote efficient network connectivity to and within major trade corridors, employment centers, and special districts that enhances the region's standing as a major economic hub.

TRACKED CHANGES – REGIONAL PLAN TEXT AMENDMENT

Pages IV-11 and IV-12

Climate Change and Adaptation

Climate change is disrupting global weather patterns and threatening communities across the world. While climate shifts have occurred in the past, today's climate is changing at a faster rate than ever recorded, due to the high concentration of human-caused greenhouse gas emissions. Changes to the climate system have been noted through observations of increases in global average air and ocean temperatures, widespread melting of snow and ice, and rising global average sea level (Intergovernmental Panel on Climate Change ~~2007~~2019). At the same time, weather patterns have become more extreme, with more intense and longer droughts, more extreme precipitation events, and increased heat waves.

~~Many c~~Climate models predict further decreases in annual precipitation and ~~increased temperatures~~a 5°F increase ~~for~~ in the average temperature in Coconino County by 2050~~our region, which in turn~~ (CLIMAS 2017). The projected increases in temperature and volatility are ~~likely~~ expected to lead to ~~result in~~ changes to Flagstaff's regional forests, our vegetation and animal communities, and our community's systems and infrastructure.~~as well as declines in agricultural productivity and food security.~~

Local Climate Change Impacts

~~Recent warming in the Southwest has resulted in declines in spring snowpack and Colorado River flow.~~ Flagstaff and Coconino County have seen warming since the mid-1980's, and will continue to see increased temperatures and aridity, or dryness. Key issues that ~~the Southwest, including~~ the Flagstaff region~~,~~ must address include the following:

- Increasing temperatures, particularly an increase in minimum temperatures, or overnight lows;
- An increase in aridity and drought, leading to d~~D~~epleted soil moisture;
- Decreasing water supplies~~, ;R~~reductions in annual snowpack, and decreases in snowmelt;
- ~~Depleted soil moisture;~~
- ~~Increasing temperature, drought,~~ Increasing risk of wildfire and~~,~~ tree mortality, ~~and invasive species~~ and an~~;~~ ~~I~~ increased frequency and altered timing of flooding;
- Impacts on the region's unique tourism and recreation opportunities~~;~~ and its land use systems, housing, and infrastructure;~~Increasing risks to cities and agriculture from a changing climate~~
- Increased risk to public health and ~~I~~increased vulnerabilities of ~~the~~ lower income families, Black communities, Indigenous communities, communities of color, ~~, poor,~~ and the elderly, among other vulnerable groups.~~.~~

Climate Action:~~Adaptation and~~ Mitigation, Adaptation and Equity

The Flagstaff region has historically faced climate risks, including forest fires, record ~~warming~~high temperatures, snow storms, high winds, flooding, and drought. These events affect every resident, ~~and as~~though different communities experience climate change in different ways. As the regional climate changes, these risks will become more ~~frequent and~~ severe.

~~-~~The ~~effects~~ impact of these ~~extreme events may~~ changes can be ~~lessened~~ reduced with preventative measures. Flagstaff's climate objectives in mitigation, adaptation and equity were established in the Flagstaff Climate Action and Adaptation Plan (2018) and then updated in the Flagstaff Carbon Neutrality Plan (2021). These documents outline three types of climate action:

- Mitigation ~~of these risks refers to reducing~~actions reduce the severity of climate change by decreasing greenhouse gas emissions and limiting their concentration in the atmosphere. The Flagstaff region has the opportunity to help mitigate the changes in climate~~, and~~ by reducing emissions from transportation, building energy use, water use, consumption of goods and waste disposal.,
- Adaptation actions prepare for ~~simultaneously be ready for its~~ the effects of climate change by understanding and preparing for the increased potential of wildfire, flooding, drought, and major community change, ~~other effects of climate change~~ and then building resilience to ~~preparing for such~~ short term hazards and ~~.~~long-term change. ~~Individual preparation measures could include preparing our homes for potential fire, implementing stormwater management best practices, and becoming more water efficient. Personal home or business investments in water conservation and stormwater collection, energy efficiencies, walking, biking, bus riding, recycling, re-using, and sharing also contribute to mitigating climate change.~~
- Equity actions reduce the unequal burdens created by climate change. Flagstaff can address climate change in a manner that prioritizes the vulnerable communities most impacted and ensures the costs and benefits of climate adaptation and mitigation are equitably distributed.

At the community level, mitigation investments include ~~investing in critical public infrastructure such as reclaimed water, conservation, and stormwater collection; efficient; use of energy resources self-reliance on transportation options;food production and the ability to generate energy by means other than fossil fuels;~~ efforts to **decrease dependence on cars**, embrace **electric mobility**, produce **clean electricity**, facilitate **fuel switching** in buildings, **reduce building energy use**, improve **sustainable consumption and waste management** and undertake **carbon dioxide removal**. Adaptation will require building **community resilience** and investing in critical infrastructure such as stormwater and transportation systems, to prepare for increases in volatility, ~~and protecting and preparing the community for~~ extreme weather events, flooding, wildfires, and community change ~~other natural and human-caused hazards are examples of large-scale preparation (refer to the~~ 2012 City of Flagstaff Resiliency and Preparedness Study~~) (2012)~~. **Equitable systems** investments include initiatives to protect vulnerable residents from the negative impacts of climate change and ensuring all residents can access the benefits of climate action. For the purposes of the Flagstaff Regional Plan, how we develop land will have a~~n~~

significant impact on our ~~reduction of~~ greenhouse gas emissions and the mitigation of climate change.

CLIMATE CHANGE AND ADAPTATION GOALS AND POLICIES

Goal E&C.2. ~~Reduce greenhouse gas emissions~~ Achieve carbon neutrality for the Flagstaff community by 2030.

Policy E&C.2.1. Encourage the reduction of ~~all~~ energy and material consumption~~, especially fossil-fuel-generated energy, in public, commercial, industrial, and residential sectors~~.

Policy E&C.2.2. Promote investments that create a more connected and efficient community, decrease emissions from transportation and building energy, and strengthen climate resiliency.

Policy E&C.2.3. Review and revise existing regulations, standards, and plans (codes, ordinances, etc.) to reduce community greenhouse gas emissions.

Policy E&C 2.4. Promote developments that help the community achieve carbon neutrality through strategies that reduce the project's emissions from transportation, energy, and consumption.

Goal E&C.3. Prepare Flagstaff's ~~Strengthen~~ community systems and resources to be more resilient to climate change impacts ~~natural environment resiliency through climate adaptation efforts.~~and address climate change in a manner that prioritizes those most impacted and ensures the costs and benefits of climate adaptation and mitigation are equitably distributed.

Policy E&C.3.1. Develop and implement a comprehensive and proactive approach to prepare the community for and to minimize the impacts of climate change induced hazards.
Policy E&C.3.2. Review and revise existing regulations, standards, and plans (codes, ordinances, etc.) to reduce the community's vulnerability to climate change impacts and reduce the disproportionate impacts on vulnerable communities.
Policy E&C.3.3. Invest in forest health and watershed protection measures.
Policy E&C.3.4. Increase the region's preparedness for extreme climate events.
Policy E&C.3.5. Improve the ability of vulnerable community members to adapt and thrive amidst the pressures of climate change.
Policy E&C.3.6. Commit to equitably distribute the burdens and benefits of climate action policies and investments to all segments of the community.

Goal E&C. 4. Integrate available science into policies governing the use and conservation of Flagstaff's natural resources.

Policy E&C. 4.1. Assess vulnerabilities and risks of Flagstaff's natural resources in the context of anticipated climate changes and resulting changes to Flagstaff's systems.
Policy E&C. 4.2. Develop water use policies that attempt to integrate current best projections of climate change effects on the Colorado Plateau's water resources and emphasize conservation.

TRACKED CHANGES – REGIONAL PLAN TEXT AMENDMENT

Pages X-19

Transportation Policy T.8.1 Revision

Tracked Changes:

Policy T.8.1. Promote efficient ~~transportation~~ network connectivity to and within major trade corridors, employment centers, and special districts that enhances the region's standing as a major economic hub.

Climate Change and Adaptation

Changes to the climate system have been noted through observations of increases in global average air and ocean temperatures, widespread melting of snow and ice, and rising global average sea level (Intergovernmental Panel on Climate Change 2007). At the same time, weather patterns have become more extreme, with more intense and longer droughts, more extreme precipitation events, and increased heat waves. Many climate models predict further decreases in annual precipitation and increased temperatures for our region, which in turn are likely to result in changes to our vegetation and animal communities, as well as declines in agricultural productivity and food security.

Photo credit: Coconino National Forest

Local Climate Change Impacts

Recent warming in the Southwest has resulted in declines in spring snowpack and Colorado River flow. Key issues that the Southwest, including the Flagstaff region, must address include the following:

- Decreasing water supplies
- Reduction in annual snowpack and decrease in snowmelt
- Depleted soil moisture
- Increasing temperature, drought, wildfire, tree mortality, and invasive species
- Increased frequency and altered timing of flooding
- Impacts on the region's unique tourism and recreation opportunities
- Increasing risks to cities and agriculture from a changing climate
- Increased vulnerabilities of the lower income, poor, and elderly.

Photo credit: Arizona Daily Sun

Climate Adaptation and Mitigation

The region has historically faced climate risks, including forest fires, record warming, snow storms, high winds, flooding, and drought. These events affect every resident, and as the regional climate changes, these risks will become more frequent and severe. The effects of these extreme events may be lessened with preventative measures.

Mitigation of these risks refers to reducing the severity of climate change by decreasing greenhouse gas emissions and limiting their concentration in the atmosphere. The Flagstaff region has the opportunity to help mitigate the changes in climate, and simultaneously be ready for its effects by understanding the potential of wildfire, flooding, drought, and other effects of climate change and then preparing for such hazards. Individual preparation measures could include preparing our homes for potential fire, implementing stormwater management best practices, and becoming more water efficient. Personal home or business investments in water conservation and stormwater collection, energy efficiencies, walking, biking, bus-riding, recycling, re-using, and sharing also contribute to mitigating climate change.

At the community level, investing in critical public infrastructure such as reclaimed water, conservation, and stormwater collection; efficient use of energy resources; self-reliance on transportation options; food production and the ability to generate energy by means other than fossil fuels; and protecting and preparing the community for extreme weather events, flooding, wildfires, and other natural and human-caused hazards are examples of large-scale preparation (refer to the City of Flagstaff *Resiliency and Preparedness Study* (2012).

For the purposes of the Flagstaff Regional Plan, how we develop land will have an impact on our reduction of greenhouse gas emissions and mitigation of climate change.

Photo credit: City of Flagstaff

CLIMATE CHANGE AND ADAPTATION GOALS AND POLICIES

Goal E&C.2. Reduce greenhouse gas emissions.

Policy E&C.2.1. Encourage the reduction of all energy consumption, especially fossil-fuel generated energy, in public, commercial, industrial, and residential sectors.

Policy E&C.2.2. Promote investments that strengthen climate resiliency.

Goal E&C.3. Strengthen community and natural environment resiliency through climate adaptation efforts.

Policy E&C.3.1. Develop and implement a comprehensive and proactive approach to prepare the community for and to minimize the impacts of climate change induced hazards.

Policy E&C.3.2. Review and revise existing regulations, standards, and plans (codes, ordinances, etc.) to reduce the community's vulnerability to climate change impacts.

Policy E&C.3.3. Invest in forest health and watershed protection measures.

Policy E&C.3.4. Increase the region's preparedness for extreme climate events.

Goal E&C.4. Integrate available science into policies governing the use and conservation of Flagstaff's natural resources.

Policy E&C.4.1. Assess vulnerabilities and risks of Flagstaff's natural resources.

Policy E&C.4.2. Develop water use policies that attempt to integrate current best projections of climate change effects on the Colorado Plateau's water resources and emphasize conservation.

Corridors serve many roles, and these roles may be understood as:

- Carrier of goods and people – how many, how far, what kind, what means
- Connector of activities – how active, what scale, what purpose, relationships
- Space and Shelter for activities within the public realm – how often, vulnerable, duration, solitude
- Symbol for the understanding of place – identity, purpose, behaviors as it applies to specific roads or corridors, not to classes of corridors.
- Builder and destroyer of city and place – corridors may be perceived as supporting a sense of place, or destroying it.

Photo credit: City of Flagstaff

To fully implement the Regional Plan's vision for Flagstaff's roadways a Flagstaff "Streets Master Plan" should be developed to serve as the specific plan that bridges the City's *Engineering Design Standards and Specifications* and the *Flagstaff Regional Plan*. Until such a Plan is developed, functional classifications for roads and their definitions can be found in the *Engineering Design Standards and Specifications.*

Corridors in the Regional Transportation Plan

The Regional Transportation Plan (RTP) is a five year planning document developed by the Flagstaff Metropolitan Planning Organization. It is used to identify roadway projects that are eligible for federal funding. Some of the future roads identified on Map 25 are also identified in the RTP, however, these two documents are not required to match. The RTP provides more detail about the stage of planning for each roadway. Some future corridors are considered "conditional roads" in the RTP, which means that further study is required before proceeding with a project. Examples include the Clay Avenue Extension, the US 89 Bypass, the Metz Walk Extension, etc.

AUTOMOBILE GOALS AND POLICIES

Goal T.8. Establish a functional, safe, and aesthetic hierarchy of roads and streets.

Policy T.8.1. Promote efficient transportation connectivity to major trade corridors, employment centers, and special districts that enhances the region's standing as a major economic hub.

Policy T.8.2. Maintain the road and street classification system that is based on context, function, type, use, and visual quality.

Policy T.8.3. Design neighborhood streets using appropriate traffic calming techniques and street widths to sustain quality of life while maintaining traffic safety.

Policy T.8.4. Protect rights-of-way for future transportation corridors.

Policy T.8.5. Support the area's economic vitality by improving intersection design for freight movements.

Policy T.8.6. Maintain the City's street infrastructure in a cost effective manner to ensure the safety and convenience of all users.

Carbon Neutrality Amendment to the Flagstaff Regional Plan 2030

Narrative

September 20, 2021

Applicant:
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928-213-2150

Project representative and preparer:
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Project data:
Carbon Neutrality Amendment to the Flagstaff Regional Plan 2030
Development timeline: Proposed adoption in December 2021

Executive summary

This application proposes a major amendment to the Flagstaff Regional Plan 2030. The proposed amendment is within the Climate Change and Adaptation section of the Environmental Planning & Conservation Chapter - pages IV-11 and IV-12.

The proposed changes to pages IV-11 and IV-12 include:

Changes to the narrative
Revisions to **goals E&C 2** and **E&C 3**
Revisions to policies **E&C 2.1, E&C 2.2, E&C 3.2,** and **E&C 4.1**
Addition of four policies: **E&C 2.3, E&C 2.4, E&C 3.5**, and **E&C 3.6**

In addition to the text revisions on the Climate Change and Adaptation pages, this amendment also includes a wording revisions to policy T.8.1, in the Transportation chapter (located on page X-19). This change is being made as a result of the compatibility review among the proposed revisions to the climate pages and the existing Regional Plan goals and policies. This revision will clarify the meaning of T.8.1 and align with how staff understand the meaning of the policy.

These changes are detailed in attachment II.7.

Need and Community Benefit

This text amendment will update the Flagstaff Regional Plan 2030's discussion of climate change and climate action to align with the City of Flagstaff's climate action goals. The climate action work of the City has evolved rapidly since the 2014 adoption of the Regional Plan, creating a gap between the guidance provided in the Regional Plan and the City's declared climate goals and the ambition of its climate actions.

This gap is exemplified in the Regional Plan's discussion of greenhouse gas reduction targets.

- The Flagstaff Regional Plan 2030 climate change and adaptation section sets a goal to reduce greenhouse gas emissions: **Goal E&C.2.**: **reduce greenhouse gas emissions**.

- In 2018, City Council set a goal to reduce community greenhouse gas emissions by 80% by 2050.
- In 2020, City Council declared a climate emergency and set a goal to achieve carbon neutrality by 2030, effectively reducing emissions to net zero. The achievement of this goal will be guided by the Carbon Neutrality Plan, which was adopted by the Flagstaff City Council on June 15, 2021.

While these goal statements all support City action to reduce greenhouse gas emissions and do not conflict with one another, and, there is a significant gap between the ambition and requisite actions of these goal statements, reflecting the growth in the urgency of climate action.

This amendment will restore alignment between the Regional Plan and the City's climate goals, clarifying the carbon neutrality goal and the types of climate action the City will take. This will reduce confusion, increase transparency, and provide decision-makers with support when making decisions based on the City's climate action goals.

This amendment to align the Regional Plan and the City's well-established climate action goals will provide 'several benefits to the community. First, formally recognizing the climate action efforts of the City of Flagstaff and its partners will increase understanding within the Flagstaff community. This amendment will help readers of the Regional Plan understand the extent of the City's climate goals, how the City is taking climate action and where to look for detailed information on the implementation of the Regional Plan goals.

This amendment will also increase transparency. Since the 2018 adoption of the Flagstaff Climate Action and Adaptation Plan, the City of Flagstaff has endeavored to incorporate climate change concerns and climate action into its decision-making processes. However, the broad nature of the Regional Plan greenhouse gas emissions reduction goal does not specify the extent of emissions reductions needed. In the development review process, staff and other decision-makers do not have strong climate action goals and policies to refer to for guidance in decision-making. Meanwhile, applicants may provide details on the environmental features or climate benefits of their projects. Strengthening the Regional Plan's climate action goals and policies will clarify the importance of climate action and provide both applicants and decision-

makers with a more current reflection of the City's climate change and climate action priorities.

Regarding the change to Transportation Policy T.8.1: This change is being made as a result of the compatibility review among the proposed revisions to the climate pages and the existing Regional Plan goals and policies. Staff found the proposed climate text amendment to be incompatible with the transportation policy T.8.1, due to ambiguity within the policy T.8.1. around the meaning of the phrase 'efficient transportation connectivity.'

This revision to T.8.1 clarifies the meaning of the policy, and aligns with how staff understand the meaning of the policy. This will reduce confusion, increase understanding throughout the community, and elevate the importance of a connected street network.

Project Team

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Description and Need for Proposed Amendment

Description

This application proposes a major amendment to the Flagstaff Regional Plan 2030 to reflect the Carbon Neutrality goals of the City of Flagstaff. This major amendment would be fall under the **text amendment category (category 9), referenced in Chapter III of the Regional Plan on page III-15.** This text amendment revises the Climate Change and Adaptation section of the Environmental Planning & Conservation Chapter, (pages IV-11 and IV-12). The proposed changes to pages IV-11 and IV-12 include:

Changes to the narrative, including:

- More specificity regarding the impacts that climate change will cause in Flagstaff.
- Stronger language around the response needed to combat climate change and prepare for the future.
- Increased clarity regarding the three types of climate action: mitigation, adaptation and equity. Previously, the Plan mentioned mitigation by name and described adaptation actions. The revisions clarify the meanings of adaptation and mitigation and add a definition for equity, the third component of climate action.
- Modified the list of investments needed, to add mitigation actions and create a separate list of adaptation actions and investments.

Revisions to:

- Goal: E&C.2:
  - **Current**: Reduce greenhouse gas emissions
  - **Proposed amendment:** Achieve carbon neutrality for the Flagstaff community by 2030.
- Policy E&C.2.1:
  - **Current**: Policy E&C.2.1. Encourage the reduction of all energy consumption, especially fossil-fuel generated energy, in public, commercial, industrial and residential sectors.
  - **Proposed amendment**: Policy E&C.2.1. Encourage the reduction of energy and material consumption.
- Policy E&C.2.2:

        - **Current**: Promote investments that create a more connected and efficient community, decrease emissions from transportation and building energy, and strengthen climate resiliency.
        - **Proposed amendment**: Promote investments that create a more connected and efficient community, decrease emissions from transportation and building energy, and strengthen climate resiliency.
    - Goal E&C.3
        - **Current**: Strengthen community and natural environment resiliency through climate adaptation efforts.
        - **Proposed amendment**: Prepare Flagstaff's community systems and resources to be more resilient to climate change impacts, and address climate change in a manner that prioritizes those most impacted and ensures the costs and benefits of climate adaptation and mitigation are equitably distributed.
    - Policy E&C.3.2:
        - **Current**: Review and revise existing regulations, standards, and plans (codes, ordinances, etc.) to reduce the community's vulnerability to climate change impacts.
        - **Proposed amendment**: Review and revise existing regulations, standards, and plans (codes, ordinances, etc.) to reduce the community's vulnerability to climate change impacts and reduce the disproportionate impacts on vulnerable communities.
    - Policy E&C.4.1:
        - **Current**: Assess vulnerabilities and risks of Flagstaff's natural resources
        - **Proposed amendment**: Assess vulnerabilities and risks of Flagstaff's natural resources in the context of anticipated climate changes and resulting changes to Flagstaff's systems.

The creation of four new policies:

- **Policy E&C.2.3:** Review and revise existing regulations, standards, and plans (codes, ordinances, etc.) to reduce community greenhouse gas emissions.

- **Policy E&C.2.4:** Promote developments that help the community achieve carbon neutrality through strategies that reduce the project's emissions from transportation, energy, and consumption.
- **Policy E&C.3.5**: Improve the ability of vulnerable community members to adapt and thrive amidst the pressures of climate change.
- **Policy E&C.3.6**: Attempt to equitably distribute the burdens and benefits of climate action policies and investments to all segments of the community.

In addition, a minor change is being made to policy T.8.1, in the Transportation Chapter.

- Policy T.8.1:
  - **Current**: Promote efficient transportation connectivity to major trade corridors, employment centers, and special districts that enhances the region's standing as a major economic hub.
  - **Proposed amendment**: Promote efficient network connectivity to and within major trade corridors, employment centers, and special districts that enhances the region's standing as a major economic hub.

Need

This text amendment will update the Flagstaff Regional Plan 2030's discussion of climate change and climate action to align with the City of Flagstaff's climate action goals. The climate action work of the City has evolved rapidly since the 2014 adoption of the Regional Plan, creating a gap between the guidance provided in the Regional Plan and the City's declared climate goals and the ambition of its climate actions.

This gap is exemplified in the Regional Plan's discussion of greenhouse gas reduction targets.

- The Flagstaff Regional Plan 2030 climate change and adaptation section sets a goal to reduce greenhouse gas emissions: **Goal E&C.2.**: **reduce greenhouse gas emissions**.

- In 2018, City Council set a goal to reduce community greenhouse gas emissions by 80% by 2050.
- In 2020, City Council declared a climate emergency and set a goal to achieve carbon neutrality by 2030, effectively reducing emissions to net zero. The achievement of this goal will be guided by the Carbon Neutrality Plan, which was adopted by the Flagstaff City Council on June 15, 2021.

While these goal statements all support City action to reduce greenhouse gas emissions and do not conflict with one another, and, there is a significant gap between the ambition and requisite actions of these goal statements. This gap reflects the growth in the urgency of climate action and the strength of the international consensus on the need for immediate and aggressive climate action, compared to 2014 when the Regional Plan was passed.

This amendment will restore alignment between the Regional Plan and the declared climate goals, clarifying the carbon neutrality goal and the types of climate action the City will take. This will reduce confusion, increase transparency, and provide decision-makers with support when making decisions based on the City's climate action goals.

Regarding the change to Transportation Policy T.8.1: This change is being made as a result of the compatibility review among the proposed revisions to the climate pages and the existing Regional Plan goals and policies. Staff found the proposed climate text amendment to be incompatible with the transportation policy T.8.1, due to ambiguity within the policy T.8.1. around the meaning of the phrase 'efficient transportation connectivity.'

This policy is located in the automobile goals and policies section on page X-19. The meaning of 'promote efficient transportation connectivity' could be understood as promoting the faster flow of vehicles from place to place, which is sometimes the goal of roadway construction or improvement projects. This can lead to increased greenhouse gas emissions. 'Efficient transportation connectivity' could also be understood as a connected street grid or network, which allows efficient movement through Flagstaff and reduces trips. Indeed, this is how City transportation staff understand this phrase, and utilize this policy to support moving towards a connected street network. This connected grid network can actually lead to reduced greenhouse gas emissions, as vehicles

can take a more direct path to their destination, so long as this new connection does not induce more vehicle trips.

This revision to T.8.1 clarifies the meaning of the policy, and aligns with how staff understand the meaning of the policy. The main change is minor and clarifying, changing just one word from “transportation” connectivity to “network” connectivity. The secondary change is to add ‘and within’ to the policy. This clarifies that strong network connectivity is desired **within** trade corridors and employment centers, as well as **to** these areas.

This will reduce confusion, increase understanding throughout the community, and elevate the importance of a connected street network.

Project Narrative

Carbon Neutrality Amendment to the Flagstaff Regional Plan 2030

Text amendment details

This application proposes a major amendment to the Flagstaff Regional Plan 2030 to align with the carbon neutrality goals of the City of Flagstaff. This major amendment would be a text amendment, revising the Climate Change and Adaptation section of the Environmental Planning & Conservation Chapter on pages IV-11 and IV-12, and revising the Automobile Goals and Policies on page X-19 in the Transportation chapter.. The proposed changes will update the Regional Plan's discussion of climate change and climate action, and include the following changes to pages IV-11 and IV-12 include:

Changes to the narrative
Revisions to **goals E&C.2** and **E&C.3**
Revisions to policies **E&C.2.1, E&C.2.2, E&C.3.2,** and **E&C 4.1**
Addition of four policies: **E&C.2.3, E&C.2.4**, **E&C.3.5**, and **E&C.3.6**

In addition to the text revisions on the Climate Change and Adaptation pages, this amendment also includes a wording revisions to policy T.8.1, in the Transportation chapter (located on page X-19).

These text amendments are detailed in section II.3 Description and Need and in attachment II.7 Concept Plan.

Background on City of Flagstaff climate action

Climate change, driven largely by human-caused greenhouse gas emissions, is disrupting global weather patterns and threatening communities worldwide. While climate shifts have occurred in the past, current climate change is happening at a faster rate than any recorded in history.

Since the passage of the Flagstaff Regional Plan 2030 in 2014, the international scientific community has clarified the need for rapid, worldwide, and aggressive climate action to avoid catastrophic change. In October of 2018, the Intergovernmental Panel on Climate Change (IPCC) published the Global Warming of 1.5° C Report, which laid out the need for urgent action to hold

overall global warming to 1.5° C[1]. The United Nations has found that currently the world is "heading for a temperature rise in excess of 3°C this century – far beyond the Paris Agreement goals of limiting global warming to well below 2°C and pursuing 1.5°C."[2] Three degrees Celsius is equivalent to 5.4 degrees Fahrenheit; warming at this scale would result in catastrophic change including devastating sea level rise, ocean acidification, extreme drought, mass migration, significant losses of plant and animal species, and positive feedback loops that further accelerate the warming.[3] Fortunately, while the timeline for effective action is quickly closing, the international community still has a narrow opportunity to act.

The growing need and short window for action has influenced the City of Flagstaff's goals on climate action and adaptation. First, in November 2018, the Flagstaff City Council unanimously adopted the Flagstaff Climate Action and Adaptation Plan. This Plan was the first community-wide climate plan in Arizona. It established specific reduction goals for community-wide greenhouse gas emissions (mitigation) as well as broad goals for preparing for change through adaptation and ensuring that Flagstaff prioritizes vulnerable community members when taking action. The Plan's focus on mitigation, adaptation, and equity – the three core components of climate action – have guided the City's climate work since that time.

Since 2018, the climate goals of the City of Flagstaff have advanced. The 2018 Global Warming of 1.5° C Report catalyzed Flagstaff community members into action: in 2019, community members started a petition to request that the Flagstaff City Council declare a climate emergency. On January 21, 2020, hundreds of community members spoke to ask the Flagstaff City Council to

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[1] IPCC, 2018: Global Warming of 1.5°C.An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty [Masson-Delmotte, V., P. Zhai, H.-O. Pörtner, D. Roberts, J. Skea, P.R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, S. Connors, J.B.R. Matthews, Y. Chen, X. Zhou, M.I. Gomis, E. Lonnoy, T. Maycock, M. Tignor, and T. Waterfield (eds.)]. 2019.
[2] United Nations Environment Programme Emissions Gap Report 2020: https://www.unep.org/emissions-gap-report-2020
[3] United Nations Environment Programme Emissions Gap Report 2020: https://www.unep.org/emissions-gap-report-2020

declare a Climate Emergency Declaration and update the 2018 Climate Action and Adaptation Plan to set a goal of carbon neutrality.

On June 23, 2020, the Flagstaff City Council declared a climate emergency and set a goal to achieve carbon neutrality by 2030. Carbon neutrality is defined as achieving "annual zero net anthropogenic (human caused or influenced) CO2 emissions" where "every ton of anthropogenic CO2 emitted is compensated with an equivalent amount of CO2 removed (e.g. via carbon sequestration)".[4]

To develop the Flagstaff Carbon Neutrality Plan, City staff engaged with over 2,600 community members via six surveys, 12 open houses, presentations to groups, and social media campaigns to discuss how Flagstaff can achieve carbon neutrality. This Plan, which was adopted by the Flagstaff City Council on June 15, 2021, outlines the steps the City will take to achieve carbon neutrality.

While achieving carbon neutrality is technically a mitigation goal, the other two overarching goals of the 2018 Climate Action and Adaptation Plan, adaptation and equity, continue to be guiding principles for the City's climate work. The Flagstaff Carbon Neutrality Plan carries forward the 2018 Climate Plan's adaptation and equity goals, and the City will apply all three concepts when working to reach carbon neutrality.

The Flagstaff Carbon Neutrality Plan outlines nine target areas for action to reach carbon neutrality:

Flagstaff will achieve carbon neutrality by taking action in the following target areas:

- Community Resilience
- Equitable Systems
- Decreased Dependence on Cars
- Electric Mobility
- Clean Electricity
- Building Fuel Switching
- Reduced Building Energy Use
- Sustainable Consumption and Waste Management

[4] https://www.wri.org/insights/cop21-glossary-terms-guiding-long-term-emissions-reduction-goal

- Carbon Dioxide Removal

Rationale

Due to the rapid acceleration of climate action by the City of Flagstaff, there is currently a gap between the ambitions of the City's climate work and the climate goals and policies of the Flagstaff Regional Plan 2030. With the upcoming implementation of the Flagstaff Carbon Neutrality Plan, this gap will continue to grow.

This gap is exemplified in the Regional Plan's discussion of greenhouse gas reduction targets:

- The Flagstaff Regional Plan 2030 climate change and adaptation section sets a goal to reduce greenhouse gas emissions: **Goal E&C.2.**: **reduce greenhouse gas emissions**.
- In 2018, City Council set a goal to reduce community greenhouse gas emissions by 80% by 2050.
- In 2020, City Council declared a climate emergency and set a goal to achieve carbon neutrality by 2030, effectively reducing emissions to net zero. The achievement of this goal will be guided by the Carbon Neutrality Plan, which was adopted by City Council on June 15, 2021.

While these goal statements all support City action to reduce greenhouse gas emissions and do not conflict with one another, and, there is a significant gap between the ambition and requisite actions of these goal statements. This gap reflects the growth in the urgency of climate action and the strength of the international consensus on the need for immediate and aggressive climate action, compared to 2014 when the Regional Plan was passed.

A major amendment to the Flagstaff Regional Plan 2030 would ensure that the City's work on climate change and climate action is appropriately aligned with the Regional Plan. This amendment will align the Regional Plan's climate change and adaptation goals and the City's climate goals as stated in the Carbon Neutrality Plan, clarifying and supporting the carbon neutrality goal as well as the types of climate action the City may take. This will reduce confusion, increase transparency, and provide decision-makers with support for decisions based on the City's climate action goals and priorities.

This amendment to the Regional Plan was requested by the City of Flagstaff Sustainability Commission at their March 25th meeting. This amendment was formally initiated by the City of Flagstaff Planning and Zoning Commission by a unanimous vote of the Commission at their April 14th meeting.

Compatibility with the Regional Plan

The proposed amendment supports the vision, goals, objectives and policies of the Flagstaff Regional Plan 2030. The Regional Plan envisions active stewardship and vitality for both the current population and future generations – ideals that are supported by aggressive climate action, resilience-building and support for vulnerable community members (the three types of climate action described in this proposed amendment). On page I-2, the Plan sets forth a vision for a Sustainable Flagstaff, connecting development decisions to environmental impact and the need to plan for the future. The Preferred Land Use Scenario chosen for the plan, Scenario E (page II-12), corresponds to lower vehicle miles traveled, lower water demand, great access to parks, and more multi-family development – all characteristics of development patterns that lead to lower greenhouse gas emissions. All of these elements are supported by the original climate change and adaptation goals and policies of the Regional Plan – and will be furthered by the revisions to the climate change and adaptation goals and policies proposed through this amendment.

Goal and Policy Compatibility and Consistency Review

The proposed text amendment is consistent with all goals and policies in the Flagstaff Regional Plan 2030. In fact, a large number of Regional Plan goals and policies are aligned with the increased specificity and ambition illustrated in the text amendment. A review of each goal and policy, and commentary to show support or address inconsistencies, are detailed in the final section at the bottom of this document starting on page 25.

While analyzing the Regional Plan for consistency with this proposed amendment, Transportation Policy T.8.1 was identified as potentially incompatible with the direction of the new greenhouse gas emissions goal. This incompatibility mainly stems from the wording of policy T.8.1. and the meaning of the phrase ‘efficient transportation connectivity.’ Since this policy is located in the automobile policy section, the meaning of ‘promote efficient transportation connectivity’ could be understood as promoting the rapid movement of vehicles

through the community. Improving the ability for cars to move through Flagstaff can lead to increased greenhouse gas emissions: people drive more when the cost of driving goes down, or when they can drive more easily.[5] If the policy is understood to promote increased ease of vehicle movement, it would lead to increased greenhouse gas emissions and would therefore be incompatible with the proposed revision to Goal E&C.2.

Upon further analysis and conversations with City staff, it became apparent that there were multiple interpretations of this policy and the meaning of 'efficient transportation connectivity. Key staff understand this policy to promote an efficient transportation network, namely through a better-connected street grid. City transportation staff currently utilize this policy to support moving towards a better-connected street network. This connected grid network can actually lead to reduced greenhouse gas emissions, as vehicles can take a more direct path to their destination, so long as this new connection does not induce more vehicle trips.

Based on this analysis, it was determined that policy T.8.1 should be revised to clarify the meaning of the policy, and align with how staff understand it – to promote a more efficient and connected street network. The main change is minor and clarifying, changing just one word from "transportation" connectivity to "network" connectivity. The secondary change is to add 'and within' to the policy. This clarifies that strong network connectivity is desired ***within*** trade corridors and employment centers, as well as ***to*** these areas.

These revisions will reduce confusion, increase understanding throughout the community, and ensure alignment among the proposed climate-related amendments and the transportation policies.

Cumulative impact of the proposal on land use categories within the City based on the Regional Plan Land Use map;

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[5] This concept is described by the Federal Highway Administration: "Improvements in any transportation system can lead to changes in travel behavior that will result in increased use of the system." https://www.fhwa.dot.gov/planning/itfaq.cfm

The proposed text amendment will not alter land use categories within the City, based on the Regional Plan Land Use map. This amendment is a text amendment and will not change any land uses or add any land uses to the City. This amendment could impact the *analysis* and *decision-making* for future revisions to the Land Use map, as stronger climate goals policies are integrated into decision-making processes. The current Regional Plan goals and policies already support land uses changes that reduce greenhouse gas emissions and community vulnerability, and discourage land use changes that would increase emissions and vulnerabilities. The proposed amended goals and policies will *strengthen* this support for land uses that reduce greenhouse gas emissions and community vulnerability, and will *reduce* support for land uses changes that lead to increased emissions and increased vulnerability. This change will lead to decisions that are directionally similar to decisions supported by the existing Regional Plan goals and policies.

Cumulative impact of the proposal on the supply of land zoned in the same category within the City;

The proposed text amendment is not associated with any parcel of land or a zone, and so will not alter the supply of land of any zone.

The proposed amendment will not have an impact on area and place types within the City of Flagstaff, based on the Future Growth Illustration.

Impact on transportation and service needs;

The proposed amendment will not have negative impacts on transportation and service needs. The amendment may increase transportation options and levels of service for non-car modes of transportation, including walking, biking and transit. The amendment will further the City's already-existing goals to encourage active transportation, support transit use and operations, and reduce congestion. The City already supports programming and policies to reduce vehicle miles traveled and support active modes of transportation; achieving the City's climate goals will require strengthening those programs to more drastically reduce greenhouse gas emissions from transportation. Please reference the Goal and Policy Consistency Review (Section II.8b - page 25) for more information on how the transportation goals and policies of the Regional Plan are well-aligned with this amendment.

Housing impacts:

The proposed amendment will not have immediate impacts on housing in Flagstaff, because there are no proposed changes to the Growth Areas & Land Use or the Neighborhoods, Housing & Urban Conservation Chapters, nor to any of the Regional Plan maps or zoning designations. There may be indirect impacts that should be considered; these are analyzed below.

Climate change will impact Flagstaff's housing market: as temperatures in central Arizona become more extreme, increased visitation and tourism will likely stress Flagstaff's already-challenging housing market. Climate change is projected to cause mass migrations across the world, including smaller movements within states and across regions in the US.[6] Flagstaff will not avoid this phenomenon, and may see more migration than most places due to its mild temperatures compared to the climate of the surrounding areas. The Phoenix area, one of the country's fastest growing metropolitan areas, is already seeing extreme heat waves with deadly effects; projections for Phoenix predict as many as 45 days each year where temperatures rise over Phoenix's extreme heat threshold of 112 degrees.[7] Due to the strong ties between the Flagstaff and Phoenix areas, we can expect that increased warming in Phoenix will increase visitation to Flagstaff, which can affect housing supply in multiple ways: through the demand for second homes, the demand for short-term rentals, and the supply of housing for full-time residents.

Climate adaptation requires preparing for anticipated community changes like changes to the housing market: Flagstaff must continue to incorporate climate change considerations into its long-term planning for housing and the broader community. Improving the alignment between the Flagstaff Regional Plan and the City's climate action work will help City decision-makers to make decisions about housing within the context of climate change and its related impacts. The text amendment will clarify the importance of resilience and preparedness, as well as supporting vulnerable community members through the expected challenges that climate change will bring – particularly the expected

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[6] https://www.ipcc.ch/site/assets/uploads/2018/02/WGIIAR5-Chap12_FINAL.pdf
[7] https://www.azcentral.com/story/news/local/arizona-environment/2020/08/21/climate-change-urban-conditions-will-fuel-extreme-heat-in-phoenix/3403640001/

exacerbation of Flagstaff's current housing challenges. Resilience-building and an equity focus can help the Flagstaff community adapt to shifts and challenges in the housing market and support its community members through these changes.

Achieving carbon neutrality will necessitate changes to Flagstaff's current land uses and housing development patterns. To reduce greenhouse gas emissions, Flagstaff needs to better utilize limited infill land by increasing the density in our inner neighborhoods and activity centers. Density reduces emissions from building energy use and transportation, while also contributing to more lively, welcoming, and diverse neighborhoods. Land use solutions are complementary to our transportation actions and impact our ability to achieve our transportation and emissions goals. Increases in density can be accompanied by efforts to make our neighborhoods more complete and support for residents who may want to walk, bike or take the bus.

These land use changes just discussed are in line with the current Regional Plan and the proposed text amendment. The Regional Plan celebrates environmentally conscious development and encourages mixed-use neighborhoods and appropriate density. Because of this strong alignment, this amendment will not significantly impact housing in Flagstaff. By clarifying Flagstaff's greenhouse gas emissions goals, this amendment could support faster implementation of the Regional Plan and achievement of its goals, which could lead to more rapid changes to Flagstaff's housing and development patterns.

Implementation impacts:
This amendment will not negatively impact the implementation of the Regional Plan goals and policies. It may improve implementation, due to better alignment between the Regional Plan and the climate action priorities of the City of Flagstaff.

Community benefits

This amendment to align the Regional Plan and the City's well-established climate action goals will provide several benefits to the community. First, formally recognizing the climate action efforts of the City of Flagstaff and its

partners will reinforce the connections between climate action and the vision of the Regional Plan, increasing understanding among the Flagstaff community. While the current Climate Change and Adaptation pages of the Regional Plan provided foundational information about climate change and climate action, specifically mentioning the City's two working documents on climate change – the 2018 Climate Action and Adaptation Plan, and the 2021 Flagstaff Carbon Neutrality Plan – will help readers of the Plan understand the extent of the City's climate goals, how the City is taking climate action and where to find detailed information on the implementation of the Regional Plan goals.

This amendment will also increase transparency. Since the 2018 adoption of the Flagstaff Climate Action and Adaptation Plan, the City of Flagstaff has endeavored to incorporate climate change concerns and climate action into its decision-making processes. However, the broad nature of the Regional Plan greenhouse gas emissions reduction goal does not specify the extent of emissions reductions needed. In the development review process, staff and other decision-makers could not refer to formal goals and policies in the Regional Plan that reflected the City's strong climate goals for guidance in decision-making. Rather, decision-makers would need to rely on the existing Regional Plan goal E&C.2 to reduce greenhouse gas emissions. Goal E&C.2 is similar to the climate goals in direction, but not informed by a time frame or a reduction goal that illustrates the level of ambition and action needed.

To align with community priorities, actors across the Flagstaff community have begun incorporating stronger environmental features and benefits into land use planning and developments. Strengthening the Regional Plan's climate action goals and policies in the Regional Plan will clarify the importance of climate action and provide both applicants and decision-makers with a more current reflection of the City's climate change and climate action priorities.

Climate action provides multiple benefits to the Flagstaff community. Achieving carbon neutrality, as proposed in the revision to Regional Plan Goal E&C.2, can usher in community transformations that benefit Flagstaff, such as: lower air pollution, a wider range of options and more support for healthy and inexpensive modes of travel, better connections and more diversity and attainability in neighborhoods, increased energy efficiency in homes and buildings, and reduced waste.

The proposed new policy **E&C.3.5** would encourage activity to support the resilience of Flagstaff's vulnerable community members. This would benefit Flagstaff's community members who are the most vulnerable to the negative impacts of climate change – the elderly, low-income families, those with health conditions or disabilities, and communities of color. These vulnerable community members may need support as climate change causes increased vulnerability to wildfire, drought, and public health concerns like poor air quality. Support may also be needed to help community members weather changes to Flagstaff's housing market, job market and infrastructure. Building resilience to change and supporting vulnerable community members, will have benefits across Flagstaff due to greater self-reliance and stronger support systems.

When the City takes climate action – whether it is for mitigation, adaptation, or equity purposes – City staff must ensure that the intended actions do not unintentionally harm vulnerable communities or add to the burdens they face. The City must analyze climate actions not only for potential harm, but also for how the benefits of climate action are being distributed: do all populations have access to new programming? Will all neighborhoods be able to benefit from a new policy? Or will some groups actually see their burdens increase due to a change in City codes? Policy **E&C 3.6** will assist in this analysis. This new policy was modeled off of the existing Regional Plan transportation policy T.11.4: 'attempt to equitably distribute the burdens and benefits of transportation investments to all segments of the community.' Just like with transportation investments, climate investments can lead to both benefits and burdens, and the City must work to anticipate these impacts and ensure that they do not disproportionately harm or benefit certain groups. Climate action can have great benefits for the Flagstaff community; this text amendment will help the City to ensure that these benefits reach further into the community and that climate action can help Flagstaff's more vulnerable residents thrive.

The following sections of the project narrative requirements (Requirement II.8) are not applicable to this amendment:

- Statement of current zoning, and proposed zoning.
- Cumulative impact of the proposal on the supply of land zoned in the existing category for the property within the City.
- Land use buffering techniques.

- A description of how essential public services (i.e. water, wastewater, stormwater, solid waste) will be provided.

II.8b Goal and Policy Compatibility and Consistency Review

Goal	Policy	Consistent?	Comments
Chapter IV - Environmental Planning & Conservation			
Chapter review: The proposed amendment is compatible with the goals and policies of the Environmental Planning & Conservation Chapter. Strong climate action is critical to maintain the long-term health and viability of Flagstaff's natural environment. Flagstaff's natural landscape will evolve with climate change, as increased temperatures and aridity cause changes in Flagstaff's forests, soils, and snowpack. Urgent and international climate action to keep global temperature change below 1.5 degrees Celsius can help the world avoid the most dramatic landscape change scenarios. The Plan revisions proposed in this amendment solidify the City's commitment to the aggressive climate action that can uphold the vision set forth in the Environmental Planning & Conservation section of the Plan. The goals and policies of the Environmental Planning & Conservation Chapter are well-aligned with strong climate action through emissions reductions, increasing resilience and improving equity, as well as the specific text revisions proposed in this text amendment. Many of the resources discussed within this Chapter (soils, sensitive lands, etc.), are resources that are enhanced or protected by resilience-building and the conservation of resources. Compact land development is a concept that is both strongly supported by this plan and also necessary to achieve the resilience, equity and mitigation goals outlined in the proposed amendment. Compact development is needed to achieve the goals outlined in this chapter related to protecting wildlife, conserving sensitive lands, maintaining quiet, and the conservation of soil; the proposed amendments, by strengthening the Regional Plan's climate goals and policies, will further these goals and support their associated policies. Dark sky preservation can be supported by climate action, though the relationship is less strong. Compact development can help to preserve undeveloped areas and focus growth in designated parts of the City where it is less likely to impact Flagstaff's night skies and our regional observatories. While some dark-sky-friendly lighting is slightly less energy efficient than the most energy-efficient outdoor lighting on the market, the preservation of dark sky lighting is a higher priority for the community compared to the relatively minor energy efficiency gains for a small portion of the community's overall energy consumption. Flagstaff can work to first reduce energy use in almost every other aspect of our community, before we need to tackle the energy efficiency of outdoor lighting. In this instance, the text amendment generally supports the goal of dark skies; decision-makers will need to understand this tension and work to appropriately balance these two goals.			
AIR QUALITY GOALS AND POLICIES Page IV-10			
Goal E&C.1. Proactively		Goal: Yes	Very strong relationship - contributes to carbon neutrality.

Goal	Policy	Consistent?	Comments
improve and maintain the region's air quality.	Policy E&C.1.1. Engage public agencies concerned with the improvement of air quality, and implement state and regional plans and programs to attain overall federal air quality standards (in particular ozone, particulate matter, and carbon monoxide) on a long- term basis.	Yes	Very strong relationship - contributes to carbon neutrality.
	Policy E&C.1.2. Pursue reduction of total emissions of high-priority pollutants from commercial and industrial sources and area- wide smoke emissions.	Yes	Very strong relationship - contributes to carbon neutrality.
	Policy E&C.1.3. Encourage strategies and partnerships to mitigate dust.	Yes	Strong relationship - contributes to equity.
	Policy E&C.1.4. Maintain air quality through pursuit of non-polluting industry and commercial enterprises.	Yes	Very strong relationship - contributes to carbon neutrality.
	Policy E&C.1.5. Seek feasible alternatives to reduce the smoke produced through prescribed burns and slash piles while continuing efforts to return fire to its natural role in the ecosystem.	Yes	Strong relationship - contributes to resilience.
CLIMATE CHANGE AND ADAPTATION GOALS AND POLICIES Page IV-12			
Goal E&C.2. Reduce greenhouse gas emissions.		Goal: Yes	Very strong relationship - contributes to carbon neutrality.
	Policy E&C.2.1. Encourage the reduction of all energy consumption, especially fossil-fuel generated energy, in public, commercial, industrial, and residential sectors.	Yes	Very strong relationship - contributes to carbon neutrality.
	Policy E&C.2.2. Promote investments that strengthen climate resiliency.	Yes	Very strong relationship - contributes to carbon neutrality.
Goal E&C.3. Strengthen		Goal: Yes	Very strong relationship - contributes to resilience.

Goal	Policy	Consistent?	Comments
community and natural environment resiliency through climate adaptation efforts.	Policy E&C.3.1. Develop and implement a comprehensive and proactive approach to prepare the community for and to minimize the impacts of climate change induced hazards.	Yes	Strong relationship - contributes to resilience.
	Policy E&C.3.2. Review and revise existing regulations, standards, and plans (codes, ordinances, etc.) to reduce the community's vulnerability to climate change impacts.	Yes	Strong relationship - contributes to resilience.
	Policy E&C.3.3. Invest in forest health and watershed protection measures.	Yes	Strong relationship - contributes to resilience.
	Policy E&C.3.4. Increase the region's preparedness for extreme climate events.	Yes	Strong relationship - contributes to resilience.
Goal E&C.4. Integrate available science into policies governing the use and conservation of Flagstaff 's natural resources.		Goal: Yes	Very strong relationship - contributes to approach.
	Policy E&C.4.1.Assess vulnerabilities and risks of Flagstaff's natural resources.	Yes	Strong relationship - contributes to resilience.
	Policy E&C.4.2. Develop water use policies that attempt to integrate current best projections of climate change effects on the Colorado Plateau's water resources and emphasize conservation.	Yes	Strong relationship - contributes to resilience.
DARK SKIES GOALS AND POLICIES Page IV-13			
Goal E&C.5. Preserve dark skies as an unspoiled natural resource, basis for an important economic sector,		Goal: Yes	There are some instances where dark-sky friendly lighting is not the most energy efficient lighting option. This tension has been discussed in climate planning documents, as one community tension that staff will need to balance as they make decisions. In many cases, dark sky lighting will be the higher

Goal	Policy	Consistent?	Comments
and core element of community character.			priority for the community, compared to relatively minor energy efficiency gains. The City can reduce energy use in several areas, whereas the Flagstaff community has limited ways to reduce dark sky pollution.
	Policy E&C.5.1. Evaluate the impacts of the retention of dark skies regarding lighting infrastructure and regulatory changes, land use decisions or changes, and proposed transportation developments within the region.	N/A (not applicable)	
	Policy E&C.5.2. Encourage and incentivize voluntary reduction of "exempt" lighting that degrades night sky visibility, and work to prevent light trespass whenever possible in both public and private areas.	N/A	
	Policy E&C.5.3. Continue to enforce dark sky ordinances.	N/A	
	Policy E&C.5.4. Encourage uses within Lighting Zone 1 of the lighting codes of the City and County that do not require outdoor lighting, and discourage those which require all-night lighting.	N/A	
Goal E&C.6. Protect, restore and improve ecosystem health and maintain native plant and animal community diversity across all land		Goal: Yes	Strong relationship - contributes to resilience.
	Policy E&C.6.1. Encourage public awareness that the region's ponderosa pine forest is a fire-dependent ecosystem and strive to restore more natural and sustainable forest composition, structure, and processes.	Yes	Strong relationship - contributes to resilience.
	Policy E&C.6.2. Encourage all landowners and land management agencies to emphasize forest ecosystem restoration and catastrophic fire risk reduction for the lands under their respective jurisdictions.	Yes	Strong relationship - contributes to resilience.

Goal	Policy	Consistent?	Comments
ownerships in the Flagstaff region.	Policy E&C.6.3. Promote protection, conservation, and ecological restoration of the region's diverse ecosystem types and associated animals.	Yes	Strong relationship - contributes to resilience.
	Policy E&C.6.4. Support collaborative efforts to return local native vegetation, channel structure and, where possible and applicable, preservation and restoration of in-stream flows to the region's riparian ecosystem.	Yes	Strong relationship - contributes to resilience.
	Policy E&C.6.5. Preserve Flagstaff's wetland areas and discourage inappropriate development that may adversely affect them and the ecosystem services they provide.	Yes	Strong relationship - contributes to resilience.
	Policy E&C.6.6. Support cooperative efforts for forest health initiatives or practices, such as the Four Forest Restoration Initiative (4FRI), to support healthy forests and protect our water system.	Yes	Strong relationship - contributes to resilience.
	Policy E&C.6.7. Use best practices to control the spread of exotic and invasive plants, weeds, and animals, and eradicate where possible.	Yes	Strong relationship - contributes to resilience.
	Policy E&C.6.8. Disturbed areas for improvements and landscaping for new developments shall emphasize the use of native, drought-tolerant or edible species appropriate to the area.	Yes	Strong relationship - contributes to resilience AND mitigation.
	Policy E&C.6.9. Develop guidelines to minimize the use of herbicides, insecticides, and similar materials.	Yes	Strong relationship - contributes to resilience AND mitigation.
ENVIRONMENTALLY SENSITIVE LANDS GOALS AND POLICIES Page IV-16			
Goal E&C.7. Give special		Goal: Yes	Environmentally sensitive lands contribute to community resilience.

Goal	Policy	Consistent?	Comments
consideration to environmentally sensitive lands in the development design and review process.	Policy E&C.7.1. Design development proposals and other land management activities to minimize the alteration of natural landforms and maximize conservation of distinctive natural features.	Yes	Strong relationship - contributes to resilience.
	Policy E&C.7.2. Favor the use of available mechanisms at the City and County level for the preservation of environmentally sensitive lands, including but not limited to public acquisition, conservation easements, transfer of development rights, or clustered development with open space designations.	Yes	Strong relationship - contributes to resilience. There often can be a perceived conflict between open space preservation and development - but climate-focused development can provide more opportunities for open space and conservation.
NATURAL QUIET GOALS AND POLICIES Page IV-16			
Goal E&C.8. Maintain areas of natural quiet and reduce noise pollution.		Goal: N/A	
	Policy E&C.8.1. Establish location-appropriate sound management tools with measurable criteria. Policy E&C.8.2. Evaluate land uses and transportation proposals for their potential noise impacts.	N/A	
SOILS GOALS AND POLICIES Page IV-17			
Goal E&C.9. Protect soils through conservation practices.		Goal: Yes	
	Policy E&C.9.1. County Policy: In areas of shallow or poor soils where standard on-site wastewater systems are not feasible, give preference to very low-density development, integrated conservation design, a centralized treatment facility, and technologically advanced environmentally sensitive systems.	Yes	Strong relationship - contributes to resilience.
	Policy E&C.9.2. Construction projects employ strategies to minimize disturbed area, soil compaction, soil erosion, and destruction of vegetation.	Yes	Strong relationship - contributes to resilience.

Goal	Policy	Consistent?	Comments
WILDLIFE GOALS AND POLICIES Page IV-19			
Goal E&C.10. Protect indigenous wildlife populations, localized and larger-scale wildlife habitats, ecosystem processes, and wildlife movement areas throughout the planning area.		Goal: Yes	Strong relationship - contributes to resilience.
	Policy E&C.10.1. Encourage local development to protect, conserve, and when possible enhance and restore wildlife habitat.	Yes	Strong relationship - contributes to resilience.
	Policy E&C.10.2. Protect, conserve, and when possible enhance and restore wildlife habitat on public land.	Yes	Strong relationship - contributes to resilience.
	Policy E&C.10.3. Protect sensitive and uncommon habitats such as ephemeral wetlands, riparian habitats, springs and seeps, rare plant communities, and open prairie ecosystems including the physical elements such as water sources and soil types on which they depend through open space acquisition efforts, avoiding these features in the design of subdivisions and other development, etc.	Yes	Strong relationship - contributes to resilience.
	Policy E&C.10.4. Support the control and removal of terrestrial and aquatic exotic and invasive animals.	Yes	Strong relationship - contributes to resilience.
	Policy E&C.10.5. Support the development of watchable wildlife recreation opportunities.	Yes	Strong relationship - contributes to resilience.
	Policy E&C.10.6. Conserve and restore important wildlife corridors throughout the planning area to allow wildlife to find suitable habitat in the face of climate change by moving along vegetational and elevational gradients.	Yes	Strong relationship - contributes to resilience.
Chapter V - Open Space			

Goal	Policy	Consistent?	Comments
Chapter review: The proposed amendment is compatible with the goals and policies of the Open Space Chapter. The proposed amendment, which strengthens the climate mitigation, adaptation and equity goals and policies of the Regional Plan, supports the preservation, development, and maintenance of open space properties. Open space supports community resilience: Open Space's many benefits to physical health, mental health, strong ecosystems, wildlife, and recreation opportunities all contribute to a stronger, more resilient community. Climate change will also affect Flagstaff's open spaces, as our region's forests, grasslands and riparian areas change due to increases in temperature and aridity. Climate adaptation and preparation can help us to better understand the impacts of climate change on our open spaces, and how to best preserve them in a time of rapid change. The preservation of open space is also strongly linked to compact development. While some may perceive a conflict between open space preservation and development, climate-focused, compact development can actually support the creation of more legally designated open space properties. Low-greenhouse gas-emissions land use incorporates density into activity centers and already-developed land (infill). This type of land use reduces building and transportation emissions, while concentrating development on land that is already served by roads, water infrastructure and social infrastructure, within existing neighborhoods. Most importantly, dense, climate-friendly development allows more people to live in smaller areas, better utilizing Flagstaff's limited land resources. Density can lead to greater preservation of open spaces, as land is better-utilized: A hypothetical scenario can demonstrate this relationship: instead of dividing 20 acres among 80 quarter-acre lots, housing 80 families, a more climate-friendly development could create 120 homes through duplexes, townhomes, and small apartment buildings on 10 acres, while preserving ten acres for open space. This arrangement means that families in the new development and families in existing nearby neighborhoods both have greater access to open space, contributing to health and equity goals. In this way, climate-focused development can help provide more opportunities for open space, recreation and conservation. The City already works to balance the goals of open space, housing and climate action. By strengthening the climate goals and policies of the Regional Plan, City decision-makers will have more support for including climate action considerations in their decision-making.			
OPEN SPACE GOALS AND POLICIES Page V-5		Goal: Yes	Strong relationship - contributes to resilience. There often can be a perceived conflict between open space preservation and development - but climate-focused development can provide more opportunities for open space and conservation.
Goal OS.1. The region has a system of open lands, such as undeveloped	Policy OS.1.1. Establish a Conservation Land System supported by stakeholders (federal, state, city, county, non-profit, and interested citizens) to inventory, map, update, and manage the region's green infrastructure including open space planning, acquisition, conservation, protection, and long-term management and maintenance.	Yes	Strong relationship - contributes to resilience.

Goal	Policy	Consistent?	Comments
natural areas, wildlife corridors and habitat areas, trails, access to public lands, and greenways to support the natural environment that sustains our quality of life, cultural heritage, and ecosystem health.	Policy OS.1.2. While observing private property rights, preserve natural resources and priority open lands, under the general guidance of the *Flagstaff Area Open Space and Greenways Plan* and the Natural Environment maps.	Yes	Strong relationship - contributes to resilience.
	Policy OS.1.3. Use open spaces as natural environment buffer zones to protect scenic views and cultural resources, separate disparate uses, and separate private development from public lands, scenic byways, and wildlife habitats.	Yes	Strong relationship - contributes to resilience.
	Policy OS.1.4. Use open space as opportunities for non-motorized connectivity, to interact with nature, and to enjoy the views and quiet.	Yes	Strong relationship - contributes to resilience and mitigation.
	Policy OS.1.5. Integrate open space qualities into the built environment.	Yes	Strong relationship - contributes to resilience.
Chapter VI - Water Resources			

Chapter review: The proposed amendment is compatible with the goals and policies of the Water Resources Chapter. The goals and policies of the Water Resources Chapter all support strong climate action, which is in turn supportive of maintaining the long-term viability of Flagstaff's water supplies and natural environment. Climate action can help to achieve all goals of the water resources chapter, helping to reduce demand on water resources through water conservation and water reuse.

The water supply goals and policies are linked to climate change and climate action, and are well-supported by the proposed amendment. Climate change will impact Flagstaff's water supply: as temperatures and aridity increase, Flagstaff will need to depend less on surface water supplies via Lake Mary, and more on water obtained from the City's wells. Climate change can lead to lower levels of water in Flagstaff's nearby aquifer, potentially leading to deeper and more expensive wells. The proposed amendment will help Flagstaff be better prepared for and ready to adapt to this changing water future.

The proposed amendments to mitigation and equity goals and policies will support the goals and policies of the water demand section, too. Water production and treatment use a large amount of energy, accounting for the largest portion of the City of Flagstaff municipal organization's energy use. Water conservation and energy efficiency improvements in water production and treatment operations are already helping to lower Flagstaff's greenhouse gas emissions; stronger climate goals and policies will further support these initiatives. Access to water has clear equity implications; as the climate changes, the City will need to prioritize the needs of vulnerable community members in its policy and process changes related to water and climate action.

Goal	Policy	Consistent?	Comments
The proposed amendments are also strongly supportive of the stormwater goals and policies, and will help to further their aims. It is well-established that climate change will bring increases in both the frequency and the intensity of extreme weather events, including intense thunderstorms and unusually heavy rainfall or snowfall events, leading to flooding in Flagstaff's flood-prone areas. Flood risks are also increased due to the increased likelihood of rain-on-snow or rain-on-ice, which lead to high volumes of run-off, or in areas that have recently been damaged by moderate- to high-severity wildfires, which degrade the soil's ability to absorb water. All of these factors contribute to expected increases in the frequency, magnitude and severity of flooding. Our current infrastructure is not well-equipped to handle these increased risks: upgrades to our current infrastructure are necessary. Preparing for our changing risk profile is a critical part of climate resilience; the proposed text amendment supports the stormwater section goal and all associated policies, and should assist in their implementation and achievement of this goal.			
WATER SOURCES GOALS AND POLICIES Page VI-8			
Goal WR.1. Maintain a sustainable water budget incorporating regional hydrology, ecosystem needs, and social and economic well-being.		Goal: Yes	Strong relationship - contributes to resilience and mitigation.
	Policy WR.1.1. Participate in and support regional processes to develop a sustainable water budget.	Yes	Strong relationship - contributes to resilience and mitigation.
	Policy WR.1.2. Seek regional opportunities to partner with resource land managers and adjacent landowners to improve water yield and hydrologic processes.	Yes	Strong relationship - contributes to resilience and mitigation.
Goal WR.2. Manage a coordinated system of water, wastewater, and reclaimed water utility service facilities and resources at the City level and		Goal: Yes	Strong relationship - contributes to resilience and mitigation.
	Policy WR.2.1. Develop and adopt an integrated water master plan that addresses water resources, water production and its distribution, wastewater collection and its treatment, and reclaimed water treatment and its distribution.	Yes	Strong relationship - contributes to resilience and mitigation.
	Policy WR.2.2. Maintain and develop facilities to provide reliable, safe, and cost-effective water, wastewater, and reclaimed water services.	Yes	Strong relationship - contributes to resilience and mitigation.

Goal	Policy	Consistent?	Comments
identify funding to pay for new resources.	Policy WR.2.3. Develop programs to minimize lost and unaccounted for water to acceptable levels.	Yes	Strong relationship - contributes to resilience and mitigation.
	Note: Specific thresholds will be included in the City's water policy.		
WATER DEMAND GOALS AND POLICIES Page VI-13		Goal: Yes	Strong relationship - contributes to resilience and mitigation.
Goal WR.3. Satisfy current and future human water demands and the needs of the natural environment through sustainable and renewable water resources and strategic conservation measures.	Policy WR.3.1. Work together with regional partners to address regional human and environmental water needs.	Yes	Strong relationship - contributes to resilience and mitigation.
	Policy WR.3.2. Favor low-water consuming businesses and industries over water-intensive uses.	Yes	Strong relationship - contributes to resilience and mitigation.
	Policy WR.3.3. Integrate sound water conservation and reuse systems into new and updated public facilities.	Yes	Strong relationship - contributes to resilience and mitigation.
	Policy WR.3.4. Use reclaimed water and rainwater harvesting wherever appropriate and practical.	Yes	Strong relationship - contributes to resilience and mitigation.
	Policy WR.3.5. Encourage private well owners to install meters to understand how much water is used as well as alert property owners to possible leaks.	Yes	Strong relationship - contributes to resilience and mitigation.
	Policy WR.3.6. All large turf areas (e.g. schools, parks, golf courses, etc.) should use reclaimed water or other approved rain harvesting techniques for irrigation purposes.	Yes	Strong relationship - contributes to resilience and mitigation.
	City-Specific Policies		
	Policy WR.3.7. Calculate the volume of local water resources it has available and make periodic updates as appropriate.	Yes	Strong relationship - contributes to resilience and mitigation.

Goal	Policy	Consistent?	Comments
	Policy WR.3.8. Implement a water management program that creates a linkage between new growth and a minimum 100-year water supply.	Yes	Strong relationship - contributes to resilience and mitigation.
	Policy WR.3.9. Identify adequate funding sources to pay for new resources for a long-term renewable water supply.	Yes	Strong relationship - contributes to resilience and mitigation.
		Goal: Yes	
Goal WR.4. Logically enhance and extend the City's public water, wastewater, and reclaimed water services including their treatment, distribution, and collection systems in both urbanized and newly developed areas of the City to provide an efficient delivery of services.	Policy WR.4.1. Use the *Regional Plan* as a guide for the *Utilities Integrated Master Plan* to better plan for the necessary infrastructure sizing and location to accommodate planned growth and resource management.	Yes	Strong relationship - contributes to resilience.
	Policy WR.4.2. Maintain, at the City level, a financially stable utility to provide reliable, high quality utility services.	Yes	Strong relationship - contributes to resilience.
	Policy WR.4.3. Development requiring public utility services will be located within the Urban Growth Boundary.	Yes	Strong relationship - contributes to resilience and mitigation.
STORMWATER AND WATERSHED MANAGEMENT GOALS AND POLICIES Page VI-18			
Goal WR.5. Manage watersheds and stormwater to		Goal: Yes	Strong relationship - contributes to resilience.

Goal	Policy	Consistent?	Comments
address flooding concerns, water quality, environmental protections, and rainwater harvesting.	Policy WR.5.1. Preserve and restore existing natural watercourse corridors, including the 100-year floodplain, escarpments, wildlife corridors, natural vegetation, and other natural features using methods that result in a clear legal obligation to preserve corridors in perpetuity, where feasible.	Yes	Strong relationship - contributes to resilience.
	Policy WR.5.2. Incorporate pedestrian access, trails, and watchable wildlife opportunities into natural watercourses when practical.	yes	Strong relationship - contributes to resilience.
	Policy WR.5.3. Identify downstream impacts as the result of development, and provide for mitigation measures to address impacts. When possible, mitigations should be non-structural in nature.	yes	Strong relationship - contributes to resilience.
	Policy WR.5.4. Develop any necessary stormwater infrastructure improvements consistent with City of Flagstaff stormwater master plans or studies as adopted by the City.	yes	Strong relationship - contributes to resilience.
	Policy WR.5.5. Give preference to regional detention facilities that are designed in conjunction with smaller low-impact development features, rather than numerous smaller dispersed basins. Encourage regional detention basins to incorporate natural watershed characteristics as well as offering recreational components.	yes	Strong relationship - contributes to resilience.
	Policy WR.5.6. Implement stormwater harvesting techniques to support water conservation strategies by collecting and using local precipitation in the vicinity where it falls to support both human and overall watershed health needs.	yes	Strong relationship - contributes to resilience and mitigation.
	Policy WR.5.7. Support healthy watershed characteristics through implementation of practices, consistent with the City of Flagstaff Low Impact Design Manual, that improve flood control and flood attenuation, stormwater quality, and water sustainability; increase groundwater recharge; enhance open space quality; increase biodiversity; and reduce land disturbance and soil compaction.	yes	Strong relationship - contributes to resilience.

Goal	Policy	Consistent?	Comments
WATER QUALITY GOALS AND POLICIES Page VI-19			
Goal WR.6. Protect, preserve, and improve the quality of surface water, groundwater, and reclaimed water in the region.		Goal: Yes	Strong relationship - contributes to resilience and mitigation.
	Policy WR.6.1. Explore the feasibility of additional or alternative treatment technologies for the City of Flagstaff and other surrounding regional wastewater treatment systems, and monitor the research on the potential impacts on human health and our regional water supplies.	yes	Strong relationship - contributes to resilience and mitigation.
	Policy WR.6.2. Recognizing the concern about water quality, seek methods to divert contaminants from the waste stream.	N/A	
	Policy WR.6.3. Implement best management practices to protect, restore, and maintain surface waters and their contributing watersheds.	yes	Strong relationship - contributes to resilience and mitigation.
	Note: Refer to best management practices adopted by the Arizona Department of Environmental Quality at http://www/adeq.gov		
	Policy WR.6.4. Encourage low-impact development strategies.	yes	Strong relationship - contributes to resilience and mitigation.
	Policy WR.6.5. Make City and County water quality data available and accessible to the public.	N/A	
Chapter VII - Energy			
Chapter review: The proposed amendment is compatible with the goals and policies of the Energy Chapter. The goals and policies of the Energy Chapter all work to reduce greenhouse gas emissions, aligning with the revised goal E&C.2, to achieve carbon neutrality. This chapter vision calls for reduced energy use and more renewable energy production, both of which lead to reductions in greenhouse gas emissions. The Chapter's two goals, regarding energy efficiency and renewable energy, are critical to reducing greenhouse gas emissions and achieving carbon neutrality; these two goals make			

Goal	Policy	Consistent?	Comments
up two of the nine target areas in the Carbon Neutrality Plan. The proposed text amendment will help to accelerate the achievement of the Regional Plan's energy efficiency and renewable energy goals and policies. Energy efficiency and renewable energy can have resilience and equity impacts, too: increased energy efficiency and on-site energy production reduce reliance on outside energy sources for a home, business or an entire community. Energy efficiency and renewable energy also can save residents, businesses, and the City municipal organization money, leading to a lower cost of living and increased disposable income for other uses. Due to these synergies, the text amendment's adaptation and equity goals and policies will further support the goals and policies of the energy chapter. The text amendments can support the implementation of these policies, to ensure that energy efficiency and renewable energy are achieved in a manner that is equitable and increases community resilience.			
EFFICIENT USE OF ENERGY GOALS AND POLICIES Page VII-3			
Goal E.1. Increase energy efficiency.		Goal: Yes	VERY strong relationship - contributes to resilience and mitigation.
	Education		
	Policy E.1.1. Promote and encourage innovative building practices through instruction on efficient building materials and methodology.	yes	VERY strong relationship - contributes to resilience and mitigation.
	Policy E.1.2. Support workforce training for the installation and maintenance of energy-efficient technologies.	yes	VERY strong relationship - contributes to resilience and mitigation.
	Policy E.1.3. Empower all community members to make smarter energy choices through education and incentives.	yes	VERY strong relationship - contributes to resilience and mitigation.
	Building		
	Policy E.1.4. Promote cost-effective, energy-efficient technologies and design in all new and retrofit buildings for residential, commercial, and industrial projects.	yes	VERY strong relationship - contributes to resilience and mitigation.

Goal	Policy	Consistent?	Comments
	Policy E.1.5. Promote and encourage the expansion and use of energy-efficient modes of transportation:	yes	VERY strong relationship - contributes to resilience and mitigation.
	a. Public transportation		
	b. Bicycles		
	c. Pedestrians		
	Policy E.1.6. Develop land use regulations promoting land use patterns that increase energy efficiency.	yes	VERY strong relationship - contributes to resilience and mitigation.
	Policy E.1.7. Support policies and programming that reduce electricity, natural gas, and water consumption in order to conserve natural resources and reduce financial costs.	yes	VERY strong relationship - contributes to resilience and mitigation.
	Policy E.1.8. Incorporate alternative energy conservation and renewable energy systems in applicable codes.	yes	VERY strong relationship - contributes to resilience and mitigation.
	Policy E.1.9. Develop standards and guidelines to guide builders, architects, and developers toward optimal building, water use, and energy performance.	yes	VERY strong relationship - contributes to resilience and mitigation.
	Policy E.1.10. Incentivize energy efficiency and renewable energy technologies in construction projects.	yes	VERY strong relationship - contributes to resilience and mitigation.
	Policy E.1.11. Identify financing mechanisms to support water and energy efficiency improvements in public, residential, commercial, and industrial sectors.	yes	VERY strong relationship - contributes to resilience and mitigation.
	Policy E.1.12. Promote indigenous and local building materials and structures as climate-adaptable energy efficiency prototypes.	yes	VERY strong relationship - contributes to resilience and mitigation.
	Transportation		

Goal	Policy	Consistent?	Comments
	Policy E.1.13. Promote and encourage the use of fuel-efficient vehicles that use renewable fuels.	yes	VERY strong relationship - contributes to resilience and mitigation.
RENEWABLE ENERGY GOALS AND POLICIES Page VII-5			
Goal E.2. Expand production and use of renewable energy.		Goal: Yes	VERY strong relationship - contributes to mitigation.
	Policy E.2.1. Promote renewable energy sources that reduce demand upon fossil fuels and other forms of generation that produce waste.	yes	VERY strong relationship - contributes to mitigation.
	Policy E.2.2. Preserve opportunities for development of renewable energy resources in the planning process.	yes	VERY strong relationship - contributes to mitigation.
	Policy E.2.3. Promote renewable energy pilot programs as a showcase to educate the public and the development community.	yes	VERY strong relationship - contributes to mitigation.
	Policy E.2.4. Encourage small-scale renewable energy production and use on the local level on appropriate residential, commercial, and industrial parcels.	yes	VERY strong relationship - contributes to mitigation.
	Policy E.2.5. Pursue, promote, and support utility-scale renewable energy production such as biomass facilities, solar electricity, wind power, waste-to-energy, and other alternative energy technologies.	yes	VERY strong relationship - contributes to mitigation.
	Policy E.2.6. Collaborate with local tribes to develop renewable energy opportunities on tribal lands.	yes	VERY strong relationship - contributes to mitigation.
Chapter VIII - Community Character			
The proposed amendment is compatible with the goals and policies of the Community Character Chapter. The goals and policies of the Community Character Chapter are somewhat relevant to climate action; several important intersections are discussed below.			

Goal	Policy	Consistent?	Comments
The Scenic Resources and Natural Setting goals and policies are compatible with the proposed text amendment. As discussed with in the Environmental Planning and Conservation and Open Space Chapter review statements, the compact land development associated with the strong climate action outlined in the text amendment can support the preservation of community resources, values and character. Concentrated, well-planned development can reduce the pressures for sprawl and inappropriate development, while reducing greenhouse gas emissions and conserving community resources such as water courses, floodplains, meadows and other landmarks. Dense development and viewsheds can sometimes seem to be at odds. However, dense development, when done appropriately, can contribute to the preservation of significant viewsheds and other landmarks, steering development to appropriate locations that have historically been densely developed, are in need of infill, or have lower impacts to significant viewsheds. Heritage preservation is generally supported by climate action, particularly when considering building energy use. Existing buildings contain significant embodied energy, and so are often more sustainable than a new building on the same site. Many of Flagstaff's historic resources are actually examples of excellent resource conservation, as many of the homes and buildings in our historic neighborhoods were built very efficiently, and retain their excellent insulation and comfort levels to this day. The Heritage Preservation Section's policies that encourage adaptive reuse are well-aligned with climate action and the proposed text amendment, reducing emissions and improving community relationships, which contributes to community resilience. The goals and policies to support Flagstaff's design tradition and promote art, science, Southwest culture and native American art are all compatible with the proposed text amendment. These goals and policies all contribute to a stronger sense of community and a more vibrant pedestrian experience, which are both positive elements for increasing resilience and reducing greenhouse gas emissions, respectively.			
SCENIC RESOURCES AND NATURAL SETTING GOALS AND POLICIES Page VIII-3		Goal: N/A	
Goal CC.1. Reflect and respect the region's natural setting and dramatic views in the built environment.	Policy CC.1.1. Preserve the natural character of the region through planning and design to maintain views of significant landmarks, sloping landforms, rock outcroppings, water courses, floodplains, and meadows, and conserve stands of ponderosa pine.	yes	There can be a perceived conflict between dense development, which contributes to reduced greenhouse gas emissions, and viewsheds. The goals are ultimately compatible; both goals can coexist and can actually reinforce each other.
	Policy CC.1.2. Continue to define and further develop the community character by incorporating the natural setting into the built environment at all design scales.	N/A	

Goal	Policy	Consistent?	Comments
	Policy CC.1.3. Design development patterns to maintain the open character of rural areas, protect open lands, and protect and maintain sensitive environmental areas like mountains, canyons, and forested settings.	yes	Strong relationship - contributes to mitigation and resilience.
	Refer to Chapter V - Open Space for more information.		
	Policy CC.1.4. Identify, protect, and enhance gateways, gateway corridors, and gateway communities.	N/A	
	Policy CC.1.5. Design development patterns to maintain the open character of rural areas, protect open lands, and protect and maintain sensitive environmental areas.	N/A	
	Policy CC.1.6. Encourage cluster development to preserve open space, viewsheds, and scenic vistas.	yes	Strong relationship - contributes to mitigation and resilience.
	Refer to Chapter IV - Environmental Planning & Conservation for more information."Rural by nature" cluster development allows preservation of more open space and natural resource protection.		
HERITAGE PRESERVATION GOALS AND POLICIES Page VIII-15		Goal: N/A	
Goal CC.2. Preserve, restore, and rehabilitate heritage resources to	Policy CC.2.1. Actively locate, identify, interpret, and preserve historical, archaeological, and cultural resources, in cooperation with other agencies and non-governmental organizations, as aspects of our society for future generations to retain, understand, and enjoy their cultural identity.	N/A	
	Policy CC.2.2. Formally recognize heritage resources through designation as local landmarks and historic districts.	N/A	

Goal	Policy	Consistent?	Comments
better appreciate our culture.	Policy CC.2.3. Mitigate development impacts on heritage resources.	N/A	
	Policy CC.2.4. Support restoration and rehabilitation of historic housing, buildings, structures, and neighborhoods.	N/A	
	Policy CC.2.5. Provide incentives for heritage and cultural preservation.	N/A	
	Policy CC.2.6. Expand a program to educate the owners of historic resources of the heritage value of their properties.	N/A	
	Policy CC.2.7. Protect existing historic districts from encroachment by land uses that compromise the historic characteristics of the district.	N/A	
	Policy CC.2.8. In "Historic" activity centers (Downtown and Five Points), prioritize Community Character (CC) and Downtown (LU.11 and LU.12) goals and policies over the Activity Center goals and policies found in LU.18 when considering cases for rezoning.	N/A	
	Policy CC.2.9. Strengthen the City's historic preservation and adaptive reuse programs by increasing funding for further inventories, grants to property owners, and education campaigns, especially, where the underlying Zoning for the historic resource put it at risk.	N/A	
	Policy CC.2.10. Educate the community and developers on the benefits of adaptive reuse and create policies to incentivize the reuse of historic buildings to maintain their integrity.	yes	Relationship – supports mitigation.
	Policy CC.2.11. Assist businesses and residents who are caretakers of historic resources, maximize the economic value of their property without damaging the integrity of the historic resource.	N/A	
	Policy CC.2.12. Advertise the economic impact of historic resources and history-related tourism on the Flagstaff community.	N/A	

Goal	Policy	Consistent?	Comments
	Policy CC.2.13. When the demolition or removal of a historic structure cannot be avoided, encourage the developer to make the building available for relocation and provide assistance in moving the building the purchaser's property, if possible.	N/A	
COMMUNITY DESIGN GOALS AND POLICIES Page VIII-23			
Goal CC.3. Preserve, restore, enhance, and reflect the design traditions of Flagstaff in all public and private		Goal: N/A	
development efforts.	Policy CC.3.1. Encourage neighborhood design to be respectful of traditional development patterns and enhance the overall community image.	N/A	
	Policy CC.3.2. Maintain and enhance existing buildings and blend well-designed new buildings into existing neighborhoods.	N/A	
	Policy CC.3.3. Emulate the most celebrated design traditions of Flagstaff, particularly the pre-Route 66 and early Route 66 eras.	N/A	
Goal CC.4. Design and develop all projects to be contextually sensitive, to enhance a positive image		Goal: N/A	
	Policy CC.4.1. Design streetscapes to be context sensitive and transportation systems to reflect the desired land use while balancing the needs of all modes for traffic safety and construction and maintenance costs.	yes	Can potentially support mitigation and resilience.
	Policy CC.4.2. Design utilities and infrastructure to be contextual and considered as part of the overall design aesthetics.	N/A	

Goal	Policy	Consistent?	Comments
and identity for the region.	Policy CC.4.3. Employ design solutions that balance the interface of the natural and built environments, with the most urbanized core activity areas being the most built, and the most rural areas being the most natural.	N/A	
	Policy CC.4.4. Design streets and parking lots to balance automobile facilities, recognize human-scale and pedestrian needs, and accentuate the surrounding environment.	yes	Supports mitigation.
	Policy CC.4.5. Encourage local landscaping using Xeriscape, low-impact principles, and native vegetation wherever possible.	yes	Supports mitigation and resilience.
	Policy CC.4.6. Use landscaping to benefit the environment and improve aesthetics, in order to maximize the economic benefit that a well landscaped community provides.	N/A	
	Policy CC.4.7. Develop an urban forestry program to catalog, preserve old growth pines, and plant new urban trees.	yes	Supports resilience.
	Policy CC.4.8. Follow arboricultural practices in maintaining a healthy urban forest.	N/A	
	Policy: CC.4.9. Develop appropriate tools to facilitate the undergrounding of existing overhead utility lines, especially in established viewsheds and in reinvestment areas.	N/A	
ARTS, SCIENCES,AND EDUCATION GOALS AND POLICIES Page VIII-26			
Goal CC.5. Support and promote art, science, and		Goal: N/A	
	Policy CC.5.1. Promote first class arts, research, and educational facilities.	N/A	

Goal	Policy	Consistent?	Comments
education resources for all to experience.	Policy CC.5.2. Coordinate educational master plans (Northern Arizona University, Coconino Community College, Flagstaff Unified School District, and charter schools) with regional planning efforts.	yes	Supports mitigation.
	Policy CC.5.3. Encourage the integration of art into public and private development projects.	N/A	
	Policy CC.5.4. Complete sidewalks and Flagstaff Urban Trails System connections for all schools, community colleges, and university campuses.	yes	Strong relationship - contributes to mitigation and resilience.
	Policy CC.5.5. Promote and expand scientific research as a key component to the Flagstaff region's character.	N/A	
	Refer to Chapter XIV - Economic Development for more information regarding STEM education.		
	No policies for this goal.	Goal: N/A	
Goal CC.6. Encourage Native American art and Southwestern culture.			
Refer to Chapter XIV - Economic Development for related Policy ED.4.9.			

Goal	Policy	Consistent?	Comments
Chapter IX - Growth Areas & Land Use			
The proposed amendment is extremely compatible with the goals and policies of the Growth Areas & Land Use Chapter, which promotes well-planned activity centers, appropriate density, mixes of uses, and strong neighborhoods. The relationship is mutually beneficial: the great majority of goals and policies of this chapter will contribute to reduced greenhouse gas emissions and increased community resilience or adaptation, supporting the revised goals in the proposed amendment. At the same time, the proposed text amendment should help to accelerate the achievement and implementation of the goals and policies throughout the Growth Areas and Land Use chapter. This chapter envisions a community whose land uses promote connectivity, walkability, efficiency, health, and housing options. Achieving this vision, and implementing the goals and policies associated with it, can help Flagstaff achieve compact, connected and complete neighborhoods that reduce greenhouse gas emissions, increases resilience and improves community equity goals, the core goals elevated by the proposed text revisions. Each goal in this chapter is strongly supportive of climate-friendly land use and strong neighborhoods, and is supported by the proposed text amendment. .			
REINVESTMENT GOALS AND POLICIES Page IX-25		Goal: Yes	Strong relationship - contributes to mitigation and resilience.
Goal LU.1. Invest in existing neighborhoods and activity centers for the purpose of developing complete, and connected places.	Policy LU.1.1. Plan for and support reinvestment within the existing city centers and neighborhoods for increased employment and quality of life.	yes	Strong relationship - contributes to mitigation and resilience.
	Policy LU.1.2. Develop reinvestment plans with neighborhood input, identifying the center, mix of uses, connectivity patterns, public spaces, and appropriate spaces for people to live, work, and play.	yes	Strong relationship - contributes to mitigation and resilience.
	Policy LU.1.3. Promote reinvestment at the neighborhood scale to include infill of vacant parcels, redevelopment of underutilized properties, aesthetic improvements to public spaces, remodeling of existing buildings and streetscapes, maintaining selected appropriate open space, and programs for the benefit and improvement of the local residents.	yes	Strong relationship - contributes to mitigation and resilience.

Goal	Policy	Consistent?	Comments
	Policy LU.1.4.Attract private investment by reinvesting in transportation infrastructure improvements as well as public utilities infrastructure for desired development size.	N/A	
	Policy LU.1.5. Maintain and upgrade existing infrastructure and invest in infrastructure to make redevelopment and infill an attractive and more financially viable development option.	yes	Strong relationship - contributes to mitigation and resilience.
	Policy LU.1.6. Establish greater flexibility in development standards and processes to assist developers in overcoming challenges posed by redevelopment and infill sites.	yes	Strong relationship - contributes to mitigation and resilience.
	Policy LU.1.7. Consider creative policy and planning tools (such as transfer of develop rights or transfer of development	yes	Strong relationship - contributes to mitigation and resilience.
	obligations) as a means to incentivize redevelopment and infill.		
	Policy LU.1.9. Provide public education regarding the sustainability and beneficial economics of redevelopment and infill.	yes	Strong relationship - contributes to mitigation and resilience.
	Policy LU.1.10. Consider adaptive reuse possibilities when new big box developments are proposed.	yes	Strong relationship - contributes to mitigation.
	Policy LU.1.11. Ensure that there is collaboration between a developer, residents, and property owners in existing neighborhoods where redevelopment and reinvestment is proposed so that they are included, engaged, and informed.	yes	Strong relationship - contributes to mitigation and resilience.
	Policy LU.1.12. Seek fair and proper relocation of existing residents and businesses in areas affected by redevelopment and reinvestment, where necessary.	yes	Strong relationship - contributes to equity.
GREENFIELD DEVELOPMENT GOALS AND POLICIES Page IX-30		Goal: Yes	

Goal	Policy	Consistent?	Comments
Goal LU.2. Develop Flagstaff 's Greenfields in accordance with the *Regional Plan* and within the growth boundary.	Policy LU.2.1. Design new neighborhoods that embody the characteristics of Flagstaff's favorite neighborhoods – that is, with a mix of uses, a variety of housing types and densities, public spaces, and greater connectivity with multimodal transportation options.	yes	Strong relationship - contributes to mitigation and resilience.
	Policy LU.2.2. Design new development to coordinate with existing and future development, in an effort to preserve viewsheds, strengthen connectivity, and establish compatible and mutually supportive land uses.	yes	Strong relationship - contributes to mitigation and resilience.
	Policy LU.2.3. New development should protect cultural and natural resources and established wildlife corridors, where appropriate.	yes	Strong relationship - contributes to mitigation and resilience.
	Policy LU.2.4. Utilize Low Impact Development (LID) strategies and stormwater best practices as part of the overall design for new development.	yes	Strong relationship - contributes to mitigation and resilience.
	Policy LU.2.5. Plan Greenfield development within the rural context to encourage formal subdivisions with shared infrastructure instead of wildcat development, and to protect open spaces, and access to public lands.	yes	Strong relationship - contributes to mitigation and resilience.
APPLICABLE TO ALL LAND USES GOALS AND POLICIES Page IX-31			
Goal LU.3. Continue to enhance the region's unique sense of place within the urban, suburban, and rural context.		Goal: N/A	
	Policy LU.3.1.Within the urban, suburban, and rural context, use neighborhoods, activity centers, corridors, public spaces, and connectivity as the structural framework for development.	N/A	
	Policy LU.3.2. Coordinate land use, master planning, and recreational uses, when feasible, with local, state, and federal land management agencies and tribal land owners.	N/A	

Goal	Policy	Consistent?	Comments
	Policy LU.3.3. Protect sensitive cultural and environmental resources with appropriate land uses and buffers.	N/A	
	Policy LU.3.4. Promote transitions between urban, suburban, and rural areas with an appropriate change in development intensity, connectivity, and open space.	N/A	
	Note: Chapter VIII - Community Character and Chapter XIV - Economic Development include further policies regarding Flagstaff's unique sense of place. Refer also to Chapter XIII - Neighborhoods, Housing, & Urban Conservation for existing neighborhood policies.		
	Policy LU.3.5.Allow and encourage urban agriculture.	yes	Strong relationship – locally grown food and urban farms and food-growing gardens can contribute to both mitigation and resilience.
Goal LU.4. Balance housing and employment land uses with the preservation and protection of our unique natural and cultural setting.		Goal: Yes	
	Policy LU.4.1. Develop neighborhood plans, specific plans, area plans, and master plans for all neighborhoods, activity centers, corridors, and gateways as necessary.	yes	Strong relationship – well-planning neighborhoods, activity centers and corridors can further the goals of this Plan and its focus on compact, efficient development. Neighborhood planning processes can also build resilience by increasing connections among neighbors and adding to neighborhood self-reliance.
	Policy LU.4.2. Utilize the following as guidance in the development process: Natural Environment maps, Environmental Planning and Conservation policies, Considerations for Development, Cultural Sensitivity, and Historical Preservation maps, and Community Character policies, while respecting private property rights.	N/A	
Goal LU.5. Encourage		Goal: Yes	Strong relationship - contributes to mitigation and resilience.

Goal	Policy	Consistent?	Comments
compact development principles to achieve efficiencies and open space preservation.	Policy LU.5.1. Encourage development patterns within the designated growth boundaries to sustain efficient infrastructure projects and maintenance.	yes	Strong relationship - contributes to mitigation and resilience.
	Policy LU.5.2. Promote infill development over peripheral expansion to conserve environmental resources, spur economic investments, and reduce the cost of providing infrastructure and services.	yes	Strong relationship - contributes to mitigation and resilience.
	Policy LU.5.3. Promote compact development appropriate to and within the context of each area type: urban, suburban, and rural.	yes	Strong relationship - contributes to mitigation and resilience.
	Policy LU.5.4. Encourage development to be clustered in appropriate locations as a means of preserving natural resources and open space, and to minimize service and utility costs, with such tools as Transfer of Development Rights (TDR).	yes	Strong relationship - contributes to mitigation and resilience.
	Policy LU.5.5. Plan for and promote compact commercial development as activity centers with mixed uses, allowing for efficient multi-modal transit options and infrastructure.	yes	Strong relationship - contributes to mitigation and resilience.
	Policy LU..5. Encourage the distribution of density within neighborhoods in relationship to associated activity centers and corridors, infrastructure, transportation, and natural constraints such as slopes and drainages.	yes	Strong relationship - contributes to mitigation and resilience.
	Policy LU.5.6. Encourage the placement of institutional and civic buildings centrally within a neighborhood to promote walkability and multi-use recreation spaces.	yes	Strong relationship - contributes to mitigation and resilience.
	Policy LU.5.7. Require any Forest Service land trades within the planning area to be consistent with the *Regional Plan*.	N/A	
	Refer to "Tools for Open Space Planning, Acquisition, and Conservation" in Chapter V - Open Space for more information.		

Goal	Policy	Consistent?	Comments
Goal LU.6. Provide for a mix of land uses.		Goal: Yes	Strong relationship - contributes to mitigation and resilience.
	Policy LU.6.1. Consider a variety of housing types and employment options when planning new development and redevelopment projects.	yes	Strong relationship - contributes to mitigation and resilience.
	Policy LU.6.2. Consider commercial core areas, corridors, activity centers, employment centers, research and development parks, special planning areas, and industrial uses as appropriate place types and area types for employment opportunities.	yes	Strong relationship - contributes to mitigation by reducing the vehicle miles residents must travel to reach employment opportunities.
	Policy LU.6.3. Encourage new mixed-use neighborhoods in appropriate locations within the growth boundary.	yes	Strong relationship - contributes to mitigation and resilience.
	Policy LU.6.4. Provide appropriate recreational and cultural amenities to meet the needs of residents.	yes	Strong relationship - contributes to mitigation by reducing the vehicle miles residents must travel to meet their needs.
Goal LU.7. Provide for public services and infrastructure.		Goal: Yes	Strong relationship - contributes to resilience.
	Policy LU.7.1. Concentrate urban development in locations that use land efficiently, and are served by roads, water, sewer, and other public facilities and services, and that support transit, reduced vehicle trips, and conservation of energy and water.	yes	Strong relationship - contributes to mitigation and resilience.
	Policy LU.7.2. Require unincorporated properties to be annexed prior to the provision of City services, or that a pre-annexation agreement is executed when deemed appropriate.	yes	Contributes to resilience by ensuring that services are provided in a more sustainable manner.
	Policy LU.7.3. Require development proposals to address availability of adequate public services.	yes	Contributes to resilience by ensuring that developments are created in a way that

Goal	Policy	Consistent?	Comments
			ensures the City can sustain public service delivery.
Goal LU.8. Balance future growth with available water resources.		Goal: Yes	Strong relationship - contributes to resilience.
	Policy LU.8.1.Available water resources should be a consideration for all major development and subdivision applications.	yes	Strong relationship - contributes to resilience.
	Policy LU.8.2. Impacts on the City's water delivery infrastructure should be a consideration for all residential and nonresidential development proposals.	yes	Strong relationship - contributes to resilience.
	Refer to Chapter VI - Water Resources for more water related goals and policies.		
URBAN AREA GOALS AND POLICIES Page IX-40			
Goal LU.9. Focus reinvestment, partnerships, regulations, and incentives on developing or redeveloping urban areas.		Goal: Yes	Strong relationship - contributes to mitigation and resilience.
	Policy LU.9.1. Reinvest in urban areas.	yes	Strong relationship - contributes to mitigation by reducing the distances need to travel to meet their needs.
Goal LU.10. Increase the proportion of urban neighborhoods to		Goal: Yes	Strong relationship - contributes to mitigation and resilience.
	Policy LU.10.1. Prioritize connectivity within all urban neighborhoods and activity centers.	yes	Strong relationship - contributes to mitigation and resilience.

Goal	Policy	Consistent?	Comments
achieve walkable, compact growth.	Policy LU.10.2. Support on-street parking, shared lots, and parking structures.	yes	Strong relationship - contributes to mitigation and resilience.
	Policy LU.10.3.Value the Historic Neighborhoods established around downtown by maintaining and improving their highly walkable character, transit accessibility, diverse mix of land uses, and historic building form.	yes	Strong relationship - contributes to mitigation and resilience.
	Policy LU.10.4. Develop specific plans for neighborhoods and activity centers to foster desired scale and form.	n/a	
	Policy LU.10.5. Consider vacant and underutilized parcels within the City's existing urban neighborhoods as excellent locations for contextual redevelopment that adds housing, shopping, employment, entertainment, and recreational options for nearby residents and transit patrons.	yes	Strong relationship - contributes to mitigation and resilience.
	Policy LU.10.6. In mixed use developments, encourage residential uses located above and behind commercial uses within urban areas as well as a variety of housing types where appropriate.	yes	Strong relationship - contributes to mitigation and resilience.
	Policy LU.10.7. Invest in infrastructure and right-of-way enhancements that favor the pedestrian and transit as an incentive for private investment in urban neighborhoods and activity centers.	yes	Strong relationship - contributes to mitigation and resilience.
	Policy LU.10.8. Include institutional uses, such as schools, within the urban context.	yes	Strong relationship - contributes to mitigation and resilience.
	Policy LU.10.9. Civic spaces must be well designed, accessible, and central to the urban fabric.	yes	Strong relationship - contributes to mitigation and resilience.
	Policy LU.10.10. Future urban activity centers and neighborhoods are designed based on gridded street systems, considering constraints on connectivity, such as topography, the railroad and highways.	yes	Strong relationship - contributes to mitigation and resilience.

Goal	Policy	Consistent?	Comments
DOWNTOWN GOALS AND POLICIES Page IX-43			
Goal LU.11. Prioritize the continual reinvigoration of downtown Flagstaff, whose strategic location, walkable blocks, and historic buildings will continue to be a vibrant destination for all.		Goal: Yes	Strong relationship - contributes to mitigation and resilience.
	Policy LU.11.1.All businesses and community services on the ground floor should be pedestrian accessible directly from a public space, such as a street, alley, square, plaza, or interior corridor.	yes	Strong relationship - contributes to mitigation and resilience.
	Policy LU.11.2. Encourage new multi-story mixed-use buildings to have windows and doors facing the sidewalks.	n/a	
	Policy LU.11.3. Design new downtown buildings to have a majority of the total linear frontages of mixed-use and nonresidential building facades built to the sidewalk.	yes	Contributes to resilience.
	Policy LU.11.4. Encourage various housing types that appeal to a diverse range of ages and income.	yes	Strong relationship - contributes to mitigation and resilience.
	Policy LU.11.5. Encourage adaptive re-use of historic structures for a variety of commercial spaces and housing options.	yes	Contributes to mitigation.
	Policy LU.11.6. Strive for a wide variety of activities in downtown to create a healthy mix of housing, employment, shopping, cultural, and civic uses.	yes	Strong relationship - contributes to mitigation and resilience.
	Policy LU.11.7. Include new and improved civic buildings and civic spaces into downtown redevelopment strategies.	yes	Strong relationship - contributes to mitigation and resilience.
	Policy LU.11.8. Maintain and enhance Heritage Square and Wheeler Park as critical civic space for social gathering and community well-being.	yes	Strong relationship - contributes to mitigation and resilience.

Goal	Policy	Consistent?	Comments
Goal LU.12. Accommodate pedestrians, bicyclists, transit riders, and private cars to supplement downtown's status as the best-served and most accessible location in the region.		Goal: Yes	Strong relationship - contributes to mitigation and resilience.
	Policy LU.12.1. Invest in downtown's streets and sidewalks so that they remain Flagstaff's premiere public spaces.	yes	Strong relationship - contributes to mitigation and resilience.
Refer to Chapter X - Transportation for more information on transit, as well as Appendix A for a listing of related transit plans.	Policy LU.12.2. Create a downtown parking strategy plan that continues to utilize and improve upon on-street parking, public parking lots and garages, and shared private parking spaces, with clear signage for wayfinding and to inform the public of all parking options.	yes	Strong relationship – managed parking increases the cost of parking to the user of that space, and decreases the public subsidy for street parking. This contributes to less overuse of parking spaces and can encourage other modes of transportation.
	Policy LU.12.3. Locate public and private parking facilities, lots, and garages carefully, screening parking from streets, squares, and plazas.	n/a	
	Policy LU.12.4. Incorporate liner buildings and larger mixed-use projects into parking facilities.	n/a	
	Policy LU.12.5. Maintain rear alleys for access to mid-block parking spaces to provide an out-of-sight location for utility equipment, and to allow the fronts of buildings to be free of driveways and parking garage entrances.	yes	Strong relationship - contributes to mitigation and resilience by better supporting biking and walking.
	Policy LU.12.6. Revise parking regulations to encourage shared parking between various uses within existing structures.	yes	Strong relationship - contributes to mitigation and resilience by reducing the

Goal	Policy	Consistent?	Comments
			space reserved for parking. More parking degrades the pedestrian environment, increases impermeable areas that cannot absorb rainfall, and encourages driving.
	Policy LU.12.7. Provide multiple routes and pathways for vehicular and pedestrian movement.	yes	Strong relationship to mitigation– multiple pathways via a well-connected street network can contribute to more efficient travel by all modes of transportation.
	Policy LU.12.8. Provide for strong connections from the Flagstaff Medical Campus to the Northern Arizona University campus via pedestrian paths, bicycle connections, streets, and transit service.	yes	Strong relationship - contributes to mitigation and resilience.
	Policy LU.12.9. As defined in the *FUTS Master Plan*, include trail access points, bicycle parking, and bicycle facilities.	yes	Strong relationship - contributes to mitigation and resilience.
	Policy LU.12.10. Seek opportunities to improve ADA accessibility in downtown.	yes	Contributes to equity.
	Refer to Policy T.2.3 in Chapter X - Transportation.		
	Policy LU.12.11. Develop a residential parking program to address the impacts of on-street parking on public streets in the downtown and surrounding areas, while considering the needs of residents, public events, and enterprises in and around the impacted areas.	yes	Strong relationship – managed parking increases the cost of parking to the user of that space, and decreases the public subsidy for street parking. This contributes to less overuse of parking spaces and can encourage other modes of transportation.
SUBURBAN AREA GOALS AND POLICIES Page IX-51			
Goal LU.13. Increase the		Goal: Yes	Strong relationship - contributes to mitigation and resilience.

Goal	Policy	Consistent?	Comments
variety of housing options and expand opportunities for employment and neighborhood shopping within all suburban neighborhoods.	Policy LU.13.1. Prioritize connectivity for walking, biking, and driving within and between surrounding neighborhoods.	yes	Strong relationship - contributes to mitigation and resilience.
	Policy LU.13.2. Consider public transit connections in suburban development.	yes	Strong relationship - contributes to mitigation and resilience.
	Policy LU.13.3. Consider retro-fitting suburbs for walkability and mixed-use.	yes	Strong relationship - contributes to mitigation and resilience.
	Policy LU.13.4. Plan suburban development to include a variety of housing options.	yes	Strong relationship - contributes to mitigation and resilience.
	Policy LU.13.5. Encourage developers to consider at least one floor of apartments or offices over commercial development in mixed-use and activity centers and corridors.	yes	Strong relationship - contributes to mitigation and resilience.
	Policy LU.13.6. Include a mix of uses and access to surrounding neighborhoods in new suburban commercial development.	yes	Strong relationship - contributes to mitigation and resilience.
	Policy LU.13.7. Include employment opportunities in all suburban activity centers.	yes	Strong relationship - contributes to mitigation and resilience.
	Policy LU.13.8. Locate civic spaces, parks, and institutional uses within neighborhood pedestrian sheds.	yes	Strong relationship - contributes to mitigation and resilience.
	Policy LU.13.9. Use open space and FUTS trails to provide walking and biking links from residential uses to employment, shopping, schools, parks, and neighborwoods.	yes	Strong relationship - contributes to mitigation and resilience.
	Policy LU.13.10. Protect wildlife corridors where appropriate.	yes	Strong relationship - contributes to mitigation and resilience.

Goal	Policy	Consistent?	Comments
	Policy LU.13.11. Promote cluster development as an alternative development pattern in appropriate locations as a means of preserving resources and to minimize service and utility costs.	yes	Strong relationship - contributes to mitigation and resilience.
RURAL AREA GOALS AND POLICIES Page IX-58			
Goal LU.14. Maintain the character of existing rural communities.		Goal: N/A	
	Policy LU.14.1. Maintain rural growth boundaries to preserve the integrity of open spaces identified in the *Greater Flagstaff Open Spaces and Greenways Plan* and updates.	yes	Contributes to resilience.
	Policy LU.14.2. Promote the coordination of the *Flagstaff Regional Plan, Coconino County Comprehensive Plan,* and area plans that takes into account local conditions and preferences of area residents.	N/A	
	Policy LU.14.3. Require future development in the unincorporated County areas to be consistent with the goals, policies, and conservation guidelines of the *Coconino County Comprehensive Plan* and any applicable local area plans.	N/A	
	Policy LU.14.4. Connect rural neighborhoods using roads, trails (equestrian, foot, and bicycle), and public access to the National Forest.	yes	Contributes to resilience.
	Policy LU.14.5. Promote cluster development as an alternative development pattern in appropriate locations as a means of preserving rural resources and to minimize service and utility costs.	yes	Contributes to mitigation and resilience.
	Policy LU.14.6. Plan for development outside of the rural growth boundary to be very low density and to have integrated conservation design.	N/A	

Goal	Policy	Consistent?	Comments
	Policy LU.14.7. Establish opportunities for rural activity centers in specifically designated County areas with a range of uses, sizes, and designs appropriate to the communities they serve.	N/A	
	Policy LU.14.8. Locate commercial uses in the County in specifically designated activity centers intended to serve as focal points and meet local needs for the community, while avoiding a strip commercial pattern of development along the region's major roadways.	N/A	
	Policy LU.14.9. Preserve the rural character, open spaces, wildlife corridors, and neighborhoods at the periphery or just outside of the planning area as defined by the FMPO boundary.	N/A	
EMPLOYMENT AREA GOALS AND POLICIES Page IX-60			
Goal LU.15. Plan for and encourage employee-intensive uses throughout the area as activity centers, corridors, research and development offices, business parks, and light industrial areas to encourage efficient infrastructure and multimodal commuting.		Goal: Yes	Contributes to mitigation and resilience.
	Policy LU.15.1. Encourage the grouping of medical and professional offices, light industrial, research, and skill training with other necessary workforce services and transportation options.	yes	Contributes to mitigation and resilience.
	Policy LU.15.2. Consider the compatible integration of residential uses and proposed employment centers to reduce vehicle trips and commute times.	yes	Contributes to mitigation and resilience.
	Policy LU.15.3. Incorporate neighborhood/support retail and other commercial uses, including childcare facilities, within new and renovated employment centers.	yes	Contributes to mitigation and resilience.
	Policy LU.15.4. Accommodate safe and convenient walking, biking, and transit facilities in existing and proposed employment centers.	yes	Contributes to mitigation and resilience.

Goal	Policy	Consistent?	Comments
Goal LU.16. Establish heavy industrial areas that provide for the manufacturing of goods, flexible space, and		Goal: N/A	
intermodal facilities that are well maintained, attractive and compatible with adjoining nonindustrial uses.	Policy LU.16.1. Encourage the continued intensification, expansion, and protection of existing industrial, warehousing, and distribution uses from encroachment where appropriate.	N/A	
Refer to Policy ED.3.9 in Chapter XIV - Economic Development.	Policy LU.16.2. Ensure new industrial areas are compatible with surrounding areas.	N/A	
	Policy LU.16.3. Locate new industrial areas near the rail line, major highways or the interstate, and ensure they are designed to be compatible with surrounding uses and gateway features.	yes	Contributes to mitigation by reducing the distances large vehicles must travel to get from transportation facilities (the highway or the rail line) to the industrial area.
	Policy LU.16.4. Limit the impacts of truck traffic on residential areas.	N/A	
	Policy LU.16.5. Consider all health impacts on the community in the design of new industrial uses, such as wastewater treatment, traffic safety, noise, and other impacts.	yes	Contributes to resilience and equity by improving the health of Flagstaff's residents, particularly those who are in lower-income households, who may be more likely to live near industrial uses.

Goal	Policy	Consistent?	Comments
SPECIAL PLANNING AREA GOALS AND POLICIES Page IX-61			
Goal LU.17. Protect, manage, and enhance the region's Special Planning Areas to benefit the whole community.		Goal: N/A	
	Policy LU.17.1. Enhance connectivity and coordinated planning efforts with neighborhoods contiguous to special planning areas.	yes	Connectivity contributes to mitigation goals, by ensuring transportation networks have appropriate connections, enabling shorter distances to travel for all modes.
ACTIVITY CENTERS AND COMMERCIAL CORRIDORS GOALS AND POLICIES Page IX-68			
Goal LU.18. Develop well designed activity centers and corridors with a variety of employment, business, shopping, civic engagement, cultural opportunities, and residential choices.		Goal: Yes	Strong relationship - Activity centers reduce emissions by grouping many destinations in one area, reducing the distance between destinations and reducing the length of trips, both of which encourage the use of active modes like the bus, walking, and biking.
	Policy LU.18.1. Design activity centers and corridors appropriate to and within the context of each area type: urban, suburban, or rural.	N/A	
	Policy LU.18.2. Strive for activity centers and corridors that are characterized by contextual and distinctive identities, derived from history, environmental features, a mix of uses, well-designed public spaces, parks, plazas, and high-quality design.	yes	Strong relationship – Mixed uses reduce the distance between destinations and reducing the length of trips, both of which encourage the use of active modes like the bus, walking, and biking.
	Policy LU.18.3. Redevelop underutilized properties, upgrade aging infrastructure, and enhance rights-of-way and public spaces so that existing activity centers and corridors can realize their full potential.	yes	Contributes to mitigation and resilience.

Goal	Policy	Consistent?	Comments
	Refer to Chapter XI - Cost of Development for the potential of public-private partnerships.		
	Policy LU.18.4. Encourage developers to provide activity centers and corridors with housing of various types and price points, especially attached and multi-family housing.	yes	Contributes to mitigation and resilience.
	Policy LU.18.5. Plan for and support multi-modal activity centers and corridors with an emphasis on pedestrian and transit friendly design.	yes	Contributes to mitigation and resilience.
	Policy LU.18.6. Support increased densities within activity centers and corridors.	yes	Contributes to mitigation and resilience.
	Policy LU.18.7. Concentrate commercial, retail, services, and mixed use within the activity center's commercial core.	yes	Strong relationship – Concentrating mixed uses within the commercial core helps decrease the distance between destinations and reduce the length of trips, both of which encourage the use of active modes like the bus, walking, and biking. A strong commercial core also supports pedestrian activity.
	Policy LU.18.8. Increase residential densities, live-work units, and home occupations within the activity center's pedestrian shed.	yes	Contributes to mitigation and resilience.
	Policy LU.18.9. Plan activity centers and corridors appropriate to their respective regional or neighborhood scale.	yes	Contributes to mitigation and resilience.
	Policy LU.18.10. Corridors should increase their variety and intensity of uses as they approach activity centers.	yes	Contributes to mitigation and resilience.
	Policy LU.18.11. Land use policies pertaining to a designated corridor generally apply to a depth of one parcel or one and one-half blocks, whichever is greater.	N/A	
	Policy LU.18.12. Corridors should focus commercial development to the corridor frontage and residential to the back.	yes	Contributes to mitigation by supporting the pedestrian environment.

Goal	Policy	Consistent?	Comments
	Policy LU.18.13. Promote higher density development in targeted areas where economically viable and desired by the public.	yes	Contributes to mitigation: density contributes to more highly-activated pedestrian spaces, makes transit more feasible, and reduces the distance people have to travel between destinations.
	Policy LU.18.14. Endorse efficiency of infrastructure with compact development within targeted activity centers.	yes	Contributes to mitigation: compact development contributes to more highly-activated pedestrian spaces, makes transit more feasible, and reduces the distance people have to travel between destinations.
	Policy LU.18.15. Actual pedestrian-shed boundaries will be established considering opportunities and constraints posed by natural and man-made barriers like terrain or the interstate, road networks, and existing development patterns.	yes	Contributes to mitigation and resilience.
	Policy LU.18.16. Adopt traffic regulations to increase awareness of pedestrian-oriented design for activity centers.	yes	Contributes to mitigation and resilience.
	Policy LU.18.17. Mixed use developments over 50 units per acre should be located in regional-scale activity centers.	N/A	
	Policy LU.18.18. New development within existing activity centers should enhance the existing street pattern to meet the goals and policies of the Regional Plan related to connectivity and complete streets.	yes	Contributes to mitigation and resilience.
	Policy LU.18.19. New development in future activity centers should create street patterns that implement the characteristics of urban and suburban place-making within a functional transportation system that minimized dead ends and offset street and driveway connections.	yes	Contributes to mitigation.
	LU.18.20. Major streets in urban activity centers should have urban-form buildings with their primary pedestrian entrances facing the major	yes	Supports mitigation by supporting the pedestrian environment, which can lead to more walking instead of driving.

Goal	Policy	Consistent?	Comments
	street. Secondary entrances could be located to meet other access needs for the building use.		
Goal LU.19. Develop a manageable evolution of the main corridors into contextual place makers.		Goal: Yes	
	Policy LU.19.1. Develop a specific plan for each "Great Street" corridor.	yes	Supports mitigation by supporting the pedestrian environment, which can lead to more walking instead of driving.
	Policy LU.19.2. Establish the context and regional or neighborhood scale of each corridor prior to design with special consideration for those intended to remain residential or natural in character.	N/A	
	Policy LU.19.3. Enhance the viewsheds and frame the view along the corridors through design.	N/A	
	Policy LU.19.4. Balance automobile use, parking, bicycle access, while prioritizing pedestrian safety along all corridors.	yes	Contributes to mitigation by prioritizing pedestrian safety, which can lead to improvements in the pedestrian experience – this can lead to more walking and even biking.
	Refer to Chapter VIII - Community Character for the discussion of "Great Streets."		
Chapter X - Transportation			
The proposed amendment is compatible with the goals and policies of the Transportation Chapter, with the exception of one policy: T.8.1. The applicant proposes to revise this policy to improve clarity and ensure compatibility between the policy T.8.1 and the proposed text amendment; this policy revision is described starting in section II.3, Description and Need. The remaining goals and policies of the Transportation Chapter are very relevant to climate action; several important intersections are discussed below.			

Goal	Policy	Consistent?	Comments
Many of the goals and policies of this chapter, from those aiming for improved mobility (Goal T.1) to improvements in safety (Goal T.2) to improved transportation infrastructure for all modes (Goals T.3, 4, 5, 6, and 7) are closely linked to climate action. The proposed text amendment includes more ambitious greenhouse gas emissions goals that will only be achieved through significant changes to Flagstaff's current transportation planning, investments and operations. These changes will help better align Flagstaff's transportation actions with the goals and policies of this chapter, particularly Goals T.1 through Goal T.7. Improved mobility, safety, and infrastructure for all modes contributes to increased choices for Flagstaff residents, allowing them to choose modes that cause fewer greenhouse gas emissions or help to save money. Increased transportation choices contribute to resilience by reducing reliance on just one mode of transportation, particularly because the dominant mode (the personal vehicle) depends on fuel produced outside our community, that has low price stability. The more residents are able to walk, bike, or take the bus, not only are they reducing their emissions and saving money, but they are helping to support a more robust transportation system that is less reliant on just one mode of travel. The proposed text amendment will support the goals and policies outlined in Goals T.1 through T.7, with significant benefits to mitigation, adaptation, and equity. Goal T.8 and its associated policies focus on the automobile and roads. The policies center around maintaining roads, designing appropriate neighborhood streets, maintaining safety and supporting economic vitality. Policy T.8.3 and T.8.6 are well-aligned with climate action the proposed text amendments. There is potential for conflicts to arise when implementing policy T.8.4 and T.8.5, because implementation involves choices among competing values when land and budgets are limited – decisions inherent to any transportation project. These policies and their potential relationships to climate action are discussed at length below. Goals T.9 and T.10, on rail service and air travel, respectively, relate to community resilience and greenhouse gas emissions. Their relevance and compatibility is discussed for each relevant policy in the table below.			
MOBILITY AND ACCESS GOALS AND POLICIES Page X-6			
Goal T.1. Improve mobility and access throughout the region.		Goal: Yes	Improved mobility for all modes contributes to mitigation and resilience by helping people to meet their needs through a variety of transportation choices.
	Policy T.1.1. Integrate a balanced, multimodal, regional transportation system.	yes	Contributes to mitigation and resilience by encouraging walking, biking and transit. These modes are lower-emissions than traveling in personal vehicles. A community is more

Goal	Policy	Consistent?	Comments
			resilient if its residents have multiple good transportation choices.
	Policy T.1.2.Apply Complete Street Guidelines to accommodate all appropriate modes of travel in transportation improvement projects.	yes	Contributes to mitigation and resilience by encouraging walking, biking and transit. These modes are lower-emissions than traveling in personal vehicles. A community is more resilient if its residents have multiple good transportation choices.
	Policy T.1.3.Transportation systems are consistent with the place type and needs of people.	N/A	
	Policy T.1.4. Provide a continuous transportation system with convenient transfer from one mode to another.	yes	Contributes to mitigation and resilience by encouraging walking, biking and transit. These modes are lower-emissions than traveling in personal vehicles. A community is more resilient if its residents have multiple good transportation choices.
	Policy T.1.5. Manage the operation and interaction of all modal systems for efficiency, effectiveness, safety, and to best mitigate traffic congestion.	yes	Contributes to mitigation and resilience by encouraging walking, biking and transit. These modes are lower-emissions than traveling in personal vehicles. A community is more resilient if its residents have multiple good transportation choices.
	Policy T.1.6. Provide and promote strategies that increase alternate modes of travel and demand for vehicular travel to reduce peak period traffic.	yes	Contributes to mitigation and resilience by encouraging walking, biking and transit. These modes are lower-emissions than traveling in personal vehicles. A community is more resilient if its residents have multiple good transportation choices.

Goal	Policy	Consistent?	Comments
	Policy T.1.7. Coordinate transportation and other public infrastructure investments efficiently to achieve land use and economic goals.	N/A	
	Policy T.1.8. Plan for development to provide on-site, publicly-owned transportation improvements and provide adequate parking.	N/A	
SAFE AND EFFICIENT MULTIMODAL TRANSPORTATION GOALS AND POLICIES Page X-8			
Goal T.2. Improve transportation safety and efficiency for all modes.		Goal: Yes	Contributes to mitigation and resilience by encouraging walking, biking and transit. These modes are lower-emissions than traveling in personal vehicles. A community is more resilient if its residents have multiple good transportation choices.
	Policy T.2.1. Design infrastructure to provide safe and efficient movement of vehicles, bicycles, and pedestrians.	yes	Contributes to mitigation and resilience by encouraging walking, biking and transit. These modes are lower-emissions than traveling in personal vehicles. A community is more resilient if its residents have multiple good transportation choices.
	Policy T.2.2. Consider new technologies in new and retrofitted transportation infrastructure.	yes	New technology can help reduce emissions by making vehicle travel more energy-efficient and by supporting active modes, i.e., better bike detection technology at traffic signals.
	Policy T.2.3. Provide safety programs and infrastructure to protect the most vulnerable travelers, including the young, elderly, mobility impaired, pedestrians, and bicyclists.	yes	Contributes to equity.

Goal	Policy	Consistent?	Comments
	Note: Mobility-impaired includes hearing and sight-impaired persons.		
	Policy T.2.4. Consider dedicated transit ways where appropriate.	yes	Contributes to mitigation and resilience by encouraging transit, which has low emissions and can support density. A community is more resilient if its residents have multiple good transportation choices.
	Policy T.2.5. Continue to seek means to improve emergency service access, relieve and manage peak hour congestion, and expand multi-modal options in the US 180 corridor.	yes	Contributes to mitigation.
ENVIRONMENTAL CONSIDERATIONS GOALS AND POLICIES Page X-9			
Goal T.3. Provide transportation infrastructure that is conducive to conservation, preservation, and development goals to avoid, minimize, or mitigate impacts on the natural and built environment.		Goal: Yes	Strong relationship - contributes to mitigation and resilience.
	Policy T.3.1. Design and assess transportation improvement plans, projects, and strategies to minimize negative impacts on air quality and maintain the region's current air quality.	yes	Strong relationship - contributes to mitigation and equity.
	Policy T.3.2. Promote transportation systems that reduce the use of fossil fuels and eventually replace with carbon neutral alternatives.	yes	Strong relationship - contributes to mitigation.
	Policy T.3.3. Couple transportation investments with desired land use patterns to enhance and protect the quality and livability of neighborhoods, activity centers, and community places.	yes	Contributes to mitigation and resilience.
	Policy T.3.4.Actively manage parking, including cost and supply, to support land use, transportation, and economic development goals.	yes	Potentially contributes to mitigation.

Goal	Policy	Consistent?	Comments
	Policy T.3.5. Design transportation infrastructure that implements ecosystem-based design strategies to manage stormwater and minimize adverse environmental impacts.	yes	Contributes to resilience.
	Policy T.3.6. Seek to minimize the noise, vibration, dust, and light impacts of transportation projects on nearby land uses.	N/A	
	Policy T.3.7. Design transportation infrastructure to mitigate negative impacts on plants, animals, their habitats, and linkages between them.	N/A	
	Policy T.3.8. Promote transportation options such as increased public transit and more bike lanes to reduce congestion, fuel consumption, and overall carbon emissions and promote walkable community design.	yes	Strong relationship - contributes to mitigation and resilience.
QUALITY DESIGN GOALS AND POLICIES Page X-9			
Goal T.4. Promote transportation infrastructure and services that enhance the quality of life of the communities within the region.		Goal: Yes	
	Policy T.4.1. Promote context sensitive solutions (CSS) supportive of planned land uses, integration of related infrastructure needs, and desired community character elements in all transportation investments.	N/A	
	Policy T.4.2. Design all gateway corridors, streets, roads, and highways to safely and attractively accommodate all transportation users with contextual landscaping and appropriate architectural features.	yes	Contributes to mitigation.
	Policy T.4.3. Design transportation facilities and infrastructure with sensitivity to historic and prehistoric sites and buildings, and incorporate elements that complement our landscapes and views.	N/A	
PEDESTRIAN INFRASTRUCTURE GOALS AND POLICIES Page X-10			

Goal	Policy	Consistent?	Comments
Goal T.5. Increase the availability and use of pedestrian infrastructure, including FUTS, as a critical element of a safe and livable community.		Goal: Yes	Strong relationship - contributes to mitigation, resilience and equity.
	Policy T.5.1. Provide accessible pedestrian infrastructure with all public and private street construction and reconstruction projects.	yes	Contributes to mitigation and resilience.
	Policy T.5.2. Improve pedestrian visibility and safety and raise awareness of the benefits of walking.	yes	Contributes to mitigation and resilience.
	Policy T.5.3. Identify specific pedestrian mobility and accessibility challenges and develop a program to build and maintain necessary improvements.	yes	Contributes to mitigation, resilience and equity.
	Policy T.5.4. Design streets with continuous pedestrian infrastructure of sufficient width to provide safe, accessible use and opportunities for shelter.	yes	Contributes to mitigation, resilience and equity.
BICYCLE INFRASTRUCTURE GOALS AND POLICIES Page X-11			
Goal T.6. Provide for bicycling as a safe and efficient means of transportation and recreation.		Goal: Yes	Strong relationship - contributes to mitigation, resilience and equity.
	Policy T.6.1. Expand recognition of bicycling as a legitimate and beneficial form of transportation.	yes	Contributes to mitigation, resilience and equity.
	Policy T.6.2. Establish and maintain a comprehensive, consistent, and highly connected system of bikeways and FUTS trails.	yes	Contributes to mitigation and resilience.
	Policy T.6.3. Educate bicyclists and motorists about bicyclist safety through education programs, enforcement, and detailed crash analyses.	yes	Contributes to mitigation and resilience.
	Policy T.6.4. Encourage bikeways and bicycle infrastructure to serve the needs of a full range of bicyclist experience levels.	yes	Contributes to mitigation, resilience and equity.

Goal	Policy	Consistent?	Comments
	Policy T.6.5. Provide short- and long-term bicycle parking where bicyclists want to travel.	yes	Contributes to mitigation and resilience.
	Policy T6.6. Integrate policies to increase bicycling and meet the needs of bicyclists into all relevant plans, policies, studies, strategies, and regulations.	yes	Contributes to mitigation and resilience.
TRANSIT GOALS AND POLICIES Page X-15			
Goal T.7. Provide a high-quality, safe, convenient, accessible public transportation system, where feasible, to serve as an attractive alternative to single-occupant vehicles.		Goal: Yes	Strong relationship - contributes to mitigation, resilience and equity.
	Policy T.7.1. Cooperate with NAIPTA in developing and implementing the five-year transit master planning goals and objectives to continuously improve service, awareness, and ridership.	yes	Contributes to mitigation, resilience and equity.
	Policy T.7.2. Provide public transit centers and options that are effectively distributed throughout the region to increase access to public transit.	yes	Contributes to mitigation, resilience and equity.
	Policy T.7.3. Support a public transit system design that encourages frequent and convenient access points, for various transportation modes and providers, such as private bus and shuttle systems, park-and-ride lots for cars and bicycles, and well- placed access to bus, railroad, and airline terminal facilities.	yes	Contributes to mitigation, resilience and equity.
	Policy T.7.4. Support mobility services for seniors and persons with mobilityneeds.	yes	Contributes to mitigation, resilience and equity.
	Policy T.7.5. Incorporate adopted plans and policies for non-motorized and public transportation in the permitting process for all development or land use proposals, including provisions for efficient access and mobility, and convenient links between pedestrian, bicycle, and transit facilities.	yes	Contributes to mitigation, resilience and equity.

Goal	Policy	Consistent?	Comments
	Policy T.7.6. Coordinate with NAIPTA to establish rural transit service within the region that is consistent with County land use plans, based on funding availability, cost effectiveness, location of major trip generators, distance between generators, and the needs of transit-dependent individuals.	yes	Contributes to mitigation, resilience and equity.
	Note: Transit dependent individuals are those who can only get around via public transit, and who do not own a car or cannot drive.		
AUTOMOBILE GOALS AND POLICIES Page X-20			
Goal T.8. Establish a functional, safe, and aesthetic hierarchy of roads and streets.		Goal: Yes	
	Policy T.8.1. Promote efficient network connectivity to and within major trade corridors, employment centers, and special districts that enhances the region's standing as a major economic hub.	Policy revised to avoid incompatibility	Proposed revisions to this policy have been noted. This revision is being proposed to clarify the intent of the policy and avoid any incompatibility. The need for this revision and its benefits are discussed in section II.3.
	Policy T.8.2. Maintain the road and street classification system that is based on context, function, type, use, and visual quality.	N/A	
	Policy T.8.3. Design neighborhood streets using appropriate traffic calming techniques and street widths to sustain quality of life while maintaining traffic safety.	yes	Contributes to mitigation, resilience and equity.
	Policy T.8.4. Protect rights-of-way for future transportation corridors.	N/A	Future transportation corridors can have a range of impacts on climate action goals, depending on the intent and design of the corridor. The proposed amendment is not necessarily incompatible with this policy, due to the large variation in the impacts of future transportation corridors. Future transportation corridors could

Goal	Policy	Consistent?	Comments
			be used to provide access to new activity centers that promote walkability, affordable housing, resilient structures and transit connections. On the other hand, future transportation corridors could encourage more driving and therefore increase greenhouse gas emissions. However, the policies in this Chapter and throughout the Regional Plan support transportation corridors that accommodate all modes, connect neighborhoods, and support economic development. The proposed amendment is not incompatible with a transportation corridor that achieves the goals and implements the policies of this Plan.
	Policy T.8.5. Support the area's economic vitality by improving intersection design for freight movements.	N/A	Improving intersection design for freight movements could be incompatible with increased biking and walking, which could hinder attempts to shift modes of transportation, and result in increased or stable greenhouse gas emissions. While intersections can be designed to safely accommodate for all users, including freight, there are intersection size challenges that are not easily solved. This potential conflict is present among the vehicle policies and the bike and pedestrian policies within this Plan, as well as with the original climate policies. During transportation planning and design processes, staff will need to weigh the appropriate prioritization of modes, according to the priorities of this Plan. This amendment will not change that analysis or prioritization process.
	Policy T.8.6. Maintain the City's street infrastructure in a cost effective manner to ensure the safety and convenience of all users.	Yes.	Contributes to mitigation and resilience by encouraging walking, biking and transit. These

Goal	Policy	Consistent?	Comments
			modes are lower-emissions than traveling in personal vehicles. A community is more resilient if its residents have multiple good transportation choices.
PASSENGER RAIL AND RAIL FREIGHT GOALS AND POLICIES Page X-21			
Goal T.9. Strengthen and support rail service opportunities for the region's businesses and travelers.		Goal: Yes	Contributes to mitigation and resilience by supporting rail travel, which is a low-emissions form of regional transportation.
	Policy T.9.1. Seamlessly integrate passenger rail with other travel modes including connectivity and operational improvements to the downtown passenger rail station and surroundings.	yes	Contributes to mitigation and resilience by supporting rail travel, which is a low-emissions form of regional transportation.
	Policy T.9.2. Promote Amtrak service and support opportunities for interregional passenger rail service.	yes	Contributes to mitigation and resilience by supporting rail travel, which is a low-emissions form of regional transportation.
	Policy T.9.3. Promote development of rail spurs and an intermodal freight facility or facilities as needed to support viable economic growth.	N/A	
	Policy T.9.4. Increase the number of grade-separated railroad crossings.	N/A	
AIR TRAVEL GOALS AND POLICIES Page X-21		Goal: Yes	
Goal T.10. Strengthen and expand the role of Flagstaff Pulliam Airport		Goal: Potential inconsistency.	This goal can strengthen resilience, but can also lead to an increase in emissions. This tension among economic growth, air travel and goals to reduce greenhouse gas emissions is one that City leaders, City staff

Goal	Policy	Consistent?	Comments
as the dominant hub for passenger, air freight, public safety flights, and other services in northern Arizona.			and the community routinely grapple with. This potential inconsistency already exists among the current Regional Plan goal E&C.2 to reduce greenhouse gas emissions, just as other tensions among goals exist throughout the Regional Plan. This potential for conflict does not need to be resolved through further Plan revisions – it is reflective of familiar tensions among competing goals, and illustrates the need for the Flagstaff community to find balance as it seeks out economic growth and strong climate action. City decision-makers and staff will need to weigh these tensions and work to balance out the impacts on a case-by-case basis.
	Policy T.10.1. Maintain and expand Flagstaff Pulliam Airport as an important link to the national air transportation system.	yes	
	Policy T.10.2. Improve multimodal access and service to and from the airport including transit, bicycle, and parking services.	yes	Contributes to mitigation.
	Policy T.10.3. Seek opportunities to expand destinations and frequency of regional air service throughout the southwest and west.	Goal: Potential inconsistency.	Airport expansion has the potential to increased emissions due to increased air flights. The value of economic development through airport expansion will need to be weighed in light of increased emissions. As discussed under goal T.10, this inconsistency already existed between expanding flights and reducing greenhouse gas emissions (the original Goal E&C.2). City decision-makers and staff will need to weigh these tensions

Goal	Policy	Consistent?	Comments
			and work to balance out priorities and impacts on a case-by-case basis.
	Policy T.10.4. Plan and manage transportation infrastructure to discourage land uses incompatible with the airport and flight zones.	N/A	
PUBLIC SUPPORT FOR TRANSPORTATION GOALS AND POLICIES Page X-22			
Goal T.11. Build and sustain public support for the implementation of transportation planning goals and policies, including the financial underpinnings of the Plan, by actively seeking meaningful community involvement.		Goal: Yes	Contributes to equity.
	Policy T.11.1. Maintain the credibility of the regional transportation planning process through the application of professional standards in the collection and analysis of data and in the dissemination of information to the public.	N/A	
	Policy T.11.2. Approach public involvement proactively throughout regional transportation planning, prioritization, and programming processes, including open access to communications, meetings, and documents related to the Plan.	N/A	
	Policy T.11.3. Include and involve all segments of the population, including those potentially underrepresented such as the elderly, low-income, and minorities (see Title VI of the Civil Rights Act of 1964 and Executive Order 12898 - Environmental Justice).	yes	Contributes to equity.
	Policy T.11.4.Attempt to equitably distribute the burdens and benefits of transportation investments to all segments of the community.	yes	Contributes to equity.
	Policy T.11.5. Promote effective intergovernmental relations through agreed-upon procedures to consult, cooperate, and coordinate transportation-related activities and decisions, including regional efforts	N/A	

Goal	Policy	Consistent?	Comments
	to secure funding for the improvement of transportation services, infrastructure, and facilities.		
Chapter XI - Cost of Development			
The proposed amendment is compatible with the goals and policies of the Cost of Development Chapter. These goals and policies are somewhat relevant to climate action, due to their influence on infrastructure investments and the disincentives and incentives for new developments. As climate changes increases stressors on community systems, there will be increased demands and new challenges for public infrastructure. A resilient community must understand the costs of developments and of maintaining and upgrading its infrastructure, and set up systems and investment plans to ensure that infrastructure is adequate for a future of increased volatility and accelerated change. The proposed text amendment, by strengthening Flagstaff's resilience and adaptation goals, can support the achievement of the goals and policies outlined in this chapter.			
COST OF DEVELOPMENT GOALS AND POLICIES Page XI-3			
Goal CD.1. Improve the City and County financial systems to provide for needed infrastructure development and rehabilitation, including maintenance and enhancement of		Goal: Yes	Contributes to resilience by ensuring Flagstaff has the resources needed to maintain its infrastructure, which will see more stress due to climate change.
	Policy CD.1.1.At the City level, provide a regular analysis of funding and financing policy alternatives needed for infrastructure development and rehabilitation.	N/A	
	Policy CD.1.2.Work collaboratively with private and non-profit economic development groups to provide for the most efficient and effective use of public and private development dollars.	N/A	

Goal	Policy	Consistent?	Comments
existing infrastructure.	Policy CD.1.3.Analyze the feasibility of expanding development fees within the City of Flagstaff, which may enable future development to provide for related adequate off-site improvements and facilities.	N/A	
	Note: Arizona state statute requires cities to analyze development fees every five years.		
	Policy CD.1.4. Develop a cost-benefit analysis protocol between regional economic development partners when the public is expected to invest.	N/A	
	Policy CD.1.5. Require that new development pay for a fair and rough proportional share of public facilities, services, and infrastructure.	yes	Contributes to resilience by ensuring Flagstaff has the resources needed to maintain its infrastructure, which will see more stress due to climate change.
	Policy CD.1.6. Encourage redevelopment projects to utilize private/public partnerships in order to succeed.	N/A	
	Refer to reinvestment and redevelopment discussions in Chapter IX - Growth Areas & Land Use and Chapter XIV - Economic Development for more information.		
Chapter XII - Public Buildings, Services, Facilities, & Safety			
The proposed amendment is compatible with the goals and policies of the Public Buildings, Services, Facilities and Safety Chapter. The goals and policies of this chapter are highly aligned with and well-supported by the text amendment's increased emphasis on preparation and resilience. The planning, operational, engagement and educational resilience policies may be accelerated by the proposed text amendment and the City's ambitious climate action goals. As the climate changes and volatility and disruptions increase, planning for public buildings, facilities and services becomes ever more important: the City will be called upon to respond to challenges more often, and will see its facilities and services used in new ways. Collaborative planning and creative partnerships, as envisioned in this chapter, will increase community resilience and help to achieve the goals and policies of this chapter as well as those outlined in the text amendment.			

Goal	Policy	Consistent?	Comments
RESILIENCY PLANNING GOALS AND POLICIES Page XII-5			
Goal PF.1.Work across all government operations and services to prepare for the impacts of natural and human-caused hazards.		Goal: Yes	Strongly related to resilience
	Planning		
	Policy PF.1.1. Consider climate resiliency and preparedness in community planning and development to be better prepared for changing conditions.	Yes	Strongly related - contributes to resilience.
	Operational		
	Policy PF.1.2.Allocate available public resources necessary for the City and County to prepare and adapt for natural and human-caused hazards so that all government operations support community resiliency.	yes	Strongly related - contributes to resilience.
	Policy PF.1.3. Support evidence-based, ongoing assessment of the region's vulnerability and risk to changes in local climate. Incorporate future climate projections and historic data into emergency operations and hazard mitigation planning efforts.	yes	Strongly related - contributes to resilience.
	Policy PF.1.4. Build, sustain, and leverage partnerships with local and regional stakeholders for collective investment, efficient action, and shared responsibility in the building of local resiliency.	yes	Strongly related - contributes to resilience.
	Community Engagement and Education		

Goal	Policy	Consistent?	Comments
	Policy PF.1.5. Support proactive communication and education aimed at both residents and governmental operations as a means to build individual, organizational, and community resiliency to weather-related impacts and climate-caused or natural disasters.	yes	Strongly related - contributes to resilience.
	Policy PF.1.6. Educate and inform the community about how to cope with climatic variability and what the local government entities are doing on a systemic level.	yes	Strongly related - contributes to resilience.
	Community Engagement and Education		
	Policy PF.1.7. Develop strategies and take meaningful steps toward extending the life of the landfill.	yes	Strongly related - contributes to resilience and mitigation.
LOCATING FACILITIES GOALS AND POLICIES Page XII-9			
Goal PF.2. Provide sustainable and equitable public facilities, services, and infrastructure systems in an efficient and effective manner to serve all		Goal: Yes	
	Policy PF.2.1. Prioritize infrastructure upgrades to encourage redevelopment and infill and meet land use goals.	Yes	Contributes to mitigation by reducing the distance traveled to reach destinations.
	Policy PF.2.2. Require new developments to pay their fair share toward the cost of additional capital improvements, infrastructure, and public service needs created by the development.	Yes	Contributes to resilience by ensuring Flagstaff has the resources needed to maintain its infrastructure, which will see more stress due to climate change.
	Refer to Chapter XI - Cost of Development for more information.		

Goal	Policy	Consistent?	Comments
population areas and demographics.	Policy PF.2.3. Provide accessible public facilities and services in strategic locations.	Yes	Contributes to mitigation by reducing the distance traveled to reach destinations.
	Policy PF.2.4. Support quality civic design for all public facilities.	N/A	
	Policy PF.2.5. Pursue cooperative and coordinated planning between government jurisdictions, agencies, educational institutions, non-profits, and private service providers.	Yes	Contributes to resilience by improving relationships and increasing connections among agencies. These relationships are particularly helpful during disasters and emergency events.
PUBLIC SAFETY GOALS AND POLICIES Page XII-12			
Goal PF.3. Provide high-quality emergency response and public safety services including law enforcement, fire, medical, and ambulance transport service.		Goal: Yes	Contributes to resilience.
	Policy PF.3.1. Maintain high-quality effectiveness and efficiency in law enforcement, fire, and emergency services to the extent that is consistent with governmental operations, plans, public policies, population served, and monies available.	Yes	Contributes to resilience.
	Policy PF.3.2. Locate City of Flagstaff and rural fire districts within the optimal response time for new and existing development.	N/A	
	Policy PF.3.3. Locate law enforcement facilities (i.e., main and sub-stations) within the prescribed response time goals and service needs of the community.	N/A	
	Policy PF.3.4. Maintain emergency management operations to protect life and property during disaster events in natural hazard areas and built environments.	Yes	Contributes to resilience.
	Policy PF.3.5. Support coordination of public safety and emergency management operations through mutual aid agreements.	Yes	Contributes to resilience.

Goal	Policy	Consistent?	Comments
Chapter XIII - Neighborhoods, Housing, & Urban Conservation			
The proposed amendment is compatible with the goals and policies of the Neighborhoods, Housing and Urban Conservation Chapter. Strong neighborhoods, as envisioned in the first goal of this chapter, contribute significantly to mitigation and adaptation goals. Strong neighborhoods that are interconnected, have a mix of uses, and support multiple modes of travel can reduce greenhouse gas emissions and increase social connections and self-reliance. The proposed text amendment should help advance these goals and policies as the amendment strengthens support for climate action, including creating connected, mixed-use, dense neighborhoods. Goals to improve housing opportunities and eliminate homelessness and the associated housing, resource and programming policies are critical to ensure equity across our community. Climate change will increase the burdens for low-income, housing insecure, and unhoused people, who are already more vulnerable to community change, disruptive events, and health issues. The proposed text amendment elevates the issue of community equity and its importance when taking climate action. A new policy to review climate actions for its potential impacts on vulnerable populations can help to increase the focus on equity and housing, and may help to accelerate the implementation of these policies.			
NEIGHBORHOODS, HOUSING,AND URBAN CONSERVATION GOALS AND POLICIES Page XIII-9			
Goal NH.1. Foster and maintain healthy and diverse urban, suburban, and rural neighborhoods in the Flagstaff region.		Goal: Yes	Contributes to resilience.
	Policy NH.1.1. Preserve and enhance existing neighborhoods.	N/A	
	Policy NH.1.2. Respect traditions, identifiable styles, proportions, streetscapes, relationships between buildings, yards, and roadways; and use historically appropriate and compatible building and structural materials when making changes to existing neighborhoods, especially in historic neighborhoods.	N/A	
	Policy NH.1.3. Interconnect existing and new neighborhoods through patterns of development, with complete streets, sidewalks, and trails.	Yes	Contributes to mitigation and resilience.

Goal	Policy	Consistent?	Comments
	Policy NH.1.4. Foster points of activities, services, increased densities, and transit connections in urban and suburban neighborhoods.	Yes	Contributes to mitigation and resilience.
	Policy NH.1.5. Use traditional neighborhood design standards for new and revitalized urban neighborhoods, neighborhood plans, specific plans, or master plans.	Yes	Contributes to mitigation and resilience.
	Policy NH.1.6. New development, especially on the periphery, will contribute to completing neighborhoods, including interconnecting with other neighborhoods; providing parks, civic spaces, and a variety of housing types; and protecting sensitive natural and cultural features.	Yes	Contributes to mitigation and resilience.
	Policy NH.1.7. Develop appropriate programs and tools to ensure the appropriate placement, design, and operation of new student housing developments consistent with neighborhood character and scale.	N/A	
	Policy NH.1.8. Prioritize the stabilization of a neighborhood's identity and maintain cultural diversity as new development occurs.	N/A	
Goal NH.2. Look to downtown Flagstaff as the primary focal point of the community character.		Goal: Yes	Contributes to mitigation – the density of downtown Flagstaff helps to reduce greenhouse gas emissions and encourage active modes of transportation.
Refer to the Downtown goals and policies in Chapter IX - Growth Areas & Land Use	Policy NH.2.1. Encourage the rehabilitation of historic downtown structures and contextual new structures as office, retail, entertainment, and residential space to reinvigorate the area as a destination of culture, shopping, government, and the arts.	Yes	

Goal	Policy	Consistent?	Comments
	Policy NH.2.2. Plan for future downtown development and contiguous development that respects the established historic core, historical architecture, and urban design.	N/A	
	Policy NH.2.3. Continue the tradition of multi-story, multi-use buildings to maintain and increase a stable, mixed-income residential population when planning new structures in the downtown and Southside neighborhoods.	Yes	Contributes to mitigation, resilience and equity.
Goal NH.3. Make available a variety of housing types at different price points, to provide housing opportunity for all economic sectors.		Goal: Yes	Contributes to equity.
	Policy NH.3.1. Provide a variety of housing types throughout the City and region, including purchase and rental options, to expand the choices available to meet the financial and lifestyle needs of our diverse population.	Yes	Contributes to resilience and equity.
	Policy NH.3.2. Promote accessory dwelling units, where appropriate.	Yes	Contributes to mitigation, resilience and equity.
	Policy NH.3.3. Increase the availability of affordable housing for very low-income persons, through innovative and effective funding mechanisms.	Yes	Contributes to resilience and equity.
	Policy NH.3.4. Reuse former brownfields, vacant buildings, and commercial buildings to provide new mixed-use and/or housing options.	Yes	Contributes to resilience and equity.
	Policy NH.3.5. Encourage and incentivize affordable housing.	Yes	Contributes to resilience and equity.
Goal NH.4. All housing is safe and sanitary.		Goal: Yes	Contributes to equity.
	Policy NH.4.1. Expand the availability of affordable housing throughout the region by preserving existing housing, including housing for very low-income persons.	Yes	Contributes to equity.

Goal	Policy	Consistent?	Comments
	Policy NH.4.2. Reduce substandard housing units by conserving and rehabilitating existing housing stock to minimize impacts on existing residents.	Yes	Contributes to equity.
	Policy NH.4.3.Address accessibility issues and other housing barriers to persons with disabilities or special needs.	Yes	Contributes to equity.
	Policy NH.4.4. Encourage green practices in housing construction and rehabilitation that support durable, healthy, and energy efficient homes.	Yes	Contributes to mitigation, resilience and equity.
	Policy NH.4.5. Renovate the existing housing stock to conserve energy and reduce utility and maintenance costs for owners and occupants.	Yes	Contributes to mitigation, resilience and equity.
	Policy NH.4.6. Consider and integrate public transportation when possible in planning housing developments, to help reduce a household's transportation costs and minimize impact on the community's roads and transportation system.	Yes	Contributes to mitigation, resilience and equity.
	Policy NH.4.7. Enforce compliance with fair housing laws.	Yes	Contributes to equity.
Goal NH.5. Eliminate homelessness.		Goal: Yes	Contributes to equity.
	Policy NH.5.1. Provide adequate resources for families with children experiencing homelessness.	Yes	Contributes to equity.
	Policy NH.5.2. Provide adequate resources for individuals experiencing homelessness.	Yes	Contributes to equity.
	Policy NH.5.3. Support and expand programs that prevent homelessness.	Yes	Contributes to equity.
	Policy NH.5.4. Make transitional housing resources available to populations experiencing homelessness.	Yes	Contributes to equity.
Goal NH.6. Neighborhood		Goal: Yes	Contributes to mitigation: when infill, redevelopment and revitalization are successful,

Goal	Policy	Consistent?	Comments
conservation efforts of revitalization, redevelopment, and infill are compatible with and enhance our overall community character.			this helps to encourage more infill and revitalization, which in turn reduces emissions from transportation
	Policy NH.6.1. Promote quality redevelopment and infill projects that are contextual with surrounding neighborhoods. When planning for redevelopment, the needs of existing residents should be addressed as early as possible in the development process.	N/A	
	Policy NH 6.2. Use urban conservation tools to revitalize existing underutilized activity centers to their potential.	Yes	Contributes to mitigation, resilience and equity.
Chapter XIV - Economic Development			
The proposed amendment is compatible with the goals and policies of the Economic Development Chapter. The goals and policies of the Economic Development Chapter are generally supported by the proposed text amendment. The increased emphasis on resilience and equity in the proposed amendment will support several policies under responsive government, education and workforce training, and business retention and expansion. A stronger economy and a resilient community are mutually supportive: when businesses and residents are successful, they are more likely to thrive amidst disruptive events and long-term challenges. By increasing the emphasis on resilience and equity, the proposed text amendment can support the implementation of these goals and policies. Several policies have large, positive impacts on community resilience, from redundant telecommunications systems to increased local and regional food production. Many goals and policies in this section will reduce community emissions, from encouraging energy and water efficiency to developing activity centers and encouraging redevelopment and infill. The proposed text amendment can accelerate the implementation of these goals and policies due to their alignment with the City's climate goals. In general, climate action and economic development can be aligned to foster innovative collaborations with existing and new businesses, that can help achieve the goals of both this chapter and the Climate Change and Adaptation Section.			
RESPONSIVE GOVERNMENT GOALS AND POLICIES Page XIV-4			
		Goal: Yes	

Goal	Policy	Consistent?	Comments
Goal ED.1. Create a healthy environment for business by ensuring transparent, expeditious, and predictable government processes.	Policy ED.1.1. Maintain the commitment by City and County government bodies to establish new public-private partnerships to spur economic development where they are potentially an effective tool.	N/A.	
	Policy ED.1.2. Steadily improve access to easily understandable public information.	N/A.	
	Policy ED.1.3. Use economic best practices to promote quality and fiscally sound projects.	N/A.	
	Policy ED.1.4. Encourage local governments and the surrounding sovereign tribal nations to collaborate on mutually beneficial economic development initiatives.	N/A.	
	Policy ED.1.5. Work cooperatively as a region towards developing a redundant telecommunications system.	Yes.	Redundancy is incredibly important to resilience.
	Policy ED.1.6. Actively recruit diverse representation for all committee vacancies.	Yes.	Contributes to equity.
	Policy ED.1.7. Establish policy and tools to consider the impacts of redevelopment on local residents.	Yes.	Contributes to equity.
EDUCATION AND WORKFORCE TRAINING GOALS AND POLICIES Page XIV-7			
Goal ED.2. Support and encourage an excellent educational		Goal: Yes	Contributes to equity.
	Policy ED.2.1. As industry sectors emerge and grow, encourage regional workforce development partners to take a proactive role by preparing the local labor force for current and future workforce needs.	N/A.	

Goal	Policy	Consistent?	Comments
system that promotes critical thinking and job training programs at all levels.	Policy ED.2.2. Support collaborative workforce training efforts by secondary schools, Coconino Community College, Northern Arizona University, and regional economic development partners.	N/A.	
	Policy ED.2.3. Encourage efforts to provide a full range of high-quality educational opportunities for life-long learning for all residents.	N/A.	
	Policy ED.2.4. Promote science, technology, engineering, mathematics, liberal arts, and entrepreneurship education at all levels.	N/A.	
BUSINESS RETENTION, EXPANSION,AND ENTREPRENEURSHIP GOALS AND POLICIES Page XIV-8			
Goal ED.3. Regional economic development partners support the start-up, retention, and expansion of existing business enterprises.		Goal: Yes	Strong businesses contribute to a stronger, more resilient community; these businesses will also be partners in achieving the City's climate goals.
	Policy ED.3.1. Encourage regional economic development partners to continue proactive programs to foster the retention and expansion of existing enterprises and home-based businesses in the community.	N/A.	
	Policy ED.3.2. Strengthen the arts, culture, and education sectors as important economic drivers in the community.	N/A.	
	Policy ED.3.3. Support plans, programs, and capital expenditures to stimulate the investment of private capital in existing commercial areas for all industry sectors.	N/A.	
	Policy ED.3.4.Take advantage of federal, state, and local incentives available for business retention and expansion efforts.	N/A.	

Goal	Policy	Consistent?	Comments
	Policy ED.3.5.Advocate the economic sustainability and growth of businesses with opportunities for transitional commercial space, leased space, and property ownership.	N/A.	
	Policy ED.3.6. Foster entrepreneurialism and start-up businesses with incubator and accelerator programs in sectors that demonstrate considerable growth potential.	N/A.	
	Policy ED.3.7. Support and encourage regional agriculture.	Yes.	Increased regional food production supports resilience by helping Flagstaff to be less dependent on far-away sources of food.
	Policy ED.3.8. Protect existing business and industrial land uses from encroachment and allow for their expansion.	N/A.	
	Policy ED.3.9. Develop infrastructure so that the community has access to high-speed internet and telecommunications.	N/A.	
BUSINESS ATTRACTION GOALS AND POLICIES Page XIV-9			
Goal ED.4. Support efforts to recruit diverse new businesses and industries compatible with the region.		Goal: Yes	A strong business community is vital to a stronger, more resilient community.
	Policy ED.4.1. Publicize all developable property, with property owner's consent, within the region with an understanding of infrastructure needs and applicable development standards.	N/A.	
	Policy ED.4.2. Promote variety and flexibility in land use and development options within the urban growth boundary.	N/A.	
	Policy ED.4.3. Facilitate regional economic development by participating in cooperative ventures throughout the northern Arizona region.	N/A.	

Goal	Policy	Consistent?	Comments
	Policy ED.4.4. Identify and support community resources that assist new businesses, such as workforce development, marketing, building processes, venture capital, financing, and management.	N/A.	
	Policy ED.4.5. In an effort to promote the sustainability of resources, the City will encourage all new and expanded commercial and industrial development to be energy and water efficient.	Yes.	Strong relationship – increased energy and water efficiencies in new and expanded developments will support resilience and mitigation: businesses are stronger and more nimble when they are less reliant on external resources. Energy and water efficiency can help businesses to both reduce their emissions and reduce their costs.
	Policy ED.4.6. Encourage development of specific area plans for targeted industrial, and business park land, which have been identified as major employment centers in the *Flagstaff Regional Plan*.	N/A.	
	Policy ED.4.7.When planning for future growth, consider tribal, cultural, and natural resources in balance with community needs.	Yes.	Development and growth that carefully considers available resources can contribute to a more resilient community.
	Policy ED.4.8. Support and encourage Native American heritage and culture as contributors to the region's economy.	Yes.	Contributes to achieving equity.
	Refer to Chapter VIII - Community Character Goal CC.6. and Chapter XIV - Economic Development Policy ED.6.3.		
Goal ED. 5.The Pulliam Airport will continue to serve the Northern Arizona region for air transportation,		Goal: Yes	
	Policy ED.5.1. Develop an Airport Business Park Specific Plan, outlining potential for connectivity, business and light industrial growth, and gateway opportunities.	Yes.	Concentrating these uses can reduce transportation distances, contributing to reduced greenhouse gas emissions.
	Policy ED.5.2. Provide a clear process for becoming a business park lessee.	N/A.	

Goal	Policy	Consistent?	Comments
multimodal connectivity and business growth potential.			
TOURISM GOALS AND POLICIES Page XIV-11			
Goal ED. 6.Tourism will continue to provide a year-round revenue source for the community, while expanding specialized tourist resources and activities.		Goal: Yes	Climate action can support tourism and contribute to a stronger tourism sector, as well as a stronger overall economy. Adaptation can also help the tourism sector prepare for potential changes in tourism patterns and shifting natural resources.
	Policy ED.6.1 Support and promote the diversification and specialization of the tourism sector, with heritage, eco-, and adventure tourism.	N/A.	
	Policy ED.6.2. Encourage cultural tourism with the advancement of heritage sites and special events.	N/A.	
	Policy ED.6.3. Continue to advance high-altitude athletic training and "extreme sport" events and programs.	N/A.	
	Policy ED.6.4. Encourage business education about the importance of tourism and its positive impacts on our region.	N/A.	
	Refer to Chapter VIII - Community Character Goal CC.6		
COMMUNITY CHARACTER GOALS AND POLICIES Page XIV-11			
		Goal: N/A	

Goal	Policy	Consistent?	Comments
Goal ED.7. Continue to promote and enhance Flagstaff 's unique sense of place as an economic development driver.	Policy ED.7.1. Support planning, design, and development that positively, creatively, and flexibly contribute to the community image.	N/A.	
	Policy ED.7.2. Coordinate community branding to effectively position the region for global marketing.	N/A.	
	Policy ED.7.3. Leverage the region's assets of history, culture, and natural environment, as well as educational and scientific facilities, as an economic development tool.	Yes.	Climate action can help to ensure that the northern Arizona region maintains its natural assets, including its ponderosa pine forests and higher-elevation ecosystems.
	Policy ED.7.4. Invest in attractive community gateways, main corridors, and public spaces to draw the business and workforce the region desires.	N/A.	
	Policy ED.7.5. Develop urban infrastructure that supports revitalization and redevelopment.	Yes.	Urban infrastructure and redevelopment, or infill, supports both mitigation and resilience. Urban redevelopment helps to reduce sprawl, by concentrating uses in already-developed areas, which helps maintain Flagstaff's resilience and also decreases the distances Flagstaff residents need to travel to meet their needs.
	Policy ED.7.6. Support southwest culture in the visual and performing arts, including for example, an annual Native American Pow- Wow.	N/A.	
ACTIVITY CENTERS GOALS AND POLICIES Page XIV-12			
	No policies for this goal.	Goal: Yes	Supports resilience and mitigation.
Goal ED.8. Promote the continued physical and			

Goal	Policy	Consistent?	Comments
economic viability of the region's commercial districts by focusing investment on existing and new activity centers.			
REDEVELOPMENT AND INFILL GOALS AND POLICIES Page XIV-12			
	No policies for this goal.	Goal: Yes	Supports resilience and mitigation.
Goal ED.9. Promote redevelopment and infill as a well-established means to accomplish a variety of community			
economic, planning, and environmental goals.			
Refer to Chapter IX - Growth Areas & Land Use, pp. IX-18			

Goal	Policy	Consistent?	Comments
through IX-25 for reinvestment goals, policies, and tools.			
Chapter XV - Recreation			
The proposed amendment is compatible with the goals and policies of the Recreation Chapter. The goal and policies of the Recreation Chapter are very related to climate action: Flagstaff's system of parks, recreation centers and trails contribute significantly to quality of life in Flagstaff and our overall community resilience. The proposed text amendment supports investments in our trails, parks, and recreation facilities in order to support community health, social connections, and reduced travel distances for residents to meet their needs. Policy Rec 1.1 is particularly relevant, as it will lead to increasd walking, reduced trip distances and reduced greenhouse gas emissions, in addition to increased equity as a result of more accessible parks and recreational sites. Policy Rec. 1.5 also is advanced by the proposed text amendment, as sustainable technologies can lead to reduced greenhouse gas emissions.			
RECREATION GOALS AND POLICIES Page XV-6			
Goal REC.1. Maintain and grow the region's healthy system of convenient and accessible parks, recreation facilities, and trails.		Goal: Yes	Supports resilience and mitigation.
	Policy Rec.1.1. Integrate active and passive recreational sites within walking distance throughout the region to promote a healthy community for all City and County residents and visitors.	Yes.	Supports reducing greenhouse gas emissions by encouraging walking.
	Policy Rec.1.2. Promote public and private partnerships to offer parks, recreation facilities, and resources.	N/aA	
	Policy Rec.1.3. Coordinate City, County, and Forest Service recreational planning to best serve the community.	Yes.	Supports resilience.
	Policy Rec.1.4. Design new or updated public facilities to include parks, open space, and/or recreational opportunities where feasible.	Yes.	Can help reduce the need for traveling long distances to parks and recreation opportunities, leading to decreased greenhouse gas emissions.

Goal	Policy	Consistent?	Comments
	Policy Rec.1.5. Incorporate sustainable building and maintenance technologies and universal design into parks and recreation facilities.	Yes.	Supports mitigation, by reducing greenhouse gas emissions associated with facility maintenance, and supports equity by planning for universal access by people of all abilities.

Carbon Neutrality Amendment to The Flagstaff 2030 Regional Plan

Part III: Required Studies and Analysis

June 30, 2021

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Carbon Neutrality Amendment to the Flagstaff 2030 Regional Plan
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CONTENTS

PART III – REQUIRED REPORTS, STUDIES, ANALYSIS, & RELATED DATA 2
III.1 Public Services and Facilities Analysis 2
III.2 Traffic Analysis or Report 4
III.3 Water and Wastewater Impact Analysis 4
III.4 School Impact Analysis 4
III.5 Police and Fire Protection Analysis 4
III.6 Economic Development Analysis 5
III.7 Cultural Resource Study 17

PART III – REQUIRED REPORTS, STUDIES, ANALYSIS, & RELATED DATA

III.1 Public Services and Facilities Analysis

The carbon neutrality amendment to the Flagstaff 2030 Regional Plan will update the City's climate goals and policies as stated in the Regional Plan to align the Regional Plan with the City's climate action planning documents. This will provide clarity to the community and decision-makers, enabling the climate goals and policies, so that they may be better utilized when making community decisions.

The pursuit of these goals may impact planning for public services and facilities, as the City works to increase resilience and preparation for short-term disruptions and long-term changes.

Stormwater: The revised climate goals and policies support the current stormwater infrastructure operations of the City of Flagstaff and Coconino County. This amendment will not change stormwater operations.

The amendment supports an increased focus on stormwater as a way to prepare for storm events and build community resilience. As Flagstaff's climate warms over time, stormwater management will become more important as the Southwest experiences increased weather volatility, more extreme weather events, and more high-severity wildfires. It is well-established that climate change will bring increases in both the frequency and the intensity of extreme weather events, including intense thunderstorms and unusually heavy rainfall or snowfall events, leading to flooding in Flagstaff's flood-prone areas. Flood risks are also increased due to the increased likelihood of rain-on-snow or rain-on-ice, which lead to high volumes of run-off, or in areas that have recently been damaged by moderate- to high-severity wildfires, which degrade the soil's ability to absorb water. All of these factors contribute to expected increases in the frequency, magnitude and severity of flooding.

Our current infrastructure is not well-equipped to handle these increased risks: upgrades to our current infrastructure are necessary. Preparing for our changing risk profile is a critical part of climate resilience; the proposed text

amendment supports investments in public infrastructure, including stormwater infrastructure.

Water facilities: The revised climate goals and policies support the current water infrastructure operations of the City of Flagstaff, as the City of Flagstaff Water Services Division currently looks to optimize water reuse, utilize renewable energy and increase energy efficiency. Achieving carbon neutrality and increased resilience will involve collaboration with the City Water Services Division to analyze emissions reduction and adaptation opportunities, and take appropriate action. One example of collaboration already underway is the installation of electric back-up generators at the Lake Mary facility. This mitigation action to reduce greenhouse gas emissions doubles as an adaptive action to increase resiliency and secure our water system against unexpected power outages due to extreme weather. There are ample opportunities for partnership and achieving water services and climate mitigation and adaptation goals.

Schools: The revised climate goals and policies can support the Flagstaff United School District (FUSD) in their work to increase efficiencies and reduce resource use. FUSD is already working to reduce energy use in their facilities through lighting retrofits and other measures, and to reduce the impact of school bus transportation. The Plan amendment will raise the importance of collaboration between the City of Flagstaff and FUSD.

There are ample opportunities for partnership. The City can assist FUSD in reducing the impact of its substantial building footprint, as community-wide carbon neutrality will require a substantial reduction in greenhouse gas emissions from Flagstaff's buildings. Transportation is another area for improvement, due to the substantial car travel used to transport children to schools in Flagstaff. Active transportation, public transit, and idling reduction campaigns present opportunities for co-benefits for students, FUSD and the City. These efforts will help improve air quality for one of our most vulnerable communities—children—while also moving closer to our carbon neutrality goals.

III.2 Traffic Analysis or Report

The carbon neutrality amendment to the Flagstaff 2030 Regional Plan will update the City's climate goals and policies as stated in the Regional Plan to align the Regional Plan with the City's climate action planning documents. This will provide clarity to the community and decision-makers, enabling the climate goals and policies, so that they may be better utilized when making community decisions.

The revised climate goals and policies will further the City's already-existing goals to encourage active transportation, support transit use and operations, and reduce congestion. Because transportation emissions are a major contributor to greenhouse gas emissions, achieving carbon neutrality will required strengthened collaboration among City of Flagstaff Community Development Division, Engineering Division, and the Sustainability Section to analyze emissions reduction opportunities and take appropriate action. Many programs and policies to reduce vehicle miles travelled and support active modes of transportation already exist; achieving the City's climate goals will require strengthening those programs to reduce greenhouse gas emissions from transportation.

III.3 Water and Wastewater Impact Analysis

Requirement waived by the Planning Director.

III.4 School Impact Analysis

Requirement waived by the Planning Director.
Schools are discussed as part of the public facilities analysis, III.1

III.5 Police and Fire Protection Analysis

The carbon neutrality amendment to the Flagstaff 2030 Regional Plan will update the City's climate goals and policies as stated in the Regional Plan to

align the Regional Plan with the City's climate action planning documents. This will provide clarity to the community and decision-makers, enabling the climate goals and policies, so that they may be better utilized when making community decisions.

The revised climate goals and policies will not impact policing or Fire Protection in Flagstaff. Climate change will bring increased volatility, more extreme weather events, higher risk for wildfires, and significant community change. As these changes have the potential to increase demands on the Flagstaff Police Department and the Flagstaff Fire Department, this amendment and further discussion of climate change impacts can be an opportunity to anticipate these changes and increased demands. Anticipating these increases in adverse events and demands on services is a central part of building a resilient community.

Climate adaptation supports strengthening community support systems and building self-reliance, to increase community resilience. Increasing support systems and anticipating adverse events can potentially decrease the demands and pressures on our first responder systems.

III.6 Economic Development Analysis

The carbon neutrality amendment to the Flagstaff 2030 Regional Plan will update the City's climate goals and policies as stated in the Regional Plan. This will align the Regional Plan with the City's climate action planning documents. This will also provide clarity to the community and decision-makers, improving the utilization of climate goals and policies when making community decisions.

This amendment will have economic impacts, likely both positive and negative, as decision-makers work to incorporate climate considerations into their decision-making. The revised climate goals and policies support the previous Regional Plan's economic development goals in Flagstaff through an increased focus on community resilience and resilience-building by households, businesses, and institutions. These efforts to build resilience and a clean energy economy support the economic development goals of the City.

Climate Action as an Investment

Taking climate action and avoiding the worst impacts of climate change makes sense economically and morally. Action is far less expensive and far more beneficial than inaction. Like forest health measures taken to avoid catastrophic wildfire, climate action is an investment in our future.

In Flagstaff, forest protection provides a sobering example of the need for preparation: The 2010 Schultz wildfire and post-fire flooding had a total impact between $133 and $147 million.[1] By comparison, the phase one of the Flagstaff Watershed Protection Project (FWPP) required a $10 million investment from Flagstaff residents. This down payment on forest health will help Flagstaff avoid high-severity fires that could cause devastating flooding, and is projected to help the Flagstaff area avoid between an estimated $573 million and $1.2 billion in damages.[2]

Just as individuals prepare for retirement, climate action takes intentional preparation. It is said that the best time to start investing for retirement is 15 years ago, and the next best time is now. Like retirement, it may be helpful to approach the spending that will be required on climate action with an investment mindset. Investments require spending, but they also produce returns and benefits. The earlier someone starts investing, the easier and less expensive it will be for them to meet their retirement goals. The longer someone delays investing, the more difficult and expensive it becomes.

Investments in climate action are no different, and these investments produce returns for ourselves and future generations. The 2019 UN Gap Report shows that if governments worldwide had started 10 years ago, we could have made relatively modest and gradual investments to achieve annual emissions reductions of just 3.3%. Figures 4 and 5 show the reductions required based on different action timeframes.

Because of our collective delay, the necessary investments will need to be more significant and rapid to achieve the annual global reductions of over 7.6% per

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[1] Full Cost Accounting of the 2010 Schultz Fire: http://openknowledge.nau.edu/1282/1/Combrink_EtAl_2013_ERIWhitePaper_SchultzFullCostAccounting.pdf

[2] The Cost of Inaction: Flagstaff Watershed Protection Project Cost Avoidance Study: https://arizonastatelawjournal.org/wp-content/uploads/2016/04/Fox_Final.pdf

year that are now required.3 That trend only continues with further delay. Indeed one recent study concluded that if the U.S. starts investing now in efforts to reach net-zero emissions by 2050, the total spending required would be nearly half as much compared to delaying our investments until 2030.4 When it comes to making investments to achieve goals, the amount of time remaining can be either the greatest asset or biggest liability. There may still be enough time to meet our climate stabilization and adaptation goals, but only if we accelerate our ambition and start making the necessary investment contributions.

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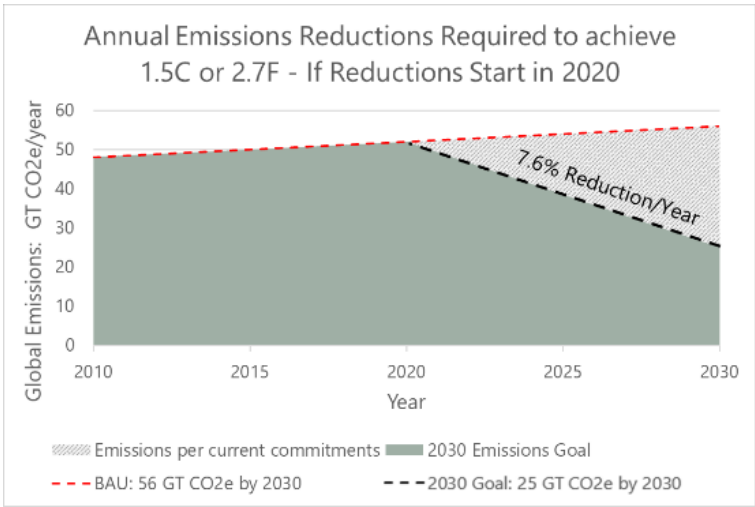
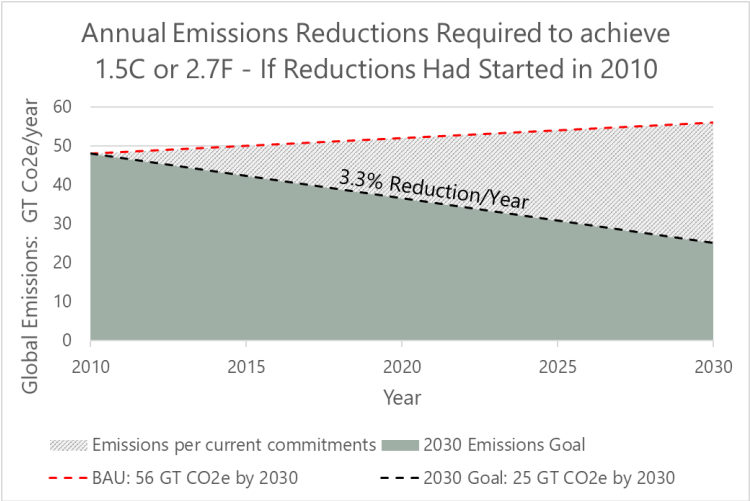
[3] https://www.unep.org/interactive/emissions-gap-report/2019/
[4] https://energyinnovation.org/wp-content/uploads/2021/01/Cost_of_Delay.pdf





Graphs: Depictions of the worldwide greenhouse gas reductions needed to achieve 1.5C (2.7F). Graphs reproduced from 2019 UN Gap Report Interactive Dashboard

It is said that an ounce of prevention is worth a pound of cure. Part of the investment mindset is evaluating both the cost of action as well as the cost of inaction. Choosing to avoid oil changes only appears to save a car owner money until their engine seizes. Likewise, avoiding investments in climate action only gives the appearance of saving money until it clearly, irreversibly, and perhaps quite suddenly, doesn't. While there is a high level of uncertainty about what the exact cost of the required level of climate action will be on a global scale, there is a high level of agreement that the risks and

cost of inaction will be far greater.5 This consensus on the cost of inaction comes despite the fact that there are many externalities that economic models often struggle to measure (See the Social Cost of Carbon section on page 41). The City's Climate Emergency Declaration recognizes that the time to invest in our future is now.

Climate Action Among Flagstaff Businesses

Climate action, like most actions to reach City goals, can have positive or negative impacts on economic development. By clarifying the City's climate goals and policies, the City intends for this text amendment to support economic development, lead to creative and productive collaborations with businesses, and help ensure the long-term success of businesses in the region. Local and regional businesses are critical partners to reach the City's goals, both in reducing emissions from commercial activities, and because many businesses in Flagstaff have climate action as part of their business model: local businesses see the opportunities for innovation and entrepreneurship, and are creating new green jobs and helping to solve climate challenges.

Climate action is already generating jobs in Flagstaff: Multiple solar companies call Flagstaff home, creating jobs while helping residents invest in on-site, money-saving energy. Home weatherization and electrification is happening today in Flagstaff, creating jobs at general contracting and home improvement companies as well as two residential energy efficiency companies providing long-term employment: E3 Energy and CozyHome. Two retail locations for electronic bikes recently opened near downtown Flagstaff, and native landscaping companies have been serving residents, creating jobs, and reducing impacts for years. Larger opportunities for jobs in the future might include infrastructure improvements to prepare for increased flooding, innovations in forest products, the construction of new bike trails and pedestrian crossings, infrastructure hardening, and net zero building construction. Local companies are often best poised to take rapid action to take advantage of market opportunities.

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5 https://policyintegrity.org/files/publications/Economic_Consensus_on_Climate.pdf

Businesses across Flagstaff and Arizona are also taking climate action, and seeing results both in operational savings, community support and revenue. A few examples:

- W.L. Gore & Associates, a large Flagstaff employer, has set a corporate goal to reduce their greenhouse gas (GHG) emissions from manufacturing sites and offices by 60% 2030, and work towards carbon neutrality by 2050.
- Rooftop Solar and Prometheus Solar, local Flagstaff companies, were selected by the Northern Arizona Solar Co-op to install solar for more than 80 households across Flagstaff, Sedona, and Coconino County. In partnership with the City, the Northern Arizona Coop was organized through Solar United Neighbors, a non-profit organization that seeks to increase the access and affordability of solar energy. These installations are projected to result in 647 kW of Solar installed, 11,608 Metric Tons of CO2 avoided over the lifetime of the panels, and $1,845,219 invested in local businesses, jobs, and clean electricity.
- Flagstaff is home to operations and retail locations of several national corporations that have goals to significantly reduce greenhouse gas emissions. Purina has corporate goals to achieve net-zero greenhouse gas emissions by 2050. REI and Walmart are part of the We Mean Business Coalition. This Coalition, comprised of over 1,776 companies that "recognize the transition to a zero-carbon economy is the only way to secure sustainable economic growth and prosperity for all," sent an open letter to the Biden administration supporting an emissions reduction goal of 50 to 52% by 2030, calling the target "ambitious and attainable."
- Hotels across Flagstaff are taking climate action. The Flagstaff Drury Inn & Suites is the first LEED-certified hotel in Arizona. The DoubleTree by Hilton Flagstaff has already seen significant energy, water and waste savings from its environmental initiatives; Hilton, the global hospitality company, has committed to cutting its environmental impact in half by 2030, including a 60% reduction in emissions by 2030.
- Arizona Public Service (APS), which is Flagstaff's electric utility company, has committed to transitioning to a 100% carbon-free electric grid by 2050. Salt River Project (SRP) recently committed to doubling its renewable electricity capacity by 2050, driven by demand from business customers.
- Arizona Forward has membership from over 150 public and private organizations across the state that recognize the need to "address the increasingly harmful climate impacts and shape Arizona's long-term future… This is why we focus on bringing local businesses and municipalities together to work toward actionable solutions – because inaction is not an option."

These are just a few examples of the many local and regional businesses working to reduce their impact and create climate solutions, with positive impacts on economic development, whether that comes from new green jobs in Flagstaff or cost savings for businesses that have invested in reducing their greenhouse gas emissions. To encourage more positive impacts like these, the City will partner with local businesses to learn about barriers and opportunities, and help them to ramp up their climate action efforts. The City can lend support, share resources, create connections to help share lessons learned opportunities, and highlight success stories.

Investment Opportunities

Clarifying Flagstaff's goals will help Flagstaff attract investment in climate-positive technologies and ensure Flagstaff is prepared for upcoming Federal grant opportunities and partnerships. The Federal Government will be an important partner in climate action. The U.S. Government has set a goal to reduce greenhouse gas emissions by 50% by 2030 and to achieve 100% renewable energy by 2035.6 Communities that have established carbon neutrality goals and have begun preparing for investments are well-positioned to take advantage of federal programming and opportunities for investment. Flagstaff's leadership in the field also positions it to partner with private companies: the City has been an early adopter in programs run by APS, Flagstaff's electric utility, and is currently working with APS to develop a large-scale renewable energy project that will help reach the climate goals of both APS and the City.

BALANCING PRIORITIES

While there are strong benefits to carbon neutrality, there are also areas where climate action goals may seem to conflict with economic or financial concerns. To achieve carbon neutrality and create a stronger community and economy, the City of Flagstaff will acknowledge the tensions between issues and seek to find common ground and mutual benefit. To illustrate the need

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[6] https://www.reuters.com/business/sustainable-business/exclusive-white-house-pushing-80-clean-us-power-grid-by-2030-2021-04-26/

for balance among key community priorities, this analysis explores three examples:

- Housing and climate
- Building electrification
- Climate change, visitation and recreation

Housing and climate

Flagstaff's housing crisis is one example of the complexity of community challenges. Affordable and additional housing in Flagstaff has been a documented need for more than 50 years and has reached a crisis level in recent years. In December 2020, the City Council declared a housing emergency and set in motion the need to make housing a leading priority for the City organization and Flagstaff community, similar to carbon neutrality. Housing costs and living expenses are key parts of economic development: today, many workers already struggle to live in Flagstaff and employers report difficulty hiring and retaining employees due to the high cost of living. Climate change is poised to exacerbate these difficulties, due to its anticipated impacts on our housing market: as temperatures rise in the Phoenix metro area and elsewhere, we can anticipate that demand for housing, second homes, and vacation rentals in Flagstaff will continue to increase. Without proper preparation, this can have severe consequences for Flagstaff's residents who already are struggling to afford a place to live. Housing, climate change, and economic development are intricately connected, critical challenges that will need to be addressed head on in the coming years. This text amendment will aid these conversations and problem-solving by ensuring that the scope of the climate challenge and the City's climate goals are accurately reflected in the City's guiding planning documents, leading to a more accessible conversation.

Balancing these priorities is achievable, when approached holistically.[7] Indeed, the solutions to the climate emergency and the housing emergency are often the same: making better use of Flagstaff's limited land through denser neighborhoods with a more diverse mix of uses will increase housing supply and reduce greenhouse gas emissions. Improving safe transportation connections between neighborhoods will help more residents walk, bike, and take the bus; this not only decreases emissions but also

[7] https://greenlining.org/wp-content/uploads/2019/10/Greenlining_EquitableElectrification_Report_2019_WEB.pdf

reduces the need for car ownership, which adds a significant expense to the cost of living – estimated by AAA to be around $9,500 per year.[8] Adding solar to homes can provide a return on investment to homeowners and landlords, reducing the overall cost of living due to decreased electricity costs. There are numerous other examples of climate actions and investments that can help reduce the cost of living in Flagstaff.

The potential benefit of these climate actions will be realized through careful design of programs to maximize benefit to residents, greenhouse gas emission reductions, and community equity. For example: currently a substantial amount of up-front financing is required to install solar panels on a house, which efficiently produce inexpensive energy on-site and provide a return on investment to homeowners. Consequently, many residents are unable to access the benefits of the low cost of solar and an investment opportunity. The City could design a solar incentive program to ensure that residents of all types can access this cost-saving investment, ensuring equitable access to a mechanism that can reduce the cost of living.

Costs of building electrification

- Building electrification is necessary to reduce greenhouse gas emissions associated with the use of fossil fuels in homes and other buildings. Building electrification, also called fuel switching, means eliminating the use of fossil fuels like natural gas and propane for functions like heating and cooking, and replacing gas appliances with alternatives that use electricity. In Flagstaff, 50% of our greenhouse gas emissions come from the buildings we live and work in. APS, Flagstaff's electric utility, has committed to 100% clean electricity by 2050.[9] As our electric grid gets steadily cleaner, building electrification will play a big part in reducing Flagstaff's greenhouse gas emissions.

While electrification has promising benefits for residents, it is an emerging approach with technical complexity, up-front costs, and equity challenges. Fuel switching will require intentional policymaking and a planned transition for Flagstaff residents to gain access to the major benefits of electrification, including healthier indoor environments, reduced emissions, affordable clean energy, and energy efficiency. Equity must be a core focus of our building electrification work to ensure that the benefits of electrification can be accessed by a wide variety of community members, and that it is a solution

[8] https://magazine.northeast.aaa.com/daily/life/aaa/costs-more-than-ever-to-own-a-car/
[9] https://www.aps.com/en/About/Our-Company/Doing-Business-with-Us/Resource-Planning

to existing household difficulties —one that lowers bills, improves health, and makes homes more comfortable, as opposed to adding challenges for already-struggling families.

Electrification may impact economic development due to its intersection with housing challenges, particularly in the rental housing space. Today, 55% of Flagstaff residents are renters. Electrifying rental housing is challenging due to a split incentive issue: improvements to building energy use like energy efficiency and building electrification primarily produce benefits for the person paying the bills (usually the renter), while the cost of improvement falls to the building owner. This effect is exacerbated by Flagstaff's ongoing housing crisis, in which the demand for housing outstrips the supply, giving landlords little incentive to make clean energy investments. Renters may fear that an upgrade could cause their landlords to increase their rent, or convert the property to a short-term rental that could be more lucrative for the property owner. Currently, no regulatory or statutory protections ensure that Flagstaff renters who live in buildings that receive energy upgrades can remain in their homes with no or minimal increased rents after the upgrades are performed, leaving renters more vulnerable to housing instability. These potential impacts must be thoroughly considered when creating electrification policies and incentives, to avoid unintended consequences for Flagstaff's vulnerable community members.

Electrification has the potential to present upfront costs to residents and businesses. For new homes, electrification is a win-win: RMI, an environmental research group, recently conducted a multi-city analysis on building electrification costs, including of cities in cold climates. They found that *"in every city we analyzed, a new all-electric, single-family home is less expensive than a new mixed-fuel home that relies on gas for cooking, space heating, and water heating."* [10]

Retrofitting existing homes to all-electric is a more costly endeavor for individual homeowners, due to current price schemes and the fact that natural gas and propane produce negative externalities that are not accounted for in their price.[11] However, advancements in electric heating

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[10] *RMI, All Electric New Homes, a Win for the Climate and the Economy:* https://rmi.org/all-electric-new-homes-a-win-for-the-climate-and-the-economy/

[11] Electrified homes and buildings may have more price stability, too. Currently, fossil fuels are subsidized and are associated with large externalities, mainly from the negative effects of their

technologies, particularly through the use of heat pumps, mean that electrification does not necessarily result in higher costs. RMI has found that electrification of space and water heating can reduce costs over the lifetime of the appliances, for both new buildings and **some** retrofits.[12] Today, in Flagstaff, not all electrification projects will produce a return on investment. Some projects will produce a return on investment today, and should be done as soon as possible to help homeowners and building owners accrue the benefits of electrification as soon as possible. Other projects will become profitable in the near future, as advancements in electric space heating and water heating continue. Other projects will need financial incentives in order to move forward. The City will prioritize incentives in collaboration with local partners to make the cost of fuel switching competitive and even beneficial compared to remaining on fossil fuels. The City will work with its partners to help residents utilize the latest technology, analyze policies for their impact on affordability, and target incentives to ensure that electrification does not have detrimental effects for Flagstaff's low-income families.

When working to promote fuel switching, Flagstaff must carefully weigh the balance between climate action and affordability, with the understanding that both are critical to ensure true sustainability.

Visitation and outdoor recreation

Flagstaff's economy is intricately linked to outdoor recreation in the San Francisco Peaks, Grand Canyon, and surrounding national forests. Climate change threatens the health of these natural systems and, in turn, the health of Flagstaff's economy. This amendment supports preparation and reduction of these threats, which will help maintain Flagstaff's economy and quality of life. While achieving carbon neutrality by 2030 will take aggressive actions, making investments now will ensure Flagstaff is a thriving city well into the future.

POLICY ANALYSIS AND REVISIONS

This text amendment recommends a review of existing regulations, standards, and plans – codes, ordinances, etc., and then revisions to reduce

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greenhouse gas emissions. Should a carbon price come into effect in the next decade, the artificial affordability of using on-site fossil fuels could be dramatically reduced or eliminated.

[12] https://rmi.org/insight/the-economics-of-electrifying-buildings/

greenhouse gas emissions. This policy was added as a complement to the current Regional Plan policy, E&C.3.2: Review and revise existing regulations, standards, and plans (codes, ordinances, etc.) to reduce the community's vulnerability to climate change impacts. This existing policy speaks to a review and policy revisions focused on reducing vulnerability, or adaptation, one of the three core climate actions. The new policy, E&C.2.3, ensures that this review and potential revisions are undertaken with climate mitigation, or reducing emissions, as well as for adaptation. This new policy was written to be complementary and similar to the existing policy (E&C.3.2) so that implementation of this policy will be similar to current work to implement the regional plan.

Implementation of this policy will be done in two parts: first, an analysis of current plans, policies and codes, and then second, revisions to plans, policies and codes.

- (1) The analysis will be conducted to understand how the City's current plans and policies may contribute to, or work against, the reduction of community greenhouse gas emissions. This review will help the City understand how various plans, policies and codes may lead directly or indirectly to increased greenhouse gas emissions. As part of this analysis, the City will work to understand the impacts of existing plans, policies ,and codes on greenhouse gas emissions , as well as, economic development, growth, and housing, due to their close relationship to our climate change impacts and challenges. This will increase the value of this review and illustrate where the City's many goals and priorities may create tensions or conflict, opening the door to a more productive conversation of how to balance priorities when revising City codes and processes. This process will result in a better understanding of the interactions among City policies/codes, and how potential revisions can better align the City's work.
- (2) Based on the results of the review, the City may revise select plans, policies, and codes so that they can better contribute to reducing greenhouse gas emissions. These revisions may have either positive or negative impacts on economic development, depending on the plan, policy or code in question. For example: City codes that require a minimum number of parking spaces in developments can contribute to increased driving, and increased greenhouse gas emissions. Code revisions that would eliminate or relax this minimum requirement, allowing the developer to determine the number of parking spaces to provide, can provide significant benefits for economic development, reduce housing costs, and can lead to reduced

driving and greenhouse gas emissions. On the other hand, code changes to increase the energy efficiency of buildings can bring higher up-front costs to the development process. While energy-efficiency investments have strong returns on investment, higher upfront costs could change how projects are financed and how investments are made, affecting economic development. Like the review process, any plan, policy or code revisions must consider any resulting impacts on economic development, growth and housing, to better align City priorities. Any changes to City plans, policies and codes will balance the original goals of the plan, policy or code with the City's goals for economic development, greenhouse gas emissions reductions, and housing.

III.7 Cultural Resource Study

Requirement waived by the Planning Director.

0I.6 CITIZEN PARTICIPATION PLAN

CARBON NEUTRALITY PLAN MAJOR PLAN AMENDMENT

JUNE 30, 2021

PURPOSE

This Citizen Participation Plan summarizes the public participation opportunities and notification procedures required for the Carbon Neutrality Major Plan Amendment to the Flagstaff 2030 Regional Plan.

The 60-day comment period will begin on July 13, 2021, and end on September 13, 2021

COMMUNITY NOTIFICATION

The following populations will be notified of the 60-day comment period and Open House, at least 14 days prior to the Open House:

- The general public, through print notifications in the Arizona Daily Sun and social media postings.
- The residents on the Regional Plan email notification list, maintained by the Planning Director (approximately 340 recipients).
- The recipients of the Sustainability Program newsletter.

At least 60 days before notice of the first hearing of the Planning Commission, the Planning Director shall transmit the proposed amendment to the Planning Commission and the Council and shall submit a copy for review and further comment to all government agencies listed in ARS 9.461, and any person or entity that requests in writing to receive a review copy of the proposal. The proposal shall also be posted on the City's website.

Notification of the general public will take several forms:

- An advertisement in the Arizona Daily Sun at least 15 calendar days but not more than 30 days prior to the first public hearing with the Planning and Zoning Commission.
- Press releases for open house and hearings.
- Email notification to the Regional Plan email list (approximately 340 recipients) and the Sustainability Program newsletter (approximately 1,000 residents) prior to all meetings.
- Notification on the Flagstaff Regional Plan 2030 Facebook page prior to all meetings.
- Social media posts on the Flagstaff Sustainability Program social media accounts. The three accounts on Facebook, Instagram, Twitter have approximately 9,000 followers combined.
- A webpage dedicated to this Major Plan Amendment, located on the City of Flagstaff climate website. Staff will ensure this page comes up in relevant search engine results.
- Posters for the open house in City Hall, libraries, and the Aquaplex.
- Legal notices for public hearings.

This amendment is a text amendment to pages IV-11 and IV-12 of the Regional Plan. Because this amendment does not involve a specific property, the property owner notification requirement is not applicable.

COMMUNITY MEETINGS OVERVIEW

Three community open house meetings will be held:

- The in-person Open House will take place on **Wednesday, August 25th from 5:00 to 7:00 pm**. This meeting is tentatively scheduled for the Murdoch Community Center, located at 203 E. Brannen Ave, Flagstaff, AZ 86001.
- An online open house meeting will be held online via Zoom, to accommodate those who cannot or do not wish to travel to an in-person event. The meeting is tentatively scheduled for Tuesday July 20th, from 5:30 to 6:30 pm.
- A second online open house meeting will be held via Zoom. The meeting is tentatively scheduled for Thursday September 9th, from 6:00 to 7:00 pm.

Important note: Meeting locations and arrangements are subject to change to protect public health in light of the ongoing COVID-19 pandemic. This document will be updated with full safety precautions that will be taken for these meetings.

Meeting content

The in-person and online meetings will provide an opportunity for the public to become informed and consult on the proposed revised amendment. The following information will be presented:

- The proposed amendment to the Regional Plan.
- The rationale for the amendment including benefits to the community.
- Supporting materials on the City's climate action goals, the Flagstaff Carbon Neutrality Plan, and associated projects.

The meetings will be organized in an Open House format, where staff present information and then community members have an open period to ask questions or to provide comments.

- Materials will be presented to residents for them to review at their own pace.
- City Staff will make a brief presentation summarizing the Plan amendment.
- A question and answer period will create an opportunity for community members to ask questions of staff.
- An online survey will be available for those residents who may want to provide feedback privately or after the meeting.

Meeting agenda:

1. Welcome and introductions
2. Introduction to informational materials
3. Overview presentation by staff
4. Question and answer period
5. Conclusion

After each meeting, the project representative will consolidate the questions/comments heard at the open house meeting into a FAQ document that will be posted to the project's webpage and distributed to the email distribution list.

ONLINE SURVEY

In order to accommodate those who are not able to attend the in-person or online open houses, City staff will develop a brief online survey. This survey will collect feedback and questions on the Regional Plan Amendment from community members.

This survey will include information directing residents to more information about the amendment. It will allow anonymous, private feedback, if that is the desire of the resident.

COMMISSION MEETINGS AND HEARINGS

City staff will present this amendment proposal at two Commission meetings:

- The fourth opportunity for input will be held at the August meeting of the Sustainability Commission. City staff will present the draft amendment at the August 27th regular meeting of the Sustainability Commission during the 60 day comment period and prior to the Citizen's Review Session. This meeting will be held from 4:30 – 6:00 pm on Thursday, August 27th.
- The fifth opportunity for input will be a Citizen's Review Work Session at Planning & Zoning Commission. The citizen review work session shall be held at a work session of the Planning Commission scheduled not less than five days and no more than 14 days prior to the public hearing at the Planning & Zoning Commission for the consideration of the proposed map and text amendments. Landowners and other citizens potentially affected by the proposed text amendment shall have an opportunity to address the Planning Commission on the proposal.

The required Planning and Zoning Commission and City Council hearings will be held either online, or at City Hall, at a time and date to be determined. The location will be determined based on the City of Flagstaff's re-entry stage and public meeting procedures at the time of the meeting. Community members will be notified in advance regarding health and safety procedures.

Planning and Zoning Commission Hearings

The Major Plan Amendment application will be presented before two public hearings before the Planning and Zoning Commission, at dates and locations to be determined.

City Council Approval

The Major Plan Amendment application will be presented before the City Council in December 2021. A two-thirds majority vote of the City Council is needed for approval.

OTHER NOTIFIED PARTIES

The project representative will work with the Planning Director to transit proposal to the following parties, at least 60 days before notice of the first hearing of the Planning and Zoning Commission on the major amendment to the Regional Plan:

- The Planning and Zoning Commission
- The City Council
- Coconino County;
- MetroPlan Flagstaff
- The Arizona Department of Commerce
- Flagstaff Unified School District
- Northern Arizona Council of Governments
- The Coconino County Superintendent of Schools
- The Coconino National Forest
- The Flagstaff Area National Monuments
- The Naval Observatory at Flagstaff
- Any person or entity that requests in writing to receive a review copy of the proposal.

METHODS TO KEEP THE DIRECTOR INFORMED

The Director will be notified immediately, if there is any change in the location, date or format of the meetings. The results will be provided in a Record of Proceedings, as provided by City Title 11-10.10.020.

I.7 NEIGHBORHOD NOTIFICATION

COMMUNITY OPEN HOUSE

Join us to review a carbon neutrality amendment to the Flagstaff Regional Plan.

The City of Flagstaff is proposing a Major Plan Amendment on climate change and climate action to the Flagstaff 2030 Regional Plan.

This amendment will revise pages IV-11, IV-12 , and X-19 of the Flagstaff Regional Plan 2030: Place Matters (Regional Plan). Revisions will align the Regional Plan Climate Change and Adaptation pages with the City's climate action work and the 2021 Carbon Neutrality Plan.

We want your input!

Join City Staff at one of three open houses for informational posters and open discussions on the proposed Amendment. This is your chance to learn more and provide comments!

Open House One:	Open House Two:	Open House Three:
Tuesday, July 20th	**Wednesday, August 25th**	**Thursday, September 9th**
5:30 to 6:30 pm	5:00 to 7:00 pm.	6:00 to 7:00 pm
Online via zoom	Murdoch Community Center 203 E. Brannen Ave Flagstaff, AZ 86001	Online via zoom

To RSVP and learn more:
www.Flagstaff.AZ.Gov/Climate

For details on the project, visit:
www.flagstaff.az.gov/planamendments

To ask a question, please contact:
Sara Dechter, Comprehensive Planning Manager, at sdechter@flagstaffaz.gov or (928) 213-2631

Carbon Neutrality Amendment to the Flagstaff Regional Plan 2030

Public Participation Report

Submitted September 24, 2021

Project:
Carbon Neutrality Amendment to the Flagstaff Regional Plan 2030
Development timeline: Proposed adoption in December 2021

Applicant:
City of Flagstaff
211 W. Aspen Avenue
Flagstaff, AZ 86001
928-213-2150

Project representative and preparer:
Jenny Niemann, Climate and Energy Specialist
City of Flagstaff Sustainability Section
211 W. Aspen Avenue
Flagstaff, AZ 86001
928-213-2150

This document summarizes the feedback received from the community during the 60-day review period.

The following outreach methods were utilized to solicit public feedback:

- Informational webpage
- Flagstaff Community Forum feedback form
- Community Open House
- Online information sessions
- Print advertisements
- Social media postings
- Direct outreach

The feedback received is detailed below.

I.1 Flagstaff Community Forum feedback form

Staff created a feedback form on the proposed Amendment, on the Flagstaff Community Forum portal. This feedback form was open from July 13, 2021 through September 13, 2021. The form was available to all members of the public.

On the forum site, staff provided links to the information webpage, dates and information for the Amendment Open House and information session events, and contact information for staff.

Five responses were provided through this feedback form. Those responses are below.

Note: the feedback form remains open, for members of the public to provide comments on the proposed amendment.

Comment #	Date	Comment	Response
1	8/24/2021 9:51	Commercial and residential buildings will have to convert to all electric at a significant level to meet CO2 reduction goals. The use of electric heat pumps instead of natural gas heat should be a large part of this effort. Is there a program planned to facilitate and encourage this? Thanks	There is a program planned to support commercial and residential buildings when converting to electric space- and water-heating. The City's strategies on this are outlined in the Building Fuel Switching target area of the Flagstaff Carbon Neutrality Plan. The City has recently published a website to assist homeowners with residential fuel switching, and is planning additional programming to support residents, businesses and contractors in this work.

2	9/8/2021 16:22	Dear Community Shapers: I would ask several items when integrating the carbon neutrality amendment into the regional plan. First, could the plan please include incorporation of non wind and solar power for the power infrastructure. Inclusion of non-GHG emitting nuclear energy would provide resiliency when conditions are not favorable for wind and solar. Secondly, could the plan please include the disposal of wind and solar components as they cannot be recycled and should not be placed into the landfill with the hazardous materials they are constructed from. Thirdly, could the rare earth metals which batteries and solar panels are made be purchased using fair trade practices to avoid supporting and encouraging child and forced labor and horrific environmental practices of China, which mines most of the rare earth metals used to make solar panels. Lastly, the Sustainability Commission would benefit from having a climate realist on the commission to present a different point of view then all the other members. Please do your research and look at the data and make a truly more sustainable America. https://climaterealism.com/	The Regional Plan Amendment does not specify which clean or renewable energy technologies will be used to achieve our emissions reduction goals. Regarding the reliability and resilience of wind and solar: new utility-scale wind and solar plants are being installed with battery-stroage systems, meaning that they can store the energy produced on-site for when it is most needed. This removes the concern about the reliability of wind and solar. The energy industry is transitioning to renewables (wind and solar) rapidly: Large solar plants with battery storage have decreased in price, making them price-competitive with natural gas. This trend is expected to continue as the market continues to innovate and the costs of solar and battery storage plants continue to fall. When new technologies emerge, there are often legitimate concerns that one bad thing (i.e., air pollution from coal) is just being replaced with another (i.e., waste from used solar panels). There are negative externalities associated with all forms of energy production. While we cannot avoid all negative impacts, we can choose the energy production methods that do the least harm to our environment and our community. The negative impacts of wind and solar are relatively modest, and are far outweighed by the positive impacts on air quality and reduced greenhouse gas emissions. Large renewable energy projects sometimes face concerns about where turbines or other equipment are disposed of after their useful life. There is much misinformation about wind turbine disposal, particularly. In fact, wind turbines are highly recyclable, as they are made of many valuable components. About 85% of wind turbine components are reusable or recyclable. Much of a solar panel is also recyclable; recycling practices for solar and wind are improving each year. Regardless, the total environmental impacts of solar and wind are far lower than other forms of energy production and involve far more recycling of components than coal, natural gas, and nuclear energy. The City will continue to consider short- and long-term impacts to

			the environment and our community when developing renewable energy projects. In response to this comment, staff have changed the narrative section of the proposed page amendments to specify clean electricity, as opposed to renewable electricity, to provide clarity. Clean electricity is a term that signifies zero-emissions electricity, and includes renewable energy generation like solar and wind. Clean electricity is the name of the relevant target area in the Carbon Neutrality Plan, and so this change mirrors other changes in the narrative to match Carbon Neutrality Plan target area language. The website referenced - ClimateRealism.com - is a well-known climate-denial website that works to undermine the global consensus on climate change. It is backed by fossil-fuel companies and anonymous donors, and is not a reliable source for evidenced-based information on climate science and climate action.
3	9/9/2021 15:09	I would like to comment on city staff's structuring of the carbon neutrality amendment. The language in the amendment is comprehensive in addressing the scientific, social, and policy needs of Flagstaff regarding climate change and what will be unfolding in the coming years. The State of Arizona heavily restricts what the City is capable of implementing so kudos for putting forth good directions for us to follow. Thank you for your hard work!	Response not required.
4	9/13/2021 11:58	The Carbon Neutrality Plan is dead on! I fully support the changes and proposals	Response not required.
5	9/13/2021 12:25	Happy to see the inclusion of the Carbon Neutrality Plan into the Regional Plan! The proposed language is clear and easy to understand. One issue that needs to be addressed in the Regional Plan Update is how the community wants to prioritize regional plan direction related to carbon neutrality when it is in conflict with other direction.	City staff believe the proposed amendment is compatible with the other goals and policies of the Flagstaff Regional Plan 2030. That said, the many goals of the Regional Plan must be balanced amongst each other. The proposed new goals in the Climate Change and Adaptation Section will need to be weighed against and balanced with the many other goals of the Regional Plan, from transportation to economic development goals. This prioritization takes place regularly, as staff, City Council, and other decision-makers weigh the many goals of the Regional Plan. The amended Climate Change and

			Adaptation section goals will be treated similarly to all other goals in the Plan: decision-makers will consider all goals of the Regional Plan and strive to balance these goals when making decisions about the future direction of Flagstaff.

I.2 Emailed or written Comments:

Staff sent mailings and email notifications to local, state, and regional agencies, as well as lists of interested parties and residents on the Regional Plan notification list.

One comment was received via email.

Comment #	Date	Comment	Response
6	8/19/2021 4:28 PM	**From:** Kate Morley <kmorley@naipta.az.gov> **Sent:** Thursday, August 19, 2021 4:28 PM **To:** Jenny Niemann <JNiemann@flagstaffaz.gov>; Heather Dalmolin <hdalmolin@naipta.az.gov> **Subject:** RE: Major Amendment to the Flagstaff Regional Plan - carbon neutrality Hi Jenny, Thanks again for allowing us to comment. We have several comments we would love to be considered to strengthen language around the role transit plays in achieving carbon neutrality. Policy E&C2.2: modify "promote" to "develop" or similar other word that commits to action. Policy T8.1: specifically identify transit as a component of "network" which could otherwise been seen more narrowly as streets. Policy T.8.2: reads as if there is no improvement to be made with work	The comment and suggestions provided are in line with the direction and intent of the Regional Plan Amendment. However, the request for revisions to specifically include transit call for a higher level of detail than the Regional Plan pages currently provide. The proposed revised pages communicate the broad goals of the City's carbon neutrality work – achieving carbon neutrality, preparing for change, and acting equitably. The revised pages include supporting actions: reducing emissions from transportation and improving community connectivity are specifically mentioned actions that cover transit. The requested additional goal, to specifically designate the emissions reductions provided through transit and first last mile infrastructure, would introduce a level of detail not used in the amended Regional Plan pages. For renewable energy, for example, neither the original nor the revised pages suggest which types of renewable energy should be used (wind, solar, hydropower, etc.). The transportation actions follow this model. In response to this feedback, revisions will be made to clarify the actions to be taken. We will reference the seven target areas of carbon neutrality actions, as specified by the Flagstaff Carbon Neutrality Plan. This will introduce two areas that are actively related to transit: Decreasing Dependence on Cars and Electric Mobility.

		"maintain. " I suggest "modify" or something similar. Policy T.8.5: can often result in poor design for bike and ped infrastructure which is critical to Mountain Line riders. Consider "balancing" these needs. Most of all, we would love to a goal specifically around transit. I am not sure if it fits in the climate section or transportation section but something to the effect of: • Support the reduction of transportation emissions through the prioritization of public transit and associated first last mile infrastructure, and through the implementation of Mountain Line services and Transit Guidelines. Happy to discuss specifics and thanks again. Kate Morley, AICP Deputy General Manager Mountain Line	Regarding the suggested revision to Policy E&C2.2: the City utilizes the word 'promote' throughout the Regional Plan to designate areas that need further City support. Because the City is not always the actor, for example in development cases, words that connotate more action or power on the City's behalf are not appropriate in this context. Regarding the suggestion revision to Policy T8.1: the change to policy T8.1 was made to clarify the meaning of this policy, as there was confusion about the meaning of transportation connectivity. This revision, to specify network connectivity, is being made to clarify that this policy discusses the street network and the need for the efficient connections that are provided by a more grid-like network. Regarding the suggestion revision to Policy T.8.2: this suggested change is outside of the scope of the proposed amendment. This amendment focuses on the Climate Change and Adaptation section, with one change to transportation policies to remove confusion. The road and street classification system is somewhat related to climate action to reduce transportation emissions, but this policy is not incompatible with the proposed amendment. Staff do believe that the word maintain does imply continual work to actively sustained the desired state of the road and street classification system, and that improvements are possible and encouraged under this policy. Regarding the suggestion revision to Policy T.8.5: while this policy does elevate the importance of freight movement, it is to be implemented in balance with policy T.8.3, which is located in the same section. (T.8.3: Design neighborhood streets using appropriate traffic calming techniques and street widths to sustain quality of life while maintaining traffic safety.) Decision-makers need to weigh both policy T.8.5 (fright movement) and policy T.8.3 (traffic calming and street widths), to balance these two priorities. Staff believe that the existence of these two policies addresses the commenter's concerns.

From: Alaxandra Pucciarelli
To: Jenny Niemann
Cc: Sara Dechter
Subject: RE: CNP Major Plan Amendment - waiver letter - Time sensitive request
Date: Monday, May 24, 2021 7:24:27 AM

I agree and support the requested waivers for this Major Regional Plan Amendment.

Thanks,

Alexandra Pucciarelli
Current Planning Manager
Community Development
211 W. Aspen Avenue
Flagstaff, AZ 86001
Phone: (928) 213-2640
Email: apucciarelli@flagstaffaz.gov

From: Jenny Niemann <JNiemann@flagstaffaz.gov>
Sent: Sunday, May 23, 2021 10:33 AM
To: Alaxandra Pucciarelli <APucciarelli@flagstaffaz.gov>
Cc: Sara Dechter <SDechter@flagstaffaz.gov>
Subject: CNP Major Plan Amendment - waiver letter - Time sensitive request
Importance: High

Alax,

I'm writing regarding the waiver letter for the Carbon Neutrality Plan major amendment to the Regional Plan, and need your help!

As Planning Director, Tiffany signed off on a waiver of a number of requirements for the major amendment submittal because the nature of this amendment (a text amendment) doesn't quite fit many of the checklist requirements. (see attached email).

For my resubmittal, I have revised the waiver memo for the Carbon Neutrality Plan, adding the Concept Plan to the list of waived requirement (paragraph 2). That's the only change to the attached memo. The rationale is that there is not actually a concept plan, there is really just the text amendment.

If you could just respond to this email with your approval of this memo, that would be wonderful and I'll add it to the resubmittal file.

Thank you,
Jenny

Jenny Niemann
Climate and Energy Specialist
City of Flagstaff
928-213-2150
JNiemann@flagstaffaz.gov
www.flagstaff.az.gov/climate

COMMUNITY DEVELOPMENT

MEMORANDUM

Date: May 20, 2021

To: Sara Dechter, AICP, Comprehensive Planning Manager
From: Alax Pucciarelli, Acting Planning Director

Subject: Waiver of Submittal requirements for the Climate Change Goals and Policy Major Plan Amendment

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The purpose of a plan amendment application is to allow decision makers to conduct a proper evaluation of the proposed changes and their potential impacts to the future of the community. The requirements for such applications are typically geared towards amendments for a particular property and precede an application for rezoning. In order to facilitate transparent and clear communication, I have elected to not require items on the application checklist that do not contribute to decision making. Items on the checklist are excluded based on the following rationale:

Because there is no property specific changes being proposed, the Concept Plan, a Legal Description, a Title Report, a County Assesor's Map, a Vicinity Map, Physical Characteristics Analysis maps, Land Use Analysis Maps, and proposed Circulation Map, Cultural Resource Studies and any other property specific submission requirements are all being waived.

Because the new goals and policies will not impact the distribution or managmeent of water infrastructure, the requirement for Water and Wastewater Impact Analyses is waived. The energy usage associated with water and wastewater processing will be discussed in Public Services and Facilities Analysis.

Based on the input of the Flagstaff Unified School District, School Impact Analysis is being waived.

RESOLUTION NO. 2021-58

A RESOLUTION OF THE FLAGSTAFF CITY COUNCIL, AMENDING THE FLAGSTAFF REGIONAL PLAN 2030 BY AMENDING CHAPTERS IV AND X TO ADDRESS THE 2021 FLAGSTAFF CARBON NEUTRALITY PLAN AND ESTABLISHING AN EFFECTIVE DATE

RECITALS:

WHEREAS, in response to community appeals, on June 23 2020, the Flagstaff City Council adopted Resolution 2020-09 endorsing a Declaration of a Climate Emergency for the City of Flagstaff, and requesting regional collaboration on an equitable transition and urgent mobilization effort to restore a safe climate; and

WHEREAS, on June 15, 2021, the Flagstaff City Council adopted Resolution 2021-34 adopting the 2021 Flagstaff Carbon Neutrality Plan; and

WHEREAS, City staff, on behalf of the Sustainability and Planning and Zoning Commissions, applied for a major plan amendment to the Flagstaff Regional Plan 2030 to modify and add policies that align with Council's objective of having a carbon neutral community by 2030; and

WHEREAS, the amendments to Chapters IV and X accurately reflect the 2021 Flagstaff Carbon Neutrality Plan adopted by City Council on June 15, 2021; and

WHEREAS, the amendments to Chapters IV and X meet the findings for providing community benefits and conforming to the Flagstaff Regional Plan 2030's and other goals and policies; and

WHEREAS, staff's application and the notice and hearing process for the amendment complies with Section 11-10 of the Flagstaff City Code and Arizona Revised Statutes Section 9-461.05 and 06; and

WHEREAS, the Planning and Zoning Commission recommends the amendment after the required notice and hearing.

ENACTMENTS:

NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF FLAGSTAFF AS FOLLOWS:

SECTION 1. That staff's application to amend the Flagstaff Regional Plan 2030 to amend Chapters IV and X to address the 2021 Flagstaff Carbon Neutrality Plan as indicated in the attached Exhibit A is hereby approved with an effective date thirty (30) days after the resolution is adopted.

SECTION 2. The adopted and effective date, the resolution number and description of the amendment will be added to Chapter XVI of the Flagstaff Regional Plan 2030 and the amended date on the cover page will also be changed for consistency with this amendment as indicated in the attached Exhibit B.

PASSED AND ADOPTED by the City Council of the City of Flagstaff this 7th day of December, 2021.

MAYOR

ATTEST:

CITY CLERK

APPROVED AS TO FORM:

CITY ATTORNEY

Exhibits:
A – Chapters IV and X of the Flagstaff Regional Plan 2030, as amended January 6, 2022
B – Cover Sheet and Chapter XVI of the Flagstaff Regional Plan 2030, as amended January 6, 2022

Carbon Neutrality Amendment to the Flagstaff 2030 Regional Plan

November 18, 2021

This document details the proposed text revisions for this major plan amendment. The pages to be revised are Regional Plan pages IV-11, IV-12 and X-19.

This document contains several versions of the revised plan pages:

- **Pages 2-4:** The proposed amended pages of the Regional Plan: pages IV-11, IV-12 and X-19 of the Regional Plan, in final formatting.

- **Pages 5-6:** A summary of proposed changes to goals and policies.

- **Pages 7-10:** A comparison document showing the exact proposed changes to the text, via tracked changes.

- **Pages 11-13:** The current Regional Plan pages, prior to any amendment.

SUMMARY OF REVISIONS – REGIONAL PLAN TEXT AMENDMENT

Pages IV-11, IV-12, and X-19

This section summarizes the proposed text revisions for this major plan amendment.

Climate Change and Adaptation pages: IV-11 and IV-12

Revisions to goal two and associated policies

Goal: E&C.2

Current: Reduce greenhouse gas emissions

Proposed revision: Achieve carbon neutrality for the Flagstaff community by 2030.

Policy E&C.2.1

Current: Policy E&C.2.1. Encourage the reduction of all energy consumption, especially fossil-fuel generated energy, in public, commercial, industrial and residential sectors.

Proposed revision: Policy E&C.2.1. Encourage the reduction of energy and material consumption.

Policy E&C.2.2

Current: Promote investments that strengthen climate resiliency

Proposed revision: Promote investments that create a more connected and efficient community, decrease emissions from transportation and building energy, and strengthen climate resiliency.

NEW Policy E&C.2.3

Review and revise existing regulations, standards, and plans (codes, ordinances, etc.) to reduce community greenhouse gas emissions.

NEW Policy E&C.2.4

Promote developments that help the community achieve carbon neutrality through strategies that reduce the project's emissions from transportation, energy, and consumption.

Revisions to goal three and associated policies

Goal E&C.3

Current: Strengthen community and natural environment resiliency through climate adaptation efforts.

Proposed revision: Prepare Flagstaff's community systems and resources to be more resilient to climate change impacts, and address climate change in a manner that prioritizes those most impacted and ensures the costs and benefits of climate adaptation and mitigation are equitably distributed.

Policy E&C.3.2

Current: Review and revise existing regulations, standards, and plans (codes, ordinances, etc.) to reduce the community's vulnerability to climate change impacts.

Proposed revision: Review and revise existing regulations, standards, and plans (codes, ordinances, etc.) to reduce the community's vulnerability to climate change impacts and reduce the disproportionate impacts on vulnerable communities.

NEW Policy E&C.3.5

Improve the ability of vulnerable community members to adapt and thrive amidst the pressures of climate change.

NEW Policy E&C.3.6:

Commit to equitably distribute the burdens and benefits of climate action policies and investments to all segments of the community.

Revisions to goal four and associated policies

Policy E&C.4.1

Current: Assess vulnerabilities and risks of Flagstaff's natural resources

Proposed revision: Assess vulnerabilities and risks of Flagstaff's natural resources in the context of anticipated climate changes and resulting changes to Flagstaff's systems.

In addition, a revision is proposed for policy T.8.1, in the Transportation Chapter.

Policy T.8.1:

Current: Promote efficient transportation connectivity to major trade corridors, employment centers, and special districts that enhances the region's standing as a major economic hub.

Proposed revision: Promote efficient network connectivity to and within major trade corridors, employment centers, and special districts that enhances the region's standing as a major economic hub.

TRACKED CHANGES – REGIONAL PLAN TEXT AMENDMENT

Pages IV-11 and IV-12

Climate Change and Adaptation

Climate change is disrupting global weather patterns and threatening communities across the world. While climate shifts have occurred in the past, today's climate is changing at a faster rate than ever recorded, due to the high concentration of human-caused greenhouse gas emissions. Changes to the climate system have been noted through observations of increases in global average air and ocean temperatures, widespread melting of snow and ice, and rising global average sea level (Intergovernmental Panel on Climate Change ~~2007~~2019). At the same time, weather patterns have become more extreme, with more intense and longer droughts, more extreme precipitation events, and increased heat waves.

~~Many c~~Climate models predict further decreases in annual precipitation and ~~increased temperatures~~a 5°F increase ~~for~~ in the average temperature in Coconino County by 2050~~our region, which in turn~~ (CLIMAS 2017). The projected increases in temperature and volatility are ~~likely~~ expected to lead to ~~result in~~ changes to Flagstaff's regional forests, our vegetation and animal communities, and our community's systems and infrastructure.~~as well as declines in agricultural productivity and food security.~~

Local Climate Change Impacts

~~Recent warming in the Southwest has resulted in declines in spring snowpack and Colorado River flow.~~ Flagstaff and Coconino County have seen warming since the mid-1980's, and will continue to see increased temperatures and aridity, or dryness. Key issues that ~~the Southwest, including~~ the Flagstaff region~~,~~ must address include the following:

- Increasing temperatures, particularly an increase in minimum temperatures, or overnight lows;
- An increase in aridity and drought, leading to d~~D~~epleted soil moisture;
- Decreasing water supplies, ~~;R~~reductions in annual snowpack, and decreases in snowmelt;
- ~~Depleted soil moisture;~~
- ~~Increasing temperature, drought,~~ Increasing risk of wildfire and~~,~~ tree mortality, ~~and invasive species~~ and an~~;~~ ~~I~~ increased frequency and altered timing of flooding;
- Impacts on the region's unique tourism and recreation opportunities~~;~~ and its land use systems, housing, and infrastructure;~~Increasing risks to cities and agriculture from a changing climate~~
- Increased risk to public health and ~~I~~increased vulnerabilities of ~~the~~ lower income families, Black communities, Indigenous communities, communities of color, ~~, poor,~~ and the elderly, among other vulnerable groups.~~.~~

Climate Action:~~Adaptation and~~ Mitigation, Adaptation and Equity

The Flagstaff region has historically faced climate risks, including forest fires, record ~~warming~~high temperatures, snow storms, high winds, flooding, and drought. These events affect every resident, ~~and as~~though different communities experience climate change in different ways. As the regional climate changes, these risks will become more ~~frequent and~~ severe.

~~-~~The ~~effects~~ impact of these ~~extreme events may~~ changes can be ~~lessened~~ reduced with preventative measures. Flagstaff's climate objectives in mitigation, adaptation and equity were established in the Flagstaff Climate Action and Adaptation Plan (2018) and then updated in the Flagstaff Carbon Neutrality Plan (2021). These documents outline three types of climate action:

- **Mitigation** ~~of these risks refers to reducing~~actions reduce the severity of climate change by decreasing greenhouse gas emissions and limiting their concentration in the atmosphere. The Flagstaff region has the opportunity to help mitigate the changes in climate~~, and~~ by reducing emissions from transportation, building energy use, water use, consumption of goods and waste disposal.,
- **Adaptation** actions prepare for ~~simultaneously be ready for its~~ the effects of climate change by understanding and preparing for the increased potential of wildfire, flooding, drought, and major community change, ~~other effects of climate change~~ and then building resilience to ~~preparing for such~~ short term hazards and ~~-~~long-term change. ~~Individual preparation measures could include preparing our homes for potential fire, implementing stormwater management best practices, and becoming more water efficient. Personal home or business investments in water conservation and stormwater collection, energy efficiencies, walking, biking, bus riding, recycling, re-using, and sharing also contribute to mitigating climate change.~~
- **Equity** actions reduce the unequal burdens created by climate change. Flagstaff can address climate change in a manner that prioritizes the vulnerable communities most impacted and ensures the costs and benefits of climate adaptation and mitigation are equitably distributed.

At the community level, mitigation investments include ~~investing in critical public infrastructure such as reclaimed water, conservation, and stormwater collection; efficient; use of energy resources self-reliance on transportation options;food production and the ability to generate energy by means other than fossil fuels;~~ efforts to **decrease dependence on cars**, embrace **electric mobility**, produce **clean electricity**, facilitate **fuel switching** in buildings, **reduce building energy use**, improve **sustainable consumption and waste management** and undertake **carbon dioxide removal**. Adaptation will require building **community resilience** and investing in critical infrastructure such as stormwater and transportation systems, to prepare for increases in volatility, ~~and protecting and preparing the community for~~ extreme weather events, flooding, wildfires, and community change ~~other natural and human-caused hazards are examples of large-scale preparation~~ (~~refer to the~~ 2012 City of Flagstaff Resiliency and Preparedness Study) ~~(2012)~~. **Equitable systems** investments include initiatives to protect vulnerable residents from the negative impacts of climate change and ensuring all residents can access the benefits of climate action. For the purposes of the Flagstaff Regional Plan, how we develop land will have a~~n~~

significant impact on our ~~reduction of~~ greenhouse gas emissions and the mitigation of climate change.

CLIMATE CHANGE AND ADAPTATION GOALS AND POLICIES

Goal E&C.2. ~~Reduce greenhouse gas emissions~~ Achieve carbon neutrality for the Flagstaff community by 2030.

Policy E&C.2.1. Encourage the reduction of ~~all~~ energy and material consumption~~, especially fossil-fuel-generated energy, in public, commercial, industrial, and residential sectors~~.

Policy E&C.2.2. Promote investments that create a more connected and efficient community, decrease emissions from transportation and building energy, and strengthen climate resiliency.

Policy E&C.2.3. Review and revise existing regulations, standards, and plans (codes, ordinances, etc.) to reduce community greenhouse gas emissions.

Policy E&C 2.4. Promote developments that help the community achieve carbon neutrality through strategies that reduce the project's emissions from transportation, energy, and consumption.

Goal E&C.3. Prepare Flagstaff's ~~Strengthen~~ community systems and resources to be more resilient to climate change impacts ~~natural environment resiliency through climate adaptation efforts.~~and address climate change in a manner that prioritizes those most impacted and ensures the costs and benefits of climate adaptation and mitigation are equitably distributed.

Policy E&C.3.1. Develop and implement a comprehensive and proactive approach to prepare the community for and to minimize the impacts of climate change induced hazards.
Policy E&C.3.2. Review and revise existing regulations, standards, and plans (codes, ordinances, etc.) to reduce the community's vulnerability to climate change impacts and reduce the disproportionate impacts on vulnerable communities.
Policy E&C.3.3. Invest in forest health and watershed protection measures.
Policy E&C.3.4. Increase the region's preparedness for extreme climate events.
Policy E&C.3.5. Improve the ability of vulnerable community members to adapt and thrive amidst the pressures of climate change.
Policy E&C.3.6. Commit to equitably distribute the burdens and benefits of climate action policies and investments to all segments of the community.

Goal E&C. 4. Integrate available science into policies governing the use and conservation of Flagstaff's natural resources.

Policy E&C. 4.1. Assess vulnerabilities and risks of Flagstaff's natural resources in the context of anticipated climate changes and resulting changes to Flagstaff's systems.
Policy E&C. 4.2. Develop water use policies that attempt to integrate current best projections of climate change effects on the Colorado Plateau's water resources and emphasize conservation.

TRACKED CHANGES – REGIONAL PLAN TEXT AMENDMENT

Pages X-19

Transportation Policy T.8.1 Revision

Tracked Changes:

Policy T.8.1. Promote efficient ~~transportation~~ network connectivity to and within major trade corridors, employment centers, and special districts that enhances the region's standing as a major economic hub.

Exhibit B

Flagstaff Regional Plan 2030

PLACE MATTERS

Adopted by Flagstaff City Council on January 14, 2014

Ratified by Flagstaff voters on May 20, 2014

As amended on January 6, 2022

The *Flagstaff Regional Plan* is a planning document that serves as a roadmap to implement the community's vision. This Plan is not intended to require or preclude any particular action and does not provide specific criteria. Development criteria and standards are located in other documents such as the Flagstaff Zoning Code.

This Plan should be viewed as a guide to better understand the community's future vision for the area. The goals, policies, maps, and illustrations within this Plan do not preclude any property owner from exercising their private development rights.

www.FlagstaffMatters.com

ACKNOWLEDGMENTS

The *Flagstaff Regional Plan 2030* is the result of the vigorous and dedicated effort of many people in our Greater Flagstaff community. The members of the Citizen Advisory Committee represent a broad spectrum of organizations and businesses, and citizens with a diversity of values and cultures. Their commitment will help us preserve and enhance what we value: the land we live in, the places we build and our neighbors. In addition, the general community was invited to give input on many occasions over a four-year period, which ensured that we were mindful of the values and ideals of our citizens throughout this process.

Regional Plan Citizen Advisory Committee (2009-2014)

Ben Anderson
Paul Babbitt (Chairman)
Carol Bousquet (Vice Chair)
Michael Chaveas
Bea Cooley
Jean Griego
Shaula Hedwall
Richard Henn
Maury Herman
Ken Kaemmerle
Susan Bean
Julie Leid
Judy Louks
Devonna McLaughlin
Jerome Naleski
Mike Nesbitt
Eva Putzova
Trish Rensink
William Ring
Larry Stevens
Eunice Tso
Don Walters
Cynthia White
Nat White
Alex Wright

Core Planning Team

CITY OF FLAGSTAFF
Jim Cronk
Bob Caravona, AICP
Kimberly Sharp, AICP
Mark Sawyers, AICP
Darrel Barker
Vince Knaggs
Roger Eastman, AICP
Jennifer Mikelson

COCONINO COUNTY
Bill Towler, FAICP
Sue Pratt, AICP
John Aber
Tiffany Antol, AICP
Kate Morley

FLAGSTAFF MPO
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XVI

PLAN AMENDMENTS

Effective Date	Resolution Number and Date	Description of Amendment	Pages Changed
November 19, 2015	2015-35 October 20	La Plaza Vieja Neighborhood Specific Plan Minor Plan Amendment, incorporated by reference	XVI-1
December 17, 2015	2015-36 November 17	Maps 21 and 22: Future Growth Illustrations Minor Plan Amendment - New area type of Existing Suburban (Core Services Yard)	IX-26-29
December 31, 2015	2015-38 December 1	Map 25: Road Network Illustration Major Plan Amendment and related text edits	IX-35-57 X-1, X-4-5, X-18-22 (In Chapter X, one page of content was deleted)
April 21, 2016	2016-08 March 22	Maps 21 and 22: Future Growth Illustration Minor Plan Amendment - Adding Existing Suburban on McMillan Mesa	IX-26-29
May 5, 2016	2016-09, 2016-10, 2016-11, and 2016-12 April 5	Maps 21 and 22: Future Growth Illustrations Minor Plan Amendments - Add City-Owned parcels to Parks/Open Space area type	IX-26-29
January 5, 2017	2016-31 December 6	Chapter III: How This Plan Works - Amended the Major Plan Amendment Criteria, information concerning plan amendments and specific Plans, and other related text.	III-1-15
February 16, 2017	2017-04 January 17	Chapter III: How This Plan Works - Amended the Major Plan Amendment Criteria for Category 5: Area Types - Urban/Suburban/ Rural	III-14

Effective Date	Resolution Number and Date	Description of Amendment	Pages Changed
April 20, 2017	2017-08 March 21	Maps 21 and 22: Future Growth Illustrations Minor Plan Amendment Change the area type designation of approximately 20 acres of real property located at 3620 W Schultz Pass road from Area in White area type to Parks/Open Space area type	IX-26-29
March 22, 2018	2018-08 February 20	High Occupancy Housing Specific Plan Minor Plan Amendment, incorporated by reference	XVI-2
March 22, 2018	2018-09 February 20	Regional Plan Amendments proposed through the High Occupancy Housing Specific Plan process.	VIII-15, IX-1, IX-16-17, IX-25-29, IX-33-37, IX-40, IX-42, IX-46-47, IX-63-70, X-6-7, XII-5, GL-6, Appendix A
November 15, 2018	2018-50 October 16	Regional Plan Amendment to make land use and road network designations consistent with the McMillan Mesa Natural Area to clarify the extent of surrounding land uses on City property, and to correct mapping errors.	IX-26-29, X-4-5
September 30, 2020	2020-51 September 1	Regional Plan Amendments proposed through the Southside Community Specific Plan process.	IX-26-29, IX-35
September 30, 2020	2020-52 September 1	Southside Community Specific Plan Minor Plan Amendment, incorporated by reference	XVI-2
January 6, 2022	2021-XX December 7	Carbon Neutrality Major Plan Amendment Amending Champeters IV and X to address the 2021 Flagstaff Carbon Neutrality Plan	IV-11-12, X-19

CITY OF FLAGSTAFF

STAFF SUMMARY REPORT

To:	The Honorable Mayor and Council
From:	Jerry Bills, Deputy Fire Chief
Date:	12/01/2021
Meeting Date:	12/07/2021

TITLE:

Consideration and Adoption of Resolution No. 2021-55: A resolution to adopt the Coconino County Multi-Jurisdictional Hazard Mitigation Plan

STAFF RECOMMENDED ACTION:

1) Read Resolution No. 2021-55 by title only
2) City Clerk reads Resolution No. 2021-55 by title only (if approved above)
3) Adopt Resolution No. 2021-55

Executive Summary:

City staff has been cooperating with Coconino County on updating the Coconino County Multi-Jurisdictional Hazard Mitigation Plan (CCMJHMP). The Federal Emergency Management Agency has approved the document per planning standards and now each jurisdiction under the plan must approve the plan to place it into effect.

Financial Impact:

The CCMJHMP creates no fiscal impact.

Policy Impact:

No policy impact

Connection to PBB Priorities/Objectives, Carbon Neutrality Plan & Regional Plan:

Priority Based Budget Key Community Priorities and Objectives

Ensure the built environment is safe through the use of consistent standards, rules and regulations, and land use practices

Utilize existing long-range plan(s) that identify the community's future infrastructure needs and all associated costs

Regional Plan

*Goal LU.7. Provide for public services and infrastructure

Has There Been Previous Council Decision on This:

The City Council adopted the original City of Flagstaff Hazard Mitigation Plan via resolution 2005-24 in March of 2005. In September of 2011, the revised multi-jurisdictional plan was adopted via resolution # 2011-37. In February of 2016 the revised Multi-jurisdictional plan was adopted via resolution 2016-07.

Options and Alternatives:

The Council can choose to:

- adopt the resolution and the CCMJHMP
- not adopt the resolution and the CCMJHMP

Background/History:

Purpose

This Plan was prepared to guide hazard mitigation to better protect the people, property, community assets and land from the effects of hazards. This Plan demonstrates the communities' and tribe's commitment to reducing risks from hazards and serves as a tool to help decision makers direct mitigation activities and resources. This Plan was also developed to make the participating communities and tribe eligible for certain types of Federal disaster assistance and hazard mitigation grant funding.

Background and Scope

Each year in the United States, disasters take the lives of hundreds of people and injure thousands more. Nationwide, taxpayers pay billions of dollars annually to help communities, organizations, businesses, and individuals recover from disasters. These monies only partially reflect the true cost of disasters, because additional expenses to insurance companies and nongovernmental organizations are not reimbursed by tax dollars. Many disasters are predictable, and much of the damage caused by these events can be alleviated or even eliminated.

Hazard mitigation is defined by FEMA as any sustained action taken to reduce or eliminate long-term risk to human life and property from a hazard event." The results of a three-year congressionally mandated independent study to assess future savings from mitigation activities provides evidence that mitigation activities are highly cost-effective. On average, each dollar spend on mitigation saves society an average of $4 in avoided future losses in addition to saving lives and preventing injuries (National Institute of Building Science Multi-Hazard Mitigation Council 2005).

Examples of hazard mitigation measures include, but are not limited to the following:

- Forest Fuels Mitigation
- Development of mitigation standards, regulations, policies, and programs
- Land use/zoning policies
- Strong building code and floodplain management regulations
- Dam safety program and levee systems
- Acquisition of flood prone and environmentally sensitive lands
- Retrofitting/hardening/elevating structures and critical facilities
- Relocation of structures, infrastructure, and facilities out of vulnerable areas
- Public awareness/education campaigns
- Improvement of warning and evacuation systems

Hazard mitigation planning is the process through which hazards that threaten communities are identified, likely impacts of those hazards are determined, mitigation goals are set, and appropriate strategies to lessen impacts are determined, prioritized, and implemented. This Plan documents the planning process employed by the Planning Team. The Plan identifies relevant hazards and risks, and identifies the strategy that will be used to decrease vulnerability and increase resiliency and sustainability.

This Plan was prepared pursuant to the requirements of the Disaster Mitigation Action of 2000 and the implementing regulations set forth in the Federal Register (hereafter, these requirements will be referred to collectively as the DMA2K). While the act emphasized the need for mitigation plans and more coordinated mitigation planning and implementation efforts, the regulations established the requirements that hazard mitigation plans must meet in order to be eligible for certain Federal disaster assistance and

hazard mitigation funding un the Robert T. Stafford Disaster Relief and Emergency Act.

Information in this Plan will be used to help guide and coordinate mitigation activities and decisions for future land use. Proactive mitigation planning will help reduce the cost of disaster response and recovery to the community and its property owners by protecting structures, reducing exposure and minimizing overall community impacts and disruption. The community has been affected by hazards in the past and is thus committed to reducing future disaster impacts and maintaining eligibility for Federal funding.

This is a multi-jurisdictional plan that geographically covers the participating communities within the Coconino County boundaries. The following communities participated in the planning process:

- Coconino County
- Flagstaff
- Fredonia
- Page
- Tusayan
- Williams

Attachments: Res. 2021-55
Multijurisdictional Hazard Mitigation Plan

RESOLUTION NO. 2021-55

A RESOLUTION OF THE FLAGSTAFF CITY COUNCIL ADOPTING THE APRIL 2021 COCONINO COUNTY MULTI-JURISDICTION HAZARD MITIGATION PLAN AND REPEALING RESOLUTION 2016-07 ADOPTING THE PRIOR PLAN

RECITALS:

WHEREAS, the City of Flagstaff ("City") would like to adopt the 2021 Coconino County Multi-Jurisdiction Hazard Mitigation Plan ("Plan") to meet the requirements of the Disaster Mitigation Act of 2000 ("DMA2K"); and

WHEREAS, the City has experienced severe damage from natural and human-caused hazards such as flooding, wildfire, drought, thunderstorms, high winds, winter storms, traffic accidents, and hazardous materials incidents on many occasions in the past century, resulting in loss of property and life, economic hardship, and threats to public health and safety; and

WHEREAS, the Plan has been drafted pursuant to Federal requirements, after having been developed after more than one year of research and work by the City of Flagstaff in association and cooperation with the Coconino County Multi-Jurisdictional Planning Team, for the reduction of hazard risk to the community; and

WHEREAS, the primary purpose of the Plan is to identify natural and human-caused hazards that affect the City of Flagstaff, assess the vulnerability and risk posed by those hazards to community-wide human and structural assets, develop strategies for mitigation of those identified hazards, present future maintenance procedures for the Plan, and document the planning process; and

WHEREAS, the Plan recommends several hazard mitigation actions or projects that will provide mitigation for specific natural and human-caused hazards that affect the City of Flagstaff, in order to protect people and property from loss associated with those hazards; and

WHEREAS, upon approval of the Plan and approval from the Arizona Department of Emergency Management and the Federal Emergency Management Agency, the City will be eligible to apply for three types of mitigation programs:

(a) Hazards Mitigation Grant Program
(b) Flood Mitigation Assistance Program
(c) Pre-Disaster Mitigation (PDM) Program;

WHEREAS, the revised Plan is attached to the staff summary report and posted on the City of Flagstaff website in support of this Resolution.

ENACTMENTS:

NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF FLAGSTAFF AS FOLLOWS:

SECTION 1. That the Plan, attached hereto as Exhibit A, be and hereby is approved and accepted.

SECTION 2. That Resolution No. 2016-07 adopting the prior plan be hereby repealed from and after the effective of this resolution.

SECTION 3. That the respective officials identified in the mitigation strategy of the Plan be and hereby are directed to pursue implementation of the recommended actions assigned to them.

PASSED AND ADOPTED by the City Council of the City of Flagstaff this 7th day of December, 2021.

MAYOR

ATTEST:

CITY CLERK

APPROVED AS TO FORM:

CITY ATTORNEY

Exhibits:
Exhibit A - 2021 Coconino County Multi-Jurisdiction Hazard Mitigation Plan

COCONINO COUNTY ARIZONA

COUNTY OF COCONINO
MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN (MJHMP) 2021

DRAFT v5.0
Last updated: April 2021

Record of Reviews and Revisions

Revision #	Date	Sections Reviewed or Revisions Made	Entered by

DRAFT

Table of Contents

Record of Reviews and Revisions ii

Table of Contents iii

Section 1: Hazard Mitigation Program and Requirements **1**

1.1 Hazard Mitigation Planning **1**
1.2 Local Mitigation Planning Requirements **1**
1.3 Hazard Mitigation Plan Description **2**
1.4 Grant Programs with Mitigation Plan Requirements **3**

Section 2: Introduction and Planning Process **5**

2.1 Plan History **5**
2.2 Plan Background, Purpose and Authority **5**
2.3 Planning Process Description **7**
2.4 Planning Team **7**
2.5 Community Engagement **12**
2.6 Incorporation into Other Planning Mechanisms **12**
2.7 References and Documents **14**

Section 3: Planning Area Description **16**

3.1 Location and Geography **16**
3.2 Rivers and Watersheds **17**
3.3 Climate **17**
3.4 History **23**
3.5 Government **19**
3.6 Economy **24**
3.7 Population and Demographics **24**
3.8 Transportation **26**
3.9 Land Use and Development Trends **27**
3.11 Participating Jurisdictions **28**

Section 4: Hazard Analysis and Risk Assessment **38**

4.1 Section Changes and County and City/Town Disaster Proclamation History **38**
4.2 Hazard Identification **39**
4.3 Hazard Risk Profiles **43**

Section 5: Mitigation Strategy **127**

5.1 Hazard Mitigation Statement **127**
5.2 Hazard Mitigation Goals and Objectives **127**
5.3 Capabilities **127**
5.4 Mitigation Actions/Projects and Implementation Strategy **145**

Section 6: Maintenance Procedures **207**

6.1 Monitoring and Evaluation **208**
6.2 Plan Update **209**
6.3 Continued Public Involvement **209**

Section 7: Plan Approval and Adoption **212**

Appendices: **213**

Appendix A: Local Mitigation Plan Review Tool and Adoption Documentation **213**

DRAFT

Appendix B: Planning Process Documentation **214**
Appendix C. Public Engagement Documentation **266**
Appendix D: Mitigation Plan Prioritization **295**
Appendix E: Acronyms **335**

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Section 1: Hazard Mitigation Program and Requirements

Coconino County (County) alongside the cities/towns of Flagstaff, Fredonia, Page, Tusayan, and Williams (Planning Team) have prepared the 2021 Multi-Jurisdiction Hazard Mitigation Plan (MJHMP) to assess the natural and human caused risks to the planning area so as to reduce the potential impact of the hazards by creating mitigation strategies. The 2021 MJHMP represents all the jurisdictions' commitment to create safer, more resilient communities by taking actions to reduce risk and by committing resources to lessen the effects of hazards on people and property.

This plan complies with the Federal Disaster Mitigation Act (2000), Federal Register 44 CFR Parts 201 and 206, which modified the Robert T. Stafford Disaster Relief and Emergency Assistance Act by adding a new section, 322 - Mitigation Planning. This law, as of November 1, 2004, requires local governments to develop and submit hazard mitigation plans as a condition of receiving Hazard Mitigation Grant Program (HMGP) and other mitigation project grants. The Planning Group has coordinated preparation of the MJHMP in cooperation with the State of Arizona, other jurisdictions, the County's and city/towns' departments, community stakeholders, partner agencies, and members of the public.

This section of the MJHMP provides a brief description of hazard mitigation planning, local mitigation plan requirements, and an outline of the 2021 MJHMP. There is also an overview of Federal Emergency Management Agency (FEMA) programs and grants related to hazard mitigation.

1.1 Hazard Mitigation Planning

Hazard mitigation is any sustained action taken to reduce or eliminate the long-term risk to human life and property from hazards. In general, hazard mitigation is work done to minimize the impact of a hazard event before it occurs, with the goal of reducing losses from future disasters. 44 CFR § 201.1(b) describes the purpose of mitigation planning is for local governments to identify the hazards that impact them, to identify actions and activities to reduce losses from those hazards, and to establish a coordinated process to implement the plan, taking advantage of a wide range of resources. For the Planning Team, hazard mitigation planning is a process that will:

- Identify and profile hazards that affect the planning area;
- Analyze the population and facilities at risk from those hazards;
- Develop mitigation strategies and actions to lessen or reduce impact of profiled hazards;
- Implement the strategy and actions that may involve planning, policy changes, programs, projects, and other activities.

The Planning Team's implementation of mitigation actions, which may be short-term or long-term strategies, is the primary objective of the planning process. This type of planning will supplement the other comprehensive planning and emergency management programs.

1.2 Local Mitigation Planning Requirements

Hazard mitigation planning is governed by the Stafford Act, as amended by the Disaster Mitigation Act of 2000 (DMA 2000), and by federal regulations implementing the Stafford Act. DMA 2000 revised the Stafford Act to require state, local, and tribal governments to develop and submit to FEMA a mitigation plan that outlines processes for identifying the natural hazards, risks, and vulnerabilities of the jurisdiction. Plan approval by FEMA is a prerequisite to receiving federal hazard mitigation grant funds (see 42 USC § 5165(a).

To implement the mitigation planning requirements of the Stafford Act, FEMA promulgated 44 CFR Part 201, the federal regulations governing the planning process, plan content, and the process for obtaining approval of the plan from FEMA. The planning requirements set forth in the CFR are identified throughout this plan mirroring the order of the FEMA Regulation Checklist in the Local Mitigation Plan Review Tool.

FEMA has produced a *Local Mitigation Plan Review Tool,* which has been tailored by FEMA Region IX as an appendix to the *Local Mitigation Planning Handbook (2013),* to demonstrate how the mitigation plan meets the regulation in 44 CFR § 201.6 and offers State and FEMA Mitigation Planners an opportunity to provide feedback to the jurisdiction. The Plan Review Tool has a regulation checklist that provides a summary of FEMA's evaluation of whether the plan has addressed all requirements. Local planners can also use the checklist prior to submitting the plan for approval to ensure they have addressed all the requirements. The Local Mitigation Plan Review Tool Regulation Checklist is provided in **Appendix A** of this document.

1.3 Hazard Mitigation Plan Description

The 2021 MJHMP consists of the sections and appendices described below:

Table 1-1: Plan Sections, Appendices, and Descriptions

Section 1: **Hazard Mitigation Program and Requirements**	Includes background on hazard mitigation planning, lists the MJHMP planning requirements, provides a description of the plan, and discusses grants related to hazard mitigation.
Section 2: **Introduction and Planning Process**	Introduces the update to the MJHMP and describes the planning process for the 2021 MJHMP, including an overview of how the MJHMP was prepared, identification of the MJHMP Planning Team, involvement of outside agencies and communities, the inclusion of related plans, reports and information, and stakeholder and public outreach activities.
Section 3: **Planning Area Description**	Includes a description of the natural and built out state of the Planning Team, including climate, geography, demographics, and economic conditions.
Section 4: **Capability Assessment**	Identifies and evaluates the resources available to participating jurisdictions for hazard mitigation in the County.
Section 5: **Hazard Analysis and Risk Assessment**	Provides a list of the hazards identified in the 2021 MJHMP, a profile of each hazard and hazard summary, and a risk assessment of the planning area.
Section 6: **Mitigation Strategy**	Identifies and evaluates the current, ongoing, and completed mitigation projects and programs of the participating jurisdictions and lists their mitigation strategies for reducing potential losses.
Section 7: **Plan Maintenance Procedures**	Describes procedures for updating the MJHMP to keep it current and for continuance of public engagement in the planning process.

Section 8: **Plan Approval and Adoption**	Includes documentation of AZ DEMA and FEMA review process and documentation of MJHMP adoption by the elected leadership of each participating jurisdiction.
Appendix A	Contains the FEMA Local Mitigation Plan Review Tool, which documents compliance with the MJHMP planning requirements of 44 CFR Part 201.
Appendix B	Contains documentation of the planning process for the Planning Team, including meetings, presentations, emails, etc.
Appendix C	Contains documentation of the planning process including meetings, presentations held for the stakeholders and public, and other stakeholder/public outreach efforts.
Appendix C	Lists acronyms and abbreviations used in the 2021 MJHMP.

1.4 Grant Programs with Mitigation Plan Requirements

Currently, four FEMA grant programs provide funding to local entities that have a FEMA-approved local mitigation plan that meets federal hazard mitigation plan requirements. Two of the grant programs are authorized under the Stafford Act. The remaining two programs are authorized under the National Flood Insurance Act and the Bunning-Bereuter-Blumenauer Flood Insurance Reform Act.

1.4.1 Stafford Act Grant Programs

Funding is provided to state, local, and tribal governments that have an approved MJHMP through the following programs.

Hazard Mitigation Grant Program (HMGP)

The HMGP provides grants to implement long-term hazard mitigation measures after declaration of a major disaster. Its purpose is to reduce the loss of life and property due to natural disasters and to enable mitigation measures to be implemented during the immediate recovery from a disaster. To qualify for HMGP funding, projects must provide a long-term solution to a problem and the project's potential savings must exceed the cost of implementing the project.

HMGP Funds may be used to protect either public or private property or to purchase property that has been subjected to, or is in danger of, repetitive damage. The amount of funding available for the HMGP under a particular disaster declaration is limited. Under the program, the federal government may provide a state or tribe with up to 20% of the total disaster grants awarded by FEMA and may provide up to 75% of the cost of projects approved under the program.

The Building Resilient Infrastructure and Communities (BRIC) Program

The new BRIC grant program is for pre-disaster mitigation activities and replaces FEMA's existing Pre-Disaster Mitigation program. The BRIC priorities are to:

- Incentivize public infrastructure projects;
- Incentivize projects that mitigate risk to one or more lifelines;
- Incentivize projects that incorporate nature-based solution;
- Incentivize the adoptions and enforcement of modern building codes.

BRIC will support states, local communities, tribes, and territories as they undertake hazard mitigation projects, reducing the risks they face from disasters and natural hazards. The BRIC program guiding principles are supporting communities through capability and capacity-building, encouraging and enabling innovation, promoting partnerships, enabling large projects, maintaining flexibility, and providing consistency. The federal government provides up to 75% of the cost of projects approved under the program.

1.4.2 National Flood Insurance Act Grant Programs

Flood Mitigation Assistance Program

The goal of the Flood Mitigation Assistance (FMA) Grant Program is to reduce or eliminate flood insurance claims under the National Flood Insurance Program (NFIP). This program emphasizes mitigating repetitive loss (RL) properties. The primary source of funding for the FMA program is the National Flood Insurance Fund. Grant funding is available for planning, project, and technical assistance. Project grants are awarded to local entities to apply mitigation measures to reduce flood losses to properties insured under the NFIP. In FY 2014, FMA funding totaled $89 million. The cost-share for this grant is 75% federal and 25% nonfederal. However, a cost-share of 90% federal and 10% nonfederal is available in certain situations to mitigate severe repetitive loss (SRL) properties.

Repetitive Flood Claims Program

The Repetitive Flood Claims (RFC) Program provides funding to reduce or eliminate the long-term risk of flood damage to residential and non-residential structures insured under the NFIP. Structures considered for mitigation must have had one or more claim payments for flood damages. All RFC grants are eligible for up to 100% federal assistance.

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Section 2: Introduction and Planning Process

The requirements for documentation of the MJHMP planning process are described below. This section summarizes the Planning Team's hazard mitigation planning efforts in 2020-2021. In addition, the section describes public and stakeholder outreach efforts as part of the MJHMP planning process. The section also summarizes the review and incorporation of existing plans, studies, and reports used to develop the MJHMP. Documentation of the 2021 MJHMP planning process for the Planning Team is provided in Appendix B and documentation of the planning process for the public and stakeholders is found in Appendix C. These appendices document the planning meetings and outreach, and include meeting agendas, presentation, materials, and other documentation used to conduct the planning process.

FEMA REGULATION CHECKLIST: PLANNING PROCESS

Documentation of the Planning Process
44 CFR § 201.6(c)(1): The plan shall include documentation of the planning process used to develop the plan, including how it was prepared, who was involved in the process, and how the public was involved.

Elements
A1. Does the Plan document the planning process, including how it was prepared and who was involved in the process for each jurisdiction? 44 CFR § 201.6(c)(1).
A2. Does the Plan document an opportunity for neighboring communities, local and regional agencies involved in hazard mitigation activities, agencies that have the authority to regulate development as well as other interests to be involved in the planning process? 44 CFR 201.6(b)(2)
A3. Does the Plan document how the public was involved in the planning process during the drafting stage? 44 CFR 201.6(b)(1) and 201.6(c)(1)
A4. Does the Plan document the review and incorporation of existing plans, studies, reports, and technical information? 44 CFR 201.6(b)(3)

Source: FEMA, *Local Mitigation Planning Handbook Review Tool,* March 2013.

The planning process began with the Planning Team establishing the planning area and inviting stakeholders within the area to participate in the process. In addition, the Planning Team identified the financial and technical resources required to update the MJHMP. Once all the Planning Team's financial and technical resources were identified, the Planning Team established a schedule for the process.

2.1 Plan History

This version of the MJHMP is an update to the 2015 MJHMP. It contains the updated status of previous mitigation activities plus the new mitigation actions identified by each of the six participating jurisdictions, includes new capabilities, and updates the risk assessment and vulnerability analysis. This effort updated the 2015 plan and added a "Pandemic" hazard.

Note the following: The County will list the original nine hazards from the 2015 MJHMP. These include Dam Failure, Drought, Earthquake, Flood, Hazardous Materials Incidents, Severe Wind, Transportation Accidents, Wildland Fire, and Winter Storm. In light of the current and very impactful COVID-19 pandemic, the County has added the additional hazard of Public Health related incidents inclusive of "Pandemic," bringing the primary County identified hazards to a total of ten.

The additional hazards of Aviation Accident, Climate Change, Extended Power Outage, Excessive Heat, and Terrorism were identified by the remaining five participating jurisdictions of Flagstaff, Page, Williams, Tusayan, and Fredonia as their unique nature of location and

circumstances lends necessity to consider these additional hazards and the impact to their individual jurisdictions.

These additional hazards ARE NOT considered part of this Plan for the formal hazard mitigation review process. The County wishes to acknowledge these hazards that the five other participating jurisdictions have identified. However, the County realizes they are mostly manmade and therefore not eligible for mitigation funding.

2.2 Plan Background, Purpose and Authority

Each year in the United States, disasters take the lives of hundreds of people and injure thousands more. Nationwide, taxpayers pay billions of dollars annually to help communities, organizations, businesses, and individuals recover from disasters. These monies only partially reflect the true cost of disasters, because additional expenses to insurance companies and nongovernmental organizations are not reimbursed by tax dollars. Many disasters are predictable, and much of the damage caused by these events can be alleviated or even eliminated.

Hazard mitigation is defined by FEMA as "any sustained action taken to reduce or eliminate long-term risk to human life and property from a hazard event." A 2019 cost-benefit analysis on hazard mitigation, the most in-depth available to date, concluded that adopting the latest building code requirements is affordable and saves $11 per $1 invested, above-code design could save $4 per $1 cost, private-sector building retrofit projects could save $4 per $1 cost, lifeline retrofit saves $4 per $1 cost, and Federal grants save $6 per $1 cost. The findings provide evidence that mitigation activities are highly cost-effective, in addition to saving lives and preventing injuries.[1]

Examples of hazard mitigation measures include, but are not limited to the following:

- Development of mitigation standards, regulations, policies, and programs;
- Land use/zoning policies;
- Strong building code and floodplain management regulations;
- Dam safety program, seawalls, and levee systems;
- Acquisition of flood prone and environmentally sensitive lands;
- Retrofitting/hardening/elevating structures and critical facilities;
- Relocation of structures, infrastructure, and facilities out of vulnerable areas;
- Public awareness/education campaigns;
- Improvement of warning and evacuation systems.

Hazard mitigation planning is the process through which hazards that threaten the County are identified, likely impacts of those hazards are determined, mitigation goals are set, and appropriate strategies to lessen impacts are determined, prioritized, and implemented. This Plan documents the planning process employed by the Planning Team. The MJHMP identifies relevant hazards and risks and identifies the strategy that will be used to decrease vulnerability and increase resiliency and sustainability.

This MJHMP was prepared pursuant to the requirements of the Disaster Mitigation Act of 2000 and the implementing regulations set forth in the Federal Register (hereafter, these requirements will be referred to

[1] National Institute of Building Science Multi-Hazard Mitigation Council, 2019, Natural Hazard Mitigation Saves: 2019 Report

collectively as the DMA 2000). While the act emphasized the need for mitigation plans and more coordinated mitigation planning and implementation efforts, the regulations established the requirements that hazard mitigation plans must meet in order to be eligible for certain Federal disaster assistance and hazard mitigation funding under the Robert T. Stafford Disaster Relief and Emergency Act.

Information in this MJHMP will be used to help guide and coordinate mitigation activities and decisions for future land use. Proactive mitigation planning will help reduce the cost of disaster response and recovery to the County and its property owners by protecting structures, reducing exposure and minimizing overall County impacts and disruption. The County has been affected by hazards in the past and is thus committed to reducing future disaster impacts and maintaining eligibility for Federal funding.

This is a multi-jurisdictional plan that geographically covers the participating jurisdictions within the County boundaries (hereinafter referred to as the Planning Area). The following jurisdictions participated in the planning process:

- Coconino County;
- Flagstaff;
- Fredonia;
- Page;
- Tusayan;
- Williams.

2.3 Planning Process Description

In September 2020, the planning process for the 2021 MJHMP began. Select staff from the Planning Group were invited to participate on the MJHMP Planning Team for the purpose of developing the 2021 MJHMP in addition to representation from AZ DEMA. A solicitation was also sent to other interested agencies through an email sent by the County. During the plan review phase, feedback was requested from adjacent counties via email. See **Appendix B** for documentation of this engagement.

2.4 Planning Team

The role of the Planning Team was to perform the review, coordination, research, and planning element activities required to update the 2015 MJHMP. Attendance by each participating jurisdiction was required at the Planning Team meetings as they were structured to progress through the planning process. Steps and procedures for updating the MJHMP were presented and discussed at each Planning Team meeting, and assignments for data collection were provided. Each meeting built on information discussed and assignments given at the previous meeting. Members of the Planning Team also had the responsibility of:

- Providing supporting data;
- Conveying information and assignments received at the Planning Team meetings to other involved parties within their respective jurisdictions such as those involved in public engagement;
- Ensuring that requested assignments were completed and returned on a timely basis;
- Reviewing the draft MJHMP;
- Coordinating official adoption of the MJHMP.

Prior to the planning process, the County identified members for the Planning Team by initiating contact with as much of the previous Planning Team as possible. Others invited included Arizona Department of Emergency and Military Affairs (DEMA), state universities, Arizona Geological Survey, National Weather Service (NWS), and community groups. Contact was made by sending invitations to participate on the Planning Team via email and via personal contacts. The invitation explained the importance of the Plan to build resilience and make communities safer.

Prior to the beginning of the plan update process, DEMA delivered a presentation that provided a full review of the current MJHMP and detailed the update process. The target audience was the agencies/individuals invited to participate on the Planning Team. The purpose was to provide an understanding of the Plan, explain its purpose and its benefits, as well as to provide detailed and realistic expectations of the Plan update process.

Members of the MJHMP Planning Team are listed in **Table 2-1**, below. To ensure manageable meeting sizes, each jurisdiction sent a limited number of representatives to MJHMP Planning Team meetings. The remainder supported the planning process through the data collection and informal planning efforts of their given jurisdiction.

Table 2-1: MJHMP Planning Team Members

Jurisdiction	Organization	Name	Key Role
Federal	National Weather Service	Brian Klimowski	Provided information on meteorological hazards and climate change.
Federal	National Weather Service	Tony Merriman	Provided information on meteorological hazards and climate change.
Arizona	Arizona Department of Emergency and Military Affairs	Daren Sweet	Provided guidance/assistance in plan update and meeting requirements.
Arizona	Arizona Department of Emergency and Military Affairs	Dustin Kirk	Represented DEMA from the state's perspective.
Arizona	Arizona Department of Emergency and Military Affairs	Sue Austin	Provided guidance/assistance in plan update and meeting requirements.
Arizona	Arizona State University	Nancy Selover	Provided information on meteorological hazards and climate change.
Bellemont	Camp Navajo	Anthony Brutto	Provided guidance and input from a regional perspective as it pertains to Camp Navajo and regional response.
Flagstaff	Emergency Management	Jerry Bills	Provided guidance and input on jurisdiction's emergency management priorities, hazards, challenges, stakeholders, and resources
Flagstaff	Conference and Planning	Sara Dechter	Provided guidance on planning and development.
Flagstaff	Engineering Section	Rick Barrett	Provided input on capability assessment. Provided guidance on capital projects funding and execution.
Flagstaff	Fire Department	Mark Gaillard	Provided jurisdiction specific information.
Flagstaff	Fire Department	Paul Oltrogge	Provided guidance on wildland fire and mitigation efforts.
Flagstaff	Grants and Contracts	Stacey Brechler-Knaggs	Planning Team participant.

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Jurisdiction	Organization	Name	Key Role
Flagstaff	Police Department	Lt. Frank Higgins	Provided jurisdiction specific information.
Flagstaff	Sustainability Management	Nicole Antonopoulos	Planning Team participant.
Flagstaff	Utilities Division	Ed Schenk	Provided input on capability assessment. Provided guidance on stormwater related information.
Flagstaff	Utilities Division	Monica Rabb	Provided input on capability assessment. Provided guidance on stormwater related information.
Flagstaff	Water Services	Mark Richardson	Provided jurisdiction specific information.
Page	Fire Department	Erin Harris	Provided jurisdiction specific information.
Page	Fire Department	Jeff Reed	Provided jurisdiction specific information.
Page	Police Department	Lt. Tim Lange	Provided jurisdiction specific information.
Page	Police Department	Sgt. Cody Miller	Provided jurisdiction specific information.
Page	Public Works	Kyle Christiansen	Provided input and information on the city's hazards.
Page	Water Resources Department	Matt Wood	Provided guidance and information related to flooding.
Williams	Emergency Services, Police Department	Theresa Johnson	Provided jurisdiction specific information.
Williams	Police Department	Lt. John Romero	Provided jurisdiction specific information.
Williams	Public Works	Tim Pettit	Provided jurisdiction specific information.
Coconino County	Community Development	JD Brice	Provided flood related information.
Coconino County	County GIS	Helen Costello	Provided mapping/planning capabilities.
Coconino County	County GIS	Scott Carey	Provided mapping/planning capabilities.
Coconino County	County Manager's Office	Lucinda Andreani	Planning Team participant.
Coconino County	Community Development	Adam Hicks	Planning Team participant.
Coconino County	Emergency Management Department	Mark Christian	Coordinated the collection of updated data/info from jurisdictions.
Coconino County	Emergency Management Department	Wes Dison	Provided County specific information.

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Jurisdiction	Organization	Name	Key Role
Coconino County	Emergency Management Department	Tim Carter	Provided County specific information.
Coconino County	Engineering Department	Christopher Tressler	Planning Team participant.
Coconino County	Engineering Department	Nick Hall	Provided hazard relation information.
Coconino County	Health and Human Services	Ben Wilson	Provided County HHS specific information.
Coconino County	Health and Human Services	Blake Scott	Provided County HHS specific information.
Coconino County	Public Works	Sam Beckett	Provided jurisdiction specific information.
Coconino County	Sheriff's Office	Brett Axlund	Provided County regional information.
Coconino County	Sheriff's Office	Gerritt Boeck	Provided County regional information.
Private / Coconino County	Northern Arizona University (NAU)	Robert Church	NAU Emergency Manager; provided NAU specific information and planning capabilities.
Ponderosa Fire District	Fire Department	Kent Ofstie	Provided wildland fire related information/data.
Ponderosa Fire District	Fire Department	Lee Antonides	Provided wildland fire related information/data.
Summit Fire District	Fire Department	Jerry Bills	Provided jurisdiction specific information and coordination.
Fredonia	Fire Department	Don Johnson	Provided assistance in identifying mitigation activities for the town's community hazards.
Fredonia	Town Manager's Office	Bayden Grover	Town Manager; provided jurisdiction information.
Tusayan	Fire Department	Greg Brush	Provided input on the community's data/information for plan.
Tusayan	Town Manager's Office	Charlie Hendrix	Provided jurisdiction specific information.

2.4.1 Planning Team Activities

Four meetings were held with the Planning Team. Representatives from the County and cities/towns shared the responsibility of chairing the Planning Team. The Coconino County Emergency Management Department also copied documents for review and sent out meeting notices. **Table 2-2** lists milestone Planning Team activities. A full description of Planning Team activities with documentation is contained in **Appendix B**.

Table 2-2: Planning Activities

Date	Activity/Meeting	Purpose
Sep 4, 2020	MJHMP Planning Team Kickoff Meeting	Introduction of Planning Team members, discussion of update process, and review of critical tasks necessary for the planning effort.
Nov 19, 2020	MJHMP Planning Team Meeting #1	Review project management plan, align expectations, review potential hazards and select those that pose risks, distribute data collection tools.
Dec 15, 2020	MJHMP Planning Team Meeting #2	Review prior mitigation action status, develop mitigation goals, and generate new mitigation actions.
Jan 12, 2021	Coconino County Mitigation Action Planning Meeting	Focused planning meeting to review County's prior mitigation actions and detail new mitigation actions for inclusion in the plan.
Jan 22, 2021	MJHMP Planning Team Meeting #3	Review of outstanding information requirements, plan review and approval processes, and steps for finalizing the draft plan.

2.4.2 Other Jurisdictions Agency / Organizational Participation

Multiple additional organizations were engaged as part of the planning process, with several participating in Planning Team meetings. They were invited by emails sent via an MS Outlook calendar invitation to the meetings. **Appendix B**, Planning Team meetings notes, documents their engagement. **Table 2-3** includes a list of the organizations and attendees.

Copies of the draft MJHMP were provided to the Planning Team, AZ DEMA, regional utilities, and neighboring counties/jurisdictions for review, as documented in **Appendix C**. The organizations and jurisdictions engaged outside of the Planning Team in this review process are also listed in **Table 2-3**.

Table 2-3: Other Organization/Jurisdictional Participants

Organization	Staff	Engagement
JE Fuller	Joe Loverich	Planning Team Invitee/Participant
Arizona State University	Nancy Selover	Planning Team Invitee/Participant
Camp Navajo	Anthony Brutto	Planning Team Invitee/Participant
Navajo County	Catrina Jenkins	Draft MJHMP Review
Yavapai County, AZ	Randolph Clark	Draft MJHMP Review
Yavapai County, AZ	R.C. Helton	Draft MJHMP Review
Mohave County, AZ	Mike Browning	Draft MJHMP Review
Gila County, AZ	Michael O'Driscoll	Draft MJHMP Review
Kane County, UT	Lt. Alan Alldredge	Draft MJHMP Review
San Juan County, UT	Tammy Gallegos	Draft MJHMP Review
City of Sedona	Jon Trautwein	Draft MJHMP Review
City of Sedona	Justin Clifton	Draft MJHMP Review
Arizona Public Service Electric	Janet Dean	Draft MJHMP Review

Arizona Public Service Electric	Rachel Mure	Draft MJHMP Review
Kinder Morgan	Joseph Simonsen	Draft MJHMP Review
Energy Transfer	Brad Monell	Draft MJHMP Review
AZ Dept. of Forestry and Fire Management	Rick Miller	Draft MJHMP Review
USFA – Coconino National Forest	Laura Jo West	Draft MJHMP Review
USDA - New Kaibab National Forest	Heather Provencio	Draft MJHMP Review
NPS – Grand Canyon National Park	Andrew Fitzgerald	Draft MJHMP Review

2.5 Community Engagement

Once the planning process commenced, the Planning Team provided public notification through their websites, Facebook, and/or Twitter accounts. Additionally, online surveys were conducted to solicit input on the hazards that their communities face and the types of mitigation activities the MJHMP participating jurisdictions should undertake. The draft MJHMP was placed on the Planning Team websites for public review and comment. The MJHMP was adopted by the Coconino County Board of Supervisors and participating jurisdictions of Flagstaff, Page, Williams, Tusayan, and Fredonia. The Plan is now available for viewing on the jurisdictions' respective websites.

The public survey input from the 518 responders was used to select hazards and rank their affects. Fire (Wildland Urban Interface) and Drought Events were ranked as the two top hazards. This input was also used to inform the Calculated Priority Risk Indices (CPRI) contained in Section 5. Finally, survey input was used to select mitigation actions. Input from posting the draft MJHMP was used to refine the MJHMP and prepared it for submission for review. **Appendix C** provides documentation of community engagement efforts and public participation.

2.6 Incorporation into Other Planning Mechanisms

The MJHMP planning process provided the Planning Team with an opportunity to review and expand on policies contained in other plans such as County or City General/Comprehensive Plans. The Planning Team views their general plans and the MJHMP as complementary documents that work together to reduce risk exposure to their residents. Many of the ongoing recommendations identified in the MJHMP are programs recommended in the various General Plan Safety Elements.

The Planning Team will additionally incorporate the MJHMP's hazards, risks, recommendations, and mitigations included into the following planning mechanism documents as seen in **Table 2-4**, as appropriate.

Incorporation of action items and processes from the 2021 MJHMP into various planning documents will be completed as other plans are updated and when new plans are developed. These efforts may coincide with the Plan Maintenance Method and Schedule Activities listed in Section 7. Additional action items may be implemented through the creation of new public educational programs, continued interagency coordination, and public input and participation.

Table 2-4: Other Planning Mechanism Documents

Jurisdiction	Planning Documents
Coconino	• Coconino County Comprehensive Plan • Coconino County Area Plans • Coconino County Roads Capital Improvement Plan • Coconino County Economic Development Plan • Northern Arizona Council of Governments (NACOG) Operations and Funding Opportunities for Economic Development • Blue Ridge Area and Mogollon Rim Ranger District of the Coconino National Forest Community Wildfire Protection Plan • Four Forest Restoration Initiative Strategic Plan
Flagstaff	• Flagstaff Capital Improvements • Flagstaff Regional 2030 Plan • Greater Flagstaff Area Community Wildfire Protection Plan • Flagstaff Watershed Protection Project Implementation Plan • Flagstaff Coordinated Public Transit - Human Services Transportation Plan • Flagstaff Regional Transportation Plan 2040 • Flagstaff Climate Action and Adaptation Plan • Picture Canyon Natural and Cultural Preserve Management Plan
Fredonia	• Fredonia General Plan • Fredonia Emergency Operations Plan
Page	• City of Page General Plan • Page Strategic Plan for Community and Economic Development
Tusayan	• Tusayan General Plan • Tusayan Multimodal Transportation Action Plan • Tusayan Community Wildfire Protection Plan
Williams	• Williams General Plan • Williams Capital Improvement Plan • Greater Williams Area Community Wildfire Protection Plan • Williams Strategic Plan Economic Development Plan • Williams Stormwater Master Plan • Williams Post Wildfire Flood Disaster Operations Plan

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2.7 References and Documents

In updating the MJHMP, the Planning Team used a large number of resource documents and references. **Table 2-5** contains a comprehensive list of guidance and tools incorporated to create the current Plan.

Table 2-5: Guidance and Tools

Referenced Document or Technical Source	Resource Type	Description of Reference and Its Use
Greater Williams Area Community Wildfire Protection Plan	Plan	Wild land fire risk, infrastructure risk, strategic goals, and other data for the Greater Williams Area.
Tusayan General Plan	Plan	Tusayan's comprehensive plan including transportation, land use, impacts on land, and housing.
Tusayan Community Wildfire Protection Plan	Plan	Comprehensive wildland fire planning resource for the City of Tusayan.
City of Page General Plan	Plan	Page's General plan including land use, economic development and demographics.
Fredonia General Plan	Plan	Fredonia's comprehensive plans and future goals.
Flagstaff Regional Plan 2030	Plan	Flagstaff's plan for future sustainability and regional policy.
Coconino County Emergency Operations Plan	Plan	Information on Coconino's response in the event of an emergency.
Flagstaff Climate Action and Adaptation Plan	Plan	A plan outlining Flagstaff's response to rising temperatures, increased wildland fires, and other threats.
Climate Profile for Coconino County	Report	Examination of Coconino's historical climate and projected climate in the future.
State of Arizona Hazard Mitigation Plan	Plan	A resource for disaster resistance and mitigation in the State of Arizona.
Arizona Commerce Authority	Website data and community profiles	Demographic and economic data for the County. Used for community descriptions.
Arizona Department of Emergency and Military Affairs	Data and planning resource	Statewide disaster declaration information and hazard mitigation planning guidance
Arizona Department of Water Resources	Technical resource	Data on drought conditions and statewide drought management (AzGDTF), and dam safety data. Used in risk assessment.
Arizona State Land Department	Data source	Statewide GIS coverage (ALRIS) and wildland fire hazard profile information (Division of Forestry). Used in the risk assessment.

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Referenced Document or Technical Source	Resource Type	Description of Reference and Its Use
Arizona Wildland Urban Interface Assessment	Report	Wildland fire hazard profile data and urban interface at risk communities. Used in the risk assessment.
Arizona State Climate Office	Website reference	Weather and climate data for the State of Arizona. Information on operational, educational, planning, and research endeavors. Used for community descriptions.
Northern Arizona University Ecological Restoration Institute (NAU ERI)	Technical resource	Research and implementation strategies supporting ecological restoration and climate adaptation in western forest landscapes.
Federal Emergency Management Agency	Technical and planning resource	Resource for MJHMP guidance (how-to series), floodplain and flooding related NFIP data (mapping, repetitive loss, NFIP statistics), and historic hazard incidents. Used in the risk assessment and mitigation strategy.
HAZUS-MH	Technical resource	Based data sets within the program were used in the vulnerability analysis.
National Centers for Environmental Information	Technical resource	Resource for weather related data and historic hazard event data used in risk assessment.
National Integrated Drought Information System (2020)	Technical resource	Source for drought related projections and conditions. Used in the risk assessment.
National Inventory of Dams (2018)	Technical resource	Database used in the dam failure hazard profiling. Used in the risk assessment.
National Weather Service	Technical resource	Source for hazard information, data sets, and historic event records used in risk assessment.
United States Geological Survey (2018). Earthquake Hazards Program.	Technical data	Source for geological hazard data and incident data. Used in the risk assessment.
Western Regional Climate Center	Website data	Online resource for climate data used in climate discussion.

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Section 3: Planning Area Description

This section includes detailed descriptions of the County and the five participating cities/towns that form the Planning Team for the MJHMP. **Section 3.1** addressed the overall County.

3.1 Location and Geography

The County is the second largest county in the country, second to only San Bernardino County (California). It is a topographically diverse area with a wide range of climatic conditions, vegetation, and wildlife. Located in north-central Arizona, the County is larger than many states and encompasses over 18,600 square miles. The County is characterized by deep canyons and rugged mountains with elevations that range from 1,350 feet at the bottom of the Grand Canyon to 12,633 feet at the top of the San Francisco Peaks. The majority of the county is located between 5,000 and 7,000 feet in elevation. The County limits generally lie between longitudes 110.75 to 113.35° west and latitudes 34.26 to 37.01° north.

The terrestrial land characteristics of the County are quite diverse, ranging from sparsely vegetated shrublands to dense pine forests, with small areas of desert scrub at the lowest altitude levels of the County.[2] The land and ecological characteristics of the County have been mapped into three terrestrial ecoregions described below.

- **Arizona Mountain Forests** – Contains a mountainous landscape, including the Mogollon Rim and the San Francisco Mountains, and covers approximately 40% of the County. The forested regions are located along the southern border of the county running diagonally from southeast to northwest, and along the upper regions of the North Kaibab Plateau. Elevations in this zone range from approximately 4,000 to just under 13,000 feet, resulting in comparatively cool summers and cold winters. Vegetation in this ecoregion is comprised largely of a mix of Scrub Grassland, Mogollon Chaparral Scrubland, Great Basin Conifer Woodland, Rocky Mountain Conifer Forest, and Plains Grassland.
- **Colorado Plateau Shrublands** – Covers approximately 55% of the County with elevations that average around 4,000-5,000 feet. Vegetation in this ecoregion is comprised mainly of Plains Grassland and Great Basin Desert scrub. Temperatures can vary widely in this zone, with comparatively warm summers and cool winters.
- **Mojave Desert** – Covers a small part of the western-central County, with elevations that range from 1,500 - 4,000 feet on some mountain locations. Typically, the climate in this ecoregion is very hot and dry during the summer and comparatively warm during the winter.

The County's landscape is comprised mainly of two fire adapted ecosystem types and regimes. Naturally occurring wildland fires play an important role in our ecosystem, however, long-term mismanagement has altered the type and frequency of fires, therefore creating unnaturally hazardous fire conditions across much of our landscape. The fire adapted ecosystem types are described as follows:

Moderately frequent fire regimes

In shrublands or forests containing plants with seeds that require fire to germinate, moderately frequent fires allow the growth from those fire-dependent seeds to eventually return the vegetation to the pre-fire condition. These ecosystems are also resilient to fire, but if fire returns before the new vegetation matures and produces more seeds, the vegetation could be replaced by a different type such as grass.

[2] DEMA, November 2007, State of Arizona Multi-Hazard Mitigation Plan

Fires in these systems could increase in frequency for a variety of reasons, including more human activity in the area leading to accidental fire starts, or invasive plants which dry out and burn readily before the re-growing vegetation can reach maturity. Public awareness, invasive species management, or strategic fire suppression strategies can reduce the frequency of fire and increase resilience in such systems.

High frequency, predominantly low severity fire regimes

Fire occurs, or historically occurred, frequently in some ecosystems, such as Ponderosa pine or mixed-conifer forests. When fire burns through the understory, the resilience of these forests depends on the survival of the adult trees with thick bark (i.e. a fire-adapted trait). If fire is excluded from these forests, fuel in the understory can accumulate to significant amounts. When fire eventually returns, it may be so severe that it kills the mature trees.

Promoting resilience in such forests after an extended period without fire, often made worse by extended periods of drought, generally involves reducing the fuel load through thinning, prescribed fire under suitable weather conditions, and other means. Once much of the fuel is removed, fire is more likely to burn with low severity and most adult trees will not be killed. Because these forests are adapted to frequent fire, long-term resilience can only be maintained by allowing fire to burn frequently enough that fuels are adequately reduced.[3]

3.2 Rivers and Watersheds

The County is characterized by many watercourses. The more prominent perennial watercourses include the Colorado River, Oak Creek, Chevelon Creek, Kanab Creek, West and East Clear Creek, and Coconino Wash. There are also numerous ephemeral watercourses that drain into the more prominent watercourses. The County is also populated by several natural and man-made lakes that serve as critical water supply sources for both humans and wildlife.

3.3 Climate

The climate in the County varies with location and elevation. Summer characteristics across the county range from hot and dry at the bottom of the Grand Canyon to moderate temperatures within the forested areas. Winter temperatures range from just above freezing to single digit temperatures in the upper mountain areas. Climatic statistics for weather stations within the County are produced by the Western Region Climate Center (WRCC) and span records dating back to the early 1900's. Statistics for the Flagstaff WSO AP, Page, and Phantom Ranch Stations are provided in the following discussions.

Average temperatures within the County vary widely depending upon location and elevation. County-wide, temperatures range from well below freezing during the winter months to nearly 100°F during the summer months. Average extreme temperatures can exceed either end of the spectrum by as much as 10-15°F.

Annual precipitation across the County varies significantly with both location and elevation. Also, for most of the county, precipitation comes in the forms of rain, snow, hail, or sleet. In general, average rainfall across the county ranges from six to 25 inches (6"-25"). Average annual snowfall totals can range from zero to 100 inches (0"-100") and greater for locations above 7,000 feet.

From November to March, storm systems from the Pacific Ocean cross the state as broad winter storms that produce mild precipitation events and snowstorms at higher elevations. Summer rainfall begins early in July and usually lasts until mid-September. Moisture-bearing winds move into Arizona at the surface from the southwest (i.e. Gulf of California) and aloft from the southeast (i.e. Gulf of Mexico). This shift in wind direction, termed the North American Monsoon, produces summer rains as thunderstorms that result

[3] U.S. Forest Service, General strategies for promoting resilience to wildfire

largely from excessive heating of land surface and subsequent lift of moisture-laden air, especially in the primary mountain ranges. Thunderstorms are often accompanied by strong winds, blowing dust, and / or hailstorms.

Arizona climate can also be largely impacted by the opposite extreme weather events known as El Niño and La Niña, or El Niño/Southern Oscillation (ENSO). ENSO refers to strong variations in sea-surface temperatures, rainfall, surface air pressure, and atmospheric circulation from the Pacific Ocean year-to-year.[4] El Niño represents the warm phase of the ENSO cycle, while La Niña represents the cold phase. ENSO affects weather patterns across the Southwest, causing wetter winter seasons due to El Niño's influence on tropical storms and subsequent higher than average precipitation, and dryer winters during La Niña events, when the pattern is reversed.[5] The recorded weather patterns in the Flagstaff from 1970—2000 found nearly double the average of snowfall from El Niño events to La Niña events and about triple the average of precipitation.[6]

Table 3-1: Average Climate Data for Flagstaff

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Avg High (F)	43	45	50	58	67	77	81	78	73	63	52	43
Avg Precipitation (Inches)	2.12	2.33	2.26	1.27	0.62	0.42	2.38	3.47	2.56	1.89	1.81	2.03
Avg Snowfall (Inches)	18	17	15	7	0	0	0	0	0	2	7	11
Source: U.S. Climate Data website, January 2021												

3.4 History

According to archeological records and tribal historical sources, the County has been inhabited by a variety of native tribes for over 12,000 years – with some estimates ranging as far as 16,000 years.[7] The name Coconino is believed to originate from the Hopi name for the inhabitants of the Grand Canyon area – the Havasupai and Yavapai.[8] Today, the County remains home to six tribal nations: Navajo, Hopi, Havasupai, Hualapai, Kaibab-Paiute, and San Juan Southern Paiute. Each operates as a sovereign nation with its own unique culture, history, and relationship with the land.[9]

The County was crossed by Spanish expeditions during the 16th, 17th, and 18th centuries, and by fur trappers and traders in the 1820s and 1830s. Cattle and sheep ranching was started in the 1870s, and when the railroad began serving the area a decade later, the lumber industry boomed.

The County was carved out of Yavapai County by the 16th Territorial Assembly in 1891. That same year, an election was held to determine the permanent county seat. Flagstaff, which had been designated the

[4] National Oceanic and Atmospheric Administration, What are La Niña and El Niño and why do they matter?
[5] The University of Arizona Climate Assessment for the Southwest (CLIMAS), How does ENSO affect SW weather patterns?
[6] National Weather Service, La Niña, El Niño and Northern Arizona Weather
[7] Visit Arizona, American Indian Tribal Lands; Williams News, Native Americans from five tribes come together to discuss Grand Canyon's indigenous history
[8] Coconino National Forest, Frequently asked questions
[9] Coconino County, 2017, Coconino County Comprehensive Plan

temporary County seat, won out over Williams by a vote of 419 to 97. In 1891, the population of the County was 4,000. Flagstaff remains the County seat, and the original County courthouse is still in use.

3.5 Government

The County elects five members to the Board of Supervisors by district for four-year terms. The Board establishes administrative policy and direction for the County and maintains budgetary oversight over all County departments to ensure funds are expended within given guidelines. The duties, responsibilities, and authority of the Board of Supervisors are expressly provided in the Constitution and/or laws of the state.

The County Manager is responsible for the daily management of County government under the policy direction of the Board of Supervisors. The County Manager's responsibilities include:

- Implement and administer policies established by Board of Supervisors, including County budget;
- Interact with County-elected officials, governmental agencies, and community groups;
- Provide support for Board of Supervisors' initiatives and programs;
- Supervise appointed department heads.

With six tribal nations under tribal jurisdiction, totaling over 7,000 square miles within the County, the County works closely with them to identify and implement joint solutions to issues of mutual interest.

Figure 3.1 below delineates the locations of the participating Planning Team jurisdictions within the County. **Figure 3.2** includes the tribal land locations in the County.

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Figure 3.1: Coconino County Overview

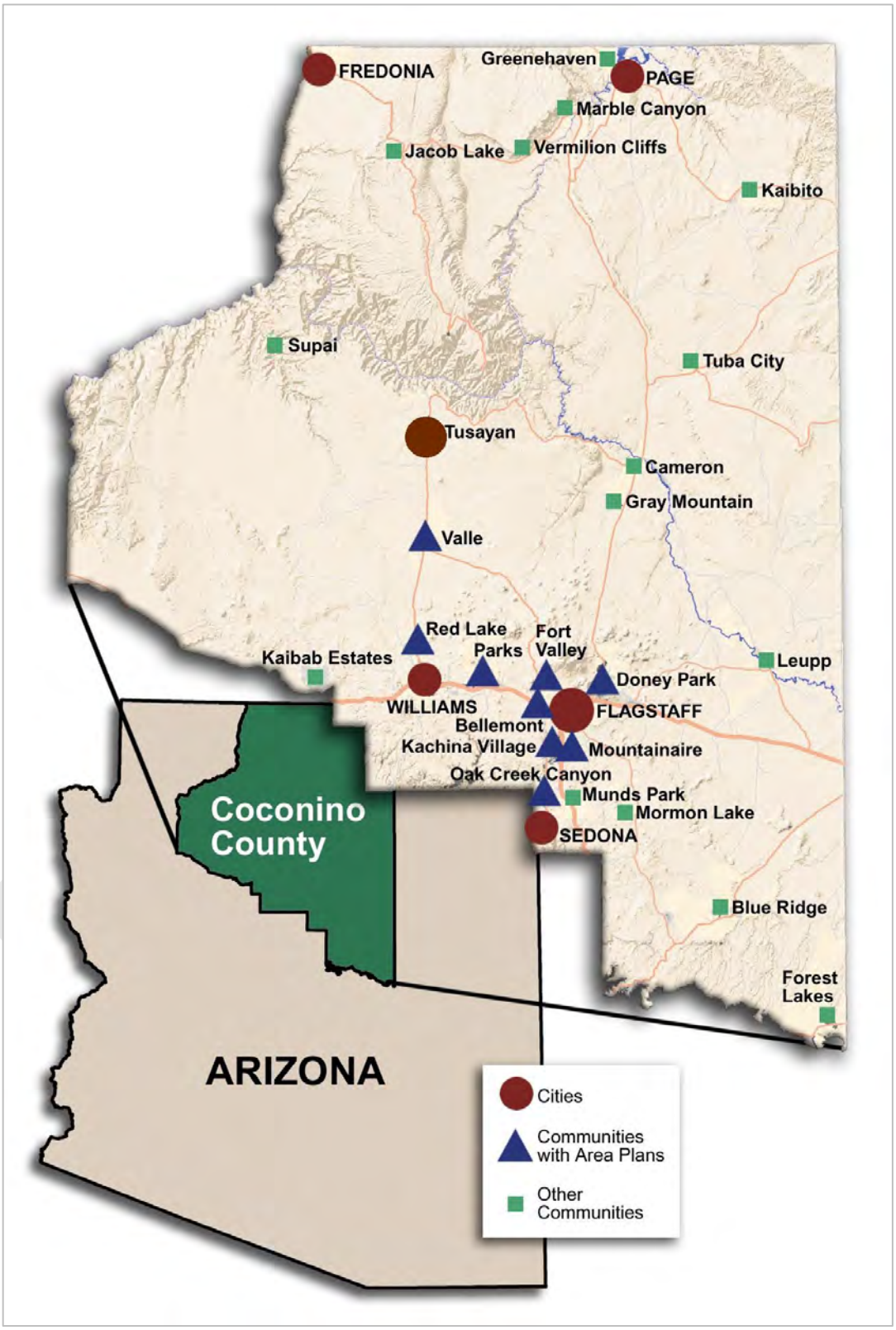


Figure 3.2: Tribal Nations in Coconino County[10]

[10] Inter-Tribal Council of Arizona Maps

Figure 3.3: Coconino County Geographic Features and Transportation Routes

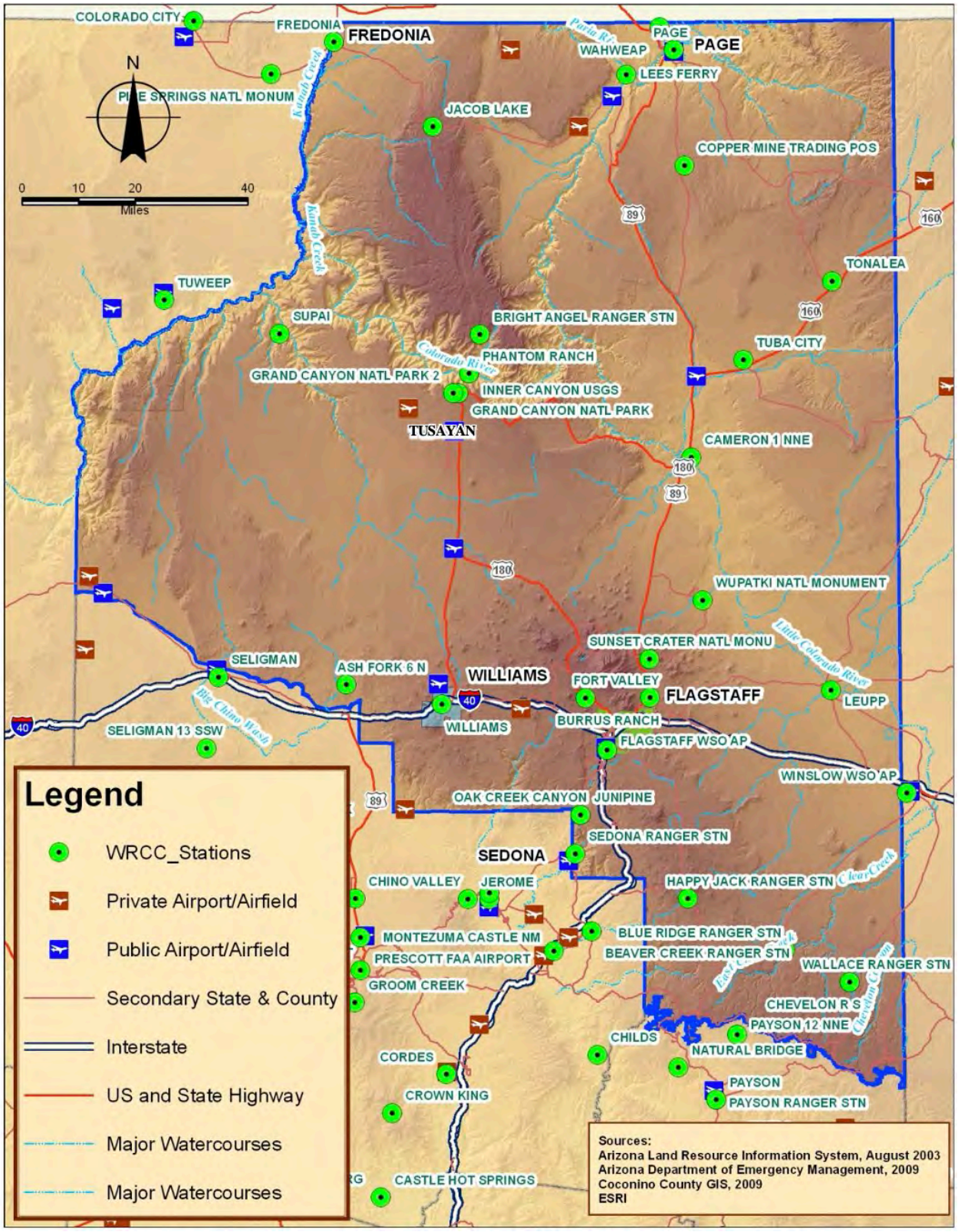


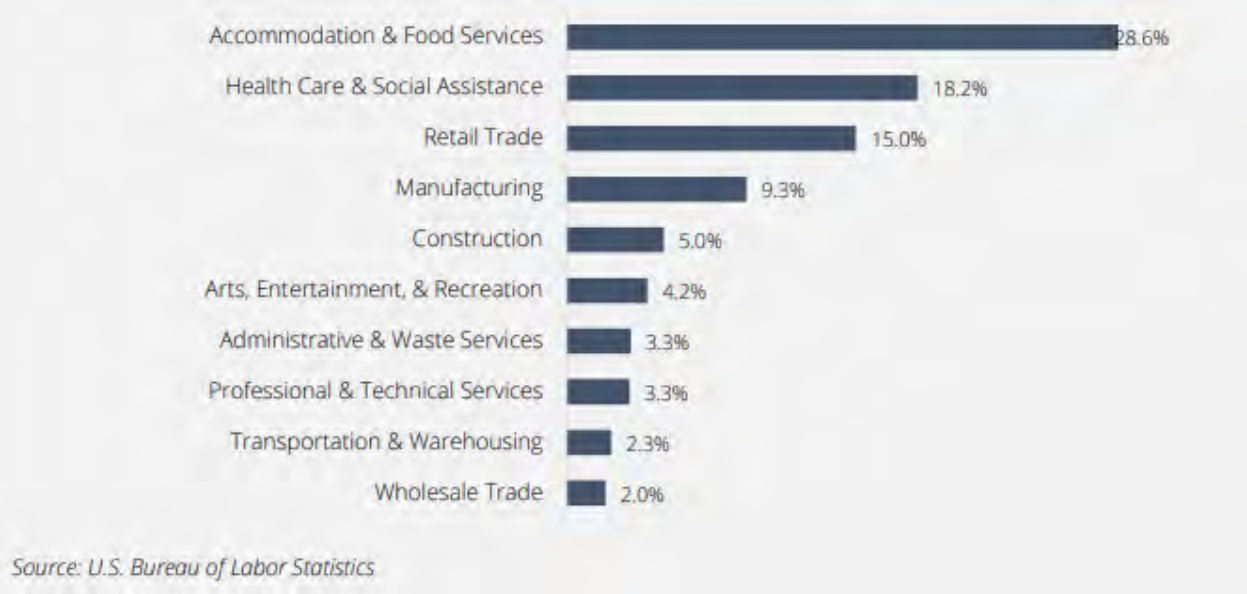
Figure 3.4: Coconino County Terrestrial Ecoregions

3.6 Economy

The County's civilian labor force and unemployment rate have been significantly affected by the COVID-19 pandemic, whose economic impacts were first detected in Arizona as early as March 2020. Between February and April 2020, Coconino County's labor force fell from 78,431 to 71,547 - ultimately decreasing to 68,447 by December 2020 (a total decrease of 12.7%). At the same time, the unemployment rate increased from 5.3% to 17.9% - settling at a steady 9.4% in December 2020.[11] It can be expected that the ongoing pandemic will cause additional fluctuations as the situation develops in 2021.

As of December 2020, the County's labor force was down 14.2% from December 2019 (78,173) and down 5.5% from December 2014 (72,242). The County's unemployment rate was up 4.2 percentage points from December 2019 (5.2%) and up 2.7 percentage points from December 2014 (6.7%).[12]

Figure 3.5: Coconino County Top Ten Employment Sectors



The County's major employment sectors are depicted in **Figure 3.5**. The chief employment sector is significantly fueled by tourism, as the County is a gateway to attractions such as Grand Canyon National Park, Oak Creek Canyon, Sunset Crater National Monument, Snowbowl Ski Area, Lake Powell, and Native American ruins at Wupatki, Walnut Canyon, and Navajo National Monument. The County is also home to Northern Arizona University, located in the City of Flagstaff, and one community college.

The seat of the County is the City of Flagstaff, the only Standard Metropolitan Statistical Area (SMSA) in the County.[13] Flagstaff serves as a hub of economic activity as the largest city in the County, making up approximately 56% of the labor workforce and 45% of the County population.[14] The major industries of the city are government, education, transportation, tourism, services, and retail trade.

In recent years, Flagstaff has experienced moderate growth and development. The Flagstaff Regional Plan 2030 identifies several policies and regulations to guide economic development within Flagstaff. These

[11] Arizona Commerce Authority: https://www.azcommerce.com/oeo/labor-market/unemployment
[12] Arizona Commerce Authority: https://www.azcommerce.com/oeo/labor-market/unemployment
[13] National Longitudinal Surveys, U.S. Bureau of Labor Statistics
[14] Arizona Commerce Authority, County Profile for Coconino County

policies and regulations emphasize the preservation of regional ecological resources such as: washes, canyons, mountains, steeply sloped hillsides and mesas, riparian areas, volcanic cinder cones and calderas, and protective buffers. Efforts to preserve these features often coincide, or parallel, hazard mitigation efforts. The strategies developed to address this policy includes increasing public awareness, hazard identification, design for public safety, redevelopment plans, cooperative planning efforts, limit development in hazard areas, structural hazard mitigation, and wildland fire fuel reduction among other strategies.

3.7 Population and Demographics

The County includes six incorporated communities: Flagstaff, Fredonia, Tusayan, Page, Sedona, and Williams. All or portions of the Navajo Nation, Hopi Indian Tribe, Hualapai Tribe, Kaibab-Paiute Tribe, San Juan Southern Paiute, and all of the Havasupai Tribe are also located within the County boundaries. A total of 45 unincorporated communities are scattered across the County, with many being comprised of only one structure or a prominent landmark. 12.27% of the land in the County, or 2,326 square miles, is owned by individuals or corporations. About three-fourths of the private land is in large ranches held by about 10 owners. Tribal lands comprise 39.11%, Forest Service 27.19%, Bureau of Land Management 5.09%, National Park Service 6.87%, and state 9.42%. As seen in **Table 3-4**, the population density of the unincorporated areas of the County is significantly smaller than that of the incorporated jurisdictions.

Table 3-2 Coconino County Demographics

County Demographics	2019
Population	147, 275
White	65.7%
Black or African American	1.5%
American Indian or Alaska Native	27.4%
Native Hawaiian or Other Pacific Islander	.2%
Asian	2.1%
Two or More Races	3.1%
Hispanic or Latino	14.3%
White, non-Hispanic or Latino	54.1%

County Demographics	2019
Foreign born persons	4.4%
Median household income	$59,460
In civilian labor force age 16+	62.6%
Persons with a disability under 65	9.1%
Mean travel time to work (minutes)	18.6
Persons in poverty	15.9%
Households with Internet	78.2%
Language other than English spoken at home	24%
Source: U.S. Census Bureau	

Table 3-3: Population Estimates for Coconino County

Jurisdiction	1990	2000	2010	2019	2030
Coconino County	96,591	116,320	134,679	147,275	154,380
Flagstaff	45,857	52,894	65,985	76,338	81994
Fredonia	1,207	1,036	1,312	1,313	1307
Page	6,598	6,809	7,253	7,686	8,110
Sedona (pop. in Coconino)	7,720	10,192	11,629	7,489	13,776
Tusayan	N/A	562	558	589	550
Williams	2,532	2,842	3,032	3,352	3,139
Source: Arizona Commerce Authority					

Table 3-4: Estimated Population Densities of Coconino County

Jurisdiction	Land Area (square miles)	Population Density (persons per square mile)
Coconino County (unincorporated area)	18,619 (18,465)	7.2 (2.9)
Flagstaff	64	1029.2
Fredonia	7	187.7
Page	17	426.3
Sedona	6	473.7
Tusayan	17	33.2
Williams	43	70.3
Based on 2010 Census and Coconino County Comprehensive Plan		

3.8 Transportation

Major transportation corridors that pass through the County include Interstates 17 and 40 and the Burlington-Northern Santa Fe (BNSF) Railway. AMTRAK operates on the BNSF line and maintains depots in Flagstaff and Williams. Other major roadways include U.S. Highways 160 and 180, State Routes 64, 66, 67, 87, 89, 89A, 98, 99, 260, and 264, and Indian Routes 2, 15 and 18. Flagstaff operates the Flagstaff-Pulliam Airport (FLG) – the largest commercial airport in the County. Other commercial airports are the Grand Canyon National Park Airport (GCN) located in Tusayan and Page Municipal Airport (PGA). Smaller, general aviation airports are Tuba City (TBC), H.A. Clark Memorial Field (KCMR) in Williams, and Valle (VLE) in Williams.

3.9 Land Use and Development Trends

The County desires to ensure that policies, plans, and land use regulations accommodate the various needs of people, households, and businesses, and also acknowledges relevant trends influencing how business and industry will utilize land and buildings in the future. A strong economy is vital to the future of the County and quality of life for County residents. Land use regarding economic development is important.

The County recognizes that limitations on development related to service and infrastructure may exist within the County. In the unincorporated areas of the County, limited infrastructure presents challenges to economic development in regard to new development of roads, water sources, and wastewater systems. Economic conditions are taken into account to help identify strengths and weaknesses and identify strategies for diversifying development to enhance a resilient and vital economy for future generations.

The County takes an active role to encourage new commercial and industrial development regarding the coordination of land use, including the formation of public-private partnerships. The Bellemont area provides opportunities for industrial economic development. Infrastructure improvements to roads, water, and wastewater would be necessary to fully develop industrial-zoned land parcels. Rezoning can be used to expand commercial and industrial uses when tied to viable development projects. The Interstate 40 corridor east of Flagstaff toward Winslow is one such example. In Williams and Fredonia, land suitable for new commercial and industrial activity underwent annexation to provide infrastructure and capture tax benefits for the municipalities. The County encourages adaptive reuse of vacant buildings and underutilized properties which serves several purposes. Adaptive reuse makes good economic sense and an effective style of development for communities with a limited supply of private land.

The County's transportation corridors are an obvious place for continued development because of their location along shipping routes, providing potential for distribution hubs. Much of the existing commercial and industrial zoning and development in the County is found along such corridors. The County supports development near these corridors but opposes strip-style development which can impede traffic, impact view sheds, and limits opportunities for multimodal transportation. Instead, clustered commercial and industrial development with access to major corridors is preferred.

State Trust lands, especially around Flagstaff, are a possible source development land to increase the availability of private land. Denser zoning for residential development may also allow for more economic use of the existing private lands. Allowance of more agriculture on properties so families can reduce their food expenditures may contribute to lower cost of living expenses. Outlying areas around Flagstaff face similar needs. The Coconino County Comprehensive Plan notes that the practice of developing residential properties in the rural areas, most commonly created by splitting ranchlands into 40 acre lots that are subdivided into 10-acre parcels without utilities, water, or reliable road maintenance, is not an efficient method of providing residential uses and results in greater impacts on County resources.

Locating residential housing in closer proximity to commercial area can reduce travel times and dependency on single-occupancy commutes. With changing times and needs, many households today have two or more residents traveling to workplace locations far removed from their immediate residential area. Future development opportunities have been studied and presented in completed multi-modal studies for Kachina Village and Doney Park. Another study is underway for the Bellemont area.

In the County, the opportunity for mixed uses exists, with the desire to support development that avoids creating large areas or communities that are exclusively residential, commercial, or industrial. Proactive land use planning combined with sound mitigation concepts can lessen the impact of natural disasters and hazards experienced by the County.

3.11 Participating Jurisdictions

The city/town planning area descriptions are contained below. Location and geography, rivers and watersheds, transportation and climate are addressed in the overall County planning area description.

3.11.1 Flagstaff

Flagstaff is located at 35°11' 53.8224" N 111°39'4.6764"W. The city lies near the southwestern edge of the Colorado Plateau within the San Francisco volcanic field, along the western side of the largest contiguous ponderosa pine forest in the continental United States. The city sits at around 7,000 feet and is next to Mount Elden, just south of the San Francisco Peaks, the highest mountain range in the state of Arizona. The city occupies 66.08 square miles.

History

Flagstaff has a rich Native American history with early tribes, such as the Sinagua and Anasazi tribes inhabiting the land over 800 years ago. Since then, many indigenous peoples have called this land home, including the Navajo, Hopi, Havasupai, Kaibab-Paiute, and Hualapai peoples.[15]

According to the City of Flagstaff's website, in 1855 Lieutenant Beale, in surveying a road from the Rio Grande River in New Mexico to Fort Tejon in California, passed over the spot where Flagstaff now stands. While camping at the Eastern extremity of the present town, the lieutenant had his men cut the limbs from a straight pine tree to fly the United States flag.

The city's first recognized permanent settler, Thomas F. McMillan, arrived in 1876 and built a cabin at the base of Mars Hill. Flagstaff drew its name from a very tall pine tree made into a flagpole in 1876 to celebrate our nation's centennial. During the 1880's, Flagstaff began to grow, opening its first post office and welcoming the booming railroad industry. The town shipped timber, sheep and cattle as exports. By 1886, Flagstaff was the biggest city on the main railroad line between Albuquerque and the West Coast.

In 1894, Dr. Percival Lowell chose Flagstaff, due to its great visibility, as the site for the Lowell Observatory. Thirty-six years later, Pluto was discovered through the observatory's telescopes. The Arizona Teacher's College was founded in 1899, later becoming Northern Arizona University in 1966. Route 66 was built through Flagstaff during the 1920's making it a popular tourist stopover. Flagstaff was incorporated as a city in 1928.

Government

Flagstaff is the County seat. The city government is organized under a council-manager form of government. Regular meetings of the city council are held on the first and third Tuesday of every month.

Economy

In its early days, the city's economic base comprised the lumber, railroad, and ranching industries. Today, that has largely been replaced by tourism, education, government, and transportation. Some of the larger employers in Flagstaff are Northern Arizona University, the Flagstaff Medical Center, and the Flagstaff Unified School District. Tourism is a large contributor to the economy with over five million visitors per year.

Scientific and high-tech research and development operations are in the city, including Lowell Observatory, Northern Arizona University, the United States Naval Observatory Flagstaff Station (NOFS) and the United States Geological Survey's (USGS) Flagstaff campus. Research is involved in observations of near-Earth phenomena such as asteroids and comets. In 2012 the observatory commissioned its Lowell Discovery Telescope, a 4.3-meter telescope with an instrument cube that can hold five instruments at once. Lowell

[15] Discover Flagstaff, Culture & Heritage

Observatory and NOFS also are collaborators on the Navy Precision Optical Interferometer, on nearby Anderson Mesa. NOFS is heavily involved with the science of star catalogs and astrometry or the positions and distances of stars and celestial objects.

There are five industrial parks in the city, situated near I-40 and I-17. Major manufacturers in Flagstaff include Coca Cola, the beverage manufacturer; W. L. Gore & Associates, widely known as the maker of Gore-Tex; Nestlé Purina PetCare, a manufacturer of pet food; SenesTech, a biotechnology research lab and manufacturer; SCA Tissue, a major tissue paper producer; and Joy Cone, a manufacturer of ice cream cones. Major employer industries in 2018 are noted in the **Table 3-5** below.[16]

Table 3-5: City of Flagstaff Major Employment Industries

Industry	Count	Percentage of Workforce
Educational services	6,584	17.8%
Accommodation & food services	5,974	16.1%
Retail trade	4,554	12.3%
Healthcare & social assistance	4,408	11.9%
Manufacturing	2,767	7.47%
Public administration	1,843	4.97%
Professional, scientific, & technical services	1,830	4.94%
Construction	1,524	4.11%

Key Critical Infrastructure Facilities and Community Assets

Flagstaff maintains several key critical infrastructure sites and facilities. Facilities include the Flagstaff Pulliam Airport and its facilities, the public works campus, city hall, the city courthouse, fire stations, Northern Arizona Health-Flagstaff Medical Center, and the law enforcement administration building. The city is also home to several critical facilities that provide services to vulnerable populations. Key assets in this area include Flagstaff Shelter Services, Flagstaff Family Food Center, Siler Homes and SHAC, Clark Homes, Brannen Homes and Boys and Girls Club, Flagstaff Senior Meadows, Sandstone Highlands Senior Living, The Peaks Senior Living, and several mobile home parks.

In addition to these facilities, Flagstaff is home to several community assets. Educational assets include South Beaver School, a national historic site of cultural importance to the Hispanic and African American community, and Haven Montessori, a historic Catholic school of cultural importance to the Hispanic community. Religious buildings, communities, and sites of historic importance include the Nativity of Blessed Virgin Mary Chapel, Our Lady of Guadalupe National Landmark, Harbert Chapel AME Church, Spring Hill Baptist Church, First Missionary Baptist Church, Riverside Church of God in Christ, and Chabad Jewish Community Center. The city is home to several historic districts including the Southside Neighborhood, Downtown Flagstaff, North End Neighborhood, Old Main (NAU campus), and Townsite Neighborhood. The city is home

[16] Data USA, Flagstaff, AZ

to several historic sites including Ft. Tuthill, Elden Pueblo, The Arboretum at Flagstaff, and McAllister Ranch.

Population and Demographics

Flagstaff has a population of 72,402 residents with a median household income of $58,748 and a poverty rate of 17.5%.1 The median age is 25.2 years, with 82.1% of residents aged 18 years and older, and 8.4% of residents aged 65 years and older.

The racial demographics of the city as reported by the U.S. Census Bureau are found below:

- White alone: 78.3%;
- American Indian and Alaska Native alone: 7.8%;
- Two or more races: 5.3%;
- Some other race alone: 3.2%;
- Asian alone: 3.1%;
- Black or African American alone: 2.0%;
- Native Hawaiian and Other Pacific Islander alone: 0.3%.

Land Use and Development Trends

The Flagstaff Regional Plan 2030 is a policy guide, serving as the general plan for the city and an amendment to the Coconino County Comprehensive Plan. As mandated by state law, the plan covers a range of topics with information on current conditions and development vision for the future. In addition, the plan outlines carefully developed goals and policies to realize the future vision.

The Flagstaff Regional Plan emphasizes reinvestment and compact, infill development. This strategy combined with resource protection and management of slopes, forest and floodplain areas ensure as parcels are redeveloped existing hazardous conditions are eliminated and best practices can be implemented. Higher density and intensities are encouraged in urbanized areas, while low density single family uses within the wildland urban interface are properly mitigated utilizing forest management and appropriate construction materials.

3.11.2 Fredonia

The incorporated Town of Fredonia is located at 36°56'44"N 112°31'36" W and encompasses an area of approximately 4,400 acres in the extreme north-western part of the County, four miles south of the Arizona-Utah border and north of the Grand Canyon. The elevation for Fredonia is 4,625 feet.

History

The current site of Fredonia was originally inhabited by the Kaibab Paiute tribe. This tribe can trace their ancestry of living in the desert to over 10,000 years ago.[17] The town was settled in 1885 by Mormon pioneers from southern Utah who capitalized on the available water in Kanab Creek to establish a small agricultural and ranching community. Timber logging, sawmill and mining industries induced modest population growth from about 500 in the mid 1950's to 1040 by 1980. The shutdown of mining activities in the area and a dramatic decline in the logging industry impacted the community with a loss of more than 300 jobs.

[17] Northern Arizona University, Kaibab Piute

Government

The town has a town manager/town council government with two elected council members and a mayor and vice mayor. The council meets monthly.

Economy

Primary occupations are retail, manufacturing, accommodation and travel, and construction. Prior to the COVID-19 pandemic, the unemployment rate was 11.6%. The median household income is $42,197 annually. Major employer industries in 2018 are noted in the **Table 3-6** below.[18]

Table 3-6: City of Fredonia Major Employment Industries

Industry	Count	Percentage of Workforce
Other services, except public administration	124	23.4%
Construction	100	18.8%
Retail trade	84	15.8%
Accommodation & food services	78	14.7%
Educational services	33	6.21%

Key Critical Infrastructure Facilities and Community Assets

Critical infrastructure and facility sites in Fredonia include the town hall, treatment facilities for water and sewage, a power substation, and the Fredonia Fire Station. The town is home to several community assets, including the Fredonia Moccasin Unified School District 6, the Church of Jesus Christ of Latter-Day Saints, Trinity Church, and the Fredonia Public Library, all of which also serve as emergency shelters for the town.

Population and Demographics

Fredonia has a population of 7,531 residents with a median household income of $65,321 and a poverty rate of 17.2%.2 The median age is 45.1 years, with 81.9% of residents aged 18 years and older, and 19.7% of residents aged 65 years and older.

The racial demographics of the town as reported by the U.S. Census Bureau are found below:

- White alone: 75.3%;
- American Indian and Alaska Native alone: 12.8%;
- Two or more races: 7.2%;
- Some other race alone: 4.7%.

Land Use and Development Trends

After experiencing a population decline in the 1980's, Fredonia has had a stable population over the past 10 years. There has been little development or change in land use.

[18] Data USA, Fredonia, AZ

3.11.3 Page

Page is located at 36°54′51″N 111°27′35″W with a total area of 16.6 square miles. The city's elevation is 4,117 feet.

History

The City of Page was originally home to the Kaibab Paiute and Navajo tribes.

Unlike other cities in the area, Page was founded in 1957 as a housing community for workers and their families during the construction of nearby Glen Canyon Dam on the Colorado River. The city's 17 square mile (44 km2) site was obtained in a land exchange with the Navajo Nation. The city is perched atop Manson Mesa at an elevation of 4,300 feet above sea level and 600 feet above Lake Powell.

The city was originally called Government Camp, but was later named for John C. Page, commissioner of the Bureau of Reclamation. After the dam was completed in the 1960s the city was officially incorporated on March 1, 1975. It grew steadily to today's population of over 7,000 residents. The city has become the gateway to the Glen Canyon National Recreation Area and Lake Powell, attracting over three million visitors per year. Additionally, the city sits adjacent to Navajo Nation – the largest remaining Native American tribe.[19]

Government

The city government is organized under a city council-city manager form of government with seven council members. The Mayor and Vice Mayor are council members. Regular meetings of the city council are held on the second and fourth Tuesday of every month.

Economy

Tourism, hospitality, a thriving industrial park, the federal government, Lake Powell, and public facilities are major contributors to Page's economy. The city's workforce is skilled in education, health care, trades, and artistry. Scenic attractions include Lake Powell which has two marinas less than 15 minutes from the city. Other attractions include the John Wesley Powell Museum, Carl Hayden Visitor Center and Glen Canyon Dam. Page has a community center, a modern library, a recreation center and six parks. Banner Hospital and four local medical clinics support health needs. Major employer industries in 2018 are noted in the **Table 3-7** below.[20]

Table 3-7: City of Page Major Employment Industries

Industry	Count	Percentage of Workforce
Accommodation & food services	811	22.6%
Educational services	474	13.2%
Retail trade	438	12.2%
Other services, except public administration	341	9.49%
Manufacturing	279	7.77%
Administrative & support & waste management services	260	7.24%

[19] City of Page, City of Page History
[20] Data USA, Page, AZ

Industry	Count	Percentage of Workforce
Utilities	253	7.04%
Public administration	151	4.2%

Key Critical Infrastructure Facilities and Community Assets

Critical infrastructure and facility sites in Page include the city hall, hospital, facilities dedicated to the treatment and provision of water to the city, and power substation and generators to deliver power to the community. Page is also home to several community assets, including facilities that care for vulnerable populations including Beehive Assisted Living and Page Care Age. Assets include cultural buildings such as a museum, the Navajo Cultural Center, and educational facilities such as the Page Unified Campus. In addition to these facilities, Horseshoe Bend and Rim View Trail are both environmental community assets that serve as popular locations for visitors.

Population and Demographics

Page has a population of 1,040 residents with a median household income of $42,197 and a poverty rate of 11.6%.3 The median age is 28.4 years, with 68.7% of residents aged 18 years and older, and 6.4% of residents aged 65 years and older.

The racial demographics of the city as reported by the U.S. Census Bureau are found below:

- American Indian and Alaska Native alone: 56.6%;
- White alone: 35.2%; Some other race alone: 3.7%;
- Two or more races: 3.0%;
- Asian alone: 0.9%;
- Black or African American alone: 0.6%.

Land Use and Development Trends

Page is currently planning development for areas south of the mesa along Highway 89 and southeast along the Highway 98 corridor. The 2006 City General Plan states that expected overall population growth over the next 20 years would be approximately 10%.

3.11.4 Tusayan

Tusayan is located at 35°58′32″N 112°7′45″W. As an incorporated town, Tusayan has a land area of 144 acres making it the smallest town in Arizona by area.

History

Some of the earliest inhabitants of Tusayan were the Ancestral Puebloans, who are believed to be the ancestors of the Hopi, Zuni, and other Puebloan tribes. Tree-ring dating shows that the town of Tusayan was inhabited by 1185 CE and potentially earlier.[21]

Due to its close proximity to the Grand Canyon, George Reed, a Forest Service ranger working in the then-called Tusayan Forest Reserve settled a homestead and vegetable farm in the Coconino Wash. A new

[21] Arizona State University, Tusayan Ruin and Museum

highway in 1928 connecting the Grand Canyon to nearby Williams brought new population growth, and Tusayan became a community.[22] Tusayan incorporated in 2010 after 20 years of voter review/elections.

Government

The government consists of a town council and city manager. The five-member council directs the course of local governance through its power to pass ordinances, levy taxes, award contracts, and appoint certain town officers (such as the town manager, town attorney, and members of town committees and commissions). The mayor, who is elected directly, is a member of the council and acts as the official head of the town at public and ceremonial occasions. Regular town council meetings are held on the second Wednesday of the month.

The city is uniquely situated in that it does not have an emergency services department, but rather, a set of contracts for all major emergency services (i.e. fire, EMS, and police). The town manager's office coordinates these emergency management functions with internal and external partners such as the Tusayan Police Department (TPD), Coconino County Sheriff's Office (CCSO), Coconino County Emergency Management (CCEM), and Arizona Department of Transportation (ADOT). Additionally, Tusayan Fire District is a separate municipal district from the town which was established in 1996 at the request of the Grand Canyon National Park.[23] Utilities are contracted with regional partners such as Tusayan Sanitation District and Arizona Department of Transportation.

Economy

The economy of the town is almost exclusively based on tourism-related retail businesses. The town encompasses more than 1,000 hotel rooms with restaurants, gift shops, and entertainment establishments like an IMAX Theater. A number of tour operators offer unique jeep and horseback trips while aircraft companies provide exclusive plane and helicopter sightseeing experiences of the Grand Canyon. The town's proximity to alpine and Nordic skiing facilities provides winter economic activity. The National Park Service and National Forest Service are major employers in this area. Additionally, a couple of cattle ranching enterprises contribute to the area's economy. Major employer industries in 2018 are noted in the **Table 3-8** below.[24]

Table 3-8: City of Tusayan Major Employment Industries

Industry	Count	Percentage of Workforce
Accommodation & food services	153	55%
Transportation & warehousing	18	6.47%
Public administration	17	6.12%
Healthcare & social assistance	16	5.76%
Educational services	15	5.4%
Administrative & support & waste management services	15	5.4%
Agricultural, forestry, fishing & hunting	14	5.04%

[22] Town of Tusayan, Tusayan Then and Now
[23] Tusayan Fire Department
[24] Data USA, Tusayan, AZ

Industry	Count	Percentage of Workforce
Construction	12	4.32%

Key Critical Infrastructure Facilities and Community Assets

Critical infrastructure and facility sites in Tusayan include the town hall, the Tusayan Fire Department, Sanitation District, and the ADOT Airport. The town is serviced by APS Power, which is the only power feed for the town and surrounding populated areas such as Grand Canyon Village, Valle, Phantom Ranch, and Desert View. Tusayan is home to several hotels, restaurants, businesses, residences, and a gas station among other community assets. It is the largest concentration of tourist services for the entire Grand Canyon, including 1,100 hotel rooms. The forest surrounding the town includes several important visitor attractions for hunting, camping, hiking, and day use. The environment provides a major source of revenue for the town.

Population and Demographics

Tusayan has a population of 297 residents with a median household income of $53,438 and a poverty rate of 20.9%.4 The median age is 42.3 years, with 97.6% of residents aged 18 years and older, and 10.1% of residents aged 65 years and older.

The racial demographics of the town as reported by the U.S. Census Bureau are found below:

- White alone: 62.6%;
- American Indian and Alaska Native alone: 15.2%;
- Some other race alone: 10.1%;
- Asian alone: 8.4%;
- Black or African American alone: 2.4%;
- Two or more races: 1.3%.

Land Use and Development Trends: Most of the land in the town is owned by federal or state government. Approximately 84% of land is comprised of the Kaibab National Forest. The Arizona Department of Transportation owns approximately 964 acres comprised of the Grand Canyon National Park Airport and the right-of way for State Highway 64. The Grand Canyon Unified School District owns 80 acres on the west side of the core area of town. The South Grand Canyon Sanitary District owns eight acres, also in the western portion of the core area. Most of the rest of the property is privately owned, including the Kotzin Ranch and Ten X Ranch parcels which together total approximately 355 acres.[25]

The town has both benefited and been constrained by its position in the Kaibab National Forest. The forest provides a beautiful natural setting but limits the ability of the town to expand. There are few properties left in the core area of town with access appropriate for commercial or multi-family use. Ownership opportunity is also limited in the town due to the control of most of the land by only a few entities.

3.11.5 Williams

Williams is located at 35°14′58″N 112°11′24″W at 6,800 feet in elevation. Bill Williams Mountain rises to an elevation of 9,256 feet just south of Williams.

[25] Tusayan General Plan 2024

History

The City of Williams sits on land that was inhabited for thousands of years by several Native American tribes including the Yavapai, Hualapai, and Havasupai.[26]

Founded in 1881, the city was named for William Sherley "Old Bill" Williams, a famous trapper, trader, scout and mountain man, who often trapped in the area. A statue of "Old Bill" stands in Monument Park, located on the west side of the city. The city was incorporated on July 9, 1901.

Williams was the last city whose section of Route 66 was bypassed, due to lawsuits that kept the last section of Interstate 40 in Arizona from being built around the city. After settlements called for the state to build three Williams exits, the suits were dropped, and I-40 was completed. On October 13, 1984, Interstate 40 was opened around the town and newspapers the next day reported the essential end of US 66. The following year, Route 66 was decommissioned. The Williams Historic Business District and Urban Route 66, Williams were added to the National Register of Historic Places in 1984 and 1989, respectively.

Government

The city has a city council/city manager form of government. The city council is the legislative body. The seven-member council oversee the operations of the city government and sets policy by approving programs, appropriating funds, enacting laws and appointing the city manager and other officers such as the city attorney. The mayor serves a two year term and council members serve overlapping four year terms. The city manager is appointed by, and serves at the pleasure of, the city council and is responsible for directing the city's daily operations.

Economy

Prior to the COVID-19 pandemic, Williams had an unemployment rate of 6.5%. The average median household income in the city is approximately $44,375.[27] Major occupational industries include tourism and food service, retail trade, and transportation as delineated in **Table 3-9** below.[28]

Table 3-9: City of Williams Major Employment Industries

Industry	Count	Percentage of Workforce
Accommodation & food services	271	18.8%
Retail trade	170	11.8%
Transportation & warehousing	143	9.9%
Healthcare & social assistance	120	8.3%
Public administration	114	7.89%
Agricultural, forestry, fishing & hunting	101	6.99%
Educational services	98	6.78%

[26] Legends of America, Wiliams, Arizona – Gateway to the Grand Canyon
[27] U.S. Census Bureau, 2019 American Community Survey 5-Year Estimates
[28] Data USA, Williams, AZ

Key Critical Infrastructure Facilities and Community Assets

Critical infrastructure and facility sites in Williams include the city's water plant and distribution center, which provides clean and filtered water to the city, and the wastewater plant, which cleans city sewage and water for its return to the environment. Williams is home to community assets including Williams High School, which also acts as an emergency shelter for the community.

Population and Demographics

Williams has a population of 3,176 residents with a median household income of $44,375 and a poverty rate of 24.9%.5 The median age is 42.1 years, with 73.1% of residents aged 18 years and older, and 19.6% of residents aged 65 years and older.

The racial demographics of the city as reported by the U.S. Census Bureau are found below:

- White alone: 75.7%;
- Some other race alone: 11.8%;
- American Indian and Alaska Native alone: 5.5%;
- Black or African American alone: 3.6%;
- Two or more races: 2.7%;
- Asian alone: 0.6%.

Land Use and Development Trends

Williams has an area of approximately 48 square miles, or 28,800 acres. Nearly 90% of the community's area is federal land. 25,600 acres of the Kaibab National Forest are within the municipal boundaries, surrounding the developed portions of the community. Currently, developed land use concentrates in a compact core area of approximately 3,200 acres or 11% of the city. There are a variety of uses in that limited area ranging from commercial enterprises to housing.

The city general plan projects development that will:

- Emphasize economic development opportunities on prime sites;
- Focus on scenic and historic qualities to increase tourism;
- Encourage strategically placed homebuilding for the local workforce;
- Keep an open mind for creative, innovative development proposals.

DRAFT

Section 4: Hazard Analysis and Risk Assessment

The risk assessment for the County and participating jurisdictions was performed using a County-wide, multi-jurisdictional process, with much of the information gathering and analysis accomplished by the Planning Team. This integrated approach was employed because many hazard events are likely to affect numerous jurisdictions within the County and are not often relegated to a single jurisdictional boundary. The vulnerability analysis was performed to reflect vulnerability at an individual jurisdictional level, and at a County-wide level.

4.1 Emergency and Disaster Declaration History

The Planning Team was able to identify the chronology of past hazard events. **Table 4.1** contains a history of State and Federal Disaster Declarations in the County (2010-Present).

Table 4-1: State and Federal Disaster Declarations for Coconino County (2010-Present)

Disaster Declaration	Hazard	Date	Details
Arizona Severe Winter Storms and Flooding DR-1888-AZ	Snowstorm/ Flooding	January 2010	The state declared an emergency during a severe winter storm lasting January 18 – January 22, 2010. This was followed by a major disaster declaration on March 18, 2010.
Arizona Hardy Fire FM-2845-AZ	Fire	June 2010	An FMA Declaration was issued for the Arizona Hardy Fire during the incident period of June 20 – June 26, 2010.
Arizona Schultz Fire FM-2846-AZ	Fire	June 2010	An FMA Declaration was issued for the Arizona Shultz Fire during the incident period of June 19 – June 30, 2010.
Arizona Severe Storms and Flooding FM-1940-DR-AZ	Storms/ Flooding	October 2010	Severe storms and flooding caused a post-fire flooding emergency due to significant amounts of rainfall on the burn area of the Schultz Fire. This prompted the state to issue a major disaster declaration on July 21st for the period of July 20 – August 7, 2010. The President declared a major disaster on October 4, 2010.
Arizona Severe Storms and Flooding DR-1950-AZ	Storms/ Flooding	November 2010	The Governor of Arizona requested a major disaster declaration due to flash flooding for the Sovereign Tribal Nation of the Havasupai Tribe. The President of the United States declared a major disaster in December, making additional support available.
Same as above	Storms/ Flooding	December 2010	Severe storms and flooding throughout the state prompted the State to declare a major disaster for the period of October 3 – October 6, 2010.
Campbell Avenue Flooding 73006	Flooding	September 2011	Heavy rainfall near the Schultz Fire burn area caused significant flooding on Campbell Avenue, prompting an emergency declaration.
Operation Winter Freeze 73013	Winter freeze	February 2013	A period of extreme sub-freezing temperatures began on January 12, 2013 in much of Northern Arizona, including all of the Hopi and Navajo Nation. The Navajo Nation requested a major disaster declaration due to a severe freeze. The President of the United States declared that a major disaster exists in the lands associated with the Navajo Nation, making additional support available.
Highway 89 Collapse 73014	Landslide	February 2013	A landslide caused significant portions of Highway 89 to collapse, prompting the state to issue an emergency declaration.

Disaster Declaration	Hazard	Date	Details
Arizona Slide Fire FM-5083-AZ	Fire	May 2014	An FMA Declaration was issued for the Arizona Slide Fire during the incident period of May 20 through June 4, 2014.
Arizona Severe Storms & Flooding DR-4203-AZ	Storms/ Flooding	November 2014	Severe storms and flooding prompted the state to declare a major disaster for the period of September 7 – 9, 2014.
Tinder Fire FM-5236-AZ	Fire	April 2018	The Governor of Arizona declared a State of Emergency in response to the Tinder Fire in the County.
Coconino County Flooding EM-73048-AZ	Flooding	July 2018	The Governor of Arizona declared a State of Emergency due to severe flooding in the County, making state resources for support available.
Havasupai Tribe Severe Storms, Flooding, And Landslides DR-4389-AZ	Storms/ Flooding/ Landslides	August 2018	The Havasupai Tribe declared a major disaster due to severe floods, storms, and landslides and requested assistance. The President of the United States declared a major disaster in the Sovereign Nation of the Havasupai tribe, making support available.
Emergency Disaster Declaration EM-73052-AZ	Snowstorm	February 2019	The Coconino County Board of Supervisors affirmed a State of Emergency Declaration due to a major snowstorm. A major disaster declaration was issued on May 21, 2019 covering the incident period of February 21 – 24, 2019.
Arizona Museum Fire FM-5284-AZ	Fire	July 2019	An FMA Declaration was issued for the Arizona Museum Fire during the incident period of July 22, 2019 to present.
Tropical Storm Lorena Flooding SD2003	Flooding	October 2019	Heavy rains caused by remnants of Tropical Storm Lorena caused severe flooding in the County.
Natural Disaster Area Designation	Drought	November 2019	The US Agriculture Secretary designated the County as a natural disaster area due to drought conditions.
Arizona Covid-19 EM-3442-AZ	Pandemic	March 2020	The County Board of Supervisors declared a State of Emergency due to the outbreak of COVID-19.
Arizona Covid-19 Pandemic DR-4524-AZ	Pandemic	April 2020	The President of the United States approved the state's request for a Presidential Major Disaster Declaration due to the outbreak of COVID-19 in the state.
Records of Disaster Declarations found at: FEMA Disaster Information, Arizona Department of Military Affairs			

4.2 Hazard Identification

For this MJHMP, the list of hazards identified in the 2015 MJHMP was reviewed by the Planning Team with the goal of refining the list to reflect the hazards that pose the greatest risk. This update provides an all-hazards approach. Hazard identification included an initial Planning Team screening process to evaluate potential hazards based on the following considerations:

- Knowledge on behalf of the Planning Team about risk associated with each hazard;
- Past events (especially events that have occurred during the last plan cycle);
- The ability/desire of Planning Team to develop effective mitigation actions for hazard.

To support hazard identification, the 2015 MJHMP disaster events were reviewed and updated.

Table 4-2: State and Federally Declared Disasters Including Coconino County (1967-2020)

Hazard	Number of Declarations	Fatalities	Damage Costs ($)
Dam Failure	1	0	Not Available
Drought	4	0	$303,000,000
Earthquake	2	0	Not Available
Flooding / Flash Flooding	12	23	$889,650,000
Severe Wind	1	0	Not Available
Snowstorm	7	12	$14,960,904
Transportation Accident	2	25	Not Available
Wildland Fire	25	0	$34,070,000

Source: DEMA Operations Branch

The Planning Team reviewed hazards from the 2015 MJHMP and several potential new hazards (many specifically identified by the local jurisdictions) including Aviation Accident, Climate Change, Extended Power Outage, Excessive Heat, Public Health Outbreak/Pandemic, and Terrorism. Additionally, the Planning Team greatly emphasized and expanded the scope of Flooding Hazards to include specific considerations for both Wildland Fire and Post-Wildfire Flooding and Debris Flows. The hazard titles for Earthquake and Transportation Accident were also updated for greater accuracy, as seen in **Table 4-4**.

The risk for each of these hazards was analyzed using a Calculated Priority Risk Index (CPRI). The CPRI examines four criteria for each hazard (probability, magnitude/severity, warning time, and duration), detailed in **Table 4-3**. The process for conducting the CPRI analysis is described below.

Calculated Priority Risk Index (CPRI) Analysis Process

1. Hazards are rated 1 to 4 in whole numbers for each CPRI category using definitions in **Table 4-3**;
2. Each category is weighted by a percentage (see **Table 4-3).** Ratings and their weighted scores (weight x rating) are captured for each hazard;
3. The weighted scores for each hazard are summed to create a cumulative weighted score. This score represents the comparative risk posed by a hazard where 1–1.9 is low risk (L), 2–2.9 is moderate risk (M), 3–3.9 is high risk (H), and 4 is severe risk (S).

The results of the County CPRI are in **Table 4-4** and provide an overall summary for the planning area. The results for all other jurisdictions are summarized in the vulnerability element of each hazard description.

It is to be emphasized that the County recognizes the four new manmade hazards that were compiled by the five remaining individual jurisdictions – Aviation Accident, Climate Change, Extended Power Outage, and Terrorism. However, they are NOT included in the County's ten principal hazards for purposes of the new MJHMP. For clarity, these hazards have been separated in **Table 4-4**.

Table 4-3: Calculated Priority Risk Index

CPRI Category	Degree of Risk Chart			Assigned Weight
	Level ID	Description	Index Rating	
Probability	Unlikely	Extremely rare with no documented history of occurrences or events. Annual probability less than 0.001.	**1**	**45%**
	Possible	Rare occurrences with at least one documented or anecdotal historic event. Annual probability of between 0.01 and 0.001.	**2**	
	Likely	Occasional occurrence with at least two or more documented historical events. Annual probability of between 0.1 and 0.01.	**3**	
	Highly Likely	Frequent events with a well-documented history of occurrence. Annual probability of greater than 0.1.	**4**	
Magnitude-Severity	Negligible	Negligible property damages (less than 5% of critical and non-critical facilities and infrastructure). Injuries or illnesses are treatable with first aid, and there are no deaths. Negligible quality of life lost. Shut down of critical facilities for less than 24 hours.	**1**	**30%**
	Limited	Slight property damages (between 5% and 25%) of critical and non-critical facilities and infrastructure). Injuries and illnesses do not result in permanent disability, and there are no deaths. Moderate quality of life lost. Shut down of critical facilities for more than one day and less than one week.	**2**	
	Critical	Moderate property damages (between 25% and 50%) of critical and non-critical facilities and infrastructures). Injuries or illnesses result in permanent disability and at least one death. Shut down of critical facilities for more than one week and less than one month.	**3**	
	Catastrophic	Severe property damages (>50%) of critical and non-critical facilities and infrastructure). Injuries or illnesses result in permanent disability and multiple deaths. Shut down of critical facilities for more than one month.	**4**	
Warning Time	> than 24 hours	Population receives greater than 24 hours of warning.	**1**	**15%**
	12 to 24 hours	Population receives between 12 and 24 hours of warning.	**2**	
	6 to 12 hours	Population receives between six and 12 hours of warning.	**3**	
	< than 6 hours	Population receives less than six hours of warning.	**4**	
Duration	< than 6 hours	Disaster event will last less than six hours.	**1**	**10%**
	6 to 24 hours	Disaster event will last between six and 24 hours.	**2**	
	24 hrs. to 1 week	Disaster event will last between 24 hours and one week.	**3**	
	> than 1 week	Disaster event will last more than one week.	**4**	

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Table 4-4: CPRI Results

Hazard		Category and Weight				Cumulative Weighted Score	Risk Level
		Probability	Magnitude/ Severity	Warning Time	Duration		
Index Rating (R) Weighted Score (WS)		45%	30%	15%	10%		
Wildland Fire	***R***	4	4	4	4	**4.0**	**S**
	WS	1.8	1.2	.6	.4		
Flood / Flash Flood and Post Wildfire Flood / Debris Flows	***R***	4	3	4	4	**3.9**	**H**
	WS	1.8	.9	.6	.4		
Drought	***R***	4	4	1	4	**3.55**	**H**
	WS	1.8	1.2	.15	.4		
Public Health Outbreak / Pandemic	***R***	2	4	4	4	**3.55**	**H**
	WS	1.35	1.2	.6	.4		
Excessive Heat	***R***	4	3	1	4	**3.25**	**H**
	WS	1.8	.9	.15	.4		
HAZMAT / Pipeline Failure / Transport Accident	***R***	4	2	4	2	**3.2**	**H**
	WS	1.8	.6	.6	.2		
Winter Storm	***R***	4	4	1	3	**3.15**	**H**
	WS	1.8	.9	.15	.3		
Dam Failure	***R***	1	4	3	4	**2.5**	**M**
	WS	.45	1.2	.45	.4		
Earthquake and Seismic Hazards	***R***	3	1	4	2	**2.45**	**M**
	WS	1.35	.3	.6	.2		
High Winds / Tornado	***R***	2	3	3	2	**2.45**	**M**
	WS	.9	.9	.45	.2		
Climate Change	***R***	4	4	1	4	**3.55**	**H**
	WS	1.8	1.2	.15	.4		
Extended Power Outage	***R***	2	3	4	4	**2.8**	**M**
	WS	.9	.9	.6	.4		
Aviation Accident	***R***	1	4	4	2	**2.45**	**M**
	WS	.45	1.2	.6	.2		
Terrorism/Active-Shooter	***R***	1	4	4	1	**2.35**	**M**
	WS	.45	1.2	.6	.1		

Table 4-5: CPRI Hazard Risk Scoring

Risk Level	Severe	High	Moderate	Low
Rank Score	4.0	3.0 – 3.9	2 – 2.9	1 – 1.9

Each jurisdiction considered which of the analyzed hazards posed a significant enough risk to their specific community to warrant mitigation efforts. Below is a summary of the hazards selected for mitigation by each jurisdiction. These selections are the basis for each jurisdictions' mitigation strategy. Final hazard selection was based on the individual jurisdiction CPRI, input provided during Planning Team meetings, and follow-up mitigation activity development.

Table 4-6: Hazards by Jurisdiction

Jurisdiction/ Hazard	Aircraft Accident	Climate Change	Dam Failure	Drought	Earthquake/ Seismic Hazards	Extended Power Outage	Excessive Heat	Flood / Flash Flood / Debris Flow	HAZMAT / Pipeline / Transport Accident	High Winds / Tornado	Public Health Outbreak	Terrorism	Wildland Fire	Winter Storm
Coconino County	*	**	X	X	X	*	X	X	X	X	X	*	X	X
Flagstaff	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Fredonia		X	X		X	X	X	X	X				X	X
Page			X	X	X		X	X	X	X	X	X	X	
Tusayan	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Williams		X	X	X	X	X	X	X	X	X	X	X	X	X

** Coconino County acknowledges the risk posed by these man-made and technological hazards to the jurisdiction. However, in alignment with DMA 2000, it has selected to address these hazards through other planning mechanisms and initiatives.*

*** Coconino County acknowledges the risk posed by climate change. For the purposes of this plan, it has elected to address this risk through mitigation of the natural hazards known to be exacerbated by climate change, as outlined in the hazard descriptions that follow.*

4.3 Hazard Risk Profiles

The requirements for hazard profiles are stipulated in DMA 2000 and its implementing regulations. The hazards that the hazard mitigation team selected for the 2021 MJHMP have been profiled using federal, state, regional, and local resources that have mapped, documented, or reported on hazards. Both natural and man-made hazards are included. The hazard profiles consist of describing the nature of each hazard and include the following:

- Description;
- History;
- Location;
- Extent;
- Regulatory context (as applicable);
- Probability of future events;
- Vulnerability;
- Loss estimates.

The sources of information used to prepare this section of the MJHMP are cited as footnotes and integrated as hyperlinks throughout the document.

4.3.1 Aviation Accident

Description

The National Transportation Safety Board defines an airplane accident as an occurrence associated with the operation of an aircraft that takes place between the time any person boards the aircraft with the intention of flight and all such persons have disembarked, and in which any person suffers death or serious injury, or in which the aircraft receives substantial damage (see 49 CFR 830).

History

The County has had at least ten aviation accidents in the past 25 years. The majority of these accidents were minor and resulted in no injuries or fatalities. However, there have been significant historical aviation accidents resulting in loss of life involving the county. An example is the historic 1956 aviation crash over the Grand Canyon. On June 30, 1956, a Trans World Airline flight collided with a United Air Lines flight in mid-air due to failed safety systems. This resulted in 128 fatalities.

Recent examples of aviation accidents in the county include the following:

- **February 8, 2019 –** A Kitfox plane crash landed on a dirt road in Page, Arizona while on route to Buckeye Municipal Airport. No injuries were sustained;
- **November 14, 2018 –** A Beechcraft plane from KCMR airport in Williams, Arizona struck the tree line near the airport fence on takeoff. The plane crash-landed and minor injuries were sustained;
- **August 2, 2016** – A Piper PA-34-200T Seneca II plane was destroyed upon impact with trees and terrain shortly after taking off from Flagstaff Pulliam Airport. The airline transport pilot received fatal injuries.

Location

- **Flagstaff Pulliam Airport (FLG) –** FLG is a commercial airport offering flights to/from Denver, Phoenix, and Dallas. The airport covers 763 acres with one runway, 3/21 measuring 8,800 ft x 150 ft of asphalt.
- **Grand Canyon National (GCN) –** GCN is the only state-owned airport in Arizona located in Tusayan, Arizona. The airport covers 859 acres and has one runway, 3/21 measuring 8,999 ft x 150 ft of asphalt.
- **Page Municipal Airport (PGA) –** PGA is a commercial service airport with daily flights to Las Vegas and Phoenix. The airport covers 536 acres and has two runways, 15/33 measuring 5,950 ft x 150 ft, and 07/25 measuring 2,200 ft x 75 ft.
- **H. A. Clark Memorial Field Airport (KCMR) –** KCMR is a public-use airport located in Williams, Arizona that covers 303 acres and servicing one runway, 18/36 which measures 6,000 ft x 100 ft.

Extent

In aviation, an accident is defined by the Convention on International Civil Aviation Annex 13 as an occurrence associated with the operation of an aircraft, which takes place from the time any person boards the aircraft with the intention of flight until all such persons have disembarked, and in which a) a person is fatally or seriously injured, b) the aircraft sustains significant damage or structural failure, or c) the aircraft goes missing or becomes completely inaccessible. Annex 13 defines an incident as an occurrence, other than an accident, associated with the operation of an aircraft that affects or could affect the safety of operation. A hull loss occurs if an aircraft is destroyed, damaged beyond repair, lost, or becomes completely inaccessible.

Although a crash by aircraft operated from a County Airport would be traumatic for the immediate impact area, it is not expected that this would have a long-term impact on service operations within the vicinity. The crash of a major airliner within a city would be catastrophic. A large area would be affected with plane wreckage, burning fuel, destroyed buildings, and casualties beyond the capability of local fire and emergency medical services personnel. Media attention would be overwhelming. Any air accident will involve coordination among federal, state, and local agencies to provide the necessary resources to manage such an event. Mass casualty transportation accidents typically require these agencies to establish a unified command post; activate disaster mortuary teams; set up medical stations; and develop a plan for moving patients and resources.

Regulatory Context

14 CFR Part 139 requires the FAA to issue airport operating certificates to airports that:

- Serve scheduled and unscheduled air carrier aircraft with more than thirty (30) seats;
- Serve scheduled air carrier operations in aircraft with more than nine seats but less than 31 seats
- The FAA Administrator requires to have a certificate.

This part does not apply to airports at which air carrier passenger operations are conducted only because the airport has been designated as an alternate airport.

Airport Operating Certificates serve to ensure safety in air transportation. To obtain a certificate, an airport must agree to certain operational and safety standards and provide for such things as firefighting and rescue equipment. These requirements vary depending on the size of the airport and the type of flights available. FAA Circular 150 Series provides detailed guidance on airport operations and management.

Probability of Future Events

Based upon hazard history, an aviation accident is likely to occur at least once in an average of 2.5 years.

Vulnerability

Table 4-7 contains an analysis of Planning Team jurisdiction vulnerability to aviation incident.

Table 4-7: CPRI Rating for Aviation Accident

Jurisdiction	Probability	Magnitude/ Severity	Warning Time	Duration	CPRI Score
Coconino County	.45	1.2	.6	.2	**2.45**
Flagstaff	1.35	1.2	.6	.2	**3.35**
Fredonia	.45	.3	.6	.2	**1.55**
Page	.9	.9	.6	.2	**2.6**
Tusayan	1.35	.9	.6	.2	**3.05**
Williams	.9	.6	.6	.2	**2.3**
County-wide average CPRI =					**2.55**
Jurisdictions in bold print indicate they will be assessing the hazard and including mitigation activities for it. *Note: Maximum CPRI score is 4.00.*					

Loss Estimates

Loss estimates for aviation accidents are difficult to predict. Most aviation accidents involve small, non-commercial aircraft with limited passengers and crew. Large passenger aircraft may have as many as a few hundred passengers and crew. Buildings and facilities at or near crash sites are also potentially at risk although few crashes have resulted in extensive damage to ground facilities or casualties of people on the ground.

Development Trend Analysis

Due to the continuing expansion of metropolitan areas within the County, such as Flagstaff, and the popularity of local tourist destinations such as Grand Canyon National Park, there is steady growth in both air traffic and the size of nearby urbanized areas. This inherently increases the risk of aviation accidents affecting the broader Coconino population. However, since most airports are located well outside densely populated areas, the increase in risk caused by the described increase in risk exposure is minimal on average and geographically specific.

4.3.2 Climate Change

Description

The earth's climate is changing. The state has warmed about two degrees Fahrenheit (°F) in the last century. Throughout the southwestern United States, heat waves are becoming more common, and snow is melting earlier in spring. In the coming decades, changing climate is likely to decrease the flow of water in the Colorado River, threaten the health of livestock, increase the frequency and intensity of wildland fire, and convert some rangelands to desert.

Our climate is changing because the earth is warming. People have increased the amount of carbon dioxide in the air by 40% since the late 1700s. Other heat-trapping greenhouse gases are also increasing. These gases have warmed the surface and lower atmosphere of our planet about one degree during the last 50 years. Evaporation increases as the atmosphere warms, which increases humidity, average rainfall, and the frequency of heavy rainstorms in many places, but contributes to drought in others. Greenhouse gases are also changing the world's oceans and ice cover. Carbon dioxide reacts with water to form carbonic acid, so the oceans are becoming more acidic. The surface of the ocean has warmed about one degree during the last 80 years.

The U.S. Environmental Protection Agency (EPA) describes climate change as "any significant change in the measures of climate lasting for an extended period of time. In other words, climate change includes major changes in temperature, precipitation, or wind patterns, among other effects, that occur over several decades or longer."

Many people confuse climate change with global warming, the recent and ongoing rise in global average temperatures near earth's surface. However, global warming represents only one aspect of climate change. The earth's average temperature has risen by 1.4°F over the past century and is projected to rise another 2°F to 11.5°F over the next hundred years. Rising global temperatures have been accompanied by changes in weather and climate. Many places have seen changes in rainfall resulting in more floods, droughts, or intense rain, as well as more frequent and severe heat waves. The planet's oceans and glaciers have also experienced changes. Oceans are warming and becoming more acidic, ice caps are melting, and sea levels are rising. The effects of these indicators include:

- **Greenhouse Gases** – Human activities have increased the emissions of greenhouse gases. As a result of the increase in emissions, average concentrations of heat-trapping gases in the atmosphere are also increasing.

- **Weather and Climate** – Average U.S. and global temperatures are increasing, while attributes of weather and climate, such as precipitation, drought, and tropical cyclone activity, are changing.
- **Oceans** – Average oceanic temperatures are increasing. Sea levels are rising around the world due to thermal expansion and increases from ice melt, and waters are becoming more acidic.
- **Snow and Ice** – Glaciers in the U.S. and around the world are generally shrinking, while snowfall and snow cover in the U.S. have decreased overall. The extent of the Arctic Sea ice is declining.
- **Health and Society** – Warmer temperatures and later fall frosts allow ragweed plants to produce pollen later into the year, potentially prolonging allergy season. The length of ragweed pollen season has increased at ten out of eleven (10/11) locations studied in the central U.S. and Canada since 1995. The change becomes more pronounced from south to north.
- **Ecosystems** – Many areas are experiencing earlier spring events, such as peak stream runoff and flower blooms. Bird migration patterns are changing, and wildland fire zone size has increased.

History

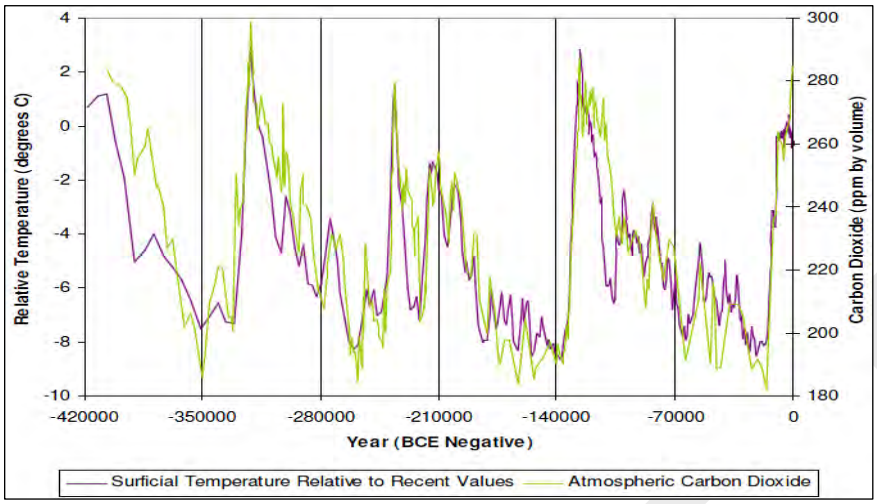
Climate change has occurred throughout the history of the planet. Due to variations in the earth's inclination to the sun, volcanic activity, and other factors such as asteroid impacts, the amount of solar radiation reaching the earth's surface rises and falls. The temperature of the planet correlates to the amount of solar radiation arriving at the surface and with it the climate.

In relatively recent history, the last glacial period, popularly known as the Ice Age, occurred from c. 110,000 to 12,000 years ago. This most recent glacial period is part of a larger pattern of glacial and interglacial periods known as the Quaternary glaciation (c. 2,588,000 years ago to present). From this point of view, scientists consider this "ice age" to be merely the latest glaciation event in a much larger ice age, one that dates back over two million years and is still ongoing.

During this last glacial period, there were several changes between glacier advance and retreat. The Last Glacial Maximum, the maximum extent of glaciation within the last glacial period, was approximately 22,000 years ago. While the general pattern of global cooling and glacier advance was similar, local differences in the development of glacier advance and retreat make it difficult to compare the details from continent to continent. Generally, the pattern of temperature variation and glaciation has lagged atmospheric carbon dioxide (CO2) content. **Figure 4.1** depicts global variations during the past 400,000 years as a correlation between temperature and atmospheric CO2 content in part per million.[29]

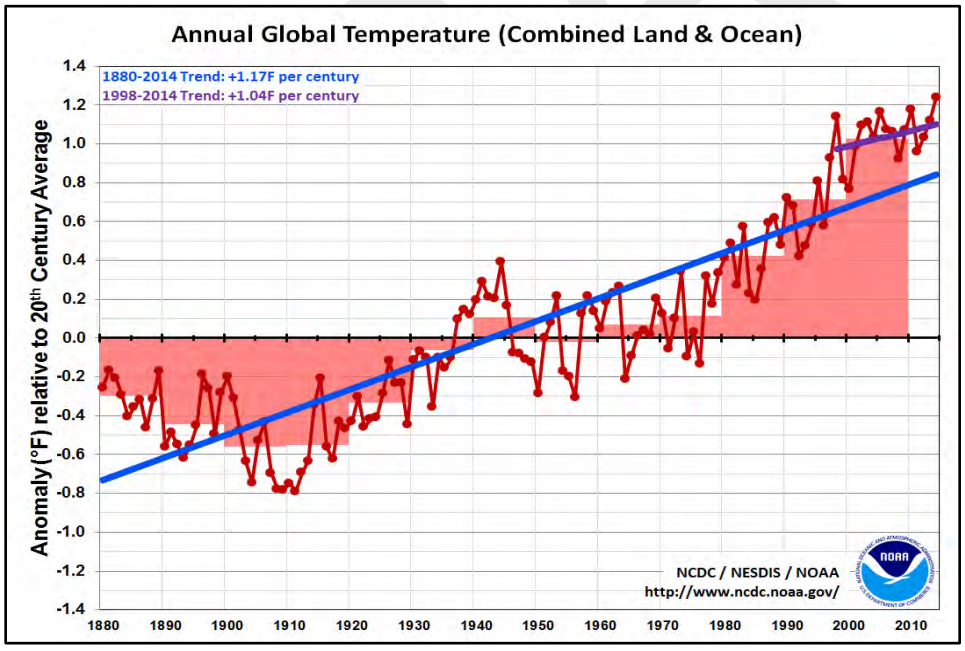
[29] Hogg, A.M., 2008, Glacial cycles and carbon dioxide: A conceptual model. Geophysical Research Letters, 35, L01701

Figure 4.1: Temperature and Atmospheric CO2 Variation Past 400,000 Years



Starting 22,000 years ago, the planet has slowly warmed and the glaciers retreated to high northern latitudes and mountains. In the last several decades of this period, human activity has likely led to a rapid increase in atmospheric CO2 and a matching rise in global temperature. The result has been that climate change may be accelerating. **Figure 4.2** provides a graphical depiction of the history of temperature rise.[30]

Figure 4.2: Annual Global Temperature



[30] NOAA, 2010, Global Climate Report

Location

Warming and climate change are occurring globally with wide variations based on location and latitude. The polar regions have experienced particularly rapid changes in climate with increased ice melt and more sea-ice free days. Climate change affects the entire planning area.

Extent

Climate change is likely to affect the entire earth's population. More widespread drought and associated crop failure, movement of invasive species, more frequent wildland fire, increased energy emergencies, and more intense climate events such as storms and extreme heat will occur throughout the County. Specific likely impacts the County include:

- **Agriculture –** Increasing droughts and higher temperatures are likely to affect top agricultural products, cattle and lumber. Hot temperatures threaten cows' health and cause them to eat less, grow more slowly, and produce less milk. Livestock operations could also be impaired by fire, the lack of water, and changes in the landscape from grassland to woody shrubs more typical of a desert. Reduced availability of water would also create challenges for irrigated farms.
- **Wildland fires and Changing Landscapes –** Higher temperatures and drought are likely to increase the severity, frequency, and extent of wildland fire, which could harm property, livelihoods, and human health. On average, more than two percent of the land in Arizona has burned per decade since 1984. Wildland fire smoke can reduce air quality and increase medical visits for chest pains, respiratory problems, and heart problems. The combination of more fires and drier conditions may expand deserts and otherwise change parts of the County's landscape. Many plants and animals living in arid lands are already near the limits of what they can tolerate. A warmer and drier climate would generally extend deserts to higher elevations and expand their geographic ranges. In some cases, native vegetation may persist and delay or prevent expansion of the desert. In other cases, fires or livestock grazing may accelerate conversion of grassland to desert in response to a changing climate. For similar reasons, some forests may change to desert or grassland.
- **Pests –** Warmer and drier conditions make forests more susceptible to pests. Drought reduces the ability of trees to mount a defense against attacks from pests such as bark beetles, which have infested 100,000s of acres in Arizona. Temperature controls the life cycle and winter mortality rates of many pests. With higher winter temperatures, some pests can persist year-round, and new pests and diseases may become established.
- **Human Health –** Hot days can be unhealthy, even deadly. Certain people are especially vulnerable, including children, the elderly, the sick, and the poor. High air temperatures can cause heat stroke and dehydration, and affect people's cardiovascular, respiratory, and nervous systems. Higher temperatures are amplified in urban settings where paved and other surfaces tend to store heat. Construction crews may have to increasingly operate on altered time schedules to avoid the heat of the day.
- **Air Quality –** Rising temperatures can increase the formation of ground-level ozone, a key component of smog. Ozone has a variety of health effects, aggravates lung diseases such as asthma, and increases the risk of premature death from heart or lung disease. U.S. EPA and the Arizona Department of Environmental Quality (ADEQ) have been working to reduce ozone concentrations. As the climate changes, continued progress toward clean air will be more difficult.

Regulatory Context

Table 4-8 contains state-wide regulations and guidance for climate change.

Table 4-8: Statewide Climate Guidance

Resource Name	Sector(s) Covered	Date
Arizona Climate and Health Adaption Plan 2017	Public health	April 2017
Arizona Extreme Weather, Climate, and Health Profile Report	Public health, frontline communities	March 2015
Preliminary Study of Climate Adaption for the Statewide Transportation System in Arizona	Emergency preparedness, land use and built environment, transportation	March 2013

In 2018, Flagstaff adopted its own Climate Action and Adoption Plan.

Probability of Future Events

Climate change is an ongoing occurrence. Essentially, it has occurred, is occurring and will continue to occur for several decades, centuries or longer. Climate change is ongoing. While individual impacts of climate change may be seen as discreet events such as drought or excessive heat, climate change is a continuous process.

Vulnerability

Table 4-9 provides an analysis of the vulnerability of the Planning Team's jurisdictions to climate change.

Table 4-9: CPRI Rating for Climate Change

Jurisdiction	Probability	Magnitude/ Severity	Warning Time	Duration	CPRI Score
Coconino County	1.8	1.2	.15	.4	**3.55**
Flagstaff	1.8	1.2	.15	.4	**3.55**
Fredonia	1.35	.6	.6	.3	**2.85**
Page	.45	.3	.6	.4	**1.3**
Tusayan	1.8	1.2	.15	.4	**3.55**
Williams	1.8	.9	.15	.4	**3.25**
County-wide average CPRI =					**3.01**
Jurisdictions in bold print indicate they will be assessing the hazard and including mitigation activities for it. *Note: Maximum CPRI score is 4.00.*					

Loss Estimates

Losses from climate change are difficult to separate from the hazards that it exacerbates, drought, wildland fire and extreme heat. Losses associated with climate change induced severity and occurrence of these hazards can run into the millions of dollars and result in injuries and fatalities.

Developmental Trends

Climate change is accelerating. The effects of climate change will become more pronounced as the amount of atmospheric greenhouse gasses increases and global temperatures continue to rise. Programs to reduce greenhouse gas emissions have had only a small impact in slowing the quickening pace of gasses release annually. Additionally, the warming effect of greenhouse gasses lags the actual increase in the

amount released, meaning that a return to cooler temperatures will occur long after the maximum concentration of gasses takes place and at a slower pace than the increase.

4.3.3 Dam Failure

Description

A dam failure is the structural collapse of a dam that releases the water stored in the impounded reservoir. Dam failures usually result due to the age of the structure, inadequate spillway capacity used in construction, or structural damage caused by an earthquake or flood. When a dam fails, large quantities of water may be suddenly released with a great potential to cause human casualties, economic loss, and environmental damage. This type of disaster is especially dangerous because it can occur suddenly, providing little warning or evacuation time for the downstream communities. The flows resulting from dam failure generally are much larger than the capacity of the downstream channels and therefore lead to extensive flooding. Flood damage occurs as a result of the momentum of the torrent caused by the sediment-laden water flooding over the channel banks and the impact of debris carried by the flow.

History

The County has a limited history of dam failures that caused damaging inundation of downstream properties. The only recorded dam failure recorded was a cattle water tank impounded by what is known as the Redlands Dam.

During August 16, 2008, heavy rain from thunderstorms over the Cataract Creek and Havasu Creek drainages caused flash flooding that started in the Village of Supai at approximately 11:30 PM MST. The flooding lasted several days and caused damage to homes in the Village of Supai. There was extensive damage to Havasu Canyon and the campground below the village. Many campers were stranded during the night in trees and on picnic tables. Approximately 426 people were evacuated by helicopter and there was significant damage to the landscape. [31] The Redlands Dam on Cataract Creek miles upstream of the Village of Supai breached and was initially assumed to have been the cause of flooding in Supai. However, the breach was later determined to be of little consequence to flooding in Supai. The National Weather Service stated they were alerted that the dam collapsed three hours after the major flood caused damage to the nearby campground.[32]

Location

Based on the National Inventory of Dams (NID) database, there are 45 dams in the County. Of the 45 dams, 13 are under federal jurisdiction. **Figures 4.3** through **Figure 4.5** provide the location of the dams.

[31] FEMA, July 2013, Federal Guidelines for Inundation Mapping of Flood Risks Associated with Dam Incidents and Failures

[32] New York Times, September 2, 2008, New Interest in Warning System After Grand Canyon Flood

Figure 4.3: Potential Dam Failure Flood Hazard 1

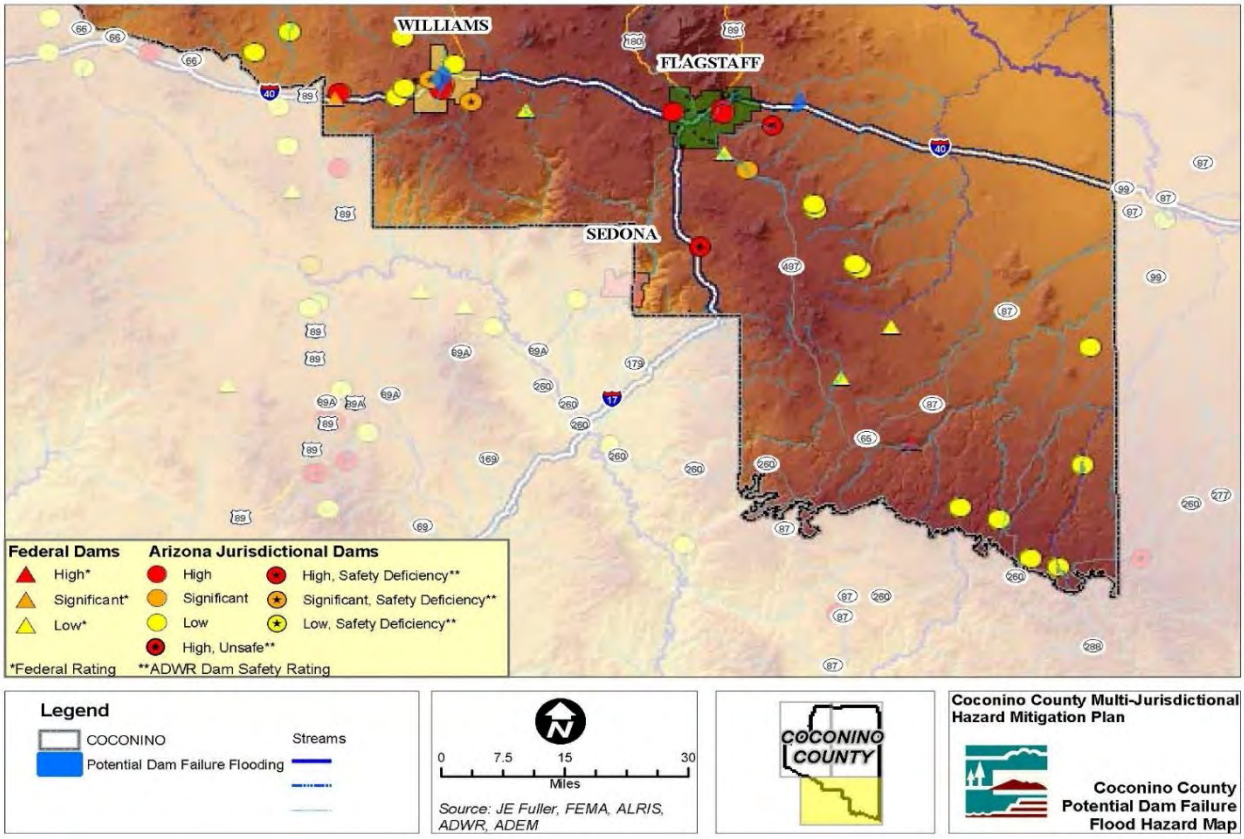


Figure 4.4: Potential Dam Failure Flood Hazard 2

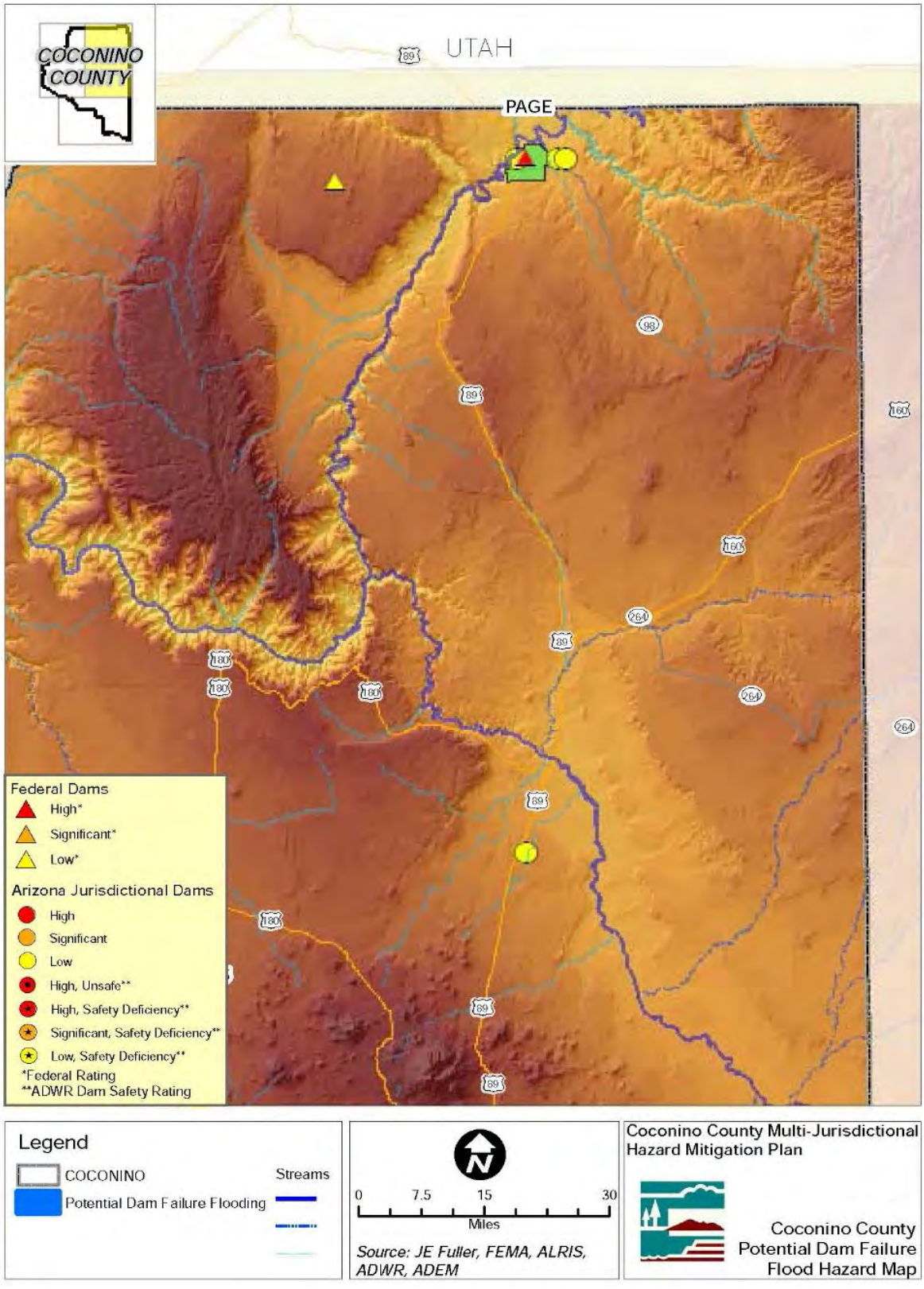
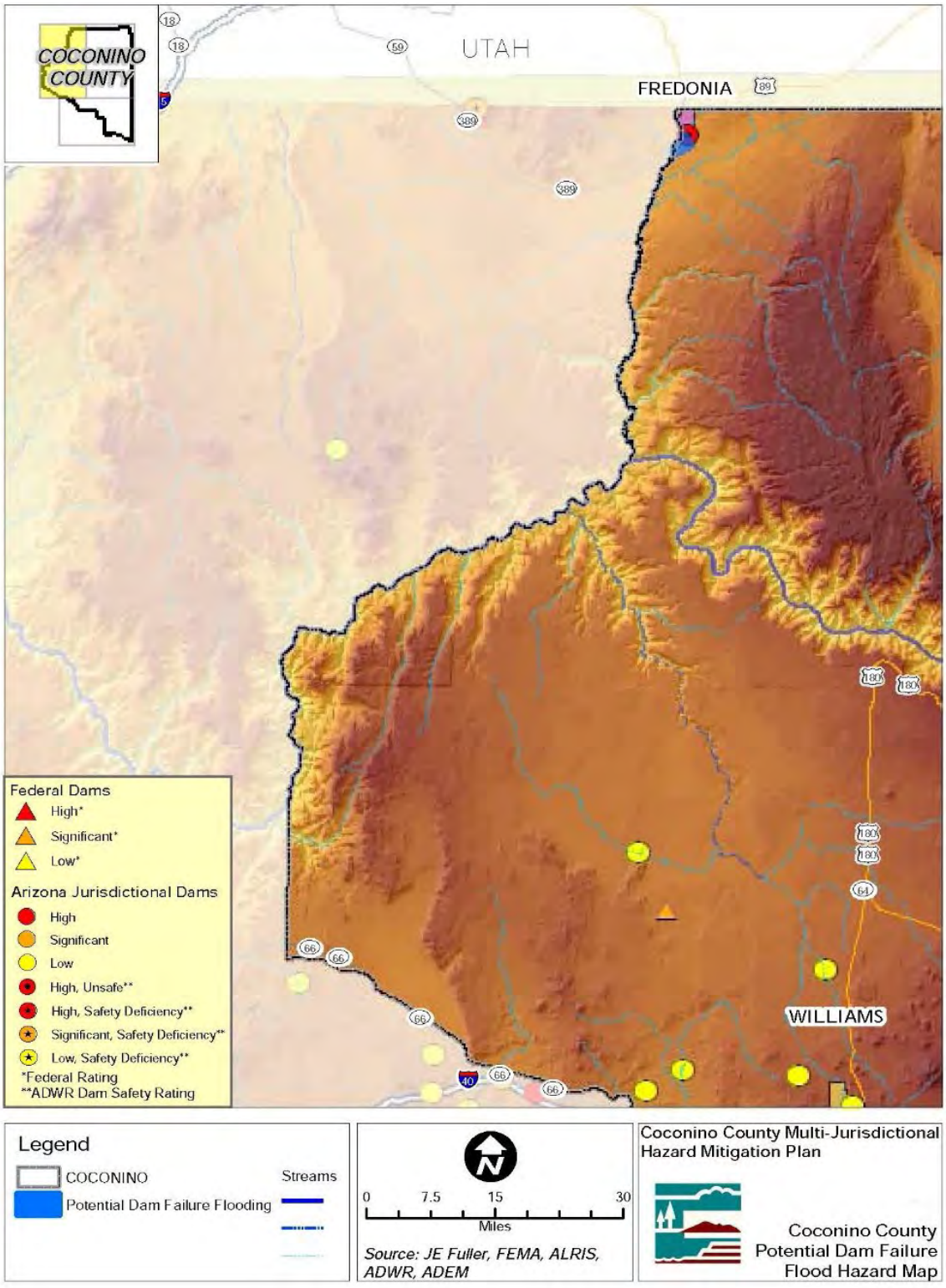


Figure 4.5: Potential Dam Failure Flood Hazard 3



Extent and Regulatory Context

ADWR has regulatory jurisdiction over the non-federally owned and/or dams that do not produce hydro-electric power. They conduct field investigations and participating in flood mitigation programs with the goal of minimizing the risk to loss of life and property. ADWR jurisdictional dams are inspected regularly according to downstream hazard potential classification. High hazard dams are inspected annually, significant hazard dams every three years, and low hazard dams every five years. During these inspections, ADWR identifies safety deficiencies requiring correction and assigns each dam one of five safety ratings (listed in increasing severity): 1) no deficiency, 2) safety deficiency, 3) unsafe non-emergency, 4) unsafe non-emergency elevated risk, or 5) unsafe emergency. Examples of safety deficiencies include lack of an adequate emergency action plan (EAP), inability to safely pass the required Inflow Design Flood (IDF), embankment erosion, dam stability, etc. Further descriptions of each safety classification are summarized below.

Table 4-10: ADWR Dam Safety Categories

ADWR Safety Rating	Definition
No Deficiency	No safety deficiencies found.
Safety Deficiency	One or more conditions at the dam that impair or adversely affects the safe operation of the dam.
Unsafe Non-emergency	Safety deficiencies in a dam or spillway could result in failure of the dam with subsequent loss of human life or significant property damage. Failure is not considered imminent.
Unsafe Non-emergency Elevated Risk	Safety deficiencies in a dam or spillway could result in failure of the dam with subsequent loss of human life or significant property damage. Concern the dam could fail during a 100-yr or smaller flood.
Unsafe Emergency	The dam is in imminent risk of failure.
Source: ADWR, 2009.	

The NID database contains information on approximately 77,000 dams in the 50 states and Puerto Rico, with approximately 30 characteristics reported for each dam, such as: name, owner, river, nearest community, length, height, average storage, max storage, hazard rating, EAP, latitude, and longitude. Dams within the NID database are classified by hazard potential that is based on an assessment of the consequences of failure.

Table 4-11: NID Downstream Hazard Classifications

Hazard Potential Classification	Loss of Human Life	Economic, Environmental, Lifeline Losses
Low	None expected	Low and generally limited to owner
Significant	None expected	Yes
High	Probable. One or more expected.	Yes (but not necessary for this classification)
Note: Hazard potential classification is an assessment of the consequences of failure, but not an evaluation of the probability of failure. Source: NID		

The NID database includes dams that are either:

- High or significant hazard potential dams or;
- Low hazard potential dams that exceed 25 feet in height and 15 acre-feet storage or;
- Low hazard potential dams that exceed 50 acre-feet storage and six feet height.

Table 4-12 provides a summary of the hazard classifications of dams in the County.

Table 4-12: NID Hazard Classification of Dams

Database Source	High	Significant	Low
NID	13	3	29
Source: US Army Corps of Engineers National Inventory of Dams (NID), 2020.			

Based on the NID Coconino County summary report, of the 45 dams in the County, 36% meet the "high" or "significant" hazard classification. State regulated dams with this level of hazard are required to have an Emergency Action Plan (EAP). In the County, 88% of those with a "high" or "significant" hazard rating have an EAP.[33] **Table 4-13** details the potential hazard level classification for each dam in Coconino County as estimated by NID. Location of these dams can be found in **Figure 4.6.**

Table 4-13 NID Hazard Classification and Inspection Date of Coconino Dams

Dam Name	Location	Inspection Date	NID Hazard Potential
CITY	Williams	November 14, 2017	High
LOWER LAKE MARY	Flagstaff*	November 5, 2013	High
SANTA FE	Williams	November 14, 2017	High
CONTINENTAL #1	Flagstaff	August 22, 2017	High
CONTINENTAL #2	Flagstaff	August 22, 2017	High
MASONRY #2	Ash Fork*	September 14, 2017	High
FREDONIA	Fredonia	May 22, 2018	High
ODELL	Munds Park	July 26, 2017	High
WALNUT CANYON	Winona	October 25, 2017	High
GLEN CANYON	Lees Ferry	September 29, 2016	High
PASTURE CANYON	Moenkopi	-	High
RAILROAD TANK DAM	Parks*	November 12, 2013	High
CC CRAGIN	Kinder Crossing	June 22, 2017	High
UPPER LAKE MARY	Flagstaff*	June 16, 2015	Significant
WEST CATARACT CREEK	Williams	October 26, 2016	Significant
DOGTOWN	Williams*	October 26, 2016	Significant

[33] National Inventory of Dams (NID), Summary for Coconino County

Dam Name	Location	Inspection Date	NID Hazard Potential
KINNIKINICK	Two Guns	July 13, 2012	Low
KNOLL	Winslow	May 17, 2012	Low
WOODS CANYON	Winslow	May 9, 2018	Low
COCONINO	Sunrise	June 13, 2012	Low
CHEVELON CANYON	Winslow	May 17, 2012	Low
ASHURST LAKE	Sunrise	June 13, 2012	Low
WILLOW SPRINGS	Winslow	May 9, 2018	Low
TREMAINE RESERVOIR	Two Guns	May 27, 2010	Low
KAIBAB	Williams*	November 14, 2017	Low
STEEL DAM	Ash Fork*	August 23, 2011	Low
MORTON	Two Guns	June 13, 2012	Low
BEAR CANYON	Winslow	May 17, 2012	Low
MCLELLAN	Ash Fork*	October 7, 2011	Low
NAVAJO EVAP POND 60-2	Page*	May 30, 2012	Low
NUMBER 10 TANK	Flagstaff*	August 19, 2011	Low
PAGE EFFLUENT PONDS 2A & 2B	Page*	May 31, 2012	Low
28 TANK	Supai Village	April 12, 2012	Low
SWEETWOOD (K4)	Williams*	October 14, 2011	Low
BROKEN TANK	Flagstaff*	April 24, 2013	Low
TOM TANK	Williams*	April 12, 2012	Low
LONG POINT DAM	Williams*	September 26, 2006	Low
BIG SUPAI TANK	Williams*	April 8, 2010	Low
BIG ASO	Ash Fork*	November 14, 2012	Low
FOXBORO LAKE DAM	Indian Gardens	April 25, 2013	Low
SOLDIER ANNEX DAM	Two Guns	August 4, 2009	Low
WHITEHORSE DAM	Clarkdale	May 30, 2012	Low
SCHOLZ DAM	Clarkdale	May 30, 2012	Low
J. D. DAM	Cottonwood	June 24, 2011	Low
RUSSELL TANK DAM	Supai	April 23, 2013	Low

*Available data was taken from the National Inventory of Dams (NID). Locations with no data recorded by the NID were supplemented by the interactive dam locator provided by the NID and approximated using the closest definable location.

DRAFT

Figure 4.6: USACE NID 2018 Dam Hazard Potential Map for Coconino County

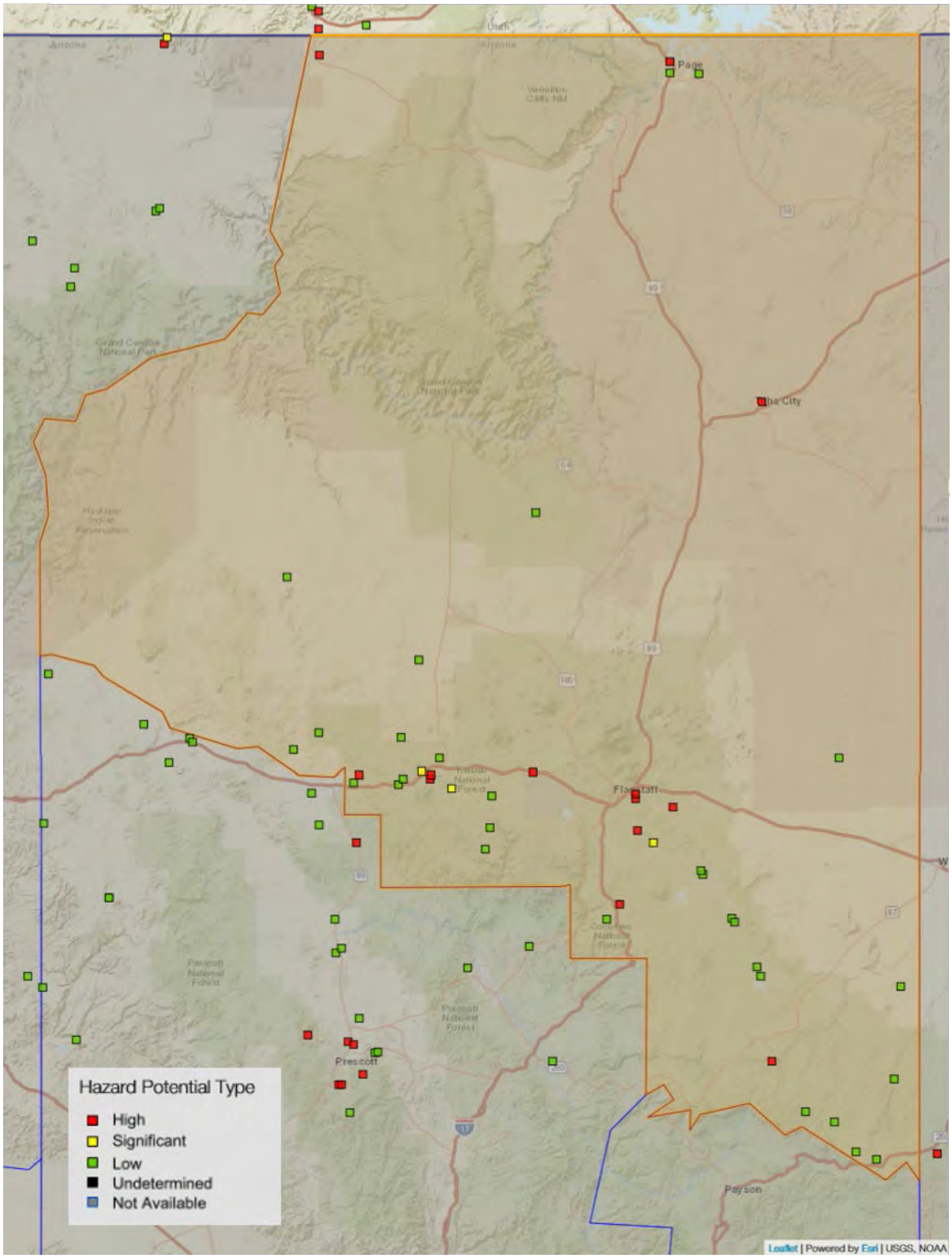


Table 4-14 summarizes the change in NID rated High and Significant hazard dams from 2009 to 2020 and the corresponding change in dams with EAPs.

Table 4-14: NID Rating

Dam Rating	Dams with EAPs (Full, Draft, and/or Outdated)	Dams without EAPs	Total Dams with Hazard Potential Classification
High in 2009	7	1	8
High in 2020	11	2	13
Significant in 2009	3	0	3
Significant in 2020	3	0	3
Sources: ADWR Dam Safety Database (May 2013); NID 2020			

The magnitude of impacts due to dam failure are usually depicted by mapping the estimated downstream inundation limits based on an assessment of a combination of flow depth and velocity. The anticipated flooding expected from a dam failure within Coconino County can be viewed on the previously provided maps **Figure 4-3 to 4-5.**

Probability of Future Events

Dam failure is a rare event with the likelihood of occurring of less than one percent annually.

Vulnerability

Table 4-15 provides an analysis of the vulnerability of Planning Team jurisdictions to dam failure.

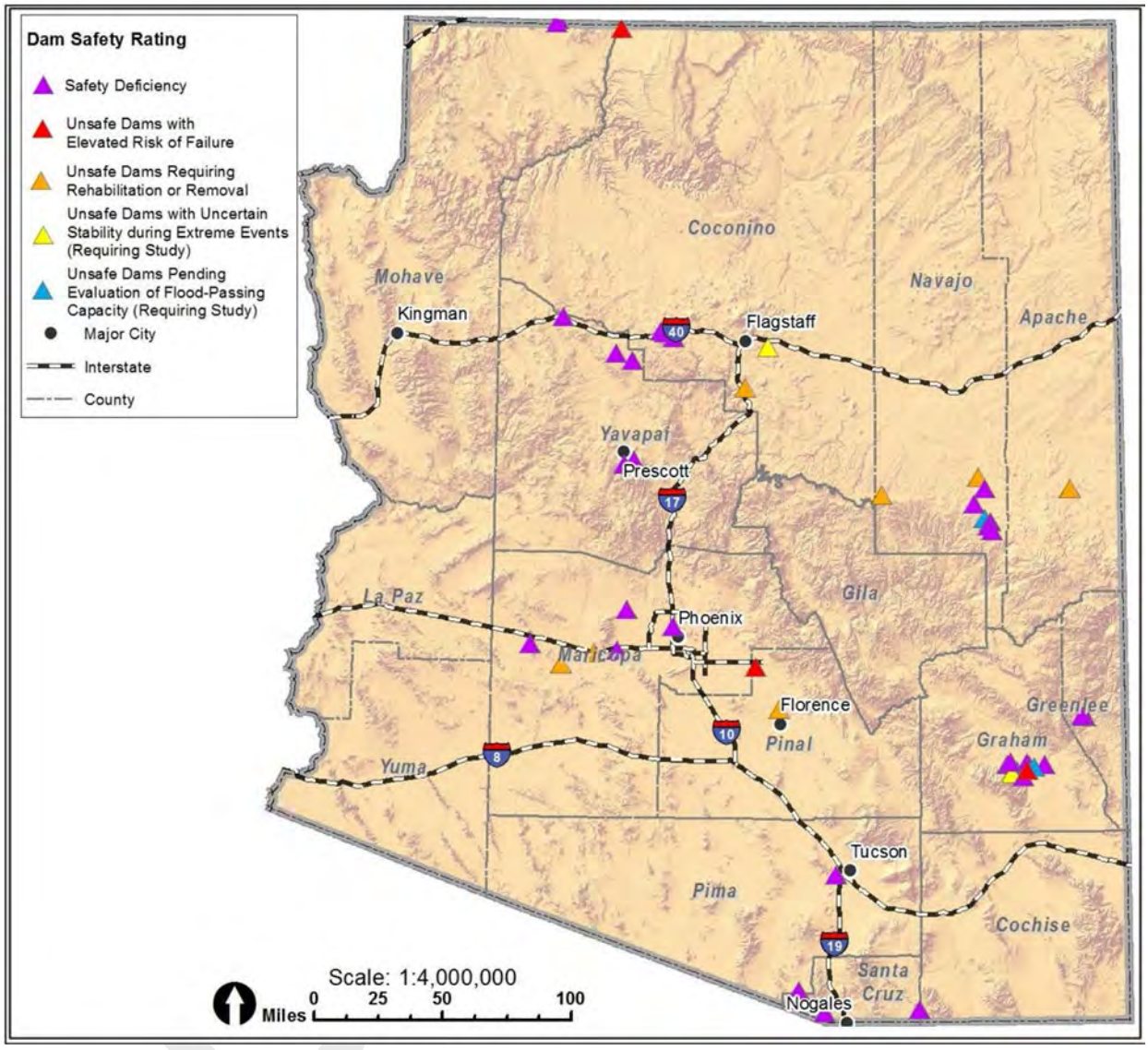
Table 4-15: CPRI Rating for Dam Failure

Jurisdiction	Probability	Magnitude/ Severity	Warning Time	Duration	CPRI Score
Coconino County	.45	1.2	.45	.4	2.5
Flagstaff	.45	1.2	.45	.4	2.5
Fredonia	.45	.9	.6	.3	2.25
Page	.45	.30	.6	.4	2.65
Tusayan	.45	1.2	.45	.4	2.5
Williams	1.35	.90	.15	.4	2.8
County-wide average CPRI =					**2.53**
Jurisdictions in bold print indicate they will be assessing the hazard and including mitigation activities for it. *Note: Maximum CPRI score is 4.00.*					

The safety ratings of Arizona dams in 2009, reported in the State of Arizona Hazard Mitigation Plan, identified several Coconino County dams with elevated risks. Based on the placement of these dams in **Figure 4.7**, it is assumed that the following dams are those most likely to have the listed safety deficiency levels. Three dams were identified as safety deficient, these were most likely Santa Fe Dam (or Railroad Dam), City Dam, and West Cataract Creek Dam. The Fredonia Dam was labeled as unsafe with elevated risk of failure. The Odell Dam was identified as unsafe requiring rehabilitation or removal. Since 2009, all of

these dams, with the exception of City Dam, have been studied for safety and the viability of repair or removal projects.[34]

Figure 4.7: State Regulated Dams with Unsafe/Safety Deficient Classifications as of 2013



Loss Estimates

14 of the 45 dams in the County are classified as having "High or Significant Hazard Potential" and have EAPs. 29 of the 45 dams in the County are not required to have an EAP due to low classification potential for hazard. While the total number of dams in the high and significant category have increased from 11 to 16 since 2009, the dams in the County continue, for the most part, to remain in compliance with EAP regulation. However, two of the 45 dams, Walnut Canyon Dam and Railroad Tank Dam, could pose

[34] Northern Arizona University. 2014. Odell Dam Safety Analysis – Final Presentation

significant risk and do not have EAPs.[35] In 2015, only four dams had a delineated inundation limit downstream of the dam associated with a dam failure. Based on this information, the results of this analysis are expected to underestimate the vulnerability of people and infrastructure within the County.

For example, no dam failure inundation limits were provided for Glen Canyon Dam (GCD) on the Colorado River near Page. However, a failure of the GCD would be catastrophic. The flood wave from such an event would likely cause the Hoover Dam downstream to fail and flood thousands of properties on its way down to the Gulf of California. To replace both GCD and the Hoover Dam would cost in excess of $36 billion and the economic losses as a result of lost water and power to the states benefitting from the Colorado River Storage Project would have a significant impact on the economy of the nation.[36] In the immediate aftermath of such a failure, communities surrounding GCD would experience severe endangerment of potable water supplies due to the proximity of GCD to the potable water pipeline, which runs from Roaring Springs to Grand Canyon Village. This would add additional pressure to surrounding jurisdictions such as Tusayan if an event requires water assistance provision.

Since no common methodology is available for obtaining losses from the exposure values, estimates of the loss-to-exposure ratios were assumed based on the perceived potential for damage. Any storm event, or series of storm events of sufficient magnitude to cause a dam failure scenario, would have potentially catastrophic consequences in the inundation area. Flood waves from these types of events travel very fast and possess tremendous destructive energy due to the debris the entrain. Accordingly, an average event-based loss-to-exposure ratio for the inundation areas with a high hazard rating are estimated to be 0.25. Low rated areas are zero.

The Planning Team recognizes that the probability of a dam failure occurring on multiple (or all) structures at the same time is essentially zero. Accordingly, the loss estimates presented below are intended to serve as a collective evaluation of the potential exposure and losses to dam failure inundation events.

In 2015, $4.2 million in asset related losses were estimated for dam failure inundation for all the participating jurisdictions in the County. An additional $52.2 million in losses to HAZUS defined residential, commercial, and industrial facilities was estimated for all participating jurisdictions. With inflation and the inevitable increase in development in Coconino, this number has likely increased. Regarding human vulnerability, it had previously been calculated that 1.96% of the total County projected population is potentially exposed to a dam failure inundation event. Given the steady increase in County population projections from 2015-2019, this estimate has risen from 2,744 people (2015) to 2,812 people (2019). The potential for deaths and injuries are directly related to the warning time and type of event. Given the magnitude of such an event(s), it is realistic to anticipate at least one death and several injuries. There is also a high probability of population displacement for inhabitants within the downstream inundation limits of the dam(s).

Development Trend Analysis

Dam failure places downstream populations at risk. In addition to the flow of water released from the reservoir, the inundation stream picks up large debris which results in a scouring effect that compounds damage. The flood protection afforded by dams in the County has encouraged development of lands immediately downstream of the structures. However, prohibition of development in these areas is not feasible. Instead, public awareness measures such as notices on final plats and public education on dam safety are mitigation efforts employed by local county and city/town officials. Also, EAPs that establish potential dam failure inundation limits, notification procedures, and thresholds are also prepared for response to potential dam related disasters.

[35] National Inventory of Dams (NID), Summary for Coconino County
[36] TriData, 2005

4.3.4 Drought

Description

Drought is an extended period of years when a region is deficient in its water supply or consistently receives below average precipitation. Drought patterns in the West are related to large-scale climate patterns in the Pacific and Atlantic oceans, such as the El Niño–Southern Oscillation in the Pacific, and the Atlantic Multidecadal Oscillation in the Atlantic. As these large-scale ocean climate patterns vary in relation to each other, drought conditions in the U.S. shift from region to region. Drought produces a variety of impacts that span many sectors of the economy such as reduced crops, rangeland, and forest productivity; increased fire hazard; reduced water levels; increased livestock and wildlife mortality; and rationing are a few examples of direct impacts. These problems can result in reduced income for farmers and agribusiness, increased prices for food and lumber, unemployment, reduced tax revenues, increased crime, migration and foreclosures on bank loans to farmers and businesses.

Drought is a normal part of virtually every climate on the planet, including areas of high and low rainfall. It is different from normal aridity, which is a permanent characteristic of the climate in areas of low rainfall. Drought is the result of a natural decline in the expected precipitation over an extended period of time, typically one or more seasons in length. The severity of drought can be aggravated by other climatic factors, such as prolonged high winds and low relative humidity.

Drought is a complex natural hazard which is reflected in the four definitions commonly used to describe it:

- **Meteorological –** Drought is defined solely on the degree of dryness, expressed as a departure of actual precipitation from an expected average or normal amount based on monthly, seasonal, or annual time scales.
- **Hydrological –** Drought is related to the effects of precipitation shortfalls on streamflows and reservoir, lake, and groundwater levels.
- **Agricultural –** Drought is defined principally in terms of naturally occurring soil moisture deficiencies relative to water demands of plant life, usually arid crops.
- **Socioeconomic –** Drought associates the supply and demand of economic goods or services with elements of meteorological, hydrologic, and agricultural drought. Socioeconomic drought occurs when the demand for water exceeds the supply as a result of weather-related supply shortfall. It may also be called a water management drought.

A drought's severity depends on numerous factors including duration, intensity, and geographic extent as well as regional water supply demands by humans and vegetation. Due to its multi-dimensional nature, drought is difficult to define in exact terms and also poses difficulties in terms of comprehensive risk assessments.

Drought differs from other natural hazards in three ways. First, the onset and end of a drought are difficult to determine due to the slow accumulation and lingering effects of an event after its apparent end. Second, the lack of an exact and universally accepted definition adds to the confusion of its existence and severity. Third, in contrast with other natural hazards, the impact of drought is less obvious and may be spread over a larger geographic area. These characteristics have hindered the preparation of drought contingency or mitigation plans by many governments.

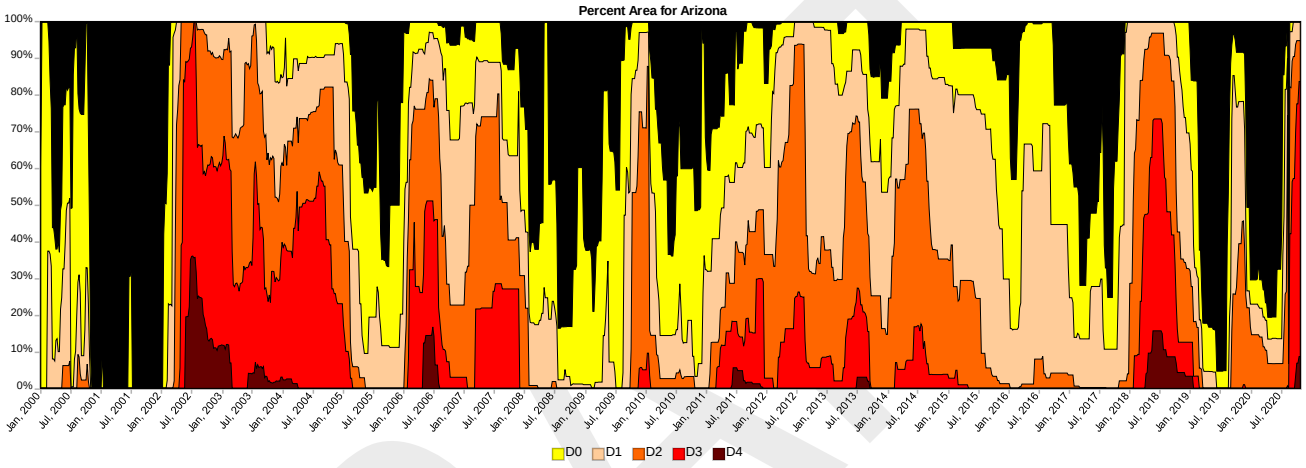
History

Arizona has experienced several droughts declared as drought disasters/emergencies. A prolonged drought occurred during the period of 1941-1965. The period from 1979-1993 appears to have been anomalously wet, while the rest of the historical records shows that dry conditions are most likely the normal

situation for Arizona. From 1994-2015, there have been more months and years with below normal precipitation than months or years with above normal precipitation. Currently, there is a standing state governor issued declaration on drought.[37] The Governor's Drought Interagency Coordinating Group has continuously recommended to the governor to extend the drought declaration originally issued in June of 1999.

Since 2000, the longest duration of drought (D1-D4) in Arizona lasted 512 weeks beginning on August 18, 2009 and ending on June 4, 2019. The most intense period of drought occurred the week of July 9, 2002 where D4 affected 36.15% of Arizona land. **Figure 4.8** depicts the duration and severity of droughts from 2000 through 2020.

Figure 4.8: Arizona Drought History (2000-2020)



The maps below show the extent of drought nationwide for mid-January 2021, 2016, and 2011.

[37]Arizona Department of Water Resources. 2019. https://new.azwater.gov/news/articles/2019-22-11

Figure 4.9: Arizona Drought Monitor (2021)

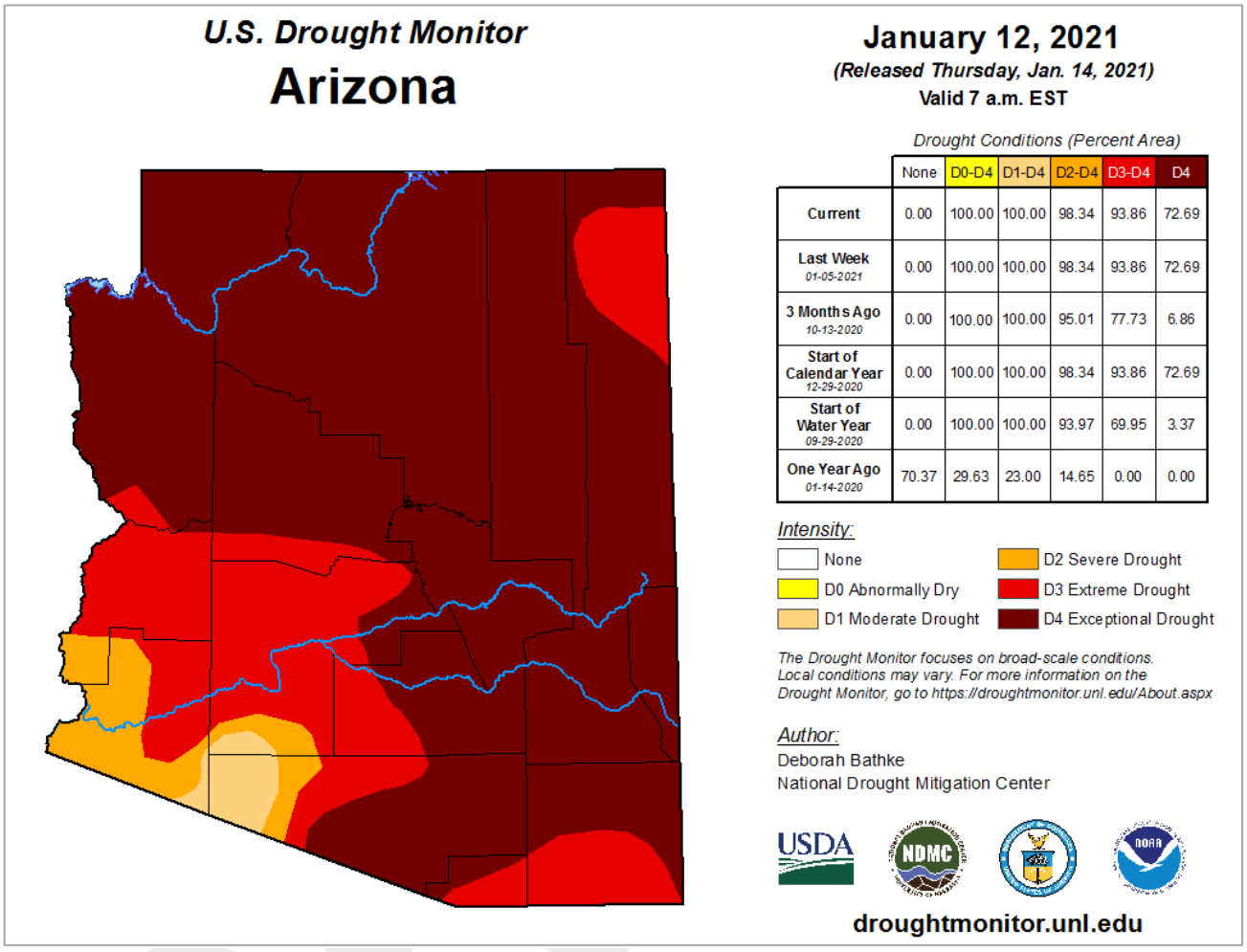


Figure 4.10: Arizona Drought Monitor (2016)

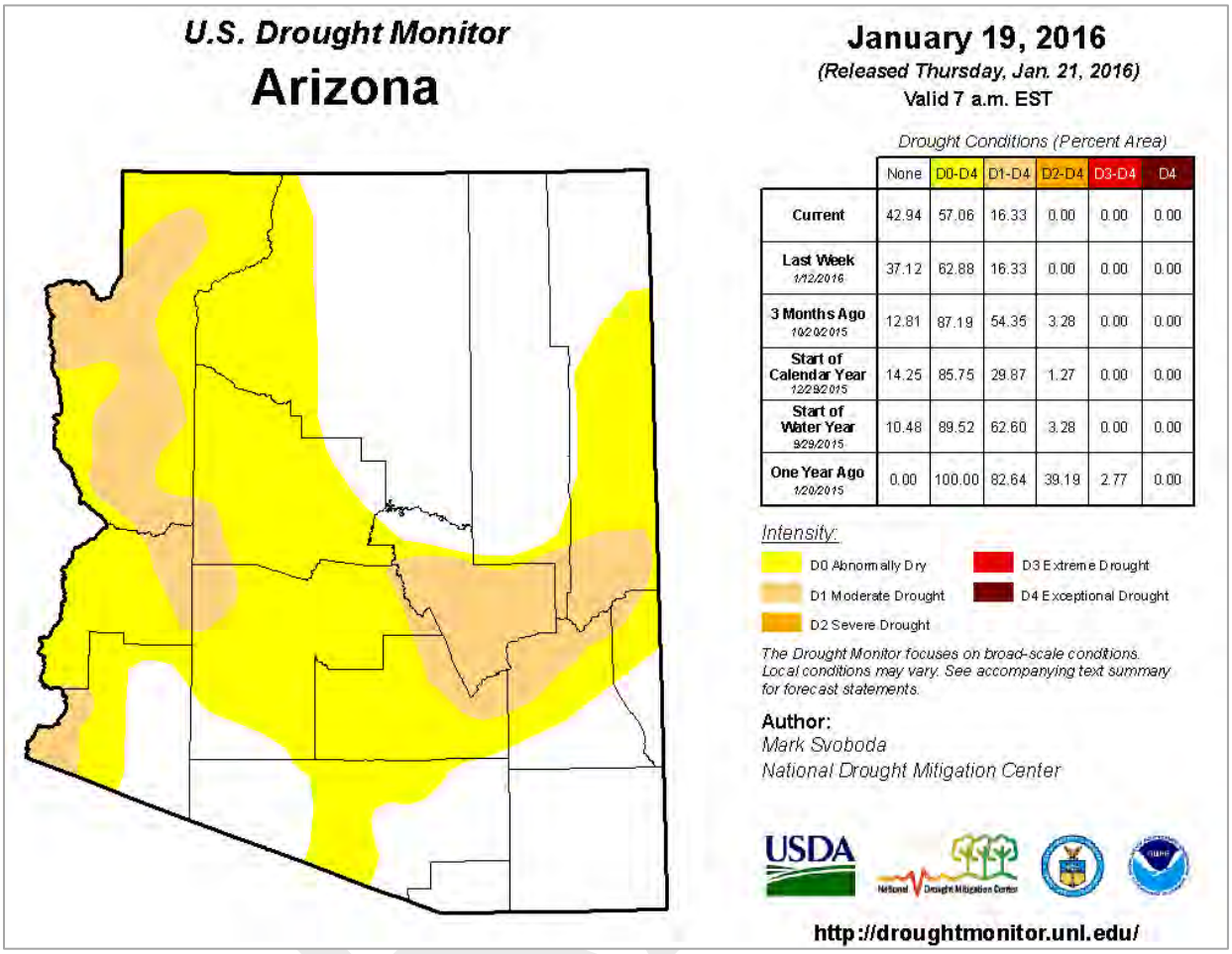
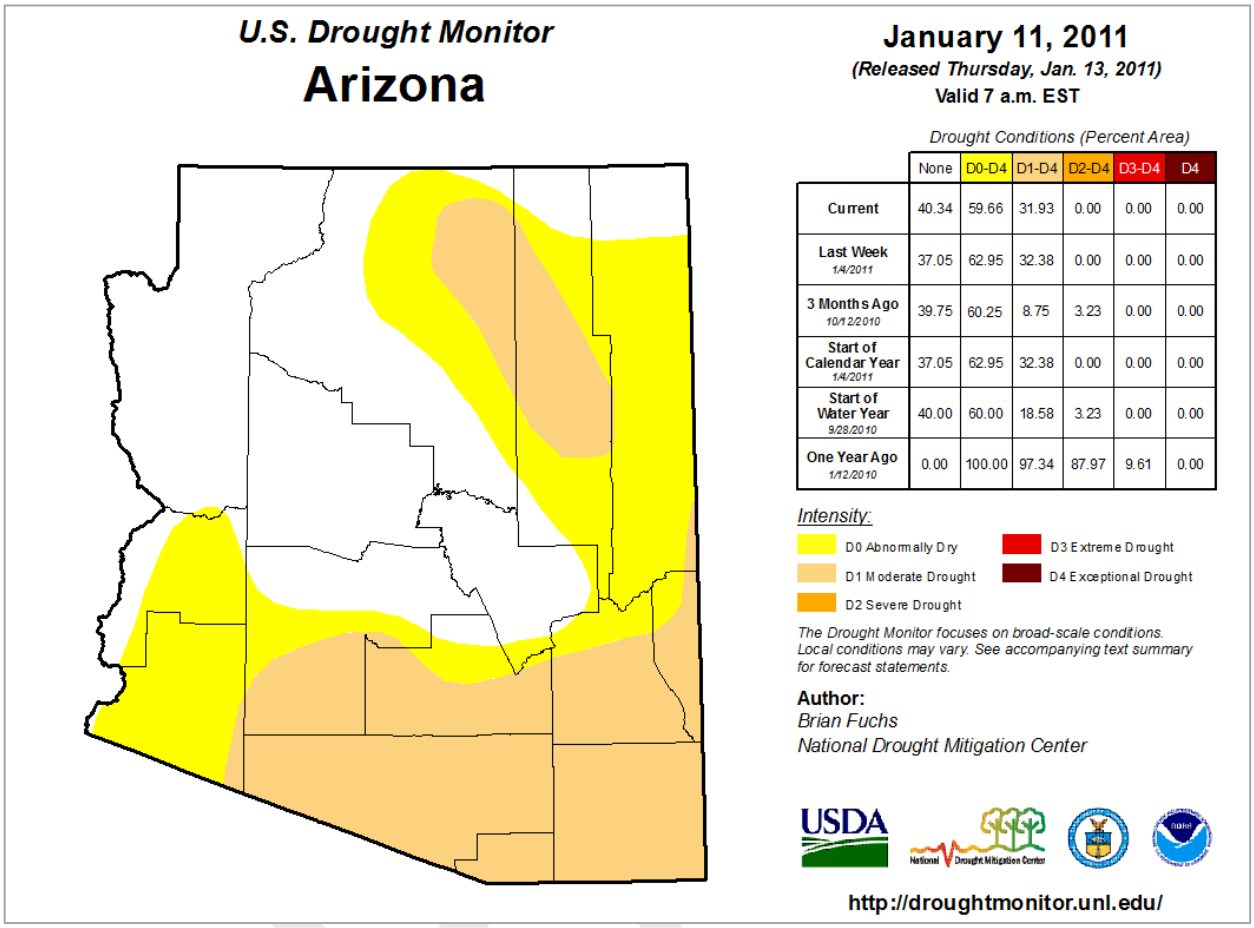


Figure 4.11: Arizona Drought Monitor (2011)



Location

All of the County is susceptible to drought. Current drought conditions from U.S. Drought Monitor are depicted in **Figure 4.11**.

Extent

Drought is classified by a variety of indices and categories. **Figure 4.12** below depicts three that are widely used. It contains severity classification ranges for each indicator for each dryness level. Because the ranges of the various indicators often do not coincide, the final drought category tends to be based on what the majority of the indicators show and on local observations.

Figure 4.12: Drought Severity Classifications

Drought Severity	Return Period (years)	Description of Possible Impacts	Drought Monitoring Indices		
			Standardized Precipitation Index (SPI)	NDMC* Drought Category	Palmer Drought Index
Minor Drought	3 to 4	Going into drought; short-term dryness slowing growth of crops or pastures; fire risk above average. Coming out of drought; some lingering water deficits; pastures or crops not fully recovered.	-0.5 to -0.7	D0	-1.0 to -1.9
Moderate Drought	5 to 9	Some damage to crops or pastures; fire risk high; streams, reservoirs, or wells low, some water shortages developing or imminent, voluntary water use restrictions requested.	-0.8 to -1.2	D1	-2.0 to -2.9
Severe Drought	10 to 17	Crop or pasture losses likely; fire risk very high; water shortages common; water restrictions imposed.	-1.3 to -1.5	D2	-3.0 to -3.9
Extreme Drought	18 to 43	Major crop and pasture losses; extreme fire danger; widespread water shortages or restrictions.	-1.6 to -1.9	D3	-4.0 to -4.9
Exceptional Drought	44+	Exceptional and widespread crop and pasture losses; exceptional fire risk; shortages of water in reservoirs, streams, and wells creating water emergencies.	less than -2	D4	-5.0 or less

*NDMC - National Drought Mitigation Center

Additionally, The Palmer Drought Severity Index (PDSI) uses readily available temperature and precipitation data to estimate relative dryness. It is a standardized index that generally spans -10 (dry) to +10 (wet). Maps of operational agencies like NOAA typically show a range of -4 to +4, but more extreme values are possible. The PDSI has been reasonably successful at quantifying long-term drought. The drought map in the location section above is a PDSI product.

Probability of Future Events

Figure 4.12 above provides estimated return periods for various severity levels of drought. An extreme, multiyear drought could impact the region with little warning. Climate change is likely to result in longer and more frequently occurring drought.

There is no commonly accepted return period or non-exceedance probability for defining the risk from drought (such as the 100-year or 1% annual chance of flood). The magnitude of drought is usually measured in time and the severity of the hydrologic deficit. There are several resources available to evaluate drought status and even project very near future expected conditions.

The National Integrated Drought Information System (NIDIS) Act of 2006 (Public Law 109-430) prescribes an interagency approach for drought monitoring, forecasting, and early warning (NIDIS, 2007). The NIDIS maintains the U.S. Drought Portal which is a centralized, web-based access point to several drought related resources including the U.S. Drought Monitor (USDM) and the U.S. Seasonal Drought Outlook (USSDO). The Palmer Drought Severity Index (PSDI) is a commonly used index that measures the severity of drought for agriculture and water resource management. It is calculated from observed temperature and precipitation values and estimates soil moisture. However, the Palmer Index is not considered to be consistent enough to characterize the risk of drought on a nationwide basis [38] and neither of the Palmer indices is well suited to the dry, mountainous western United States.

In 2003, Governor Janet Napolitano created the Arizona Drought Task Force, led by ADWR, which developed a statewide drought plan. The plan includes criteria for determining both short and long-term drought status for each of the 15 major watersheds in the state using assessments that are based on precipitation and stream flow. The plan also provided the framework for the Drought Interagency Coordinating Group, which reports to the governor on drought status, in addition to local drought impact groups in each county and the State Drought Monitoring Technical Committee. The counties use the drought status reports to implement drought actions within their drought plans. The State Drought Monitoring Technical Committee uses the Standardized Precipitation Index (SPI) for the short-term drought status and a combination of the SPI and streamflow for the long-term drought status.

The County has experienced drought ranging from abnormally dry to extreme drought over the past five years as winter storms sweep across the northern third of the state one year then stay north of the state in other years, leaving large precipitation deficits. While the current 21-year drought is longer than the 16-year wet period that preceded it, it is still shorter than the 37-year drought of the mid-20th century. There are no trends or other indicators that the drought will end soon. Drought in northern Arizona is generally characterized by extreme variability in precipitation from year-to-year. However, the most recent four years have been the second driest 48-month period since the 1950s and extended dry periods have negative impacts on wildland fires and water resources. Drought is likely to continue, as will the extreme variability in precipitation, both summer and winter.

When attempting to evaluate the probability and magnitude of drought in the County, it is helpful to remember that potable water in the County is derived from both surface water and groundwater. Surface water to the County usually comes from several sources such as the Colorado River, (stored in Lake Powell near Page), small lakes in the Lake Mary area serving the Flagstaff area, and Cataract Creek in Williams. This surface water is a major renewable resource for the County, but can vary dramatically between years, seasons, and locations due to the state's desert climate.

Groundwater is the other primary water source in the County obtained by drilling wells and pumping from large subsurface natural reservoirs known as aquifers. While a significant supply of water remains stored in the aquifers, groundwater has historically been pumped out much more rapidly than it can be replenished through natural recharge and has led to a condition known as overdraft. Furthermore, ground water depths on the Colorado Plateau range from 2,000 feet to over a mile deep.

Reclaimed water, or effluent, is another source of water in the County and is the only increasing source of water in the County, although it constitutes only a small amount of the overall water used. As the regional

[38] FEMA, 1997.

population grows, increasing amounts of reclaimed water will be available for agricultural, golf course, and landscape irrigation, as well as industrial cooling and maintenance of wildlife areas.

Vulnerability

Combinations of low precipitation and unusually high temperatures could occur over several consecutive years. Intensified by such conditions, extreme wildland fires could break out throughout the County, increasing the need for water. Surrounding communities, also in drought conditions, could increase their demand for water supplies relied upon by the planning partnership, causing social and political conflicts. If such conditions persisted for several years, the economy of the County could experience declines, especially in water-intensive industries such as agriculture. **Table 4-16** provides the CPRI for the planning area.

Table 4-16: CPRI Rating for Drought

Jurisdiction	Probability	Magnitude/ Severity	Warning Time	Duration	CPRI Score
Coconino County	1.8	1.2	.15	.4	3.55
Flagstaff	1.8	1.2	.15	.4	3.55
Fredonia	.9	.3	.15	.4	1.75
Page	1.8	.6	.15	.4	2.95
Tusayan	1.8	1.2	.15	.4	3.55
Williams	1.8	1.2	.15	.4	3.55
County-wide average CPRI =					**3.15**
Jurisdictions in bold print indicate they will be assessing the hazard and including mitigation activities for it. *Note: Maximum CPRI score is 4.00.*					

Loss Estimates

No standardized methodology exists for estimating losses due to drought and drought does not generally have a direct impact on critical and non-critical facilities and building stock. A direct correlation to loss of human life due to drought is improbable for the County. Instead, drought vulnerability is primarily measured by its potential impact to certain sectors of the County economy and natural resources to include:

- Crop and livestock agriculture;
- Municipal and industrial water supply;
- Recreation/tourism;
- Wildlife and wildlife habitat.

Sustained drought conditions will also have secondary impacts to other hazards such as fissures, flooding, subsidence and wildland fire. Extended drought may weaken and dry the grasses, shrubs, and trees of wildland fire areas, making them more susceptible to ignition. Drought also tends to reduce the vegetative cover in watersheds, and hence decrease the interception of rainfall and increase the flooding hazard. Subsidence and fissure conditions are aggravated when lean surface water supplies force the pumping of more groundwater to supply the demand without the benefit of recharge from normal rainfall.

From 1995 to 2020, County farmers and ranchers received $18 million in disaster related assistance funding from the U.S Department of Agriculture (USDA) for crop and livestock damages. Of this, $13.1 million of those funds were received from 2014 to 2020, corresponding with the recent drought cycle for the

County. It is therefore realistic to expect at $250,000 to $500,000 in agriculture related drought losses in a given year of severe drought conditions. Other direct costs such as increased pumping costs due to lowering of groundwater levels and costs to expand water infrastructure to compensate for reduced yields or to develop alternative water sources, are a significant factor but very difficult to estimate due to a lack of documentation. There are also the intangible costs associated with lost tourism revenues and impacts to wildlife habitat and animals. Typically, these impacts are translated into the general economy in the form of higher food and agricultural goods prices and increase utility costs.

Developmental Trends

The entire state of Arizona is susceptible to drought at any time and recent climate modeling studies have indicated that mega-droughts are likely to occur in the future. Additionally, as was mentioned previously, climate change is accelerating, and its effects will become more pronounced over time. The increase in average temperature will likewise lead to drier conditions in the West and Southwest of the United States. Even if precipitation does not decrease in the future, higher temperatures increase the risk that evaporation of standing water will occur more rapidly, decreasing local supply. At the same time, it is projected that the region's population will continue to increase, thus increasing demand for water. As availability decreases and demand increases, there will be a heightened risk for drought in areas that have traditionally been irrigated or relied on local water sources.[39]

4.3.5 Earthquake / Seismic Hazards

Description

Ground shaking, landslides, liquefaction, and amplification are the specific hazards associated with earthquakes. The severity of these hazards depends on several factors, including soil and slope conditions, proximity to the fault, earthquake magnitude and depth, and the type of earthquake:

- **Ground Shaking** – Ground shaking is the motion felt on the earth's surface caused by seismic waves from an earthquake. It is the primary cause of earthquake damage. The strength of ground shaking depends on the magnitude of the earthquake, the type of fault, and distance from the epicenter. Buildings on poorly consolidated and thick soils will typically see more damage than buildings on consolidated soils and bedrock.
- **Amplification** – Soils and soft sedimentary rocks near the earth's surface can modify ground shaking caused by earthquakes. One of these modifications is amplification. Amplification increases the magnitude of the seismic waves generated by the earthquake. The amount of amplification is influenced by the thickness of geologic materials and their physical properties. Buildings and other structures built on soft and unconsolidated soils can face greater risk. Amplification can also occur in areas with deep sediment-filled basins and ridge tops.
- **Earthquake-Induced Landslides** – Earthquake-induced landslides are secondary earthquake hazards that occur from ground shaking. They can destroy the roads, buildings, utilities, and other critical facilities necessary to respond and recover from an earthquake and are common in areas with steep slopes.
- **Liquefaction** – Liquefaction, a secondary earthquake hazard, occurs when ground shaking causes wet granular soils to change from a solid state to a liquid state. This results in the loss of soil strength and the soil's ability to support weight. Buildings and their occupants are at risk when the ground can no longer support these buildings and structures. In some cases, this ground may be

[39] Arizona State Hazard Mitigation Plan. 2013. https://dema.az.gov/sites/default/files/EM-PLN_2013%20State%20Hazard%20Mitigation%20PlanFINAL_0.pdf

subject to liquefaction, depending on the depth of the water table. Liquefaction occurs primarily in saturated and loose, fine- to medium-grained soils, in areas where the groundwater table lies within 50 feet of the ground surface. Liquefaction is known to occur is southern and western Arizona.

The Richter scale is often used to rate the strength of an earthquake and is an indirect measure of seismic energy released. The scale is logarithmic, with each one-point increase corresponding to a ten-fold increase in the amplitude of the seismic shock waves generated by the earthquake. However, in actual energy released, each one-point increase on the Richter scale corresponds to about a 32-fold increase in energy released. Therefore, a magnitude (M) 7.0 earthquake is 100 times (10×10) more powerful than an M5 earthquake and releases 1,024 times (32×32) the energy.

The Modified Mercalli Intensity (MMI) scale, as shown in **Table 4-17**, quantifies the intensity of ground shaking. Intensity in this scale is a function of distance from the epicenter (the closer a site is to the epicenter, the greater the intensity at that site), ground acceleration, duration of ground shaking, and degree of structural damage. The MMI rates earthquake severity by the amount of damage and perceived shaking.

Table 4-17: Modified Mercalli Intensity Scale

MMI Value	Shaking Severity	Summary Damage	Description
I	Micro	Little to none	Not felt except by few under especially favorable conditions.
II	Minor	Little to none	Felt only by a few persons at rest, especially on upper floors of buildings. Delicately suspended objects may swing.
III	Minor	Hanging objects move	Felt quite noticeably by persons indoors, especially on upper floors of buildings. Many people do not recognize it as an earthquake. Standing motor cars may rock slightly. Vibration similar to the passing of a truck. Duration estimated.
IV	Light	Hanging objects move	Felt indoors by many, outdoors by few during the day. At night, some awakened. Dishes, windows, doors disturbed. Walls make cracking sound. Sensation like heavy truck striking building. Standing motor cars rocked noticeably.
V	Light	Pictures move	Felt by nearly everyone. Many awakened. Some dishes, windows broken. Unstable objects overturned. Pendulum clocks may stop.
VI	Moderate	Objects fall	Felt by all, many frightened. Some heavy furniture moved. Few instances of fallen plaster. Damage slight.
VII	Strong	Nonstructural damage	Damage negligible in buildings of good design and construction, slight to moderate in well-built ordinary structures. Considerable damage in poorly built or badly designed structures. Some chimneys broken.
VIII	Very strong	Moderate damage	Damage slight in specially designed structures. Considerable damage in ordinary buildings with partial collapse. Damage great in poorly built structures. Fall of chimneys, walls, factory stacks, columns, monuments. Heavy furniture overturned.
X	Very violent	Extreme damage	Damage considerable in specially designed structures. Well-designed frame structures thrown out of plumb. Damage great in substantial buildings, with partial collapse. Buildings shifted off foundations.

XI	Very violent	Extreme damage	Some well-built wooden structures destroyed. Most masonry and frame structures destroyed with foundations. Rails bent.
XII	Very violent	Total damage	Few, if any (masonry) structures remain standing. Bridges destroyed. Rails bent greatly.

Source: United States Geological Survey, 2016.

History

Records of earthquakes occurred in the County chronicle seismic incidents since the early 1900s. None have resulted in deaths or injuries. The first damaging earthquake known to have occurred within Arizona's borders ruptured on January 25, 1906 causing a violent shock within Flagstaff. A tremor on August 18, 1912 damaged homes in Williams. In January 1935, an earthquake at the Grand Canyon awakened sleepers, causing a distinct subterranean rumble, movement of their homes, and cracked walls. In 1993 another earthquake caused minor damage at the Grand Canyon Village.[40] And in June 2011, one local source reported that "…the Arizona Integrated Seismic Network detected notable earthquakes in three areas in the County near Parks and Tusayan, and just south of Flagstaff."[41]

On November 30, 2014 an earthquake occurred near the Oak Creek fault zone. USGS confirmed a 4.7 magnitude on the Richter scale. The epicenter was determined to be roughly seven miles north of Sedona and sixteen miles south-southwest of Flagstaff. It was 3.1 miles below the surface of the Earth.[42] In the early morning hours of October 31, 2009, the 2009 Halloween "earthquake swarm" occurred near Sunset Crater, Arizona, 15 miles northeast of Flagstaff. Approximately 120 small magnitude earthquakes, (M2.0 or smaller), occurred during a six-hour period with the largest being a M2.9 tremor. Not all earthquakes are caused by moving tectonic plates. In Northern Arizona in particular, many are caused by magma moving through cracks deep in the crust. There have been 12 earthquake incidents since 2015 with the largest incident, a M3.6 event occurring December 28, 2020.

Location

Figure 4.13, on the following page, depicts the location of historic earthquakes in or near Coconino County.

Extent

All of the County is subject to major earthquakes. The magnitude of any earthquake is directly related to the length of the rupture of the earthquake producing fault. Length of the fault does not predict the measure of ground movement. Ground movement and resulting shaking is determined by the depth of the earthquake hypocenter, directionality of the rupture propagation and amplifying or dampening effects of the geomorphology of soils of the affected region. The relatively small M6.3 earthquake that struck Christchurch, New Zealand in 2011 resulted in severe damage and loss of life due to its very shallow hypocenter. Distance from the fault lessens potential ground shaking subject to the factors previously cited.

The USGS maintains an Earthquake Scenario Tool that supports modeling an earthquake for a specific area. The tool provides shake maps of ground acceleration. **Figure 4.14** is a Tool product that predicts ground acceleration for a M7.2 earthquake at a depth of 11.9 kilometers on the Big Chino-Little Chino Fault. The map depicts light to moderately heavy damage in the parts of the planning area for this scenario.

[40] Arizona Geological Survey, Earthquakes Threaten Arizona
[41] Arizona Geology Magazine, 2011, Notable Arizona Seismicity
[42] The Arizona Geological Survey, December 2014, M 4.7 earthquake rocks Sedona – Flagstaff, Arizona

Figure 4.13: Historic Earthquakes in Arizona

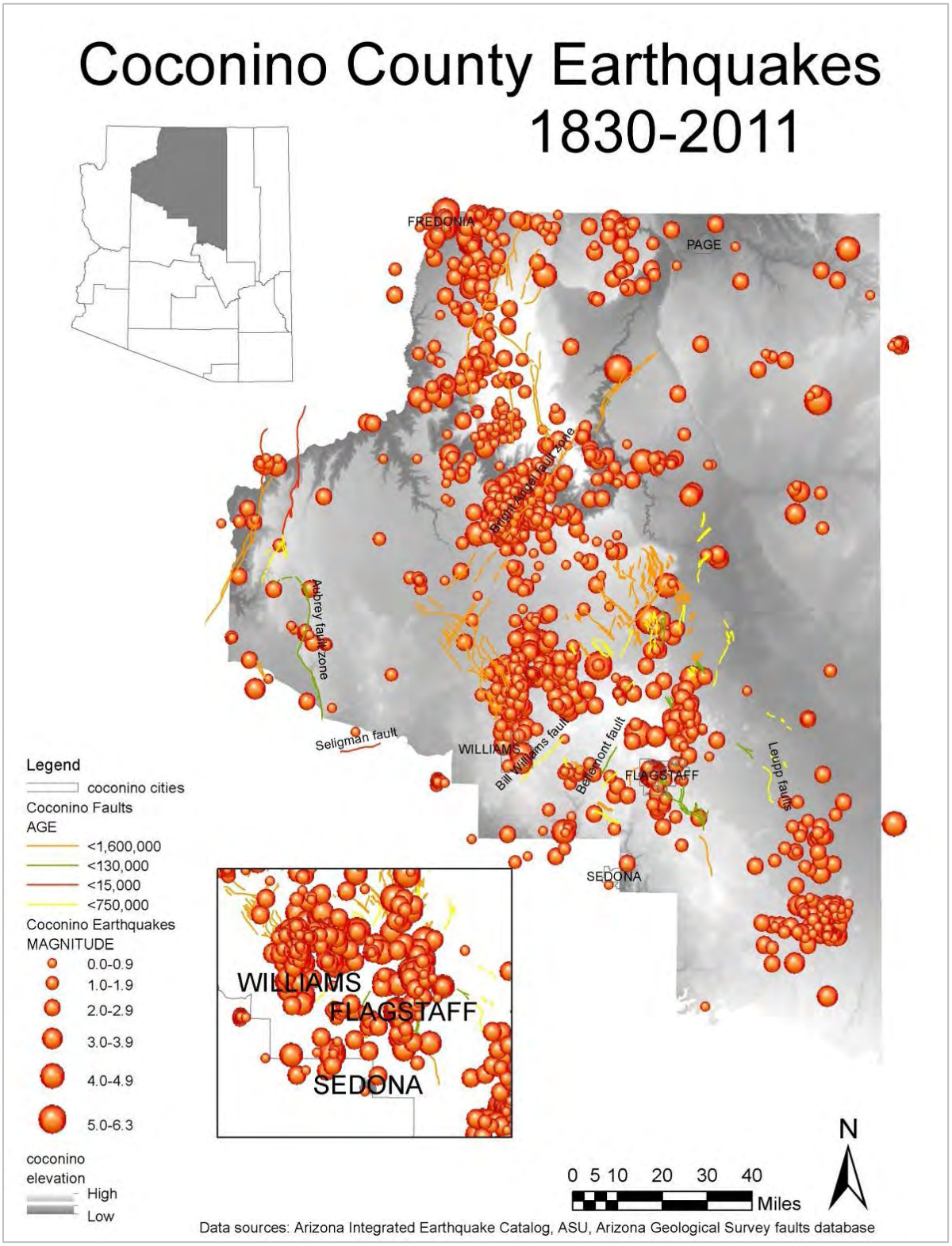
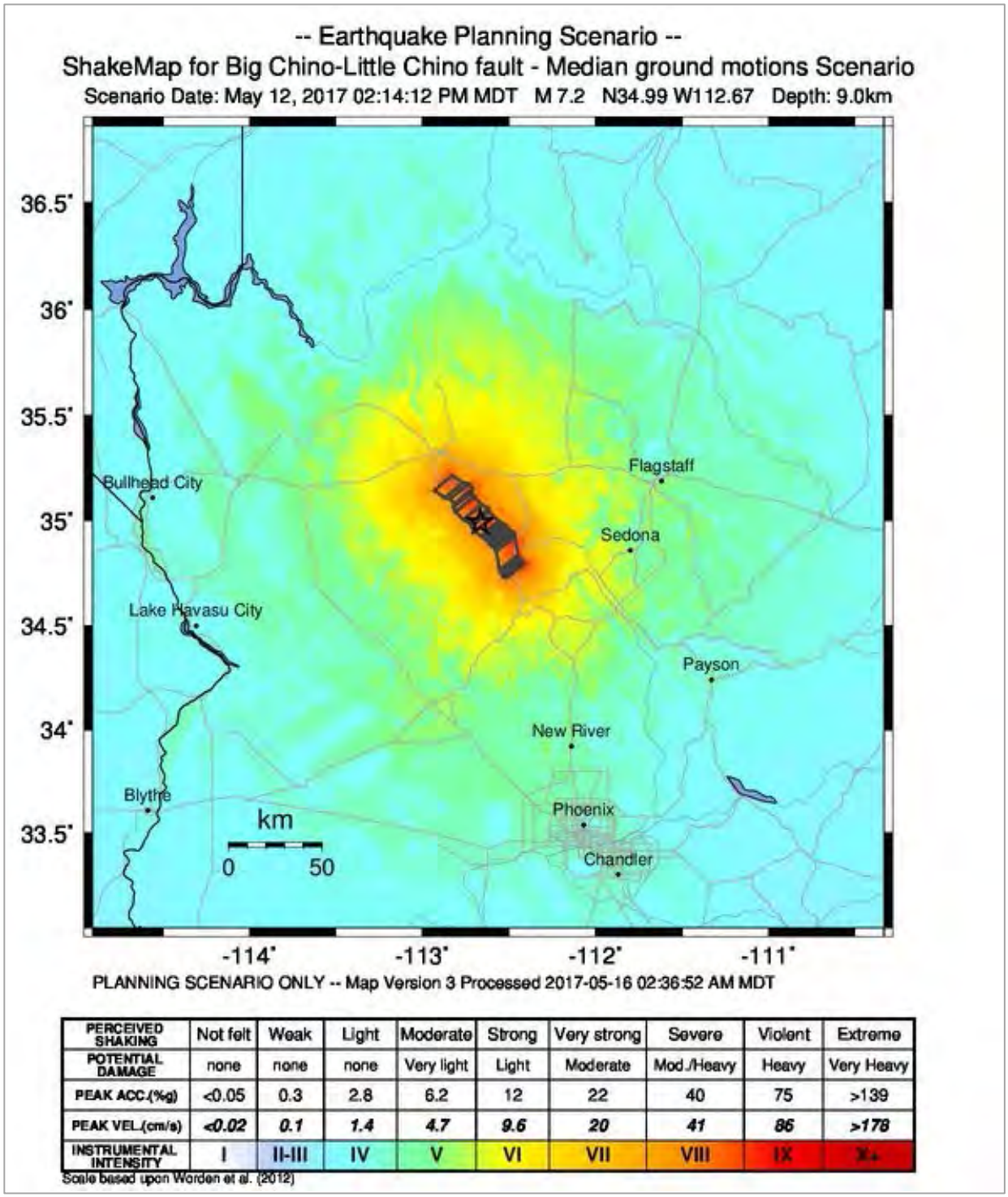


Figure 4.14: Arizona Earthquake Planning Scenario



PERCEIVED SHAKING	Not felt	Weak	Light	Moderate	Strong	Very strong	Severe	Violent	Extreme
POTENTIAL DAMAGE	none	none	none	Very light	Light	Moderate	Mod./Heavy	Heavy	Very Heavy
PEAK ACC.(%g)	<0.05	0.3	2.8	6.2	12	22	40	75	>139
PEAK VEL.(cm/s)	*<0.02*	*0.1*	*1.4*	*4.7*	*9.6*	*20*	*41*	*86*	*>178*
INSTRUMENTAL INTENSITY	I	II-III	IV	V	VI	VII	VIII	IX	X+

Scale based upon Worden et al. (2012)

Regulatory Context

While Arizona does not have specific regulations related to seismic hazards, State I Administrative Code Title 7, Education Chapter 6, Section 760. Laws and Building Codes states: To the extent required by law, school buildings shall be in compliance with federal, state and local building and fire codes and laws that are applicable to the particular building. At a minimum, the 1997 Uniform Building Code (UBC) is required to be met for new school facility construction and as required, for building renovations in existing schools.

Probability of Future Events

The USGS database predicts that there is a 37.18% chance of a major earthquake (greater than M5.0) within 50 kilometers of the County within the next 50 years.

Vulnerability

All of the County is vulnerable to seismic incidents. The map below depicts that most of the County is at moderately to low risk.

Figure 4.15: Risk of Seismic Incidents

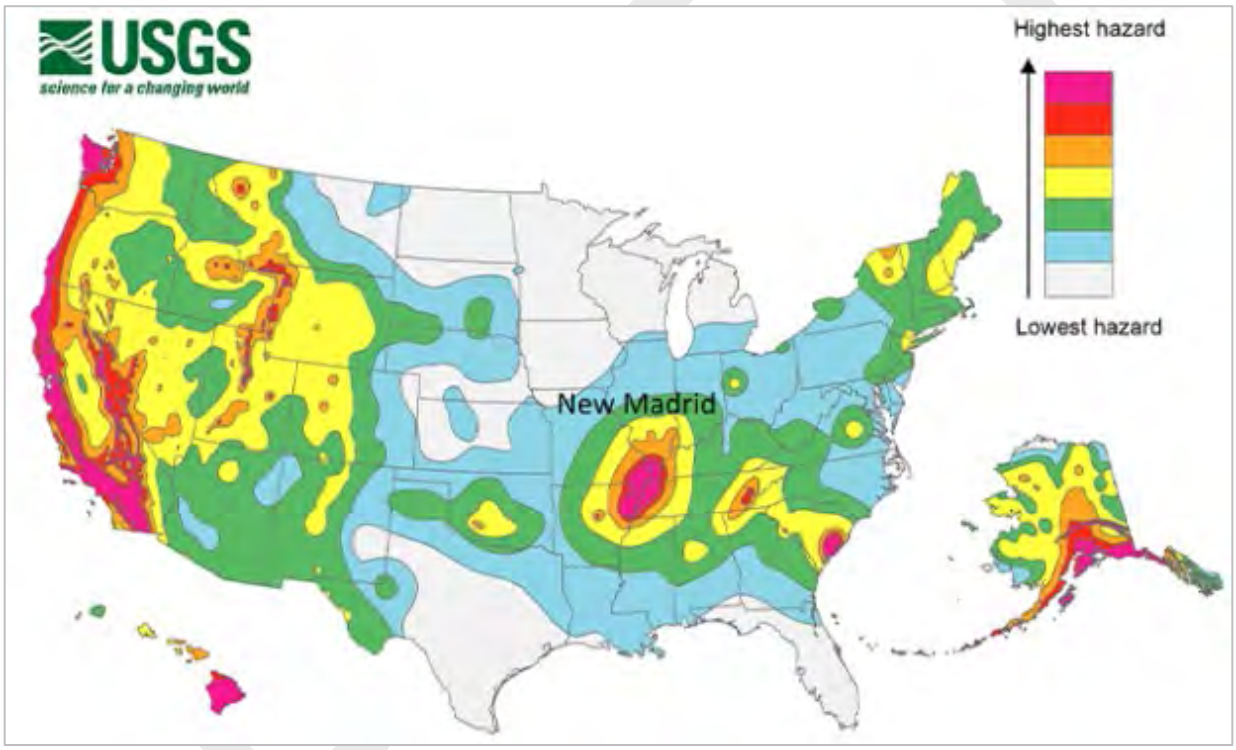


Table 4-18 below provides the CPRI ratings earthquake.

Table 4-18: CPRI Rating for Earthquake and Seismic Hazards

Jurisdiction	Probability	Magnitude/ Severity	Warning Time	Duration	CPRI Score
Coconino County	1.35	.3	.6	.2	2.45
Flagstaff	1.35	.3	.6	.2	2.45
Fredonia	.9	.3	.6	.3	2.1
Page	1.8	.6	.15	.4	2.1

Jurisdiction	Probability	Magnitude/ Severity	Warning Time	Duration	CPRI Score
Tusayan	1.35	.3	.6	.2	2.45
Williams	.9	.6	.6	.2	2.3
County-wide average CPRI =					**2.31**
Jurisdictions in bold print indicate they will be assessing the hazard and including mitigation activities for it. *Note: Maximum CPRI score is 4.00.*					

Loss Estimates

Earthquakes could potentially disrupt major transportation routes in the County. These include Interstates 17 and 40, U.S. Highways 160 and 180, State Routes 64, 66, 67, 87, 89, 89A, 98, 99, 260, and 264, and Indian Routes 2, 15, and 18. Burlington-Northern Santa Fe (BNSF) Railway runs through the middle of the county. Hazardous material cargo includes numerous TIER II reportable products and the highly volatile Bakken crude product. AMTRAK passenger trains also operate on the BNSF lines with depots located in Flagstaff and Williams. Air traffic in Flagstaff, Grand Canyon National Park, Williams, Page, Tuba City, and Valle could also be impacted.

Utility disruption due to earthquakes is a potential risk as well. Arizona Public Service (APS) is the predominant provider of electricity to the County except on the Navajo Nation which has its own electricity supplier, Navajo Tribal Utility Authority. Natural gas and propane disruption to cities and areas throughout the County could be a possibility.

Loss of water and sewer service is another possibility. Most incorporated areas within the County have their own water system and wastewater or sewer system. Water for the City of Flagstaff comes from over forty (40) wells. Surface water is stored in Lake Mary and a spring from the Inner Basin in the San Francisco Peaks. The City of Williams' water supply comes from wells or lakes and reservoirs. After treatment, water is distributed to storage tanks and then gravity fed to customers. Page receives all of their water from Lake Powell. After being treated at their city plant, it is distributed directly to their customers. Outside of these areas, residents receive their water piped from private water companies, hire commercial water haulers, or haul the water themselves.

Privately owned wells exist in many parts of the County, but many residents rely on hauled water. Although the incorporated areas may have wastewater systems, most residents outside the cities have septic systems for sewer.

Developmental Trends

The County is geographically located in a general area of numerous seismic zones, and the potential exists for damage to critical infrastructure and facilities, and perhaps loss of life. As population growth continues, potential impacts to local economies will increase.

4.3.6 Excessive Heat

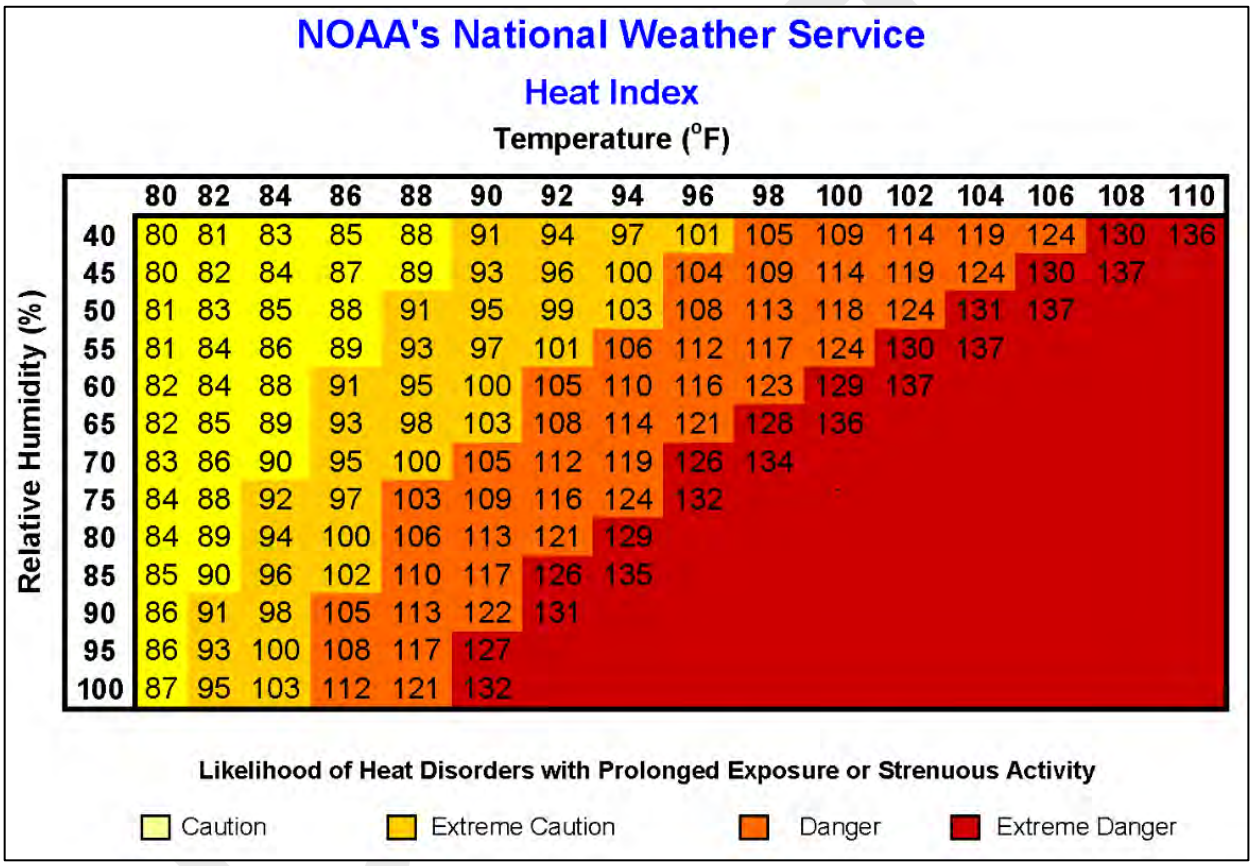
Description

Excessive heat is a period of high heat and humidity with temperatures above 90°F for at least two to three days. In extreme heat conditions the human body works extra hard to maintain a normal temperature, which can lead to death. This hazard is responsible for the most annual fatalities from weather-related hazards.

- Extreme heat can occur quickly and without warning;
- Older adults, children, and sick or overweight individuals are at greater risk to it;
- Humidity increases the feeling of heat as measured by a heat index.

The Heat Index in **Figure 4.16** also known as the Apparent Temperature, is a subjective measure of what it feels like to the human body when relative humidity is factored into the actual air temperature. Relative humidity is a measure of the amount of water in the air compared with the amount of water that air can hold at the current temperature. In short, it is a measure of how close the air is to being saturated with moisture. The body cools itself through the evaporation of perspiration or sweat. However, when the relative humidity is high, the increased moisture content in the air decreases the evaporation of perspiration or sweat. Therefore, the body feels warmer when it is humid. For example, in the heat index chart below, a hot and very humid air mass with a temperature of 94°F and a relative humidity of forty-five percent (45%) yields an apparent temperature of 100°F. Holding the temperature constant and increasing the relative humidity to sixty percent (60%) yields an apparent temperature of 110°F.

Figure 4.16: National Weather Service Heat Index



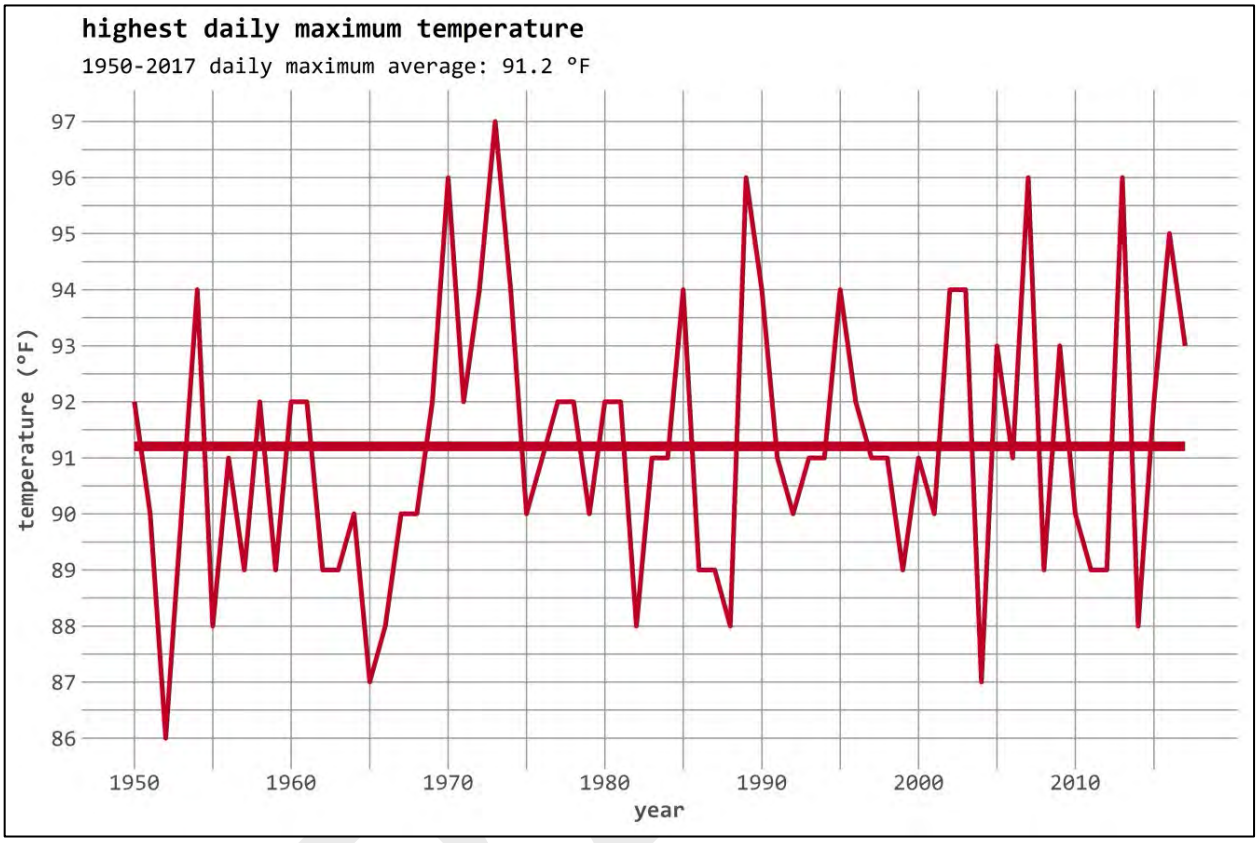
Relative Humidity (%)	80	82	84	86	88	90	92	94	96	98	100	102	104	106	108	110
40	80	81	83	85	88	91	94	97	101	105	109	114	119	124	130	136
45	80	82	84	87	89	93	96	100	104	109	114	119	124	130	137	
50	81	83	85	88	91	95	99	103	108	113	118	124	131	137		
55	81	84	86	89	93	97	101	106	112	117	124	130	137			
60	82	84	88	91	95	100	105	110	116	123	129	137				
65	82	85	89	93	98	103	108	114	121	128	136					
70	83	86	90	95	100	105	112	119	126	134						
75	84	88	92	97	103	109	116	124	132							
80	84	89	94	100	106	113	121	129								
85	85	90	96	102	110	117	126	135								
90	86	91	98	105	113	122	131									
95	86	93	100	108	117	127										
100	87	95	103	112	121	132										

History

Since the early 20th century, average surface temperatures worldwide have risen at an average rate of 0.15°F per decade (1.5°F per century). In the U.S. average surface temperatures have risen more quickly since the late 1970s (0.36 to 0.55°F per decade), with eight (8) of the top ten (10) warmest years on record since 1880. Scientists predict that over the next century, global temperatures will increase between 2.5°F and 10.4°F.

Figure 4.17 below shows the annual, daily high temperature for Flagstaff from 1950 to 2017. It should be noted the high temperature of 97°F on August 17, 2020 tied the 1973 record.

Figure 4.17: Highest Daily Maximum Temperature



Source: University of Arizona, 2018

Location

Excessive heat occurs most frequently at the County's lower elevations. Fredonia and Page experience excessive heat more frequently that Flagstaff, Tusayan, or Williams. The Southwest is experiencing more rapid temperature rise than the rest of the nation. As temperatures rise, excessive heat will become more common at higher elevations.

Extent

The National Weather Service issues the following excessive heat products:

- **Hazardous Weather Outlook for Excessive Heat –** Period of excessive heat is possible within the next three to five days. A heat advisory or excessive heat warning may eventually be needed.
- **Heat Advisory –** Period of excessive heat is expected. The combination of hot temperatures and high humidity will create a situation in which heat related illnesses are possible.
- **Excessive Heat Watch –** Prolonged period of dangerous excessive heat possible within 48 hours.
- **Excessive Heat Warning –** Prolonged period of dangerous excessive heat is expected within 24 hours. The combination of hot temperatures and high humidity will create a dangerous situation in which heat related illnesses are likely. An Excessive Heat Warning is issued when heat indices are expected to reach at least 105°F for more than three hours per day for two consecutive days, or heat index more than 115°F for any period of time.

All of the County, except the highest elevations, may experience excessive heat.

Regulatory Context

There are few regulatory mechanisms related to heat. OSHA does not have a specific standard that covers working in hot environments. Nonetheless, under the OSH Act, employers have a duty to protect workers from recognized serious hazards in the workplace, including heat-related hazards. OSHA has cited employers for injuries related to excessive heat.

Probability of Future Events

While the number of days that excessive heat will occur on an annual basis is difficult to predict, it nearly certain to occur within the County on an annual basis. As global temperatures rise, more days of excessive heat will occur yearly.

Vulnerability

Contrary to common perception, heat is the number one weather-related killed in the United States. According to data from the Center for Disease Control and Prevention (CDC) heat-related deaths numbered 8,081 in the United States from 1999 to 2010. On average, more people are killed by heat in the U.S. than are by tornadoes, hurricanes, floods, and lightning combined.

Groups within communities that are more vulnerable to excessive heat, than the general population include:

- The elderly;
- Young children;
- Persons with chronic health conditions
- Outdoor workers;
- Athletes;
- Persons with low income;
- Persons experiencing homelessness.

Table 4-19 below provides the CPRI ratings excessive heat.

Table 4-19: CPRI Rating for Excessive Heat

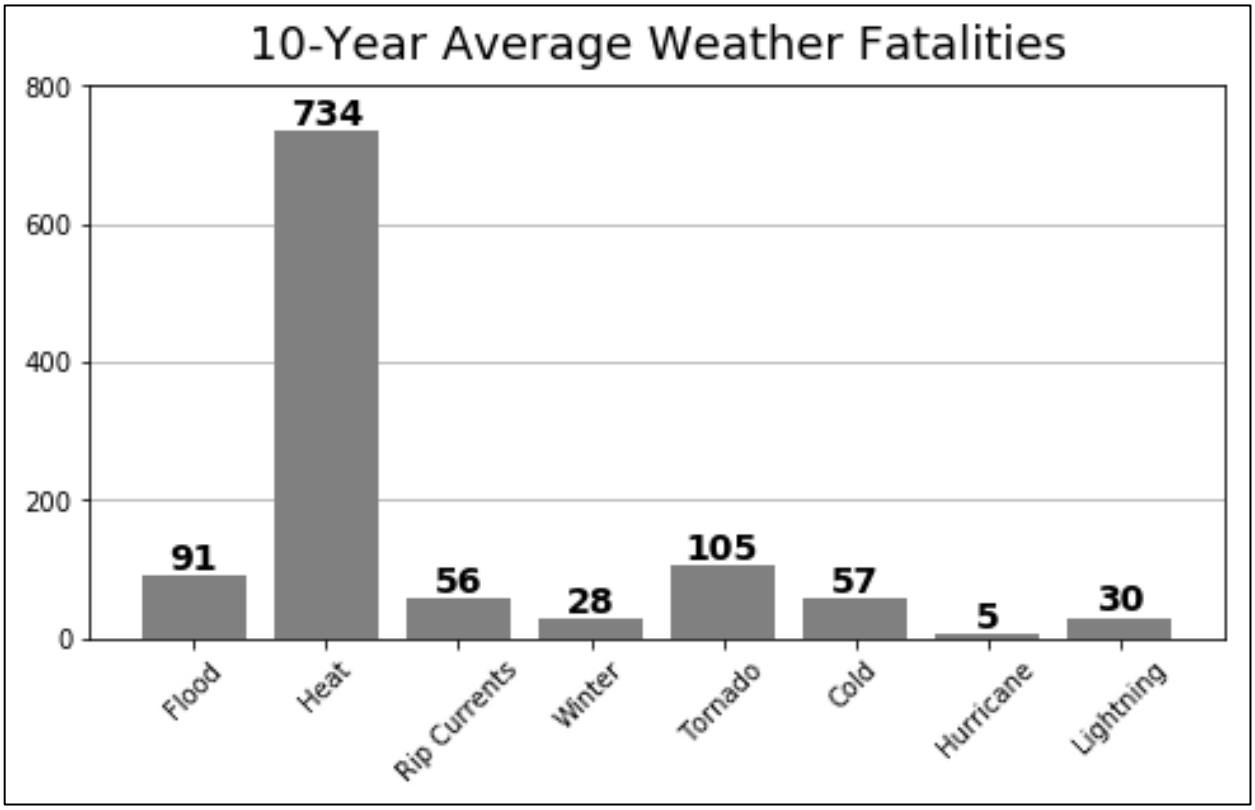
Jurisdiction	Probability	Magnitude/ Severity	Warning Time	Duration	CPRI Score
Coconino County	1.8	.9	.15	.4	3.25
Flagstaff	1.8	.9	.15	.4	3.25
Fredonia	1.35	.3	.15	.3	2.1
Page	1.8	.3	.15	.4	2.65
Tusayan	1.8	.9	.15	.4	3.25
Williams	1.35	.6	.15	.4	2.5
County-wide average CPRI =					**2.83**
Jurisdictions in bold print indicate they will be assessing the hazard and including mitigation activities for it. Note: Maximum CPRI score is 4.00.					

Loss Estimates

In Arizona, heat-related deaths are by far the number one weather-related killer. The Arizona Department of Health Service reported that in the County, between 2008 and 2018, 30 people died of heat-related illnesses, including eight in 2017. Neighboring Maricopa County reported 1,078 heat-related deaths during that 10-year period.[43]

[43] Arizona Department of Health Services, Heat-Caused and Heat-Associated Deaths in Arizona by Year (2008-2018)

Figure 4.18: Arizona Weather Fatalities



Source: NOAA, CDC

Developmental Trends

As the population in the County continues to grow and as the general climate becomes warmer, more people will be exposed to excessive heat which will occur more frequently.

4.3.7 Extended Power Outage

Description

A power outage is the loss of the electricity supply to an area. In addition to natural hazards, power failure can result from a defect in a power station, damage to a power line or other part of the distribution system, a short circuit, or the overloading of electricity mains.

A power outage may be referred to as a blackout if power is lost completely or as a brownout if some power supply is retained, but the voltage level is below the minimum level specified for the system, and a short circuit indicates a loss of power for a short amount of time (usually seconds). Some brownouts, called voltage reductions, are made intentionally to prevent a full power outage.

Power failures may also be intentionally induced due to high power demand that exceeds supply or due to actions taken by utility companies to de-energize power lines when there is the possibility of energized power lines being downed during fire Red Flag warnings and causing fires.

Power outages can significantly disrupt all forms of critical infrastructure and have cascading effects that threaten public safety and health – particularly through the disruption of public safety, environmental health, and life support systems.

History

Significant examples of planned and unplanned power outages include:

- **July 2020 –** Three consecutive unplanned outages in east Flagstaff left 3,500 residents without power. One outage was due to an above-ground power line failure; the second was due to an underground line failure; the third was due to an operator error.[44]
- **November 2019 –** Heavy snow in Tusayan and Flagstaff caused a power outage, forcing the town of Tusayan to declare an emergency.[45]
- **March 2017** – Unplanned power outage affecting Williams and 3,000 residents.[46]
- **October 2016 –** A temporary power outage was scheduled along the Kachina Trail to repair a damaged utility line.[47]

Location

Power outages can occur throughout the County and affect the entire region. Though impacts can be severe throughout affected areas, extreme weather conditions can pose a significant threat to the health and safety of the population. Severe winter storms, high winds, and flooding can all cause significant disruptions to power supplies in the County, especially for jurisdictions with limited power feeds such as Tusayan, which is serviced by one feed and has experienced power outages during severe weather events. Additionally, the heat island effect in urban areas during the summer months and extreme cold during winter storm events in rural and reservation communities can exacerbate the felt effects of a power outage.

Extent

Power outages are typically measured by the number of customers without power. This number is two to three times lower than the number of people affected.

Vulnerability

Table 4-20 provides an analysis of the vulnerability of the Planning Team's jurisdictions to extended power outages.

Table 4-20: CPRI Rating for Extended Power Outage

Jurisdiction	Probability	Magnitude/ Severity	Warning Time	Duration	CPRI Score
Coconino County	.9	.9	.6	.4	2.8
Flagstaff	.9	.9	.6	.4	2.8
Fredonia	.9	.6	.6	.3	2.4
Page	.45	.3	.6	.1	1.45
Tusayan	1.8	.3	.6	.2	2.9
Williams	1.35	.6	.6	.2	2.75
County-wide average CPRI =					**2.52**
Jurisdictions in bold print indicate they will be assessing the hazard and including mitigation activities for it. *Note: Maximum CPRI score is 4.00.*					

[44]Arizona Daily Sun, July 2020, Repeated power outages hit east Flagstaff neighborhood
[45]Associated Press, November 2019, Snowy Grand Canyon Town Declares Emergency
[46]12 News, March 2017, Northern Arizona power outages stretches from Grand Canyon to Williams
[47] Coconino County Arizona, October 2016, Temporary power outage scheduled along the Kachina Trail

Probability of Future Events

While the location, duration, and number of residents impacted by power outages is not able to be predicted for the County, the probability of a future power outage is increasing due to increasing demand for power, climate change, technological/cybersecurity threats, and ageing infrastructure. In turn, this increases the vulnerability of economic, communication, health, and public safety infrastructure to other hazard events (such as HAZMAT or Transportation Accident).

Developmental Trends

One developmental trend that may affect an increased likelihood of an extended power outage is the increase in cyberattacks. While recent federal assessments indicate that cyberattacks could cause widespread power outages in the United States, the scale of power outages that may result from a cyberattack is uncertain due to limitations in those assessments.[48] It remains critical resilient power plans for public and private facilities are created to keep critical systems operational when there is a temporary or extended power outage. In 2019, the U.S. Government Accountability Office (GAO) proposed recommendations for actions needed to address significant cybersecurity risks facing the electric grid. This included a recommendation to the U.S. Department of Energy (DOE) to develop plans aimed at implementing the federal cybersecurity strategy for the grid and ensure that the plan addresses the national strategy's key elements, including a full assessment of cybersecurity risks to the grid.

Climate change has the potential to cause an increase in severe weather events resulting in hazard impacts to the local electrical grid. Climate Central updated an analysis of national power outage data, which shows a 67% increase in major power outages from weather-related events since 2000[49]. Two-thirds of states, including Arizona, experienced an increase in outages caused by extreme weather. Combined with aging County's infrastructure, this means power outages will increase unless mitigative actions are taken to increase electrical grid resilience.

Trends in employment and the adoption of technology-based services across the County and the country should also be taken into consideration. The impact of a major, long-term power outage will impact more services and economies than it would have even a decade ago, as remote work relying on internet connectivity and power becomes more common, though the Coconino County Workforce Development Plan from 2020 identified the lack of broadband infrastructure in the County as the "largest weakness to effective delivery of workforce development services."[50] Rural communities throughout Coconino County have less access to broadband services and power than many urban communities, which may make them more resilient to power outage events compared with other jurisdictions. Many residents throughout Coconino County already are heavily self-reliant on generators, solar, and other backup power sources as a result of "living off the grid" and previous experience with disasters. Still, the Coconino County Workforce Development Board is actively working to find solutions to increase access to broadband services and technology throughout Coconino County, which will only increase future power dependence.

Healthcare facilities are also more dependent now on technology (e.g., electronic health records) and utilities (refrigeration, heating, and cooling) during severe weather events, making power a critical commodity. The size of the County and the long distances that some clients must travel to receive healthcare services already limits access to healthcare countywide, this distance can be disastrously increased by power outage disruptions of transport, health, and safety infrastructure.

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[48] United States Government Accountability Office, GAO-19-332 Action Needed to Address Significant Cybersecurity Risks Facing the electric Grid.

[49] Kenward and Raja. Climate Central. "Blackout: Extreme Weather, Climate Change, and Power Outages." 2014.

[50] Coconino County Workforce Development Board. Local Workforce Development 2020-2023 Plan. Arizona At Work. 2020.

4.3.8 Flood / Flash Flood / Post-Wildfire Flooding / Debris Flows

Description

For the purpose of this MJHMP, the hazard of flooding will pertain to floods that result from precipitation / runoff related events. Flooding due to dam failures is addressed separately. The three seasonal atmospheric events that tend to trigger floods in the County are:

- **Tropical Storm Remnants** – Some of the worst flooding tends to occur when the remnants of a hurricane that has been downgraded to a tropical storm or tropical depression enter the state. These events occur infrequently and mostly in the early autumn, and usually bring heavy and intense precipitation over large regions causing severe flooding.
- **Winter Rains** – Winter brings the threat of low intensity, but long duration rains covering large areas can cause extensive flooding and erosion, particularly when combined with snowmelt. In particular rain-on-snow events can be devastating due to the rapid snowmelt and frozen ground conditions that lead to increased run-off and flooding. If Arizona experiences a regular increase of rainy winters instead of snow, this could potentially be a challenge for the limited capacity of reservoirs and could create dangerous road conditions and heavier-than-usual snow and slush on buildings causing roof collapses. Rain-on-snow events in the Western U.S. are most common from October-May.[51]
- **Summer Monsoons** – A third atmospheric condition that brings flooding to Arizona is the annual summer monsoon. In mid to late summer the southerly monsoon circulation brings humid subtropical air into the state. Solar heating triggers afternoon and evening thunderstorms that can produce extremely intense, short duration bursts of rainfall. The thunderstorm rains are mostly translated into runoff and in some instances, the accumulation of runoff occurs very quickly resulting in a rapidly moving flood wave referred to as a flash flood. Flash floods tend to be very localized and cause significant flooding of local watercourses.

Damaging floods in the County can be primarily categorized as either riverine or local area flows. Riverine flooding occurs along established watercourses when the bank full capacity of a wash is exceeded by storm runoff or snowmelt and the overbank areas become inundated. Local area flooding can be the result of poorly designed or planned development wherein natural flow paths are altered, blocked or obliterated, and localized ponding and conveyance problems result. In some cases, adequately designed and planned developments may experience flooding as a result of wildland fire damage due to the new lack of vegetation available to soak up rainwater. Erosion is also often associated with damage due to floods.

Warmer ocean and atmosphere temperatures over the past 20 years have led to an increase in atmospheric moisture available for precipitation, resulting in some heavier rain- and snowfall events than the average in northern Arizona. Recent years have had fewer cold winter storms, resulting in warmer winter conditions. Warmer temperatures can lead to fewer winter snow events, and more winter rain events, but more importantly for flooding, more rain-on-snow events. So far, the climate division record for Coconino, Navajo, and Apache Counties shows significant warming over the last 20 years. But there is no clear trend in the frequency of extreme precipitation, though the record shows extreme annual variation.

Precipitation during the monsoon season can be particularly heavy for short durations, and when these heavy rains fall on burn areas the flash flooding includes large debris flows. The warmer eastern Pacific Ocean waters also increase the potential for eastern Pacific hurricane formation off the coast of central America and Mexico, which bring additional moisture to the monsoon events in August and September, even if the tropical storms dissipate before reaching Arizona.

[51] Gregory J. McCabe, Martyn P. Clark, and Lauren E. Hay, 2007, Rain-on-Snow Events in the Western United States

Three tropical storms in late summer of 2014 reached Arizona causing significant flooding statewide, including the County.

Post-Wildfire Flooding / Debris Flows

Debris flows are hazard that may occur after large wildland fires. Wildland fire can significantly alter the hydrologic response of a watershed to the extent that even modest rainstorms can produce dangerous flash floods and debris flows. The USGS conducts post-fire debris-flow hazard assessments for select fires in the western United States. It uses geospatial data related to basin morphometry, burn severity, soil properties, and rainfall characteristics to estimate the probability and volume of debris flows that may occur in response to a design storm.

Wildfire-related flooding and increased runoff may continue for several years in a burn area, but it is unusual for post-fire debris flows to occur beyond the second rainy season. Some of the largest debris-flow events happen during the first post-fire storm season. It takes much less rainfall to trigger debris flows from burned basins than from unburned areas. Any storm that has intensities greater than about 0.4 inches per hour poses the risk of producing debris flows.

While multiple factors can affect debris-flow occurrence, post-fire debris flows generally are triggered by one of two processes: 1) surface erosion caused by rainfall runoff, and 2) landslides caused by rainfall seeping into the ground. Surface-erosion runoff processes are by far the most prevalent contributors to debris flows. This is because fires commonly reduce the rate at which water can seep into the soil. Landslide processes are much less common causes of fire-related debris flow, but prolonged heavy rains may increase soil moisture even after a wildland fire. The wetted soil can then fail, producing infiltration-triggered landslides, which may be shallow or deep-seated landslides (greater than 10'-15' deep).

History of Events

Between 1967 and 2020, Coconino County was involved in 12 state and/or federally declared flooding-based disaster declarations. These have been accompanied by numerous seasonal events – often affecting areas impacted by recent wildfire events. The following list of incidents provide a representative samples of major flooding events that have impacted the County:

- **February 3, 2019 --** Oak Creek in Sedona rose 7 feet between 6:15 AM and 8:30 AM. Numerous low water crossings in Oak Creek Canyon were flooded. The creek dropped below bank full by 7:00 PM on February 4 in Sedona. The river gauge at Page Springs rose 9 feet between noon and 2:30 PM. At the peak of the flooding at the Page Springs RV Park, a foot of water was flowing through the park. at the peak of the flooding. One large tree and several small trees came down. Red mud was deposited throughout the RV park. The water continued to flow downstream from Sedona into the Verde River where it was no longer a flood issue.[52]
- **July 11-12, 2018 –** Deep monsoon moisture over northern Arizona allowed strong thunderstorms to develop into a 1000-year rainfall event. Heavy rain from thunderstorms caused flash flooding in the northern drainages of the Schultz Fire scar and created two flood waves which impacted the Supai area. A total of 172 visitors in the Supai campground were evacuated, campers were displaced, and 15 campers were stranded on high ground as tents and belongings were swept away.[53] Rainfall in the affected area was recorded between 5.35 inches to 5.94 inches of rain in

[52] National Centers for Environmental Information (NCEI) formerly NCDC
[53] National Weather Service, Flagstaff

under two hours.[54] The County road crews spent up to two weeks removing debris, mud, and rocks from water channels and roads.[55]

- **February-March 2015 –** Oak Creek rose above all low water crossings for several days due to heavy rains in the area and upstream. This is a normal event but one of significance when considering the potential for post fire flooding as a result of the Slide Fire.
- **July 2014 –** The event of July 8th was one of the largest urban flood events ever recorded for the City of Flagstaff. The storm event that led to flooding was a very rare event. Estimates indicate that the storm event was one that would be expected to occur once every 100 years (i.e. 1% chance of occurring in any given year) and possibly only once every 500 years (i.e. .2% chance of occurring in any given year) based on an approximately 100-year climate record. Several residential structures were evacuated during debris removal and cleanup.[56]
- **2013 –** Record monsoon activity contributed to flooding incidents in Kaibab Estates West, McCann Estates in the Doney Park area, and Havasupai Village. Some homes in McCann estates sustained significant damage. It is important to note this particular flooding of McCann estates was unrelated to the Schultz Burn impacts but was the result of three significant rainfalls on the watershed areas above McCann Estates. The water treatment facility in Havasupai was temporarily disabled and potable water and sandbags were flown in by helicopter.
- **2011-2014 –** Additional post-fire flooding related to the Schultz Burn contributed to property damage, debris flows, and damage to utilities, roads, and some structures.
- **July 2010 –** Heavy rain from thunderstorms over the Schultz Burn area of the San Francisco Peaks near Flagstaff Arizona caused severe post fire flooding and loss of a child's life in the residential areas inclusive of Doney Park, and Timberline-Fernwood. The aftermath of the largest wild land fire in Arizona in 2010 and subsequent sediment and ash-laden floods caused extensive damage to homes, property, and infrastructure up to four miles from the burn. The Schultz Fire caused significant impact to portions of several watersheds.[57]
- **August 2008 –** Heavy rain from thunderstorms over the Cataract Creek and Havasu Creek drainages caused flash flooding that started in the Village of Supai. Radar estimated between three to four inches of rain over several square miles in the Cataract Creek drainage during the afternoon. Additional heavy rain from thunderstorms on August 17 contributed heavy runoff into the canyon. Cataract Canyon/Creek becomes Havasu Canyon/Creek at Havasu Springs about a mile upstream from the Village of Supai. The flooding lasted several days and caused damage to a few homes in the Village of Supai..[58]
- **July 30, 2006 –** Heavy rain caused three debris slides over Highway 89A in Oak Creek Canyon near Sedona. One slide was 100 feet wide and covered the road four feet deep. This area was below the Brins Fire scar area.
- **August 24, 2006 –** Heavy rain caused at least three rockslides on Highway 89A through Oak Creek Canyon below the are impacted by the 2006 Brins Fire. The Highway was closed until the slides could be cleared.

[54] Coconino County, Press Release, July 20, 2018
[55] National Centers for Environmental Information
[56] Weather.gov, July 2014, Month in Review for Northern Arizona
[57] Arizona Hydrological Society Annual symposium, 2011, Field Trip Guide to the 2010 Schultz Burn Area
[58] National Climactic Data Center, 2008

- **December 2004 –** A strong Pacific storm system moved across Arizona December 28th and 29th with heavy rainfall. The governor declared a state of emergency for Coconino and Yavapai Counties which provided $200,000 aid for relief efforts. The heavy rain and melting snow resulted in excessive runoff in many areas from Williams to Flagstaff to Winslow and south to Prescott and Black Canyon City. High water, mudslides, and rockslides resulted in numerous road closures and evacuations in the area. Many creeks experienced significant rises. Some storm total rainfall amounts were: Flagstaff 3.83 inches, Crown King 4.73 inches, Sedona 4.06 inches, Winslow 0.54 inches, Payson 2.88 inches. Flagstaff received its second largest calendar day precipitation on record. 70 people were evacuated in southwest Flagstaff when water over-topped an earthen flood control dam. A 14-mile section of Highway 89 between Flagstaff and Sedona was closed because of rockslides. Preliminary counts indicate that as many as 150 homes may have sustained damages up to approximately $1 million. Roads and bridges sustained an additional $1 million in damage.[59]

Location - Flooding / Flash Flooding

Flooding is the most common hazard in the state of Arizona. All of the planning area is susceptible to both flooding and flash flooding. The maps in **Figures 4.19 – 4.21** indicate potential flood zones in the County. High and medium flood risks indicated in the maps are primarily the river and stream beds that compose the regions watershed.

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[59] National Climactic Data Center, 2008

Figure 4.19: Flood Hazard 1

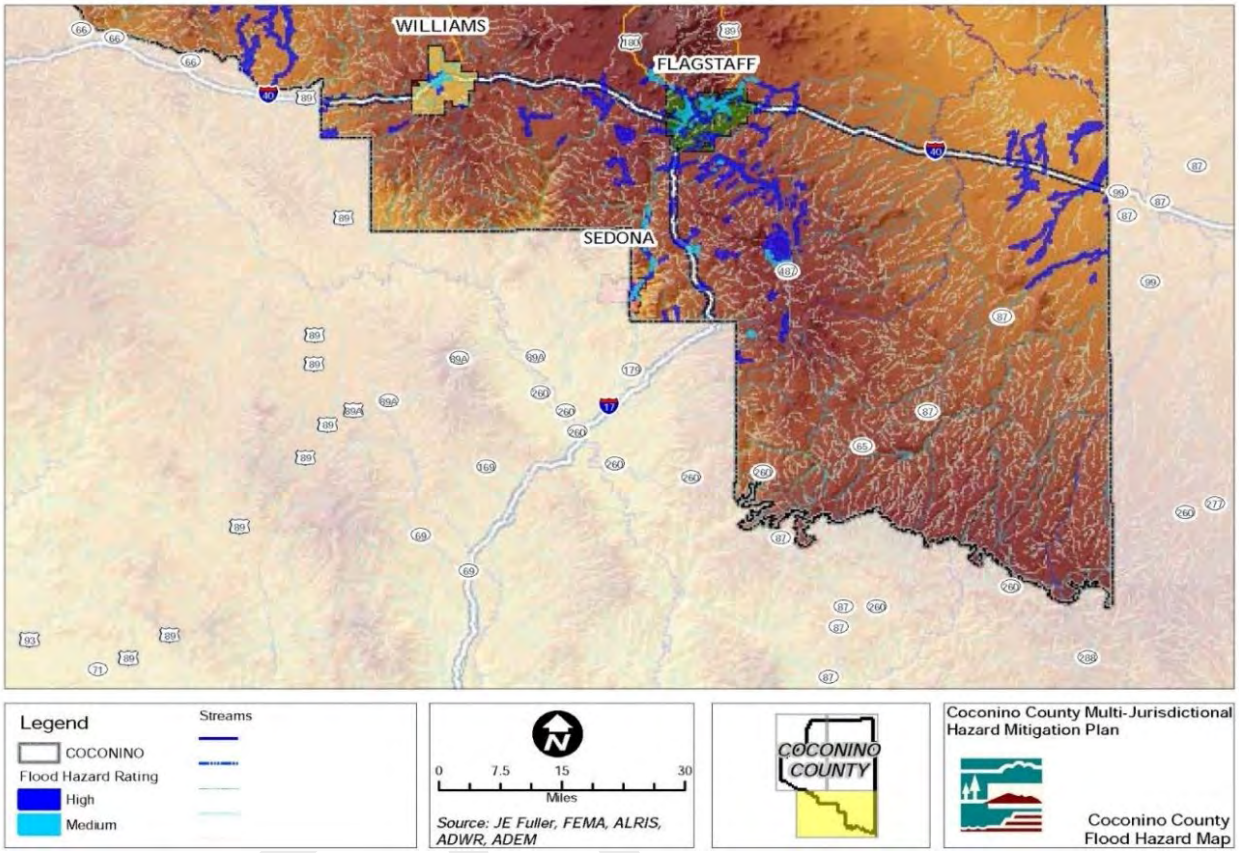

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Figure 4.20: Flood Hazard 2

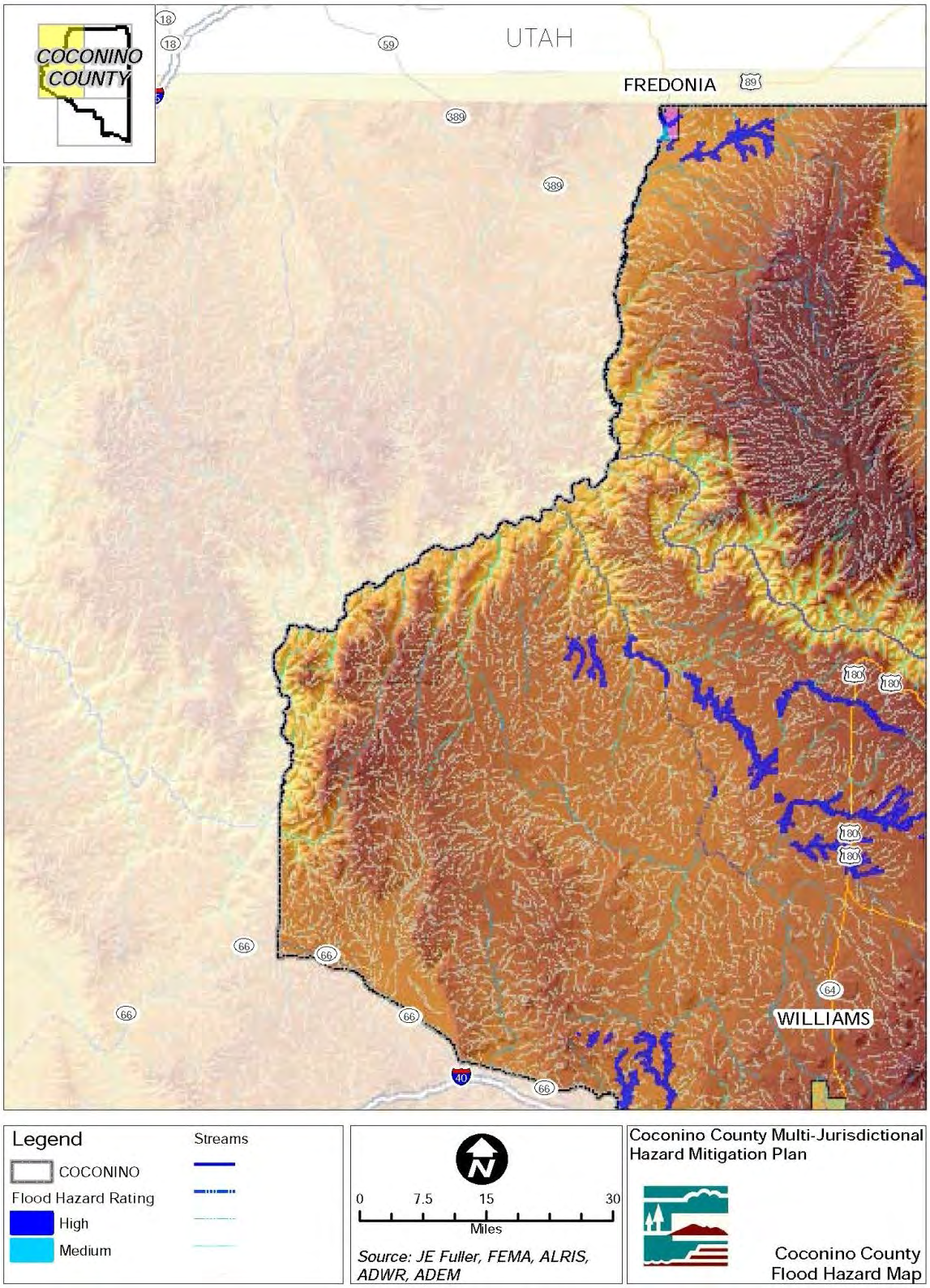
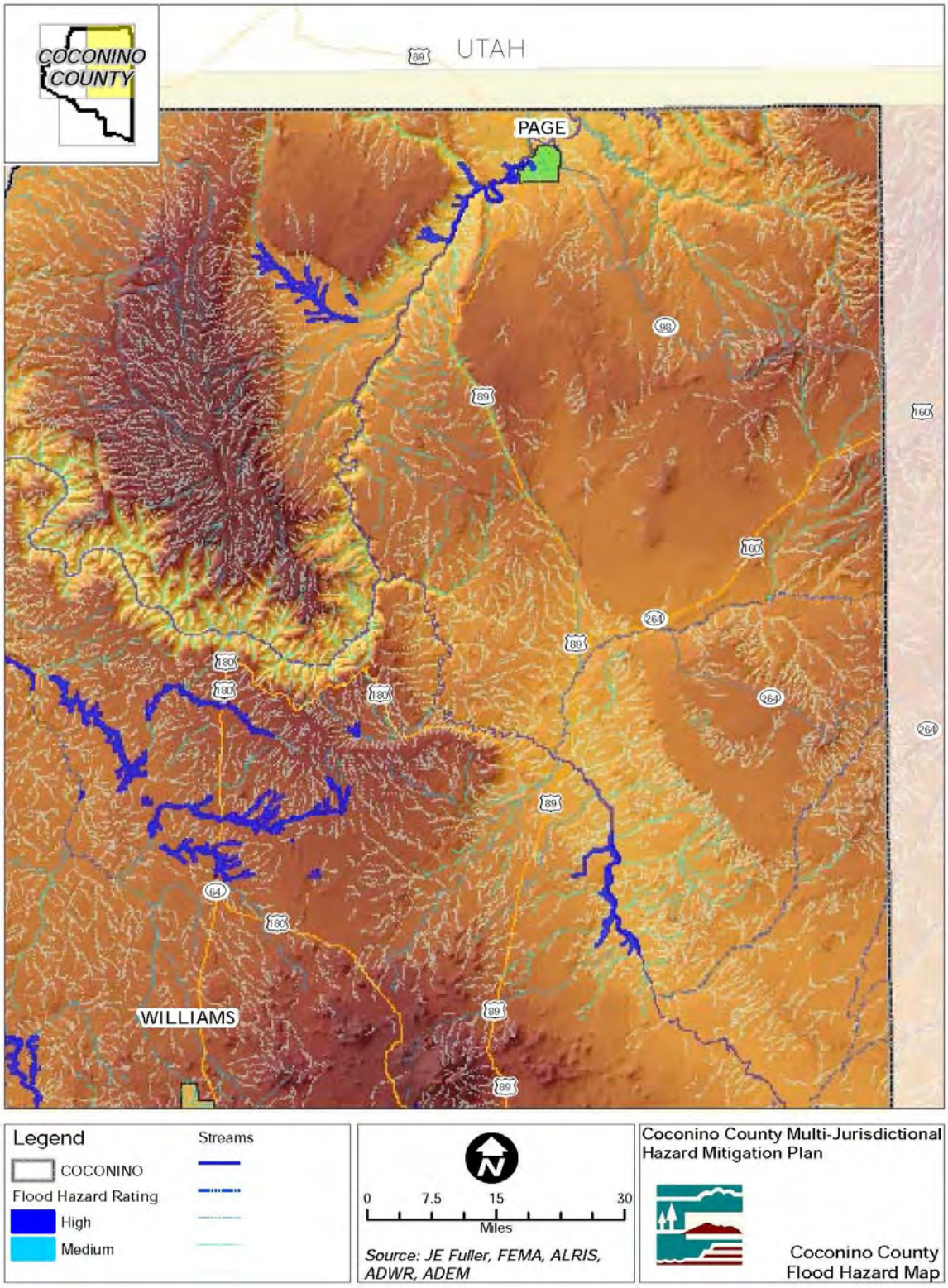


Figure 4.21: Flood Hazard 3



Location – Post-Wildfire Flooding / Debris Flows

The USGS conducts post-fire debris-flow hazard assessments for select fires in the western United States. They use geospatial data related to basin morphometry, burn severity, soil properties, and rainfall characteristics to estimate the probability and volume of debris flows that may occur in response to a design storm. The assessment provides a map of potential debris flows.

In addition to the USGS debris-flow hazard assessments mentioned above, previous work has been done in Coconino County to identify potential debris-flow risk corridors. In 2017, the Arizona Geological Survey at the University of Arizona produced a Post-Wildfire Debris Flow & Flooding Assessment for Coconino County. The Assessment identified areas that are at risk for flooding and debris flows in the aftermath of a wildland fire. The study consisted of a countywide reconnaissance-level evaluation and two pilot study areas in Fort Valley and Williams. The results were based on field investigations, state-of-the-art two-dimensional FLO2D pre- and post-wildfire flood computer modeling, LAHARZ debris flow computer modeling, and GIS terrain and geographic modeling. The study concluded that up to 34% of the buildings, and up to 26% of the critical facilities in the County are at some level of increased risk of post-fire flooding, if not actions are taken to reduce the risk of severe wildland fires. As many as 593 homes in the County, as well as 13 dams and other critical facilities, may be impacted by post-fire debris flows. However, the study also concluded that forest health initiatives can effectively mitigate as much as 58% of the post-fire flood and debris flow risk.

Recommended risk mitigation actions from the Assessment include implementation of development guidelines to prevent new development from repeating past mistakes, creation of emergency action plans to streamline post-fire recovery efforts, and community awareness and public education activities to build support for safe development and mitigation efforts. The County was further encouraged to continue partnering with the Arizona Department of Forestry and Fire Management via their Prevention Programs to educate the public on the wildland-urban interface.

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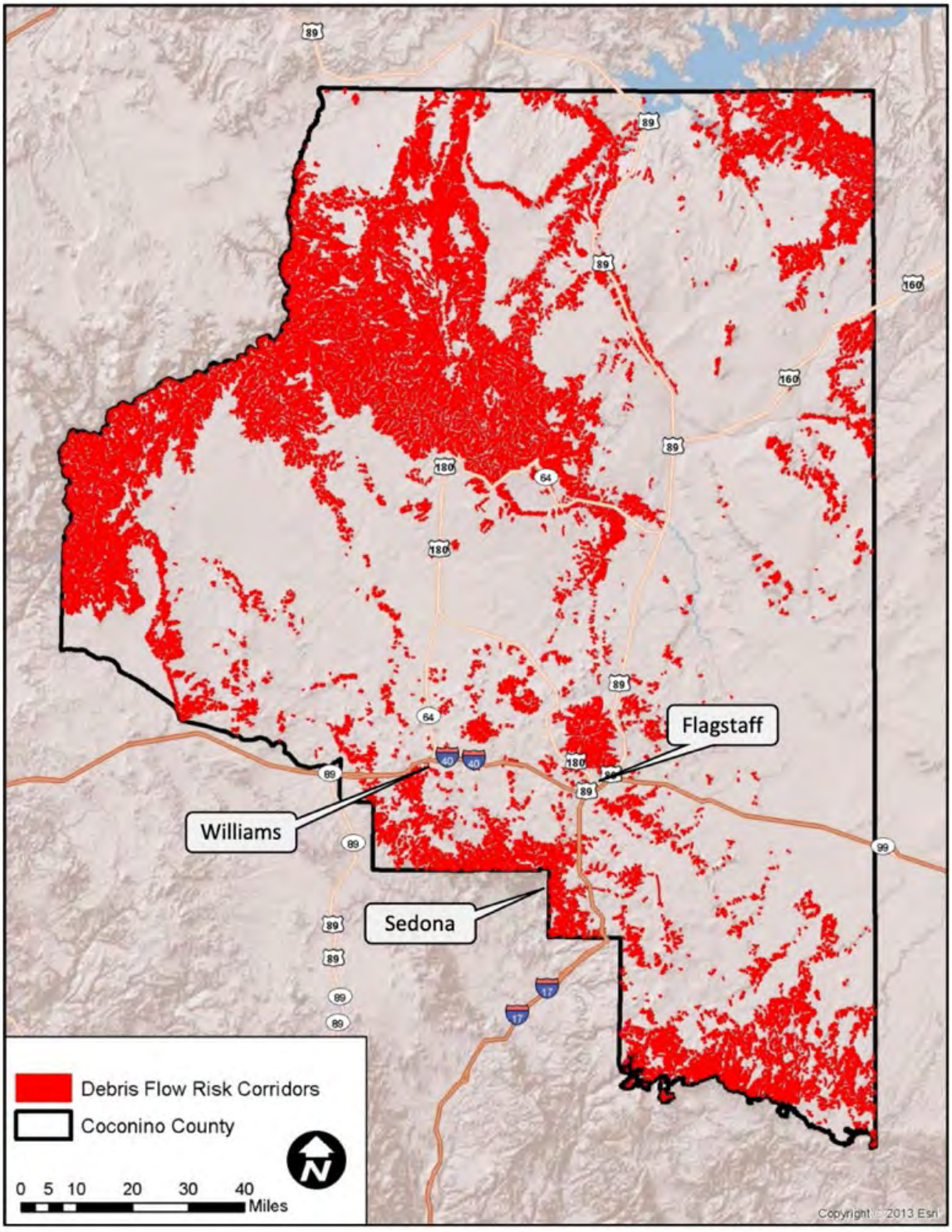
Figure 4.22: Post-Wildfire Debris Flow Corridors



Extent

The magnitude of flooding that is used as the standard for floodplain management in the U.S. is a flood with a probability of occurrence of one percent in any given year. This flood is also known as the 100-year flood or base flood. The most readily available source of information regarding the 100-year flood, as well as the 500-year flood (i.e. 0.2% probability of occurrence in any given year), is the system of Flood Insurance Rate Maps (FIRMs) prepared by FEMA. These maps are used to support the NFIP.

The USGS and other agencies refer to the percent chance of occurrence as an Annual Exceedance Probability (AEP). An AEP is always a fraction of one. A 0.2 AEP flood has a twenty percent (20%) chance of occurring in any given year, and this corresponds to a five-year recurrence-interval flood. Recurrence-interval terminology tends to be more understandable for flood intensity comparisons but may be misleading because a 100-year flood can occur two years in a row.

Probability of Future Events – Flood / Flash Flood

The probability and magnitude of flood hazards in the County jurisdictions are based on the 1% probability floodplains delineated on FEMA Flood Insurance Rate Maps (FIRMs), plus any provisional floodplain delineations used for in-house purposes by participating jurisdictions. As of April 2009, the maps are in draft form and have not been formally approved by the County. The April 2009 draft DFIRM floodplain GIS base files were provided by the Coconino County Engineering Division and are the basis for the flood hazard depictions in the MJHMP.

Two designations of flood hazard are used, with HIGH hazard areas being any “A” zone and MEDIUM flood hazard being “Shaded X” zones. All “A” zones represent areas with a one percent (1%) probability of being flooded at a depth of one-foot or greater in any given year. All “Shaded X” zones represent areas with a 0.2% probability of being flooded at a depth of one foot or greater in any given year. These two storms are often referred to as the 100-year and 500-year storm, respectively.

Probability of Future Events – Post-Wildfire Flooding / Debris Flows

In the Arizona Geological Survey Assessment mentioned previously, the two pilot studies that were conducted utilized modeling to predict debris flow probability and volumes based on three burn scenarios – treated, treated to 8200 elevation, and untreated. An emphasis of the study was to understand and quantify the impact of increased forest health due to forest treatments (e.g. thinning, control burns, etc.) on downstream flood risk. The two pilot studies were conducted for Fort Valley and the City of Williams. The probabilities determined are outlined in the tables below. The report determined that treatment can effectively reduce post-fire discharges by 58%.

Table 4-21: Fort Valley Debris Flow Probability

Modeled Scenario	Probability of Debris Flow in a 1-Year Event	Basin Hazard Class Ranking
Treated All	45% - 77%	Moderate to High
Treated to 8200 Elevation	66% - 99%	Moderate to High
Untreated	77% - 99%	High

Table 4-22: Williams Debris Flow Probability

Modeled Scenario	Probability of Debris Flow in a 1-Year Event	Basin Hazard Class Ranking
Treated	38% - 94%	Low to High
Untreated	66% - 99%	Moderate to High

Vulnerability

Table 4-23 provides an analysis of the vulnerability of the Planning Team jurisdictions to flooding.

Table 4-23: CPRI Rating for Flooding / Flash Flood and Post-Wildfire Flood / Debris Flows

Jurisdiction	Probability	Magnitude/ Severity	Warning Time	Duration	CPRI Score
Coconino County	1.8	.9	.6	.2	**3.5**
Flagstaff	1.8	.9	.6	.2	**3.5**
Fredonia	.9	.6	.6	.3	**2.4**
Page	1.35	.6	.45	.2	**2.6**
Tusayan	.9	.9	.6	.3	**2.7**
Williams	1.8	.9	.6	.1	**3.4**
County-wide average CPRI =					**3.02**
Jurisdictions in bold print indicate they will be assessing the hazard and including mitigation activities for it. *Note: Maximum CPRI score is 4.00.*					

Although Fredonia has not experienced significant flooding since the 1960's, the community understands that a 100-year flooding event or worse could have a devastating effect on them. Due to lack of recent documented history for either Fredonia or Tusayan, it is difficult to fully understand the likelihood of such an event and the potential damages. However, it is safe to say a significant event could result in property damage, loss of utilities, road damage and injury or loss of life which in turn could force evacuations and further disrupt everyday life in the community. Nearly year round in Tusayan there is an added exposure concern created by visitors to the area. Visitors comprise the largest Town population sector of approximately 1,000 in the area hotels. There is also visitor traffic on Highway 64 traveling to and from the Grand Canyon.

Regulatory Context

The Legislature of the State of Arizona has in ARS 48-3601 through 48-3628 delegated responsibility to each County Flood Control District to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry, and as such the Board of Directors of the Flood Control District of Coconino County, Arizona have defined Coconino County zoning ordinances to minimize public and private losses due to flood conditions in specific areas.

In May 2018, the Coconino County Flood Control District Board of Directors affirmed the boundaries of the Flood Control District (FCD) to ensure the District was established according to Arizona Revised Statutes.[60] This review also found that the Flood Control District tax must be levied on all taxable properties within the County including the municipalities of Flagstaff, Fredonia, and Page that manage their own floodplain administration responsibilities. As of May 2018, Coconino County is now taxing all private properties within all municipalities consistent with Arizona's other counties.

Loss Estimates

Potential damages from a catastrophic wildland fire and the resulting post-fire flooding have been estimated to be between $379 million and $694 million specifically for the City of Williams and Bill Williams watershed in one report, which is only a fraction of the areas of the County vulnerable to flooding and debris flows.[61]

[60] Coconino County Flood Control District Website. 2018. "FCD Tax Fact Sheet."
[61] Coconino County Flood Control District. 2018. "The Economic Impact of Post Fire Flooding: Bill Williams Mountain."

The report utilized the 2010 Schultz Fire as a proxy to estimate costs incurred due to post-fire flooding for the local area. From the 2010 Schultz Fire alone, property values were estimated to fall overall by 12% in Flagstaff, and 13.4% in the county overall when adjusted for overall market decline.[62] Residents in a survey administered by the County estimated property loss from the Schultz Fire and Flood at approximately 30%.[63] There is also a high likelihood that severe flooding and debris flows could damage the I-40 and result in transportation delays, resulting in another estimated loss of $4,280,000 per day of lost accessibility for the County. There are additional estimated economic impacts due to impacts to the water supply, impacts to local wildlife, loss of communications infrastructure, loss of tourist revenue, and loss of business revenue in flooding-affected areas.

Developmental Trends

Climate change has the potential to cause more frequent and more damaging flood incidents by increasing the rate and severity of rainstorm events. The warmer weather and increased moisture in storm systems can be further exacerbated by atmospheric rivers, which can create flooding throughout Arizona. The resulting deluges from these events can increase the frequency and size of major flooding events that approach or exceed the 100 and 500-year floodplains. Since historical and ongoing developments are generally permitted based on historical 100-year floodplain data, the risk of flooding events to existing and new developments is substantial.

This risk is magnified regarding debris flows. There is an ongoing trend of high-value residential development in rural areas that are in, or adjacent to, regions of heightened wildland fire risk. As wildland fires become larger and more frequent, they are priming wider areas for debris flow events at more frequent intervals. Heavier rainfall events will subsequently trigger these events more frequently at scale. These events can deliver major secondary impacts to communities recovering from wildland fire, but also significantly expand the breadth of the disaster affected area / population. However, the risk growth is moderated by the lower population density in affected areas.

4.3.9 High Winds / Tornado

Description

The hazard of severe wind encompasses all climatic events that produce damaging winds. For the County, severe winds usually result from either extreme pressure gradients that usually occur in the spring and early summer months, or from thunderstorms. Thunderstorms can occur year-round and are usually associated with cold fronts in the winter, monsoonal activity in the summer, and tropical storms in the late summer or early fall. Three types of damaging wind features typically accompany thunderstorms: 1) downbursts, 2) straight line winds, and 3) tornadoes.

Downbursts are columns of air moving rapidly downward through a thunderstorm. When the air reaches the ground, it spreads out in all directions, creating horizontal wind gusts of eighty miles per hour (80 mph) or higher. Downburst winds have been measured as high as 140 mph. Some of the air curls back upward with the potential to generate a new thunderstorm cell.

Downbursts are called macrobursts when the diameter is greater than 2.5 miles, and microbursts when the diameter is 2.5 miles or less. They can be either dry or wet downbursts, where the wet downburst contains precipitation that continues all the way down to the ground, while the precipitation in a dry downburst evaporates on the way to the ground, decreasing the air temperature and increasing the air speed.

[62] NAU Ecological Restoration Institute, "A Full Cost Accounting of the 2010 Schultz Fire," May 2013.
[63] NAU Ecological Restoration Institute, "A Full Cost Accounting of the 2010 Schultz Fire," May 2013.

In a microburst the wind speeds are highest near the location where the downdraft reached the surface and are reduced as they move outward due to the friction of objects at the surface. Typical damage from downbursts includes uprooted trees, downed power lines, mobile homes knocked off foundations, block walls and fences blown down, and porches and awnings blown off homes.

Straight line winds develop similarly to downbursts but are usually sustained for greater periods when a thunderstorm reaches the mature stage. They travel parallel to the ground surface at speeds of 75 miles per hour (mph) or higher. These winds are frequently responsible for generating dust and sandstorms, reducing visibility and creating hazardous driving conditions.

A tornado is a rapidly rotating funnel or vortex of air that extends toward the ground from a cumulonimbus cloud. Most funnel clouds do not touch the ground, but when the lower tip of the funnel cloud touches the earth, it becomes a tornado and can cause extensive damage. For the County, tornadoes are the least common severe wind to accompany a thunderstorm.

Warming temperatures across the southwest are not expected to change the severe wind climatology. The current regime of severe winds, primarily from thunderstorms, should not change in the future as there is no evidence of an increase of pressure gradients or other forcing factors.

Downbursts from summer thunderstorms will continue to be the primary source, but there is no evidence to indicate an increase in frequency or intensity. There is no evidence of a trend of increased frequency or severity of tornadoes in the state, though there were eight tornadoes on October 6, 2010, with the strongest being an EF3.

History

During the 50 years prior to 2010, the County had been subject to severe wind events with a combined loss of over $146,000 to structures and agriculture, two deaths, and 30 injuries. Historically, the County experiences severe wind events more than twenty-four (24) times per year and up to 80 thunderstorms. The following are examples of significant documented past events:

- **May 9, 2019 –** An EF0 tornado touched down in Moenave causing no injuries or damage.[64]
- **August 18 and October 21, 2018 –** EF0 tornadoes touched down. The first was in Walnut Canyon and the second was in Meteor City. They caused no injuries or damage.[65]
- **October 6, 2010 –** 11 tornadoes touched down in the County. Of the 11 tornadoes, two were EF-3, four were EF-2, two were EF-1, and three were EF-0.[66] Seven people were injured, and 101 homes suffered various levels of damage. The area of Bellemont Arizona was the hardest hit. The Flagstaff Meadows subdivision had three homes completely destroyed, nine homes had major damage, and fifteen homes experienced minor damage. I-40 and the BNSF rail line run east and west parallel and next to the Flagstaff Meadows housing area. Several vehicles along the I-40 corridor were flipped over, and the BNSF railroad experienced a 20 rail car derailment.[67]
- **April 2010 –** Strong winds and blowing dust closed a stretch of Interstate 40 between Meteor Crater rest area and Winslow for several hours twice during the month. Blowing dust reduced visibility so much so, that the Arizona Department of Transportation closed the 17 mile stretch of interstate.

[64] National Centers for Environmental Information
[65] National Centers for Environmental Information
[66] National Weather Service Flagstaff Office
[67] US National Weather Service Flagstaff Arizona Facebook page

Strong, gusting sustained southwest winds of 30-40 mph, with gusts of 45-55 mph, were recorded.[68]

- **September 2000 –** A strong dust devil at the Coconino County Fairgrounds caused property damage and personal injuries. The dust devil ripped shingles off two roofs, blew down four large tents, blew over a ticket booth and split the supporting beams on a permanent structure. Two people sustained minor scrapes and bruises and one person reported a back injury.[69]
- **June 1995 –** Very strong north to northeast winds caused significant damage and combined with cold temperatures to produce extremely cold wind chills above 9,000 feet in the San Francisco Peaks area north of Flagstaff. The highest wind gust of 105 mph was recorded by the Arizona Snowbowl ski area at 3:00 P.M. MST at an elevation of 10,800 feet. Winds blew down approximately 80 trees in the Arizona Snowbowl. One fallen tree caused several thousand dollars damage to a ski lift. Communication lines and power were down also for several hours on the morning of June 18.[70]

Additional areas of notable historic impact include the Glen Canyon Recreation Area / Lake Powell, where severe wind events transform the lake's water surface into dangerous waves that have proven to be fatal and extremely damaging to the surrounding marinas.

Location

All of the County is subject to high winds and potentially tornadoes. Thunderstorms with associated macro and micro-bursts occur more frequently at higher altitudes while tornadoes occur most often at lower elevations.

Extent

Powerful tornadoes can leave a path of near total destruction several hundred yards in width and several miles long. They often occur in clusters that include more than a single destructive funnel. They have the potential to cause extensive damage to dozens or even hundreds of city blocks. The Fujita Scale is used to categorize tornadoes. **Figure 4.23** lists scale values with their affects.

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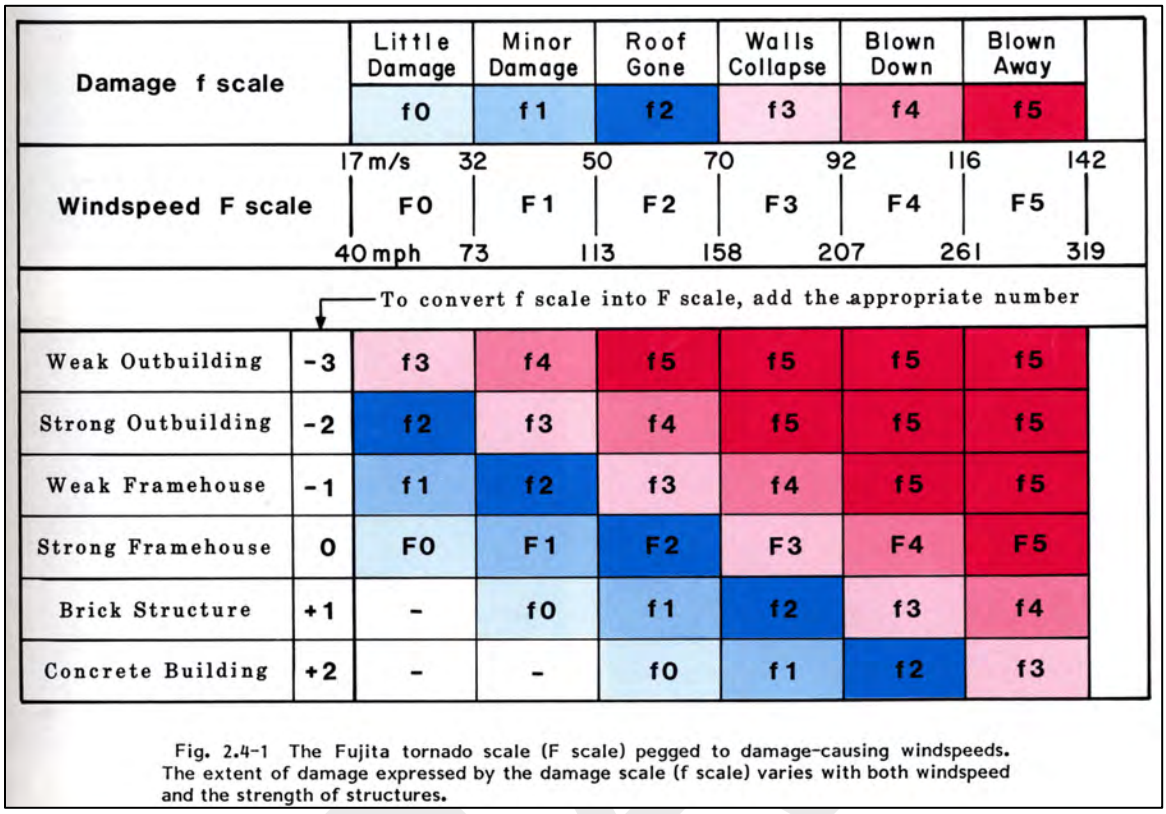
[68] Arizona Daily Sun, April 2010
[69] National Climatic Data Center, 2008
[70] National Climatic Data Center, 2008

Figure 4.23: Fujita Scale and Effects



Damage f scale		Little Damage	Minor Damage	Roof Gone	Walls Collapse	Blown Down	Blown Away
		f0	f1	f2	f3	f4	f5
Windspeed F scale		17 m/s – F0 – 32	F1 – 50	F2 – 70	F3 – 92	F4 – 116	F5 – 142
		40 mph – 73	113	158	207	261	319
To convert f scale into F scale, add the appropriate number							
Weak Outbuilding	-3	f3	f4	f5	f5	f5	f5
Strong Outbuilding	-2	f2	f3	f4	f5	f5	f5
Weak Framehouse	-1	f1	f2	f3	f4	f5	f5
Strong Framehouse	0	F0	F1	F2	F3	F4	F5
Brick Structure	+1	-	f0	f1	f2	f3	f4
Concrete Building	+2	-	-	f0	f1	f2	f3

Fig. 2.4-1 The Fujita tornado scale (F scale) pegged to damage-causing windspeeds. The extent of damage expressed by the damage scale (f scale) varies with both windspeed and the strength of structures.

Wind events, other than tornadoes, are measured on the Beufort Scale, shown in **Table 4-24** below.

Table 4-24: Beufort Scale

Force	Wind (Knots)	WM Classification	Appearance of Wind Effects	
			On the Water	On Land
0	Less than 1	Calm	Sea surface smooth and mirror-like.	Calm, smoke rises vertically.
1	1-3	Light Air	Scaly ripples, no foam crests.	Smoke drift indicates wind direction and still wind vanes.
2	4-6	Light Breeze	Small wavelets, crests glassy, no breaking.	Wind felt on face, leaves rustle, and vanes begin to move.
3	7-10	Gentle Breeze	Large wavelets, crests begin to break, scattered whitecaps.	Leaves and small twigs constantly moving and light flags extended.
4	11-16	Moderate Breeze	Small waves 1-4 feet becoming longer, numerous whitecaps.	Dust, leaves, and loose paper lifted; small tree branches move.
5	17-21	Fresh Breeze	Moderate waves 4-8 feet taking longer form, many whitecaps, some spray.	Small trees in leaf begin to sway.

6	22-27	Strong Breeze	Larger waves 8-13 feet, whitecaps common, more spray.	Larger tree branches moving and whistling in wires.
7	28-33	Near Gale	Sea heaps up, waves 13-19 feet, white foam streaks off breakers.	Whole trees moving and resistance felt walking against wind.
8	34-40	Gale	Moderately high (18-25 feet) waves of greater length, edges of crests begin to break into spindrift, foam blown in streaks.	Twigs breaking off trees and generally impedes progress.
9	41-47	Strong Gale	High waves (23-32 feet), sea begins to roll, dense streaks of foam, spray may reduce visibility.	Slight structural damage occurs, slate blows off roofs.
10	48-55	Storm	Very high waves (29-41 feet) with overhanging crests, sea white with densely blown foam, heavy rolling, lowered visibility.	Seldom experienced on land, trees broken or uprooted, and considerable structural damage.

Regulatory Context

City and County building codes include regulations for structural design to resist wind damage.

Vulnerability

The NWS issues a severe thunderstorm watch when conditions are favorable for the development of severe thunderstorms. The local NWS office considers a thunderstorm severe if it produces hail at least a three-fourths inch in diameter, winds of 58 mph or higher, or tornadoes. When a watch is issued for a region, residents are encouraged to continue normal activities but should remain alert for signs of approaching storms and continue to listen for weather forecasts and statements from the local NWS office.

When a severe thunderstorm has been detected by weather radar or one has been reported by trained storm spotters, the local NWS office will issue a severe thunderstorm warning. A severe thunderstorm warning is an urgent message to the affected counties that a severe thunderstorm is imminent. The warning time provided by a severe thunderstorm watch may be on the order of hours, while a severe thunderstorm warning typically provides an hour or less warning time.

Vulnerabilities for the County and cities/towns are provided in **Table 4-25** below.

Table 4-25: CPRI Rating for High Wind / Tornado

Jurisdiction	Probability	Magnitude/ Severity	Warning Time	Duration	CPRI Score
Coconino County	.90	.90	.45	.20	**2.45**
Flagstaff	.90	.90	.45	.20	**2.45**
Fredonia	.45	.30	.60	.20	**1.55**
Page	.90	.90	.45	.20	**2.45**
Tusayan	.90	.90	.45	.20	**2.45**
Williams	1.35	.90	.30	.10	**2.65**
County-wide average CPRI =					**2.33**

Jurisdictions in bold print indicate they will be assessing the hazard and including mitigation activities for it.
Note: Maximum CPRI score is 4.00.

Probability of Future Events

High winds may be expected to occur in the County, several times a year. Tornadoes occur less frequently. Other than the 2010 incident during which 11 funnels touched down, tornadoes occur approximately once every five years.

Loss Estimates

The 2010 tornado incident resulted in seven injuries and over $1 million in damages. Similar, or greater losses can be expected in the future.

Developmental Trends

Strong wind and tornado activity do not appear to be changing in occurrences or strength. As more structures are built to accommodate development, additional amounts of damage can be expected.

4.3.10 HAZMAT / Pipeline Failure / Transport Accident Release

Description

A hazardous material is defined as any material that, due to its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released. Hazardous materials include but are not limited to hazardous substances, hazardous wastes, and any material that a business or local implementing agency has a reasonable basis to believe would be injurious to the health and safety of persons or would be harmful to the environment if released. Effects of exposure may be felt over seconds, minutes, or hours (i.e. short-term effects) or not emerge until days, weeks, or even years after (i.e. long-term effects). Some substances are harmful after a single exposure of short duration, but others require long episodes of exposure or repeated exposure over time to cause harm.

Hazardous material releases can occur from industrial facilities at fixed sites or along transportation corridors such as rail and roadways. Past hazardous material releases are contained in the history section. Hazards from releases cause include fire, explosion, toxicity, corrosiveness, and asphyxiation. These releases may cause long-term impacts to both individuals affected by the initial release and the surrounding environment or personal property, and can result in short-term or long-term evacuations, depending on the size and scale of the incident.

Mobile incidents include those that occur on a roadway or a railroad. These incident-related releases are dangerous because they can occur anywhere, including near human populations, critical facilities, or environmentally sensitive areas. Mobile incident-related releases can also be more difficult to mitigate because of the great area over which any given incident might occur and the potential distance of the incident site from response resources.

The release of hazardous substances from stationary sources such as storage facilities or manufacturing plants can be caused by human error, equipment failure, intentional dumping, acts of terrorism, or natural phenomena. Earthquakes pose a particular risk because they can damage or destroy facilities containing hazardous substances. The threat posed by a hazardous-material event can be amplified by restricted access, reduced fire suppression and spill containment capability, and cutoff of response resources.

History

Although pipelines are the safest and most reliable way to transport natural gas, crude oil, liquid petroleum products, and chemical products, there is still an inherent risk due to the nature of hazardous materials. While no significant pipeline failures have occurred within the County, past events include:

- **Flagstaff, August 2020 –** An overturned tanker truck released 1,000 gallons of gasoline onto the ground. The gasoline flowed into a storm drain and an unnamed creek;
- **Page, September 2018 –** A storage tank experienced a transfer line rupture, causing a spill of materials into secondary containment;
- **Flagstaff, March 2018 –** A natural gas explosion occurred along a distribution line at a private residence. The occupant sustained burns to the hand and face;
- **Page, September 2017 –** A storm caused a houseboat to tip over onto the beach and rocks, causing a discharge of fuel into the water. Nineteen people were on board, and three people suffered injuries;
- **Flagstaff, August 2015 –** A one-car freight train derailment occurred with no injuries.
- **Bellemont, October 2000 –** On Halloween night, October 31, 2000, two west bound trains on the BNSF rail line collided in Bellemont Arizona, a community of approximately 1000 people, and approximately ten miles from Flagstaff. A large quantity of diesel fuel was released from one locomotive and caught fire. Atmospheric conditions were favorable for smoke dissipation for public safety and the diesel fuel was allowed to burn as it was released to avoid water table and soil contamination. This collision caused the closure of east bound and west bound I-40 and evacuation of local residents throughout the night. There was one crewmember fatality.

According to the United States Coast Guard National Response Center (USCG NRC), there have been 84 hazardous materials releases in Coconino County, and 67 events took place in jurisdictions named in this plan between 2015 through 2020. A count of reports between 2015 and 2020 is in the **Table 4-26** below.

Table 4-26: USCG NRC Reports by Jurisdiction

Jurisdiction	Incidents Reported 2015-2020
Page	22
Flagstaff	40
Fredonia	1
Williams	4

Location

The largest concentration of extremely hazardous substances storage and facilities are in Flagstaff, followed by the unincorporated areas, then Page, and finally Williams. A review of the State of Arizona Tier Two Chemical Inventory Reporting as reported in 2015 shows the following County-wide risks:

Table 4-27: Hazardous Materials Storage Facilities

Facilities with Reportable Risks	Number of Facilities in the County
Organizations with reportable tier two chemical quantities	72
Physical addresses with reportable quantities (some addresses have more than one chemical in reportable quantities)	187
Reportable quantities County-wide for all chemical	393

Facilities with Reportable Risks	Number of Facilities in the County
Reportable quantities within municipal jurisdictions	216 of 393 locations (54.96%)
Reportable quantities in un-incorporated areas	177 of 393 locations (45%)
Extremely hazardous substance (EHS) reports	75 of 393 (19%)

The top three hazardous commodities at fixed facilities are shown to be sulfuric acid, chlorine, and lead. The probable locations of hazardous materials are:

- Transport routes for Extremely Hazardous Substances (EHS) as identified by facilities subject to Emergency Planning and Community Right-to-Know Act (EPCRA) Reporting;
- Facilities with EHS in quantities in excess of Threshold Planning Quantities (TPQ), as identified through EPCRA reporting;
- Facilities that employ, process, and/or store radioactive materials.

Specific facilities known to the County are:

- Airports in Flagstaff, Grand Canyon, Page, Tuba City, and Williams;
- Enterprise Products (13625 Winora Road) – Underground natural gas storage site near Winslow;
- Other industrial sites in Flagstaff and Doney Park/Winona;

Additional hazardous materials risks for the County stem from pipelines that flow through the jurisdiction. The interstate pipeline delivering Arizona's natural gas flows directly East to West through the Navajo Nation and Hopi Reservations into the County. These major pipelines run parallel to I-40 and underneath Flagstaff.

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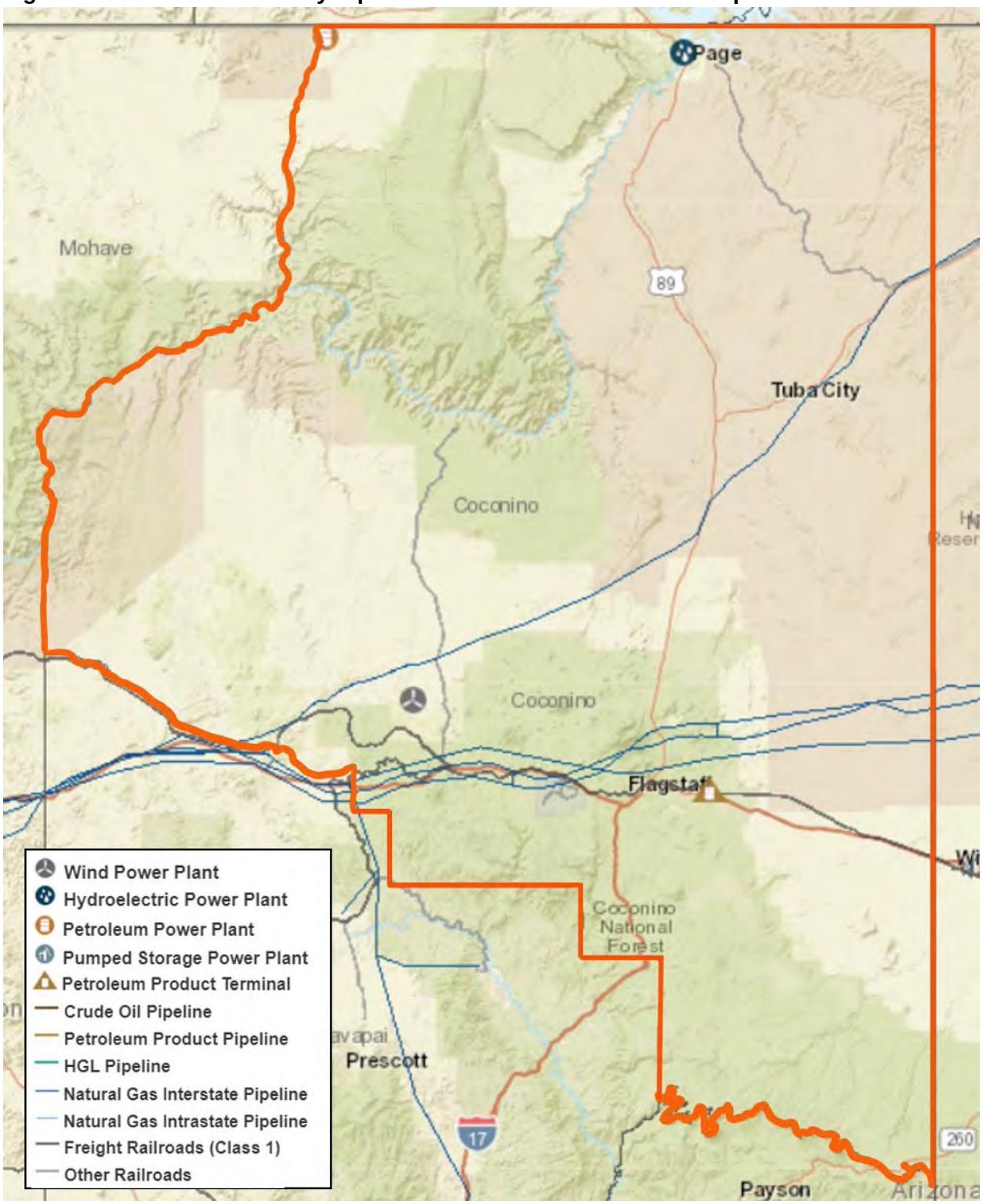
Figure 4.24: Coconino County Pipeline and Related HAZMAT Transport Routes[71]



[71] U.S. Energy Information Administration (EIA) Maps for Coconino County, AZ. https://www.eia.gov/state/?sid=AZ

Transportation corridors can pose a significant threat with risks of spills and accidents. The I-40 corridor runs East and West through the county from the Navajo Nation through Flagstaff and to Seligman. The BNSF Railway takes a similar path. North and South through the County Grand Canyon Railway runs from Grand Canyon to Congress.[72] Approximately 85 trains per day, with an average of 70 cars per train, travel through Coconino County and 100 of which can include significant amounts of hazardous materials in their contents. Each of these heavily traveled lines runs through densely populated areas, including downtown Flagstaff and Williams. As with railroads, its strategic location makes the County region a hub for local, regional, and national cargo shipments by tractor trailers and smaller trucks. The I-40/I-17 highway system sees an average of 12,000 – 17,000 vehicles per day, with 45% of those vehicles being commercial trucks. An estimated 300 – 450 trucks per day travel this highway system with hazardous materials.[73] Based on past event data, the most likely cause of hazardous material release incidents in the County has historically been due to spills and accidents on transportation corridors or vehicles.

Transportation routes with the highest probability of hazardous materials incidents include:

- Interstate 40;
- Interstate 17;
- US Highway 89;
- US Highway 89A;
- State Route 98;
- State Route 180;
- State Route 87;
- State Route 99;
- State Route 64;
- Business 40 (Santa Fe Avenue through Flagstaff);
- Lake Mary Road (FH 3);
- Leupp Road (County Road 127, Flagstaff to Leupp);
- Burlington Northern Santa Fe Railway.

The County has uranium mines and mining claims near the Grand Canyon which pose an environmental and health threat. Particular concern has been raised in the Navajo Nation's reservation and remediation efforts are underway. A five-year plan (2014-2018) was drafted by six federal agencies included the EPA to address elevated uranium contamination levels in the Navajo Nation due to a history of uranium mining since the 1940s on Navajo land. Assessment and cleanup of contaminated structures and sites will continue, and Coconino County has continued to ask for continued federal support to prioritize uranium cleanup and remediation as an environmental justice issue.[74]

In addition, the Arizona Army National Guard Camp Navajo site has been identified as a hazardous materials waste site requiring additional cleanup efforts. Contaminants of concern include perchlorate, explosives, nitrate, semi-volatile organics, and heavy metals. A post-closure permit was issued in January

[72] Arizona Department of Transportation Railway Map, 2012.
[73] Coconino County Emergency Operations Plan, 2011.
[74] Coconino County Uranium Cleanup Fact Sheet.
https://www.coconino.az.gov/DocumentCenter/View/21881/Coconino---Uranium-Cleanup-Fact-Sheet-

2017 to establish a 30-year monitoring period for groundwater and surface water bodies near Camp Navajo.[75] Corrective actions for site cleanup are ongoing.

Extent

The extent of a hazardous material spill may vary from significant impacts causing injuries and evacuation to minor impacts requiring cleanup. Hazardous material releases can be harmful in the following ways:

- Chemical, biological, and radiological agents can cause significant health risks to those exposed to them; biological agents can be additionally dangerous if they are infectious. Flammable and explosive materials pose life safety concerns when exposed to heat.
- Oil spills can present an immediate fire hazard and can contaminate drinking water supplies. Any release of hazardous material requires a thorough clean-up of the site and decontamination of those exposed. Clean-up and recovery are time and cost consuming.
- Delays caused by hazardous materials releases and the ensuing evacuation and cleanup processes could lead to significant economic losses due to traffic delays (i.e. mobile releases) or operational shut-down (i.e. fixed facilities).

Overall, hazardous materials can cause death, serious injury, long-lasting health effects, and damage to buildings, the environment, homes, and other property.

Regulatory Environment

The Hazardous Materials Transportation Act (HMTA), enacted in 1975, is the principal federal law regulating the transportation of hazardous materials. Its purpose is to "protect against the risks to life, property, and the environment inherent in the transportation of hazardous material in intrastate, interstate, and foreign commerce." Implementation is under the authority of the U.S. Secretary of Transportation. The Act was passed as a means to improve the uniformity of existing regulations for transporting hazardous materials and preventing the spills and illegal dumping endangering the public and the environment – a problem exacerbated by uncoordinated and fragmented regulations.

Regulations are enforced through four key provisions encompassing federal standards under Title 49 of the United States Code:

- Procedures and policies;
- Material designations and labeling;
- Packaging requirements;
- Operational rules.

In 1990, Congress enacted the Hazardous Materials Transportation Uniform Safety Act (HMTUSA) to clarify the maze of conflicting state, local, and federal regulations. Like the HMTA, the HMTUSA requires the Secretary of Transportation to promulgate regulations for the safe transport of hazardous material in intrastate, interstate, and foreign commerce. The Secretary also retains authority to designate materials as hazardous when they pose unreasonable risks to health, safety, or property. The statute includes provisions to encourage uniformity among different state and local highway routing regulations, to develop criteria for the issuance of federal permits to motor carriers of hazardous materials, and to regulate radioactive material transport.

[75] Arizona Department on Environmental Quality. January 2019. “Arizona Army National Guard Camp Navajo Hazardous Waste Site.” https://azdeq.gov/node/4884

Originally published in 1973 under the authority of §311 of the Clean Water Act, the Oil Pollution Prevention regulation sets forth requirements for prevention of, preparedness for, and response to oil discharges at specific non-transportation-related facilities. To prevent oil from reaching navigable waters and adjoining shorelines and to contain discharges of oil, the regulation requires these facilities to develop and implement Spill Prevention, Control, and Countermeasure (SPCC) Plans and establishes procedures, methods, and equipment requirements (Subparts A, B, and C). In 1990, the Oil Pollution Act (OPA) amended the Clean Water Act to require some oil storage facilities to prepare Facility Response Plans (FRP). On July 1, 1994, the EPA finalized the revisions that direct facility owners or operators to prepare and submit plans for responding to a worst-case discharge of oil.

Federal

- **Resource Conservation and Recovery Act –** At the federal level, the principal agency regulating the generation, transport, and disposal of hazardous substances is the EPA, under the authority of the Resource Conservation and Recovery Act (RCRA). The RCRA established an all-encompassing federal regulatory program for hazardous substances that is administered by the EPA. Under the act, the EPA regulates the generation, transportation, treatment, storage, and disposal of hazardous substances.
- **Hazardous Materials Transport Regulations –** The U.S. Department of Transportation (USDOT) regulates the transportation of hazardous materials between states. The USDOT Federal Railroad Administration enforces the Hazardous Materials Regulations promulgated by the Pipeline and Hazardous Materials Safety Administration for rail transportation. These regulations include requirements that railroads and other transporters of hazardous materials, as well as shippers, have and adhere to security plans and also train employees involved in offering, accepting, or transporting hazardous materials on both safety and security matters.
- **Comprehensive Environmental Response, Compensation, and Liability Act –** Congress enacted this Act, commonly known as Superfund, in 1980. It established prohibitions and requirements concerning closed and abandoned hazardous waste sites, provided for liability of persons responsible for hazardous waste release at sites, and established a trust fund to pay for cleanup when no responsible party could be identified.
- **Regulation of Polychlorinated Biphenyls and Lead-Based Paint –** The Toxic Substances Control Act of 1976 (Title 15, United States Code, Section 2605) banned the manufacture, processing, distribution, and use of polychlorinated biphenyls (PCB) in enclosed systems. The EPA Region 9 PCB Program regulates the remediation of polychlorinated biphenyls in several states, including California. The Residential Lead-Based Paint Hazard Reduction Act of 1992 amended the Toxic Substances Control Act to include Title IV, Lead Exposure Reduction. The EPA regulates renovation activities that could create lead-based paint hazards in target housing and child-occupied facilities and has established standards for lead-based paint hazards and lead dust cleanup levels in most pre-1978 housing and child-occupied facilities.

State

Arizona Administrative Code Rules 17-5-209 list regulations applicable to hazardous materials transportation within Arizona, which is managed by the Arizona Department of Transportation (ADOT) and the Arizona Department of Public Safety Highway Patrol Division. Arizona has adopted the federal hazardous materials regulations as they apply to the transportation and storage of hazardous materials. ADOT and Highway Patrol administer and enforce the hazardous materials transportation rules. The Arizona Department of Environmental Quality (ADEQ), under the RCRA along with state statutes and codes, has the authority to monitor and direct businesses that may generate, transport, or dispose of

hazardous waste in Arizona. Finally, the Arizona State Fire Marshal, ADEQ, and the Arizona Department of Agriculture (AZDA) Environmental Services Division are responsible for state regulations of hazardous materials storage.

Applicable Arizona Administrative Code Rules:

- Aboveground storage tanks (ASTs): Uniform Fire Code (UFC), Arizona Revised Statutes (AZ Rev. Stat.) 41-2146(C) and Arizona Administrative Code Rules (AZ Admin. Code R) 4-36-201 *et seq.*
- Hazardous materials transportation regulations: AZ Admin. Code R 17-5-209
- Hazardous substance release: AZ Rev. Stat. 26-348
- Hazardous underground storage tanks (USTs): AZ Admin. Code R 18-12-240 to 18-12-242
- Hazardous substance dry wells: AZ Admin. Code R 18-9-C301
- Pesticide storage: AZ Admin. Code R 3-3-308

Local

The County adopted the Coconino County Health and Human Services Unified Health Code in December of 2019. Chapter 4 of the Code provides minimum standards for the protection of the health of people in the County including incorporated and unincorporated areas with regard to the storage, collection, transportation, and disposal of refuse and other objectionable waste. The Code prevents the creation or maintenance of unhealthful, unsanitary conditions or public health nuisances, including potentially hazardous waste.

Vulnerability

Vulnerabilities for the County and cities/towns are provided in **Table 4-28** below.

Table 4-28: CPRI Rating for HazMat / Pipeline Failure / Transportation Accident

Jurisdiction	Probability	Magnitude/ Severity	Warning Time	Duration	CPRI Score
Coconino County	1.8	.6	.6	.2	**3.2**
Flagstaff	1.8	.6	.6	.2	**3.2**
Fredonia	.45	.3	.6	.2	**1.55**
Page	.9	.6	.6	.2	**2.3**
Tusayan	.45	.6	.15	.2	**1.4**
Williams	.9	.6	.6	.4	**2.5**
County-wide average CPRI =					**2.36**

Jurisdictions in bold print indicate they will be assessing the hazard and including mitigation activities for it.
Note: Maximum CPRI score is 4.00.

Probability of Future Events

While safety programs aim to prevent hazardous material releases, accidents occur due to equipment failures or human error. Additionally, a large earthquake could rupture piping and other containment systems and derange controls, causing releases, fires and public health incidents. There is a high probability of future hazardous releases from refineries and chemical plants that could affect the County. Based on previous events, the likelihood of small hazardous materials releases is high and can occur at any time.

Loss Estimates

If released, hazardous materials may cause harm to people, the environment, critical infrastructure, and property. Their potential for harm exists regardless of whether they are released by accident, malicious actor, fire, or weather-related event. These incidents affect a range of stakeholders in the whole community. Workers in facilities who regularly use or handled hazardous materials, transportation carriers, nearby residents and students, first responders, and first receivers are all at risk of health impacts from hazardous materials.[76] Loss estimates can be difficult to predict for hazardous material incidents, but modeling programs such as those available through the Interagency Modeling and Atmospheric Assessment Center (IMAAC) can assist first responders in utilizing plume modeling to predict exposure risk.[77]

Developmental Trends

The danger of a hazmat incident or release in the County will continue to pose a threat based on existing transportation corridors, traffic, severe weather incidents, and potential future development and construction. Future expansion of highways and new roads will encourage an increase in traffic and the percentage of commercial trucks carrying hazardous materials. In addition, the increased likelihood of severe weather incidents such as flooding, wildland fires, and severe heat may further increase the likelihood of a railway or vehicle crash and spill, or facility damage resulting in a release. Though, with the 2014 implementation by voters of Proposition 403 in the County, implementing a road maintenance sales tax, improved road conditions may help to curb future accidents and improve road safety when hazardous materials are being transported. Additionally, according to the U.S. Department of Transportation, the number of railroad incidents that involve hazardous materials in the U.S. has been generally decreasing over the last decade, from about 750 in 2010 to about 570 in 2017, and 500 in 2018. In Arizona, the number of incidents also has been decreasing over the last five years. In 2016, there were 13 incidents, while these numbers dropped to nine and five in 2017 and 2018, respectively. In 2019, there were only three railroad incidents related to hazardous materials.[78] This indicates overall improvement in railway safety that can be expected to continue.

4.3.11 Public Health Outbreak and Pandemic

Description

Human health hazards include transmittable diseases and environmental hazards, such as adverse weather. The following sections describe commonly recognized human health hazards.

- **Corona Viruses / SARS** –Coronaviruses cause a large percentage of colds and upper respiratory infections. Severe Acute Respiratory Syndrome (SARS) is a viral respiratory disease caused by a SARS-associated coronavirus. It was first identified on November 16, 2002 during an outbreak that emerged in China and spread to four other countries. It was quickly given the formal name of SARS due to its primary symptoms, and the CDC issued their first health alert on March 15, 2003.[79] The current (2020) COVID-19 pandemic is spread by a coronavirus.
- **Influenza** – Flu epidemics and pandemics occur routinely, typically in the fall and winter. Because flu seasons fluctuate in length and severity, a single estimate cannot be used to summarize

[76] FEMA. Hazardous Materials Incidents: Guidance for State, Local, Tribal, Territorial, and Private Sector Partners. August 2019. https://www.fema.gov/sites/default/files/2020-07/hazardous-materials-incidents.pdf
[77] https://www.fema.gov/emergency-managers/practitioners/hazardous-response-capabilities/imaac
[78] Arizona State University. “ASU professor details hazardous materials risks in incidents like Tempe Lake Bridge Derailment.” August 2020. https://news.asu.edu/20200804-arizona-impact-asu-professor-details-hazardous-materials-risks-incidents-tempe-lake-bridge
[79] Centers for Disease Control, CDC SARS Response Timeline

influenza-associated deaths. The U.S. Centers for Disease Control and Prevention (CDC) estimates that from the 1976-1977 flu season to the 2006-2007 season, flu-associated deaths ranged from a low of about 3,000 to a high of about 49,000.

- **Insect / Tick-Borne Disease** – Insects such as mosquitos and ticks can transmit a variety of diseases. Diseases that can be contracted through a tick bite include Colorado tick fever; Ehrlichiosis; Lyme disease; Rocky Mountain spotted fever; Tularemia. Diseases that mosquitoes carry include: Eastern equine encephalitis; Malaria; West Nile virus; Zika virus.
- **Plague** – Caused by the bacteria Yersinia pestis, a zoonotic bacterium usually found in small mammals and their flea, the plague is transmitted between animals and humans by the bite of infected fleas, direct contact with infected tissues, and inhalation of infected respiratory droplets. There are two primary clinical forms of plague infection: bubonic and pneumonic. Bubonic plague is the most common form and is characterized by painful swollen lymph nodes or 'buboes.' Plague can be a very severe disease in people, with a case-fatality ratio of thirty to sixty percent (30%-60%) for the bubonic type and is always fatal for the pneumonic kind when left untreated.
- **Anthrax** – Anthrax is a serious infectious disease caused by gram-positive, rod-shaped bacteria known as Bacillus anthracis. Although it is rare, people can get sick with anthrax if they come in contact with infected animals or contaminated animal products. Anthrax has the potential for and has been used as a biological weapon.
- **Hemorrhagic Fevers** – Viral hemorrhagic fevers are a group of illnesses caused by several distinct families of viruses. In general, the term “viral hemorrhagic fever” is used to describe a severe multisystem syndrome. Characteristically, the overall vascular system is damaged, and the body’s ability to regulate itself is impaired. These symptoms are often accompanied by hemorrhage. However, the bleeding is itself rarely life-threatening. While some types of hemorrhagic fever viruses can cause relatively mild illnesses, many of these viruses cause severe, life-threatening disease. Hemorrhagic fevers include Ebola and Yellow Fever.

History

Pandemics have occurred throughout history. Some of the largest scale public health and pandemic incidents include:

- **COVID-19 (2019-Present) –** Beginning in December 2019, in the region of Wuhan, China, a new (“novel”) coronavirus appeared and rapidly spread. COVID-19, a shortened form of “coronavirus disease of 2019,” has affected every nation on the planet. It is the largest pandemic since the 1918-1919 Spanish Influenza.
- **HIV/AIDS (1976-Present, peak at 2005-2012) –** HIV/AIDs was first identified in the Democratic Republic of the Congo in 1976. HIV/AIDS is a global pandemic, having killed more than 36 million people since 1981. Currently, there are between 31 and 35 million people living with HIV infections.
- **H3N2 Flu (1968) –** A category 2 Flu pandemic, the 1968 flu pandemic was caused by the H3N2 strain of the Influenza A virus. Within three months, it had spread to the Philippines, India, Australia, Europe, and the U.S. While the 1968 pandemic had a comparatively low mortality rate (.5%), it still resulted in the deaths of more than a million people, including 500,000 residents of Hong Kong; approximately 15% of its population at the time.
- **H2N2 Flu (1956-1958)** – The Asian Flu was a pandemic outbreak of Influenza A of the H2N2 subtype that originated in China in 1956 and lasted until 1958. In its two year infectious duration, it resulted in approximately two million deaths worldwide and 69,800 in the U.S.

- **H1N1 Flu (1918-1920)** – A strain of H1N1 influenza resulted in a deadly outbreak that tore across the globe, infecting over a third of the world's population and ending the lives of 20 to 50 million people. Of the 500 million people infected in the 1918 infection wave, mortality rates were estimated at 10% to 20%, with up to 25 million deaths in the first 25 weeks alone.
- **Plague (1346 to 1353)** – The Black Death was an outbreak of Bubonic Plague that ravaged Europe, Africa, and Asia, with an estimated death toll between 75 and 200 million people. Thought to have originated in Asia, the pandemic most likely jumped continents via the fleas living on the rats found aboard merchant ships.

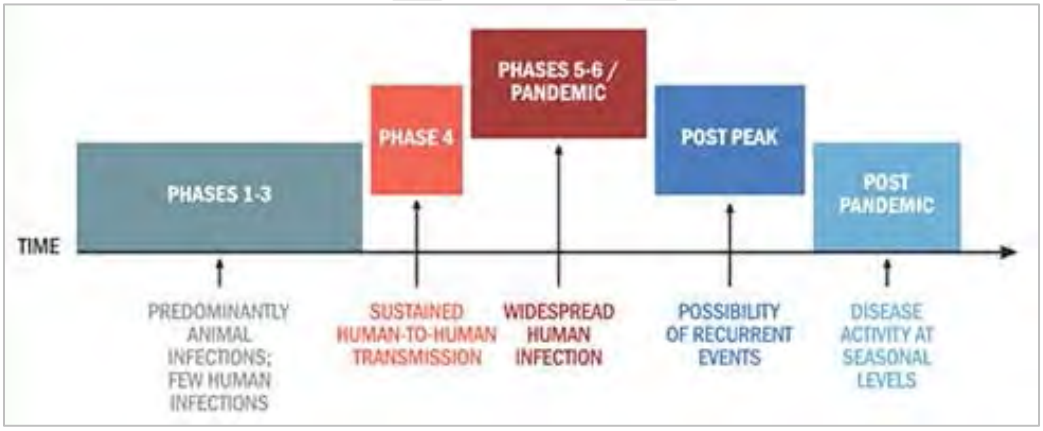
Location

Pandemics occur worldwide. Smaller-scale public health incidents or epidemics may be localized, such as the Ebola outbreak in a region of Africa. All locations are susceptible to pandemics and local public health hazard incidents.

Extent

The County COVID 19 weekly update site provides current data on the ongoing pandemic. The World Health Organization currently uses the Pandemic Influenza Phases to characterize pandemics as shown in **Figure 4.25**.

Figure 4.25: WHO Pandemic Influenza Phases (2009)



Influenza viruses circulate naturally and continuously among animals, especially birds. Even though such viruses might theoretically develop into pandemic viruses, in **Phase 1** no viruses circulating among animals have been reported to cause infections in humans.

In **Phase 2** an animal influenza virus circulating among domesticated or wild animals is known to have caused infection in humans and is, therefore, considered a potential pandemic threat.

In **Phase 3**, an animal or human-animal influenza reassortant virus has caused sporadic cases or small clusters of disease in people but not human-to-human transmission sufficient to sustain community-level outbreaks. Limited human-to-human transmission may occur under some circumstances, for example, when there is close contact between an infected person and an unprotected caregiver. However, limited transmission under such restricted circumstances does not indicate that the virus has gained the transmissibility necessary to cause a pandemic.

Phase 4 is characterized by verified human-to-human transmission of an animal or human-animal influenza reassortant virus able to cause "community-level outbreaks." The ability to cause sustained disease outbreaks in a community marks a significant upwards shift in the risk for a pandemic. Any country that

suspects or has verified such an event should urgently consult with WHO so that the situation can be jointly assessed, and a decision made by the affected country if implementation of a rapid pandemic containment operation is warranted. Phase 4 indicates a significant increase in the risk of a pandemic but does not necessarily mean a pandemic will occur.

Phase 5 is characterized by human-to-human spread of the virus into at least two countries in one WHO region. While most countries will not be affected at this stage, the declaration of Phase 5 is a strong signal that a pandemic is imminent and that the time to finalize the organization, communication, and implementation of the planned mitigation measures is short.

Phase 6, the pandemic phase, is characterized by community-level outbreaks in at least one other country in a different WHO region in addition to the criteria defined in Phase 5. Designation of this phase will indicate that a global pandemic is underway.

Regulatory Context

There are numerous regulatory organizations that provide public health direction and guidance. The County Board of Supervisors may declare a State of Emergency for public health incidents. The formal declaration provides extraordinary power to regulate businesses, schools, houses of worship and general public activity, as well as provide financial authority to procure resources and deliver emergency protective measures. The state has similar authority to declare a state-wide emergency with comparable power to address an incident such as a pandemic. The federal government may also declare and emergency and/or a disaster under the provision of the Stafford Act. Federal declarations are done state by state. The COVID-19 pandemic has resulted in a federal emergency declaration and disaster declaration for every state and territory.

Vulnerability

Localized public health emergencies may occur, such as contaminated drinking water in a single city or water district, or a localized infectious disease.

The entire population of the County is vulnerable to a pandemic. The nature of the population that is most susceptible varies from one event to another. During the 1918-1919 influenza pandemic, young, healthy adults were most likely to be fatalities. The COVID-19 pandemic results in disproportionate severe cases and deaths in older adults.

Most public health and pandemics affect disadvantaged communities to a greater degree. This is due to more frequent, underlying health conditions among this population, less access to health care / health insurance and living in more densely occupied housing.

Table 4-29: CPRI Rating for Public Health/Pandemic

Jurisdiction	Probability	Magnitude/ Severity	Warning Time	Duration	CPRI Score
Coconino County	1.35	1.2	.6	.4	**3.55**
Flagstaff	1.35	1.2	.6	.4	**3.55**
Fredonia	.9	.3	.15	.4	**1.75**
Page	.9	1.2	.15	.4	**2.65**
Tusayan	.9	1.2	.15	.4	**2.65**
Williams	1.8	.9	.15	.4	**3.25**
County-wide average CPRI =					**2.9**

Jurisdictions in bold print indicate they will be assessing the hazard and including mitigation activities for it.
Note: Maximum CPRI score is 4.00.

Probability of Future Events

The intervals between future public health emergencies and epidemics/pandemics are difficult to predict. Many of the diseases such as typhoid, diphtheria and cholera that caused past health care emergencies have been largely eliminated due to vaccines and better public health practices. However, it is nearly certain that public health emergencies and epidemics/pandemic will occur. This is due to continuous mutation of existing pathogens, the development of new pathogens and the likelihood of human induced incidents such as terrorism or poor health practices.

Loss Estimates

There are no models for loss estimates for public health emergencies and epidemics / pandemics. The 1918-1919 influenza incident resulted in up to 50 million deaths world-wide with over 500,000 in the U.S. and severe disruption of economies. The COVID-19 pandemic may not result in as many fatalities but has had an acute impact on the economy of the County and nation.

Developmental Trends

Much like estimating the interval between public health emergencies and epidemics/pandemics, determining developing trends for them is difficult. Improved public health measures, real time, scientific analysis of data and more rapid development of vaccines may reduce the duration and lethality of public health emergencies and epidemics/pandemics. While the COVID-19 pandemic has proven to be more likely to spread quickly in densely populated urban areas, it has also had a devastating impact on rural communities.

4.3.12 Terrorism / Active Shooter-Hostile Event

Description

The definition of terrorism by the U.S. Federal Bureau of Investigation (FBI) is “the unlawful use of force or violence against persons or property to intimidate or coerce a government, the civilian population, or any segment thereof, in furtherance of political or social objectives.” The FBI defines cyberterrorism as the use of computer network tools to shut down critical national infrastructures (e.g. energy, transportation, government operations) or to coerce or intimidate a government or civilian population.

Terrorists may use one or more of the following types of weapons: chemical, biological, incendiary, radiological, or explosives. In addition to large-scale attacks, a full range of assault styles must be considered, including simple bombings, active shooter, assassinations with small arms, major bombings, and others. The use of explosive devices remains the weapon of choice for terrorist activity. Related activities include bomb threats that disrupt the normal operations of transit systems, government, or corporate facilities. Primary locations likely to be targeted include airports, mass transit targets, government facilities, and high population density locations, although so-called “soft targets” such as schools, local entertainment facilities, etc., are at risk. The potential for nuclear, biological, or chemical terrorism is also a concern. These types of emergencies would necessitate detailed contingency planning and preparation of emergency responders to protect their communities.

Weapons of mass destruction (WMD) typically used by terrorists are categorized by an acronym that lists the types of materials/weapons: CBRNE stands for chemical, biological, radiological, nuclear, and explosives; BNICE stands for biological, nuclear, incendiary, chemical, and explosives. The nature of each category of weapon is described briefly below:

- **Chemical –** These include blood and choking agents, nerve agents, blister agents, and toxic industrial chemicals. The advantages of using chemical weapons include being easy to make, readily available, inexpensive, having an immediate effect, and that they are easily spread. The

disadvantages are that they require significant quantities for a mass effect, and that the production and deployment are potentially hazardous to the terrorist. Some chemical agents are odorless and tasteless and are difficult to detect, while others have distinct odors. They can have an immediate effect (i.e. a few seconds to a few minutes) or a delayed effect (i.e. several hours to several days). Routes of exposure for chemical weapons are inhalation, ingestion, absorption, and injection. Unlike many of the biological weapons, first responders can take self-protective measures by wearing personal protective equipment. First-aid measures and effective medical interventions are available, and chemical agent exposures can be decontaminated, and agents neutralized.

- **Biological –** These are defined as bacteria, viruses, or toxins used to produce illness or death in people, animals, or plants. The advantages of biological weapons include being easy to make, readily available, and relatively inexpensive. The disadvantages include delayed effects and potential deployment hazards to the terrorist. Routes of exposure for biological weapons are inhalation, ingestion, absorption, and injection. Biological agents can be dispersed as airborne particles or aerosols on food items or in water, or through an injection. Terrorists may use biological weapons because the agents are odorless, tasteless, and extremely difficult to detect.
- **Radiological / Nuclear –** These are typically in the form of a traditional fission device such as an atom bomb, a radiological dispersal device (i.e. often called a dirty bomb), or a conventional explosion at a nuclear facility. The advantages of radiological or nuclear weapons include availability of materials, devastating effects, and a great psychological impact on the population. The disadvantages include delayed effects, deployment is hazardous to the terrorists, and it is extremely expensive — in the millions of dollars for a nuclear weapon. Radiation cannot be detected by human senses. Consequences may include death, severe health risks to the public, damage to the environment, and extraordinary loss of, or damage to, property. The health effects of radiological or nuclear materials include radiation burns, fragmentation wounds, acute radiological poisoning, and long-term effects, such as cancers and birth defects.
- **Explosives –** These are most terrorists' weapon of choice. 86% of domestic terrorist incidents involve the use of explosives. Explosives are readily available and have dramatic results, are low risk, require few skills to build and use, are easy to execute, allow for remote attacks, and do not require many people to execute. There are low explosives and high explosives. The effects include blast pressure, both positive and negative, fragmentation, and thermal. There are pipe bombs or bombs that can be easily concealed into a backpack, box, vehicles, or virtually any type of container, with numerous trigger mechanisms to set off the bomb. Bombings account for up to fifty percent of worldwide terrorist attack patterns.
- **Cyberterrorism –** According to the FBI, cyberterrorism is any "premeditated, politically motivated attack against information, computer systems, computer programs, and data which results in violence against non-combatant targets by sub-national groups or clandestine agents." As nations and critical infrastructure become more dependent on computer networks for their operations, new vulnerabilities are created. A cyberterrorist attack is designed to cause physical violence or extreme financial harm. Possible cyberterrorist targets include the banking industry, military installations, power plants, air traffic control centers, and water systems but could be against any facility that relies on computers, computer systems, and programs for their operations.
- **Active shooter –** The U.S. Department of Homeland Security defines the active shooter as "an individual actively engaged in killing or attempting to kill people in a confined and populated area; in most cases, active shooters use firearms, and there is no pattern or method to their selection of victims." Active shooters may also use explosive devices during assaults to increase the likelihood of casualties or to commit suicide. Most incidents occur at locations in which the killers find little

impediment in pressing their attack. Locations are generally described as soft targets that have limited security measures to protect members of the public. In most instances, shooters commit suicide, are shot by police, or surrender when confrontation with responding law enforcement is unavoidable.

- **Contamination –** Contamination of food and water supplies are an infrequent method of terrorism. In 1984, members of the Rajneeshee religious cult contaminated a city water supply tank in Dalles, Oregon, using Salmonella and infected 750 people. In 1992 The Kurdistan Workers' Party (PKK) put lethal concentrations of potassium cyanide in the water tanks of a Turkish Air Force compound in Istanbul. Contamination has the potential to injure large numbers of people and disrupt critical commodity supplies. Under the Environmental Protection Agency America's Water Infrastructures Act, water system operators are required to conduct a risk and resiliency assessment and develop an emergency response plan.

History

No data exists to show that the County has experienced acts of terrorism. The history of terrorism on U.S. soil includes the large-scale attacks of September 11, 2001, on the World Trade Center in New York and the Pentagon in Washington, DC, and the ensuing anthrax attacks, the 1995 bombing of the Alfred P. Murrah Federal Building in Oklahoma City, and the earlier bombing of the World Trade Center in 1993. There have been numerous smaller-scale shootings, bombings, and fires that have been labeled as terrorist incidents.

Location

The form and locations of many natural hazards are identifiable and, even in some cases, predictable. However, there is no defined geographic boundary for terrorism. Based on previous events, it is presumed that critical facilities and services and large gatherings of people are at higher risk. Public transportation facilities have been a repeated target of terrorists. This is due to the open nature of the facilities, the large numbers of people that use them, and the paralyzing effects that terrorist attacks have on communities' ability to provide transportation for daily life. Terrorist attacks on transportation systems thus have an impact that is much greater than to loss of human life and injuries and the damage done to infrastructure. By shutting down vital services and requiring increased security, they have a disproportionate economic cost.

Extent

The damage caused by a terror attack is dependent on the method of attack. Large bomb attacks could destroy major infrastructure, kill many people, and disrupt regional functioning for a significant time. Cyberterrorism would cause very different types of damage, possibly severely hampering local government operations and local businesses with no direct injuries or loss of life. In addition to direct physical damage, terrorist attacks breed fear. Even an unsuccessful attempt to attack the region would seriously impact the comfort of residents and affect local businesses.

Regulatory Environment

There are numerous laws and regulations that relate to terrorism both at the state and federal levels. Key laws that are particularly applicable to the County are:

- 18 United States Code Title 113B Section 2323f which describes prohibitions for bombings of places of public use, government facilities, public transportation, and infrastructure facilities;
- The Critical Infrastructure Information Act of 2002 (CII Act) facilitates greater sharing of critical infrastructure information among the owners and operators of the critical infrastructures and

government entities with infrastructure protection responsibilities, thereby reducing the nation's vulnerability to terrorism.

Probability of Future Occurrences

The time and place of individual terrorist acts cannot be forecast with great accuracy. However, anti-terrorist organizations such as local law enforcement, the Arizona Counter Terrorism Information Center (ACTIC), and federal agencies work collaboratively to detect, deter, and disrupt potential terrorist activity. Terrorists can strike not just large cities but in any community of any size. While no amount of planning and mitigation can remove 100% of the risk from terrorism, hazard mitigation, and preparedness can help reduce the risk. Given the lack of information on observed historical damages, frequency of occurrence, intensity, and damage parameters, no estimate is available for the probability of a future occurrence of a terrorist event.

It is not possible to estimate the probability of a terrorist attack. The approach experts use to prioritize mitigation and preparedness efforts is to identify critical sites and assess the vulnerability of these sites to terrorist attacks. Vulnerability of these sites is determined subjectively by considering factors such as visibility (e.g. does the public know this facility exists in this location?), accessibility (e.g. is it easy for the public to access this site?), and occupancy (e.g. is there a potential for mass casualties at this site?).

Vulnerability

Table 4-30: CPRI Rating for Terrorism

Jurisdiction	Probability	Magnitude/ Severity	Warning Time	Duration	CPRI Score
Coconino County	.45	1.2	.6	.1	**2.35**
Flagstaff	.45	1.2	.6	.1	**2.35**
Fredonia	.45	.6	.6	.2	**1.85**
Page	.45	1.2	.6	.1	**2.35**
Tusayan	.45	1.2	.6	.1	**2.35**
Williams	1.35	.9	.6	.1	**2.95**
County-wide average CPRI =					**2.37**

Jurisdictions in bold print indicate they will be assessing the hazard and including mitigation activities for it.
Note: Maximum CPRI score is 4.00.

Loss Estimates

There are no defined methods for estimating the losses from terrorism. Individual terrorist incidents, such as the 9/11 World Trade Center attack, have caused the loss of thousands of lives and resulted in billions of dollars in damage. Within the County, losses from terrorist attacks could be devastating.

Developmental Trends

Terrorist attacks will continue into the future. They are likely to become more sophisticated, and potentially, more deadly. As terrorists increasingly target information technology systems through cyberattacks, critical infrastructure, finance, health, and transportation systems are at risk.

4.3.13 Wildland Fire

Description

A wildland fire (or wildfire) is an uncontrolled fire spreading through wild land vegetative fuels and/or urban interface areas where fuels may include structures. They often begin unnoticed, spread quickly, and may be signaled by dense smoke that may fill the area for miles around. Wildland fires can be human-caused through acts such as arson or campfires or can be caused by natural events such as lightning. If not promptly controlled, wildland fires may grow into an emergency or disaster. Even small fires can threaten lives, resources, and destroy improved properties.

The indirect effects of wildland fires can also be catastrophic. In addition to stripping the land of vegetation and destroying forest resources and personal property, large, intense fires can harm the soil, waterways and the land itself. Soil exposed to intense heat may temporarily lose its capability to absorb moisture and support life. Exposed soils in denuded watersheds erode quickly and are easily transported to rivers and streams thereby enhancing flood potential, harming aquatic life and degrading water quality. Lands stripped of vegetation are also subject to increased debris flows and landslide hazards.

To the extent that wildland fires are a cascading effect of drought or warmer temperatures, wildfire risk will likely increase somewhat in the future. Due to the effects of climate change, deserts may have more extreme temperature swings, meaning days can reach extremely high temperatures in the summer. These high temperatures will result in increased numbers of low humidity hot days, which can lead to excess dry brush and optimal conditions for fires to ignite.

History

The mountainous regions of the County offer significant sources of fuel and topography favorable to wildland fire. The intersection of environmental and economic sectors versus historically natural fire patterns and seasons, has left much of the forested areas in a prime condition to experience extremely destructive fires. In addition, compounded hazards such as bark beetle infestations as a result of extended severe drought conditions only exasperate the wildfire hazard. According to the Planning Team, wildland fire is the number one hazard in the County. Numerous wildland fires have impacted the County as demonstrated by the following recent events:

- **July 21, 2019 – The Museum Fire** began approximately four miles north of Flagstaff on July 21st at approximately 11:15 AM MST. The fire grew to 1,962 acres in the Dry Lake Hills area. The burn severity was 12% high, 28% moderate, 48% low, and 12% very low. Much of this area drains into the Spruce Wash which runs into several communities of Flagstaff.[80] To guard against post-wildfire flooding and debris flows, the community made over 600,000 sandbags, and placed 500,000 of them. In addition, 5,000 feet of concrete barriers and a 300-foot water barrier were constructed to mitigate the impacts of flooding. Fire investigators determined that the wildfire was likely caused by an excavator striking a rock during routine restoration work operations.[81]
- **April 28-30, 2018 – The Tinder Fire** was first seen by Moqui Tower lookout on April 27th, 11:43 AM MDT. Investigators determined that the fire originated in the East Clear Creek drainage approximately one mile downstream from Forest Road 95. Forest Road 95 runs north-south and is located approximately 1.5 miles east of C.C. Cragin (Blue Ridge) Reservoir. The cause of the fire

[80] National Centers for Environmental Information
[81] United States Department of Agriculture Forest Service: https://www.fs.usda.gov/detail/coconino/news-events/?cid=FSEPRD662372

was an abandoned illegal campfire. The fire burned 16,309 acres, 33 primary residences, and 54 minor structures.[82]

- **May 20, 2014 – The Slide Fire** was a human caused fire that scorched 21,227 acres in Oak Creek Canyon north of Sedona. Approximately 100 homes were evacuated and Highway 89A was closed from Pine Flats campground north to the overlook at the top of the switchbacks. Fire suppression costs are listed at $10.1 million.[83] Post fire flooding in Oak Creek Canyon was immediately recognized as a great potential. The Oak Creek Canyon Interagency Emergency Operations Flood Plan was produced at a cost of $42,000.00 to aid responding emergency resources to an Oak Creek Canyon Post Slide Fire Flood event.
- **June 20, 2010 – The Schultz Fire** ignited from an abandoned campfire near Schultz Tank and Elden Trail and consumed 15,000 acres of the San Francisco Peaks. This fire was driven by high winds across the steep terrain of the eastern slope. The fire caused the evacuation of more than 1,000 residents and was contained on June 30th. Post fire flooding from heavy rains from the fourth wettest monsoon on record in Flagstaff resulted in numerous debris flows, significant erosion, and substantial flooding of the residential areas on both sides of Highway 89 North inclusive of Timberline-Fernwood and traveling north past Wupatki Trails subdivision.[84]
- **June 19, 2010 – The Hardy Fire** was ignited by a camper dumping hot ashes and embers from a camp stove onto the ground. The resulting fire burned 3,026 acres southeast of downtown Flagstaff. Over 200 homes and the Coconino Humane Association animal shelter had to be evacuated. There were no injuries and no structure damage.
- **June 11, 2010 – The Eagle Rock Fire** on the Kaibab National Forest began approximately 11 miles northwest of Williams. The presumed lightning caused fire consumed 3,400 acres and caused the evacuation of several residents.
- **July 6, 2007 – The Birdie Fire** near Mormon Lake was lightning caused and burned approximately 5,018 acres. No structures were lost or damaged.
- **June, 2006 – The Brins Fire** ignited in the Coconino National Forest near the communities of Sedona and Oak Creek Canyon burning 4,317 acres. Most of Oak Creek Canyon was evacuated. Fire suppression resources responded from federal, state and local governments. The situation necessitated the activation of the AZ211 call center and the Governor declared an emergency on June 19, 2006. The fire started within three miles of Sedona on June 18th from an abandoned campfire. The fire was located in the rugged terrain to the west of Oak creek Canyon and north of the town of Sedona. The close proximity to these communities created a serious threat to hundreds of residents, homes and businesses. The previous winter had been extremely dry with little or no snow at the higher elevations. The effects of the drought, coupled with the rugged and broken topography within the vicinity of the fire, made for difficult suppression. This was a serious threat to hundreds of homes and structures and infrastructures valued at well over $85 million, including Sedona and Oak Creek Canyon, well known tourist attractions. Oak Creek Canyon was evacuated and remained closed to residents, businesses and visitors for six days. The urban interface was the priority for fire suppression and structure protection activities. Suppression costs were estimated at $6.4 million.[85]

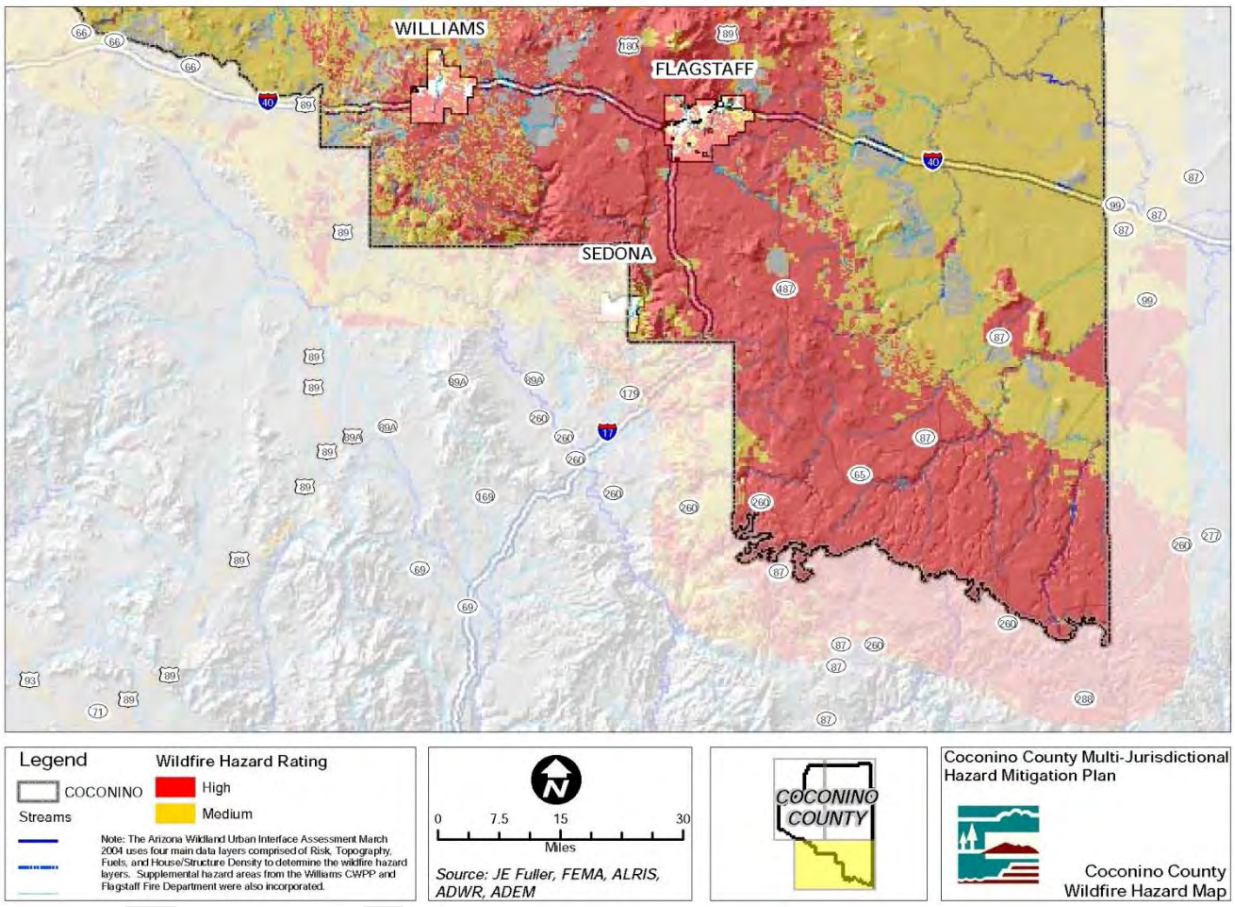
[82] National Centers for Environmental Information
[83] Inciweb, 2014
[84] Arizona Hydrological Society Annual symposium, 2011, Field Trip Guide to the 2010 Schultz Burn Area
[85] Coconino County, 2009

- **June 2006 – The Woody Fire** started from sparks of a blown tire along Interstate 40. The fire burned approximately 110 acres in West Flagstaff and threatened multiple neighborhoods. Hundreds of people were evacuated, and some were placed in community shelters.[86]

Location

Wildland fires may occur throughout the County. The maps below depict the fire danger zones for the County's communities.

Figure 4.26: Wildland Fire Hazard 1



[86] Coconino County and Flagstaff Fire Department, 2009

Figure 4.27: Wildland Fire Hazard 2

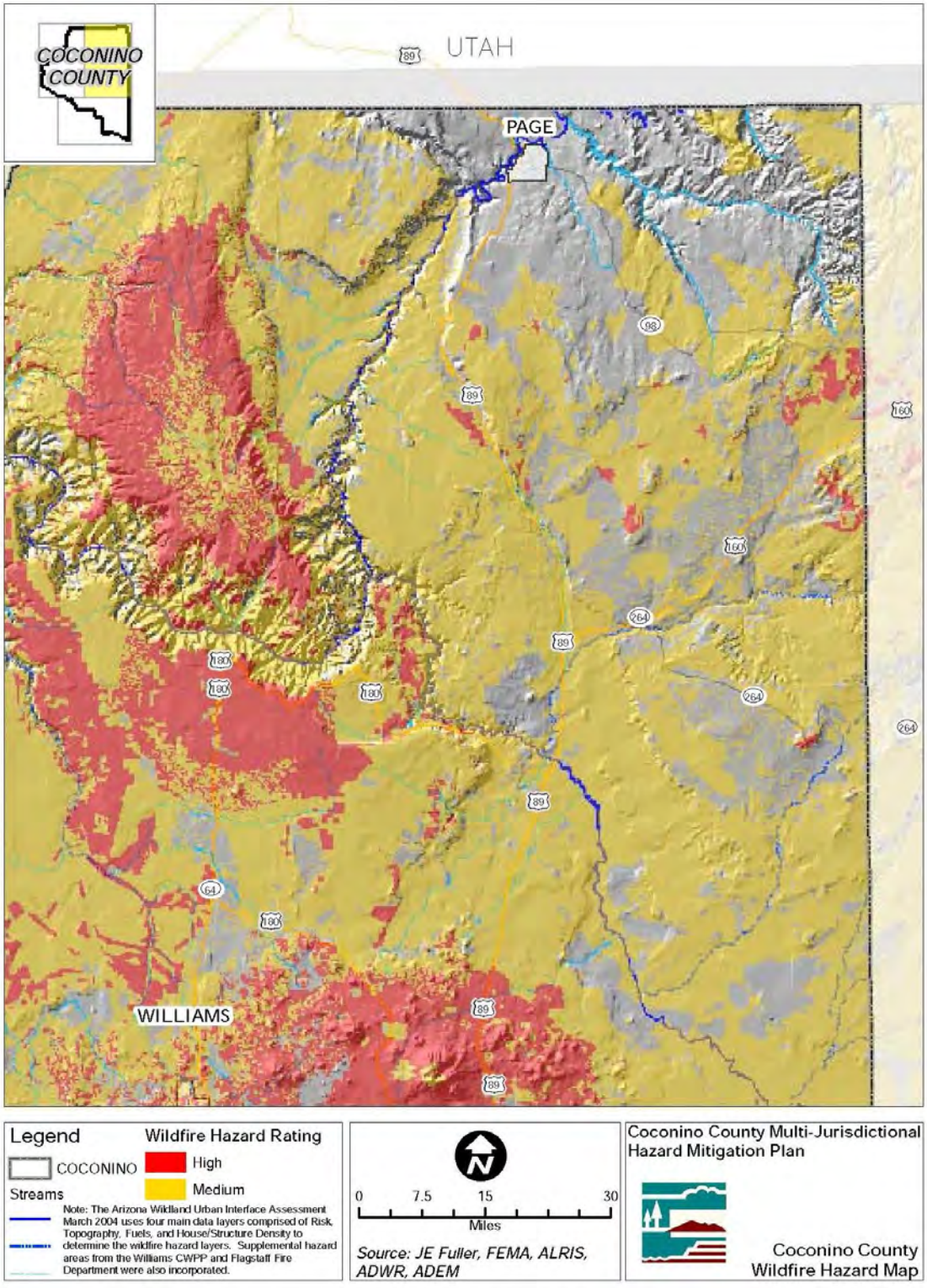
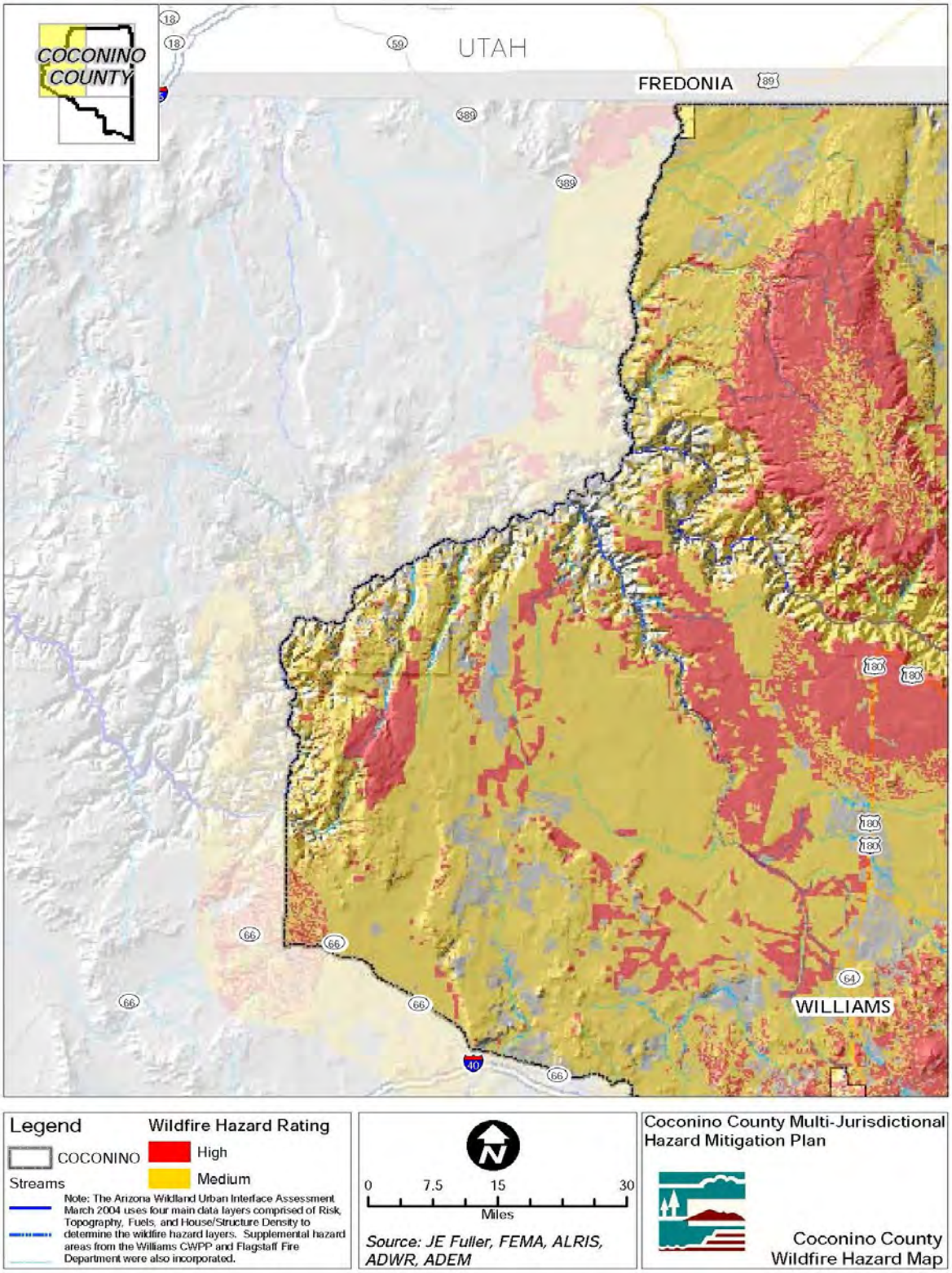


Figure 4.28: Wildland Fire Hazard



Extent

Wildland fires are a cascading effect of drought and warmer temperatures. Wildfire risks will likely increase in the future, perhaps dramatically. Extreme variability of precipitation across the southwest, combined with the trend of increasing temperatures, has led to extremely dry conditions within the forest and grasslands of the County, even in the absence of a prolonged drought.

Potential fire conditions are described by the warnings issued by the NWS, as shown in **Table 4-31**.

Table 4-31: NWS Wildland Fire Warnings

Warning Type	Warning Criteria	Zones Affected
Red Flag Warning	Combination of weather and fuels conditions for any three hours or more in a 12-hour period. Criteria may include: • Frequent gusts of 25 mph or greater; • Relative humidity of 15% or less; • Dry thunderstorms with 15% coverage or more, constituting an LAL 6. Additional criteria include: • Haines Index of 5 or 6, indicating a moderate or high potential for large, plume-dominated fire growth; • Wind shifts associated with frontal passages; • First significant lightning event (wet or dry) after an extended hot and dry period; • Poor relative humidity recovery overnight (40% or lower) ; • Any combination of weather and fuel moisture conditions which, to the judgement of the forecaster, would cause extensive wildland fire occurrences.	A warning may be issued for all or portions of a fire weather zone or region. Zones impacted by the event will be listed within the Red Flag Warning product.
Fire Weather Watch	Alerts land management agencies to the high potential for development of the above Red Flag criteria in the next 12-72 hours.	A watch may be issued for all or portions of a fire weather zone or region. Zones impacted by the event will be listed within the Red Flag Warning
Source: The National Weather Service.		

The NWS produces fire danger maps that depict current fire weather across the U.S. The U.S. Forest Service Wildland Fire Assessment System (USFS-WFAS) also provides daily potential wildfire conditions throughout the Country.

Regulatory Context

The County passed Ordinance 2021-01, repealing an earlier ordinance, that directs restrictions on activities that cause wildland fires. The ordinance describes various levels for restricting open fires, campfires, and fireworks among other provisions.

The Community Wildfire Protection Plan for Flagstaff and Surrounding Communities (Flagstaff CWPP), Greater Williams Area Community Wildfire Protection Plan (Williams CWPP), Blue Ridge Fire District Community Wildfire Protection Plan (CWPPBR), and Tusayan Community Wildfire Protection Plan

(Tusayan CWPP) are four community wildfire protection plans that cover various urbanized areas of the County.

The Greater Flagstaff Forests Partnership (GFFP) and Ponderosa Fire Advisory Council (PFAC) collaborated to prepare the Flagstaff CWPP and is the largest planning area covered by the three plans, including a significant portion of the forested areas around Flagstaff and Sedona. In the pages that follow, there is an excerpt from each of the community wildfire protection plans that show the limits of the study area and the extent of communities identified to be within wildland/urban interface areas.

Probability of Future Events

Wildland fire is the most threatening of the hazards within the County. It will occur with near certainty on an annual basis. While the number of deaths, amount of property and other losses and the acreage burnt, is difficult to predict, the likelihood of substantial economic cost is extremely high.

Vulnerability

Table 4-32 below shows the Planning Team's jurisdictions vulnerability to wildland fire.

Table 4-32: CPRI Rating for Wildland Fire

Jurisdiction	Probability	Magnitude/ Severity	Warning Time	Duration	CPRI Score
Coconino County	1.8	1.2	.6	.3	**3.9**
Flagstaff	1.8	1.2	.6	.4	**4**
Fredonia	1.35	.9	.45	.2	**2.9**
Page	.45	1.2	.6	.2	**2.45**
Tusayan	1.8	1.2	.6	.3	**3.9**
Williams	1.35	.9	.6	.3	**3.15**
County-wide average CPRI =					**3.38**

Jurisdictions in bold print indicate they will be assessing the hazard and including mitigation activities for it.
Note: Maximum CPRI score is 4.00.

Fredonia and Tusayan perceive wildland fire as a threat to their communities and are actively exploring ways to prevent disasters due to this hazard.

Fredonia has experienced a couple of wildland fires on the outskirts of town, about five miles out. Therefore, wildland fire is not considered a high-level threat. However, the community understands that if one did get close to or into the town, there may be substantial loss of property.

The danger of wildfire exists for virtually all areas of Tusayan. While there has been history of wildfire within Tusayan, there have been no resulting evacuations. The town is very small and has limited resources which would make evacuation and fire suppression challenging and would most likely require outside support.

Loss Estimates

The estimation of potential exposure to high and medium wildfire hazards was accomplished by intersecting the human and facility assets with the wildland fire hazard limits depicted on the flowing hazard maps. Loss to exposure ratios of 20% and 5% were assumed to estimate losses for all facilities located within the high and medium wildfire hazard areas, respectively.

In summary, $9.6 million and $2.0 million in asset related losses are estimated for high and medium wildland fire hazards, for all the participating jurisdictions in the County. An additional $704 and $102 million in high and medium hazard wildland fire losses to HAZUS defined residential, commercial, and industrial facilities, is estimated for all participating County jurisdictions. It should be noted that these exposure dollar amounts

do not include the cost of wildfire suppression which can be substantial. For example, a Type 1 wildland firefighter IMT costs about $1 million per day.

The indirect effects of wildland fires can also be catastrophic. In addition to stripping the land of vegetation and destroying forest resources and personal property, large, intense fires can harm the soil, waterways and the land itself. Soil exposed to intense heat may temporarily lose its capability to absorb moisture and support life. Exposed soils in denuded watersheds erode quickly and are easily transported to rivers and streams thereby enhancing flood potential, harming aquatic life and degrading water quality. Lands stripped of vegetation are also subject to increased debris flows and landslide hazards.

Developmental Trends

Wildland fires throughout the western United States have become, larger, hotter, and more deadly over the past years. This is due to record drought which has resulted in 100's of millions of dead trees, hotter temperatures and forest management programs that left very high fuel loads in place. As the County's population grows and more development occurs at the urban/wildland interface, loss of life and property are likely to increase.

4.3.14 Winter Storm

Description

Severe snowstorms affect many aspects of life in the County, including transportation, emergency services, utilities, agriculture and the supply of basic subsistence to isolated communities. Interstates 40 and 17 have produced numerous fatal multi-car accidents due to heavy winter snowfall and icy road conditions. Heavy snowfalls can also leave motorists stranded in their vehicles with potentially disastrous results like hypothermia and carbon-monoxide poisoning. Significant snowstorms can also hinder both ground and air emergency services vehicles from responding to accidents or other emergencies. Remote areas and communities can be easily cut-off from basic resources such as food, water, electricity, and fuel for extended periods during a heavy storm. Extremely heavy snowstorms can produce excessive snow loads that can cause structural damage to under-designed buildings. Agricultural livestock can also be vulnerable to exposure and starvation during heavy snowstorms.

Freezing rain is formed as snow falls through a warm zone in the atmosphere completely melting the snow. The melted snow then passes through another zone of cool air "super cooling" the rain below freezing temperature while still in a liquid state. The rain then instantly freezes when it comes in contact with the ground or other solid object. Because freezing rain hits the ground as a rain droplet, it conforms to the shape of the ground, making one thick layer of ice. Sleet is similar to hail in appearance but is formed through atmospheric conditions more like freezing rain. The difference is that the snowflakes do not completely thaw through the warm zone and then freeze through the cool air zone closer to the ground. Sleet typically bounces as it hits a surface similar to hail. Sleet is also informally used to describe a mixture of rain and snow and is sometimes used to describe the icy coating on trees and power lines.

Sleet and freezing rain can cause slippery roadway surfaces and poor visibility leading to traffic accidents and can leave motorists stranded in their vehicles with potentially disastrous results like hypothermia and carbon monoxide poisoning. Heavy sleet or freezing rain can produce excessive ice-loads on power lines, telecommunication lines and other communication towers, tree limbs, and buildings causing power outages, communication disruptions, and other structural damage to under-designed facilities.

The warmer oceans and atmosphere observed in the recent past lead to increased evaporation and increased water vapor in the atmosphere. The higher water vapor values translate directly into greater perceptible water – the amount of liquid water found in a column of air, if all the water were squeezed out of the column of air. Increased atmospheric moisture can result in more extreme precipitation events, both rain and snow events. For the County, there is a possibility of higher intensity winter storms, though there

is no clear trend, but rather an increase in variability of winter storms, including both higher snowfall events and months with no winter storms at all.

History

Although winter snows are the lifeblood of water supplies for most of the County, they are also the County's deadliest natural hazard. There have been at least three fatalities and 10 injuries in the County as a result of snowstorms during the last 50 years. The following highlights the more prominent winter snow events:

- **November 29, 2019 –** A major winter storm impacted northern Arizona over the Thanksgiving holiday, bringing very heavy wet snow and causing significant travel disruptions, road closures, and power outages. The combination of heavy snow and strong winds caused multiple power outages, most notably in Tusayan and the Grand Canyon. Over 30 inches of snow was reported near Hwy 180. Power was lost to portions of the northwestern areas of the County along Old Route 66. A State of Emergency was declared for Tusayan.[87]
- **February 20-22, 2019 –** A cold, strong, intensifying low pressure system spread a blanket of snow over a majority of central and northern Arizona. As a result of the heavy snowfall, major roadways were closed, trees were downed, and power was lost in local communities. Snowfall recorded at NWS Flagstaff and Flagstaff Pulliam Airport was 40.8 inches throughout the storm. State of Emergencies were declared by all counties along with some cities and reservations in central and northern Arizona.[88]
- **January 18-23, 2010 –** A series of three low pressure systems tracked across the state during a 6 day period. These systems brought heavy snowfall to the higher elevations of northern Arizona, record flooding to lower elevation locations, and strong winds area-wide. The third and most intense system resulted in record low pressure readings. Several snow and rainfall records were set throughout the week, with estimates of over 90 inches on the highest peaks of northern Arizona and liquid precipitation amounts exceeding 10 inches in some areas. Snowfall resulted in numerous roof collapses in Flagstaff, widespread power outages for several days along the Eastern Mogollon Rim and White Mountains, severely hampered services across the Navajo and Hopi reservations, and impassable roads due to limited powering services. Two homes were damaged in Williams due to a fallen tree.[89]
- **December 12-20, 1967 –** A series of snowstorms caused substantial disruption to communities in northern Arizona and shattered snowfall records. Measurements taken at the Flagstaff Pulliam Airport totaled the snowfall at 86 inches. The storm caused road closures, power outages, and devastating impacts for residents seeking basic necessities such as food, water, and shelter. Navajo tribal lands experienced significant hardship, requiring airlifted food and livestock feed.[90]

Location

All of the County is susceptible to winter storms. Unincorporated County land, and the cities of Flagstaff and Tusayan experience heavier winter storm precipitation.

Extent

The NWS produces several notifications about potential winter storm events.

[87] National Weather Service, Flagstaff AZ Weather Forecast Office
[88] National Weather Service, Flagstaff AZ Weather Forecast Office
[89] National Weather Service, Flagstaff AZ Weather Forecast Office
[90] Arizona Central, "Extreme Weather: The Snowiest Storm in Arizona History," December 23, 2015

Table 4-33: Winter Storm Warnings Issued by the NWS

Warning Type	Warning Criteria	Zones Affected
Winter Storm Watch	Issued when there is potential for significant and hazardous winter weather within 48 hours. Criteria includes: • Five inches or more of snow/sleet within a 12-hour period; • Seven inches or more of snow/sleet within a 24-hour period; • Eight inches or more within a 24-hour period; • Life-threatening or damaging combination of snow and/or ice accumulation with wind.	Advisory may vary from area to area.
Blizzard Warning	Issued when the following conditions are occurring or expected within 12-18 hours. Criteria includes: • Snow and//or blowing snow reducing visibility to a quarter mile or less for three hours or longer; • Sustained winds of 35 mph or greater; • Frequent gusts to 35 mph or greater. There is no temperature requirement to achieve blizzard conditions.	Advisory may vary from area to area.
Winter Storm Warning	Issued when a significant combination of hazardous winter weather is occurring or imminent. Criteria includes: • Five inches or more of snow/sleet within a 12-hour period AND/OR; • Seven inches or more of snow/sleet within a 24-hour period AND/OR; • Enough ice accumulation to cause damage to trees or powerlines AND/OR; • Life-threatening or damaging combination of snow and/or ice accumulation with wind.	Advisory may vary from area to area.
Ice Storm Warning	Issued when an ice storm event is expected to meet or exceed local ice storm warning criteria in the next 12-36 hours. Criteria includes: • Ice that is ½ inch or more over at least 50% of the zone or encompassing most of the population	Advisory may vary from area to area.
Heavy Snow Warning	Issued when snowfall meets the following criteria: • Snowfall of 6 inches or more in a 12-hour period is imminent or occurring; • 8 inches or more in a 24-hour period is imminent or occurring	Advisory may vary from area to area.
Snow Advisory	Issued when a low pressure system produces snow that may cause significant inconveniences, but do not meet warning criteria and if caution is not exercised, could lead to life-threatening situations.	Advisory may vary from area to area
Blowing Snow Advisory	Issued when wind-driven snow reduces surface visibility, possibly, hampering traveling. Blowing snow may be falling snow, or snow that has already accumulated but is picked up and blown by strong winds.	Advisory may vary from area to area.

Source: The National Weather Service.

NOAA's National Centers for Environmental Information produces the Winter Storm Severity Index (WSSI) to provide NWS partners and the public with an indication of winter precipitation (snow and ice) severity and its potential related societal impacts. The WSSI does not depict official warnings and should always be used in context with official NWS forecasts and warnings.

Table 4-34: NOAA WSSI Potential Winter Storm Impact Scale

Color Code	Severity Level	Definition
	No Impacts	Impacts not expected
	Limited Impacts	Rarely a direct threat to life and property. Typically results in little inconveniences
	Minor Impacts	Rarely a direct threat to life and property. Typically results in an inconvenience to daily life
	Moderate Impacts	Often threatening to life and property. Some damage unavoidable. Typically results in disruptions to daily life.
	Major Impacts	Extensive property damage likely and lifesaving actions needed. Will likely result in major disruptions to way of life
	Extreme Impacts	Extensive and widespread severe property damage and life saving actions will be needed. Resuls in extreme disruptions to daily life

Regulatory Context

There few statutory requirements related to winter storms. City ordinances about snow removal, like this one from Flagstaff, AZ where owners, lessees, or residents are required to remove snow from public walkways that border the property within 24 hours.

OSHA's Hazard Alert, Snow Removal: Know the Hazards Pamphlet, and winter weather webpages provide guidance to employers on how to prevent serious injuries and fatalities. Employers should consider options to avoid working on roofs or elevated heights, plan ahead for safe snow removal and must:

- Provide required fall protection and training when working on the roof or elevated heights;
- Ensure ladders are used safely (e.g. clearing snow and ice from surfaces);
- Use extreme caution when working near power lines;
- Prevent harmful exposure to cold temperatures and physical exertion.

Probability of Future Events

Snow level measurements are recorded daily across the United States and can be used to estimate the probability and frequency of severe winter storms. Extremes can occur in Arizona with a much higher chance in the County and can have serious impacts.

The NCEI compiled snow climatology statistics using historic record data from statewide NWS cooperative observer sites for 1948 to 1996. Each station in Arizona and the nearest stations in California, Nevada, Utah, Colorado, and New Mexico were queried from this data set to establish maps showing statistical projections of the snow depths for various recurrence intervals. According to the data, most of the County could experience a 100-year, three-day snow depth of over 14 inches with some communities receiving well over two or three feet of snow.

Vulnerability

Winter storms usually begin to impact the County and especially the northern areas beginning in the fall (October / November) and can continue through April and portions of May. The higher elevations of the County will feel the immediate impacts first. However, as snow elevations drop and precipitation amounts (both rain and snow) increase, lower elevations will begin to experience severe weather impacts including but not limited to flooding, hazardous road conditions, and potential structural damage. Winter storm post event rain and water runoff due to melting snow can lead to flooding impacts in many populated areas of the County. These areas include Flagstaff and the immediate surrounding area, and potentially areas several miles from Flagstaff.

The storms experienced in the high country can cripple transportation corridors, shut down air traffic, create health related issues and strand motorists on highways. They contribute to traffic accidents and adversely impact first responder operations (including ground and air transportation) regarding safe response to others in need. Remote areas and communities can be easily cut-off from basic resources such as food, water, electricity, and fuel for extended periods during a heavy storm. These could include the Navajo Reservation lands, Page, Sedona-Oak Creek, the Mogollon Rim area, and the areas inclusive of and surrounding Williams.

Winter storms occur frequently and have a disproportionate effect on Flagstaff's vulnerable populations. Flagstaff's population experiencing homelessness is particularly at-risk during winter storm events. **Table 4-35** displays the CPRI for winter storms.

Table 4-35: CPRI Rating for Winter Storms

Jurisdiction	Probability	Magnitude/ Severity	Warning Time	Duration	CPRI Score
Coconino County	1.8	.9	.15	.3	**3.15**
Flagstaff	1.8	.9	.15	.3	**3.15**
Fredonia	1.35	.6	.15	.3	**2.40**
Page	.9	.3	.15	.3	**1.65**
Tusayan	1.8	.6	.15	.3	**2.85**
Williams	1.8	1.2	.15	.2	**3.35**
County-wide average CPRI =					**2.76**

Jurisdictions in bold print indicate they will be assessing the hazard and including mitigation activities for it.
Note: Maximum CPRI score is 4.00.

Loss Estimates

For the County, there is a 10% probability that a heavy snow warning could be issued in any given year. All of the County population and assets are exposed to winter storm. Historic records indicate an estimated annual loss of $500,000 could be expected. At least one fatality and multiple injuries will result likely occur yearly.

Developmental Trends

The NCEI database indicates that winter storms are occurring less frequently in the 21st century than they did in the 20th century. This is likely due to warmer weather and a shift in snowfall patterns due to global warming.

Section 5: Mitigation Strategy

5.1 Hazard Mitigation Statement

The 2021 MJHMP represents the County's and participating jurisdiction's commitment to create safer, more resilient communities by taking actions to reduce risk and by committing resources to lessen the effects of hazards on the people and property.

5.2 Hazard Mitigation Goals and Objectives

Mitigation goals are guidelines that represent what the community wants to accomplish through the mitigation plan. Goals are broad statements that represent a long-term, community-wide vision. The Planning Team reviewed the goals and objectives from the previous MJHMP and determined which best met their jurisdiction's mitigation requirements. The result was a new streamlined set of unified hazard mitigation goals listed in **Table 5-1**. The goals support addressing the hazards in the General Plans and reflect input provided by stakeholders and the public. The jurisdictions worked with their Planning Departments to align these goals, and their mitigation strategies, with their General Plan Safety Elements.

Table 5-1: Hazard Mitigation Goals

2021 Goals
Goal 1: Protect life, property, and reduce potential injuries from natural, technological, and human-caused disasters – with particular emphasis on reducing the threat and impacts of wildland fires and post-wildfire flooding/debris flows.
Goal 2: Improve public understanding of, and support for, hazard mitigation measures
Goal 3: Promote disaster resistance for the natural, existing, and future built environment.
Goal 4: Strengthen partnerships and collaboration to implement hazard mitigation activities.
Goal 5: Enhance the ability of the County, and the jurisdictions within it, to effectively and immediately respond to disasters.

5.3 Capabilities

Federal regulations require local hazard mitigation plans identify goals for reducing long-term vulnerabilities to the identified hazards in the planning area (Section 201.6(c)(3)(i)). Elements of this requirement include a description of capabilities that support mitigation activities.

FEMA REGULATION CHECKLIST: CAPABILITY ASSESSMENT

44 CFR § 201.6(c)(3): – The plan must include mitigation strategies based on the jurisdiction's "existing authorities, policies, programs and resources, and its ability to expand on and improve these existing tools."

Elements
C1. Does the plan document the jurisdiction's existing authorities, policies, programs and resources, and its ability to expand on and improve these existing policies and programs? 44 CFR § 201.6(c)(3).
C2. Does the Plan address the jurisdiction's participation in the NFIP and continued compliance with NFIP requirements, as appropriate? 44 CFR § 201.6(c)(3)(ii).

Source: FEMA, *Local Mitigation Planning Handbook Review Tool,* March 2013.

A capability assessment was conducted of the MJHMP participating jurisdictions' authorities, policies, programs, and resources. From the assessment, goals and mitigation actions were developed. Capabilities for the County and other participating jurisdictions are described in detail below. The Yes/No column denotes if a particular jurisdiction has that specific capability.

5.3.1 Planning and Regulatory Capabilities

These include local ordinances, policies and laws to manage growth and development. Examples include land use plans, capital improvement plans, transportation plans, emergency preparedness and response plans, building codes and zoning ordinances. Based upon the specific authorities contained in each of these planning and regulatory capabilities, they may be used to support mitigation activities.

Table 5-2: Planning and Regulatory Capability Assessment for Coconino County

PLANS	**Yes/No Year**	**Does the plan address hazards? Does the plan ID project to include in the mitigation strategy? Can the plan be used to implement mitigation actions?**
Capital Improvements Plan	Yes	2015. Yes, it addresses all hazards, identifies projects and includes mitigation strategies, and can be used to implement mitigation actions.
Community Wildfire Protection Plan	Yes	Yes, these plans address hazards, and provide for identification of values, risks and threats, identify projects to include in the mitigation strategy, community preparedness and protection capability, and implementation and monitoring actions. CWPP's currently exist for Tusayan (2013), Blue Ridge area and Mogollon Rim, Greater Flagstaff Area. This plan also covers communities in the Coconino and Kaibab National Forests of Coconino County.
Comprehensive/Master Plan	Yes	Yes, it addresses all hazards, identifies projects and includes mitigation strategies, and can be used to implement mitigation actions. It is currently being updated.
Continuity of Operations Plan	Yes	Yes, it addresses all hazards and is always in a state of being updated.
Economic Development Plan	Yes	No, the plan does not address hazards. However, the plan includes Action Initiative Items, including a Land and Natural Environment category to which mitigation actions can be added.
Emergency Operations Plan	Yes	Yes, it addresses all hazards. Yes, it can be used to implement mitigation actions via application of applicable ESF Annexes.
Stormwater Management Plan	Yes	Yes, it addresses all hazards, identifies projects in the mitigation strategy, and can be used to implement mitigation actions. This is included in County ordinances.
Transportation Plan	Yes	Yes, it addresses all hazards, identifies projects and includes mitigation strategies, and can be used to implement mitigation actions.
How can these capabilities be expanded and improved to reduce risk?		Plan reviews and updates will include consideration of the hazards identified in the MJHMP including new hazards in the 2021 update.
BUILDING CODES, PERMITTING, INSPECTIONS	**Yes/No**	**What type of codes? Are codes adequately enforced?**
Building Codes	Yes	The 2012 IBC Code Suite. Yes, codes are adequately enforced.
Site plan review requirements	Yes	Yes, codes are adequately enforced.

How can these capabilities be expanded and improved to reduce risk?		Codes and requirements will be reviewed based on developing trends in identified hazards and mitigation measures that can make them more effective at preventing losses.
LAND USE PLANNING & ORDINANCES	**Yes/No**	**Is the ordinance effective for reducing hazard impacts?** **Is the ordinance adequately administered and enforced?**
Floodplain ordinance	Yes	Yes, 2013 updated 2019.
Subdivision ordinance	Yes	Yes, 2013 updated 2018.
Zoning ordinance	Yes	Yes, 2015 Updated 2019.
How can capabilities be expanded and improved to reduce risk?		Planning and land use regulations will be reviewed based on developing trends in identified hazards and mitigation measures that can make them more effective at preventing losses.

Table 5-3: Planning and Regulatory Capability Assessment for Flagstaff

PLANS	**Yes/No Year**	**Does the plan address hazards?** **Does the plan ID projects to include in the mitigation strategy?** **Can the plan be used to implement mitigation actions?**
Capital Improvements Plan	Yes/Five (5) year plan updated annually	Yes to all.
(Greater Flagstaff Area) Community Wildfire Protection Plan	Yes/Updated in 2012	Yes to all.
Comprehensive/Master Plan (Flagstaff Regional Plan)	Yes/2018	Yes, No, No
Continuity of Operations Plan	Yes/2021	Yes, Yes, Yes
Economic Development Plan	Yes/2014	Yes, No, No
Emergency Operations Plan	Yes/2013	Yes, No, Yes
Stormwater Management Plan	Yes/Annually	Yes to all.
Transportation Plan	Yes/2014	Yes to all.
How can these capabilities be expanded and improved to reduce risk?		Plan reviews and updates will include consideration of the hazards identified in the MJHMP including new hazards in the 2021 update.
BUILDING CODES, PERMITTING, INSPECTIONS	**Yes/No**	**What type of codes?** **Are codes adequately enforced?**

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Building Codes	Yes	2018 International Building Code, 2018 International Plumbing Code, 2018 Int'l Fuel Gas Code, 2018 International Residential Code, 2018 International Mechanical Code, 2018 International Existing Building Code, 2018 International Energy Conservation Code, 2018 International Swimming Pool & Spa Code, 2018 International Solar Energy Provisions, 2017 NFPA70/National Electric Code, ICC A117.1-2017 Accessible and Usable Buildings & Facilities, 1997 Uniform Code for the Abatement of Dangerous Buildings, 1997 Uniform Administrative Code, 1997 Uniform House Code. Codes are adequately and appropriately enforced though the Code Enforcement Section.
Site plan review requirements	Yes	
COF Wildland Urban Interface Code	Yes	Yes, codes adopted by the city council in 2008
How can these capabilities be expanded and improved to reduce risk?		Codes and requirements will be reviewed based on developing trends in identified hazards and mitigation measures that can make them more effective at preventing losses.
LAND USE PLANNING & ORDINANCES	**Yes/No**	**Is the ordinance effective for reducing hazard impacts?** **Is the ordinance adequately administered and enforced?**
Floodplain ordinance	Yes	Yes to both.
Subdivision ordinance	Yes	Yes to both.
Zoning ordinance	Yes	Yes to both.
How can these capabilities be expanded and improved to reduce risk?		Plan reviews and updates will include consideration of the hazards identified in the MJHMP including new hazards in the 2021 update.

Table 5-4: Planning and Regulatory Capability Assessment for Fredonia

PLANS	Yes/No Year	Does the plan address hazards? Does the plan ID projects to include in the mitigation strategy? Can the plan be used to implement mitigation actions?
Capital Improvements Plan	No	N/A
Community Wildfire Protection Plan	No	N/A
Comprehensive/Master Plan	Yes, 1994	General Plan is in process of being updated.
Continuity of Operations Plan	No	N/A
Economic Development Plan	No	N/A
Emergency Operations Plan	Yes, 1986	Yes to all
Stormwater Management Plan	No	N/A
Transportation Plan	No	N/A

How can these capabilities be expanded and improved to reduce risk?		Plan reviews and updates will include consideration of the hazards identified in the MJHMP including new hazards in the 2021 update.
BUILDING CODES, PERMITTING, INSPECTIONS	**Yes/No**	**What type of codes?** **Are codes adequately enforced?**
Building Codes	Yes	Town Code Chapter 151.
Site plan review requirements	Yes	Town Code Chapter 153.
How can these capabilities be expanded and improved to reduce risk?		Codes and requirements will be reviewed based on developing trends in identified hazards and mitigation measures that can make them more effective at preventing losses.
LAND USE PLANNING & ORDINANCES		**Is the ordinance effective for reducing hazard impacts?** **Is the ordinance adequately administered and enforced?**
Floodplain ordinance	Yes	Yes to both.
Subdivision ordinance	Yes	Yes to both.
Zoning ordinance	Yes	Yes to both.
How can these capabilities be expanded and improved to reduce risk?		Plan reviews and updates will include consideration of the hazards identified in the MJHMP including new hazards in the 2021 update.

Table 5-5: Planning and Regulatory Capability Assessment for Page

PLANS	**Yes/No Year**	**Does the plan address hazards?** **Does the plan ID projects to include in the mitigation strategy?** **Can the plan be used to implement mitigation actions?**
Capital Improvements Plan	Yes	No, No, No
Community Wildfire Protection Plan	No	N/A
Comprehensive/Master Plan	No	N/A
Continuity of Operations Plan	Yes	Yes, No, Yes
Economic Development Plan	Yes	No, No, No
Emergency Operations Plan	Yes	Yes, No, Yes
Stormwater Management Plan	Yes	No, No, No
Transportation Plan	Yes	No, No, No
How can these capabilities be expanded and improved to reduce risk?		Plan reviews and updates will include consideration of the hazards identified in the MJHMP including new hazards in the 2021 update.
BUILDING CODES, PERMITTING, INSPECTIONS	**Yes/No**	**What type of codes?** **Are codes adequately enforced?**

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Building Codes	Yes	2018 IBC, IRC, IPC, IMC, IFC, 2017 National Electric Code, 2020 City Code, Yes
Site plan review requirements	Yes	Planning and Zoning Ordinance, Yes
How can these capabilities be expanded and improved to reduce risk?		Codes and requirements will be reviewed based on developing trends in identified hazards and mitigation measures that can make them more effective at preventing losses.
LAND USE PLANNING & ORDINANCES	**Yes/No**	**Is the ordinance effective for reducing hazard impacts?** **Is the ordinance adequately administered and enforced?**
Floodplain ordinance	Yes	Yes to both.
Subdivision ordinance	Yes	Yes to both.
Zoning ordinance	Yes	Yes to both.
How can these capabilities be expanded and improved to reduce risk?		Plan reviews and updates will include consideration of the hazards identified in the MJHMP including new hazards in the 2021 update.

Table 5-6: Planning and Regulatory Capability Assessment for Tusayan

PLANS	**Yes/No Year**	**Does the plan address hazards?** **Does the plan ID projects to include in the mitigation strategy?** **Can the plan be used to implement mitigation actions?**
Capital Improvements Plan	Yes	Yes to all. Capital Improvements budget that addresses drainage and street improvements, as well as monies to assist with grant for wildland fire mitigation.
Community Wildfire Protection Plan	Yes, 2014	Yes to all. Tusayan Fire District.
Comprehensive/Master Plan	Yes, 2014	Yes to all. The town adopted a General Plan in 2014 (due for updates).
Continuity of Operations Plan	No	N/A
Economic Development Plan	No	Policies noted in General Plan.
Emergency Operations Plan	Yes	Yes to all. Included within the current Coconino County Emergency Operations Plan.
Stormwater Management Plan	Yes	Yes to all. Included within the current County and the Grand Canyon National Park Airport operated by ADOT, has a storm water management plan unique to the airport facility.
Transportation Plan	Yes	General Plan has a transportation element which can be used to aid in mitigation actions, but no plan to address specific hazards (due for updates).
BUILDING CODES, PERMITTING, INSPECTIONS	**Yes/No**	**What type of codes?** **Are codes adequately enforced?**
Building Codes	No	Yes to all. Current application of IBC 2006, and in the process of updating to the 2012 IBC's.
Site plan review requirements	Yes	Yes to all. Willdan & Woodson Engineering Firms fulfill these needs.

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LAND USE PLANNING & ORDINANCES		Is the ordinance effective for reducing hazard impacts? Is the ordinance adequately administered and enforced?
Floodplain ordinance	Yes	Tusayan is included in the Coconino County ordinance of 2013.
Subdivision ordinance	No	N/A
Zoning ordinance	Yes	Adopted on December 5, 2012 and in the process of updating.
How can capabilities be expanded and improved to reduce risk?		Town staff will review and draft policies, plans and other documents (to better address hazard mitigation strategies) and present to leadership for review. Town staff will identify areas within their regulations to increase a greater level of enforcement and to implement projects and practices to reduce risks for hazards.

Table 5-7: Planning and Regulatory Capability Assessment for Williams

PLANS	Yes/No Year	Does the plan address hazards? Does the plan ID projects to include in the mitigation strategy? Can the plan be used to implement mitigation actions?
Capital Improvements Plan	Yes 2008	Yes, it addresses all hazards, identifies projects and includes mitigation strategies, and can be used to implement mitigation actions.
Community Wildfire Protection Plan	Yes	WFAC
Comprehensive/Master Plan	Yes	Yes, it addresses all hazards, identifies projects and includes mitigation strategies, and can be used to implement mitigation actions. It is currently being updated.
Continuity of Operations Plan	No	N/A
Economic Development Plan	Yes/2013	
Emergency Operations Plan	No	Uses the County Emergency Operations Plan.
Stormwater Management Plan	Yes/2009	Yes, it addresses all hazards, identifies projects in the mitigation strategy, and can be used to implement mitigation actions. This is included in county ordinances.
Transportation Plan	Yes/2008	Yes, it addresses all hazards, identifies projects and includes mitigation strategies, and can be used to implement mitigation actions.
How can these capabilities be expanded and improved to reduce risk?		Plan reviews and updates will include consideration of the hazards identified in the MJHMP including new hazards in the 2021 update.
BUILDING CODES, PERMITTING, INSPECTIONS	**Yes/No**	**What type of codes?** **Are codes adequately enforced?**
Building Codes	Yes/2008	2008, IBC, IRC, NEC, IFC, Yes
Site plan review requirements	Yes	Yes, codes are adequately enforced.

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How can these capabilities be expanded and improved to reduce risk?		Codes and requirements will be reviewed based on developing trends in identified hazards and mitigation measures that can make them more effective at preventing losses.
LAND USE PLANNING & ORDINANCES		**Is the ordinance effective for reducing hazard impacts?** **Is the ordinance adequately administered and enforced?**
Floodplain ordinance	Yes/2008	Yes to both.
Subdivision ordinance	Yes/2008	Yes to both.
Zoning ordinance	Yes/2008	Yes
How can these capabilities be expanded and improved to reduce risk?		Plan reviews and updates will include consideration of the hazards identified in the MJHMP including new hazards in the 2021 MJHMP update.

5.3.2 Administrative and Technical Capabilities

These capabilities include community (public and private) staff and their skills and tools which can be used for mitigation planning and implementation. This capability includes engineers, planners, emergency managers, GIS analysts, building inspectors, grant writers, and floodplain managers. Small communities may rely on other government entities such as counties or special districts for resources. Based upon the specific expertise contained in each of these administrative and technical capabilities, they may be used to support mitigation activities.

Table 5-8: Administrative and Technical Capability Assessment for Coconino County

ADMINISTRATION	**Yes/No**	**Describe capability.** **Is coordination effective?**
Mutual aid agreements	Yes	Yes, the County participates in the AZMAC (Arizona Mutual Aid Compact).
Planning Commission	Yes	They are effective in communication with the Board of Supervisors.
TECHNICAL STAFF	**Yes/No FT/PT**	**Is staff trained on hazards and mitigation?** **Is coordination between agencies and staff effective?** **Have skills/expertise been used to assess/mitigate risk in the past?**
Building Official	Yes	Yes, to all.
Community Planner	Yes	Yes, to all.
Emergency Manager	Yes	Yes, to all.
Engineer	Yes	Yes, to all.
Floodplain Manager/Administrator	Yes	Yes, to all.
GIS/HAZUS Coordinator	Yes	Yes, to all.

How can capabilities be expanded and improved to reduce risk?	By continuing to utilize and seek improved methods for including the necessary technical and planning staff in the development and updates of emergency operations plans, financial planning and mitigation planning efforts. An important component is the use of trained grant writers with the knowledge and skill sets to research and apply for federal funding opportunities.

Table 5-9: Administrative and Technical Capability Assessment for Flagstaff

ADMINISTRATION	**Yes/No**	**Describe capability.** **Is coordination effective?**
Mutual aid agreements	Yes	Agreements are in place with multiple Jurisdictions; The COF joined AZMAC and revised the Greater Flagstaff Fire Service Mutual Aid IGA. Agreements are effective in assisting with mitigation.
Planning (and Zoning) Commission	Yes	Advisory board to the council on matters related to growth and physical development of the city; conducts public hearings on amendments to the zoning map, and public meetings on preliminary subdivision plans.
Board of Adjustment	Yes	Hears and decides appeals of staff determinations of the Zoning Code.
TECHNICAL STAFF	**Yes/No** **FT/PT**	**Is staff trained on hazards and mitigation?** **Is coordination between agencies and staff effective?** **Have skills/expertise been used to assess/mitigate risk in the past?**
Building Official	Yes/FT	Yes to all.
Planning Director (and Staff)	Yes/FT	Yes to all.
Emergency Manager	Yes/PT	Yes to all.
City Engineer (and Staff)	Yes/FT	Yes to all.
Floodplain Manager/Administrator	Yes/FT	Yes to all.
GIS/HAZUS Coordinator	Yes/FT	No, Yes, Yes
Grant writer	Yes/FT	Yes to all. (Disaster Recovery Management also)
Firewise Specialist	Yes/FT	Yes to all.
How can capabilities be expanded and improved to reduce risk?		Additional training of staff in hazard mitigation and financial resources to pursue mitigation projects.

Table 5-10: Administrative and Technical Capability Assessment for Fredonia

ADMINISTRATION	**Yes/No**	**Describe capability.** **Is coordination effective?**
Mutual aid agreements	Yes	With Kane county, help when needed.
Planning Commission	Yes	Planning and Zoning meet monthly to ensure Code is followed for building and land usage.

TECHNICAL STAFF	Yes/No FT/PT	Is staff trained on hazards and mitigation? Is coordination between agencies and staff effective? Have skills/expertise been used to assess/mitigate risk in the past?
Building Official	Yes/ PT	Trained, has skills.
Community Planner	No	Town manager, trained, good coordination, has skills.
Emergency Manager	Yes/ft	Town Manager/ Deputy Marshal, trained, coordination effective, has skills.
Engineer	No	Public Works Director, coordination is effective, has training, has skills.
Floodplain Manager/Administrator	Yes/ FT	Public Works Director, coordination is effective, has training, has skills.
GIS/HAZUS Coordinator	No	N/A
Grant writer	Yes	No mitigation training, coordination is effective, no.
How can capabilities be expanded and improved to reduce risk?		Additional training of staff in hazard mitigation and financial resources to pursue mitigation projects.

Table 5-11: Administrative and Technical Capability Assessment for Page

ADMINISTRATION	Yes/No	Describe capability. Is coordination effective?
Mutual aid agreements	Yes	Provide assistance to local agencies. Yes/
Planning Commission	Yes	Voting and public input. Yes.
TECHNICAL STAFF	**Yes/No FT/PT**	**Is staff trained on hazards and mitigation? Is coordination between agencies and staff effective? Have skills/expertise been used to assess/mitigate risk in the past?**
Building Official	FT	Yes to all.
Community Planner	FT	Yes to all.
Emergency Manager	FT	Yes to all.
Engineer	FT	Yes to all.
Floodplain Manager/Administrator	Yes	Yes to all.
GIS/HAZUS Coordinator	No	N/A
Grant writer	No	N/A
How can capabilities be expanded and improved to reduce risk?		Additional training of staff in hazard mitigation and financial resources to pursue mitigation projects.

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Table 5-12: Administrative and Technical Capability Assessment for Tusayan

ADMINISTRATION	Yes/No	Describe capability. Is coordination effective?
Mutual aid agreements	Yes	Coconino County, Kaibab National Forest, National Park Service, ADOT and others.
Planning and Zoning Commission	Yes	Planning Commission established in 2012 with Zoning Ordinance
TECHNICAL STAFF	**Yes/No FT/PT**	**Is staff trained on hazards and mitigation? Is coordination between agencies and staff effective? Have skills/expertise been used to assess/mitigate risk in the past?**
Building Official	Yes	Yes to all. Willdan performs building services under the direction of the Interim Town Engineer
Community Planner	Yes	Yes to all. Willdan performs planning functions under the direction of the Interim Town Engineer.
Emergency Manager	Yes	Yes to all. The town manager works in consultation with the County Emergency Management.
Engineer	Yes	Yes to all. Interim town engineer.
Floodplain Manager/Administrator	Yes	Yes to all. Tusayan included within the County agreement.
GIS/HAZUS Coordinator	Yes	Yes to all. Included within the County agreement.
Grant writer	Yes	Yes to all. Town manager and clerk perform grant writing functions.
How can capabilities be expanded and improved to reduce risk?		Making leadership and employees aware of the town's Hazard Mitigation Plan and having employees take advantage of County and state training. Address the CERT team concept with the County Sherriff's Office to assist community with any hazard.

Table 5-13: Administrative and Technical Capability Assessment for Williams

ADMINISTRATION	Yes/No	Describe capability. Is coordination effective?
Mutual aid agreements	Yes	Communications, Inner OP, DPS, SO (EOC), Yes
Planning Commission	Yes	Implement new ordinances, yes
TECHNICAL STAFF	**Yes/No FT/PT**	**Is staff trained on hazards and mitigation? Is coordination between agencies and staff effective? Have skills/expertise been used to assess/mitigate risk in the past?**
Building Official	Yes/FT	Yes to all.
Community Planner	Yes/FT	Yes to all.
Emergency Manager	Yes/FT	Yes to all.
Engineer	Yes	Off site.

Floodplain Manager/Administrator	Yes/FT	Yes to all.
GIS/HAZUS Coordinator	No	N/A
Grant writer	Yes/No	Williams PD, not the city.
How can capabilities be expanded and improved to reduce risk?		By continuing to utilize and seek improved methods for including the necessary technical and planning staff in the development and updates of emergency operations plans, financial planning and mitigation planning efforts. An important component is the use of trained grant writers with the knowledge and skill sets to research and apply for federal funding opportunities.

5.3.3 Financial Capabilities

Table 5-14 contains a list of administrative and financial capabilities available to the Coconino County. Based upon procedures for each resource, these financial capabilities may be used to support mitigation activities.

Table 5-14: Financial Capability Assessment for Coconino County

FINANCIAL	Yes/No	Has the funding resource been used in past and for what type of activities? Could the resource be used to fund future mitigation actions?
Hazard Mitigation Grant Program (HMPG)	Yes	
Pre-Disaster Mitigation grant program (PDM)	Yes	
Flood Mitigation Assistance grant program (FMA)	Yes	
Capital improvements project funding	Yes	Funding source has been used in past for roads and flood control and could be used for future mitigation actions.
Community Development Block Grant	Yes	This source has been used for low income housing rehabilitation and could be used for future mitigation actions.
Authority to levy taxes for specific purposes	Yes	Yes, examples include the recently passed Proposition 403 (road maintenance sales tax), Flood Control Tax was upgraded in 2011, and the 2012 Public Health District tax. These sources of revenue could be used for future mitigation actions.
Impact fees for new development	No	N/A
Incur debt through special tax bond	Yes	Yes, an example is the use by facilities for courthouse remodel. This source could be used for future mitigation actions.
Incur debt through general obligation bonds	Yes	This has not been used in the past but that is a possibility for future needs.
How can capabilities be expanded and improved to reduce risk?		Apply for FEMA program grants. Develop new and creative ways to acquire funding such as new legislation proposals to open the doors for improved funding opportunities.

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Table 5-15: Financial Capability Assessment for Flagstaff

FINANCIAL	Yes/No	Has the funding resource been used in past and for what type of activities? Could the resource be used to fund future mitigation actions?
Hazard Mitigation Grant Program (HMPG)	Yes	
Pre-Disaster Mitigation grant program (PDM)	Yes	
Flood Mitigation Assistance grant program (FMA)	Yes	
Capital improvements project funding	Yes	Yes, transportation improvement projects, Stormwater/winter storm drainage projects, water supply and storage protection, fire prevention/protection, Yes
Community Development Block Grant	Yes	No, Possibly
Authority to levy taxes for specific purposes	Yes	Yes, Yes
Impact fees for new development	Yes	Yes, Limited to public safety Equipment and facilities, No
Incur debt through special tax bond	Yes	Yes, public safety radio system bond, Flagstaff Watershed Protection Program (FWPP) bond, road repair and street safety tax, Yes
Incur debt through general obligation bonds	Yes	Yes, forest fuels treatments, $16.5M in street/utility improvements, $42M for municipal services maintenance facility, Yes
How can capabilities be expanded and improved to reduce risk?		Apply for FEMA program grants. Develop new and creative ways to acquire funding such as new legislation proposals to open the doors for improved funding opportunities.

Table 5-16: Financial Capability Assessment for Freedonia

FINANCIAL	Yes/No	Has the funding resource been used in past and for what type of activities? Could the resource be used to fund future mitigation actions?
Hazard Mitigation Grant Program (HMPG)	Yes	
Pre-Disaster Mitigation grant program (PDM)	Yes	
Flood Mitigation Assistance grant program (FMA)	Yes	
Capital improvements project funding	Yes	Funding sources previously used for infrastructure could be used for mitigation.
Community Development Block Grant	Yes	Infrastructure, possibly.
Authority to levy taxes for specific purposes	No	No town property tax.
Impact fees for new development	Yes	No impact fees currently, just hookup fees for utilities.
Incur debt through special tax bond	No	N/A
Incur debt through general obligation bonds	Yes	Not in use currently.

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How can capabilities be expanded and improved to reduce risk?	Apply for FEMA program grants. Develop new and creative ways to acquire funding such as new legislation proposals to open the doors for improved funding opportunities.

Table 5-17: Financial Capability Assessment for Page

FINANCIAL	Yes/No	Has the funding resource been used in past and for what type of activities? Could the resource be used to fund future mitigation actions?
Hazard Mitigation Grant Program (HMPG)	Yes	
Pre-Disaster Mitigation grant program (PDM)	Yes	
Flood Mitigation Assistance grant program (FMA)	Yes	
Capital improvements project funding	Yes	Yes, capital needs of the city, primarily Airport; yes, with council approval.
Community Development Block Grant	Yes	Yes, various community needs; no, usually the funding cycle is every four (4) years and funds are specifically allocated from the beginning of the cycle.
Authority to levy taxes for specific purposes	Yes	Yes, to pay off existing bond debt; with council approval and direction.
Impact fees for new development	No	N/A
Incur debt through special tax bond	Yes	Yes, to construct city facilities; yes, with council direction.
Incur debt through general obligation bonds	No	N/A
How can capabilities be expanded and improved to reduce risk?		Apply for FEMA program grants. Develop new and creative ways to acquire funding such as new legislation proposals to open the doors for improved funding opportunities.

Table 5-18: Financial Capability Assessment for Tusayan

FINANCIAL	Yes/No	Has the funding resource been used in past and for what type of activities? Could the resource be used to fund future mitigation actions?
Capital improvements project funding	Yes	Yes to both questions. Town does have a capital improvements budget
Community Development Block Grant	No	N/A
Authority to levy taxes for specific purposes	Yes	Yes to both questions.
Impact fees for new development	No	N/A
Incur debt through special tax bond	No	N/A
Incur debt through general obligation bonds	No	N/A
How can capabilities be expanded and improved to reduce risk?		Continue to identify and budget for specific improvements listed in the MJHMP as well as those identified by the community in future planning efforts.

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Table 5-19: Financial Capability Assessment for Williams

FINANCIAL	Yes/No	Has the funding resource been used in past and for what type of activities? Could the resource be used to fund future mitigation actions?
Hazard Mitigation Grant Program (HMPG)	Yes	
Pre-Disaster Mitigation grant program (PDM)	Yes	
Flood Mitigation Assistance grant program (FMA)	Yes	
Capital improvements project funding	Yes	Yes, flood mitigation
Community Development Block Grant	Yes	Water infrastructure, housing
Authority to levy taxes for specific purposes	No	N/A
Impact fees for new development	No	N/A
Incur debt through special tax bond	No	N/A
Incur debt through general obligation bonds	No	N/A
How can capabilities be expanded and improved to reduce risk?		Apply for FEMA program grants. Increase of city financial resources, IGA's.

5.3.4 Education and Outreach Capabilities

Table 5-20 lists financial and public outreach capabilities. These capabilities include programs such as fire safety programs, hazard awareness campaigns, public information or communications offices. Education and outreach capabilities can be used to inform the public on current and potential mitigation activities.

Table 5-20: Education and Outreach Capability Assessment for Coconino County

PROGRAM / ORGANIZATION	Access / Eligibility (Yes/No)	Describe program/organization and how it relates to disaster resilience and mitigation. Could the program/organization help implement future mitigation activities?
County Website and Social Media (PIO/PAO Programming	Yes	The County maintains a website and accounts with Facebook, Instagram, Twitter, and YouTube. County libraries, law enforcement, and fire/rescue agencies also maintain social media accounts. These resources are regularly used to convey hazard mitigation and disaster-related information to the public, as well as develop awareness of in-person and online events. They can be used to support future mitigation activities.
Firewise Communities certification	Yes	The Flagstaff Fire Dept and the individual Fire Depts/Districts within the County work in their respective communities to establish disaster resilience. These communities include Pine Canyon, Stoneman Lake, Sherwood Forest, Munds Park, Starlight Pines, The Meadows, Lockett Ranches, Sunset Vista, Flagstaff Ranch, Continental, Linwood Heights, Kachina Village, and Forest Highland. The Community Wildfire Protection Plans also serve to establish future mitigation projects and actions to support disaster resilience.

Storm Ready certification	Yes	The County Storm Ready Certification issued through the National Weather Service is current and due for renewal in July 2021 (i.e. applies to all of the County).
Citizen groups focused on emergency preparedness, environmental protection, etc.	Yes	CERT (Community Emergency Response Team), MRC (Medical Reserve Corps), ARES (Amateur Radio Emergency Services), Faith Based organizations such as the First Baptist support group, Salvation Army, and United Way of Northern Arizona. These organizations provide First Responder Support and Emergency Management and EOC support to local communities and local government during times of disaster and preparedness training for local needs.
Public education/information programs (fire safety, household preparedness, responsible water use, etc.)	Yes No (for water use)	The County frequently addresses public information needs through a variety of mechanisms. The local government organizations utilize a well–developed and coordinated PIO group with partners from all levels of government including city, county departments. and federal and state offices. This is especially effective during times of disaster. Coconino County Emergency Management utilizes public presentations and media outlets (e.g. radio, print) to provide public outreach on emergency preparedness. The County website is a primary tool for dissemination of public information.
Public-private partnership initiatives addressing disaster-related issues	Yes	Examples of organizations for this effort include VOAD (Volunteer Organizations Active in Disaster), LEPC (Local Emergency Planning Committee) for addressing hazardous materials issues, and PFAC (Ponderosa Fire Advisory Council) which brings together local, state, and federal fire resources to enhance efforts in pursuit of a Common Operating Picture for community fire protection.
How can capabilities be expanded and improved to reduce risk?		This can be accomplished by including the organizations in our public outreach, planning, training and overall preparedness efforts and real time events.

Table 5-21: Education and Outreach Capability Assessment for Flagstaff

PROGRAM / ORGANIZATION	Access / Eligibility (Yes/No)	Describe program/organization and how it relates to disaster resilience and mitigation. Could the program/organization help implement future mitigation activities?
City Website and Social Media (PIO/PAO Programming)	Yes	The city maintains a website and accounts with Facebook and Twitter. Local libraries, law enforcement, and fire/rescue agencies also maintain social media accounts. These resources are regularly used to convey hazard mitigation and disaster-related information to the public, as well as develop awareness of in-person and online events. They can be used to support future mitigation activities.
Firewise (Fire-Adapted) Communities certification	Yes	Develops fire adapted communities; Yes, the County has 13 Firewise Communities (Pine Canyon, Stoneman Lake, Sherwood Forest, Munds Park, Starlight Pines, The Meadows, Lockett Ranches, Sunset Vista, Flagstaff Ranch, Continental, Linwood Heights, Kachina Village, and Forest Highlands)
Storm Ready certification	No	The County as a whole is certified; renewal is in July 2021
Citizen groups focused on emergency preparedness, environmental protection, etc.	Yes	Red Cross, Woods Watch, Emergency Operations Center Volunteers, Yes

DRAFT

Public education/information programs (fire safety, household preparedness, responsible water use, etc.)	Yes	Emergency notification system, stormwater public outreach, water conservation program, Firewise, city has a budget performance measurement the priority of "resiliency and preparedness efforts," Yes
Public-private partnership initiatives addressing disaster-related issues	Yes	Red Cross, Pipeline Companies, FWPP, BNSF Railroad, Northern Arizona University, Purina companies, United Way of No Arizona, and various other non-profit agencies, Flagstaff Unified School District, Flagstaff Fire Occupancy Inspection Program.
How can capabilities be expanded and improved to reduce risk?		This can be accomplished by including the organizations in our public outreach, planning, training and overall preparedness efforts and real time events.

Table 5-22: Education and Outreach Capability Assessment for Fredonia

PROGRAM / ORGANIZATION	Access / Eligibility (Yes/No)	Describe program/organization and how it relates to disaster resilience and mitigation. Could the program/organization help implement future mitigation activities?
Town Website and Social Media (PIO/PAO Programming)	Yes	The town maintains a website and a Facebook account. Local libraries, law enforcement, and fire/rescue agencies also maintain social media accounts. These resources are regularly used to convey hazard mitigation and disaster-related information to the public, as well as develop awareness of in-person and online events. They can be used to support future mitigation activities.
Firewise Communities certification	No	N/A
StormReady certification	No	N/A
Citizen groups focused on emergency preparedness, environmental protection, etc.	Yes	Local faith-based groups are involved with education for emergency preparedness and organizing volunteers when needed.
Public education/information programs (fire safety, household preparedness, responsible water use, etc.)	Yes	Marshal's Office and Fire Department offer education on emergency preparedness, Fire Safety.
Public-private partnership initiatives addressing disaster-related issues	No	None currently.
How can capabilities be expanded and improved to reduce risk?		This can be accomplished by including the organizations in our public outreach, planning, training and overall preparedness efforts and real time events.

Table 5-23: Education and Outreach Capability Assessment for Page

PROGRAM / ORGANIZATION	Access / Eligibility (Yes/No)	Describe program/organization and how it relates to disaster resilience and mitigation. Could the program/organization help implement future mitigation activities?
City Website and Social Media (PIO/PAO Programming)	Yes	The city maintains a website, as well as Facebook and YouTube accounts. Local libraries, law enforcement, and fire/rescue agencies also maintain social media accounts. These resources are

		regularly used to convey hazard mitigation and disaster-related information to the public, as well as develop awareness of in-person and online events. They can be used to support future mitigation activities.
Firewise Communities certification	No	N/A
Storm Ready certification	No	N/A
Citizen groups focused on emergency preparedness, environmental protection, etc.	No	N/A
Public education/information programs (fire safety, household preparedness, responsible water use, etc.)	Yes	Fire and life safety education, fire extinguisher training, Emergency preparedness. Yes.
Public-private partnership initiatives addressing disaster-related issues	No	N/A
How can capabilities be expanded and improved to reduce risk?		This can be accomplished by including the organizations in our public outreach, planning, training and overall preparedness efforts and real time events.

Table 5-24: Education and Outreach Capability Assessment for Tusayan

PROGRAM / ORGANIZATION	Access / Eligibility (Yes/No)	Describe program/organization and how it relates to disaster resilience and mitigation. Could the program/organization help implement future mitigation activities?
Town Website and Social Media (PIO/PAO Programming)	Yes	The town maintains a website and a Facebook account. Local libraries, law enforcement, and fire/rescue agencies also maintain social media accounts. These resources are regularly used to convey hazard mitigation and disaster-related information to the public, as well as develop awareness of in-person and online events. They can be used to support future mitigation activities.
Firewise Communities certification	No	N/A
Storm Ready certification	Yes	The County EOP and participant in NFIP. Yes, will aid in future mitigation activity.
Citizen groups focused on emergency preparedness, environmental protection, etc.	No	N/A
Public education/information programs (fire safety, household preparedness, responsible water use, etc.)	Yes	The town performs certain public information, outreach, and training programs. Tusayan Fire District performs community outreach with the schools and pre-school education and works with businesses/community groups and with entities delineated in the County EOP.
Public-private partnership initiatives addressing disaster-related issues	Yes	The town has facilitated opportunities with partners such as Coconino Emergency Management. Examples include after action response exercises, evaluating communication assets, and stakeholder training and exercises related to regional disaster related issues.
How can capabilities be expanded and improved to reduce risk?		Participating in the Update of the MJHMP has helped identify areas where the Tusayan community can improve safety and mitigate possible hazards. This will aid in identifying specific projects and

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	areas. Exercise and training will enhance partnerships, support and coordination and involvement with local resources (local state and federal). Targeted capital improvements will be essential as well.

Table 5-25: Education and Outreach Capability Assessment for Williams

PROGRAM / ORGANIZATION	Access / Eligibility (Yes/No)	Describe program/organization and how it relates to disaster resilience and mitigation. Could the program/organization help implement future mitigation activities?
City Website and Social Media (PIO/PAO Programming)	Yes	The city maintains a website. Local libraries, law enforcement, and fire/rescue agencies also maintain social media accounts. These resources are regularly used to convey hazard mitigation and disaster-related information to the public, as well as develop awareness of in-person and online events. They can be used to support future mitigation activities.
Firewise Communities certification	No	N/A
Storm Ready certification	Yes	County MJHMP
Citizen groups focused on emergency preparedness, environmental protection, etc.	No	N/A
How can capabilities be expanded and improved to reduce risk?		This can be accomplished by including the organizations in our public outreach, planning, training, and overall preparedness efforts and real time events.

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5.3.5 National Flood Insurance Program Participation

Joining the NFIP requires the adoption of a floodplain management ordinance by jurisdictions and following established minimum standards set forth by FEMA and the State of Arizona, when developing in the floodplain. These standards require that all new buildings and substantial improvements to existing buildings will be protected from damage by the 100-year flood, and that new floodplain development will not aggravate existing flood problems or increase damage to other properties. As a participant in the NFIP, communities also benefit from having Flood Insurance Rate Maps (FIRM) that map identified flood hazard areas and can be used to assess flood hazard risk, regulate construction practices and set flood insurance rates.

If a community adopts and enforces a floodplain management ordinance to reduce future flood risk to new construction in floodplains, the Federal Government will make flood insurance available within the community as a financial protection against flood losses. This insurance is designed to provide an insurance alternative to disaster assistance to reduce the escalating costs of repairing damage to buildings and their contents caused by floods.

The County and four of the five incorporated jurisdictions currently participate in the NFIP. **Table 5-26** summarizes their NFIP status and statistics.

Table 5-26: NFIP Status for Coconino County

Jurisdiction	Comm ID	NFIP Entry Date	Map Date (DFIRM)	# of Policies	Total Coverage	Floodplain Management Role
Coconino County	040019	11/16/1983	09/03/2010	361	$110,901,100	Provides floodplain management for the Unincorporated County. Participant in the Coconino County Flood Control District (CCFCD).
Flagstaff	040020	1/19/1983	09/03/2010	648	$185,592,000	Provides in-house floodplain management. Participant of the CCFCD.
Fredonia	040021	05/17/1982	09/03/2010	3	$675,000	Provides in-house floodplain management. Participant of the CCFCD.
Page	040113	07/11/2011	09/03/2010	1	$210,000	Provides in-house floodplain management. Participant of the CCFCD.
Tusayan	N/A	N/A	09/03/2010	N/A	N/A	Relinquished to CCFCD in 2019.
Williams	040027	12/15/1983	09/03/2010	32	$9,753,100	Provides in-house floodplain management. Participant of the CCFCD

FEMA NFIP Policy Information by State and Community, 12/31/2020. https://nfipservices.floodsmart.gov/sites/default/files/NFIP_Policy-Information-by-State_20201231.xlsx
Participation – FEMA's Community Status Book Report, 9/3/2020. Policy statistics (current as of 11/11/2020) http://www.fema.gov/policy-claim-statistics-flood-insurance/policy-claim-statistics-flood-insurance/policy-claim-13
Town of Tusayan, Arizona Ordinance No. 2019-02. https://tusayan-az.gov/wp-content/uploads/2019/12/Ordinance-2019-02.pdf

Continued compliance with NFIP requirements is listed for each jurisdiction>

Coconino County: County Code SECTION 13.6: FPM--FLOODPLAIN MANAGEMENT OVERLAY ZONE - The Special Flood Hazard Areas identified by the Federal Insurance Administration (FIA) of the Federal Emergency Management Agency (FEMA) in a scientific and engineering report entitled "The Flood Insurance Study (FIS) for Coconino County, dated September 3, 2010 with accompanying Flood Insurance Rate Maps (FIRMs), dated September 3, 2010 and all subsequent amendments and/or revisions, are hereby adopted by reference and declared to be a part of this Ordinance.

This Flood Insurance Study and attendant mapping is the minimum area of applicability of this Ordinance and may be supplemented by studies for other areas which allow implementation of this Ordinance and which are recommended to the Floodplain Board by the Floodplain Administrator. The Board, within its area of jurisdiction shall delineate (or may by rule require developers of land to delineate) for areas where development is ongoing or imminent, and thereafter as development becomes imminent, Floodplains consistent with the criteria developed by the Federal Emergency Management Agency and the Director of Water Resources. The FIS and FIRMs are on file at the Department of Community Development, 2500 N. Fort Valley Road, Flagstaff

Flagstaff: City Code CHAPTER 12-01 FLOOD PLAIN REGULATIONS - These floodplain management regulations of the City of Flagstaff are hereby amended by the addition thereto of the regulations of the National Flood Insurance Program as they may from time to time be amended.

In accordance with 44 CFR Ch. 1, Part 60, Subpart A, any state or local floodplain management regulations, including the regulations set forth in these regulations, which are more restrictive than the minimum criteria set forth in 44 CFR shall take precedence.

Fredonia: City Code 150.01 FLOOD DAMAGE PREVENTION REGULATIONS ADOPTED BY REFERENCE

Page: City Code CHAPTER 153: FLOODPLAIN MANAGEMENT
The areas of special flood hazard identified by the Federal Emergency Management Agency in a scientific and engineering report entitled "The Flood Insurance Study (FIS) for Coconino County, Arizona and Incorporated Areas" dated September 3, 2010, with accompanying Flood Insurance Rate Maps (FIRMs) dated September 3, 2010, and all subsequent amendments and/or revisions, are hereby adopted by reference and declared to be a part of this chapter.

This FIS and attendant mapping is the minimum area of applicability of this chapter and may be supplemented by studies for other areas which allow implementation of this chapter and which are recommended to the Floodplain Board by the Floodplain Administrator. The Floodplain Board, within its area of jurisdiction, shall delineate (or may, by rule, require developers of land to delineate) for areas where development is ongoing or imminent, and thereafter as development becomes imminent, floodplains consistent with the criteria developed by the Federal Emergency

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Management Agency and the Director of the Arizona Department of Water Resources. The FIS and FIRM panels are on file at the city hall.

Williams: City Code CHAPTER 155: FLOOD DAMAGE PREVENTION
The areas of special flood hazard identified by the Federal Emergency Management Agency in a scientific and engineering report entitled "The Flood Insurance Study (FIS) for Coconino County", dated 9-29-2006, with accompanying Flood Insurance Rate Maps (FIRMs) dated 9-29-2006, and all subsequent amendments and/or revisions, are hereby adopted by reference and declared to be a part of this chapter.

This FIS and attendant mapping are the minimum area of applicability of this chapter and may be supplemented by studies for other areas which allow implementation of this chapter and which are recommended to the Floodplain Board by the Floodplain Administrator. The Floodplain Board, within its area of jurisdiction, shall delineate (or may, by rule, require developers of land to delineate) for areas where development is ongoing or imminent, and thereafter as development becomes imminent, floodplains consistent with the criteria developed by the Federal Emergency Management Agency and the Director of the state's Department of Water Resources.

Repetitive Loss Properties:
According to FEMA, there are 17 repetitive loss (RL) properties are located in the planning area. Of these, 12 are single family dwellings. The remainder are non-residential. Fifteen of the properties are located in Sedona.

These NFIP-insured properties have experienced multiple flood losses since 1978. RL properties demonstrate a track record of repeated flooding for a certain location and are one element of the vulnerability analysis. RL properties are also important to the NFIP, since structures that flood frequently put a strain on the National Flood Insurance Fund.

5.4 Mitigation Actions/Projects and Implementation Strategy

The following section contains the status of mitigation actions from the previous MJHMP. It also provides for ongoing mitigation actions from the 2015 plan and the new mitigation action for this MJHMP.

5.4.1 Previous Mitigation Actions / Projects Assessment

FEMA REGULATION CHECKLIST: PLAN REVIEW AND REVISION

Progress in Local Mitigation Efforts

44 CFR § 201.6(c)(d)(3): "A local jurisdiction must review and revise its plan to reflect . . . progress in local mitigation efforts . . .."

Element

D2. Was the Plan revised to reflect progress in local mitigation efforts? 44 CFR § 201.6(d)(3).

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Source: FEMA, Local Mitigation Plan Review Tool, March 2013.

The 2015 MJHMP contained mitigation actions for the County and each participating jurisdiction. Many of the mitigation actions were completed or carried out to some degree or are considered ongoing. Some of the mitigation actions were duplicative, some were better categorized as emergency preparedness or recovery activities, and others were either not addressed during the time period or were not feasible to accomplish. The tables below describe the current status of mitigation action from the previous plan.

Table 5-27: Coconino County Current Status of Previous Plan's Mitigation Actions

#	Mitigation Action	Status	Additional Details	POC/Dept.
1	Greater Flagstaff Forests Partnership: A community-based collaborative of environmental, business, land-management, emergency response, and regulatory agencies whose objectives include 1) forest restoration, 2) community protection from wildland fire, 3) sustainable, small-diameter wood utilization, and 4) adaptive management. The focus involves a multi-jurisdiction area of 180,000 acres surrounding Flagstaff, but the area of interest extends to include the nearly 900,000-acre area encompassed by the Greater Flagstaff Community Wildfire Protection Plan.	Ongoing	In 2019, GFFP's work and accomplishments were focused on the Four Forest Restoration Initiative (4FRI), Fire Adapted Communities Learning Network (FACLN), Arizona Fire Adapted Communities (AZFAC) and in cost-share grant programs that encourage and fund on-the-ground forest restoration treatments on private and non-federal land, adjacent to and complimenting project treatment areas on federal land, like the Flagstaff Watershed Protection Project (FWPP) in the Coconino National Forest. For detailed project information and annual reports for the GFFP and the 4Fri please consult: www.gffp.org/annual-reports & fs.usda.gov/4fri	Greater Flagstaff Forests Partnership; includes the 4FRI (Four Forest Restoration Initiative)
2	Flagstaff Fire Dept Wildland Fire Management Program: Housed within the Prevention Bureau, the staff lead and manage a program focused on 1) prevention, 2) preparedness, 3) hazard mitigation, 4) response, and 5) recovery. Efforts are centered on education, engineering, enforcement, and ecosystem. The Flagstaff Wildland-Urban Interface Fire Code was adopted in 2008.	Ongoing	Neil Chapman & Paul Oltrogge of the Flagstaff Fire Department oversee this very broad scoped and year-round process. Paul Oltrogge's focus is on Operations while Neil Chapman focuses on the water shed and Prevention side. This program serves to protect the watershed resources and is funded via Water Services Protection Fees.	Flagstaff Fire Department
3	Floodplain re-mapping, including any local requests for map updates to	Ongoing	Floodplain re-mapping, including any local requests for map updates to provide the community	County PW/ Flood Control

#	Mitigation Action	Status	Additional Details	POC/Dept.
	provide the community with a regulatory tool to reduce the losses to property and people for Munds Park and Kachina/Mountainaire.		with a regulatory tool to reduce the losses to property and people for Ft. Valley; Doney Park; Munds Park.	District/County Engineer
4	Develop neighborhood wildland fire assessment and rank at-risk neighborhoods with the goal to provide residents with accurate wildland fire information and motivate them to implement personal and neighborhood mitigation measures.	Ongoing	This action ties into PFAC. The County is seeking grant funding through the Building Resilience Infrastructure and Communities (BRIC) program to enhance this mitigation effort.	PFAC/County Public Works
5	Conduct roadside thinning along Forest Highway 3 (Lake Mary Road), Perkinsville Road, Old Munds Hwy, Garland Prairie, and Spring Valley Rd to reduce vulnerability to wildland fire.	Ongoing	This action ties into PFAC. The County is seeking grant funding through the Building Resilience Infrastructure and Communities (BRIC) program to enhance this mitigation effort.	PFAC/County Public Works
6	Enforcement of floodplain management requirements in accordance with the NFIP, including regulating all and substantially improved construction in floodplains to reduce losses to property and people.	Ongoing	None	County Engineer/ Community Development
7	Develop additional GIS data layers including Sedona and Winona areas to facilitate future revisions of the greater Flagstaff area Community Wildfire Protection Plan	Ongoing	Project in development.	PFAC/CCPW/ USFS Grants
8	Rural Communities Fuel Management Partnerships: An informal multi-agency alliance has been created to work with landowners to reduce fuel hazards on their property in two (2) communities located in the County. Initial complementary work was conducted on the Kaibab National Forest adjacent to the communities of Sherwood Forest Estates and Parks. Additional grant funds are continually being sought to continue the fuels reduction work on private property in other local communities including Doney Park and Williams. The Blue Ridge community is now included.	Paused	The County is now applying for new funding through the BRIC grant. Project continuation is pending additional grant funding.	Kaibab National Forest/Arizona State Land Department/ University of Arizona/County Cooperative Extension/ County fire districts
9	Establish and maintain a county component of the state GIS mapping system documenting forest treatments, hazard data, grants, etc.	Pending Further Review	This is pending further review and coordination with County GIS.	County EM

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#	Mitigation Action	Status	Additional Details	POC/Dept.
10	Winter Weather Preparedness Campaign and brochures developed for public/PSA/webpage input.	Ongoing	Winter Weather Preparedness classes are conducted as available. Community Outreach remains a high priority for the County.	County EM/ County PW
11	Educational programs and outreach to outlying areas of the County that are not currently served by any organized fire protection system with the goal to assist in organizing districts.	Pending	Pending due to lack of funding.	All fire agencies
12	Flash Flood Early Warning System for hikers in Havasupai Canyon to alert campers of life-threatening event in canyon. Feasibility study and implementation.	Partially Complete	NWS installed Weather Station upstream at well site in Supai Village Havasupai Canyon in October 2016 and then moved to well site in 2017. The Supai weather instrument has not reported since January 28, 2019, likely due to comms failure with the internet. Frequent emails with Supai facilities have not rectified the communications issue. The instrument is still physically at the well site but is not transmitting the data online.	County EM/ DEMA/NWS/ Tribal EM
13	Expand education activities to include Northern Arizona Home Show, public service announcements, public access TV, and website.	Ongoing	County Emergency Management Home Page is continually updated. EM participated in 2018 Health Fair at the Flagstaff Aquatic Center. Public Service announcements conducted for events such as the Oak Creek Canyon Siren Tests in 2017, 2018, 2019, and 2020. In the spring of 2020, Coconino County Emergency Management worked with the NAU School of Communications to develop a multimodal plan for community outreach education and engagement.	County EM
14	Commodity flow study for State Hwy 89 from Utah Boundary to Flagstaff.	Not Started	Instead, the County is currently part of a Commodity Flow Study coordinated and paid for through the Arizona State Emergency Response Commission (AZSERC) that addresses the portions of Highway 260 in the County.	County EM/ AZSERC

Table 5-28: Flagstaff Current Status of Previous Plan's Mitigation Actions

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#	Mitigation Action	Status	Additional Details	POC/Dept.
1	Red Gap Ranch Study: This is underway to evaluate the future pumping for Red Gap Ranch and potential impacts on regional stream depletion rates.	Complete	Southwest Ground Water, Inc. completed this groundwater computer modeling study in 2015.	Flagstaff Water Services Division
2	Flagstaff Well Field & Pipeline Evaluation: The city purchased Red Gap Ranch and has drilled ten (10) wells for the purpose of future water supply. The city is currently negotiating a Right of Water with ADOT along 1-40 and is performing the first phase of a feasibility study.	In progress	JACOBS Engineering is completing the Pipeline Feasibility Study. The study should be completed by the end of 2020, pending USFS approvals. The city and ADOT entered into an Intergovernmental Agreement in 2016 to establish the process and requirements necessary to obtain permits from Arizona Department of Transportation which would allow the city to place a waterline in the right-of-way of Interstate 4.	Flagstaff Water Services Division
3	Flagstaff Watershed Protection Project (also referred to as County & Dry Hills Watershed Protection Project): Approved by the voters, this project is being pursued to ensure the viability of this surface reservoir and stormwater runoff through forest treatments.	In progress	The project is 56% complete. Remaining work includes Picture Canyon, Orion Task Order, Dry Lake Hills Stewardship Contract and Shultz Tank Timber Sale (2,348 acres). All other DLH, Observatory Mesa and State Land acres are completed (5,755 acres.) Mormon Mtn/Upper Lake Mary Watershed workplans and funding TBD (2,573 acres).	Flagstaff Fire & Water Services Division
4	Upgrade existing conservation measures to provide for water during periods of drought. The city depends on surface reservoirs and groundwater for domestic water supply. Conservation efforts expand the capacity of this limited resource.	Ongoing	The Flagstaff Watershed Protection Program is underway and reclaimed water is required for large area irrigation and lawn watering restrictions are in place. A water harvesting rebate program started in 2012. Water conservation outreach was presented to all students at the fourth (4th) grade level.	Water Services Department/ Conservation Manager
5	Enhance flood mitigation efforts through channelization and detention. Due to drainage patterns and topography many areas of the city are subject to periodic flooding during snow melts and monsoon periods.	Complete	The Clay Avenue Wash Basin flood mitigation dam was completed. The Linda Vista/Rainer Street and drainage project was completed. Additional major flood reduction projects at Lockett Road, Fanning Wash, and Zuni Drive have been completed. The Road Repair and Street Safety initiative (RRSS) will address many additional flood improvements over the next few years. The Stormwater CIP budget will continue indefinitely to construct smaller flood reduction projects.	Stormwater Manager

#	Mitigation Action	Status	Additional Details	POC/Dept.
6	Plan and conduct forest treatments to reduce severity and impact of unwanted wildland fire both within and adjacent to the community. The Flagstaff area is ranked as the #1 wildland fire threatened area in the state.	Ongoing	Hazard mitigation (e.g. selective thinning, debris disposal, prescribed fire, hazard trees), response and recovery efforts – both internal city stand-alone work as well as collaborative efforts with our partners (e.g. Four Forest Restoration Initiative, Ponderosa Fire Advisory Council, Greater Flagstaff Forests Partnership, others).	Fire Department/ Wildland Fire Management Officer
7	Provide equipment and human resources sufficient to handle comprehensive road, air, and railway hazmat and mass casualty incidents. Nearly 120 trains travel through the city boundaries each day. I-40 and I-17 generate truck traffic that carry hazardous materials through the city each day.	Ongoing	Flagstaff Fire Department continues to train, equip, and respond to transportation and fixed site emergencies throughout Northern Arizona.	Fire Department/ Training Chief
8	Educate the local and regional community (including tourists) about the potential and consequences of catastrophic wildland fire and actions necessary to mitigate the risk/threat.	Complete	Prevention and preparedness programs are in place: Firewise Neighborhood and Fire-Adapted-Community programs, Annual Restrictions & Closure Plan, Annual Wildfire Preparedness Day, Flagstaff Wildland-Urban Interface Fire Code, and general outreach efforts and events.	Fire Department/ Firewise Coordinator
9	The Rio DeFlag Project is a major flood control initiative designed to remove 1,500 structures from the flood plain. The downtown area is prone to flooding. This effort will both reduce the threat and enable further economic development in this area.	In progress	This project has received funding from the Army Corps of Engineers, and is progressing in the property acquisitions, engineering design, outreach and developing agreements with impacted parties (BNSF, ADOT),	Capital Improvements/ Rio DeFlag Project Manager
10	Install generators for water wells vulnerable to losing power during wildland fires. More than 60% of the water supply is pumped from underground wells. Many of these are subject to wildland fire threats that disrupt power.	Complete	Five diesel-powered, trailer mounted, portable generators have been purchased and manual transfer switches installed at four critical water production facilities. The final step in completion was installing “shore power” for the five portable gensets at two locations.	Water Services/ Division Head
11	Flagstaff Stormwater Public Outreach: Public awareness program on topic of flooding and dam risks.	Ongoing	These efforts are required to be repeated annual per FEMA requirements	Water Services
12	County emergency notification system	Ongoing	System has been deployed. Working on public engagement and increasing participation.	Coconino County EM

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#	Mitigation Action	Status	Additional Details	POC/Dept.
13	Building code adoption: Maintain current building standards for seismic protection.	Complete	None	Community Development
14	Building code adoption: Maintain building standards for snow loading.	Complete	None	Community Development
15	Building code adoption: Maintain building standards for wind shear.	Complete	None	Community Development
16	Fire prevention inspection: Perform building inspections to prevent exceeding snow load limits.	Complete	These efforts are required to be repeated periodically.	Fire Department
17	Fire prevention patrols: Fire prevention patrols by law enforcement including fly-overs to discover illegal transient camps and illegal fires within the city limits.	Complete	These are ongoing efforts.	Flagstaff Police Dept
18	Pulliam Airport Security Screening: Armed police officers are present at airport screenings prior to boarding to ensure passenger safety.	Complete	Continue to have local police officers at airport screenings funded in part by TSA.	Flagstaff Fire Dept
19	Clay Avenue Wash Detention (Dam) Basin Emergency Action Plan. A plan to address how to warn the public in the event of dam failure or flood.	In progress	City is waiting for finalized plan.	Stormwater
20	Construct and equip a multi-agency EOC to coordinate disasters. The area is subject to periodic disasters. On an annual basis the EOC is activated two to three (2-3) times each year.	In progress	The Gemini EOC (formerly known as the alternate EOC) is located 2201 North Gemini. It is the primary EOC. It is to be completed when funding becomes available.	Fire Department/ Fire Chief
21	Floodplain identification and mapping, including any local requests for map updates to provide the community with a regulatory tool to reduce the losses to property and people.	Complete	All Flood Insurance Rate Maps (FIRM) have been updated and converted to Digital Flood Insurance Rate Maps (D-FIRM), to help enforce flood plain regulations. We completed the Northeast Area Master Drainage Study, to conceptually identify and mitigate major flooding in northeast Flagstaff.	Stormwater/ Stormwater Manager

Table 5-29: Fredonia Current Status of Previous Plan's Mitigation Actions

#	Mitigation Action	Status	Additional Details	POC/Dept.
1	Replacing existing dike to a levy.	Seeking funding	Estimate $11 million for construction.	Public Works
2	Replace existing backwash basin at the water ponds. Repair pumps in the wells.	Completed	Backwash Basin replaced and wells were repaired	Public Works

DRAFT

#	Mitigation Action	Status	Additional Details	POC/Dept.
3	Hold annual community meeting in September with all residents and churches to educate residents about 72-hour kits and food storage.	Ongoing	None	Town Manager/ Marshall's Office
4	Conduct fire department training for a hazardous fires and spills.	Ongoing	Department trains weekly with HAZMAT training quarterly	Fire Department
5	Conduct severe wind community outreach through newsletter in the spring and fall, reminding residents to put outdoor belongings away.	Ongoing	None	Town Clerk's Office
6	Enforce speed limits and training.	Ongoing	Speed enforcement conducted daily	Marshall's Office
7	Fire department training and community outreach (through annual community meeting, with specifics being prepared).	Ongoing	None	Fire Department/ Town Clerk
8	Quarterly outreach to the community through the town, discussing what to do in the event of an earthquake.	Ongoing	None	Marshall's Office/ Town Clerk
9	Conduct feasibility study for curb and gutters to determine cost.	Not started	None	Public Works/ Town Manager

Table 5-30: Page Current Status of Previous Plan's Mitigation Actions

#	Mitigation Action	Status	Additional Details	POC/Dept.
1	Provide equipment and other resources sufficient to provide initial response to major road, air, hazardous materials and mass casualty incidents.	In progress	None	Fire Department
2	The city will develop a plan and mutual aid agreement with the State, County, Navajo Nation, National Park Service and other governmental entities as necessary to implement mitigation actions.	In progress	None	Community Development, Building Official
3	Page Fire Department will develop a public awareness program. Handouts and presentations will be developed and presented at area clubs, schools, and other public gatherings. Goals shall include increasing public support for funding disaster preparation, educating the public on what to do in a disaster, and increasing public awareness of how public safety agencies respond in a disaster.	Ongoing	None	Fire Department
4	Design and construct drainage structures for problem flood areas throughout the city to prevent flooding of properties and buildings.	Ongoing	None	Engineering/Public Works

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#	Mitigation Action	Status	Additional Details	POC/Dept.
5	Water supply system upgrade: This project is to upgrade the current pumping units and possibly identify an alternative lower-level intake with a new pumping system and a separate pipeline to deliver water to the water treatment plant. This will allow for dependability and a backup to the current system. It will also provide water if the lake level drops below the current intake levels.	In progress	Preliminary design stages.	Engineering and Utility Department/ City Engineer
6	Construction mitigation from drainage study for Letter of Map Revision (LOMR): Construct any channels, berms, bank stabilization, etc. indicated by drainage study.	Completed	None	Engineering Department/City Engineer
7	The city will develop a plan and pamphlets and implement a public information program that will identify the following: Who can apply? What types of emergencies can be applied for? Where to apply.	Ongoing	None	Risk Management/ Human Resources/ Public Information Officer
8	Train fire department and school personnel to set up and operate a medical countermeasure point of dispensing site for residents and visitors.	Partially Complete	Project designed to provide open points of dispensing in the event of a public health emergency or pandemic. Training was provided by Coconino County Health and Human Services for City of Page and Page Unified School District employees.	Fire Department
9	Enforcement and/or implementation of modern building codes to regulate new development to mitigate against loss.	Completed/ Ongoing	None	Community Development/ Building and Engineering Department

Table 5-31: Tusayan Current Status of Previous Plan's Mitigation Actions

#	Mitigation Action	Status	Additional Details	POC/Dept.
1	Tusayan Fire Department (TFD) Digital Newsletter: Explain hazards of smoke/CO, fireplaces, chimneys, cleaning, and fire hazards. Regularly scheduled cleaning of chimneys. Smoke/CO detector maintenance program (as a follow up to the previous month's safety topic). Smoke and CO detectors use and maintenance.	Completed and ongoing	Through TFD Newsletter: Statistics for fires due to heating. Chimney cleaning reminders. TFD/Red Cross program provided free smoke detectors and installation in the area. The TFD Newsletter messages were replaced by the Facebook	Tusayan Fire District

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#	Mitigation Action	Status	Additional Details	POC/Dept.
	Explanation of two (2) types of detectors. Regularly scheduled replacement of batteries and testing.		TFD page. These reminders will continue through the Facebook page.	
2	Tusayan Fire Department Digital Newsletter: Publish links and email brochures and topics for [the County's website] emergency kits, Winter Preparation and Safety Brochure, additional tips from the County.	Completed and ongoing	Through TFD Newsletter: Links for County Emergency Preparation shared. Car stocking tips for winter travel provided. The TFD Newsletter messages were replaced by the Facebook TFD page. These reminders will continue through the Facebook page.	Tusayan Fire District
3	Tusayan Fire Department Digital Newsletter: Storm roof loading education. For preparation of 2016 winter, educated residents of online resources and building considerations for the town.	Completed and ongoing	Through TFD Newsletter: FEMA Snow Load Safety Guide promoted, warning signs of roof collapse, and online link for snow-load safety. The TFD Newsletter messages were replaced by the Facebook TFD page. These reminders will continue through the Facebook page.	Tusayan Fire District
4	Perform Initial Engineering Assessment and Hydrologic Analysis, coordinate with County for drainage improvements work plan and perform various projects identified in this plan.	Ongoing	The town has invested more than $465,000 towards these efforts since 2015. It continues to work with the County as the Town's flood plain administrator.	Town Administration
5	Partner with the County to use its emergency notification system to improve warning and evacuation systems during hazmat incidents.	Ongoing	The town is in the process of registering residents in the County's emergency notification system and providing educational opportunities to the entire community.	Town Administration and Sheriff's Office
6	Support Tusayan Fire District in wildland fire mitigation activities through Reduction of Hazardous Fuels Grant program.	Ongoing	Forest service continues to work on the reduction of forest fuels through thinning and burn-pile.	Tusayan Fire, Kaibab NF, and Arizona State Forestry
7	Promote and enforce water conservation through cooperative programs with water company.	Ongoing	The town is providing education through the facilitation of tabletop exercises, the development of a website and other educational opportunities.	Town Administration

DRAFT

#	Mitigation Action	Status	Additional Details	POC/Dept.
8	Work with ADOT to replace and add signage along Highway 64, including crosswalk blinker signs for pedestrian safety.	Partially Complete	The town has added and maintained signage along Highway 64.	Maintenance Division
9	Implement plan for snow removal throughout the town, including for severe storms. Maintain snow removal equipment and have list of contractors available for severe incidents.	Ongoing	The town has implemented a plan for snow removal throughout the town, based on after action response from a severe storm. The town maintains snow removal equipment. In the summer of 2020, the town issued a new RFQ for snow removal service and elected to choose a local contractor to assist in severe incident response.	Maintenance Division
10	Educate public with links and/or information available from the Arizona Geological Survey.	Ongoing	The town is working with a third-party contractor to develop an educational webpage that will contain links to this information.	Town Administration
11	Assist with educating the public about impacts associated with severe wind hazard in this region.	Ongoing	The town is providing education through the facilitation of tabletop exercises, the development of a website, and other educational opportunities.	Town Administration and Sheriff Office

Table 5-32: Williams Current Status of Previous Plan's Mitigation Actions

#	Mitigation Action	Status	Additional Details	POC/Dept.
1	Perform public outreach and education campaign with informational booklets from the Arizona Geological Survey.	Completed and ongoing	Williams Police Department Facebook page, city webpage	Williams Police/ Fire Public Works Director
2	Partnering with the County to use its emergency notification system to better warn and evacuate citizens during HazMat events.	Completed and ongoing	City uses County's emergency notification system	Williams Police/ Fire
3	Working with NACOG to update, replace, and add signage on the roads in Williams that meet current standards, add reflectivity, and increase driver awareness.	Completed and ongoing	None	Williams Police/ Fire/ Public Works/Streets
4	Enforcement of floodplain management requirements, including regulating all and substantially improved construction in floodplains to reduce the losses to property and people.	Completed and ongoing	City Ordinance #858 Flood Ordinance	Planning and Building Code Enforcement/ Building Official
5	Continue to enforce zoning and building codes through current site plan, subdivision, and building	Completed and ongoing	Adopted in 2015; will update in 2021	Planning and Building Code Enforcement/

	permit review processes to reduce the effects of drought, flood, severe wind, wildland fire, and other hazards on new buildings and infrastructure.			Building Official

#	Mitigation Action	Status	Additional Details	POC/Dept.
6	Perform fuel thinning around water treatment plant to create a wildland fire defensible space perimeter and install exterior sprinkler system on the structures and site perimeter.	Completed and ongoing	City Ordinance #843 Defensible Space Ordinance; regulates city and private infrastructures	Public Works/ Director
7	Annual Inspections and maintenance work on five (5) existing city dams. Continued monitoring by the city water department in cooperation with ADEQ.	Completed and ongoing	ADEQ and Arizona Department Water Resources inspected annually	Public Works/ Director
8	Continued planning as part of the annual Snow Removal Plan. This planning effort continues annually in advance of the winter season and includes inventorying and maintenance of existing snow removal vehicles, plows, cutting edges, chains, and other equipment. The city also contacts local contractors to identify resources in the event of a major snowstorm.	Completed and ongoing	City of Williams Snow Removal Plan; if overwhelmed, have contractor list to remove snow	Public Works/ Director
9	Continued tree and shrub pruning around power lines, telephone lines, and other infrastructure as part of regular city maintenance.	Completed and ongoing	Evaluation done by APS 3-5-year survey.	Public Works/ Director
10	Enforcement of the newly adopted Defensible Space Ordinance for the protection of future and existing structures within the wildland urban interface.	Completed and ongoing	City of Williams Defensible Space Ordinance #843; regulates city and private Infrastructures	Planning and Building Code Enforcement/ Building Official
11	Perform public outreach activities, including fliers, town hall meetings, safety fairs, and others to educate the public on wildland fire protection activities and best management practices.	Planning phase and ongoing	Due to COVID-19, no public outreach meetings are being held.	Public Works/ Director
12	Create new storage facilities for effluent to be used for irrigation and emergency wildland fire protection.	Planning phase and ongoing	Five (5) Year Capital Improvement Plan; effluent irrigates city golf course	Public Works/ Director
13	Bill Williams Mountain Steep Slope forest restoration treatments to reduce threat from catastrophic wildland fires and post-wildfire flooding.	300 acres completed; ongoing	Identified 1,200 acres of steep slopes on Bill Williams Mountain to complete forest restoration treatments on to reduce the risk of catastrophic wildland fire and post-wildfire flooding	Flood Control District Administrator/ Forest Restoration Director

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			that would critically impact the city of Williams infrastructure, public lives, and regional economy.	

5.4.2 New Mitigation Actions

Mitigation actions are specific activities or projects that serve to meet the goals that the community has identified. Mitigation actions and projects are more specific than goals or objectives, and often include a mechanism, such as an assigned time period, to measure the success and ensure the actions are accomplished. The Planning Team conducted a review of the mitigation actions and strategies from the 2015 MJHMP. With information from the risk assessment, capability assessment, and status of the actions implemented since the 2015 MJHMP, the Planning Team developed a variety of new mitigation actions and projects to reduce the effects of hazard, with emphasis on new and existing buildings and infrastructure.

Mitigation actions reflected the revised priorities of addressing the new hazards of aviation accident, climate change, public excessive heat, health outbreak and pandemic, extended power outage and terrorism. This action was based upon the results of developing the CPRI for each jurisdiction and applying them across the jurisdiction relevant hazards.

Based upon the updated priorities, each jurisdiction subsequently selected and developed their own mitigation actions as listed in the following tables.

Table 5-33 lists the County's potential mitigation actions developed by the Planning Team. For each mitigation action, the following information is listed: mitigation goal, mitigation action description, mitigation type, hazard(s) addressed, and potential implementing city / town organizations.

Table 5-33: County New Mitigation Activities

Goal	Action Item #	Action Description	Mitigation Type	Related Hazards	Implementing Organizations
Goal 1: Protect life, property, and reduce potential injuries from natural caused hazards.	1.1	Maintain evaluations for structural integrity of County and non-County facilities identified as potential shelter sites. This can be performed via application of the 2018 International Building Codes and 2017 National Electric Codes**.**	Structure and infrastructure projects	Dam failure, earthquake, excessive heat, power outage, flood, high winds, hazmat, terrorism, wildland fire, winter storm	Community Development
	1.2	Identify and pursue funding opportunities to develop and implement local mitigation activities (all hazards).	Natural systems protection	All	All County departments
Goal 2: Improve public understanding, support and need for hazard mitigation measures.	2.1	Coordinate with local stakeholders and partners for the enhancement of public outreach and awareness regarding regional hazards and mitigation actions community members can implement for self-reliance	Education	All	All County departments, and local stakeholders

Goal	Action Item #	Action Description	Mitigation Type	Related Hazards	Implementing Organizations
		and protection to property and life safety.			
	2.2	Increase public awareness of the natural, human-caused, and technological hazards to residents and businesses as a means to reduce the potential impacts through education and outreach.	Education	All	Emergency Management, Public Affairs, County Public Works
	2.3	Partner with local insurance agencies to hold workshops for property owners to educate about the Flood Insurance Programs and its requirements. Community Development performs this function through NEIPA and the Engineering Division.	Education	Flood	Community Development
	2.4	Increase public awareness of dam failure hazards and identify mitigation measures to address those hazards.	Education	Dam failure	Emergency Management, Public Affairs,
	2.5	In light of the current COVID-19 pandemic and past public health related challenges: County will seek to improve upon/enhance community outreach and coordination of information to stress the importance of nonpharmaceutical interventions to help slow the spread of infectious diseases.	Education	Pandemic	Public Health
	2.6	Expand and maintain public education activities to include events like the North Arizona Home Show, public service announcements, public access television and County website.	Education	All	Emergency Management, Public Affairs,
	2.7	Continue to maintain a resource center of information accessible to the public at key government facilities, providing informational brochures and information on	Education	All	Emergency Management, Public Affairs, County Public Works

DRAFT

Goal	Action Item #	Action Description	Mitigation Type	Related Hazards	Implementing Organizations
		government websites and social media.			
Goal 3: Promote disaster resistance for the natural, existing, and future built environment.	3.1	Seek any opportunities to enhance the implementation and monitoring of the code regulated design criteria in relation to the adopted 2018 International Codes and the 2017 National Electrical Code for the protection of life and property and reduce the impacts of natural and manmade hazards**.**	Local plans and regulations	Earthquake, flood, high winds, wildland fire, winter storm	Community Development
	3.2	Integrate appropriate items from the MJHMP into the Safety Element of the General Plan and other regulatory documents as deemed appropriate. This function is ongoing through adopted codes and ordinances and improves policy capabilities.	Local plans and regulations, structure and infrastructure projects, natural systems protection, and education	All	Community Development
	3.3	Coordinate with the utility companies and vendors to strengthen, safeguard, or take other appropriate measures such as providing supplemental services, to protect and secure high-voltage lines, water, sewer, natural gas and petroleum pipelines, and trunk electrical and telephone conduits from hazards via County adherence to the International Codes and the 2017 National Electric Code.	Structure and infrastructure projects, natural	Earthquake, excessive heat, extended power outage, flood, high winds, terrorism, wildland fire, winter storm	Public Works
	3.4	Implement and develop the county Resilient Community Program.	Structure and infrastructure projects	Climate change, drought, earthquake, flood, high winds, wildland fire, winter storm	Public Works
	3.5	Post Wildfire Mt Elden Flood Mitigation Project.	Structure and infrastructure projects	Flood	County Flood Control District and City of Flagstaff
Goal 4: Strengthen partnerships and collaboration to	4.1	Partner with local insurance agencies to hold workshops for property owners to educate about the Flood Insurance Programs and its	Natural systems protection	Flood	Community Development

DRAFT

Goal	Action Item #	Action Description	Mitigation Type	Related Hazards	Implementing Organizations
implement hazard mitigation activities.		requirements. Community Development performs this function through NEIPA and the Engineering Division for flood only.			
	4.2	Regarding flood plain needs, continue partnership with County and local stakeholders to Improve hazard assessment information and identify recommendations for avoiding new development in high hazard areas and encourage preventative measures for existing development in areas vulnerable to flooding/ flash flooding.	Natural systems protection	Flood	Community Development
	4.3	Continue to develop mutual aid agreements and memorandum of understanding with agencies to serve emergency and disaster purposes – notably by encouraging additional signatories to the Arizona Mutual Aid Compact.	Local plan and regulations	All	Emergency Management
	4.4	Continue County partnership and support with local government, NGO and non-profits to maintain and build upon our cadre of committed, trained, volunteers to augment disaster response and recovery efforts in compliance with Arizona Disaster Service Worker program guidance (e.g. shelter workers, animal rescue and care, Community Emergency Response Team, communications staff, medical and health, and human service providers).	Capability enhancement; provides surge capacity for medical response	All	Emergency Management / County Sheriff
	4.5	Facilitate integration of Northern Arizona university into the County MJHMP as a participating jurisdiction via annual MJHMP review and update process.	Natural systems protection; structure and infrastructure projects	All	Emergency Management / Northern Arizona University
	4.6	Continue to push for mutual aid agreements and memorandum of understanding (MOU) with	Natural systems protection; structure and	All	Emergency Management / County Sheriff

DRAFT

Goal	Action Item #	Action Description	Mitigation Type	Related Hazards	Implementing Organizations
		agencies to serve emergency and disaster purposes – notably by encouraging additional signatories to the Arizona Mutual Aid Compact.	infrastructure projects		
Goal 5: Enhance the County's ability to effectively and immediately respond to disasters.	5.1	Secure funding and strategic partnerships necessary to develop County Medical Reserve Corps capability.	Capability enhancement; provides surge capacity for medical response	All	Public Health
	5.2	Post wildland fire early monitoring and flood warning system for areas impacted by catastrophic fires.	Natural systems protection; structure and infrastructure projects	Wildland fire, flood	County Flood Control District

Flagstaff:

Table 5-34 lists Flagstaff's potential mitigation actions developed by the Planning Team. For each mitigation action, the following information is listed: mitigation goal, mitigation action description, mitigation type, hazard(s) addressed, and potential implementing city organizations.

Table 5-34: Flagstaff New Mitigation Activities

Goal	Action Item #	Action Description	Mitigation Type	Related Hazards	Implementing Organizations
Goal 1: Protect life, property, and reduce potential injuries from natural caused hazards.	1.1	Identify and pursue funding opportunities to develop and implement local mitigation activities.	Natural systems protection	All	Emergency Services/ Public Works
	1.2	Enhance resiliency to natural hazards and climate change by integrating government and community programs and building institutional capacity.	Natural systems protection	Climate change, earthquake, flood, high winds, terrorism, wildland fire, winter storm	Sustainability
	1.3	Reduce the impacts of natural hazards and climate change with forward-looking policies, plans, and regulations.	Structure and infrastructure projects	Climate change, earthquake, flood, high winds, terrorism, wildland fire, winter storm	Sustainability
	1.4	Understand vulnerabilities and risks and develop immediate and long-term risk reduction strategies for current and future conditions using the best available science.	Structure and infrastructure projects	Climate change, earthquake, flood, high winds, terrorism,	Sustainability

Goal	Action Item #	Action Description	Mitigation Type	Related Hazards	Implementing Organizations
				wildland fire, winter storm	
	1.5	Develop greenhouse gas mitigation strategies that address multiple objectives, including damage reduction, environmental enhancement, historic preservation, tourism/ recreation, economic recovery/development, and building community resilience to climate variance.	Structure and infrastructure projects	Climate change, earthquake, flood, high winds, terrorism, wildland fire, winter storm	Sustainability
Goal 2: Improve public understanding, support and need for hazard mitigation measures.	2.1	Develop a public outreach and awareness program about regional hazards and mitigation actions community members can do in their homes.	Education	All	Emergency Services/PIO
	2.2	Increase public awareness of the natural, human-caused, and technological hazards to businesses as a means to reduce the potential damage from each hazard through educational and outreach. Maintain a resource center accessible to the public at key government facilities. Provide information on government websites and social media accounts.	Education	Earthquake, flood	Emergency Services/City PIO
	2.3	Provide information on tools, partnership opportunities, and funding resources for business and philanthropical organizations to assist in implementing mitigation activities.	Education	All	Community Development
	2.4	Place more stress on the risks associated with natural and manmade hazards in public awareness campaigns conducted by various County/city departments.	Education	All	All
	2.5	Advance education programs to increase awareness and mitigation impacts of climate change.	Education	Climate change	Sustainability Section

DRAFT

Goal	Action Item #	Action Description	Mitigation Type	Related Hazards	Implementing Organizations
Goal 3: Promote disaster resistance for the natural, existing, and future built environment.	3.1	Identify water resources management and conservation opportunities.	Natural systems protection	Drought, climate change	Public Works and Public Utility Easements
	3.2	Improve hazard assessment information to make recommendations for avoiding new development in high hazard areas and encouraging preventative measures for existing development in areas vulnerable to natural, man-made, and technological hazards.	Structure and infrastructure projects	Earthquake, flood, high winds, terrorism, wildland fire, winter storm	Building & Safety/ Planning
	3.3	Integrate appropriate items from the MJHMP into the Safety Element of the General Plan and other regulatory documents as appropriate.	Structure and infrastructure projects	All	Building & Safety/ Planning/ Community Development
	3.4	Coordinate with the utility companies and vendors to strengthen, safeguard, or take other appropriate measures such as providing supplemental services, to protect and secure high-voltage lines, water, sewer, natural gas and petroleum pipelines, and trunk electrical and telephone conduits from hazards.	Structure and infrastructure projects	All	Public Works
	3.5	Continue to invest in up-sizing drainage ways, improving floodplain flood mitigations, and enhancing streams and washes to convey design storms.	Natural systems protection	Flood	Floodplain Manager
	3.6	Continue to collect rain and stream gauge information and provide new hydraulic models to better inform development and maintenance of local and regional storm water facilities.	Natural systems protection	Flood	Floodplain Manager

DRAFT

Goal	Action Item #	Action Description	Mitigation Type	Related Hazards	Implementing Organizations
Goal 4: Strengthen partnerships and collaboration to implement hazard mitigation activities.	4.1	Partner with local insurance agencies to hold workshops for property owners to educate about the Flood and Earthquake Insurance Programs and its requirements.	Natural systems protection	Flood	Stormwater
	4.2	The city will develop a plan and mutual aid agreement with the state, County, Navajo Nation, National Park Service, and other governmental entities as necessary to implement mitigation actions.	Local plans and regulations	All	Legal/ City Manager
	4.3	Continue to develop mutual aid agreements and memorandum of understanding with agencies to serve emergency and disaster purposes – notably by encouraging additional signatories to the Arizona Mutual Aid Compact.	Local plans and regulations	All	Emergency Services
	4.4	Continue County partnership and support with local government, NGO and non-profits to maintain and build upon our cadre of committed, trained volunteers to augment disaster response and recovery efforts in compliance with Arizona Disaster Service Worker program guidance (e.g. shelter workers, animal rescue and care, Community Emergency Response Team, communications staff, medical and health, and human service providers).	Capability enhancement; provides surge capacity for emergency response	All	Emergency Services
Goal 5: Enhance the ability to effectively and immediately respond to disasters.	5.1	Develop a disaster debris plan.	Preparedness	Dam failure, earthquake, flood, high winds, terrorism, wildland fire, winter storm	Emergency Service/ Public Works
	5.2	Budget for maintenance and replacement of County/city owned fire and police stations.	Structure and infrastructure projects	All	Public Works

DRAFT

Goal	Action Item #	Action Description	Mitigation Type	Related Hazards	Implementing Organizations
	5.3	Maintain cloud storage for vital records and data to allow access, if government servers are disrupted.	Structure and infrastructure projects	Dam failure, earthquake, flood, high winds, terrorism, wildland fire, winter storm	IT

Fredonia:

Table 5-35 lists the Fredonia's potential mitigation actions developed by the Planning Team. For each mitigation action, the following information is listed: mitigation goal, mitigation action description, mitigation type, hazard(s) addressed, and potential implementing town organizations.

Table 5-35: Fredonia New Mitigation Activities

Goal	Action Item #	Action Description	Mitigation Type	Related Hazards	Implementing Organizations
Goal 1: Protect life, property, and reduce potential injuries from natural caused hazards.	1.1	Evaluate facilities identified as potential shelter sites for structural integrity.	Structure and infrastructure projects	Dam failure, earthquake, excessive heat, power outage, flood, high winds, hazmat, terrorism, wildland fire, winter storm	Emergency Services and Building-Safety
	1.2	Identify and pursue funding opportunities to develop and implement local mitigation activities.	Natural systems protection	All	Emergency Services/Public Works
	1.3	Integrate appropriate items from the MJHMP into the Safety Element of the General Plan and other regulatory documents as appropriate.	Structure and infrastructure projects; natural systems protection	All	Manager/ Planning/ Community Development
Goal 2: Improve public understanding, support and need for hazard mitigation measures.	2.1	Increase public awareness of dam failure hazards and mitigations to address them.	Education	Dam failure	Emergency Services
	2.2	Develop a public outreach and awareness program about regional hazards and mitigation actions community members can do in their homes.	Education	All	Town Manager/Fire Department/ Town Marshal/ Library

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Goal	Action Item #	Action Description	Mitigation Type	Related Hazards	Implementing Organizations
	2.3	Increase public awareness of the natural, human-caused, and technological hazards to businesses as a means to reduce the potential damage from each hazard through education and outreach. Maintain a resource center accessible to the public at key government facilities. Provide information on government websites and social media.	Education	All	Town Manager/Fire Department/ Town Marshal/ Library
Goal 3: Promote disaster resistance for the natural, existing, and future built environment.	3.1	Identify water resources management and conservation opportunities.	Natural systems protection	Drought, climate change	PUE/Public Works
	3.2	Coordinate with the utility companies and vendors to strengthen, safeguard, or take other appropriate measures such as providing supplemental services, to identify, repair, protect and secure high-voltage lines, water, sewer and trunk electrical and telephone conduits from hazards.	Structure and infrastructure projects	Dam failure, earthquake, excessive heat, power outage, flood, high winds, hazmat, terrorism, wildland fire, winter storm	Public Works
Goal 4: Strengthen partnerships and collaboration to implement hazard mitigation activities.	4.1	Partner with local insurance agencies to hold workshops for property owners to educate about the Flood and Earthquake Insurance Programs and its requirements. Community Development performs this function through NEIPA and the Engineering Division for flood only.	Natural systems protection	Earthquake Flood	Community Development
Goal 5: Enhance the ability to effectively and immediately respond to disasters.	5.1	Build a cadre of committed, trained volunteers to augment disaster response and recovery efforts in compliance with Arizona Disaster Service Worker program guidance (e.g. shelter workers, animal rescue and care, Community Emergency Response Team, communications staff, medical and health, and human services) during and after a disaster.	Education	All	Emergency Service

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Table 5-36 lists Page's potential mitigation actions developed by the Planning Team. For each mitigation action, the following information is listed: mitigation goal, mitigation action description, mitigation type, hazard(s) addressed, and potential implementing city organizations.

Table 5-36: Page New Mitigation Activities

Goal	Action Item #	Action Description	Mitigation Type	Related Hazards	Implementing Organizations
Goal 1: Protect life, property, and reduce potential injuries from natural caused hazards.	1.1	Evaluate city/County and non-city/County facilities identified as potential shelter sites for structural integrity.	Structure and infrastructure projects	Dam failure, earthquake, excessive heat, power outage, flood, high winds, hazmat, terrorism, wildland fire, winter storm	Emergency Services and Building-Safety
	1.2	Identify and pursue funding opportunities to develop and implement local mitigation activities.	Natural systems protection	All	Emergency Services/ Public Works
	1.3	Enforcement and/or implementation of modern building codes to regulate new development to mitigate against loss	Local plans and regulations	Dam failure, earthquake, excessive heat, power outage, flood, high winds, hazmat, terrorism, wildland fire, winter storm	Community Development/ Building and Engineering Department
Goal 2: Improve public understanding, support and need for hazard mitigation measures.	2.1	Coordinate with local stakeholders and partners for the enhancement of public outreach and awareness regarding regional hazards and mitigation actions community members can implement for self- reliance and protection to property and life safety.	Education	All	All departments and local stakeholders
	2.2	Place more stress on the risks associated with natural and manmade hazards in public awareness campaigns conducted by various County/City departments (i.e. partner with local insurance agencies to hold workshops for property owners to educate about the Flood and Earthquake Insurance Programs and its requirements).	Education	Earthquake, flood	All

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Goal	Action Item #	Action Description	Mitigation Type	Related Hazards	Implementing Organizations
	2.3	Develop a public awareness program. Handouts and presentations will be developed and presented at area clubs, schools, and other public gatherings. Goals of the project shall include increasing public support for funding disaster preparation, educating the public what to do in case of a disaster, and increasing public awareness as to how public safety agencies will respond in a disaster	Education	All	Emergency Services/PIO
	2.4	The city will develop a plan and pamphlets and implement a public information program that will identify the following: Who can apply? What types of emergencies can be applied for? Where to apply.	Education	All	Risk Management/Human Resources/ Public Information Officer
Goal 3: Promote disaster resistance for the natural, existing, and future built environment.	3.1	Identify water resources management and conservation opportunities.	Natural systems protection	Drought, climate change	PUE/Public Works
	3.2	Design and construct drainage structures for problem flood areas throughout the city to prevent flooding of properties and buildings.	Structure and infrastructure projects	Flood	Engineering/Public Works
	3.3	Water supply system upgrade. This project is to upgrade the current pumping units and possibly identify an alternative lower level intake with a new pumping system and a separate pipeline to deliver water to the water treatment plant. This will allow for dependability and a backup to the current system. It will also provide water if the lake level drops below the current intake levels.	Structure and infrastructure projects	Drought	Engineering/ Utility Department/ City Engineer
	3.4	Construction mitigation from drainage study for (LOMR). Construct any channels, berms, bank stabilization, etc. which arise from the drainage study.	Structure and infrastructure projects	Flood	Engineering/ Utility Department/ City Engineer

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Goal	Action Item #	Action Description	Mitigation Type	Related Hazards	Implementing Organizations
Goal 4: Strengthen partnerships and collaboration to implement hazard mitigation activities.	4.1	Partner with local insurance agencies to hold workshops for property owners to educate about the Flood Insurance Programs and its requirements. Community Development performs this function through NEIPA and the Engineering Division for flood only.	Natural systems protection	Flood	Community Development
	4.2	The city will develop a plan and mutual aid agreement with the state, County, Navajo Nation, National Park Service, and other governmental entities as necessary to implement mitigation actions.	Local plans and regulations	All	Legal/City Manager
	4.3	Continue to develop mutual aid agreements and memorandum of understanding with agencies to serve emergency and disaster purposes – notably by encouraging additional signatories to the Arizona Mutual Aid Compact.	Local plans and regulations	All	Emergency Services
	4.4	Continue County partnership and support with local government, NGO and non-profits to maintain and build upon our cadre of committed, trained, volunteers to augment disaster response and recovery efforts in compliance with Arizona Disaster Service Worker program guidance (e.g. shelter workers, animal rescue and care, Community Emergency Response Team, communications staff, medical and health, and human service providers).	Capability enhancement; provides surge capacity for emergency response	All	Emergency Services
Goal 5: Enhance the ability to effectively and immediately respond to disasters.	5.1	Develop a disaster debris plan	Preparedness	Dam failure, earthquake, flood, high winds, terrorism, wildland fire, winter storm	Emergency Service/Public Works
	5.2	Budget for maintenance and replacement of County/city owned fire and police stations.	Structure and infrastructure projects	All	Public Works

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Goal	Action Item #	Action Description	Mitigation Type	Related Hazards	Implementing Organizations
	5.3	Build a cadre of committed, trained volunteers to augment disaster response and recovery efforts in compliance with Arizona Disaster Service Worker program guidance (e.g. shelter workers, animal rescue and care, CERT, communications staff, medical and health, and human services) during and after a disaster.	Education	All	Emergency Service

Tusayan:

Table 5-37 lists the Tusayan's potential mitigation actions developed by the Planning Team. For each mitigation action, the following information is listed: mitigation goal, mitigation action description, mitigation type, hazard(s) addressed, and potential implementing town organization/s.

Table 5-37: Tusayan New Mitigation Activities

Goal	Action Item #	Action Description	Mitigation Type	Related Hazards	Implementing Organizations
Goal 1: Protect life, property, and reduce potential injuries from natural caused hazards.	1.1	Evaluate facilities identified as potential shelter sites for structural integrity.	Structure and infrastructure projects	Dam failure, earthquake, flood, high winds, terrorism, wildland fire, winter storm	Facilities & Grounds
	1.2	Identify and pursue funding opportunities to develop and implement local mitigation activities.	Structure and infrastructure projects	Dam failure, earthquake, flood, high winds, terrorism, wildland fire, winter storm	Town Manager/ Management and Support
Goal 2: Improve public understanding, support and need for hazard mitigation measures.	2.1	Develop a public outreach and awareness program about regional hazards and mitigation actions community members can do in their homes.	Education	All	Town Manager/ PIO/ Management and Support
	2.2	Increase public awareness of the natural, human-caused, and technological hazards to businesses as a means to reduce the potential damage from each hazard through educational and outreach. Maintain a resource center accessible to the public at key government facilities.	Education	All	Town Manager/PIO/ Tusayan Fire Department

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Goal	Action Item #	Action Description	Mitigation Type	Related Hazards	Implementing Organizations
	2.3	Place more stress on the risks associated with natural and manmade hazards in public awareness campaigns conducted by various County/city departments.	Education	All	All Departments
	2.4	Increase public awareness of dam failure hazards and mitigation measures to address them.	Education	Dam Failure	Town Manager
Goal 3: Promote disaster resistance for the natural, existing, and future built environment.	3.1	Seek to implement codes, standards, and policies that will protect life and property from the impacts of hazards.	Structure and infrastructure projects	Dam failure, earthquake, flood, high winds, terrorism, wildland fire, winter storm	Planning & Zoning
	3.2	Integrate appropriate items from the MJHMP into the Safety Element of the General Plan and other regulatory documents as appropriate.	Structure and infrastructure projects, Natural systems protection	All	Mayor Council/ Manager Support
	3.3	Maintain cloud storage for vital records and data to allow access, if government servers are disrupted.	Structure and infrastructure projects	Dam failure, earthquake, flood, high winds, terrorism, wildland fire, winter storm	Manager Support
	3.4	Coordinate with the utility companies and vendors to strengthen, safeguard, or take other appropriate measures such as providing supplemental services, to protect and secure high-voltage lines, water, sewer, natural gas and petroleum pipelines, and trunk electrical and telephone conduits from hazards. Collaborate with partners/service providers to identify and implement water resource management and conservation opportunities as applicable.	Structure and infrastructure projects	Dam failure, earthquake, flood, high winds, terrorism, wildland fire, winter storm	Facilities
Goal 4: Strengthen partnerships and collaboration to implement hazard mitigation activities.	4.1	Continue to develop mutual aid agreements and memorandum of understanding with agencies to serve emergency and disaster purposes.	Structure and infrastructure projects, Natural systems protection	All	City Attorney/ Town Manager

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Goal	Action Item #	Action Description	Mitigation Type	Related Hazards	Implementing Organizations
Goal 5: Enhance the ability to effectively and immediately respond to disasters.	5.1	Collaborate with partners and service providers to identify and implement water resource management and conservation opportunities as applicable.	Natural systems protection	Climate change, drought	Facilities and Maintenance
	5.2	Build a cadre of committed, trained volunteers to augment disaster response and recovery efforts in compliance with Arizona Disaster Service Worker program guidance (e.g. shelter workers, animal rescue/care, CERT, medical, communication, and health, and human services) during and after a disaster.	Education	All	Town Manager/ Parks and Rec/ Manager Support
	5.3	Develop an emergency preparedness network for community members (and visitors) to access food, water, communications, warming/cooling stations in times of emergent need.	Preparedness	All	Manager Support/ Public Safety

Williams:

Table 5-38 lists the Williams' potential mitigation actions developed by the Planning Team. For each mitigation action, the following information is listed: mitigation goal, mitigation action description, mitigation type, hazard(s) addressed, and potential implementing city organization/s.

Table 5-38: Williams New Mitigation Activities

Goal	Action Item #	Action Description	Mitigation Type	Related Hazards	Implementing Organizations
Goal 1: Protect life, property, and reduce potential injuries from natural caused hazards.	1.1	Evaluate city/County and non-city/County facilities identified as potential shelter sites for structural integrity.	Structure and infrastructure projects	Dam failure, earthquake, excessive heat, power outage, flood, high winds, hazmat, terrorism, wildland fire, winter storm	Building & Safety/ Planning
	1.2	Identify and pursue funding opportunities to develop and implement local mitigation activities.	Natural systems protection	All	Emergency Services

Goal	Action Item #	Action Description	Mitigation Type	Related Hazards	Implementing Organizations
Goal 2: Improve public understanding, support and need for hazard mitigation measures.	2.1	Increase public awareness of dam failure hazards and mitigation measures to address them.	Education	Dam failure	Emergency Services
Goal 3: Promote disaster resistance for the natural, existing, and future built environment.	3.1	Coordinate with the utility companies and vendors to strengthen, safeguard, or take other appropriate measures such as providing supplemental services, to identify, repair, protect and secure high-voltage lines, water, sewer and trunk electrical and telephone conduits from hazards.	Structure and infrastructure projects	Dam failure, earthquake, excessive heat, power outage, flood, high winds, hazmat, terrorism, wildland fire, winter storm	Public Works
Goal 4: Strengthen partnerships and collaboration to implement hazard mitigation activities.	4.1	Continue to develop mutual aid agreements and memorandum of understanding with agencies to serve emergency and disaster purposes.	Preparedness	All	City Attorney/ Emergency Services

5.4.3 Mitigation Action Plans

The mitigation action plan developed by the Planning Team includes the action items that the County and cities / towns intend to implement during the next five years, assuming funding availability. The action plans, shown in **Table 5-38** through **Table 5-43** include the implementing department, an estimate of the timeline for implementation, and potential funding sources. The individual mitigation activities in the Action Plan include the new mitigation actions listed in **Table 5-32** through **Table 5-37** and the mitigation actions from the 2015 MJHMP that are ongoing or not completed that are still applicable.

The new mitigation actions include a broad range of approaches to hazard mitigation such as retrofitting, code enforcement, development of new regulations, public education, development of redundant facilities, and others. Measures are included to mitigate risks to existing buildings and infrastructure, as well as new buildings and infrastructure. The mitigation action plan assigns primary responsibility for each of the action items to an implementing department. The implementing department is the controlling department that will assign funding and oversee activity implementation, monitoring, and evaluation.

The Planning Team does not presume the expertise to prescribe which projects will be implemented. The prioritization of projects in the MJHMP is a means to provide a basis for implementing the mitigation strategies, but all new mitigation actions and projects will be formally prioritized and selected by the implementing department. This will accommodate the project funding, schedule of the department, staff requirements, and ability to integrate the new project into existing and ongoing projects. Departments will take into account the funding source, the cost effectiveness of the project, alternative projects, the compatibility of the new project with ongoing projects, the extent to which the project addresses the risks assessed in Section 4, and the potential of economic and social damage.

The final mitigation action plans identify desired mitigation actions for each participating jurisdiction pending future funding – they are not obligations or funding commitments.

Prioritization

To assist with implementing the mitigation action plan, the Planning Team used the following ranking process to provide a method to prioritize the projects for the Action Plan. Designations of High, Medium, and Low priorities have been assigned to each action using the following criteria.

Does the action:	• Solve the problem? • Address vulnerability assessment? • Reduce the exposure or vulnerability to the highest priority hazard? • Address multiple hazards? • Offer benefits that equal or exceed costs? • Implement a goal, policy, or project identified in the General Plan or Capital Improvement Plan?
Can the action:	• Be implemented with existing funds? • Be implemented by existing state or federal grant programs? • Be completed within the five (5) year life cycle of the HMP?
Will the action:	• Be implemented with currently available technologies? • Be accepted by the community? • Be supported by community leaders? • Adversely affect segments of the population or neighborhoods? • Require a change in local ordinances or zoning laws? • Result in positive or neutral impact on the environment? • Comply with all local, state, and federal environmental laws and regulations?
Is there:	• Sufficient staffing to undertake the project? • Existing authority to undertake the project?

Each positive response is equal to one point. Answers to the criteria above determined the priority according to the following scale:

1–6 = Low priority ***7–12 = Medium priority*** ***13–18 = High priority***

Using the criteria above, the Planning Team employed the STAPLEE method to rank actions in the mitigation action plan. The results are contained in **Appendix D**.

Benefit-Cost Analysis

FEMA provides detailed guidance for analyzing the economic feasibility of mitigation activities. Benefit-Cost Analysis (BCA) is the method by which the future benefits of a hazard mitigation project are determined and compared to its costs. The end result is a Benefit-Cost Ratio (BCR), which is calculated by a project's total benefits divided by its total costs. The BCR is a numerical expression of the "cost-effectiveness" of a project. A project is considered to be cost effective when the BCR is 1.0 or greater, indicating the benefits of a prospective hazard mitigation project are sufficient to justify the costs.

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FEMA requires a BCA to validate cost effectiveness of proposed hazard mitigation projects prior to funding. There are two drivers behind this requirement: 1) the Office of Management and Budget's (OMB) Circular A-94 Revised, "Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs" and 2) the Stafford Act.

Conducting BCA for a mitigation activity can assist the County in determining whether a project is worth undertaking now, in order to avoid disaster related damages later. Cost-effectiveness analysis evaluates how to best spend a given amount of money to achieve a specific goal. Determining the economic feasibility of mitigating hazards can provide decision makers with an understanding of the potential benefits and costs of an activity, as well as a basis for comparing alternative projects. Additional information on BCA is available on the FEMA BCA website.

Funding

The funds required to implement the mitigation action plan will come from a variety of sources including: Federal Hazard Mitigation Grants, city/town budgets, bonds, fees and assessments, and others. Some projects are (or will be) included in capital improvement budgets, while some, especially ongoing projects, are included in department operating budgets.

Prior to beginning a project or when federal funding is involved, the implementing department will use a FEMA approved benefit/cost analysis approach to identify the actual costs and benefits of implementing these mitigation actions. For non-structural projects, implementing departments will use other appropriate methods to weigh the costs and benefits of each action item, and then develop a prioritized list.

Implementation

Mitigation projects were assigned one of three categories as a tentative schedule for implementation, short-range, mid-range, and long-range. Projects that are currently being implemented by various departments are assigned to the ongoing category. Implementation of short-range projects will typically begin within the next three years. Mid-range projects will require some planning and likely require funding beyond what is currently allocated to the various departments in the County and city / towns' general funds. Projects in the mid-range category will generally begin implementation in the next three to five years. Long range projects will require great planning and funding and will generally begin implementation within five years and beyond.

Table 5-39: County Mitigation Action Plan

Action Item #	Priority	Action Description	Timeline	Funding Source	Estimated Cost	Implementing Department	Related Hazards
1.1	High	Maintain evaluations for structural integrity of County and non-County facilities identified as potential shelter sites can be performed seamlessly via application of 2018 International Codes and 2017 National Electric Code.	Ongoing	General Fund	Requires further study	Community Development	Dam failure, earthquake, excessive heat, power outage, flood, high winds, wildland fire, winter storm
1.2	High	Identify and pursue funding opportunities to develop and implement local mitigation activities.	Ongoing	Grant: BRIC FMA CDBG	Variable per project	All County departments	All

Action Item #	Priority	Action Description	Timeline	Funding Source	Estimated Cost	Implementing Department	Related Hazards
2.1	High	Coordinate with local stakeholders and partners for the enhancement of public outreach and awareness regarding regional hazards and mitigation actions community members can implement for self- reliance and protection to property and life safety.	Ongoing	General Fund	$25,000 annually	All County departments and local stakeholders	All
2.2	High	Increase public awareness of the natural, human-caused, and technological hazards to residents and businesses as a means to reduce the potential impacts through education and outreach. Continue to maintain a resource center of information accessible to the public at key government facilities, providing informational brochures and information on government websites and social media.	Ongoing	General Fund	$25,000 annually	Emergency Management Department /Public Affairs/ County Public Works	All
2.3	High	Partner with local insurance agencies to hold workshops for property owners to educate about the Flood Insurance Programs and its requirements. Community Development performs this function through NEIPA and the Engineering Division for flood only.	Ongoing	General Fund	N/A	Community Development	Flood

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Action Item #	Priority	Action Description	Timeline	Funding Source	Estimated Cost	Implementing Department	Related Hazards
2.4	High	Increase public awareness of dam failure hazards and identify mitigation measures to address those hazards.	1-3 Years	General Fund	$20,000	Emergency Management/ Coconino County Flood Control District	Dam failure
2.5	High	In light of the current COVID-19 pandemic and past public health related challenges, the County will seek to improve upon and enhance community outreach and coordination of information to stress the importance of nonpharmaceutical interventions to help slow the spread of infectious diseases.	1 Year	General Fund	$50,000	Public Health	Pandemic
2.6	High	Expand and maintain public education activities to include events like the Northern Arizona Home Show, public service announcements, public access television and county website.	Ongoing	General Fund	$20,000 annually	Emergency Management/ Public Affairs	All
2.7	High	Enhance winter weather preparedness campaign including brochures, Public Service Announcements and County webpage content development for public awareness.	Ongoing	General Fund	$20,000 annually	Emergency Management/ Public Affairs	Winter storm
2.8	High	Deliver educational programs and outreach to outlying areas of county that are not currently served by any organized fire protection system, with the goal to assist organizing districts.	Ongoing	General Fund	$10,000 annually	Emergency Management/ Public Affairs	Fire

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Action Item #	Priority	Action Description	Timeline	Funding Source	Estimated Cost	Implementing Department	Related Hazards
2.9	High	Continue to maintain a resource center of information accessible to the public at key government facilities, providing informational brochures and information on government websites and social media.	Ongoing	General Fund Grant EMPG	Requires further study	Emergency Management/ Public Affairs/ County Public Works	All
3.1	Med	Seek any opportunities to enhance the implementation and monitoring of the code regulated design criteria in relation to the adopted 2018 International codes and the 2017 National Electrical Code for the protection of life and property and reduce the impacts of natural and manmade hazards.	Ongoing	General Fund	$10,000 annually	Community Development	Earthquake, flood, high winds, wildland fire, winter storm
3.2	High	Integrate appropriate items from the MJHMP into the Safety Element of the General Plan and other regulatory documents as appropriate. This function is ongoing through adopted codes and ordinances.	1 year	General Fund	$10,000 annually	Community Development	All
3.3	High	Coordinate with the utility companies and vendors to strengthen, safeguard, or take other appropriate measures such as providing supplemental services, to protect and secure high-voltage lines, water, sewer, natural gas and petroleum pipelines, and trunk electrical and telephone conduits from hazards	Ongoing	General Fund	N/A	Public Works/ Community Development	Earthquake, excessive heat, extended power outage, flood, high winds, terrorism, wildland fire, winter storm

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Action Item #	Priority	Action Description	Timeline	Funding Source	Estimated Cost	Implementing Department	Related Hazards
		via County adherence to International Codes and 2017 National Electric Code.					
3.4	High	Implement and develop the County Resilient Community Program.	2 years	Grant: BRIC	$75,000	Public Works	All
3.5	High	Establish and maintain a County component of the state GIS mapping system documenting forest treatment, hazard data, and grant funding sources to monitor our wildland fire threat.	Ongoing	General Fund Grant: BRIC	$50,000 annually	Emergency Management/ GIS	Wildland Fire
3.6	High	Conduct floodplain re-mapping for reducing losses to Munds Park and Kachina/ Mountainaire.*	2 years	Grant: FMA	$120,000	Public Works/ Flood Control District/County Engineer/GIS	Flood
3.7	High	Develop Neighborhood Wildfire Assessment, at-risk neighborhood ranking, and provide risk information to residents.*	1-3 years	General Fund Grant: BRIC	$200,000	PFAC, Public Works	Fire
3.8	High	Conduct roadside thinning along Forest HWY 3, Perkinsville Rd, Old Munds Hwy, Garland Prairie, and Spring Valley Rd.*	1-3 years	General Fund Grant: BRIC	$100,000	PFAC, County Public Works	Fire/ County Public Works
3.9	High	Enforce floodplain management requirements in accordance with NFIP, including regulating all substantially improved construction in floodplain.*	Ongoing	General Fund	$25,000 annually	Community Development	Flood
3.10	High	Continue support for Flagstaff Fire Department Fire Management Program to mitigate wildland fire hazards to watershed resources through prevention, preparedness, hazard mitigation, response,	Ongoing	General Fund, Grant: BRIC	$125,000 annually	Coconino County EM/ Flagstaff Fire Department Prevention Bureau	Fire

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Action Item #	Priority	Action Description	Timeline	Funding Source	Estimated Cost	Implementing Department	Related Hazards
		and recovery efforts – with an emphasis on education engineering, enforcement, and ecosystems.*					
3.11	High	Continue participation in Rural Communities Fuel Management Partnership – an informal multi-agency alliance created to work with landowners to reduce fuel hazards on their property in two communities located in Coconino Co. Areas of interest include the communities of Doney Park, Williams, and Blue Ridge.	Ongoing	General Fund	$10,000 annually	Kaibab National Forest/State Land Department/ University of Arizona/ Coconino County Cooperative Extension/ Coconino County Fire Districts	Fire
4.1	High	Partner with local insurance agencies to hold workshops for property owners to educate about the Flood Insurance Programs and its requirements. Community Development performs this function through NEIPA and the Engineering Division for flood only.	Ongoing	N/A	N/A	Community Development	Flood
4.2	High	Regarding flood plain needs, continue partnership with County and local stakeholders to Improve hazard assessment information and identify recommendations for avoiding new development in high hazard areas and encourage preventative measures for existing development in areas vulnerable to flooding/flash flooding.	Ongoing	N/A	N/A	Community Development	Flood

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Action Item #	Priority	Action Description	Timeline	Funding Source	Estimated Cost	Implementing Department	Related Hazards
4.3	High	Continue to develop mutual aid agreements and memorandum of understanding with agencies to serve emergency and disaster purposes – notably by encouraging additional signatories to the Arizona Mutual Aid Compact.	Ongoing	N/A	N/A	Emergency Management	All
4.4	High	Continue County partnership and support with local government, NGO and non-profits to maintain and build upon our cadre of committed, trained volunteers to augment disaster response and recovery efforts in compliance with Arizona Disaster Service Worker program guidance (e.g. shelter workers, animal rescue and care, CERT, communications staff, medical and health, and human service providers).	1-3 years	General Fund, Grant: EMPG	$150,000	Emergency Management	All
4.5	High	Facilitate integration of Northern Arizona university into the County MJHMP as a participating jurisdiction via annual MJHMP review and update process.	Present - 1 year	Public Health District	Requires further Study	Emergency Management / Northern Arizona University	All
4.6	High	Continue to push for mutual aid agreements and memorandum of understanding (MOU) with agencies to serve emergency and disaster purposes – notably by encouraging additional signatories to the Arizona Mutual Aid Compact.	1-3 years	General Fund	Requires further study	Emergency Management	All

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Action Item #	Priority	Action Description	Timeline	Funding Source	Estimated Cost	Implementing Department	Related Hazards
5.1	High	Secure funding and strategic partnerships necessary to develop County Medical Reserve Corps capability.	2-3 years	Grant: HHS ASPR	$250,000	Public Health	Pandemic
5.2	High	Provide support and coordination as requested (and as funding is available) toward the deployment and maintenance of the Flash Flood Early Warning System in Havasupai Canyon.	2 years	Grant: FMA	Requires design study	Emergency Management	Flood
5.3	High	Post Wildfire Mt. Elden Flood Mitigation Project.	2-5 years	General Fund, Grant: EMPG	$2.5 million	County Flood Control District and City of Flagstaff	Flood
5.4	High	Post wildland fire early monitor flood warning system for areas impacted by catastrophic fires.	1-5 years	General Fund, Grant: EMPG	$500,000	County Flood Control District	Flood

**Action from 2015*

Flagstaff

Table 5-40 lists the Flagstaff's potential mitigation actions developed by the Planning Team. For each mitigation action, the following information is listed: mitigation goal, mitigation action description, mitigation type, hazard(s) addressed, and potential implementing city organization/s.

Table 5-40: Flagstaff Mitigation Action Plan

Action Item #	Priority	Action Description	Timeline	Funding Source	Estimated Cost	Implementing Department	Related Hazards
1.1	High	Upgrade existing conservation measures to provide for water during periods of drought. The city depends on surface reservoirs and groundwater for domestic water supply. Conservation efforts expand the capacity of this limited resource.*	Ongoing	General Fund, Grant: EMPG	Requires further study	Flagstaff Water Services Division	Drought

Action Item #	Priority	Action Description	Timeline	Funding Source	Estimated Cost	Implementing Department	Related Hazards
1.2	Med	Plan and conduct forest treatments to reduce severity and impact of unwanted wildland fire both within and adjacent to the community. The Flagstaff area is ranked as the #1 wildland fire threatened are in Arizona.*	Ongoing	Grant: EMPG	Requires further study	Fire Department/ Wildland Fire Management Officer	Fire
1.3	High	Maintain evaluations for structural integrity of facilities identified as potential shelter sites. This can be performed seamlessly via application of the 2018 International Building Codes and 2017 National Electric Codes.	1-3 Years	General Fund	Requires further study	Emergency Services/ Public Works	All
1.4	High	Identify and pursue funding opportunities to develop and implement local mitigation activities.	1-3 years	General Fund	Requires further study	Sustainability	Climate change, earthquake, flood, high winds, terrorism, wildland fire, winter storm
1.5	High	Develop greenhouse gas mitigation strategies that address multiple objectives, including damage reduction, environmental enhancement, historic preservation, tourism/ recreation, economic recovery /development, and building community resilience to climate variance.	2-5 years	General Fund Grant: BRIC	Requires further study	Sustainability	Climate change, earthquake, flood, high winds, terrorism, wildland fire, winter storm

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Action Item #	Priority	Action Description	Timeline	Funding Source	Estimated Cost	Implementing Department	Related Hazards
1.6	High	Flagstaff Well Field & Pipeline Evaluation. The city purchased Red Gap Ranch and has drilled ten (10) wells for the purpose of future water supply. The city is currently negotiating a Right of Water with ADOT along 1-40 and is performing the first phase of a feasibility study.*	1-3 years	Water Service Fees	Feasibility Study in progress	Flagstaff Water Services Division	Drought
1.7	High	Flagstaff Watershed Protection Project (also referred to as County & Dry Hills Watershed Protection Project): Approved by the voters, this project is being pursued to ensure the viability of this surface reservoir and stormwater runoff through forest treatments.*	1-3 years FWPP is 56%	City bond	Requires further study	Flagstaff Water Services Division	Drought
2.1	High	Develop a public outreach and awareness program about regional hazards and mitigation actions community members can do in their homes	Ongoing	General fund	$35,000 annually	Emergency Services/PIO	All
2.2	High	Increase public awareness of the natural, human-caused, and technological hazards to businesses as a means to reduce the potential damage from each hazard through educational and outreach. Maintain a resource center accessible to the public at key government facilities. Provide information on government websites and social media accounts.	Ongoing	General fund	$35,000 annually	Emergency Services/City PIO	Earthquake, flood

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Action Item #	Priority	Action Description	Timeline	Funding Source	Estimated Cost	Implementing Department	Related Hazards
2.3	High	Provide information on tools; partnership opportunities, and funding resources for business and philanthropical organizations to assist in implementing mitigation activities.	Ongoing	General fund	$25,000 annually	Community Development	All
2.4	High	Place more stress on the risks associated with natural and manmade hazards in public awareness campaigns conducted by various County/city departments.	Ongoing	General fund	$40,000 annually	All	All
2.5	High	Advance education programs to increase awareness and mitigation impacts of climate change	Ongoing	General fund	$100,000 annually	Climate Change	Sustainability Section
2.6	High	Flagstaff Stormwater Public Outreach: Public awareness program on topic of flooding and dam risks.*	Ongoing	General fund	$40,000 annually	Stormwater	Dam failure, flood
3.1	High	Identify water resources management and conservation opportunities.	Ongoing	Water fees	Requires further study	Building & Safety/ Planning	Earthquake, flood, high winds, terrorism, wildland fire, winter storm
3.2	Med	Improve hazard assessment information to make recommendations for avoiding new development in high hazard areas and encouraging preventative measures for existing development in areas vulnerable to natural, man-made, and technological hazards.	Ongoing	General fund	Requires further study	Building & Safety/ Planning/ Community Development	All

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Action Item #	Priority	Action Description	Timeline	Funding Source	Estimated Cost	Implementing Department	Related Hazards
3.3	Med	Integrate appropriate items from the MJHMP into the Safety Element of the General Plan and other regulatory documents as appropriate.	1 year	General fund	Requires further study	Public Works	All
3.4	High	Coordinate with the utility companies and vendors to strengthen, safeguard, or take other appropriate measures such as providing supplemental services, to protect and secure high-voltage lines, water, sewer, natural gas and petroleum pipelines, and trunk electrical and telephone conduits from hazards.	Ongoing	General Fund	Requires further study	Floodplain Manager	Flood
3.5	High	Continue to invest in up-sizing drainage ways, improving floodplain flood mitigations, and enhancing streams and washes to convey design storms.	1-5 years	Grant FMA	Requires further study	Floodplain Manager	Flood
3.6	Med	The Rio DeFlag Project is a major flood control initiative designed to remove 1500 structures from the flood plain. The downtown area is prone to flooding and this effort will reduce the flood threat and enable further economic development in this area.*	Ongoing	Grant FMA	Requires further study	PUE and Public Works	Drought, climate change

DRAFT

Action Item #	Priority	Action Description	Timeline	Funding Source	Estimated Cost	Implementing Department	Related Hazards
4.1	Med	Partner with local insurance agencies to hold workshops for property owners to educate about the Flood and Earthquake Insurance Programs and its requirements.	Ongoing	General Fund	Requires further study	Stormwater	Flood
4.2	High	The city will develop a plan and mutual aid agreement with the state, County, Navajo Nation, National Park Service, and other governmental entities as necessary to implement mitigation actions.	1-3 years	General Fund	Requires further study	Legal City Manager	All
4.3	High	Continue to develop mutual aid agreements and memorandum of understanding with agencies to serve emergency and disaster purposes – notably by encouraging additional signatories to the Arizona Mutual Aid Compact.	Ongoing	General Fund	Requires further study	Emergency Services	All
4.4	High	Continue County partnership and support with local government, NGO and non-profits to maintain and build upon our cadre of committed, trained, volunteers to augment disaster response and recovery efforts in compliance with Arizona Disaster Service Worker program guidance (e.g. shelter workers, animal rescue and care, CERT, communications staff, medical and health, and human service providers), during and after a disaster.	Ongoing	General Fund Grant BRIC	Requires further study	Emergency Services	All

DRAFT

Action Item #	Priority	Action Description	Timeline	Funding Source	Estimated Cost	Implementing Department	Related Hazards
5.1	High	Develop a disaster debris plan.	1-3 years	Grant BRIC	Requires further study	Emergency Service/Public Works	Dam failure, earthquake flood, high winds, winter storm terrorism, wildland fire
5.2	High	Budget for maintenance and replacement of County/city owned fire and police stations.	Ongoing	General Fund	Requires further study	Public Works	All
5.3	High	Maintain cloud storage for vital records and data to allow access, if government servers are disrupted.	Ongoing	General Fund	Requires further study	IT	Dam failure, earthquake, flood, high winds, terrorism, wildland fire, winter storm
5.4	High	Provide equipment and human resources sufficient to handle comprehensive road, air, and railway hazmat and mass casualty incidents. Nearly 120 trains travel through the city boundaries each day. I-40 and I-17 generate truck traffic that carry hazardous materials through the city each day.*	Ongoing	General Fund	Requires further study	Fire Department/ Training Chief	Hazmat, transport accident
5.5	High	Clay Avenue Wash Detention (Dam). Basin Emergency Action Plan. A plan to address how to warn the public in the event of a pending dam failure or flooding.*	1-3 years	Grant BRIC	Requires further study	Stormwater	Dam failure, flood
5.6	High	Construct and equip a multi-agency EOC to coordinate disasters. The area is subject to periodic disasters. On an annual basis the EOC is activated 2-3 times each year.*	1-3 years	Grant BRIC	Requires further study	Fire Department/ Fire Chief	All

**Action from 2015*

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Fredonia

Table 5-41 lists Fredonia's potential mitigation actions developed by the Planning Team. For each mitigation action, the following information is listed: mitigation goal, mitigation action description, mitigation type, hazard(s) addressed, and potential implementing town organization/s.

Table 5-41: Town of Fredonia Mitigation Action Plan

Action Item #	Priority	Action Description	Timeline	Funding Source	Estimated Cost	Implementing Department	Related Hazards
1.1	Med	Evaluate city/county and non-city/county facilities identified as potential shelter sites for structural integrity.	Ongoing	General Fund	$65,000 Request bids	Emergency Services and Building-Safety	Dam failure, earthquake, excessive heat, power outage, flood, high winds, hazmat, terrorism, wildland fire, winter storm
1.2	High	Identify and pursue funding opportunities to develop and implement local mitigation activities.	Ongoing	Grant HMGP FMA BRIC CDBG	N/A	Emergency Services/ Public Works	All
1.3	Med	Integrate appropriate items from the MJHMP into the Safety Element of the General Plan and other regulatory documents as appropriate.	1 year	General fund	$10,000	Manager/ Planning/ Community Development	All
1.4	High	Replacing existing dike with a levy.	3-5 years	Grant HMPG FMA	$11 million	Public Works	Flood
2.1	High	Increase public awareness of dam failure hazards and mitigation measures to address them	Ongoing	General Fund	$20,000 annually	Emergency Services	Dam failure
2.2	High	Develop a public outreach and awareness program about regional hazards and mitigation actions community members can do in their homes.	Ongoing	General Fund	$20,000 annually	Town Manager/Fire Department/ Town Marshal/ Library	All

DRAFT

Action Item #	Priority	Action Description	Timeline	Funding Source	Estimated Cost	Implementing Department	Related Hazards
2.3	High	Increase public awareness of the natural, human-caused, and technological hazards to businesses as a means to reduce the potential damage from each hazard through education and outreach. Maintain a resource center accessible to the public at key government facilities. Provide information on government websites and social media accounts.	Ongoing	General Fund	$15,000 annually	Town Manager/Fire Department/ Town Marshal/ Library	All
2.4	High	Hold annual community meeting in September with all residents and churches to educate residents about seventy-two (72) hour kits and food storage.	Ongoing	General Fund	$12,000 annually	Town Manager/ Marshal's Office	All
2.5	High	Conduct severe wind community outreach through newsletter in the spring and fall, reminding residents to put outdoor belongings away.	Ongoing	General Fund	$5,000 annually	Town Clerk's Office	High winds/ tornado
2.6	High	Enforce speed limits and conduct driver safety training.	Ongoing	General Fund	$20,000 annually	Marshal's Office	Hazmat releases, transport accident
2.7	High	Conduct Fire Department training during community outreach (through annual community meeting, with specifics being prepared).	Ongoing	General Fund	$10,000 annually	Fire Department/ Town Clerk's Office	All

DRAFT

Action Item #	Priority	Action Description	Timeline	Funding Source	Estimated Cost	Implementing Department	Related Hazards
2.8	High	Conduct outreach to the community, quarterly, through the town discussing what to do in the event of an earthquake.	Ongoing	General Fund	$15,000 annually	Marshal's Office/Town Clerk's Office	Earthquake
3.1	High	Identify water resources management and conservation opportunities.	Ongoing	General Fund	Needs study	PUE/Public Works	Drought, climate change
3.2	High	Coordinate with the utility companies and vendors to strengthen, safeguard, or take other appropriate measures such as providing supplemental services, to identify, repair, protect and secure high-voltage lines, water, sewer and trunk electrical and telephone conduits from hazards.	Ongoing	General Fund	N/A	Public Works	Dam failure, earthquake, excessive heat, power outage, flood, high winds, hazmat, terrorism, wildland fire, winter storm
3.3	High	Conduct feasibility study for curb and gutters to determine cost.	1-3 years	General Fund CIP	$32,500	Public Works/ Town Manager	Flood
4.1	High	Partner with local insurance agencies to hold workshops for property owners to educate about the Flood and Earthquake Insurance Programs and its requirements. Community Development performs this function through NEIPA and the Engineering Division for flood only.	Ongoing	General Fund	N/A	Emergency Services	Earthquake, flood

DRAFT

Action Item #	Priority	Action Description	Timeline	Funding Source	Estimated Cost	Implementing Department	Related Hazards
5.1	High	Build a cadre of committed, trained volunteers to augment disaster response and recovery efforts in compliance with Arizona Disaster Service Worker program guidance (e.g. shelter workers, animal rescue and care, CERT, medical, communications staff, and health, and human services), during and after a disaster	Ongoing	General Fund	$50,000 annually	Emergency Services	All
5.2	High	Conduct Fire Department training for a hazardous fires and spills.	Ongoing	General Fund	$27,000 annually	Fire Department	Fire, hazardous material release

**Action from 2015*

Page

Table 5-42 lists the Page's potential mitigation actions developed by the Planning Team. For each mitigation action, the following information is listed: mitigation goal, mitigation action description, mitigation type, hazard(s) addressed, and potential implementing city organizations.

Table 5-42: Page Mitigation Action Plan

Action Item #	Priority	Action Description	Timeline	Funding Source	Estimated Cost	Implementing Department	Related Hazards
1.1	Med	Evaluate city/County and non-city/County facilities identified as potential shelter sites for structural integrity.	1 year	General fund	$50,000	Emergency Services and Building-Safety	Dam failure, earthquake, excessive heat, power outage, flood, high winds, hazmat, terrorism, wildland fire, winter storm
1.2	High	Identify and pursue funding opportunities to develop and implement local mitigation activities.	Ongoing	General fund	Requires study	Emergency Services/ Public Works	All

Action Item #	Priority	Action Description	Timeline	Funding Source	Estimated Cost	Implementing Department	Related Hazards
1.3	High	Enforcement and/or implementation of modern building codes to regulate new development to mitigate against loss.*	Ongoing	General fund	Requires study	Community Development/ Building and Engineering Department	Dam failure, earthquake, excessive heat, power outage, flood, high winds, hazmat, terrorism, wildland fire, winter storm
2.1	High	Coordinate with local stakeholders and partners for the enhancement of public outreach and awareness regarding regional hazards and mitigation actions community members can implement for self-reliance and protection to property and life safety.	Ongoing	General Fund	$3,000 annually	All departments and local stakeholders	All
2.2	High	Place more stress on the risks associated with natural and manmade hazards in public awareness campaigns conducted by various County/city departments (i.e. partner with local insurance agencies to hold workshops for property owners to educate about the Flood and Earthquake Insurance Programs and its requirements).	Ongoing	N/A	N/A	All	Earthquake, flood

DRAFT

Action Item #	Priority	Action Description	Timeline	Funding Source	Estimated Cost	Implementing Department	Related Hazards
2.3	High	Develop a public awareness program. Handouts and presentations will be developed and presented at area clubs, schools, and other public gatherings. Goals of the project shall include increasing public support for funding disaster preparation, educating the public what to do in case of a disaster, and increasing public awareness as to how public safety agencies will respond in a disaster.*	Ongoing	General fund	$2,500 annually	Emergency Services/ Public Information Officer	All
2.4	High	The city will develop a plan and pamphlets and implement a public information program that will identify the following: Who can apply? What types of emergencies can be applied for? Where to apply.*	Ongoing	General fund	$2,000 annually	Risk Management/ Human Resources/ Public Information Officer	All
3.1	High	Identify water resources management and conservation opportunities.	3 – 5 years	General fund/PUE	$100,000	Page Utility Enterprises /Public Works	Drought, climate change
3.2	High	Design and construct drainage structures for problem flood areas throughout the city to prevent flooding of properties and buildings.*	Ongoing	PUE Grant FMA	Requires study	Engineering/ Public Works	Flood

DRAFT

Action Item #	Priority	Action Description	Timeline	Funding Source	Estimated Cost	Implementing Department	Related Hazards
3.3	High	Water supply system upgrade. This project is to upgrade the current pumping units and possibly identify an alternative lower level intake with a new pumping system and a separate pipeline to deliver water to the water treatment plant. This will allow for dependability and a backup to the current system. It will also provide water if lake level drops below current intake levels.*	1-3 years	PUE	Requires study	Engineering/ Utility Department/ City Engineer	Drought
3.4	High	Maintain cloud storage for vital records and data to allow access if government servers are disrupted.	Ongoing	General fund	$3,500 annually	IT	All
4.1	High	Partner with local insurance agencies to hold workshops for property owners to educate about Flood Insurance Programs and its requirements. Community Development performs this function through NEIPA and the Engineering Division for flood only	3-5 years	General fund	Requires study	Community Development	Flood
4.2	High	The city will develop a plan and mutual aid agreement with the state, County, Navajo Nation, National Park Service, and other governmental entities as necessary to implement mitigation actions.*	In progress	General fund	Requires study	Legal/City Manager	All

DRAFT

Action Item #	Priority	Action Description	Timeline	Funding Source	Estimated Cost	Implementing Department	Related Hazards
4.3	High	Continue County partnership and support with local government, NGO and non-profits to maintain and build upon our cadre of committed, trained, volunteers to augment disaster response and recovery efforts in compliance with Arizona Disaster Service Worker program guidance (e.g. shelter workers, animal rescue and care, Community Emergency Response Team, communications staff, medical and health, and human service providers).	2-3 years	General fund	Requires study	Emergency Services	All
5.1	High	Develop a disaster debris plan.	1-2 years	General fund	$50,000	Emergency Service/Public Works	Dam failure, earthquake, flood, high winds, terrorism, wildland fire, winter storm
5.2	High	Budget for maintenance and replacement of County/city owned fire and police stations.	Ongoing	General fund/ Grants	Requires study	Public Works	Dam failure, earthquake, flood, high winds, terrorism, wildland fire, winter storm
5.3	High	Build a cadre of committed, trained volunteers to augment disaster response and recovery efforts in compliance with Arizona Disaster Service Worker program guidance (e.g. shelter workers, animal rescue and care, CERT,	2 – 3 years	General fund	Requires study	Emergency Service	All

DRAFT

Action Item #	Priority	Action Description	Timeline	Funding Source	Estimated Cost	Implementing Department	Related Hazards
		communications staff, medical, and health, and human services), during and after a disaster.					
5.4	High	Provide equipment and other resources sufficient to provide initial response to major road, air, HAZMAT, and mass casualty incidents.*	1 Year	General fund	Requires study	Fire Department	All

**Action from 2015*

Tusayan

Table 5-43 lists Tusayan's potential mitigation actions developed by the Planning Team. For each mitigation action, the following information is listed: mitigation goal, mitigation action description, mitigation type, hazard(s) addressed, and potential implementing city organizations.

Table 5-43: Tusayan Mitigation Action Plan

Action Item #	Priority	Action Description	Timeline	Funding Source	Estimated Cost	Implementing Department	Related Hazards
1.1	Med	Evaluate town/County and non-town/County facilities identified as potential shelter sites for structural integrity.	1-3 years	General Fund	$500	Facilities & Grounds	Dam failure, earthquake, flood, high winds, terrorism, wildland fire, winter storm
1.2	High	Identify and pursue funding opportunities to develop and implement local mitigation activities.	1-3 years	General Fund	$1,000	Management and Support	Dam failure, earthquake, flood, high winds, terrorism, wildland fire, winter storm
2.1	High	Develop a public outreach and awareness program about regional hazards and mitigation actions community members can do in their homes.	Ongoing	N/A	N/A	PIO/ Management and Support	All

DRAFT

Action Item #	Priority	Action Description	Timeline	Funding Source	Estimated Cost	Implementing Department	Related Hazards
2.2	High	Increase public awareness of the natural, human-caused, and technological hazards to businesses as a means to reduce the potential damage from each hazard through educational and outreach. Maintain a resource center accessible to the public at key government facilities. Provide information on government websites and social media accounts.	Ongoing	General Fund	$2,500 annually	Manager Support/Town Manager/PIO	All
2.3	High	Place more stress on the risks associated with natural and manmade hazards in public awareness campaigns conducted by various County/town departments.	Ongoing	General Fund	$500 annually	All departments	All
2.4	High	Increase public awareness of dam failure hazards and mitigation measures to address them	Ongoing	General Fund	$500 annually	Manager Support	Dam failure
2.5	High	Tusayan Fire Department Digital Newsletter: Explain hazards of smoke/carbon dioxide (CO2), fireplaces, chimneys, cleaning, and fire hazards. Regularly scheduled cleaning of chimneys. Smoke/CO2 detector maintenance program (as a follow up to the previous month's safety topic). Smoke and CO2 detectors use	Annually	General Fund	$500 annually	Tusayan Fire Department	Wildland Fire

DRAFT

Action Item #	Priority	Action Description	Timeline	Funding Source	Estimated Cost	Implementing Department	Related Hazards
		and maintenance. Explanation of two (2) types of detectors. Regularly scheduled replacement of batteries and testing.*					
2.6	High	Publish key preparedness information and links via town website and Tusayan Fire Department (TFD) digital newsletter to include information on emergency kits, winter preparation and safety, and relevant tips/guidance from the County.	Annually	General Fund	$500 annually	Tusayan Fire Department / Manager Support	Winter storm
2.7	High	Utilize town website and TFD digital newsletter to educate residents on winter hazards – with a particular focus on storm roof loading and other relevant building safety considerations.	Annually	General Fund	$500 annually	Tusayan Fire Department / Manager Support	High winds/ tornado, winter storm
3.1	High	Seek to implement codes, standards, and policies that will protect life and property from the impacts of hazards.	Ongoing	General Fund	$5,000	Planning & Zoning / Manager Support	Dam failure, earthquake, flood, high winds, terrorism, wildland fire, winter storm
3.2	Med	Integrate appropriate items from the MJHMP into the Safety Element of the General Plan and other regulatory documents as appropriate.	1-3 years	General Fund	N/A	Mayor Council/ Manager Support	All

DRAFT

Action Item #	Priority	Action Description	Timeline	Funding Source	Estimated Cost	Implementing Department	Related Hazards
3.3	High	Maintain cloud storage for vital records and data to allow access if government servers are disrupted.	Ongoing	General Fund	$500 annually	Manager Support	Dam failure, earthquake, flood, high winds, terrorism, wildland fire, winter storm
3.4	High	Coordinate with the utility companies and vendors to strengthen, safeguard, or take other appropriate measures such as providing supplemental services, to protect and secure high-voltage lines, water, sewer, natural gas and petroleum pipelines, and trunk electrical and telephone conduits from hazards.*	Ongoing	N/A	N/A	Facilities	Dam failure, earthquake, flood, high winds, terrorism, wildland fire, winter storm
3.5	High	Finalize the ongoing Engineering Assessment and Hydrological Analysis for the drainage improvements work plan in coordination with the County and implement related projects as appropriate.*	Ongoing	General Fund/ Grant FMA	Requires further study	Town Administration	Flood
4.1	High	Continue to develop mutual aid agreements and memorandum of understanding with agencies to serve emergency and disaster purposes.	Ongoing	N/A	N/A	City Attorney/ Manager Support / Tusayan Fire Department	All
5.1	High	Collaborate with partners and service providers to identify and implement water resource management and conservation opportunities as applicable.	Ongoing	General Fund	Requires further study	Facilities and Maintenance	Climate change, drought

DRAFT

Action Item #	Priority	Action Description	Timeline	Funding Source	Estimated Cost	Implementing Department	Related Hazards
5.2	High	Build a cadre of committed, trained volunteers to augment disaster response and recovery efforts in compliance with Arizona Disaster Service Worker program guidance (e.g. shelter workers, animal rescue and care, Community Emergency Response Team, communications staff, medical and health, and human services), during and after a disaster.	1-3 years	General Fund/ Grant HMGP/ EMPG	$2,000	Parks & Rec/ Manager Support/ Tusayan Fire Department	All
5.3	High	Develop an emergency preparedness network for community members (and visitors) to access food, water, communications, warming/cooling stations in times of emergent need.	1 year	General Fund	Conduct study, get bids	Manager Support/ County Sheriff's Office	All

**Action from 2015*

Williams

Table 5-44 lists the William's potential mitigation actions developed by the Planning Team. For each mitigation action, the following information is listed: mitigation goal, mitigation action description, mitigation type, hazard(s) addressed, and potential implementing city organizations.

Table 5-44: Williams Mitigation Action Plan

Action Item #	Priority	Action Description	Timeline	Funding Source	Estimated Cost	Implementing Department	Related Hazards
1.1	Med	Evaluate city/County and non-city/County facilities identified as potential shelter sites for structural integrity.	1 year	General Fund	$1,500	Building & Safety/ Planning	Dam failure, earthquake, excessive heat, power outage, flood, high winds, hazmat, terrorism, wildland fire, winter storm

Action Item #	Priority	Action Description	Timeline	Funding Source	Estimated Cost	Implementing Department	Related Hazards
1.2	High	Identify and pursue funding opportunities to develop and implement local mitigation activities.	Ongoing	General Fund	Further Study Required	Emergency Services	All
1.3	High	Enforcement of floodplain management requirements, including regulating all and substantially improved construction in floodplains to reduce the losses to property and people.	Ongoing	General Fund	Further Study Required	Planning and Building Code Enforcement/ Building Official	Flood
1.4	High	Continue to enforce zoning and building codes through current site plan, subdivision, and building permit review processes to reduce the effects of drought, flood, severe wind, wildland fire, and other hazards on new buildings and infrastructure.	Ongoing	General Fund	Further Study Required	Planning and Building Code Enforcement/ Building Official	Dam failure, earthquake, excessive heat, power outage, flood, high winds, hazmat, terrorism, wildland fire, winter storm
1.5	High	Enforcement of the newly adopted Defensible Space Ordinance for the protection of future and existing structures within the wildland urban interface.	Ongoing	General Fund	Further Study Required	Planning and Building Code Enforcement/ Building Official	Wildland fire
2.1	High	Increase public awareness of dam failure hazards and mitigation measures to address them.	Ongoing	General Fund	Further Study Required	Emergency Services	Dam failure

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Action Item #	Priority	Action Description	Timeline	Funding Source	Estimated Cost	Implementing Department	Related Hazards
3.1	High	Coordinate with the utility companies and vendors to strengthen, safeguard, or take other appropriate measures such as providing supplemental services, to identify, repair, protect and secure high-voltage lines, water, sewer and trunk electrical and telephone conduits from hazards.	Ongoing	General Fund	Further Study Required	Public Works	Dam failure, earthquake, excessive heat, power outage, flood, high winds, hazmat, terrorism, wildland fire, winter storm
3.2	High	Perform fuel thinning around water treatment plant to create a wildland fire defensible space perimeter and install exterior sprinkler system on the structures and site perimeter.	Ongoing	General Fund	Further Study Required	Public Works	Wildland Fire
3.3	High	Annual inspections and maintenance work on five (5) existing city dams. Continued monitoring by the City Water Department in cooperation with ADEQ.	Annually	General Fund	Further Study Required	Public Works	Dam failure
3.4	High	Bill Williams Mountain Steep Slope forest restoration treatments to reduce threat from catastrophic wildland fires and post-wildfire flooding.	Ongoing	General Fund/ Grant/ HMPG	Further Study Required	Coconino County Flood Control District Administrator / Coconino County Forest Restoration Director	Flooding, Wildland Fire

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Action Item #	Priority	Action Description	Timeline	Funding Source	Estimated Cost	Implementing Department	Related Hazards
4.1	High	Continue to develop mutual aid agreements and memorandum of understanding with agencies to serve emergency and disaster purposes.	Ongoing	General Fund	Further Study Required	City Attorney/ Emergency Services	All
5.1	Med	Create new storage facilities for effluent to be used for irrigation and emergency wildland fire protection.	Ongoing	General Fund/ Grant/ BRIC	Further Study Required	Public Works	Wildland Fire

**Action from 2015*

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Section 6: Maintenance Procedures

Elements of this section include:

- Monitoring, evaluating, and updating the MJHMP;
- Incorporation into existing plans and procedures;
- Continued public participation.

FEMA REGULATION CHECKLIST: PLANNING PROCESS

Documentation of the Planning Process
44 CFR § 201.6(c)(1): The plan shall include documentation of the planning process used to develop the plan, including how it was prepared, who was involved in the process, and how the public was involved.

Elements
A5. Is there discussion on how the community will continue public participation in the plan maintenance process? 44 CFR 201.6(c)(4)(iii)
A6. Is there a description of the method and schedule for keeping the plan current (monitoring, evaluating and updating the mitigation plan within a 5-year cycle)? 44 CFR 201.6(c)(4)(i)

Source: FEMA, *Local Mitigation Planning Handbook Review Tool,* March 2013.

Implementation and maintenance of the MJHMP is critical to the overall success of hazard mitigation planning. This section details the process that the County and cities / towns will use to monitor, update, and evaluate the plan within the five year cycle of the plan's revision to ensure the MJHMP remains an active and relevant document. The format of the plan aligns with the regulation checklist and is divided into sections of information. When it is time to maintain or revise the MJHMP, data can be easily located and incorporated, resulting in an easy method to keep the plan current and relevant.

The Planning Team represents County and city/town staff from and other stakeholders that contributed to the development of the 2021 MJHMP. The Planning Team oversaw the development of the MJHMP, and made recommendations on key elements of the MJHMP, including the maintenance strategy.

It was important that all members of the Planning Team be given the opportunity to provide input during MJHMP maintenance. This philosophy will be continued for future plan revisions through evaluations, maintenance, and updates of data, processes, and programs. The Planning Team will convene annually to perform annual reviews of the MJHMP and its implementation. The Planning Team will include representation from residents, citizen groups, and stakeholders within the planning area.

If Planning Team members can no longer serve on the Planning Team, the appropriate department director will assign another staff person to be on the Planning Team so that every County, city / town department is represented.

Although formal annual evaluations were not completed every year, the MJHMP was indirectly reviewed on a frequent basis. The lack of review was primarily due to:

- The MJHMP maintenance requirements were not effectively communicated when changes in personnel occurred;
- A general lack of understanding regarding the importance and requirements of the maintenance element;

A period of several significant hazard events and heavy mitigation efforts, resulting in the lack of resources or time to perform the plan maintenance tasks.

6.1 Monitoring and Evaluation

The MJHMP includes a range of action items to reduce losses from hazard events. Together, the action items provide a framework for activities that the County and cities/towns can choose to implement over the next five years. The effectiveness of the MJHMP depends on the incorporation of the action items into other existing plans, policies, and programs. Although County Administrator and City/Town Manager Offices will have primary department responsibility for the MJHMP's continual review, coordination, and promotion, plan implementation and evaluation will be a shared responsibility among all departments and agencies that contributed to the mitigation action plan.

The Planning Team will be jointly responsible for the MJHMP's implementation and maintenance through existing programs. Department managers will be responsible for implementing mitigation strategies and actions specific to their department operations. The County Emergency Manager will assume responsibility for facilitating plan maintenance and Planning Team coordination.

Each April, the Planning Team will begin the process of reviewing the MJHMP and the implementation of mitigation actions to develop an annual progress report. This process can also assist the budget review process by providing information on mitigation projects and activities that have been completed or implemented. An annual progress report process will serve to align annual reviews of the MJHMP to incorporate information. As updates to the MJHMP are completed, the public will be made aware of the changes to the MJHMP and make recommendations or comments.

The Planning Team will monitor the hazard mitigation strategies during the year and at a meeting held in January of each year, Planning Team members will provide information for the evaluation of the progress of the 2021 MJHMP. This evaluation will include:

- A summary of any hazard events that occurred during the prior year and their impact on the planning area;
- A review of successful mitigation initiatives identified in the 2021 MJHMP;
- A brief discussion about the targeted strategies that were not completed;
- A re-evaluation of the action plan to determine if the timeline for identified projects needs to be amended, and the reason for the amendment (e.g. funding issues);
- Any recommendations for new projects;
- Any changes in or potential for new funding options (e.g. grant opportunities);
- Any impacts of County planning programs or initiatives that involve hazard mitigation.

The Planning Team will write a progress report that will be provided to the County and cities / towns' budget Planning Team for review and incorporation in the budget process as mitigation projects are completed or implemented. The hazard mitigation plan progress report will also be posted on the County and city / town websites on the page dedicated to the MJHMP, provided to the local media through a press release, and presented in the form of a report to the County Supervisors and City/Town Councils. The Planning Team will strive to complete the progress report process by March of each year.

6.2 Plan Update

Section 201.6.d.3 of 44CFR requires that MJHMPs be reviewed, revised as appropriate, and resubmitted for approval in order to remain eligible for benefits awarded under the Disaster Mitigation Act. The County and cities/towns intend to update its MJHMP on a five year cycle.

Based on needs identified by the Planning Team, the update will, at a minimum, include the following elements:

- The hazard risk assessment will be reviewed and updated using the most recent information and technologies;
- The action plan will be reviewed and revised to account for any initiatives completed, dropped, or changed and to account for changes in the risk assessment;
- Any new policies identified under other planning mechanisms, as appropriate;
- The draft MJHMP will be sent to appropriate agencies and organizations for comment;
- The public will have an opportunity to comment on the updated version prior to adoption;
- The County Board and City/Town Councils will adopt the updated plan.

At a minimum of nine months prior to the expiration date of the 2021 MJHMP, the Planning Team will implement a revision schedule to formally update the plan. The MJHMP will be revised using the latest FEMA hazard mitigation guidance documents, such as the Mitigation Planning Tool and Regulation Checklist to ensure compliance with current mitigation planning regulations.

6.3 Continued Public Involvement

The overall success of the MJHMP is through implementation of the hazard mitigation strategy and activities to reduce the effects of hazards, protect people and property, and improve efforts to respond to and recover from disasters. Members of the public and the County and cities / towns will ultimately benefit from the implementation of the MJHMP and must be given the opportunity to provide input to the continuous cycle of MJHMP planning.

Jurisdictions participating in the MJHMP will strive to keep the public aware of hazard mitigation projects that take place as a result of the plan. Public information will be released through press releases, website announcements, public hearings, board, council and commission meetings, and social media.

Projects that mitigate hazards are included in each jurisdiction's annual budget planning process. Workshops are held, meetings are convened, and the public is made aware of the planning through County Board and City / Town Council meetings, open workshop sessions, and press releases during this time. The budget planning process will serve as an annual opportunity to conduct outreach to the public on updates to the hazard mitigation planning process.

A survey can be developed to gather input on how the community feels about the progress being made on MJHMP activities. The County and each city / town will also provide press releases and information about hazard mitigation projects to the public on a regular basis, but at a minimum, the public will be engaged to learn about current MJHMP activities and given the opportunity to provide comments and information on an annual basis to update and maintain the MJHMP. The County and city / town emergency managers are responsible for ensuring the public is included and involved in the annual public plan update and outreach.

Below is a sample list of additional public engagement efforts utilized by the participating jurisdictions to engage the public in hazard mitigation efforts and gather input.

- Coconino County Emergency Management Department participates in annual events such as the Coconino County Fair, other public events, and public outreach. It manages a booth at annual Home Shows, providing information on emergency preparedness and hazard awareness, as well as a booth at the Coconino County Fair.
- The Flagstaff Fire Department provides outreach to the public and developers in the fuel management arena utilizing multiple mediums. The Fire Department hosts a booth at the Coconino County Fair and during the Greater Flagstaff Home Show and provides information including suggested construction practices, materials, and other safety efforts. Flagstaff works with the Greater Flagstaff Forest Partnership in providing mail-outs, inserts in pizza boxes, and short promotional messages during movie intermissions, etc. In addition, the city provides presentations to civic groups and homeowners groups on fire safety and fuel management efforts. The city hosts workshops with the various forest thinning contractors regarding code requirements and the permitting process. The Flagstaff Water Utilities Department provides information and outreach to the public regarding water conservation measures and flooding. The city council-appointed Water Commission has public meetings on a monthly basis to convey these messages. The city has an annual public open house, during which outreach is done and written information regarding the various mitigation efforts taking place throughout the city is provided.
- Williams maintains a website with a hazard mitigation link to the County's website. The city hosts an annual meeting for all agencies and the public involved with the city's efforts to protect the community from natural disasters.
- Various departments within Page establish booths at public events to distribute hazard awareness information appropriate to the event. Appropriate items will also be released to the local media as opportunities arise. These activities will be on a continuous basis and will involve all city departments. The city holds public meetings, makes public announcements, and distributes public safety brochures.

When the time comes to begin revising the 2021 MJHMP, the plan update process will be implemented, which will include continued public involvement and input through attendance at designated public meetings, web postings, through press releases to local media, community fairs and events, and surveys. As part of this effort, a series of public meetings will be held, and public comments will be solicited on the revisions to the MJHMP according to the five year cycle.

Table 6-1 summarizes successful public involvement efforts previously conducted by participating jurisdictions and proposes activities for public involvement and dissemination of information. These shall be pursued whenever possible and appropriate.

Table 6-1: Public Involvement Activity or Opportunity

Departments	Past	Proposed
All	• Participate in annual public events such as annual fairs, home shows, and festivals to distribute information on emergency preparedness and hazards. • Conduct multi-medium public communications efforts to deliver critical information on hazards, mitigation programs, available resources, and best practices. Mediums can include mail-outs, pizza box inserts, brochures, social media campaigns, dedicated websites, outreach to community groups, and promotional messages during movie intermissions. • Deliver training, workshops, and presentations to help citizens and businesses comply with regulations, learn how to take advantage of existing programs, or benefit from relevant practices	• Place more emphasis on the risks associated with natural and manmade hazards at public awareness campaigns conducted by various city/town departments. Consider developing and distributing public education materials for natural hazards. • Continue to expand collaboration with educational institutions to deliver hazard and preparedness information, engage youth and young adults in relevant programming, and convey relevant knowledge to families. • Continue to expand support for multi-lingual and multi-cultural communication tools and engagement methods – including but not limited to documents, surveys, social media posts, and in-person events.
Administration	MJHMP survey conducted online.	Conduct annual surveys online and at the annual Public Safety Event.
Human Resources		Procure funding, staff, and develop CERT program as appropriate and facilitate participation in formal emergency and disaster management programs by government staff and the public.
Utilities and Public Works	Development and delivery of public information products on conservation methods and flooding.	Integrate methods for modifying billing and invoicing tools to inform, empower, and incentivize conservation among customers/users.
Law Enforcement, Fire/Rescue, Administration	City/Town agencies, such as law enforcement and human resources, and federal and congressional officials have conducted training events (e.g. first aid and CPR, active shooter drills, school lockdown drills, emergency alert notification, American Red Cross training and smoke alarm distribution) as ways to educate the public and community leaders in responding to circumstances and situations.	• Increase public awareness of the natural, human-caused, and technological hazards to businesses as a means to reduce the potential damage from each hazard through educational and outreach. • Place more stress on the risks associated with natural and manmade hazards at public awareness campaigns conducted by various city/town departments. Consider developing and distributing public education materials for natural hazards.

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Section 7: Plan Approval and Adoption

NOTE: Approval resolution will be input here after AZ DEMA/FEMA review and County adoption

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Appendices:

Appendix A: Local Mitigation Plan Review Tool and Adoption Documentation

NOTE: Will be added once AZ DEMA and FEMA have completed their review

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Appendix B: Planning Process Documentation

Appendix B contains documentation of the planning process for the MJHMP Planning Team, including meetings, presentations, emails, etc. Each jurisdiction conducted additional, informal, planning efforts to support the MJHMP Planning Team. This was primarily due to the operational requirements of the ongoing COVID-19 response. Only one of these supplementary efforts was conducted formally. It is documented herein.

Meeting Date	Meeting Title	Meeting Handouts, Presentation Included in MJHMP
Sep 4, 2020	MJHMP Planning Team Kickoff Meeting	- Presentation (cover only) - Meeting notes with attendance sheet
Nov 19, 2020	MJHMP Planning Team Meeting #1	- Invitation to stakeholders - Sign-in sheet - Agenda - Presentation (cover only) - Meeting notes
Dec 15, 2020	MJHMP Planning Team Meeting #2	- Invitation to stakeholders - Stakeholders invitation list - Sign-in sheet - Presentation (cover only) - Meeting notes
Jan 12, 2021	Coconino County Mitigation Action Planning Meeting	- Invitation to stakeholders - Sign-in sheet - Presentation (cover only) - Meeting notes
Jan 22, 2021	MJHMP Planning Team Meeting #3	- Invitation to stakeholders - Sign-in sheet - Presentation (cover only) - Meeting notes

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1. Project Kickoff Meeting

Date/Time: September 4, 2020 @ 10:00AM-11:00AM MST

Location: GoToWebinar (virtual meeting)

Presentation:

Meeting notes (with attendance sheet):

Hazard Mitigation Planning Meeting Minutes September 3, 2020

The attendees Included:
Susan Austin
DEMA Daren
Sweet DEMA
Wes Dison Coconino County Emergency Mgnt.
Mark Christian Coconino County Emergency
Mgnt. Sam Beckett Coconino Co. Public Works
John D Brice Coconino Co Public
Works Brett Axlund Coconino Co.
Sheriff Off. Gerritt Boeck Coconino
Co Sheriff Off. Scott Carey Coconino
Co GIS
Helen Costello Coconino Co GIS
Ben Wilson PHEP Coconino Co Health and Human
Services Blake Scott Planner Coconino Co Health and
Human Service Eric Peterson Coconino Co Public
Relations
Brian Klimowski National Weather
Service Tony Merriman National
Weather Service Lee Antonides
Ponderosa Fire Department Mike
Greenwalt Highlands Fire Department
Paul Oltrogge Flagstaff Fire Department (Wildland Fire Mgnt.
Officer) Greg Brush Tusayan Fire Department
Jeff Reed Page Fire Department
Erin Harris Page Fire
Department
Matt Wood City of Page (Utilities)
Bayden Grover Fredonia (Town Marshall and primary
contact) Frank Higgins Flagstaff police Department
Mark Richardson City of Flagstaff Water
Services Sara Dechter City of Flagstaff
Jim Janacek City of Flagstaff
Stormwater Monica Rabb City of
Flagstaff Stormwater
Ed Schenk City of Flagstaff Stormwater (utilities
division) Rick Barrett City of Flagstaff Engineer
Theresa Johnson City of Williams (Emergency
Manager) John Romero City of Williams (Primary
Point of Contact)

Hazard mitigation meeting 9/3/2020

Recorded meeting began at 0800.

Wes Dison provided opening remarks: Thanked attendees for their participation, and reminded the group there will be future asks for their input, the goal is to keep plan as simple as possible. Advised participants that session was recorded. Wes also mentioned the proposed use of a vendor to assist in plan construction.

Sue Austin is the presenter:

Overview: mitigation-plan review
Sue had released a "cleaned up" version of the 2016 to prepare it for the 2021 updates.

Provided a definition of Mitigation which included actions that are taken to reduce or eliminate risk before, during, or after an incident.

Plan Purpose: The Plan acts as a guide to make safer communities, reduces disaster impact. We can't stop hazards, but we need to reduce the impact. A Hazard Mitigation Plan facilitates eligibility for grants. We should implement and use the plan in alignment with other County/Jurisdiction plans.

Planning Process:
We should expect to have three (3) of these meetings.

1. 1st meeting September 3rd 2020
2. 2nd meeting Sept.-Oct. To be Determined. Sue proposed end of September to early October.
3. 3rd meeting Oct.-Nov. To be Determined

DEMA will put information into the updated plan as new information is received from Mark C. If we move quickly we could see a draft by January.

The draft Plan 2021 will be made ready for Plan Team review and changes, then forwarded to FEMA by DEMA. (Jan-February)

Review of the FEMA Process:
All individual jurisdictions must adopt the plan.

Review of Plan requirements:
Per FEMA there are 36 Requirements for the plan and all jurisdictions must meet each of the 36 elements. FEMA will use the "Review Tool" to assure all elements have been met.

The old (outgoing) plan of 2015 should be made available for public viewing/comments. This is the plan that was approved March 2016.

Plan Structure:
The Plan consists of four (4) main sections: Planning Process
Risk Assessment Mitigation Strategies Plan Maintenance

Information Collection & Taskings:
Plan Point of Contact is Mark Christian Coconino County Emergency Management (CCOEM). Mark will assign taskings and review those items when received from the jurisdictions. Mark will forward that information to Daren Sweet for review. If changes are needed it is returned to Mark Christian for updates. If changes are unnecessary, Daren will include in the Plan.

Points of Contact:
County-Mark Christian
Flagstaff- City Emergency Mgr. Jerry Bills (Flagstaff Fire Department Deputy Chief & Summit Fire Chief) Fredonia- Bayden Grover -Town Marshall
Page- Jeff Reed Page fire Chief Tusayan Fire Chief Greg Brush
Williams- Lt. Joe Romero Williams police Department

Jurisdictional Overviews:
Brief discussion: Mark has been working with jurisdictions to move these updates forward. If no changes are needed that is okay. It is important to recognize and include changes respective to each jurisdiction.

Public Involvement Decision Point:
Important piece. How will you meet the Public Involvement requirements?
Eric Peterson: public relations will post links for viewing and survey/comments, and will also utilize press and social media.
Sue recommends we take "snapshots" of local jurisdiction web pages showing each jurisdiction webpage bearing information on the hazard Mitigation Plan process.

We should collect copies of all community outreach efforts for the community outreach narrative description in the plan. Jurisdictions need to "link" to the county or do their own public outreach activities. Jurisdictions must document that County link on their respective homepage.
Must document that the public was given a chance to get involved and document any feedback obtained.
Risk Assessment:
Document any events with significant enough impact that it warrants mention. Do not necessarily have to be from a declared emergency. Manmade disasters do not to be included (Hazmat incidents, transportation accidents).
Asset: is not required
Loss Estimations: not required.
What are the impact and severity of hazards? History of hazards.
Probability and Magnitude of the hazard Sue asks that we "brush up" on these a little.

We must look at incident/ hazards from 2015 moving forward.

Hazard profile updates:
Hazard Profile updates are up to the Planning Team. Who will be the leader for this?
Mark Christian will serve as point of contact for individuals working on the profiles and forwarding that completed information to Vendor (Constant Associates) and DEMA for inclusion into the hazard risk profile updates.

Risk Assessment (note this is Section 4 in the 2015 Plan CPRI (Calculated Priority Risk Index) was mentioned with the need to make a decision today regarding the inclusion of Loss Estimation tables. Apparently, these tables are not required. Sue presented the option of maintaining the Table format or inclusion of a narrative explanation of losses. Many Counties have been taking these out and opting for the narrative explanations. Emergency Manager Wes Dison wants to eliminate the table and go with the simplified narrative explanation.

Hazard Identification:
We currently have nine (9) identified hazards.

Sue asked if want HHPD Grant eligibility (High Hazard Potential Dams). this was regarding the Dam Failure hazard. Jim Janacek is interested in further discussion of this topic and mentioned the Clay Avenue Detention Basin and related Emergency Action Plan.

Blake Scott wants to add health related hazards. This discussion was generated due to earlier comments that we intend to add a "Pandemic" 'hazard to our existing list. Sue A stated that any new hazards will need to be accompanied with a "Hazard Profile". Sue asked Blake for the list of health-related hazards and if any of our health-related hazards are currently addressed in other County documents/plans. Sue provided the option of listing one new "Health" related hazard and within that one new listing address several related hazards as opposed to individually listing several health hazards.

Wes Dison wants to follow DEMA's recommendation of listing one additional hazard to be added to plan for Coconino County.

Mark Christian will be the lead and is assigned to find the "leads" for updating each hazard profile. Wes Dison commented that our Contractor (Constant Associates) will take the lead for the Hazard Profile updates and will be assisting the Contractor for that purpose.

Sue A. confirmed that Hazard Profile updates are now in the County's hands.

Mitigation Measures:
Regarding updates we will work with only the right 2 columns for the new information. Do not change any other portions as FEMA will want to see the original descriptions and the changes over the five- year period. Sue is requesting more specific information on the mitigation measures.

I asked Sue to send the power point presentation for today to me for information purposes.

Section 5: Things needed to help implement Mitigation Measures.
Mention was made of FEMA Regulatory requirements

On page 128 of our current hazard Mitigation Plan for Administrative and Technical information, and subsequent pages regarding capability assessments: Sue can offer a much "cleaner" way to present the information. Wes Dison agreed and would like to simplify this information.

Mark C. needs to continue checking in with Points of Contact, and DEMA will be in the background with Mark and Wes. We can adjust for further meetings to be determined.

Jim Janacek is interested in further discussion regarding removal of the asset tables and new ways of
assessing each jurisdiction's capability.

Sue A. and Daren S. and mark C will stay in contact with Daren as main point of contact. Sue A. clarified that jurisdictions are being asked for a "piece by piece" update of their respective sections of the Hazard Mitigation Plan, and we are not asking for the jurisdictions to make adjustments to the whole plan.

Meeting ended at 0945 9/3/2020.

Please use the below listed link to review the entire meeting of 9/ 3/ 2020 in detail.

Link to video: https://youtu.be/ROrpdqmHV04

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2. Project Planning Team Meeting #1

Date/Time: November 19, 2020 @ 10:00AM – 12:00PM MST

Location: GoToWebinar (virtual meeting)

Invitation:

Subject: Coconino MJHMP Update Planning Meeting #1 - Registration Information
Date: Monday, November 2, 2020 at 9:36:28 AM Pacific Standard Time
From: Janlia Riley <Janlia@constantassociates.com>
To: Jerry Bills <jbills@flagstaffaz.gov>, Bayden Grover <bgroverfmo@fredonia.net>, Jromero@williamsaz.gov <Jromero@williamsaz.gov>, Theresa Johnson <tjohnson@williamsaz.gov>, hnixon@williamsaz.gov <hnixon@williamsaz.gov>, Jeff Reed <firechief@cityofpage.org>, Erin Harris <eharris@pageaz.gov>, 'Charlie Hendrix' <tusayantownmanager@tusayan-az.gov>, Greg Brush <gbrush.tfdgc@outlook.com>, tusayanasst@tusayan-az.gov <tusayanasst@tusayan-az.gov>, Lee Rosenberg <lee@constantassociates.com>, Amanda Ozaki-Laughon <Amanda@constantassociates.com>, Christian, Mark <mchristian@coconino.az.gov>, Andreani, Lucinda <landreani@coconino.az.gov>, Dison, Wes <wdison@coconino.az.gov>, Wilson, Benjamin <bewilson@coconino.az.gov>, 'Carter, Tim' <tcarter@coconino.az.gov>
BCC: Evan Koepke <evan@constantassociates.com>, Amanda Ozaki-Laughon <Amanda@constantassociates.com>, lee <lee.rosenberg@navigatingpreparedness.com>
Attachments: image001.jpg

Good Morning,

Your presence is requested for the **Coconino MJHMP Update Planning Meeting #1**. Please see the meeting details and link to register below. Registering prior to the meeting time is recommended. Please remember that it is imperative that an authorized representative from each jurisdiction to be present so that key planning decisions can be made

Date: Thursday, November 19th, 2020
Time: 10:00 AM – 12:00 PM
Registration Link: https://attendee.gotowebinar.com/register/6384269597353174284

Dial in #: +1 (951) 384-3421
Attendee PIN: 240-634-290

(*Once registered, you will receive your unique audio PIN to enable self mute/unmute functions via phone dial-in. You can also use your computer's audio functions.)*

Best regards,

Janlia Riley
Operations Analyst

CONSTANT ASSOCIATES
8(a) Certified Business
Emergency Management | Health Security | Healthcare Preparedness | Counterterrorism
Direct: (424) 320-2583
Email: janlia@constantassociates.com
www.constantassociates.com

Sign-in sheet:

Coconino County
Hazard Mitigation Plan Update Project 2020
Planning Meeting 1 – Attendance Sheet

Attendance Sheet

Planning Meeting 1

Location: Virtual Meeting on GoToWebinar
Date: Thursday, November 19, 2020
Time: 10:00am-12:00pm MST
Dial-In: GoToWebinar
Participant Pin: Received upon registration
Webinar Link: https://attendee.gotowebinar.com/register/6384269597353174284

#	Name	Organization/ Department	Telephone	Email	Attendance
1.	Erin Harris	City of Page Fire Department		eharris@papeaz.gov	Present
2.	John Romero	City of Williams Police Department		jromero@williamsaz.gov	Present
3.	Wes Dison	Coconino County Emergency Management		wdison@coconino.az.gov	Present
4.	Evan Kopke	Constant Associates		evan@constantassociates.com	Present
5.	Lee Rosenberg	Constant Associates		lee@constantassociates.com	Present
6.	Jerry Bills	Summit Fire District		jbills@flagstaffaz.gov	Present

1

Agenda:

Coconino County
Hazard Mitigation Plan Update Project 2020
Planning Meeting 1 - Agenda

Meeting Agenda

Planning Meeting 1

Location: Virtual Meeting on GoToWebinar
Date: Thursday, November 19, 2020
Time: 10am-12pm MST
Dial-In: GoToWebinar
Participant Pin: Received upon registration
Webinar Link: https://global.gotowebinar.com/join/6384269597353174284/661855202

I. Welcome & Agenda
   a. Meeting Purpose
   b. Administration
   c. Introductions
II. Project Status and Plan Update
   a. Project Status
   b. Project Plan
   c. Schedule
III. Outstanding Data Requirements
IV. Hazard Identification and Prioritization
   a. Historical Hazards
   b. Hazard List and Prioritization
   c. Hazard Selection
V. Action Items & Next Steps
VI. Questions & Discussion
VII. Adjourn

Presentation (cover only):

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Meeting notes:

Coconino County
Hazard Mitigation Plan Update Project 2020
Planning Meeting 1 – Meeting Minutes

Meeting Minutes

Planning Meeting 1

Location: Virtual Meeting on GoToWebinar
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Table 1: Action Items

#	Deliverable	Responsible	Due
1.	Finalize and share meeting minutes within 5 business days	CONSTANT	11/24/2020
2.	Conduct risk assessment	CONSTANT	TBD
3.	Analyze public survey results	CONSTANT	TBD
4.	Send planning team guidance for review of mitigation actions	CONSTANT	11/27/2020
5.	Send poll to planning team and schedule next planning meeting for week of December 14	CONSTANT	12/4/2020
6.	Collect and deliver remaining data requirements (see pages 3-4)	Planning Team	12/11/2020
7.	Complete CPRI worksheet for your jurisdiction	Planning Team	12/4/2020
8.	Review mitigation strategy/actions from 2015 MJHMP	Planning Team	12/11/2020
9.	Identify desired mitigation goals and actions (pages 4-7)	Planning Team	12/11/2020

I. **Welcome**

a. Evan Koepke reviewed the meeting's purpose (listed on slide 2 of the presentation), reviewed the meeting materials/ handouts provided through GoToWebinar for download (Agenda, Meeting Presentation, and CPRI Worksheet), and discussed meeting administration. He subsequently led the group in a round of introductions.

II. **Project Status and Plan Update**

a. Actions Taken and Tasks Completed

i. Evan reviewed the list of completed actions on slide 4 of the meeting presentation. He highlighted the deployment of the hazard mitigation survey and the provision of pre-built

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communications materials to participating jurisdictions, noting that the consulting team is awaiting substantiation from several jurisdictions.

ii. Tim Carter added that the hazard mitigation survey was sent via the County's notification system to all registered citizens.

iii. Evan noted that Constant Associates (CONSTANT) has received updated community descriptions from all participating jurisdictions, and the community capabilities inventory from most.

b. Challenges and support needs

i. Evan stated that there are several outstanding data requirements for conducting the risk assessment that will be reviewed in detail in a subsequent section.

ii. Evan noted that the CONSTANT team is available to provide technical support regarding research and hazard identification via Mark Christianson. However, while Mark is out on vacation, the consulting team is directly available to help problem-solve and answer questions as they arise.

c. Next Steps

i. Evan state that the next steps for the project will be to finalize the list of hazards, use the CPRI Worksheet to prioritize those hazards for each participating community, and conduct a risk assessment to inform mitigation planning efforts.

d. Schedule

i. Evan reviewed the planning schedule and the condensed planning approach being used due to the limited time available to execute the project.

1. Planning will take place during two planning meetings. This is the first of two.
2. The second meeting will assist in defining the mitigation strategy and weave together specific implementation information that FEMA requires.
3. Planning Meeting 1 (This meeting): Hazards and risk assessment. During the risk assessment process, it will be key to evaluate the risks presented to your community.
4. Planning Meeting 2: Mitigation planning. This meeting will result in a solid action plan, which will be brought together with the previous risk analysis portion of the plan. You will then receive a full draft of the plan for your review and approval.
5. After planning team review and approval, the draft MJHMP will be released for public review. Feedback from public review will be incorporated and a brief second round of reviews will occur internally to ensure planning team agree with the final product.
6. After public review, the plan will be sent for state and federal review. The final product will be packaged for County adoption and for adoption by each individual community.

III. Project Plan: Roles and Responsibilities

a. Evan reviewed the roles and responsibilities of the project's stakeholders

i. CONSTANT will:

1. Coordinate planning meetings and data collection
2. Develop the MJHMP

3. Support the approval process
4. Act as a resource for the entire planning team
5. Will provide timely requests for information and provide adequate time to review draft documents
6. Evan asked if two weeks of review time is adequate.
    - **A.** Jerry Bills says yes
    - **B.** Ben Wilson says yes
    - **C.** John Romero says yes
    - **D.** Wes Dison says yes
    - **E.** No comment from other participants
    - **F.** Evan confirmed that two weeks will be the target review period for documents
2. Evan asked if CONSTANT can assume assent if feedback is not received by communicated review deadlines?
    - **A.** Jerry Bills says yes
    - **B.** Ben Wilson defers to Wes Dison
    - **C.** John Romero says yes
    - **D.** Wes Dison says yes
    - **E.** No comment from other participants
    - **F.** Evan confirmed that assent will be assumed if no feedback is received. He caveated that it will be only be used as a final resort – particularly if attempts to make contact / get feedback directly are unsuccessful

ii. Jurisdictional representatives will:

1. Ensure consistent attendance at planning meetings
2. Compile requested information and send to CONSTANT
3. Ensure consistent review and feedback delivered, with open communication
4. Assist with public engagement, especially boosting community participation via the survey and public release of final draft

IV. Outstanding Data Requirements

a. Evan noted that the planning team has received requests for information organized into three categories via Mark Christian prior to this meeting. This information is critical to completing the hazard identification and risk assessment elements of the project, as well as starting the mitigation planning process.

i. The Community Capabilities Inventory (form provided)

1. Regulatory and Planning: Listing of jurisdiction's ordinances and laws relevant to reducing disaster risk.
2. Administrative and Technical: Capabilities of each individual community
3. Education and Outreach Programs: Activities which seek to reduce hazard risk and increase public safety. All activities with community partners and community programs are considered education and outreach programs.

4. Mitigation Programs: CONSTANT needs any mitigation programs in place.

ii. Hazard Assessment Questionnaire (form provided)

1. CONSTANT needs answers to the Hazard Assessment Questionnaire for each community. Information needed includes:

A. Prior disaster declarations.

B. National Flood Insurance Program (NFIP) participation information, especially prior damage to insured structures. FEMA requires this to assess if there are NIFP insured structures at risk of flood that have been previously impacted

C. Hazards of Concern for each community

D. A listing of Critical Infrastructure for each community – these include facilities and systems that are critical lifelines. These should be accompanied by some economic valuation.

E. A listing of Community Assets – including key cultural, economic, and/or environmental assets. These may include major religious sites, registered historical locations, etc.

2. Mitigation Action Status – CONSTANT needs each community to designate each mitigation action from 2015 with a status. A worksheet and additional guidance will be provided to support the collection of this information.

V. Hazard Identification and Prioritization

a. Evan handed off facilitation to Lee Rosenberg, who proceeded to review historical hazards, present the CPRI approach, and CONSTANT's Calculated Priority Risk Index (CPRI) analysis for Coconino County

b. Historical Hazards

i. Lee shared data analysis of federal and state declarations of disasters from 1966-2020. Coconino County has, like every county, experienced its fair share of disasters. CONSTANT will go through each of these one at a time to give a quantitative risk score. The list of historical hazards came from government sources at the federal, state, and county level.

ii. Lee detailed the graph of federal and county disaster declarations, and the graph of County hazard events since 2015 (as seen on slide nine of the meeting presentation). He asked if any were missing, none were mentioned.

c. Hazard Identification and Prioritization

i. Lee provided an overview of the CPRI categorization matrix

ii. The matrix goes through each hazard as presented by the 2015 MJHMP as well as additional hazard identified by the consulting team. Each hazard is rated between one and four based on the probability of the hazard occurring, the severity of the hazard, warning time, and the hazard's duration. Specific definitions for these ratings can be found in the meeting presentation.

iii. The CPRI matrix in the presentation is CONSTANT's initial analysis for Coconino County as a whole, and feedback is encouraged.

iv. Each City will need to complete their own risk analysis to evaluate the hazards in their community using the CPRI Worksheet that will be provided after the meeting.

v. Lee proceeded to review each hazard listed in the CPRI matrices on presentation slides 12 and 13, soliciting participants for feedback on ratings and questions. He noted that the hazard identified on slide 12 are directly correlated or modified from the 2015 MJHMP, while those on slide 13 are new.

1. Dam Inundation: While there was at least one recorded dam collapse, the probability is low and not likely. Severity of the event would be very high and cause significant damage. The Northwestern part of Coconino County includes a large dam. Warning time could fluctuate but is usually substantial if it is a precipitation event including collapsed spillways. Duration of recovery results in months-long recovery timeframe.
    A. No feedback given, hazard assessment accepted.
2. Earthquakes: While earthquakes are experienced in Coconino County, they are not usually over a 4.0 M rating, nor do they cause significant damage.
    A. Erin Harris stated no one could recall any damage caused due to earthquakes in the community.
    B. Jerry Bills stated the same.
2. Flood/Flash Flood: This hazard has a high probability and is ranked as a medium-high threat. Flash floods usually have very little warning time. Duration of floods are usually moderate. This was given a 3.5 rating and a high-risk level.
    A. No feedback given, hazard assessment accepted.
3. High Winds/Tornadoes: This hazard was given a moderate severity. Tornados are not as common in the county, which means warning time can be shorter. The National Weather Service can often predict and issue high wind warnings accurately. Duration is usually a few hours, not for many days.
    A. No feedback given, hazard assessment accepted.
4. Pipeline Failure/Transportation: Was given a high-risk level, given the amount of commerce in the area.
    A. No feedback given, hazard assessment accepted.
5. Wildfire: Highest risk hazard due to location and environment. Probability and severity are very high. Duration can be many days, but usually less than 1 week.
    A. No feedback given, hazard assessment accepted.
6. Winter Storm: Due to the altitude of Coconino County, snowfall is common and can result in power outages and isolation of communities due to inaccessible roads. Warning times are usually given with advance notice. The National Weather Service puts out those warnings and they may last for several days.
    A. No feedback given, hazard assessment accepted.
7. Earthquakes: Lee recommended that Earthquakes to be removed from hazardous list due to their low assessed risk level and because leaving it in would require inclusion of mitigation actions which may not provide significant benefit to the county. However, he noted that he would check with FEMA Region 9 to ensure that this could be viably done. The group assented.
8. Aviation accidents: Due to the proximity to airports, accidents do occur. The probability of this hazard is low, warning time is usually none, and magnitude can be

significant. Event can last a few hours to a few days, would likely result in a low weighted score.

   A. Jerry Bills says yes, would like this hazard listed and to attempt developing mitigating activities. They have had a few accidents over the years, and it would be good for the County to include.

9. Lee reminded participants that not every jurisdiction needs to have the same hazards or weighted score overall. Each jurisdiction will need to conduct their own CPRI using the provided worksheet to capture specific risk profiles.
10. Climate Change: Lee stated that FEMA often requires this hazard be listed. Rising sea levels, growing numbers of hurricanes, excessive heat, drought, and wildfires can all be attributed to change in climate. Warning time has been significant, has a very high magnitude.
11. Excessive heat: This would be a new hazard. Arizona is already in a dry and hot climate. Warning time is usually significant and issued by the National Weather Service. Advisories on heat can last up to or over a week. This would be ranked at a high-risk level.
12. Public Health and Pandemic Event: Probability of this event is fairly high given other pandemics have taken place such as HIV and influenza. Over 250,000 fatalities in the United States due to current pandemic. Pandemics usually extend for several weeks or month before the pandemic begins as a community spreading event and could last for months or ears.
    A. Ben Wilson stated that Coconino wants to keep the pandemic event in there. This is where they focus efforts developing relationships and ensuring there is visibility and capability, surveillance systems to keep tabs on diseases that could become pandemics. Also, notes that title should be adjusted to "public health outbreak AND pandemics," since outbreaks can be local/regional, and pandemic implies international.
13. Extended Power Outages: In other states, programs from publicly owned utility companies called Public Safety Power Shutoffs can occur and cause extended power outages. Warning time is short, and the event can last for 20 hours or more.
    A. Lee asked if Arizona has a PSPS program in place?
    B. Jerry Bills said he is not aware of one.
14. Terrorism: Lee stated that Coconino County is likely not high on the list of terrorist targets, and probability is low. However, terrorism can be extremely disruptive. Warning time is negligible and duration is usually short. This definition may include active shooter events and domestic terrorism, as well as cyber terrorism.
    A. Ben Wilson asked if the term terrorism can include active shooter. The County has recently been impacted by cyber terrorism, so recommends the hazard is added.
    B. Erin Harris stated that the Glen Canyon Dam is defined as a major terrorist threat and is ranked as one of the major locations under threat of a terrorist attack. Given that Page is a smaller and isolated community, such an event would be devastating and needs to be planned for.

C. Jerry Bills suggested that ASHER (Active Shooter Hostile Event Response) could be used as an alternate title to capture active shooter style events

D. Lee recommended that each jurisdiction use the CPRI worksheet to define their perceived risk to this hazard type.

b. Hazard Selection

i. Based on the group discussion and the proposed hazards for the 2020 MJHMP, the following list of hazards will be included in the plan:

1. Dam Inundation
2. Drought
3. Earthquake and Seismic Hazards (Tentatively Removed)
4. Flood/Flash Flood
5. High Winds/Tornado
6. Pipeline Failure/Transport Accident/HAZMAT Release
7. Wildfire
8. Winter Storms
9. Aviation Accidents
10. Climate Change
11. Excessive Heat
12. Public Health Outbreak and Pandemic Events
13. Extended Power Outage (Public Safety Power Shutoff tentatively removed)
14. Terrorism (Term may be modified to better reflect active shooter type threats – one participant recommended the term ASHER incidents)

ii. Evan noted that this is not a final decision, and that a gap period of a week will be provided for participants, and planning team members who could not attend, to provide further input once the meeting minutes are released.

VI. Action Items & Next Steps

a. Evan reviewed action items for CONSTANT and the Planning Team, highlighted the timing and process for scheduling the next planning meeting, and solicited the group for final questions.

b. CONSTANT

i. Finalize and share meeting minutes within five business days.

ii. Conduct risk assessment, analyze public survey results, and update working draft with provided data

iii. Provide planning team tool for jurisdictions to select hazards and adjust their CPRI ratings

iv. Send planning team guidance for reviewing

c. Planning Team

i. Collect and deliver remaining data requirements

ii. Complete CPRI worksheet by December 4 as practicable

iii. Review mitigation strategy and mitigation actions from 2015 MJHMP prior to next meeting.

iv. Provide status of mitigation actions from the previous plan. Incomplete status is fine, ongoing is fine as well. CONSTANT will address each on an individual basis. This will assist in developing new mitigation actions with concrete, actionable mitigation activities to address a known hazard, protect the community, and provide an estimated cost that can be completed within the next five years. Concrete actions are preferred (retrofitted buildings, defensible spaces in high fire areas, etc.).

v. Identify desired mitigation goals, actions, and how they should be implemented

d. Next Meeting:

i. Week of December 14

ii. Will include similar time frame

iii. Date and time will be determined via a Doodle Poll

iv. The meeting will take up to two hours due to volume of content covered.

e. Questions & Discussion

i. Evan asked if the Coconino County has recently conducted a HAZUS assessment.

1. Ben Wilson and Wes Dison stated that they are unaware of one. Tim Carter would know for sure and can be contacted via email.

VII. Adjourn

Table 2: Meeting Attendees

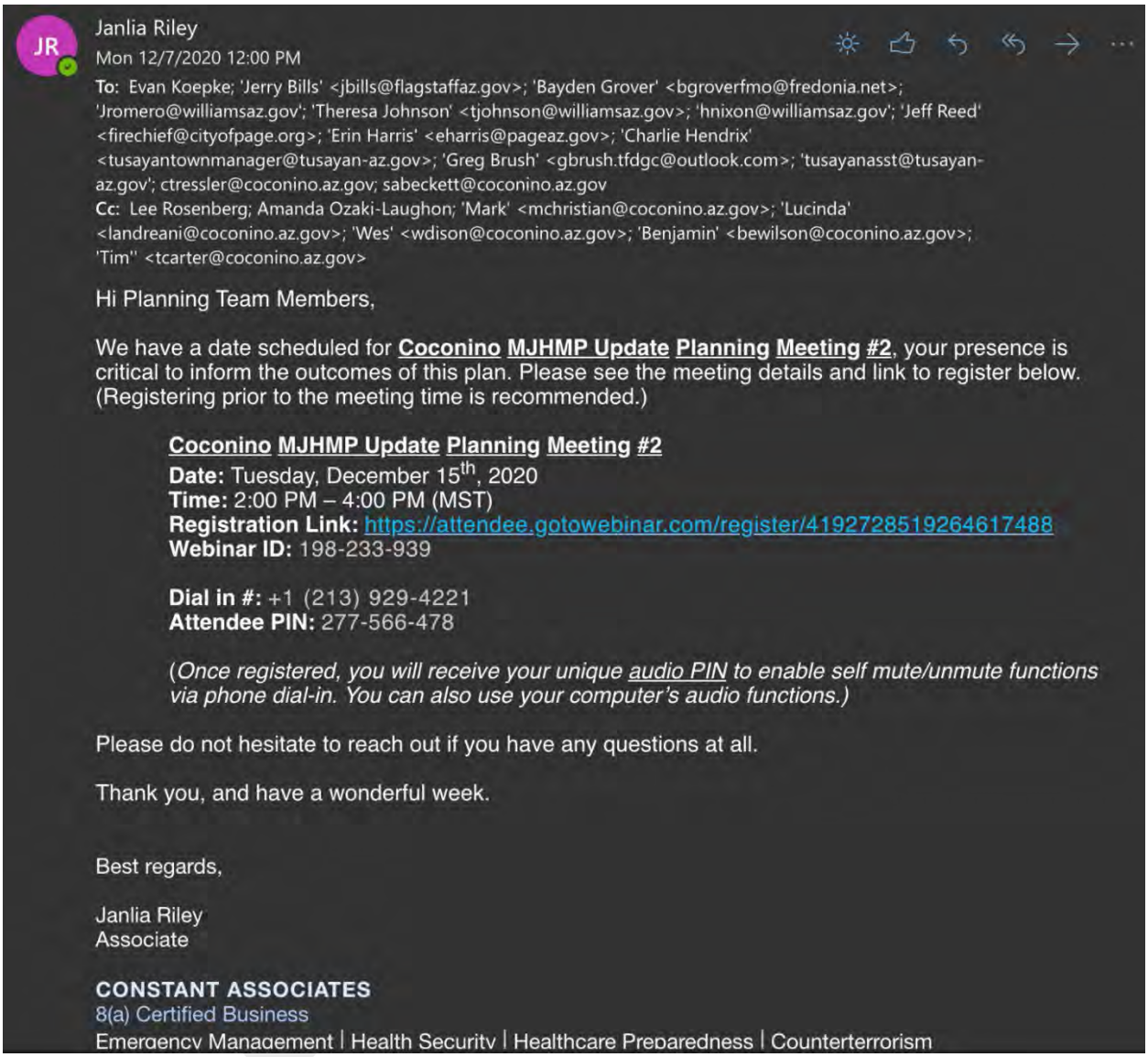
#	Name	Organization/Department	Email
1.	Erin Harris	City of Page Fire Department	eharris@pageaz.gov
2.	John Romero	City of Williams Police Department	jromero@williamsaz.gov
3.	Wes Dison	Coconino County Emergency Management	wdison@coconino.az.gov
4.	Evan Koepke	Constant Associates	evan@constantassociates.com
5.	Lee Rosenberg	Constant Associates	lee@constantassociates.com
6.	Jerry Bills	Summit Fire District	jbills@flagstaffaz.gov
7.	Tim Carter	Coconino County Emergency Management	tcarter@coconino.az.gov
8.	Benjamin Wilson	Coconino County Public Health	bwilson@coconino.az.gov
9.	Amanda Ozaki-Laughon	Constant Associates	amanda@constantassociates.com

3. Project Planning Team Meeting #2

Date/Time: December 15, 2020 @ 2:00PM – 3:00PM MST

Location: GoToWebinar (virtual meeting)

Invitation:



Janlia Riley
Mon 12/7/2020 12:00 PM

To: Evan Koepke; 'Jerry Bills' <jbills@flagstaffaz.gov>; 'Bayden Grover' <bgroverfmo@fredonia.net>; 'Jromero@williamsaz.gov'; 'Theresa Johnson' <tjohnson@williamsaz.gov>; 'hnixon@williamsaz.gov'; 'Jeff Reed' <firechief@cityofpage.org>; 'Erin Harris' <eharris@pageaz.gov>; 'Charlie Hendrix' <tusayantownmanager@tusayan-az.gov>; 'Greg Brush' <gbrush.tfdgc@outlook.com>; 'tusayanasst@tusayan-az.gov'; ctressler@coconino.az.gov; sabeckett@coconino.az.gov
Cc: Lee Rosenberg; Amanda Ozaki-Laughon; 'Mark' <mchristian@coconino.az.gov>; 'Lucinda' <landreani@coconino.az.gov>; 'Wes' <wdison@coconino.az.gov>; 'Benjamin' <bewilson@coconino.az.gov>; 'Tim'' <tcarter@coconino.az.gov>

Hi Planning Team Members,

We have a date scheduled for **Coconino MJHMP Update Planning Meeting #2**, your presence is critical to inform the outcomes of this plan. Please see the meeting details and link to register below. (Registering prior to the meeting time is recommended.)

Coconino MJHMP Update Planning Meeting #2
Date: Tuesday, December 15th, 2020
Time: 2:00 PM – 4:00 PM (MST)
Registration Link: https://attendee.gotowebinar.com/register/4192728519264617488
Webinar ID: 198-233-939

Dial in #: +1 (213) 929-4221
Attendee PIN: 277-566-478

(Once registered, you will receive your unique audio PIN to enable self mute/unmute functions via phone dial-in. You can also use your computer's audio functions.)

Please do not hesitate to reach out if you have any questions at all.

Thank you, and have a wonderful week.

Best regards,

Janlia Riley
Associate

CONSTANT ASSOCIATES
8(a) Certified Business
Emergency Management | Health Security | Healthcare Preparedness | Counterterrorism

Stakeholders invitation list:

Coconino MJHMP Update Planning Meeting 2 Invitee List.pdf

Individuals with (*) by their name were invited afterward at request of Wes Dyson or Mark Christian

#	Name	Organization/Department	Email
1.	Bayden Grover	Marshall, Fredonia	bgroverfmo@fredonia.net
2.	Benjamin Wilson	Coconino County Public Health	bewilson@coconino.az.gov
3.	Charlie Hendrix	Town Manager, Tusayan	tusayantownmanager@tusayanaz.gov
4.	Christian Tressler	County Engineer, Coconino County	ctressler@coconino.az.gov
5.	Erin Harris	Page Fire Department	eharris@pageaz.gov
6.	Greg Brush	Fire Chief, Tusayan	Gbrush.tfdgc@outlook.com
7.	Herman Nixon	Williams Police Department	hnixon@williamsaz.gov
8.	Jeff Reed	Fire Chief, City of Page	firechief@cityofpage.org
9.	Jerry Bills	Summit Fire District	jbills@flagstaffaz.gov
10.	John Romeo	Williams Police Department	jromeo@williamsaz.gov
11.	Junjun Liang	Tusayan Town Clerk	tusayanasst@tusayan-az.gov
12.	Lucinda Andreani	Coconino Deputy County Manager	Landreani@coconino.az.gov
13.	Mark Christian	Program Coordinator, Emergency Management, Coconino County	mchristian@coconino.az.gov
14.	Sam Beckett	Public Works Response Coordinator	sabeckett@coconiono.az.gov
15.	Theresa Johnson	Emergency Management, Williams	tjohnson@williamsaz.gov
16.	Tim Carter	Coconino County Emergency Management	tcarter@coconino.az.gov
17.	Wes Dison	Emergency Manager, Coconino County	wdison@coconino.az.gov
18.	Daren Sweet *	AZ Dept of Emergency & Military Affairs	daren.sweet@azdema.gov
19.	Tim Carter *	Emergency Management Specialist, Coconino County	tcarter@coconino.az.gov

Sign-in sheet:

Coconino County
Hazard Mitigation Plan Update Project 2020
Planning Meeting 2 – Attendance Sheet

Attendance Sheet

Planning Meeting 2

Location: Virtual Meeting on GoToWebinar
Date: Tuesday, December 15, 2020
Time: 2:00pm-3:00pm MST
Dial-In: GoToWebinar
Participant Pin: Received upon registration
Webinar Link: https://attendee.gotowebinar.com/register/4192728519264617488

#	Name	Organization/ Department	Telephone	Email	Attendance
1.	Erin Harris	City of Page Fire Department		eharris@pageaz.gov	Present
2.	John Romero	City of Williams Police Department		jromeo@williamsaz.gov	Present
3.	Wes Dison	Coconino County Department of Emergency Management		wdison@coconino.az.gov	Present
4.	Evan Koepke	Constant Associates		evan@constantassociates.com	Present
5.	Lee Rosenberg	Constant Associates		lee@constantassociates.com	Present
6.	Jerry Bills	Summit Fire Department		jbills@flagstaffaz.gov	Present

1

Coconino County
Hazard Mitigation Plan Update Project 2020
Planning Meeting 2 – Attendance Sheet

7.	Tim Carter	Coconino County Department of Emergency Management		tcarter@coconino.az.gov	Present
8.	Benjamin Wilson	Coconino County Department of Health and Human Services		bewilson@coconino.az.gov	Present
9.	Amanda Ozaki-Laughon	Constant Associates		amanda@constantassociates.com	Present
10.	Daren Sweet	Arizona Department of Emergency Management		Daren.sweet@azdema.gov	Present
11.	Mark Christian	Coconino County Department of Emergency Management		mchristian@coconino.az.gov	Present
12.	Greg Brush	Town of Tusayan Fire Department		Gbrush.tfdgc@outlook.com	Present
13.	Bayden Grover	Town of Fredonia		bgroverfmo@fredonia.net	Present
14.	Jeff Reed	City of Page Fire Department		firechief@cityofpage.org	Present

2

DRAFT

Presentation (cover only):

DRAFT

Meeting notes:

Coconino County
Hazard Mitigation Plan Update Project 2020
Planning Meeting 2 – Meeting Minutes

Meeting Minutes

Planning Meeting 2

Location: Virtual Meeting on GoToWebinar
Date: Tuesday, December 15, 2020
Time: 2:00pm-3:00pm MST
Dial-In: GoToWebinar
Participant Pin: Received upon registration
Webinar Registration Link:
https://attendee.gotowebinar.com/register/4192728519264617488

Table 1: Action Items

#	Deliverable	Responsible	Due
1.	Finalize and share meeting minutes within 5 business days	CONSTANT	12/22/2020
2.	Continue hazard and risk assessment, analyze public survey results, update working draft with provided data	CONSTANT	1/22/2021
3.	Support Planning Team in collecting necessary information, completing worksheets, and developing mitigation actions	CONSTANT	1/22/2021
4.	Build and share new mitigation action worksheet	CONSTANT	ASAP
5.	Resend planning team the hazard assessment questionnaire	CONSTANT	12/22/2020
6.	Identify a date for follow-up planning meeting in the new year via Doodle Poll and send registration link	CONSTANT	ASAP
7.	Post community hazard survey to city webpages if not complete and provide substantiation if not complete	Planning Team	ASAP
8.	Collect and deliver remaining data requirements	Planning Team	ASAP
9.	Identify additional mitigation actions and build out specifications to the mitigation actions identified	Planning Team	1/22/2020
10.	Review mitigation strategy/actions from 2015 MJHMP	Planning Team	Prior to next planning meeting

CONSTANT ASSOCIATES

1

Coconino County
Hazard Mitigation Plan Update Project 2020
Planning Meeting 2 – Meeting Minutes

I. Welcome

i. Evan Koepke reviewed the purpose of the planning meeting, found on page two of the slide deck. He subsequently led the group in a round of introductions.

II. Project Status and Plan Update

i. Actions Taken and Tasks Completed

1. Evan Koepke reviewed the actions taken and tasks completed by CONSTANT and the Coconino County planning team, found on page four of the slide deck. He thanked the planning team for their hard work during a very busy time.
2. Evan Koepke walked the planning team through outstanding data requirements, found on page 6 of the slide deck.
3. Evan asked if everyone had a copy of the hazard assessment questionnaire and if there were any outstanding issues or questions.
    A. Jerry Bills requested Evan Koepke to identify the proper form.
    B. Evan Koepke gave a description of the hazard questionnaire and offered to resend the questionnaire if necessary.
    C. Jerry Bills affirmed.
    D. Evan followed up and asked if any other planning team members needed forms sent to them

ii. Hearing no additional requests, Evan Koepke continued through the outstanding data requirements.

1. Lee Rosenberg advised that infrastructure departments often keep data on critical infrastructure property values, which planning team members can forward along to the CONSTANT team.

iii. Evan Koepke asked if planning members had any technical questions. Hearing none, he asked Lee Rosenberg to lead the group through brainstorming new mitigation goals.

III. Mitigation Goals

i. Lee Rosenberg walked the planning team through the proposed mitigation goals (found on page eight of the slide deck). He asked the planning team for thoughts on the mitigation goals.

1. Wes Dison stated that Coconino County requires specific language referring to wildfires and post-fire flooding to be included in the mitigation goals.
2. Lee Rosenburg stated that language will be included as hazards and will include post-fire debris flows as well.
3. Wes Dison emphasized the county has a specific recognition of those two hazards.
4. Lee Rosenburg agreed and affirmed they will be included.
5. Lee Rosenburg opened the discussion for any additional thoughts on the mitigation goals. Hearing none, he continued.

ii. Lee Rosenburg walked the planning team through the mitigation action overview found on page nine of the slide deck. He emphasized each jurisdiction does not need to have the same hazards and mitigation actions.

iii. Lee Rosenburg stated that the goal of this documentation is to create a mitigation plan for the next five years, allowing each jurisdiction to request grant funding. He stated the next step is for the planning team to submit new mitigation actions.

IV. New Mitigation Actions

i. Evan Koepke gave an overview for the new mitigation actions procedure the planning meeting may utilize. He asked Lee Rosenberg to begin the new mitigation action brainstorming process.

ii. Lee Rosenburg began first with Coconino County, and asked Coconino County planning team members to identify new mitigation actions that may be incorporated into the new plan. He stated these can be broad actions that have been used before.

1. Wes Dison inquired if representatives from Public Works were on the call.
2. Evan Koepke checked the attendee lists and verified that they were not. He additionally verified that the identified representatives from each jurisdiction had received invitations to the meeting.
3. Mark Christian stated that an offline conversation with Evan Koepke can be held with Public Works.
4. County representatives and Constant staff discussed the value of continuing discussion of mitigation actions without additional county stakeholders present from Public Works and Engineering. It was generally concurred that additional identification of mitigation actions at the County level was not practicable without additional stakeholders present.

ii. The group weighed the value of continuing the meeting and Evan asked attendees if any had brought mitigation actions that they could discuss.

1. Several participants stated they were unsure if their jurisdiction had identified new mitigation actions and did not have new mitigation actions to discuss.
2. Jeff Reed concurred and stated that his jurisdiction's Public Works department may be better suited to identify new mitigation actions.

iii. Evan Koepke affirmed responses and asked for any other feedback.

1. Jerry Bills asked if the planning team could review previous mitigation actions beforehand.
2. Evan Koepke affirmed this should occur.
3. Jerry Bills asked for the slides to be shared so that their jurisdiction can brainstorm new mitigation actions.
4. Evan Koepke agreed and stated that the slides will be shared with the planning team.

iv. Lee Rosenberg asked if it would be helpful to continue with an abbreviated overview of the slides, to allow the planning team to see the process of brainstorming new mitigation actions.

1. The group affirmed.

v. Lee Rosenberg assented and continued with an overview of what new mitigation actions should entail found on slides 10-15.

iii. Lee Rosenberg asked if anyone had any questions. Hearing none, he asked if any jurisdictions had their own water districts.

1. Jerry Bills affirmed for the City of Flagstaff.

2. Mark Christian affirmed the County has its own water district.
3. Lee Rosenberg asked if there are any other water districts. Hearing none, he turned the closing of the meeting over to Evan Koepke.

iv. Evan Koepke went over action items found on page 16 of the slide deck.

v. Wes Dison affirmed the plan to hold an additional meeting in the new year in light of the approaching deadline and recommended adding additional invitees.

vi. Evan affirmed and ended the meeting.

V. Adjourn

Table 2: Meeting Attendees

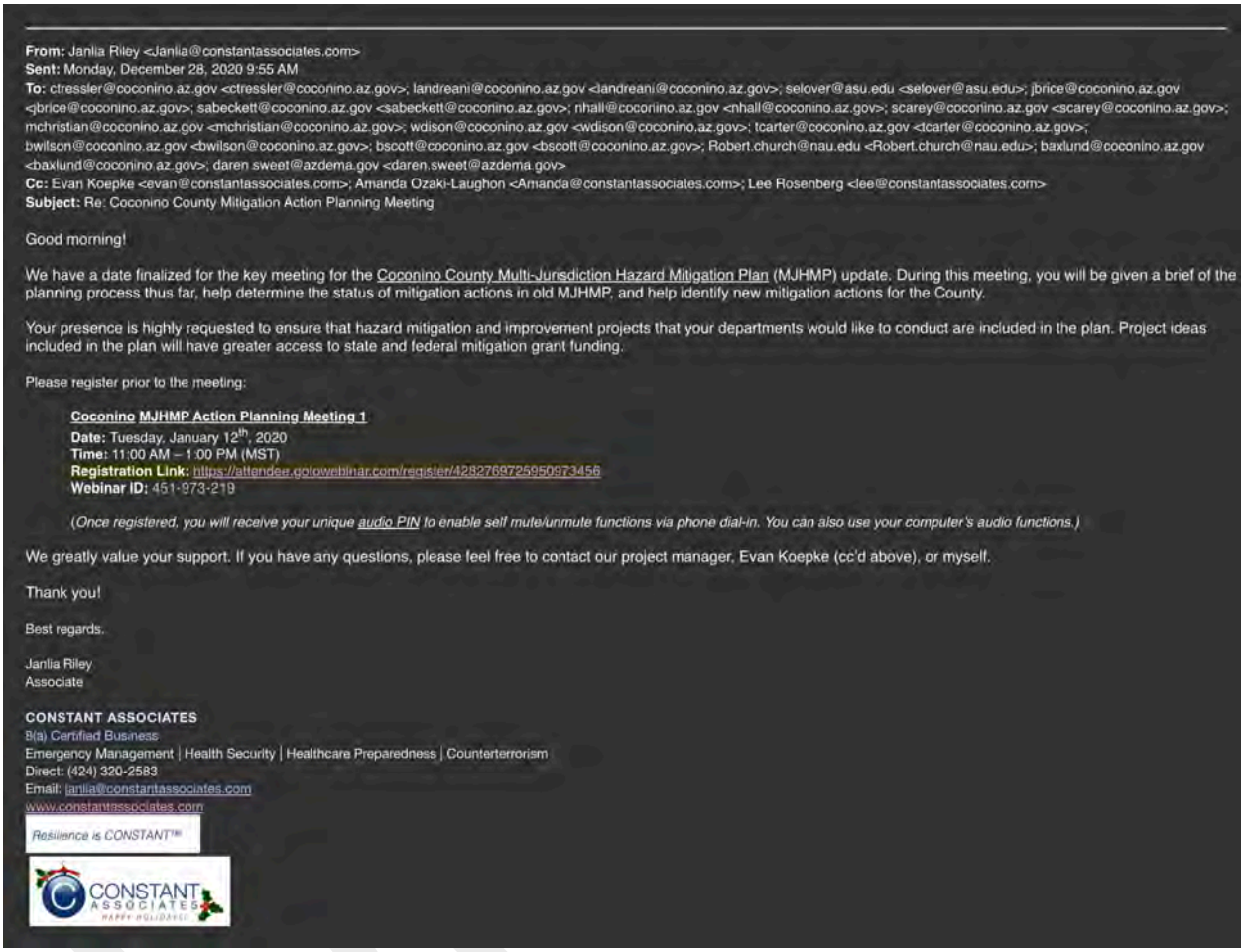
#	Name	Organization/Department
1.	Erin Harris	City of Page Fire Department
2.	John Romero	City of Williams Police Department
3.	Wes Dison	Coconino County Department of Emergency Management
4.	Evan Koepke	Constant Associates
5.	Lee Rosenberg	Constant Associates
6.	Jerry Bills	Summit Fire Department
7.	Tim Carter	Coconino County Department of Emergency Management
8.	Benjamin Wilson	Coconino County Department of Health and Human Services
9.	Amanda Ozaki-Laughon	Constant Associates
10.	Daren Sweet	Arizona Department of Emergency Management
11.	Mark Christian	Coconino County Department of Emergency Management
12.	Greg Brush	Town of Tusayan Fire Department
13.	Bayden Grover	Town of Fredonia
14.	Jeff Reed	City of Page Fire Department

4. Project Planning Team Mitigation Action Planning Meeting

Date/Time: January 12, 2021 @ 2:00PM – 3:00PM MST

Location: GoToWebinar (virtual meeting)

Invitation:



From: Janlia Riley <Janlia@constantassociates.com>
Sent: Monday, December 28, 2020 9:55 AM
To: ctressler@coconino.az.gov <ctressler@coconino.az.gov>; landreani@coconino.az.gov <landreani@coconino.az.gov>; selover@asu.edu <selover@asu.edu>; jbrice@coconino.az.gov <jbrice@coconino.az.gov>; sabeckett@coconino.az.gov <sabeckett@coconino.az.gov>; nhall@coconino.az.gov <nhall@coconino.az.gov>; scarey@coconino.az.gov <scarey@coconino.az.gov>; mchristian@coconino.az.gov <mchristian@coconino.az.gov>; wdison@coconino.az.gov <wdison@coconino.az.gov>; tcarter@coconino.az.gov <tcarter@coconino.az.gov>; bwilson@coconino.az.gov <bwilson@coconino.az.gov>; bscott@coconino.az.gov <bscott@coconino.az.gov>; Robert.church@nau.edu <Robert.church@nau.edu>; baxlund@coconino.az.gov <baxlund@coconino.az.gov>; daren sweet@azdema.gov <daren.sweet@azdema.gov>
Cc: Evan Koepke <evan@constantassociates.com>; Amanda Ozaki-Laughon <Amanda@constantassociates.com>; Lee Rosenberg <lee@constantassociates.com>
Subject: Re: Coconino County Mitigation Action Planning Meeting

Good morning!

We have a date finalized for the key meeting for the Coconino County Multi-Jurisdiction Hazard Mitigation Plan (MJHMP) update. During this meeting, you will be given a brief of the planning process thus far, help determine the status of mitigation actions in old MJHMP, and help identify new mitigation actions for the County.

Your presence is highly requested to ensure that hazard mitigation and improvement projects that your departments would like to conduct are included in the plan. Project ideas included in the plan will have greater access to state and federal mitigation grant funding.

Please register prior to the meeting:

Coconino MJHMP Action Planning Meeting 1
Date: Tuesday, January 12th, 2020
Time: 11:00 AM – 1:00 PM (MST)
Registration Link: https://attendee.gotowebinar.com/register/4282768725950973456
Webinar ID: 451-973-219

(Once registered, you will receive your unique audio PIN to enable self mute/unmute functions via phone dial-in. You can also use your computer's audio functions.)

We greatly value your support. If you have any questions, please feel free to contact our project manager, Evan Koepke (cc'd above), or myself.

Thank you!

Best regards,

Janlia Riley
Associate

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Email: janlia@constantassociates.com
www.constantassociates.com
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Sign-in sheet:

Coconino County
Hazard Mitigation Plan Update Project 2020
Planning Meeting 2 – Attendance Sheet

Attendance Sheet

Planning Meeting 2

Location: Virtual Meeting on GoToWebinar
Date: Tuesday, January 12, 2020
Time: 11:00am-1:00pm MST
Dial-In: GoToWebinar
Participant Pin: Received upon registration
Webinar Link: https://register.gotowebinar.com/register/6217741965557827344

#	Name	Organization/ Department	Telephone	Email	Attendance
1.	Adam Hicks	Coconino County Department of Building Safety			Present
2.	Amanda Ozaki-Laughon	Constant Associates		amanda@constantassociates.com	Present
3.	Blake Scott	Coconino County Public Health Emergency Preparedness			Present
4.	Daren Sweet	Arizona Department of Emergency Management		Daren.sweet@azdema.gov	Present
5.	Evan Koepke	Constant Associates		evan@constantassociates.com	Present
6.	Gerrit Boeck	Coconino County Sheriff's Office			Present

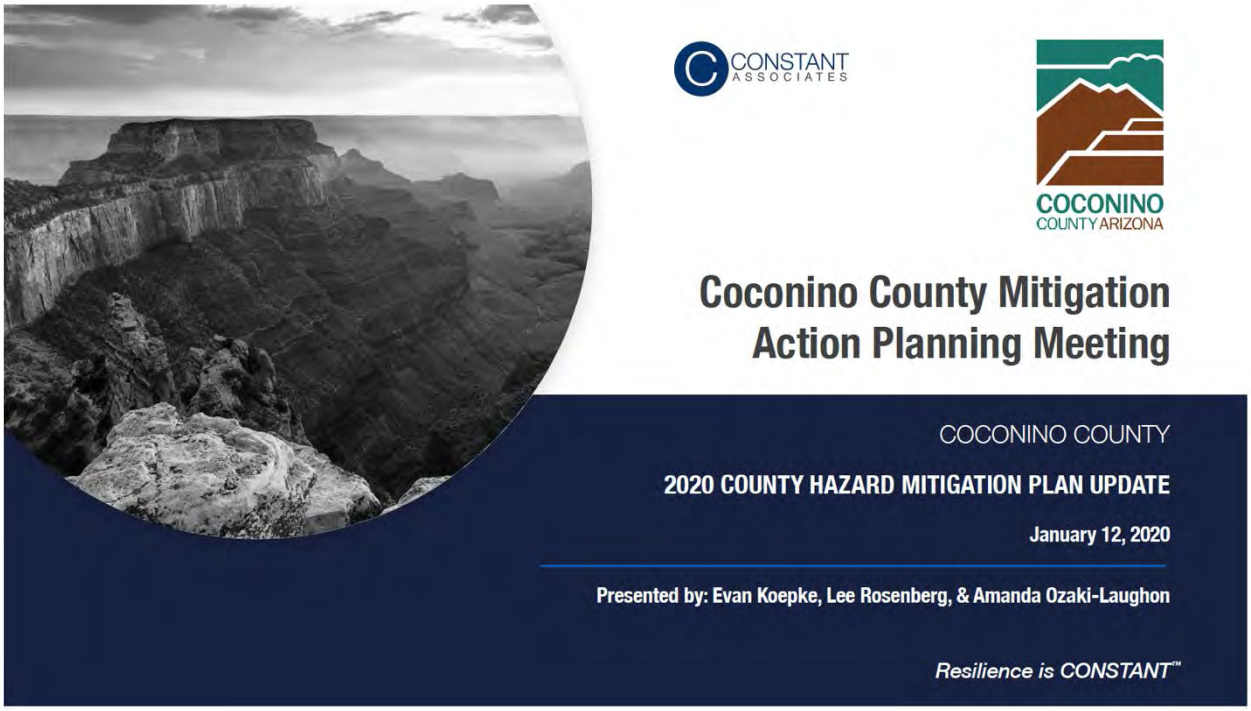
1

Coconino County
Hazard Mitigation Plan Update Project 2020
Planning Meeting 2 – Attendance Sheet

7.	John Brice II	Coconino County Department of Building and Safety			Present
8.	Lee Rosenberg	Constant Associates		lee@constantassociates.com	Present
9.	Mark Christian	Coconino County Department of Emergency Management		mchristian@coconino.az.gov	Present
10.	Nancy Selover	Arizona State University			Present
11.	Robert Church	Northern Arizona University			Present
12.	Samuel Beckett	Coconino County Public Works			Present
13.	Tim Carter	Coconino County Department of Emergency Management		tcarter@coconino.az.gov	Present
14.	Wes Dison	Coconino Department of Emergency Management		wdison@coconino.za.gov	Present

2

Presentation (cover only):



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Meeting notes:

Coconino County
Hazard Mitigation Plan Update Project 2020
Mitigation Action Planning Meeting – Meeting Minutes

Meeting Minutes

Mitigation Action Planning Meeting

Location: Virtual Meeting on GoToWebinar
Date: Tuesday, January 12, 2021
Time: 11:00am-1:00pm MST
Dial-In: GoToWebinar
Participant Pin: Received upon registration
Webinar Registration Link: https://register.gotowebinar.com/register/6217741965557827344

Table 1: Action Items

#	Deliverable	Responsible	Due
1.	Finalize and share meeting minutes within 7 business days	CONSTANT	1/21/2021
2.	Build and share updated mitigation action worksheet with Mark, who will share with Coconino County Planning Team	CONSTANT	ASAP
3.	Send relevant mitigation planning documents to Robert Church	CONSTANT	1/22/2021
4.	Identify additional mitigation actions (as necessary) and define the specifications for the mitigation actions assigned to your department – document in new mitigation action worksheet and send to Mark Christian	Coconino County Planning Team	1/22/2021
5.	Identify an expanded list of partner agencies to substantiate Action 5.3	Coconino County Planning Team	1/29/2021
6.	Provide feedback on Draft MJHMP when released for initial review. Expected by February 1	Coconino County Planning Team	TBD
7.	Send the NAU CPRI to the CONSTANT team at: evan@constantassociates.com	Robert Church	ASAP
8.	Follow-up with Daren Sweet to discuss utility of CPRI "roll-up."	Wes Dison	1/29/2021
9.	Identify any existing mutual aid agreement with DFFM outside of AZMAC and follow-up with Sam Beckett and CONSTANT	Mark Christian	1/29/2021

I. Welcome

a. Evan Koepke reviewed the purpose of the action planning meeting, found on page two of the slide deck. He and Amanda Ozaki-Laughon conducted a brief roll call. Evan received confirmation that all necessary participants were present.

CONSTANT ASSOCIATES

1

II. Project Status and Plan Update

a. Evan led the Coconino County planning team through an overview of the project, found on slide 4. He emphasized the truncated timeline of the project and the importance of staying on schedule. He provided an overview of actions taken thus far in the project.

b. Evan updated the planning team on the project timeline, found on slide 5 and asked if the planning team had any questions. Hearing none, he proceeded.

III. Historical Hazard Events in the County

a. Evan handed the presentation over to Lee Rosenberg. Lee gave a brief overview of historical hazard events in Coconino County, found on slide six.

b. Lee asked if there were any questions regarding the historical hazard events.

i. Mark Christian emphasized that while wildfires are listed as a threat, there is great interest in listing post-fire flooding into the plan.

ii. Lee acknowledged this and stated that FEMA categorizes post-fire flooding as a flood/flash flood event. A detailed write-up will be included in the plan for that category.

iii. Wes Dison stated that inclusion is appreciated and that Daren Sweet and their contact Sue Austin at DEMA can be made available to help with that process.

iv. Lee stated that the CONSTANT team can draft mitigation activities associated with post-fire debris flows and flooding.

v. Wes affirmed those actions would be an excellent value add.

c. Lee asked if there were any additional questions or feedback from the team on historical hazard events. Hearing none, he proceeded.

IV. Hazard ID & Prioritization

a. Lee briefly led the team through an overview of hazard identification and prioritization conducted by the CPRI process. He highlighted the flood/flash flood and wildfire categories to further emphasize the ways post-fire flooding will be incorporated into the MJHMP. He asked the team if there were any questions.

i. Robert Church stated in the chat that Northern Arizona University's CPRI could be made available to the CONSTANT team. Amanda gave him Evan's email to facilitate the exchange of information.

b. Hearing no additional questions, Lee proceeded.

V. Hazard Selection

a. Lee led the group through the hazards identified in the 2015 plan and the new hazards selected for the 2020 plan, found on slide nine. He asked the group if there were any questions regarding hazard selection.

i. Wes asked Blake Scott if the term "Pandemic" was acceptable from a public health perspective.

ii. Blake stated that he would use terminology highlighting "Public Health/Pandemic."

iii. Lee stated they would use the same terminology across the entire plan.

iv. Evan stated that the term "Public Health Emergency" was suggested by Ben Wilson.

v. Lee stated that they would defer to Public Health with terminology, and Evan agreed that the terminology can be edited depending on their preference.

vi. Lee asked if there were any other questions. Hearing none, he continued to discuss mitigation goals.

VI. **Mitigation Goals**

a. Lee provided a brief overview of the five overarching goals of hazard mitigation, found on slide 10.

i. Mark asked for clarification, stating that the mitigation goals are the overarching goals, and that the team was required to provide a mitigation activity for each hazard

ii. Lee affirmed that was correct and explained the process of creating a matrix of mitigation activities which will include a description, timeframe, cost, associated agency/agencies, and a prioritization.

iii. Mark noted that in the worksheet provided by CONSTANT for creating future mitigation actions there were sample actions listed and asked if that was correct.

iv. Lee stated that was correct and that CONSTANT is available to assist with other examples.

VII. **Mitigation Actions**

a. Lee proceeded with an overview of mitigation actions. Process details can be found on slide 11.

b. Lee stated the focus for this meeting will be to create mitigation activities for the county, preferably one for each of the hazards listed. He noted that FEMA maintains a large list of potential mitigating activities in its handbook.

i. Blake inquired about the possibility of conducting a roll-up of the CPRI scores. He stated in the 2015 plan, CPRI scores showed certain agencies/jurisdictions at higher risks for certain hazards than others. He asked if the CPRI would be a standalone number, or if there could be a roll-up of scores.

ii. Lee stated that was a good question, and that it is up to the county. He stated the plan could take the highest risk number for each hazard if that is desired.

iii. Blake clarified that the plan could have a standalone number, but also include the separate number for jurisdictions with a higher risk for a certain hazard. He acknowledged the issue is nuanced and that it was a question that came up with the 2015 plan.

iv. Lee stated that their preference could be taken.

v. Blake stated he would defer to emergency management.

vi. Lee affirmed and said that the answer is likely subjective.

vii. Wes stated he would hesitate to take the highest number for each hazard due to the size of the county. He would take direction from Daren Sweet and Sue Austin. He stated he would follow-up with Daren offline.

viii. Lee stated the county will have the opportunity to see the overall data and can make a judgement from there.

ix. Lee asked if there were any additional questions. Hearing none, he proceeded.

c. Lee led the group through a list of ongoing mitigation actions from the previous plan. He explained these actions would be incorporated into the current plan. He asked if anyone could validate that these mitigation actions are ongoing.

i. Mark asked if the team was looking for a detailing of actions taken.

ii. Evan emphasized they were looking for validation that these should be included in the updated plan and that detailed descriptions are available.
iii. Mark clarified that the actions listed are a combination of the ongoing activities and asked if they were taken from the county review sheet.
iv. Lee affirmed that they came from the previous plan. Evan re-emphasized that they would like to confirm the ongoing mitigation actions are captured appropriately and receive validation on that end.
v. Mark stated they appeared accurate.
vi. Sam stated he also did not see any errors.
vii. Wes stated he would defer to Sam.

d. Lee moved to the second slide of ongoing mitigation actions on slide 13.
i. Mark stated that the action, "Deploy and maintain/repair Flash Flood Early Warning System in Havasupai Canyon" may need to be updated.
ii. Wes asked if Mark was in contact with the DEMA tribal liaison.
iii. Mark stated he contacted the liaison but has not heard back. The action as listed is correct.
iv. Wes stated the "implementing agency" for that action should be "DEMA Tribal EM."
v. Lee noted the change and stated the language would remain consistent.
vi. Lee asked if there were any additional questions. Hearing none, he proceeded.

VIII. New Mitigation Actions

a. Lee transitioned the team into a session to create new mitigation actions for each goal. He stated CONSTANT had provided generic actions and emphasized they were not specific.
b. Goal 1: Protect life, property, and reduce potential injuries from natural caused hazards
i. Evan asked if there were any ideas offhand from the planning team for new mitigation actions for this goal.
ii. Sam asked Wes if he believed the Resilience Community Program should be included as a mitigation action here, since much of the funding for the program will be grant-related.
iii. Lee emphasized that if grant funding will be associated with the program, states and territories will be receiving funding through COVID-19 disaster declarations, and he encouraged the team to put anything for which they may apply for a grant in the plan.
iv. Sam stated including the Resilience Community Program will likely be necessary.
v. Lee encouraged the team to also include the grant that took the place of the Pre-Disaster Mitigation Grant (PDM) as a funding source.
vi. Sam stated that upgrading a communications system for the county is a goal, but it is a large undertaking. He asked if it would be too early to add that as a mitigation action.
vii. Lee stated that the upgrade can be included in goal one or goal five, including upgrades to the community system, new applications, etc.
viii. Wes agreed with Sam's suggestion, but asked if there is a rate against including the upgrade in the mitigating actions due to the high cost and the lasting impact COVID-19 presents to budgetary constraints.
ix. Lee stated the rate against it is neutral. He suggested turning the upgrade into smaller mitigation actions and putting them in different places.

x. Evan stated there is no penalty to including this large endeavor and clarified that future substantiations of the plan can break the upgrade down further if needed.

xi. Wes agreed it would be a good initiative to include but emphasized caution on the language.

c. Goal 2: Improve public understanding of, and support for, hazard mitigation measures

i. Actions 2.1 and 2.2:

1. Wes asked if specific mentions of post-fire flooding, wildfires, and pandemic events can be included under actions 2.1 and/or 2.2 since they weigh heavily with the public.
2. Lee agreed.

ii. Robert stated that he and Tim Carter had a partnership with Northern Arizona University communications students last year regarding creating messaging campaigns for real-world hazard mitigation experiences. COVID-19 halted partnership, but he would like to renew it.

iii. Wes emphasized interest in that partnership.

iv. Lee stated that a mitigation activity could be included to reinvigorate the partnership with the university.

v. Lee stated that flood insurance awareness could be included as a mitigation action here to be in alignment with the post-fire flooding concerns mentioned earlier.

vi. Evan asked if there were other ideas for Goal 2. Hearing none, Lee transitioned to Goal 3.

d. Goal 3: Promote disaster resistance to natural, existing, and future built environment.

i. Lee reviewed the five generic actions that the planning team can refine to match local needs and context.

ii. Action 3.4:

1. Sam stated under action 3.4, the implementing agency would likely be the flood control district because they hold the most authority. They also aren't labeled an agency, but as the district.
2. Lee affirmed.

iii. Lee asked if there were any additional ideas for Goal 3. Hearing none, he moved to Goal 4.

e. Goal 4: Strengthen partnerships and collaboration to implement mitigation activities

i. Lee asked the group for any mutual aid agreements or pre-existing partnerships and stated a list of those existing or new partnerships would be helpful for the plan.

ii. Evan asked the group to provide any additional partnerships they want to include.

iii. Action 4.1:

1. Mark stated they may want to examine the current signatories of the Arizona Mutual Aid Compact (AZMAC) to see if there are missing any key players or stakeholders.
2. Wes agreed and asked for clarification if this was the agreement under DEMA.
3. Mark affirmed and cited as an example that the Havasupai tribal government is still not a signatory to the agreement.
4. Lee stated they could reframe Action 4.1 to say verbiage such as, "conduct a review of AZMAC and encourage any that have not joined the pact to do so."

iv. Lee asked of there were any additional mutual aid projects such as with USDA or firefighting.

v. Sam asked the group if there was a mutual aid agreement with Coconino Department of Forestry and Fire Management (DFFM).

vi. Mark affirmed but stated the planning team should check into the agreement in order to be very specific because the mutual aid may be solidified with AZMAC. Mark stated he would make some contacts and follow up with both Sam and CONSTANT on this.

vii. Lee asked of there were any additional ideas for this goal. Hearing none, he proceeded.

f. Goal 5: Enhance the ability to effectively and immediately respond to disasters

i. Lee asked the team for new mitigation action ideas.

ii. Action 5.1:

1. Lee asked if Action 5.1 regarding cloud storage should be included.
2. Wes stated that their IT department has cloud storage covered.
3. Lee stated that it can be removed if not valuable.
4. Wes stated he would prefer to leave the action in the plan to maintain systems.

iii. Lee agreed and moved to Action 5.2.

1. Wes stated the county has strong relationships with its utility companies and vendors.
2. Mark asked the group what other agencies would be beneficial to list.
3. Sam stated he did not know offhand, and Mark followed up that the planning team may desire to strengthen the agency sources for this action.
4. Adam Hicks offered the inclusion of the Community Development, Building Division because they conduct final checks.
5. Sam agreed with this inclusion and stated he prefers to loop in Sue Austin. Adam stated he would link up with her and see what they are able to contribute.

iv. Lee moved to Action 5.3.

1. Mark stated the county maintains a close working relationship with United Way, law enforcement agencies providing CERT, and search and rescue. He stated the planning team can broaden the list of implementing agencies.
2. Lee asked for that list to be provided.
3. Sam asked to revisit the language of "build." The county agreement with United Way was intended to keep the county from being required to take on oversee management. He stated public health took the initiative on that agreement.
4. Blake agreed and stated that volunteer management is conducted through United Way to allow more effective use of volunteer time. Logistics and legal requirements are fulfilled through this agreement.
5. Mark asked if the county would need to run or develop volunteers when using the language, "build a cadre."
6. Lee stated that the wording could be changed to, "support a cadre." He also stated a mitigation action specific to the United Way agreement could be included.
7. Lee asked if there are any additional agreements outside of the United Way umbrella, such as CERT teams or a medical reserve corps.
8. Blake stated the medical reserve corps are supposed to be a county function, but there is no substantial funding attached to it.

9. Lee stated grant funding may be an opportunity if that is included as a mitigation action, and that the team will work to parse this out.
10. Blake stated that the funding is supposed to be present to pay for medical reserve corps volunteers under public health emergency preparedness, homeland security funding, and other sources.

v. Lee offered additional explanation of disaster cadre, public servants and government workers. Required by law to provide services doing a disaster. Include volunteer orgs that are managed by the county as support during an incident
   1. Wes stated that volunteer management is run by the United Way of Northern Arizona.
   2. Wes asked for clarification of what "emergency services" includes in Action 5.3.
   3. Lee stated it is a broad category covering any personnel, staff, or resources used to respond to an incident or disaster.
   4. Wes agreed with this category.
   5. Lee asked if there were additional questions or actions. Hearing none, he proceeded.

vi. Lee handed the presentation over to Evan to close out the meeting.

IX. **Meeting Conclusion**

a. Evan reviewed action items on slide 20 and opened up the presentation to any remaining questions from the planning team.
   i. Mark asked if the new mitigation action review sheets were the documents forwarded to other jurisdictions by Bill Pepler. He asked of those mitigation action review sheets are being forwarded to Mark or to CONSTANT.
   ii. Evan stated yes, those are the correct documents. He stated they may be a mixture of both methods, but that he will ensure Mark receives copies of all paperwork being sent.
   iii. Robert asked the CONSTANT team to ensure he receives the worksheets. Evan affirmed.
   iv. Wes offered a thank you to the CONSTANT team and the Coconino County planning team.

X. **Adjourn.**

Coconino County
Hazard Mitigation Plan Update Project 2020
Mitigation Action Planning Meeting – Meeting Minutes

Table 2: Meeting Attendees

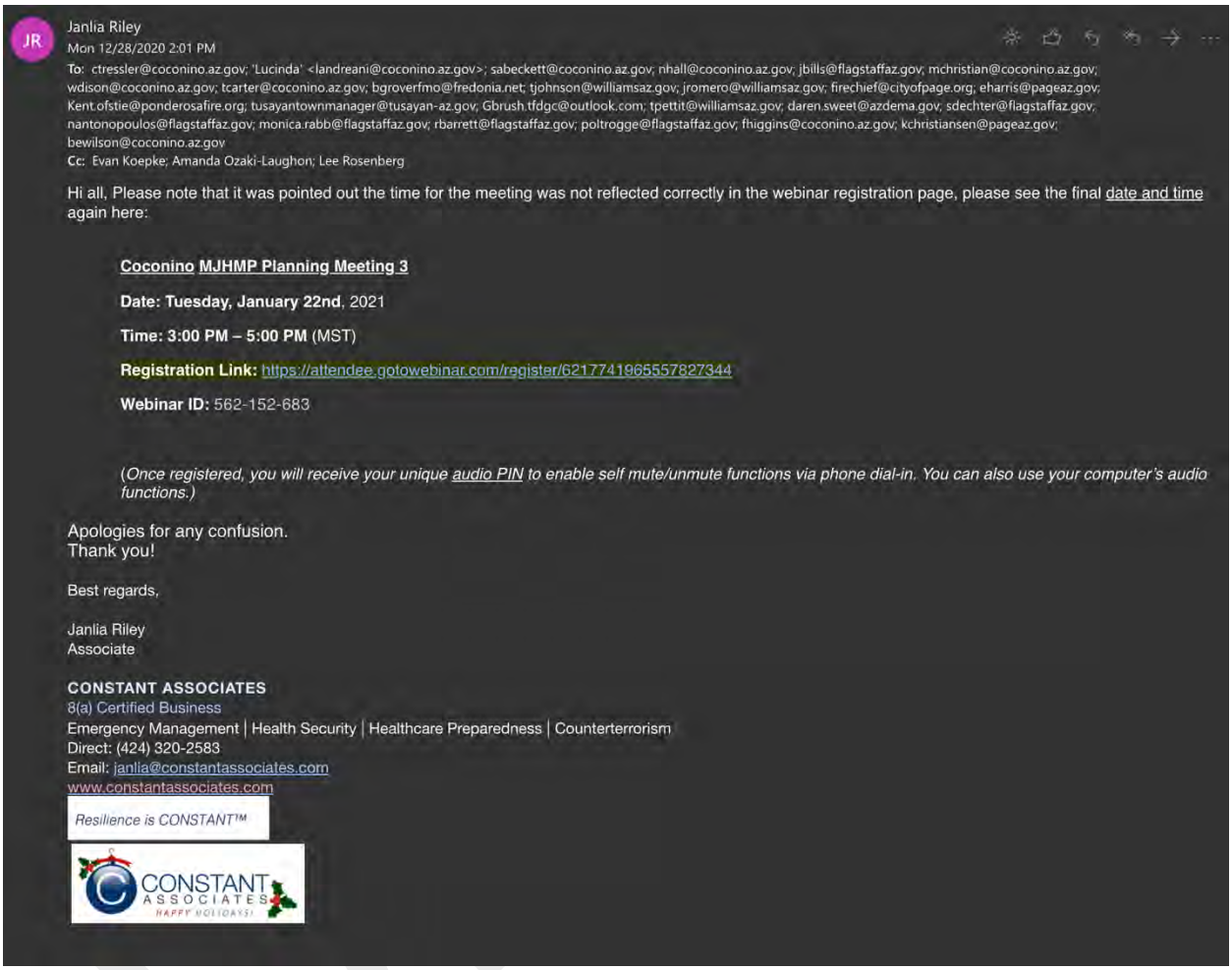
#	Name	Organization/Department
1.	Adam Hicks	Coconino County Department of Building and Safety
2.	Amanda Ozaki-Laughon	Constant Associates
3.	Blake Scott	Coconino County Public Health Emergency Preparedness
4.	Daren Sweet	Arizona Department of Emergency and Military Affairs
5.	Evan Koepke	Constant Associates
6.	Gerrit Boeck	Coconino County Sherriff's Office
7.	John Brice II	Coconino County Department of Building and Safety
8.	Lee Rosenberg	Constant Associates
9.	Mark Christian	Coconino County Department of Emergency Management
10.	Nancy Selover	Arizona State University
11.	Robert Church	Northern Arizona University
12.	Samuel Beckett	Coconino County Public Works
13.	Tim Carter	Coconino County Department of Emergency Management
14.	Wes Dison	Coconino County Department of Emergency Management

5. Project Planning Team Meeting #3

Date/Time: January 22, 2021 @ 2:00PM – 3:00PM MST

Location: GoToWebinar (virtual meeting)

Invitation:



Janlia Riley
Mon 12/28/2020 2:01 PM

To: ctressler@coconino.az.gov; 'Lucinda' <landreani@coconino.az.gov>; sabeckett@coconino.az.gov; nhall@coconino.az.gov; jbills@flagstaffaz.gov; mchristian@coconino.az.gov; wdison@coconino.az.gov; tcarter@coconino.az.gov; bgroverfmo@fredonia.net; tjohnson@williamsaz.gov; jromero@williamsaz.gov; firechief@cityofpage.org; eharris@pageaz.gov; Kent.ofstie@ponderosafire.org; tusayantownmanager@tusayan-az.gov; Gbrush.tfdgc@outlook.com; tpettit@williamsaz.gov; daren.sweet@azdema.gov; sdechter@flagstaffaz.gov; nantonopoulos@flagstaffaz.gov; monica.rabb@flagstaffaz.gov; rbarrett@flagstaffaz.gov; poltrogge@flagstaffaz.gov; fhiggins@coconino.az.gov; kchristiansen@pageaz.gov; bewilson@coconino.az.gov
Cc: Evan Koepke; Amanda Ozaki-Laughon; Lee Rosenberg

Hi all, Please note that it was pointed out the time for the meeting was not reflected correctly in the webinar registration page, please see the final date and time again here:

Coconino MJHMP Planning Meeting 3

Date: Tuesday, January 22nd, 2021

Time: 3:00 PM – 5:00 PM (MST)

Registration Link: https://attendee.gotowebinar.com/register/6217741965557827344

Webinar ID: 562-152-683

(Once registered, you will receive your unique audio PIN to enable self mute/unmute functions via phone dial-in. You can also use your computer's audio functions.)

Apologies for any confusion.
Thank you!

Best regards,

Janlia Riley
Associate

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Sign-in sheet:

Coconino County
Hazard Mitigation Plan Update Project 2020
Planning Meeting 3 – Attendance Sheet

Attendance Sheet

Planning Meeting 3

Location: Virtual Meeting on GoToWebinar
Date: Friday, January 22, 2021
Time: 3:00PM-4:15PM MST / 2:00PM-3:15PM PST
Dial-In: GoToWebinar
Participant Pin: Received upon registration
Webinar Registration Link: https://attendee.gotowebinar.com/register/6217741965557827344

#	Name	Organization/ Department	Telephone	Email	Attendance
1.	Bill Pepler	Constant Associates		Bill.pepler@constantassociates.com	Present
2.	Erin Harris	City of Williams Police Department			Present
3.	Evan Koepke	Constant Associates		evan@constantassociates.com	Present
4.	Greg Brush	Town of Tusayan Fire Department			Present
5.	John Romero	City of Williams Police Department			Present
6.	Lee Rosenberg	Constant Associates		lee@constantassociates.com	Present

1

Coconino County
Hazard Mitigation Plan Update Project 2020
Planning Meeting 3 – Attendance Sheet

7.	Mark Christian	Coconino County Department of Emergency Management			Present
8.	MJ Yoon	Constant Associates		mj@constantassociates.com	Present
9.	Monica Rabb	City of Flagstaff Utilities Division		mchristian@coconino.az.gov	Present
10.	Nicole Antonopoulos	City of Flagstaff Sustainability Manager			Present
11.	Paul Oltrogge	City of Flagstaff Fire Department			Present
12.	Samuel Beckett	Coconino County Public Works			Present
13.	Stacey Brechler-Knaggs	City of Flagstaff Grants and Contracts Manager			Present
14.	Susan Austin	AZ Department of Emergency Management/Military Affairs			Present
15.	Wes Dison	Coconino County Department of Emergency Management		wdison@coconino.za.gov	

2

Presentation (cover only):

DRAFT

Meeting notes:

Coconino County
Hazard Mitigation Plan Update Project 2020
Mitigation Action Planning Team Meeting #3 – Meeting Minutes

Meeting Minutes

Planning Team Meeting #3

Location: Virtual Meeting on GoToWebinar
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Table 1: Action Items

#	Deliverable	Responsible	Due
1.	Finalize and share meeting minutes within 7 business days.	CONSTANT	2/2
2.	Send Constant the Flagstaff Disaster Recovery team information (i.e. names, contact info) as relevant to the MJHMP planning process.	Stacey Brechler-Knaggs	2/3
3.	Confirm total number of Dam Emergency Action Plans.	Mark Christian	2/3
4.	Update 2018 data on USDA drought assistance funding provided to farmers and ranchers is still accurate (i.e. is this still occurring and what are the updated dollar amounts?).	Wes Dison/Evan Koepke	2/3
5.	Coordinate provision of updated flood maps by County GIS.	Mark Christian	2/3
6.	Remove two (2) tables of wildfire hazard risk that were included in the 2015 MJHMP (i.e. Constant is unable to find replicate/data for).	Lee Rosenberg	2/3
7.	Provide a finalized list of hazards to be included in the 2020 MJHMP update.	Wes Dison/Mark Christian	1/29

I. Welcome
   a. Evan Koepke opened the meeting by going over the meeting's agenda:
      i. Provide project status update;
      ii. Discuss outstanding data requirements;
      iii. Brief approach to expediently review Draft LHMP;
      iv. Presentation will be sent with meeting minutes.
   b. MJ Yoon performed the roll call.

CONSTANT ASSOCIATES

1

II. Project Status Update

a. Evan went over the actions taken and tasks completed:
   i. Finalizing hazard identification, risk assessment, and public outreach survey analysis;
   ii. Developed working draft of MJHMP as of this last week; only a few sections remain to be filled in with the new mitigation actions.

b. Evan went over the remaining challenges and support needs:
   i. Aiming to send first draft for the team to review during the first week of February;
   ii. Requested feedback from the team within a week to a week and half;
   iii. Finalize draft for a public review that will be for two (2) weeks;
      1. Need the team's coordination to publish a copy of the plan for the public to review on the website(s);
      2. Team will need to collect substantiations that will be included in the MJHMP such as screenshots from website and screenshots of any invitations sent to the public via email, social media, press releases, etc.;
      3. Constant will provide draft content that can be cut-and-pasted with the plan and public survey attached to expedite the public review process.

c. Evan discussed the next steps:
   i. Integrate all feedback and conduct reviews;
   ii. Package final draft plan for submission to DEMA and FEMA;
   iii. Keep in mind that adjustments may need to be made per FEMA review comments during the approval process.

III. Project Schedule Status

a. Evan stated that we are looking to finalize the project by late April/early May;
   i. However, review time for MJHMPs is highly variable due to the FEMA approval process that typically takes a month and a half to two months;
   ii. Constant will keep the team updated with any changes and developments.

b. Wes stated that he would like Sue to check to make sure the timeline works.

c. Sue confirmed that the time line is feasible and that her department can do a day or two turnaround if needed.

IV. Contents Gaps/Troubleshooting

a. Evan stated that Constant will need substantiations from the team that include copies of emails that were sent out to facilitate the organization of the cities' planning team;
   i. Stacey (Flagstaff Disaster Recovery Manager) stated that her team has been putting plans together on the recovery side if it is helpful to Constant;
   ii. Evan stated that if a planning team was created specifically for the HMP or some sort of communication was made to formally move the HMP forward, a copy of the formalized email may be helpful;

iii. Lee stated that if the team was included in the reviewing of the plan, we can add their names; requested from Stacey to send a list of names;

iv. Stacey stated that she will send her contacts' info.

b. Evan stated that Constant has identified a total of four (4) Dam Emergency Action Plans and wants to confirm if this number is accurate;

i. Mark stated that he will make arrangements to scan and sent information to Constant next week with all of the hard copy information;

ii. Evan stated that the total number is needed and what they associated with, not any additional information;

iii. Lee confirmed that Constant does work on dam EAPs and the number of EAPs would suffice.

c. Evan asked if the data in 2018 on USDA drought assistance funding provided to farmers and ranchers is still accurate (i.e. is this still occurring and what are the updated dollar amounts?)

i. Wes stated that the information is not readily available; will work on getting it;

ii. Evan stated that he will send a follow-up email to keep it on the radar.

d. Evan asked if there are updated flood maps from County GIS;

i. Looking to see if there is a recent run with County GIS and if the jurisdictions have built out any of their plans on regular maintenance;

ii. Wes stated that he will go back to the GIS department to confirm;

iii. Lee stated that DEMA might have information as far as state-wide flood plain mapping;

iv. Sue stated that it is not something her department performs at the state level;

1. 2015 plan was from JE Fuller or the county itself;
2. The county would probably be the best since they know the ins and outs;
3. DEMA cannot provide that information.

e. Evan stated that the 2015 MJHMP includes two (2) tables of wildfire hazard risk that Constant is unable to replicate/find data for;

i. Where did the data come from and is it critical to keep this information?

ii. Sue stated that those are probably old or created by the county and that the data is not required;

1. Data driven vulnerability or estimates are not required by FEMA;
2. Can express it in narrative form in the plans, but do not need to identify which assets are exposed;

iii. Lee agreed and stated that if the information is not up-to-date, we only need to add minimal information with no maps or tables;

iv. Sue stated that as of now and moving five (5) years ahead, the data would not be accurate;

v. Lee agreed to take the information out;

vi. Wes agreed with Sue's assessment and to remove the content.

f. Evan stated that the planning team will need to verify listing of key City and County reference documents during their review of the draft plan itself;

i. Need to confirm that the list includes all of the natural hazards and that they are comprehensively covered;

ii. Lee confirmed that he is looking to make the HMP as comprehensive as possible, giving the team the opportunity to include all the details they want;

iii. Wes stated that he spoke with Mark earlier today and wants to talk about the list of hazards that has gotten very long; concerned with the length and wants to resolve it today.

V. **Hazards Selection Discussion for the 2020 HMP**

a. Lee stated that Constant went through a fairly standard process using the FEMA local hazard mitigation planning guide to assess the potential hazards;

i. Had the planning team review the hazards; planning team included which ones to include in the plan (county and individual jurisdictions);

ii. FEMA planning guide only requires addressing natural hazards; manmade hazards can be deleted/not added;

b. Wes stated that they agreed to add pandemic and wants to recognize the different topography and climates of each individual jurisdiction, but he is concerned with the number of hazards being addressed;

c. Evan stated that the MJHMP includes a table that indicates which hazards each community is effected by, additionally the CPRI for each jurisdiction is appended in each section to clearly demonstrate the difference in hazard threat/effects across the jurisdictions;

d. Sue stated that the only hazards that are required in FEMA are natural hazards that adversely affect the communities because they are the only ones that FEMA for grant funding;

i. No grant funding is given by FEMA for manmade accidents such as aviation accident, HAZMAT, extended power outage/PSPS;

ii. When communities want to add additional hazards, it is good to address if this is covered somewhere else (i.e. different planning mechanism) since some can end up being duplicates of what other agencies, private entities, and organizations are already trying to mitigate;

iii. Some HMPs result in operational or response type of mitigation methods that will not be counted towards FEMA's requirements for mitigation actions for hazards, so the jurisdictions have to be careful as to which type of mitigation measures are included in the plan;

iv. Aviation accident, for example, would not have recourse for FEMA funding;

v. Climate change, for example, is not perceived as a hazard; it is a condition of other hazards (i.e. drought);

1. At the state-level, it is not required in local plans; in state-level, it is addressed under each profile of a corresponding hazard to discuss the impacts on that specific hazard;

vi. Excessive heat, need to ask if the jurisdictions consider this a real hazard and if they can really mitigate it;

vii. Public health/Pandemic is included in the state plan, with the caveat that it will not receive FEMA grant funding; but it is included because it is a big concern, especially now, and including it in the plan is a great way to create attention and public awareness;

viii. Extended power outage/PSPS are cascading effects of other hazards (i.e. high winds) and are human-caused;

ix. Terrorism is human caused and not required by FEMA; can respond to it, but not really mitigate it.

e. Lee agreed with Sue and stated that it is up to the communities if they want to include this in their local plans;

f. Wes stated that he wants to add public health/pandemic for sure; does not mind if the additional ones to the new plan appear as an addendum, but not as primary hazard selections;

g. Nicole stated that we need a clearer definition when we are talking about broad spectrum issues such as climate change that have cascading impacts;

h. Evan stated that this is a broader conversation for the county and cities to have since the group chose the current list of hazards during Planning Meeting 1. He added that its important to ensure that all stakeholders' needs are covered and that they are open to amendments.

i. Lee stated that there are many variations of organizing the content that are possible;

i. Need to include what changes have occurred since the last plan and developmental issues;

ii. Climate change is so broad and overarching, it does not hurt include information about what it is, how it occurs, and causes/fixes;

iii. Constant already has this information ready to go, so it can be taken out if needed; would not really slow the completion process down;

j. Wes asked if there would be anything detrimental if this information were included in the plan in some other content, but not as principle hazards;

k. Sue stated that the information is not bad to have, but she suggested having a clear plan that lists just the top hazards;

i. Ask the stakeholders who ultimately have the choice, but focus on what is the benefit of having these extra hazards to the plan;

ii. Think forward in five (5) years since the plan will need to be updated again; more hazards will require more updates;

iii. As reference, there are only fifteen (15) included for the state plan;

l. Wes suggested taking the discussion offline with Mark and having further conversations with the local jurisdictions to finalize answers;

m. Erin Harris asked if it would make sense to take several and put them under a climate change umbrella while extrapolating what is needed per community;

n. Nicole agreed and stated that it would be a benefit if there were an umbrella for climate change;

o. Lee cautioned that from the point-of-view of receiving FEMA grant approval, not all issues with drought, flood, wildfire are solely driven by climate change (i.e. they are exacerbated by it);

i. FEMA would come back that climate change was not the precipitant cause of an incident;

ii. It would take some time to realign hazards under the climate change umbrella;

p. Lee stated that with high winds and tornadoes, they have to be individually addressed with past locations and probabilities;

i. Individual hazards and lumping them under climate change will be difficult to sell to FEMA;

ii. Can eliminate aviation accident, extended power outage/PSPS, and other manmade events

q. Sue stated that the team may need to look at how things are titled in lieu of creating umbrellas;
   i. In the state plan, it is titled severe wind in lieu of high winds/tornado;
   ii. HAZMAT incidents instead of Pipeline Failure/Transport Accident/HAZMAT Release;
r. Evan cautioned that significant revisions would increase the amount of time/work it takes to finish the draft MJHMP;
   i. Sections can be subtracted and renamed quickly, but if more significant changes need to be made, it could push the schedule back a week or more;
s. Wes stated that he will take it offline and get back to Constant with an answer shortly through Mark within the next few days.

VI. **Review Guide Briefing (Overview)**

a. Evan stated that the final plan will be approximately 300 pages;
b. Keep a close look on the tables and the content specific to each stakeholder's jurisdiction;
c. Section 3 Outline: Planning Area Description;
   i. Requested for the team to take a closer look at the end sections that have specific detailed information for each jurisdictions to verify accuracy;
   ii. Was created using content from public sources and information the team provided;
   iii. Take a close look a jurisdiction demographics and land use data;
d. Section 4 Outline: Capabilities Assessment;
   i. Consolidated content from capability assessment worksheets and open source research;
   ii. Jurisdiction specific data split among section titles;
   iii. Important to review NFIP content for accuracy; particularly regarding repeat damage on facilities;
   iv. View the tables for accuracy;
e. Section 5 Outline: Hazard Analysis and Risk Assessment;
   i. Read first two (2) sections to verify accuracy;
   ii. County CPRI captured in section 3; verify accuracy;
   iii. Skim hazard risk profiles, focusing on history, location, and extent sections that usually contain the most locally specific information;
   iv. Review vulnerability and risk assessment in detail;
   v. Important tables to view include critical facilities, hazard susceptibility of city-owned facilities, potential losses;
f. Section 6 Outline: Hazard Mitigation Strategy;
   i. Review content thoroughly to ensure the status of prior mitigation actions and the specifications for new actions is correct;
   ii. Note that the information is jurisdiction-specific and distributed between sections;
   iii. Last chance to provide mitigation actions;
   iv. Review important tables;
g. Appendix Outline;

i. Largest portion of the plan because it contains substantiation documentations to show FEMA that we have done all of the required steps needed for approval;
ii. Carefully rview the STAPLEE table the Mitigation Action Prioritization.

VII. **Action Items**

a. Evan viewed the ongoing responsibilities to be carried out by Constant;
   i. Constant will finalize meeting minutes;
   ii. Final outreach for data collection;
   iii. Develop the first draft of the MJHMP with a target date of the first week of Feb;
   iv. Aiming for the planning team to review all information within a week to keep on schedule;
   v. Develop draft website copy for publishing draft plan for public review and sending to neighboring jurisdictions;
      1. Constant will need a copy of the email sent and will include this in the meeting minutes as an action item;
   vi. Facilitate messaging to neighboring jurisdictions (including draft language);
b. Evan reviewed the ongoing responsibilities to be carried out by the planning team;
   i. Provide any data to complete draft plan;
   ii. Schedule time to review draft plan;
   iii. Prep to post on website for public review during the second week of February; posting will be for a two (2) week period;
   iv. Create list of surrounding jurisdictions /PICS not involved in plan for review;
c. Lee stated that if feedback from neighboring jurisdictions is provided, the planning team will need to document it and provide the information to Constant;
   i. Constant will then forward information on how to address it;
d. Wes reiterated that in the hazards, pandemic will definitely be added, but the additional hazards in the 2020 plan will need to be addressed first before confirmation.

VIII. **Adjourn**

Table 2: Meeting Attendees

#	Name	Organization/Department
1.	Bill Pepler	Constant Associates
2.	Erin Harris	City of Williams Police Department
3.	Evan Koepke	Constant Associates
4.	Greg Brush	Town of Tusayan Fire Department
5.	John Romero	City of Williams Police Department
6.	Lee Rosenberg	Constant Associates
7.	Mark Christian	Coconino County Department of Emergency Management
8.	MJ Yoon	Constant Associates
9.	Monica Rabb	City of Flagstaff Utilities Division
10.	Nicole Antonopoulos	City of Flagstaff Sustainability Manager
11.	Paul Oltrogge	City of Flagstaff Fire Department
12.	Samuel Beckett	Coconino County Public Works
13.	Stacey Brechler-Knaggs	City of Flagstaff Grants and Contracts Manager
14.	Susan Austin	AZ Department of Emergency Management/Military Affairs
15.	Wes Dison	Coconino County Department of Emergency Management

Appendix C. Public Engagement Documentation

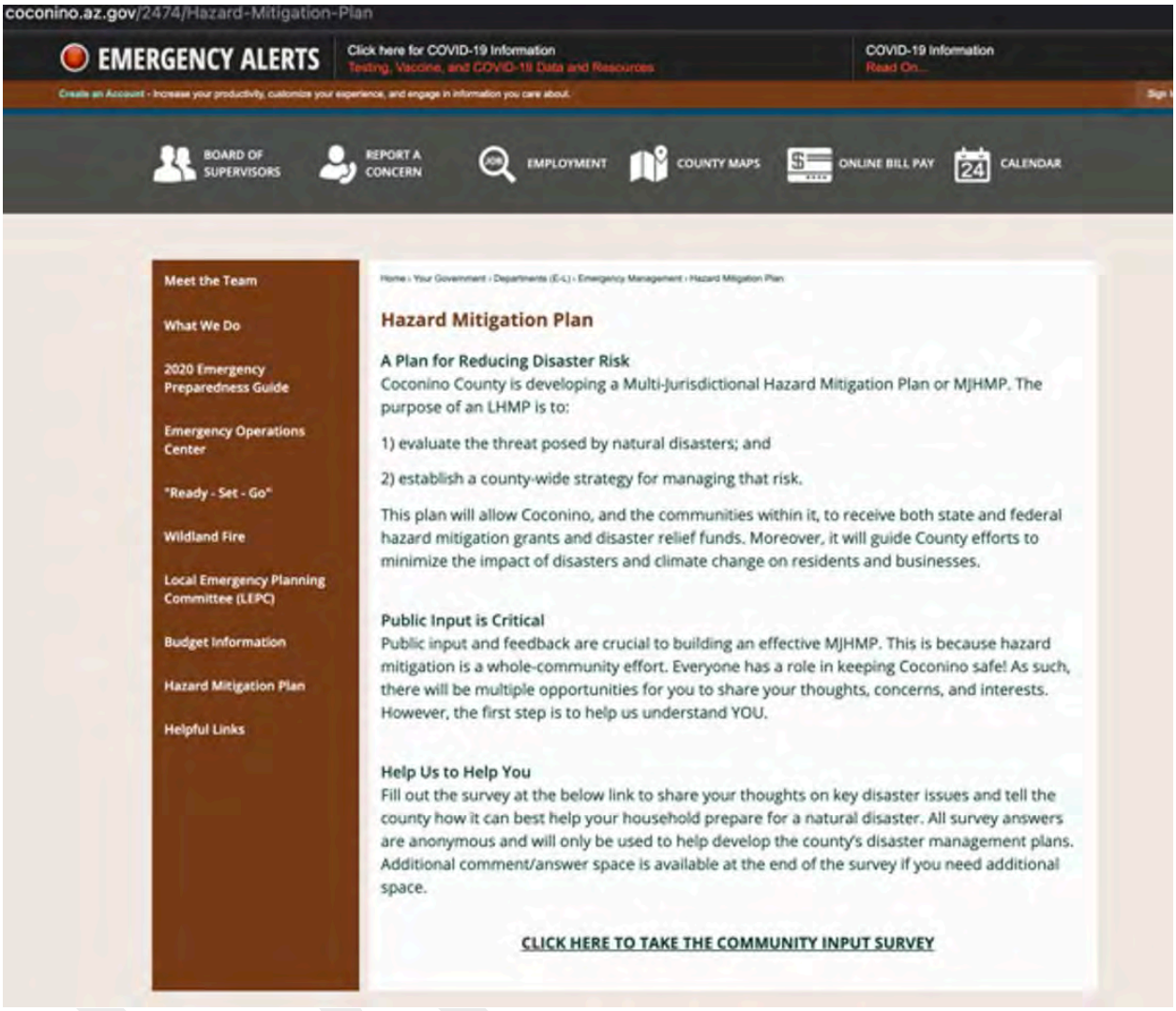
Appendix C contains documentation of stakeholder engagement and outreach. It includes survey format and results, webpage and social media account postings, and public notification material.

Dates	Event Activity	Documentation
Oct 29, 2020 – Dec 31, 2020	Media Campaign	• Posts on County, city/town, fire department, university websites • Posts on County, city/town, fire department, university Facebook, Instagram, and Twitter • County press release • County emergency notification system
Oct 29, 2020 – Dec 31, 2020	Public Engagement Survey and Results	• Survey questions, data analysis, and results report
March 17, 2021 – April 2-8, 2021 ***NOTE:*** *Ending date varies due to variable initial posting date of participating jurisdictions*	Public and Neighboring Jurisdiction Review Public draft MJHMP posted on County and cities' websites and sent to the following neighboring jurisdictions for review and comment.	• Posts on County and city/town websites (with select social media posts supporting outreach). • Email to neighboring jurisdictions and utilities ***NOTE:*** *No substantive feedback was received from the public, neighboring jurisdictions, or utility organizations engaged in the review process.*

DRAFT

Media Campaign

County: Website



County: Facebook (October 29, 2020)

Coconino County Emergency Management
October 29, 2020

WE NEED YOUR HELP! Coconino County is updating its Multi-Jurisdictional Hazard Mitigation Plan. Part of this update relies heavily on input from our citizens! Please take five minutes to complete the online survey!

COCONINO COUNTY ARIZONA

FOR IMMEDIATE RELEASE
FOLLOW US ON:

October 29, 2020

County Seeks Community Input for Disaster Planning

FLAGSTAFF, Ariz. – Natural disasters and climate change impacts are increasing in both frequency and impact nationwide. To meet this challenge, Coconino County is updating its Multi-Jurisdictional Hazard Mitigation Plan (MJHMP) – a plan that guides county-wide efforts to reduce the risk of hazards such as fires, and floods. However, for this planning effort to be successful, the county needs input from the people who work and live within its boundaries. To start collecting this input, the county has released a Hazard Mitigation Planning survey on its website, which can be accessed at

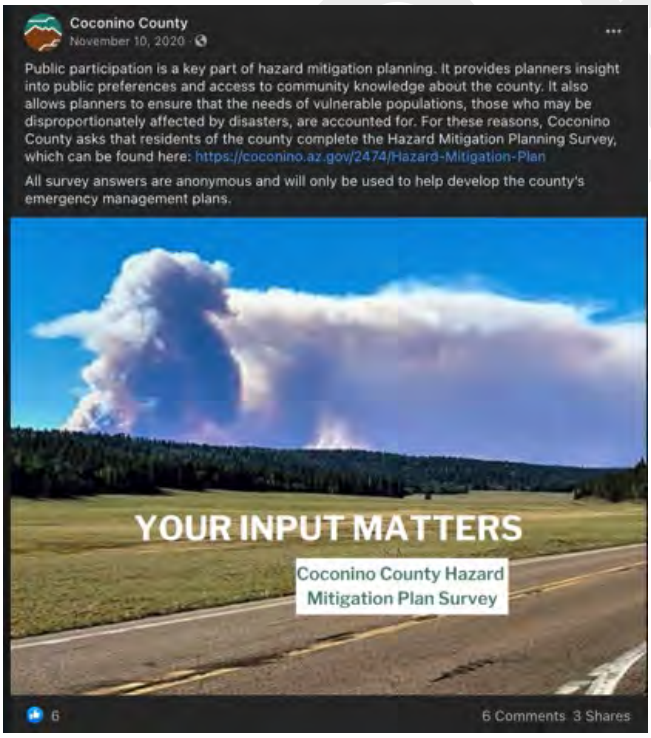
Public participation is a key part of hazard mitigation planning. It provides planners insight into public preferences and access to community knowledge about the county. It also allows planners to ensure that the needs of vulnerable populations, those who may be disproportionately affected by disasters, are accounted for. For these reasons, Coconino County will be providing several opportunities for public participation.

Investing in the creation of quality hazard mitigation plans provides communities with multiple benefits. First, they allow the county to take a comprehensive approach towards reducing the likelihood and impact of disaster events. Second, these plans are the principal qualification for localities to receive state and federal hazard mitigation and disaster relief funds. Hazard mitigation funds can be applied to risk management projects such as brush or drainage clearing to reduce wildfire and flooding risk. Meanwhile, disaster relief funding helps communities pay the immense costs inherent in responding to, and recovering from, disasters. Ultimately, these reduce the likelihood and impact of disasters while minimizing the disruption and suffering that they cause.

To lead these efforts, the county has hired Constant Associates, an emergency management consulting firm. The project is expected to be complete by March 2021.

County: Facebook (November 7, 2020)

County: Facebook (November 10, 2020)



County: Facebook (November 13, 2020)

County: Instagram (November 7, 2020)

County: Instagram (November 10, 2020)

County: Twitter (November 13, 2020)

County Emergency Management Notification System Email

Email distributed through Emergency Notification System (unformatted)

Message Content

COCONINO COUNTY ARIZONA

From Coconino County Emergency Management

County Seeks Community Input for Disaster Planning FLAGSTAFF, Ariz. – Natural disasters and climate change impacts are increasing in both frequency and impact nationwide. To meet this challenge, Coconino County is updating its Multi-Jurisdictional Hazard Mitigation Plan (MJHMP) – a plan that guides county-wide efforts to reduce the risk of hazards such as fires and floods. However, for this planning effort to be successful, the county needs input from the people who work and live within its boundaries. To start collecting this input, the county has released a Hazard Mitigation Planning Survey on its website, which can be accessed at https://coconino.az.gov/2474/Hazard-Mitigation-Plan. Public participation is a key part of hazard mitigation planning. It provides planners insight into public preferences and access to community knowledge about the county. It also allows planners to ensure that the needs of vulnerable populations, those who may be disproportionately affected by disasters, are accounted for. For these reasons, Coconino County will be providing several opportunities for public participation. Investing in the creation of quality hazard mitigation plans provides communities with multiple benefits. First, they allow the county to take a comprehensive approach towards reducing the likelihood and impact of disaster events. Second, these plans are the principal qualification for localities to receive state and federal hazard mitigation and disaster relief funds. Hazard mitigation funds can be applied to risk management projects such as brush or drainage clearing to reduce wildfire and flooding risk. Meanwhile, disaster relief funding helps communities pay the immense costs inherent in responding to, and recovering from, disasters. Ultimately, these reduce the likelihood and impact of disasters while minimizing the disruption and suffering that they cause. To lead these efforts, the county has hired Constant Associates, an emergency management consulting firm. The project is expected to be complete by March 2021. Coconino County Emergency Management

Click here to sign up for Coconino County Emergency Notifications and alerts at Coconino.az.gov/ready.

SIGN UP Emergency Notifications Coconino.az.gov/ready

Distribution summary report

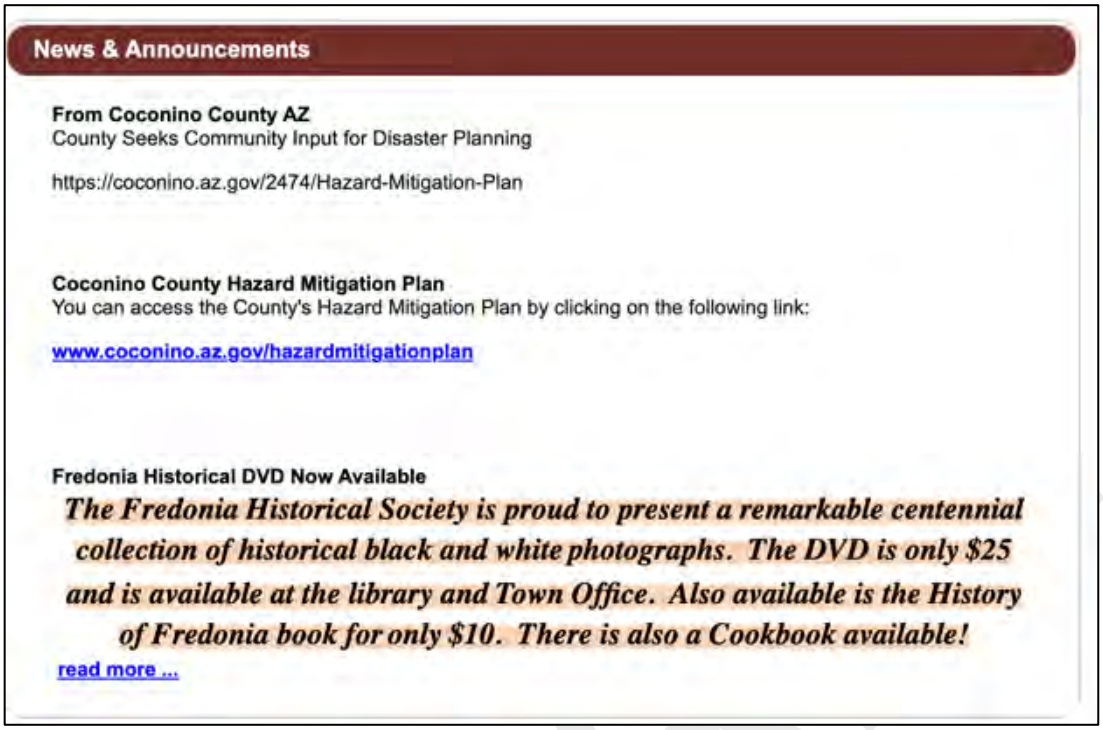
Flagstaff

Flagstaff: Survey posted on city website (December 4, 2020)

Flagstaff: Facebook (November 14, 2020)

Fredonia

Fredonia: Survey posted on town website



News & Announcements

From Coconino County AZ
County Seeks Community Input for Disaster Planning

https://coconino.az.gov/2474/Hazard-Mitigation-Plan

Coconino County Hazard Mitigation Plan
You can access the County's Hazard Mitigation Plan by clicking on the following link:

www.coconino.az.gov/hazardmitigationplan

Fredonia Historical DVD Now Available

The Fredonia Historical Society is proud to present a remarkable centennial collection of historical black and white photographs. The DVD is only $25 and is available at the library and Town Office. Also available is the History of Fredonia book for only $10. There is also a Cookbook available!

read more ...

Page

Page: Survey posted on town website (November 16, 2020)

City of Page ARIZONA

FOR IMMEDIATE RELEASE
FOLLOW US ON

November 16, 2020

County Seeks Community Input for Disaster Planning

PAGE, Ariz. – Natural disasters and climate change impacts are increasing in both frequency and impact nationwide. To meet this challenge, Coconino County is updating its Multi-Jurisdictional Hazard Mitigation Plan (MJHMP) – a plan that guides county-wide efforts to reduce the risk of hazards such as fires and floods. However, for this planning effort to be successful, the county needs input from the people who work and live within its boundaries. To start collecting this input, the county has released a Hazard Mitigation Planning Survey on its website, which can be accessed at https://coconino.az.gov/2474/Hazard-Mitigation-Plan

Public participation is a key part of hazard mitigation planning. It provides planners insight into public preferences and access to community knowledge about the county. It also allows planners to ensure that the needs of vulnerable populations, those who may be disproportionately affected by disasters, are accounted for. For these reasons, Coconino County will be providing several opportunities for public participation.

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To lead these efforts, the county has hired Constant Associates, an emergency management consulting firm. The project is expected to be complete by March 2021.

Page: Facebook (November 16, 2020)

Page: Instagram (November 16, 2020)

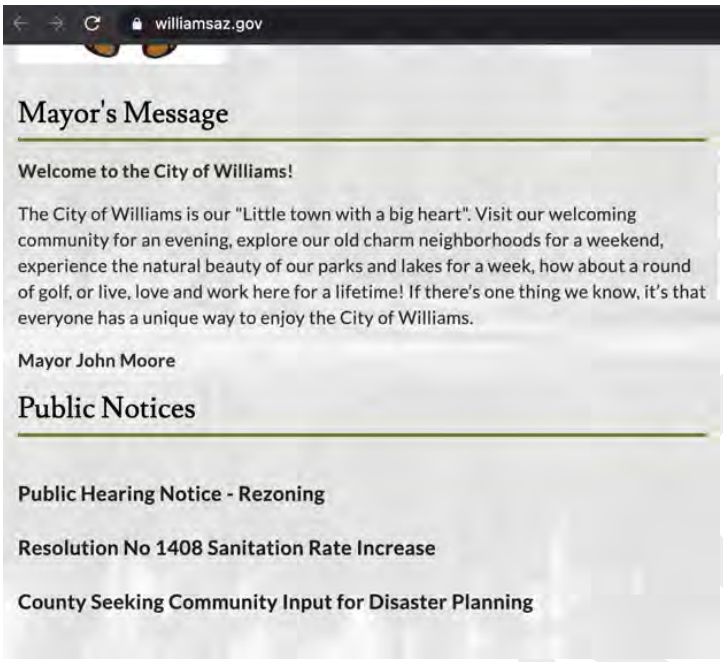
Tusayan

Tusayan: Survey posted on town website (December 15, 2020)

DRAFT

Williams

Williams: Survey posted on city website



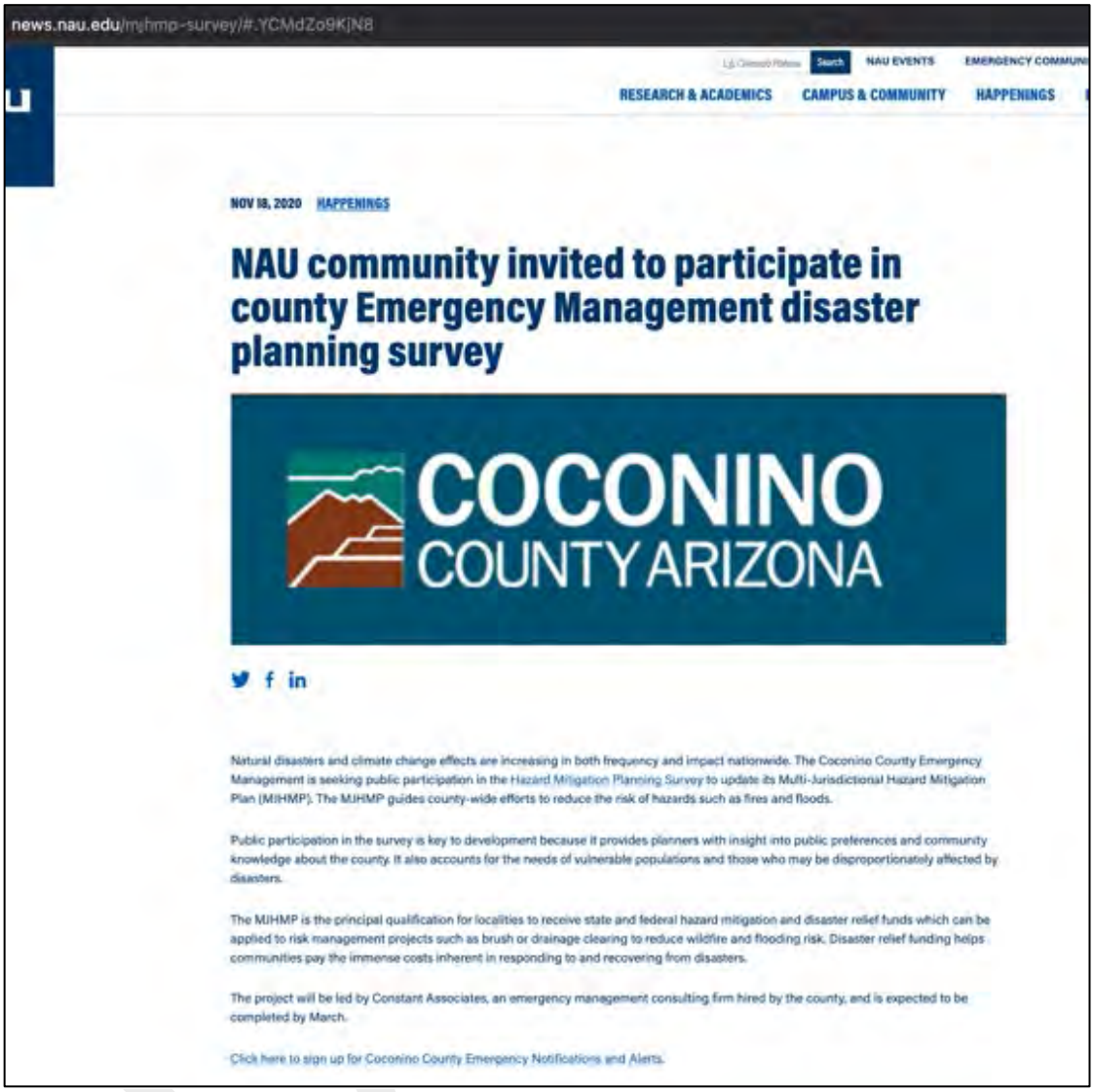
Williams: Facebook (November 7, 2020)

Highlands Fire Department

Highlands: Survey posted on department website

Northern Arizona University (NAU)

NAU: Survey posted on university website



news.nau.edu/mjhmp-survey/#.YCMdZo9KjN8

Search NAU EVENTS EMERGENCY COMMUN

RESEARCH & ACADEMICS CAMPUS & COMMUNITY HAPPENINGS

NOV 18, 2020 HAPPENINGS

NAU community invited to participate in county Emergency Management disaster planning survey

COCONINO COUNTY ARIZONA

Natural disasters and climate change effects are increasing in both frequency and impact nationwide. The Coconino County Emergency Management is seeking public participation in the Hazard Mitigation Planning Survey to update its Multi-Jurisdictional Hazard Mitigation Plan (MJHMP). The MJHMP guides county-wide efforts to reduce the risk of hazards such as fires and floods.

Public participation in the survey is key to development because it provides planners with insight into public preferences and community knowledge about the county. It also accounts for the needs of vulnerable populations and those who may be disproportionately affected by disasters.

The MJHMP is the principal qualification for localities to receive state and federal hazard mitigation and disaster relief funds which can be applied to risk management projects such as brush or drainage clearing to reduce wildfire and flooding risk. Disaster relief funding helps communities pay the immense costs inherent in responding to and recovering from disasters.

The project will be led by Constant Associates, an emergency management consulting firm hired by the county, and is expected to be completed by March.

Click here to sign up for Coconino County Emergency Notifications and Alerts.

Survey Questions and Results (Data Analysis)

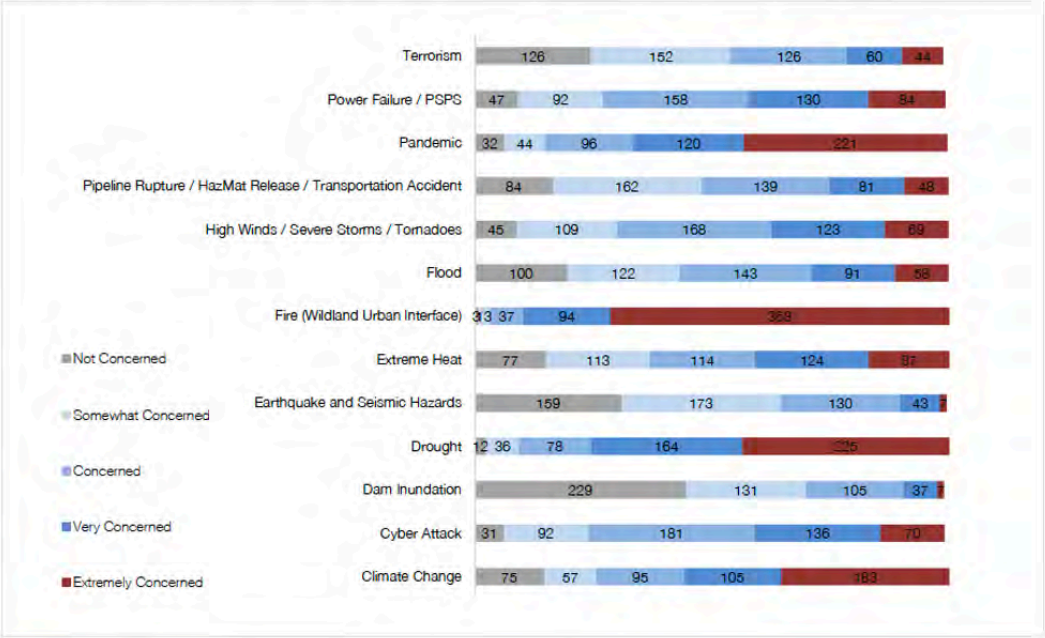
Coconino County
Hazard Mitigation Plan Update Project 2020
Planning Meeting 2 – Meeting Minutes

Coconino County Local Hazard Mitigation Plan Survey

Data Analysis Report

To inform the update of the Coconino County Multi-Jurisdictional Hazard Mitigation Plan (MJHMP), a survey was conducted measuring citizen level of concern for various hazards and their general level of preparedness. This electronic survey was conducted from October 2, 2020 and was closed January 4, 2021. The survey was made available to the public using the Coconino County public alert system, jurisdictional websites, and social media channels. In total, 518 residents of Coconino County responded to the survey.

Question 1: Coconino County residents and businesses may encounter a variety of hazards and/or disasters. How concerned are you about the following hazards impacting you, your business and Coconino County? (Check one response for each hazard)



CONSTANT ASSOCIATES

1

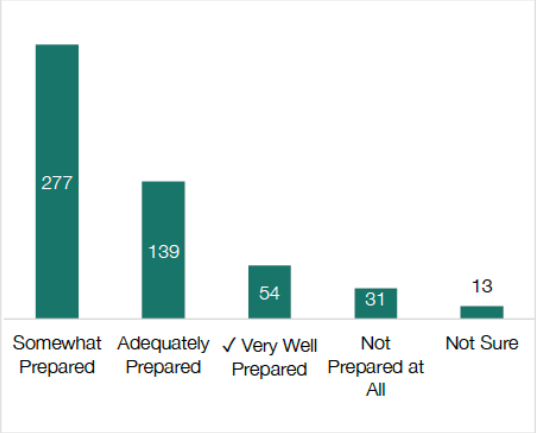
Survey respondents to this question highlighted fires (wildland and urban interface), drought, pandemic, and climate change as being of extreme concern, with 368 respondents (71%) being extremely concerned of fire events, 225 respondents (44%) being extremely concerned with drought events, 221 respondents (43%) being extremely concerned with pandemic events, and 183 respondents (36%) extremely concerned with climate change events.

The hazards of least concern to respondents were dam inundation, earthquake and seismic hazards, terrorism, and flood events. 229 respondents (45%) stated they were not concerned about dam inundation, 159 respondents (31%) stated they were not concerned with earthquake and seismic hazards, 126 respondents (25%) stated they were not concerned by terrorism, and 100 respondents (19%) stated they were not concerned by flood events.

Question 2: How prepared is your household to cope with a hazard event?

Respondents were asked to rate their preparedness for their household if confronted with a hazardous event. They were asked to select one answer rating their current preparedness, ranging from very well prepared, adequately prepared, somewhat prepared, not prepared at all, and unsure. 436 respondents completed this question.

Overall, 277 respondents (54%) stated they were somewhat prepared for a hazardous event. This answer is the second to last level of preparedness, indicating that more training and resources regarding household preparedness may be needed to bring city residents to satisfactory levels of preparedness.



Question 3: Which of the following steps has your household taken to prepare for hazardous events?

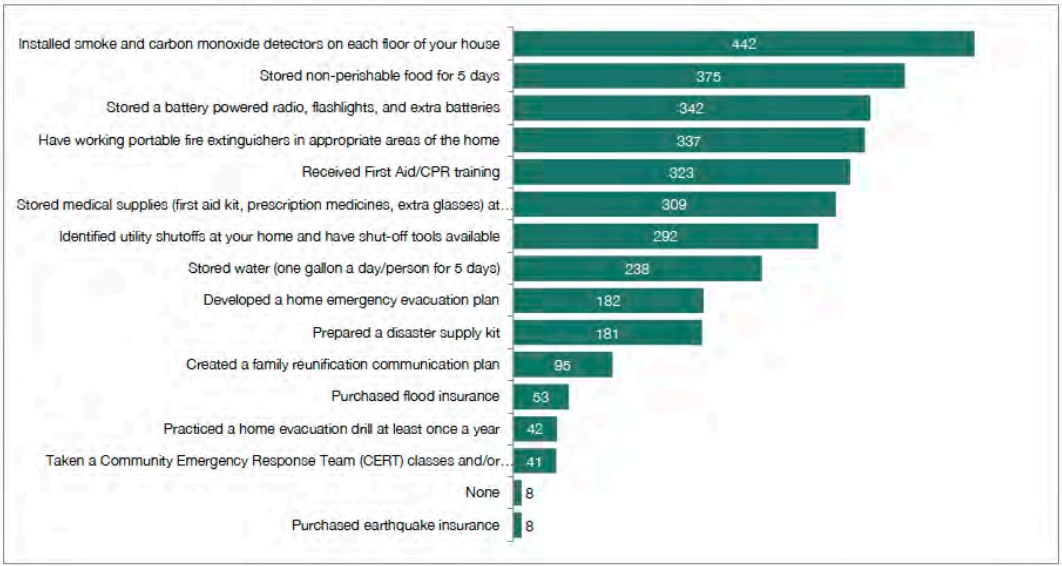
Respondents were asked to indicate which actions their households have taken to prepare for hazardous events. These questions allow the county to recognize common strengths in preparedness among households in different jurisdictions and identify gaps they may need to address and add to response efforts during emergency response.

There were 16 options for respondents to choose from, ranging from no steps taken by the household to preparing a disaster supply kit. The full list of categories can be seen in the corresponding tale.

Out of the 518 respondents in total to the electronic survey, 4 respondents skipped this question for a total of 514 responses. The most common steps taken by households in the county included the installation of smoke and carbon monoxide detectors on each floor of the home, with 442 respondents (86%) indicating they have taken this step. The two next most common steps included storing non-perishable food for five days with 375 respondents (73%) stating they have taken this step, and storing a battery powered radio, flashlights, and extra batteries with 342 respondents (67%) stating they have taken this step. Finally, the

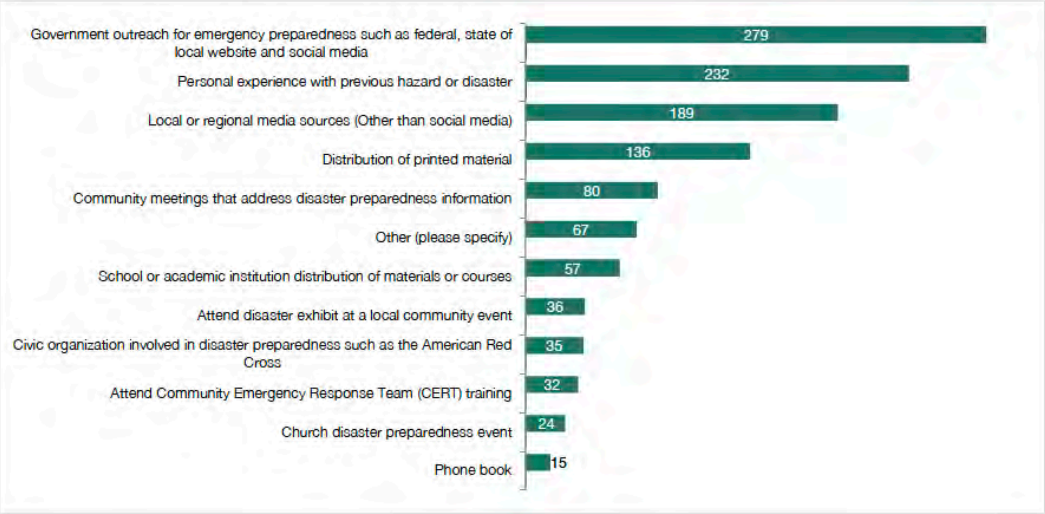
fourth most popular step completed was the possession of working portable fire extinguishers in appropriate areas of the home, with 337 (66%) stating they have taken this step.

The preparedness steps with the lowest completion rates by respondents included practicing a home evacuation drill at least once a year, with 42 respondents (8%) stating they have taken this step, taking a Community Emergency Response Team (CERT) class and/or joining a CERT team, with only 41 respondents (8%) indicating they have completed this step, and the purchase of earthquake insurance, with only 8 respondents (2%) indicating they have taken this step. Only 8 respondents (2%) indicated they have taken no preparedness steps.



Question 4: Which of the following sources of information have helped you to prepare for hazardous events? (Check all that apply)

This question assists the county and each jurisdiction in identifying strengths in community engagement regarding preparation for hazardous events, as well as identifying gaps in increasing community-wide preparedness and education surrounding such events.

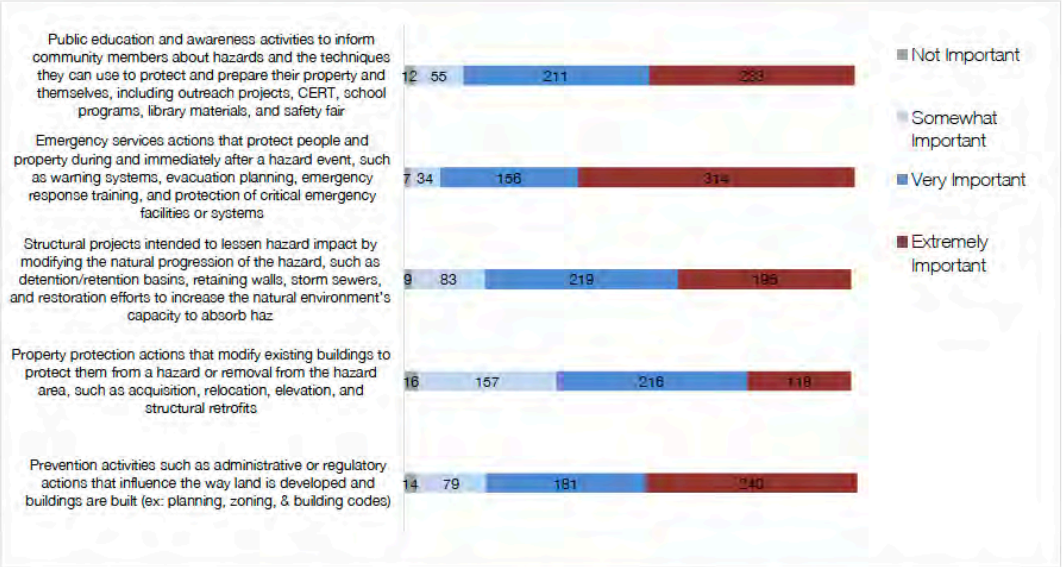


From the 436 respondents that answered this question, 279 respondents (64%) identified government outreach for emergency preparedness such as federal, state, or local websites and social media as their primary source of information for preparation. This category was followed by personal experience with previous hazards or disasters (53% of respondents) and local or regional media sources (43% of respondents).

The categories identified the least by respondents as sources of primary information included civic organizations (8% of respondents), attending a Community Emergency Response Team (CERT) training (7% of respondents), church disaster preparedness events (6% of respondents), and the phone book (3% of respondents).

Question 5: How important do you find the following community-wide actions or activities that may reduce the risks of hazards in Coconino County?

This question asks respondents to identify the importance of community-wide actions and activities to increase preparedness and reduce the risks of hazards in Coconino County.

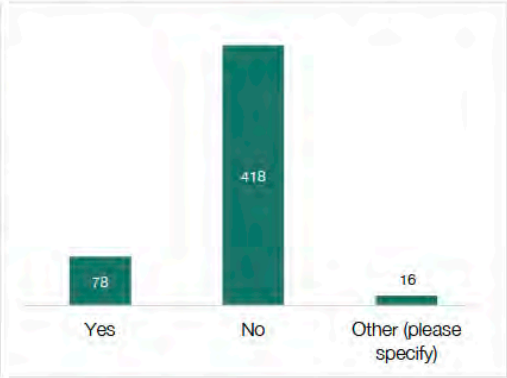


314 of the 514 respondents, or 61% of the answers to this question identified emergency services actions as extremely important. Additionally, 240 respondents (47%) identified prevention activities such as administrative or regulatory actions as extremely important, and 233 of the 514 respondents (46%) identified public education and awareness activities as extremely important.

Question 6: Do you or anyone in your household have disabilities and/or access and functional needs and would you be interested in early warning notifications or specialized response to evacuate during disasters?

This question allows the county a top-level look at the needs of their community in order to recognize areas where access and functional needs may surface during a hazards event response.

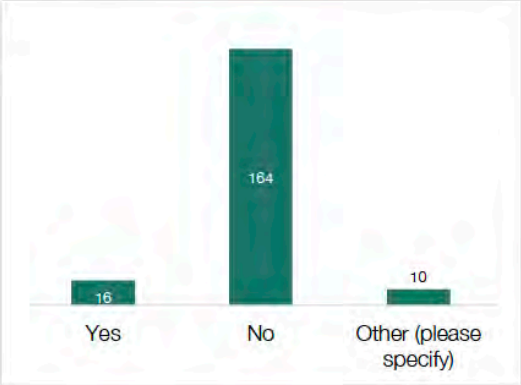
Of the 512 respondents to this question, 78 individuals (15% of respondents) answered yes, that they do have additional access and functional needs and would be interested in early warning notifications or specialized response to evacuate during disasters.



Coconino County
Hazard Mitigation Plan Update Project 2020
Planning Meeting 2 – Meeting Minutes

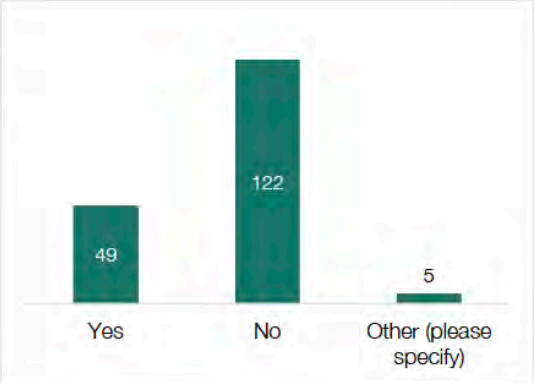
Question 7: If you answered yes to Question 6, do you have a certified service animal that you would be interested in evacuating with you or a household member to a shelter during a disaster?

Of the respondents that answered Question 6, 16 (8% of respondents) indicated that they do have a certified service animal that may evacuate with their household to a shelter during a disaster response.



Question 8: If you answered yes to Question 6, would you be interested in more information about Disaster Assistance for people with disabilities and/or access and functional needs?

Of the respondents that answered question 6, 49 (28% of respondents) indicated that they would be interested in more information about Disaster Assistance for people with disabilities and/or access and functional needs.



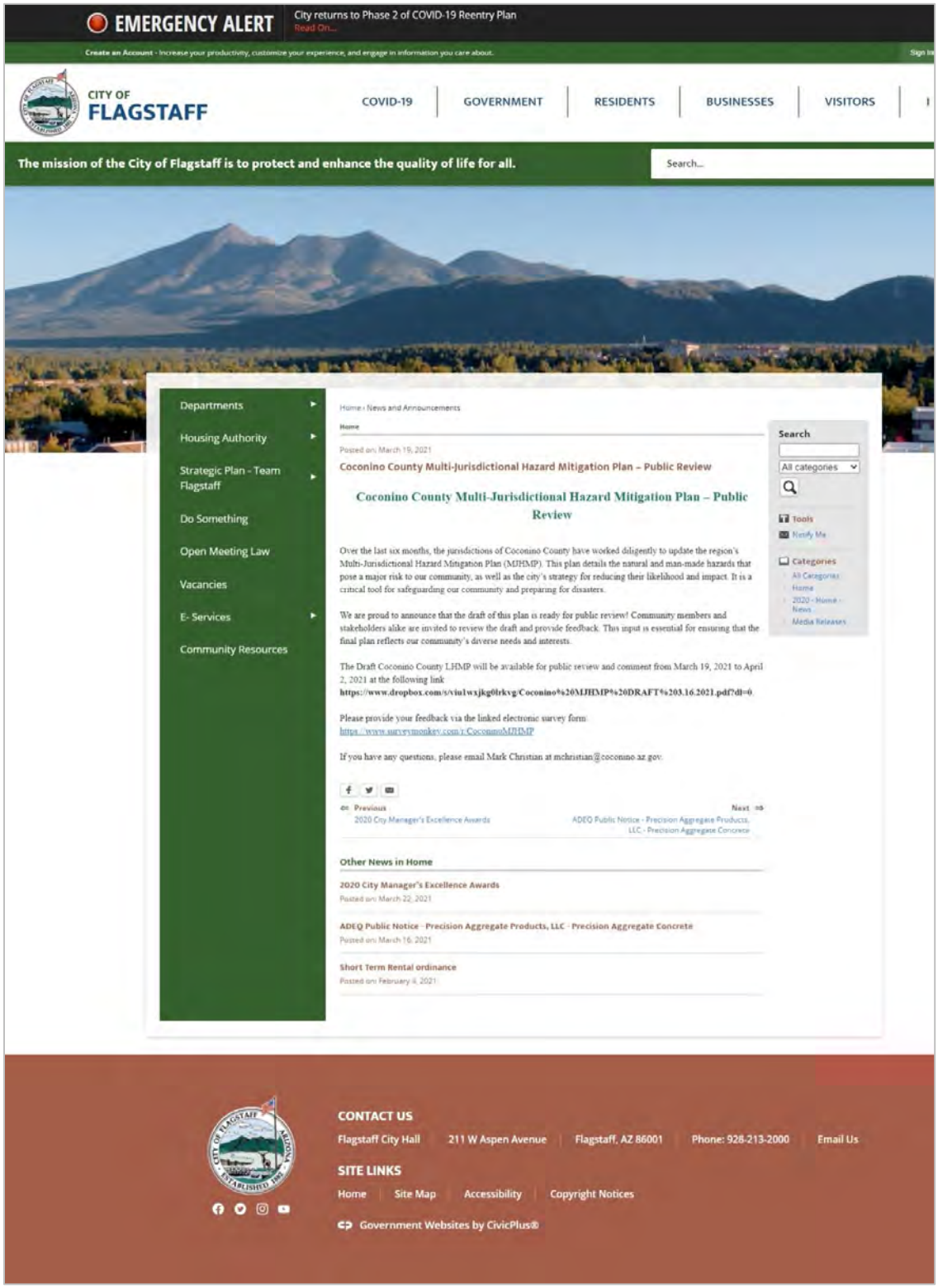
CONSTANT ASSOCIATES

6

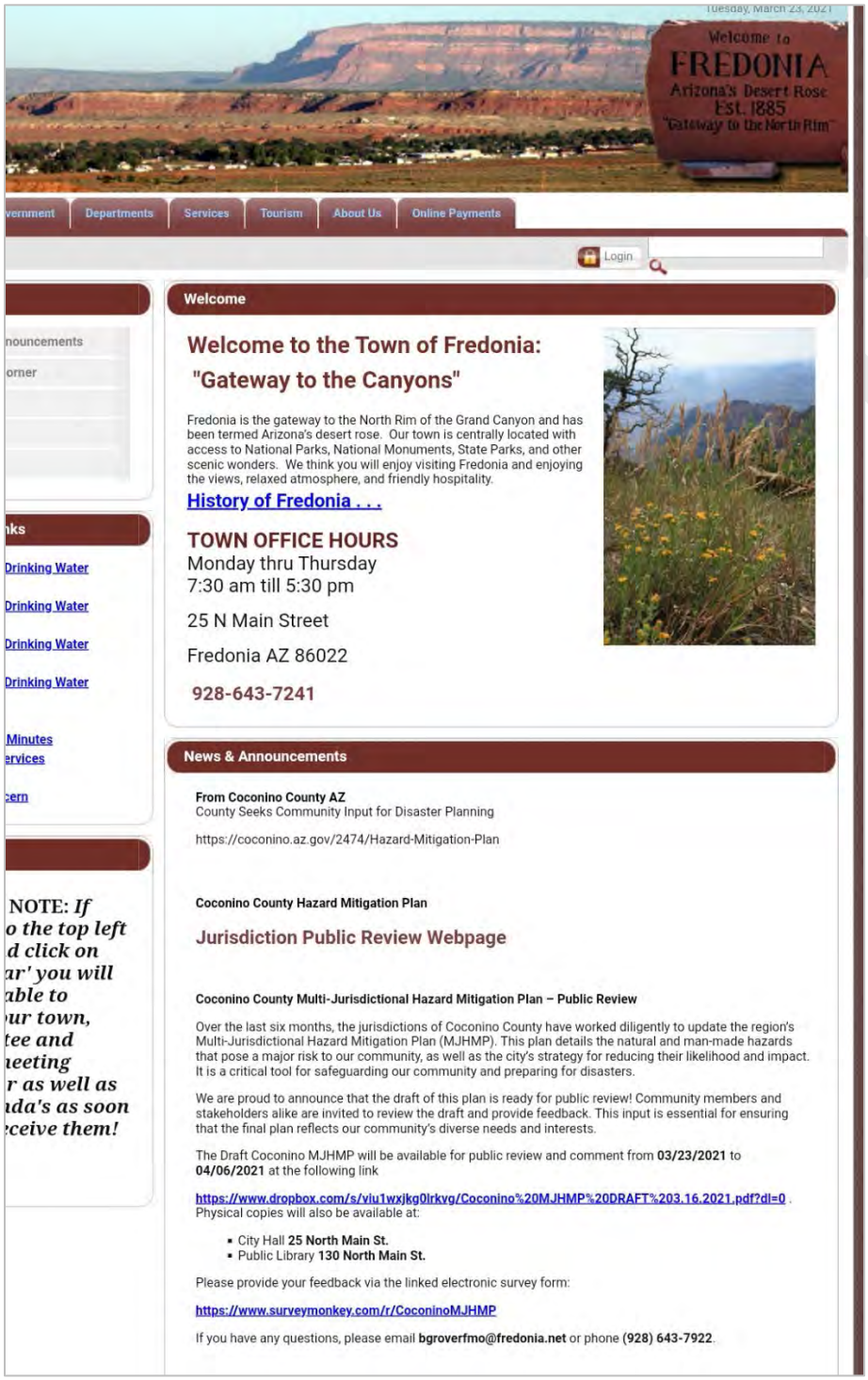
Public and Neighboring Jurisdiction / Utility Review

County: Website

Flagstaff: Website



Fredonia: Website



Page: Website
NOTE: Weblink in left toolbar redirects to Coconino County webpage shown previously

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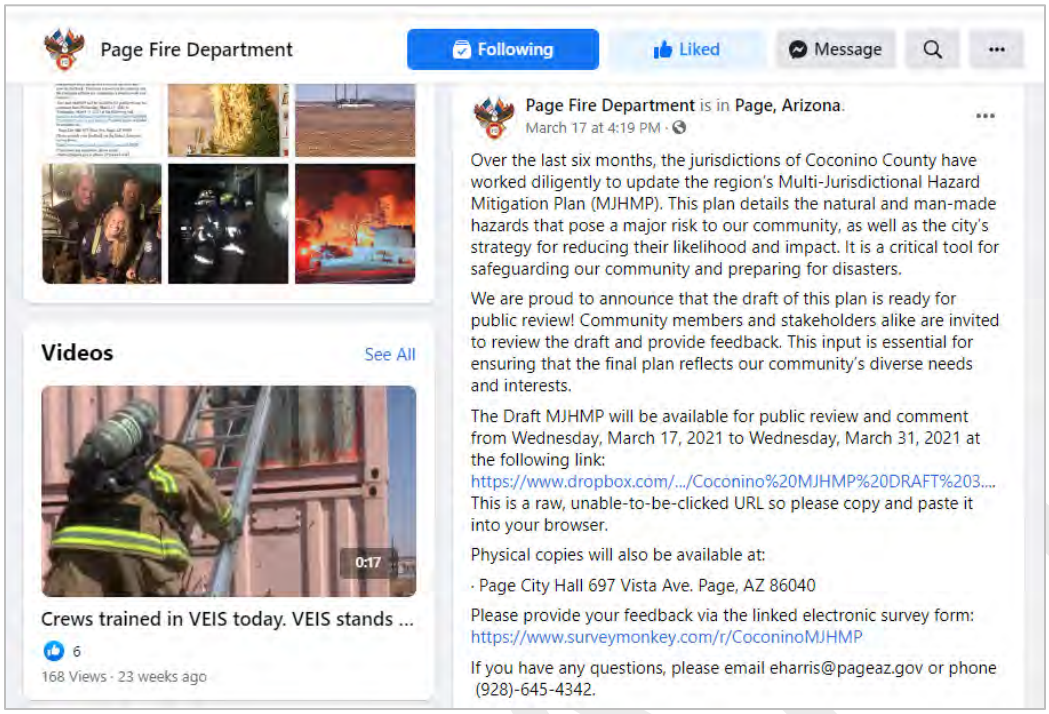
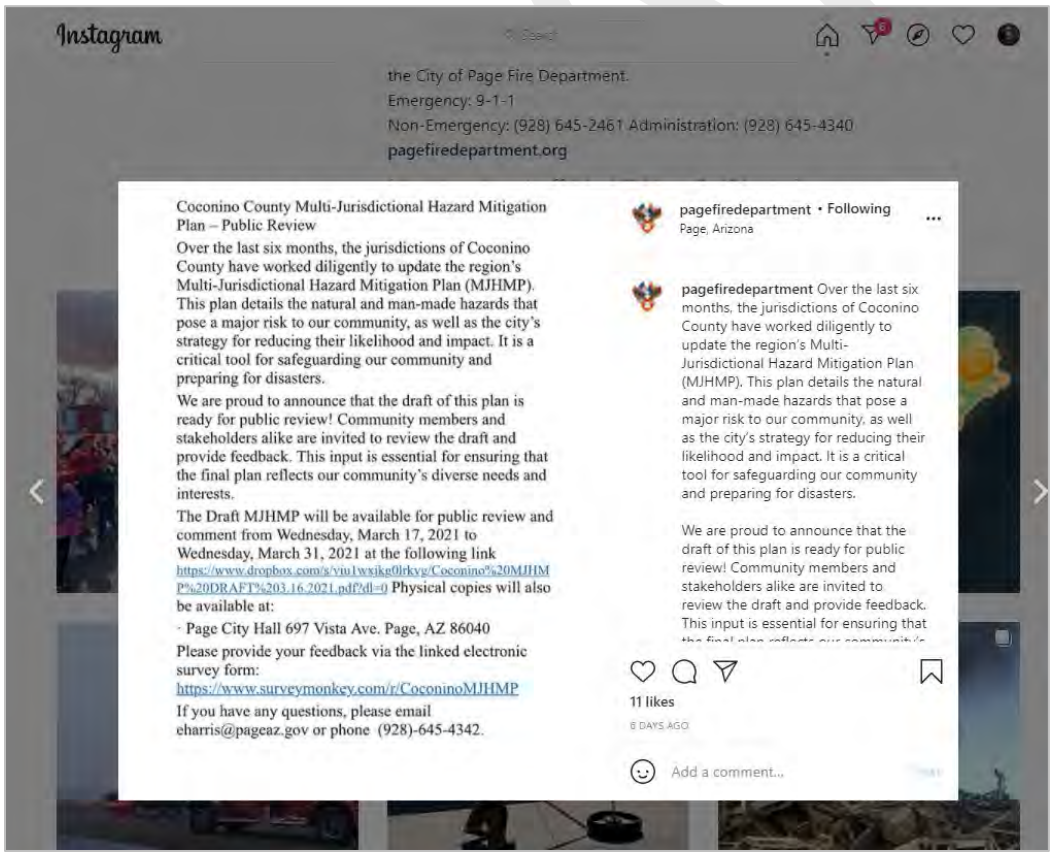
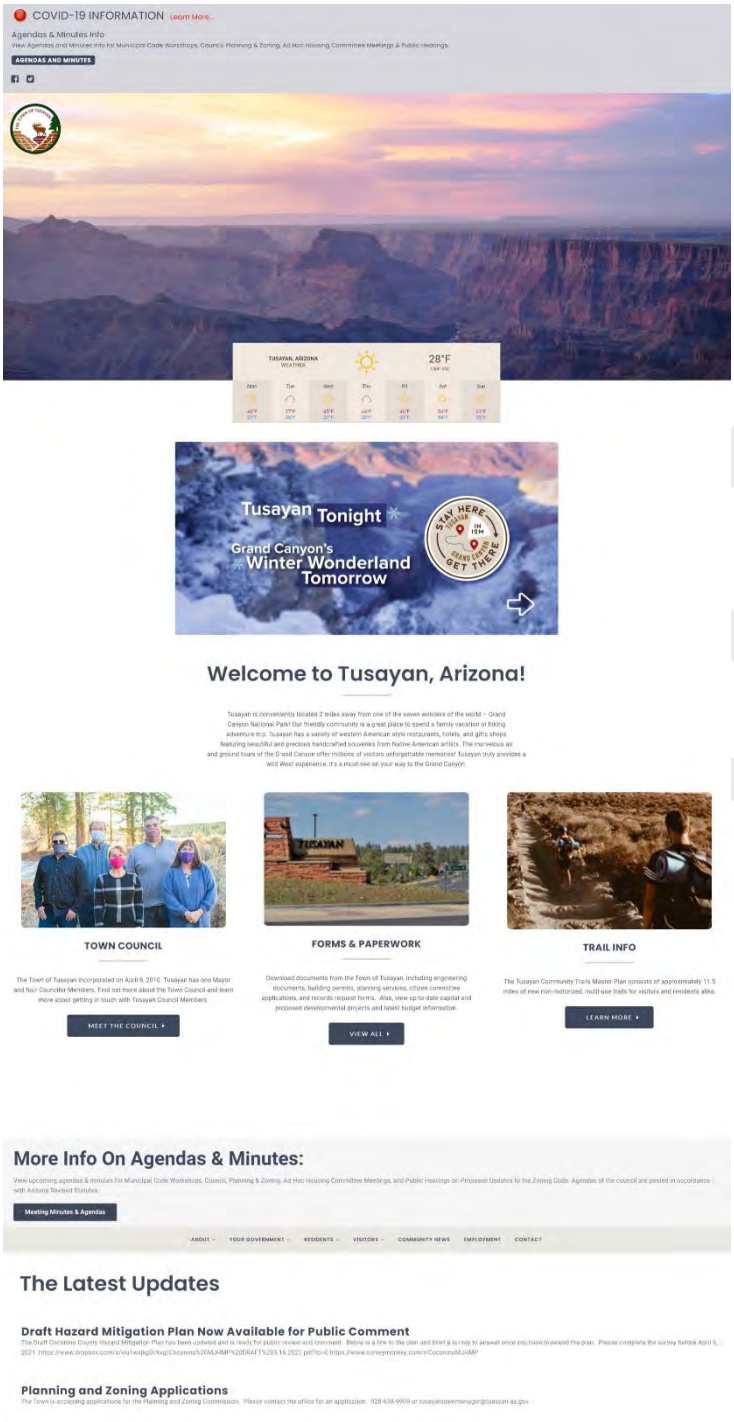
Page: Facebook and Instagram Posts

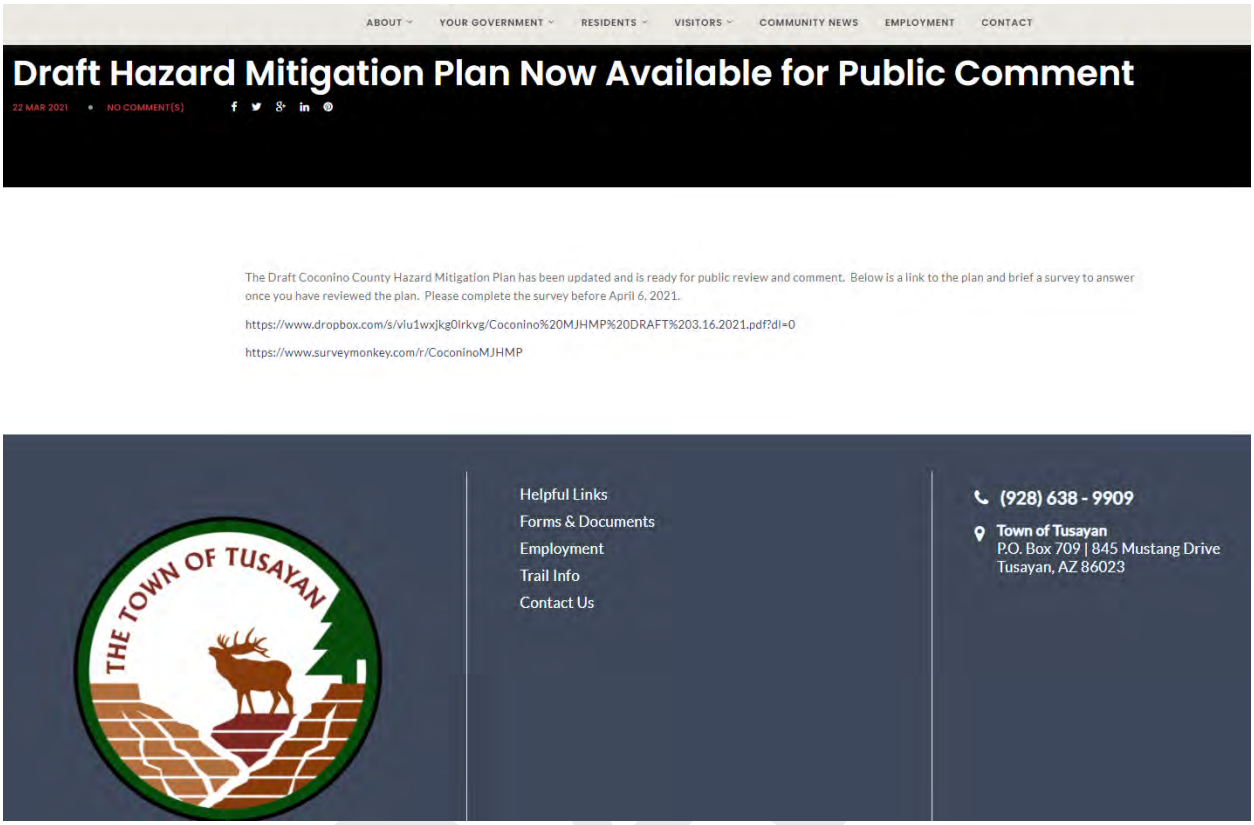




Tusayan: Website (Frontpage - link at bottom of image)



Tusayan: Website 2 (frontpage link destination page)



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Williams: Website

Note: weblink on this page connected with the Coconino County webpage shown previously

3/17/2021 Find Things to Do in Williams, AZ - City of Williams, AZ

Design Mode

Page | Page Options | Advanced Options | Tools | Site Admin | ?

Read More

Mayor's Message

Welcome to the City of Williams!

The City of Williams is our "Little town with a big heart". Visit our welcoming community for an evening, explore our old charm neighborhoods for a weekend, experience the natural beauty of our parks and lakes for a week, how about a round of golf, or live, love and work here for a lifetime! If there's one thing we know, it's that everyone has a unique way to enjoy the City of Williams.

Mayor John Moore

Public Notices

Resolution No 1408 Sanitation Rate Increase

County Seeking Community Input for Disaster Planning

COVID- 19 Vaccine Information

Public Hearing Notice - Young

Public Hearing Notice - Lessnick

Coconino County Multi-Jurisdictional Hazard Mitigation Plan – Public Review

PROCLAMATION OF THE MAYOR

Williams Historic Business District Design Guide

Recreation Center closed for the 2020-2021 season

City Council Statement Regarding Social Distancing

COVID-19 Press Release

https://williamsaz.hosted.civiclive.com/cms/One.aspx?portalId=9450766&pageId=9450774 2/3

Adjacent Jurisdiction / Utility Review Message

From: Dison, Wes <wdison@coconino.az.gov>
Sent: Wednesday, March 24, 2021 11:18
To: catrina.jenkins@navajocountyaz.gov; Randolph.clark@yavapai.us; Rc.helton@yavapai.us; mike.browning@mohavecounty.us; modriscoll@gilacountyaz.gov; aalldredgekcso@kanab.net; tgallegos@sanjuancounty.org; jtrautwein@sedonaaz.gov; jclifton@sedonaaz.gov; janet.dean@aps.com; rachel.mure@aps.com; joseph.simonsen@kindermorgan.com; brad.monell@energytransfer.com; rmiller@dffm.az.gov; laurajo.west@usfa.gov; heather.provencio@usda.gov; andrew_p_fitzgerald@nps.gov
Cc: Christian, Mark; Evan Koepke; Wilson, Benjamin
Subject: Coconino County Multi-Jurisdictional Hazard Mitigation Plan (MJHMP):

Categories: CC Me

Good morning, I hope this email finds you well.

Coconino County is the in the final stages of our MJHMP FEMA required 5 year renewal and we wanted to share our plan with you for your awareness. Please know we have no ask of you at this time. We are currently in the Public View/Comment stage and as our neighboring jurisdictions you are all key partners. Our planning effort this year was framed as an "update" to our last edition (2015), but in working with our contractor, Constant Associates, the update was very thorough.

The major change to our plan is the addition of a "Public Health Outbreak/Pandemic" hazard, bringing our official MJHMP County list of hazards to 10. We have also worked to recognize some of the local hazards that do not fit precisely within the intent of the MJHMP (natural caused & eligible for mitigation efforts/funding), but remain very high priorities for our five incorporated jurisdictions.

Again, there is no action necessary on your part. We appreciate our partnerships and relationships with each of you and information sharing is critical to meeting mission.

Link to view our plan:
https://www.dropbox.com/s/viu1wxjkg0lrkvg/Coconino%20MJHMP%20DRAFT%203.16.2021.pdf?dl=0

V/r

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Covid-19 Incident Management Team, Deputy Incident Commander,Emergency Manager
(928) 606-1286 (Cell)
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"Leadership is the art of accomplishing more than the science of management says is possible."
General Colin Powell, Retired

Appendix D: Mitigation Plan Prioritization

These worksheets follow the FEMA State and Local Mitigation Planning How-To Guide: Developing the Mitigation Plan – Identifying Mitigation Actions and Implementation Strategies published by FEMA in 2003.

Coconino County

STAPLEE Prioritization Tool (Scoring: "+" = 1 point, "-" = -1 point, "n/a" = 0 point, "u/k" = unknown)																						
	S Social		T Technical			A Administrative			P Political			L Legal			E Economic				E Environmental					
Mitigation Action	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-Term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance/Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land/Water	Effect on Endangered Species	Effect on HAZMAT/ Waste Sites	Consistent with Comm. Environmental Goals	Consistent with Federal Environmental Laws	**Priority Total (net)**
1.1 Maintain evaluations for structural integrity of County and non-County facilities identified as potential shelter sites can be performed seamlessly via application of 2018 International Codes and 2017 National Electric Code.	+	+	+	+	+	*N/A*	*U/K*	+	+	+	+	+	+	*0*	+	*N/A*	*0*	*N/A*	*0*	*0*	*N/A*	+	+	***14***
1.2 Identify and pursue funding opportunities to develop and implement local mitigation activities.	+	+	+	+	+	*0*	*0*	+	+	+	+	+	+	*U/K*	+	*N/A*	+	*N/A*	*U/K*	*U/K*	*U/K*	+	+	***15***

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Mitigation Action	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-Term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance/Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land/Water	Effect on Endangered Species	Effect on HAZMAT/ Waste Sites	Consistent with Comm. Environmental Goals	Consistent with Federal Environmental Laws	**Priority Total (net)**
2.1 Coordinate with local stakeholders and partners for the enhancement of public outreach and awareness regarding regional hazards and mitigation actions community members can implement for self-reliance and protection to property and life safety.	+	+	+	+	+	*0*	*0*	*N/A*	+	+	+	+	+	+	+	*N/A*	+	*N/A*	*U/K*	*U/K*	*U/K*	+	+	***15***
2.2 Increase public awareness of the hazards to residents and businesses as a means to reduce the potential impacts through education and outreach. Continue to maintain a resource center of information accessible to the public at key government facilities.	+	+	+	+	+	*0*	*0*	*0*	+	+	+	+	+	*0*	+	-	+	*0*	*0*	*0*	+	+	+	***14***

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Mitigation Action	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-Term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance/Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land/Water	Effect on Endangered Species	Effect on HAZMAT/ Waste Sites	Consistent with Comm. Environmental Goals	Consistent with Federal Environmental Laws	**Priority Total (net)**
2.3 Partner with local insurance agencies to hold workshops for property owners to educate about the Flood Insurance Programs and its requirements. Community Development performs this function through NEIPA and the Engineering Division for flood only.	+	+	+	+	+	*0*	*0*	*0*	+	+	+	+	+	*0*	+	*0*	+	*0*	*0*	*0*	+	+	+	***15***
2.4 Increase public awareness of dam failure hazards and identify mitigation measures to address those hazards.	+	+	+	+	+	*0*	*0*	*0*	+	+	+	+	+	*0*	+	*0*	+	*0*	*0*	*0*	*N/A*	+	+	***14***
2.5 In light of the current COVID-19 pandemic and past public health related challenges, the County will seek to improve upon and enhance community outreach and coordination of information to stress the importance of nonpharmaceutical interventions to help slow the spread of infectious diseases.	+	+	+	+	+	+	*0*	*0*	+	+	+	+	+	-	+	*0*	*0*	*0*	*0*	*0*	*0*	+	+	***13***

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Mitigation Action	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-Term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance/Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land/Water	Effect on Endangered Species	Effect on HAZMAT/ Waste Sites	Consistent with Comm. Environmental Goals	Consistent with Federal Environmental Laws	**Priority Total (net)**
2.6 Expand and maintain public education activities to include events like the Northern Arizona Home Show, public service announcements, public access television and county website.	+	+	+	+	+	*0*	+	*0*	+	+	+	+	+	*0*	+	*0*	+	*0*	*0*	*0*	*0*	+	+	***15***
2.7 Enhance winter weather preparedness campaign including brochures, Public Service Announcements and County webpage content development for public awareness.	+	+	+	+	+	+	+	*0*	+	+	+	+	+	*0*	+	*0*	+	*0*	*0*	*0*	*0*	*0*	+	+	***16***
2.8 Deliver educational programs and outreach to outlying areas of county that are not currently served by any organized fire protection system, with the goal to assist organizing districts.	+	+	+	+	+	+	+	*0*	+	+	+	+	+	*0*	+	*0*	+	*0*	*0*	*0*	*0*	*0*	+	+	***16***
2.9 Continue to maintain a resource center of information accessible to the public at key government facilities, providing informational brochures and information on government websites and social media.	+	+	+	+	+	+	+	*0*	+	+	+	+	+	*0*	+	*0*	+	*0*	*0*	*0*	*0*	*0*	+	+	***16***

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Mitigation Action	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-Term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance/Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land/Water	Effect on Endangered Species	Effect on HAZMAT/ Waste Sites	Consistent with Comm. Environmental Goals	Consistent with Federal Environmental Laws	**Priority Total (net)**
3.1 Seek any opportunities to enhance the implementation and monitoring of the code regulated design criteria in relation to the adopted 2018 International codes and the 2017 National Electrical Code for the protection of life and property and reduce the impacts of natural and manmade hazards.	*0*	+	+	+	*0*	*0*	+	*0*	+	+	*0*	+	+	-	+	-	*0*	+	+	*0*	+	+	+	***12***
3.2 Integrate appropriate items from the MJHMP into the Safety Element of the General Plan and other regulatory documents as appropriate. This function is ongoing through adopted codes and ordinances.	+	+	+	+	+	*0*	+	*0*	+	+	+	+	+	*0*	+	*0*	*0*	*0*	*0*	*0*	*0*	*0*	+	+	***14***

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Mitigation Action	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-Term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance/Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land/Water	Effect on Endangered Species	Effect on HAZMAT/ Waste Sites	Consistent with Comm. Environmental Goals	Consistent with Federal Environmental Laws	**Priority Total (net)**
3.3 Coordinate with the utility companies and vendors to strengthen, safeguard and provide measures such as providing supplemental services, to protect and secure high-voltage lines, water, sewer, natural gas and petroleum pipelines, and trunk electrical and telephone conduits from hazards via County adherence to International Codes and 2017 National Electric Code.	+	+	+	+	+	+	+	+	+	+	+	+	+	*0*	+	*0*	+	*0*	*0*	*0*	+	+	***17***
3.4 Implement and develop the County Resilient Community Program.	+	+	+	+	+	*0*	*0*	*0*	+	+	+	+	+	*0*	+	-	+	*0*	+	*0*	+	+	+	***15***
3.5 Establish and maintain a County component of the state GIS mapping system documenting forest treatment, hazard data, and grant funding sources to monitor our wildland fire threat.	+	+	+	+	+	+	+	+	+	+	+	+	+	*0*	+	*0*	+	*0*	*0*	*0*	*0*	+	+	***17***
3.6 Conduct floodplain re-mapping for reducing losses to Munds Park and Kachina/ Mountainaire.	+	+	+	+	+	*0*	*0*	*0*	+	+	+	+	+	-	+	*0*	+	*0*	+	*0*	*0*	+	+	***14***

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Mitigation Action	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-Term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance/Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land/Water	Effect on Endangered Species	Effect on HAZMAT/ Waste Sites	Consistent with Comm. Environmental Goals	Consistent with Federal Environmental Laws	**Priority Total (net)**
3.7 Develop Neighborhood Wildfire Assessment, at-risk neighborhood ranking, and provide risk information to residents.	+	+	+	+	+	+	+	*0*	+	+	+	+	+	*0*	+	-	+	*0*	*0*	*0*	*0*	+	+	***15***
*3.8 Conduct roadside thinning along Forest HWY 3, Perkinsville Rd, Old Munds Hwy, Garland Prairie, and Spring Valley Rd.**	+	+	+	+	+	*0*	+	*0*	+	+	+	+	+	*0*	+	*0*	+	*0*	*0*	*0*	*0*	+	+	***15***
3.9 Enforce floodplain management requirements in accordance with NFIP, including regulating all substantially improved construction in floodplain.	+	+	+	+	+	*0*	+	*0*	+	+	+	+	+	*0*	+	*0*	+	*0*	*0*	*0*	*0*	+	+	***15***
3.10 Continue support for Flagstaff Fire Department Fire Management Program to mitigate wildland fire hazards to watershed resources with an emphasis on education engineering, enforcement, and ecosystems.	+	+	+	+	+	+	+	*0*	+	+	+	+	+	*0*	+	*0*	+	*0*	+	+	*0*	+	+	***19***

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Mitigation Action	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-Term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance/Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land/Water	Effect on Endangered Species	Effect on HAZMAT/ Waste Sites	Consistent with Comm. Environmental Goals	Consistent with Federal Environmental Laws	**Priority Total (net)**
3.11 Continue participation in Rural Communities Fuel Management Partnership – an informal multi-agency alliance created to work with landowners to reduce fuel hazards on their property in two communities located in Coconino Co. Areas of interest include the communities of Doney Park, Williams, and Blue Ridge.	+	+	+	+	+	*0*	+	*0*	+	+	+	+	+	*0*	+	*0*	+	*0*	*0*	*0*	*0*	+	+	***19***
4.1 Partner with local insurance agencies to hold workshops for property owners to educate about the Flood Insurance Programs and its requirements. Community Development performs this function through NEIPA and the Engineering Division for flood only.	+	+	+	+	+	*0*	+	*0*	+	+	+	+	+	*0*	+	*0*	+	*0*	*0*	*0*	*0*	+	+	***15***

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Mitigation Action	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-Term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance/Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land/Water	Effect on Endangered Species	Effect on HAZMAT/ Waste Sites	Consistent with Comm. Environmental Goals	Consistent with Federal Environmental Laws	**Priority Total (net)**
4.2 Continue partnership with County and local stakeholders to Improve floodplain hazard assessment information and identify recommendations for avoiding new development in high hazard areas and encourage preventative measures for existing development.	+	+	+	+	+	*0*	+	*0*	+	+	+	+	+	*0*	+	*0*	+	*0*	+	+	*0*	+	+	***17***
4.3 Continue to develop mutual aid agreements and memorandum of understanding with agencies to serve emergency and disaster purposes – notably by encouraging additional signatories to the Arizona Mutual Aid Compact.	+	+	+	+	+	+	+	+	+	+	+	+	+	*0*	+	*0*	+	*0*	*0*	*0*	*0*	+	+	***17***

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Mitigation Action	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-Term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance/Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land/Water	Effect on Endangered Species	Effect on HAZMAT/ Waste Sites	Consistent with Comm. Environmental Goals	Consistent with Federal Environmental Laws	**Priority Total (net)**
4.4 Continue County partnership and support with local government, NGO and non-profits to maintain and build upon our cadre volunteers to augment efforts in compliance with Arizona Disaster Service Worker program guidance (e.g., shelter workers, animal rescue and care, CERT, communications staff, medical and health, and human service providers).	+	+	+	+	+	*0*	+	*0*	+	+	+	+	+	*0*	+	-	+	*0*	*0*	*0*	*0*	+	+	***14***
4.5 Facilitate integration of Northern Arizona University into the County MJHMP as a participating jurisdiction via annual MJHMP review and update process.	+	+	+	+	+	*0*	*0*	*0*	+	+	+	+	+	*0*	+	*0*	+	*0*	*0*	*0*	*0*	+	+	***14***
4.6 Continue to push for mutual aid agreements and memorandum of understanding (MOU) with agencies to serve emergency and disaster purposes – notably by encouraging additional signatories to the Arizona Mutual Aid Compact.	+	+	+	+	+	*0*	+	+	+	+	+	+	+	*0*	+	*0*	+	*0*	*0*	*0*	*0*	+	+	***16***

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Mitigation Action	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-Term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance/Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land/Water	Effect on Endangered Species	Effect on HAZMAT/ Waste Sites	Consistent with Comm. Environmental Goals	Consistent with Federal Environmental Laws	**Priority Total (net)**
5.1 Secure funding and strategic partnerships necessary to develop County Medical Reserve Corps capability.	+	+	+	+	+	+	+	+	+	+	+	+	+	*0*	+	*0*	+	-	*0*	*0*	*0*	+	+	***16***
5.2 Provide support and coordination as requested (and as funding is available) toward the deployment and maintenance of the Flash Flood Early Warning System in Havasupai Canyon.	+	+	+	+	+	*0*	-	+	+	+	+	+	+	*0*	+	*0*	+	*0*	*0*	*0*	*0*	+	+	***15***
5.3 Post Wildfire Mt. Elden Flood Mitigation Project.	+	+	+	+	+	*0*	+	*0*	+	+	+	+	+	*0*	+	*0*	+	*0*	*0*	*0*	*0*	+	+	***15***
5.4 Post wildland fire early monitoring flood warning system for areas impacted by catastrophic fires.	+	+	+	+	+	*0*	+	+	+	+	+	+	+	*0*	+	*0*	+	*0*	*0*	*0*	*0*	+	+	***16***

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Flagstaff

STAPLEE Prioritization Tool (Scoring: "+" = 1 point, "-" = -1 point, "n/a" = 0 point, "u/k" = unknown)																						
	S Social		T Technical			A Administrative			P Political			L Legal			E Economic				E Environmental					
Mitigation Action	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-Term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance/Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land/Water	Effect on Endangered Species	Effect on HAZMAT/ Waste Sites	Consistent with Comm. Environmental Goals	Consistent with Federal Environmental Laws	**Priority Total (net)**
1.1 Upgrade existing conservation measures to provide for water during periods of drought. The city depends on surface reservoirs and groundwater for domestic water supply. Conservation efforts expand the capacity of this limited resource.	+	+	+	+	+	N/A	N/K	+	+	+	+	N/A	N/A	N/A	+	N/A	+	N/A	+	+	N/A	+	+	**15**
1.2 Plan and conduct forest treatments to reduce severity and impact of unwanted wildland fire both within and adjacent to the community.	N/K	+	+	+	+	-	-	+	+	+	+	+	+	-	+	-	+	-	+	+	+	+	+	**12**

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Mitigation Action	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-Term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance/Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land/Water	Effect on Endangered Species	Effect on HAZMAT/ Waste Sites	Consistent with Comm. Environmental Goals	Consistent with Federal Environmental Laws	**Priority Total (net)**
1.3 Maintain evaluations for structural integrity of facilities identified as potential shelter sites. This can be performed seamlessly via application of the 2018 International Building Codes and 2017 National Electric Codes.	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	-	+	N/A	N/A	N/A	+	+	+	**18**
1.4 Identify and pursue funding opportunities to develop and implement local mitigation activities.	+	+	+	+	+	-	N/A	+	+	+	+	+	+	N/A	+	-	+	-	N/A	N/A	N/A	+	+	**13**
1.5 Develop greenhouse gas mitigation strategies that address multiple objectives, including damage reduction, environmental enhancement, historic preservation, tourism/ recreation, economic recovery /development, and building community resilience to climate variance.	+	+	+	+	+	N/A	-	+	+	+	+	+	+	U/K	+	-	+	U/K	+	+	N/A	+	+	**15**

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Mitigation Action	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-Term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance/Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land/Water	Effect on Endangered Species	Effect on HAZMAT/ Waste Sites	Consistent with Comm. Environmental Goals	Consistent with Federal Environmental Laws	**Priority Total (net)**
1.6 Flagstaff Well Field & Pipeline Evaluation. The city purchased Red Gap Ranch and has drilled ten (10) wells for the purpose of future water supply. The city is currently negotiating a Right of Water with ADOT along 1-40 and is performing the first phase of a feasibility study.	+	+	+	+	+	N/A	+	+	+	+	+	+	+	--	+	-	+	N/A	+	U/K	N/A	+	+	**15**
1.7 Flagstaff Watershed Protection Project (also referred to as County & Dry Hills Watershed Protection Project): Approved by the voters, this project is being pursued to ensure the viability of this surface reservoir and stormwater runoff through forest treatments.	N/K	+	+	+	+	-	+	+	+	+	+	+	+	-	+	-	+	-	+	+	+	+	+	**14**
2.1 Develop a public outreach and awareness program about regional hazards and mitigation actions community members can do in their homes	+	+	+	+	+	0	0	0	+	+	+	+	+	0	+	-	+	0	0	0	0	+	+	+	**14**

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Mitigation Action	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-Term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance/Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land/Water	Effect on Endangered Species	Effect on HAZMAT/ Waste Sites	Consistent with Comm. Environmental Goals	Consistent with Federal Environmental Laws	**Priority Total (net)**
2.2 Increase public awareness of the natural, human-caused, and technological hazards to businesses as a means to reduce the potential damage from each hazard through educational and outreach. Maintain a resource center accessible to the public at key government facilities. Provide information on government websites and social media accounts.	+	+	+	+	+	0	0	0	+	+	+	+	+	0	+	-	+	0	0	0	+	+	+	**14**
2.3 Provide information on tools; partnership opportunities, and funding resources for business and philanthropical organizations.	+	+	+	+	+	0	0	0	+	+	+	+	+	0	+	-	+	0	0	0	+	+	+	**14**
2.4 Place more stress on the risks associated with natural and manmade hazards in public awareness campaigns conducted by various County/city departments.	+	+	+	+	+	0	0	0	+	+	+	+	+	0	+	-	+	0	0	0	+	+	+	**14**

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Mitigation Action	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-Term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance/Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land/Water	Effect on Endangered Species	Effect on HAZMAT/ Waste Sites	Consistent with Comm. Environmental Goals	Consistent with Federal Environmental Laws	**Priority Total (net)**
2.5 Advance education programs to increase awareness and mitigation impacts of climate change	+	+	+	+	+	0	0	0	+	+	+	+	+	0	+	-	+	0	0	0	+	+	+	**14**
2.6 Flagstaff Stormwater Public Outreach: Public awareness program on topic of flooding and dam risks.	+	+	+	+	+	0	0	0	+	+	+	+	+	0	+	0	+	0	0	0	+	+	+	**15**
3.1 Identify water resources management and conservation opportunities.	+	+	+	+	+	N/A	N/K	+	+	+	+	N/A	N/A	N/A	+	N/A	+	N/A	+	+	N/A	+	+	**15**
3.2 Improve hazard assessment information to make recommendations for avoiding new development in high hazard areas and encouraging preventative measures for existing development in areas vulnerable to natural, man-made, and technological hazards.	0	+	+	+	+	0	0	0	+	+	+	+	+	-	+	-	+	0	0	0	+	+	+	**12**
3.3 Integrate appropriate items from the MJHMP into the Safety Element of the General Plan and other regulatory documents as appropriate.	0	+	+	+	+	0	0	0	+	+	+	+	+	-	+	-	+	0	0	0	+	+	+	**12**

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Mitigation Action	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-Term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance/Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land/Water	Effect on Endangered Species	Effect on HAZMAT/ Waste Sites	Consistent with Comm. Environmental Goals	Consistent with Federal Environmental Laws	**Priority Total (net)**
3.4 Coordinate with the utility companies and vendors to strengthen, safeguard, or take other appropriate measures such as providing supplemental services, to protect and secure high-voltage lines, water, sewer, natural gas and petroleum pipelines, and trunk electrical and telephone conduits from hazards.	+	+	+	+	+	N/A	N/A	+	+	+	+	+	+	+	+	-	+	N/A	N/A	N/A	N/A	+	+	**15**
3.5 Continue to invest in up-sizing drainage ways, improving floodplain flood mitigations, and enhancing streams and washes to convey design storms.	+	+	+	+	+	+	-	0	+	+	+	+	+	0	+	-	+	0	+	+	0	+	+	**16**
3.6 The Rio DeFlag Project is a major flood control initiative designed to remove 1500 structures from the flood plain. The downtown area is prone to flooding and this effort will reduce the flood threat and enable further economic development in this area.	-	+	+	+	+	N/A	-	+	-	+	U/K	+	+	+	+	-	+	-	+	+	+	+	+	**11**

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Mitigation Action	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-Term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance/Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land/Water	Effect on Endangered Species	Effect on HAZMAT/ Waste Sites	Consistent with Comm. Environmental Goals	Consistent with Federal Environmental Laws	**Priority Total (net)**
4.1Partner with local insurance agencies to hold workshops for property owners to educate about the Flood and Earthquake Insurance Programs and its requirements.	+	+	+	+	+	0	N/A	0	+	+	+	+	+	0	+	N/A	+	0	N/A	N/A	N/A	0	0	**12**
4.2 The city will develop a plan and mutual aid agreement with the state, County, Navajo Nation, National Park Service and other agencies to implement mitigation actions.	+	+	+	+	+	+	0	0	+	+	+	+	+	0	+	0	+	0	0	0	+	+	+	**16**
4.3 Continue to develop mutual aid agreements and memorandum of understanding with agencies to serve emergency and disaster purposes – notably by encouraging additional signatories to the Arizona Mutual Aid Compact.	+	+	+	+	+	+	0	0	+	+	+	+	+	0	+	0	+	0	0	0	+	+	+	**16**

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Mitigation Action	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-Term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance/Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land/Water	Effect on Endangered Species	Effect on HAZMAT/ Waste Sites	Consistent with Comm. Environmental Goals	Consistent with Federal Environmental Laws	**Priority Total (net)**
4.4 Continue City partnership and support with NGOs and non-profits to maintain and build a cadre of trained, volunteers to augment disaster response and recovery efforts in compliance with Arizona Disaster Service Worker program guidance (e.g., shelter workers, animal rescue and care, CERT, communications staff, medical and health, and human service providers),	+	+	+	+	+	-	0	+	+	+	+	+	+	+	+	0	-	0	0	0	+	+	+	**15**
5.1 Develop a disaster debris plan.	+	+	+	+	+	0	0	0	+	+	+	+	+	0	+	-	+	0	+	0	+	+	+	**15**
5.2 Budget for maintenance and replacement of County/city owned fire and police stations.	+	+	+	+	+	0	-	+	+	+	+	+	+	0	+	-	+	0	0	0	+	+	+	**14**
5.3 Maintain cloud storage for vital records and data to allow access, if government servers are disrupted.	+	+	+	+	+	0	0	+	+	+	+	+	+	0	+	0	+	0	0	0	+	+	+	**16**

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Mitigation Action	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-Term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance/Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land/Water	Effect on Endangered Species	Effect on HAZMAT/ Waste Sites	Consistent with Comm. Environmental Goals	Consistent with Federal Environmental Laws	**Priority Total (net)**
5.4 Provide equipment and human resources sufficient to handle comprehensive road, air, and railway hazmat and mass casualty incidents. Nearly 120 trains travel through the city boundaries each day. I-40 and I-17 generate truck traffic that carry hazardous materials through the city each day.	+	+	+	+	+	0	-	+	+	+	+	+	+	0	+	-	+	0	0	0	+	+	+	**14**
5.5 Clay Avenue Wash Detention (Dam). Basin Emergency Action Plan. A plan to address how to warn the public in the event of a pending dam failure or flooding.	+	+	+	+	+	0	-	+	+	+	+	+	+	0	+	-	+	0	0	0	+	+	+	**14**
5.6 Construct and equip a multi-agency EOC to coordinate disasters. The area is subject to periodic disasters. On an annual basis, the EOC is activated 2-3 times each year.	+	+	+	+	+	0	-	+	+	+	+	+	+	0	+	-	+	0	0	0	+	+	+	**14**

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Fredonia

STAPLEE Prioritization Tool (Scoring: "+" = 1 point, "-" = -1 point, "n/a" = 0 point, "u/k" = unknown)																						
	S Social		T Technical			A Administrative			P Political			L Legal			E Economic				E Environmental					
Mitigation Action	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-Term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance/Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land/Water	Effect on Endangered Species	Effect on HAZMAT/ Waste Sites	Consistent with Comm. Environmental Goals	Consistent with Federal Environmental Laws	**Priority Total (net)**
1.1 Evaluate city/county and non-city/county facilities identified as potential shelter sites for structural integrity	+	+	+	+	+	0	-	+	+	+	+	+	+	0	+	-	0	0	0	0	0	+	+	**12**
1.2 Identify and pursue funding opportunities to develop and implement local mitigation activities.	+	+	+	+	+	0	0	+	+	+	+	+	+	0	+	o	+	0	0	0	+	+	+	**16**
1.3 Integrate appropriate items from the MJHMP into the Safety Element of the General Plan and other regulatory documents as appropriate.	+	+	+	+	+	0	-	0	+	+	+	+	+	0	+	-	0	0	0	0	+	+	+	**12**
1.4 Replacing existing dike with a levy.	+	+	+	+	+	0	-	+	+	+	+	+	+	0	+	-	+	0	1	0	+	+	+	**15**
2.1 Increase public awareness of dam failure hazards and mitigation measures to address them	+	+	+	+	+	0	0	+	+	+	+	+	+	0	+	0	+	0	0	0	+	+	+	**16**

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Mitigation Action	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-Term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance/Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land/Water	Effect on Endangered Species	Effect on HAZMAT/ Waste Sites	Consistent with Comm. Environmental Goals	Consistent with Federal Environmental Laws	**Priority Total (net)**
2.2 Develop a public outreach and awareness program about regional hazards and mitigation actions community members can do in their homes.	+	+	+	+	+	0	-	+	+	+	+	+	+	0	+	-	+	0	0	0	+	+	+	**14**
2.3 Increase public awareness of hazards to businesses as a means to reduce the potential damage from each hazard through education and outreach. Maintain a resource center accessible to the public. Provide information on government websites and social media accounts.	+	+	+	+	+	0	-	+	+	+	+	+	+	0	+	-	+	0	0	0	+	+	+	**14**
2.4 Hold annual community meeting in September with all residents and churches to educate residents about seventy-two (72) hour kits and food storage.	+	+	+	+	+	+	+	+	+	+	+	+	+	0	+	0	+	0	0	0	+	+	+	**17**
2.5 Conduct severe wind community outreach through newsletter in the spring and fall.	+	+	+	+	+	0	0	+	+	+	+	+	+	0	+	0	+	0	0	0	+	+	+	**16**

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Mitigation Action	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-Term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance/Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land/Water	Effect on Endangered Species	Effect on HAZMAT/ Waste Sites	Consistent with Comm. Environmental Goals	Consistent with Federal Environmental Laws	**Priority Total (net)**
2.6 Enforce speed limits and conduct driver safety training.	+	+	+	+	+	0	0	+	+	+	+	+	+	0	+	+	+	0	0	0	+	+	+	**16**
2.7 Conduct Fire Department training during community outreach (through annual community meeting).	+	+	+	+	+	+	+	+	+	+	+	+	+	0	+	0	+	0	0	0	+	+	+	**17**
2.8 Conduct outreach to the community, quarterly, through the town discussing what to do in the event of an earthquake.	+	+	+	+	+	+	+	+	+	+	+	+	+	0	+	0	+	0	0	0	+	+	+	**17**
3.1 Identify water resources management and conservation opportunities.	+	+	+	+	+	+	-	+	+	+	+	+	+	0	+	0	+	0	0	0	+	+	+	**16**
3.2 Coordinate with the utility companies and vendors to strengthen, safeguard, or take other appropriate measures such as providing supplemental services, to identify, repair, protect and secure high-voltage lines, water, sewer and trunk electrical and telephone conduits from hazards.	+	+	+	+	+	+	+	+	+	+	+	+	+	0	+	0	+	0	0	0	+	+	+	**17**

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Mitigation Action	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-Term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance/Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land/Water	Effect on Endangered Species	Effect on HAZMAT/ Waste Sites	Consistent with Comm. Environmental Goals	Consistent with Federal Environmental Laws	**Priority Total (net)**
3.3 Conduct feasibility study for curb and gutters to determine cost.	+	+	+	+	+	+	-	+	+	+	+	+	+	0	+	-	0	0	0	0	0	+	+	**13**
4.1 Partner with local insurance agencies to hold workshops for property owners to educate about the Flood and Earthquake Insurance Programs and its requirements. Community Development performs this function through NEIPA and the Engineering Division for flood only.	+	+	+	+	+	+	0	+	+	+	+	+	+	0	+	0	+	0	0	0	+	+	+	**17**
5.1 Build a cadre of volunteers to augment disaster response and recovery efforts in compliance with Arizona Disaster Service Worker program guidance (e.g., shelter workers, animal rescue and care, CERT, medical, communications staff services), during and after a disaster	+	+	+	+	+	+	0	+	+	+	+	+	+	0	+	-	+	0	0	0	+	+	+	**16**
5.2 Conduct Fire Department training for a hazardous fires and spills.	+	+	+	0	+	+	+	+	+	+	+	+	+	0	+	-	-	0	0	0	+	+	+	**14**

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STAPLEE Prioritization Tool (Scoring: "+" = 1 point, "-" = -1 point, "n/a" = 0 point, "u/k" = unknown)																						
	S Social		T Technical			A Administrative			P Political			L Legal			E Economic				E Environmental					
Mitigation Action	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-Term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance/Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land/Water	Effect on Endangered Species	Effect on HAZMAT/ Waste Sites	Consistent with Comm. Environmental Goals	Consistent with Federal Environmental Laws	Priority Total (net)
1.1 Evaluate city/County and non-city/County facilities identified as potential shelter sites for structural integrity.	+	+	+	+	+	0	-	+	+	+	+	+	+	0	+	-	0	0	0	0	0	+	+	**12**
1.2 Identify and pursue funding opportunities to develop and implement local mitigation activities.	+	+	+	+	+	0	0	+	+	+	+	+	+	0	+	0	+	0	0	0	+	+	+	**16**
1.3 Enforcement and/or implementation of modern building codes to regulate new development to mitigate against loss.	+	+	+	+	+	+	0	+	+	+	+	+	+	0	+	0	+	0	0	0	+	+	+	**17**

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Mitigation Action	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-Term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance/Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land/Water	Effect on Endangered Species	Effect on HAZMAT/ Waste Sites	Consistent with Comm. Environmental Goals	Consistent with Federal Environmental Laws	Priority Total (net)
2.1 Coordinate with local stakeholders and partners for the enhancement of public outreach and awareness regarding regional hazards and mitigation actions community members can implement for self-reliance and protection to property and life safety.	+	+	+	+	+	+	+	0	+	+	+	+	+	0	+	0	0	0	0	0	0	+	+	**15**
2.2 Place more stress on the risks associated with natural and manmade hazards in public awareness campaigns (i.e., partner with local insurance agencies to hold workshops for property owners to educate about the Flood and Earthquake Insurance Programs and its requirements).	+	+	+	+	+	0	0	+	+	+	+	+	+	0	+	0	+	0	0	0	+	+	+	**16**

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Mitigation Action	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-Term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance/Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land/Water	Effect on Endangered Species	Effect on HAZMAT/ Waste Sites	Consistent with Comm. Environmental Goals	Consistent with Federal Environmental Laws	Priority Total (net)
2.3 Develop a public awareness program. To increase public support for funding disaster preparation, educating the public what to do in case of a disaster, and increasing public awareness as to how public safety agencies will respond in a disaster.	+	+	+	+	+	+	+	0	+	+	+	+	+	0	+	0	0	0	0	0	0	+	+	**15**
2.4 The city will develop a plan and pamphlets and implement a public information program that will identify the following: Who can apply? What types of emergencies can be applied for? Where to apply.	+	+	+	0	0	0	0	+	0	+	+	+	+	0	+	0	+	0	0	0	+	+	+	**13**
3.1 Identify water resources management and conservation opportunities.	+	+	+	+	+	+	0	+	+	+	+	+	+	0	+	0	+	0	+	+	+	0	+	**18**
3.2 Design and construct drainage structures for problem flood areas throughout the city to prevent flooding of properties and buildings.	+	+	+	+	+	0	-	+	+	+	+	+	+	0	+	-	+	-	+	0	0	+	+	**13**

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Mitigation Action	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-Term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance/Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land/Water	Effect on Endangered Species	Effect on HAZMAT/ Waste Sites	Consistent with Comm. Environmental Goals	Consistent with Federal Environmental Laws	Priority Total (net)
3.3 Water supply system upgrade. This project is to upgrade the current pumping units and possibly identify an alternative lower-level intake with a new pumping system and a separate pipeline to deliver water to the water treatment plant. This will allow for dependability and a backup to the current system. It will also provide water if lake level drops below current intake levels.	+	+	+	+	+	0	0	+	+	+	+	+	+	0	+	-	+	0	0	U/K	+	+	+	**15**
3.4 Maintain cloud storage for vital records and data to allow access if government servers are disrupted.	+	+	+	+	+	0	0	+	+	+	+	+	+	0	+	-	+	0	0	0	0	+	+	**14**
4.1 Partner with local insurance agencies to hold workshops for property owners to educate about Flood Insurance Programs and its requirements. Community Development performs this function through NEIPA and the Engineering Division for flood only	+	+	+	+	+	0	0	0	+	+	+	+	+	0	+	0	+	0	0	0	0	+	+	**14**

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Mitigation Action	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-Term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance/Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land/Water	Effect on Endangered Species	Effect on HAZMAT/ Waste Sites	Consistent with Comm. Environmental Goals	Consistent with Federal Environmental Laws	Priority Total (net)
4.2 The city will develop a plan and mutual aid agreement with the state, County, Navajo Nation, National Park Service, and other governmental entities to implement mitigation actions.	+	+	+	+	+	0	0	U/K	+	+	+	+	+	U/K	+	0	0	0	0	0	0	+	+	+	**14**
4.3 Continue County partnership and support with local government, NGO and non-profits to maintain and build upon our cadre of committed, trained, volunteers to augment disaster response and recovery efforts in compliance with Arizona Disaster Service Worker program guidance (e.g., shelter workers, animal rescue and care, Community Emergency Response Team, communications staff, medical and health, and human service providers).	+	+	+	+	+	0	-	+	+	+	+	+	+	0	+	-	+	0	0	0	0	0	+	+	**13**
5.1 Develop a disaster debris plan.	+	+	+	+	+	0	-	+	+	+	+	+	+	0	+	-	+	0	0	0	0	+	+	+	**14**

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Mitigation Action	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-Term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance/Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land/Water	Effect on Endangered Species	Effect on HAZMAT/ Waste Sites	Consistent with Comm. Environmental Goals	Consistent with Federal Environmental Laws	Priority Total (net)
5.2 Budget for maintenance and replacement of County/city owned fire and police stations.	+	+	+	+	+	0	-	+	+	+	+	+	+	0	+	-	0	0	0	0	+	+	+	**13**
5.3 Build a cadre of committed, trained volunteers to augment disaster response and recovery efforts in compliance with Arizona Disaster Service Worker program guidance (e.g. shelter workers, animal rescue and care, CERT, communications staff, medical, and health, and human services), during and after a disaster.	+	+	+	+	+	0	0	+	+	+	+	+	+	0	+	0	+	0	0	0	+	+	+	**16**
5.4 Provide equipment and other resources sufficient to provide initial response to major road, air, HAZMAT, and mass casualty incidents.	+	+	+	+	+	+	-	+	+	+	+	+	+	0	+	-	+	0	0	0	+	+	+	**15**

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Tusayan

STAPLEE Prioritization Tool (Scoring: "+" = 1 point, "-" = -1 point, "n/a" = 0 point, "u/k" = unknown)																						
	S Social		**T Technical**			**A Administrative**			**P Political**			**L Legal**			**E Economic**				**E Environmental**					
Mitigation Action	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-Term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance/Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land/Water	Effect on Endangered Species	Effect on HAZMAT/ Waste Sites	Consistent with Comm. Environmental Goals	Consistent with Federal Environmental Laws	**Priority Total (net)**
1.1 Evaluate town/County and non-town/County facilities identified as potential shelter sites for structural integrity.	+	+	+	+	+	0	-	+	+	+	+	+	+	0	+	-	0	0	0	0	0	+	+	**12**
1.2 Identify and pursue funding opportunities to develop and implement local mitigation activities.	+	+	+	+	+	0	0	+	+	+	+	+	+	0	+	0	+	0	0	0	+	+	+	**16**
2.1 Develop a public outreach and awareness program about regional hazards and mitigation actions community members can do in their homes.	+	+	+	+	+	0	-	+	+	+	+	+	+	0	+	-	+	0	0	0	+	+	+	**14**

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Mitigation Action	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-Term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance/Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land/Water	Effect on Endangered Species	Effect on HAZMAT/ Waste Sites	Consistent with Comm. Environmental Goals	Consistent with Federal Environmental Laws	**Priority Total (net)**
2.2 Increase public awareness of the natural, human-caused, and technological hazards to businesses as a means to reduce the potential damage from each hazard through educational and outreach. Maintain a resource center accessible to the public at key government facilities. Provide information on government websites and social media accounts.	+	+	+	+	+	+	0	0	0	+	+	+	+	+	0	+	-	+	0	0	0	+	+	14
2.3 Place more stress on the risks associated with natural and manmade hazards in public awareness campaigns conducted by various County/town departments.	+	+	+	+	+	0	0	+	+	+	+	+	+	0	+	0	+	0	0	0	+	+	+	**16**
2.4 Increase public awareness of dam failure hazards and mitigation measures to address them	+	+	+	+	+	0	0	+	+	+	+	+	+	0	+	0	+	0	0	0	+	+	+	**16**

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Mitigation Action	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-Term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance/Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land/Water	Effect on Endangered Species	Effect on HAZMAT/ Waste Sites	Consistent with Comm. Environmental Goals	Consistent with Federal Environmental Laws	**Priority Total (net)**
2.5 Tusayan Fire Department Digital Newsletter: Explain hazards of smoke/carbon dioxide (CO2), fireplaces, chimneys, cleaning, and fire hazards. Regularly scheduled cleaning of chimneys. Smoke/CO2 detector maintenance program (as a follow up to the previous month's safety topic). Smoke and CO2 detectors use and maintenance. Explanation of two (2) types of detectors. Regularly scheduled replacement of batteries and testing.	+	+	+	+	+	+	0	+	+	+	+	+	+	0	+	0	+	0	0	0	+	+	+	**17**
2.6 Publish key preparedness information and links via town website and Tusayan Fire Department (TFD) digital newsletter to include information on emergency kits, winter preparation and safety, and relevant tips/guidance from the County.	+	+	+	+	+	+	0	+	+	+	+	+	+	0	+	0	+	0	0	0	0	+	+	+	**17**

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Mitigation Action	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-Term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance/Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land/Water	Effect on Endangered Species	Effect on HAZMAT/ Waste Sites	Consistent with Comm. Environmental Goals	Consistent with Federal Environmental Laws	**Priority Total (net)**
2.7 Utilize town website and TFD digital newsletter to educate residents on winter hazards – with a particular focus on storm roof loading and other relevant building safety considerations.	+	+	+	+	+	+	0	+	+	+	+	+	+	0	+	0	+	0	0	0	+	+	+	**17**
3.1 Seek to implement codes, standards, and policies that will protect life and property from the impacts of hazards.	+	+	+	+	+	+	0	+	+	+	+	+	+	0	+	0	+	0	0	0	+	+	+	**17**
3.2 Integrate appropriate items from the MJHMP into the Safety Element of the General Plan and other regulatory documents as appropriate.	+	+	+	+	+	0	-	0	+	+	+	+	+	0	+	-	0	0	0	0	+	+	+	**12**
3.3 Maintain cloud storage for vital records and data to allow access if government servers are disrupted.	+	+	+	+	+	0	0	+	+	+	+	+	+	0	+	-	+	0	0	0	0	+	+	**14**

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Mitigation Action	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-Term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance/Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land/Water	Effect on Endangered Species	Effect on HAZMAT/ Waste Sites	Consistent with Comm. Environmental Goals	Consistent with Federal Environmental Laws	**Priority Total (net)**
3.4 Coordinate with the utility companies and vendors to strengthen, safeguard, or provide supplemental services, to protect and secure high-voltage lines, water, sewer, natural gas and petroleum pipelines, and trunk electrical and telephone conduits from hazards.	+	+	+	+	+	+	+	+	+	+	+	+	+	0	+	0	+	0	0	0	+	+	+	**17**
3.5 Finalize the ongoing Engineering Assessment and Hydrological Analysis for the drainage improvements work plan in coordination with the County and implement related projects as appropriate.	+	+	+	+	+	0	0	+	+	+	+	+	+	0	+	0	+	0	+	0	0	+	+	**16**
4.1 Continue to develop mutual aid agreements and memorandum of understanding with agencies to serve emergency and disaster purposes.	+	+	+	+	+	+	0	0	+	+	+	+	+	0	+	0	+	0	0	0	+	+	+	**16**

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Mitigation Action	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-Term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance/Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land/Water	Effect on Endangered Species	Effect on HAZMAT/ Waste Sites	Consistent with Comm. Environmental Goals	Consistent with Federal Environmental Laws	**Priority Total (net)**
5.1 Collaborate with partners and service providers to identify and implement water resource management and conservation opportunities as applicable.	+	+	+	+	+	+	0	+	+	+	+	+	+	0	+	0	+	0	+	+	+	0	+	**18**
5.2 Build a cadre of volunteers to augment disaster response and recovery efforts in compliance with Arizona Disaster Service Worker program guidance (e.g., shelter workers, animal rescue and care, Community Emergency Response Team, communications staff, medical and health, and human services), during and after a disaster.	+	+	+	+	+	+	0	+	+	+	+	+	+	0	+	-	+	0	0	0	+	+	+	**16**
5.3 Develop an emergency preparedness network for community members (and visitors) to access food, water, communications, warming/cooling stations in times of emergent need.	+	+	+	+	+	+	0	+	+	+	+	+	+	0	+	-	+	0	0	0	+	+	+	**16**

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STAPLEE Prioritization Tool (Scoring: "+" = 1 point, "-" = -1 point, "n/a" = 0 point, "u/k" = unknown)																						
	S Social		**T Technical**			**A Administrative**			**P Political**			**L Legal**			**E Economic**				**E Environmental**					
Mitigation Action	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-Term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance/Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land/Water	Effect on Endangered Species	Effect on HAZMAT/ Waste Sites	Consistent with Comm. Environmental Goals	Consistent with Federal Environmental Laws	**Priority Total (net)**
1.1 Evaluate city/County and non-city/County facilities identified as potential shelter sites for structural integrity.	+	+	+	+	+	0	-	+	+	+	+	+	+	0	+	-	0	0	0	0	0	+	+	**12**
1.2 Identify and pursue funding opportunities to develop and implement local mitigation activities.	+	+	+	+	+	0	0	+	+	+	+	+	+	0	+	0	+	0	0	0	+	+	+	**16**
1.3 Enforcement of floodplain management requirements, including regulating all and substantially improved construction in floodplains to reduce the losses to property and people.	+	+	+	+	+	0	+	0	+	+	+	+	+	0	+	0	+	0	0	0	0	+	+	**15**

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Mitigation Action	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-Term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance/Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land/Water	Effect on Endangered Species	Effect on HAZMAT/ Waste Sites	Consistent with Comm. Environmental Goals	Consistent with Federal Environmental Laws	**Priority Total (net)**
1.4 Continue to enforce zoning and building codes through current site plan, subdivision, and building permit review processes to reduce the effects of drought, flood, severe wind, wildland fire, and other hazards on new buildings and infrastructure.	+	+	+	+	+	+	0	+	+	+	+	+	+	0	+	0	+	0	0	0	+	+	+	**17**
1.5 Enforcement of the newly adopted Defensible Space Ordinance for the protection of future and existing structures within the wildland urban interface.	+	+	+	+	+	+	0	0	+	+	+	+	+	0	+	0	+	0	0	0	+	+	+	**16**
2.1 Increase public awareness of dam failure hazards and mitigation measures to address them.	+	+	+	+	+	+	0	+	+	+	+	+	+	0	+	0	+	0	0	0	+	+	+	**17**

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Mitigation Action	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-Term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance/Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land/Water	Effect on Endangered Species	Effect on HAZMAT/ Waste Sites	Consistent with Comm. Environmental Goals	Consistent with Federal Environmental Laws	**Priority Total (net)**
3.1 Coordinate with the utility companies and vendors to strengthen, safeguard, or take other appropriate measures such as providing supplemental services, to identify, repair, protect and secure high-voltage lines, water, sewer and trunk electrical and telephone conduits from hazards.	+	+	+	+	+	+	+	+	+	+	+	+	+	0	+	0	+	0	0	0	+	+	+	**17**
3.2 Perform fuel thinning around water treatment plant to create a wildland fire defensible space perimeter and install exterior sprinkler system on the structures and site perimeter.	+	+	+	+	+	+	-	+	+	+	+	+	+	0	+	0	+	0	+	0	0	+	+	**16**
3.3 Perform annual inspections and maintenance work on five (5) existing city dams. Continued monitoring by the City Water Department in cooperation with ADEQ.	+	+	+	+	+	+	+	+	+	+	+	+	+	0	+	0	+	0	+	0	0	+	+	**17**

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Mitigation Action	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-Term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance/Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land/Water	Effect on Endangered Species	Effect on HAZMAT/ Waste Sites	Consistent with Comm. Environmental Goals	Consistent with Federal Environmental Laws	**Priority Total (net)**
3.4 Bill Williams Mountain Steep Slope forest restoration treatments to reduce threat from catastrophic wildland fires and post-wildfire flooding.	+	+	+	+	+	+	-	+	+	+	+	+	+	0	+	-	+	+	+	0	0	+	+	**16**
4.1 Continue to develop mutual aid agreements and memorandum of understanding with agencies to serve emergency and disaster purposes.	+	+	+	+	+	+	+	+	+	+	+	+	+	0	+	0	+	0	0	0	0	+	+	**17**
5.1 Create new storage facilities for effluent to be used for irrigation and emergency wildland fire protection.	0	+	+	+	+	+	-	+	+	+	0	+	+	0	+	-	+	0	0	0	0	+	+	**12**

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Appendix E: Acronyms

4FRI	Four Forest Restoration Initiative
ACTIC	Arizona Counter Terrorism Information Center
ADEQ	Arizona Department of Environmental Quality
ADOT	Arizona Department of Transportation
ADWR	Arizona Department of Water Resources
AEP	Annual Exceedance Probability
ALRIS	Arizona Land Resource Information System
APS	Arizona Public Service
ARES	Amateur Radio Emergency Services
AST	Aboveground storage tanks
AZ DEMA	Arizona Department of Emergency and Military Affairs
AZDA	Arizona Department of Agriculture
AZFAC	Arizona Fire Adapted Communities
AZGDTF	Arizona Governor's Drought Task Force
AZMAC	Arizona Mutual Aid Compact
AZSERC	Arizona State Emergency Response Commission
BCA	Benefit-Cost Analysis
BCR	Benefit-Cost Ratio
BNSF	Burlington-Northern Santa Fe Railway
BRIC	Building Resilient Infrastructure and Communities Program
CBRNE	Chemical, Biological, Radiological, Nuclear, and Explosive
CCEM	Coconino County Emergency Management
CCFCD	Coconino County Flood Control District
CCSO	Coconino County Sheriff's Office
CDC	Center for Disease Control and Prevention
CERT	Community Emergency Response Team
CII	Critical Information Act of 2002
COF	City of Flagstaff

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CPRI	Calculated Priority Risk Index
CWPP	Community Wildfire Protection Plan
DFIRM	Digital Flood Insurance Rate Maps
DMA	Disaster Mitigation Act
DOE	United States Department of Energy
EAP	Emergency Action Plan
EHS	Extremely hazardous substances
ENSO	El Niño/Southern Oscillation
EOC	Emergency Operations Center
EOP	Emergency Operations Plan
EPA	Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to-Know Act
ERI	Ecological Restoration Institute
FACLN	Fire Adapted Communities Learning Network
FBI	Federal Bureau of Investigation
FCD	Flood Control District
FEMA	Federal Emergency Management Agency
FIRMs	Flood Insurance Rate Maps
FLG	Flagstaff-Pulliam Airport
FMA	Fire Management Assistance
FMA	Flood Mitigation Assistance
FRP	Facility Response Plans
FWPP	Flagstaff Watershed Protection Project
FY	Financial Year
GAO	United States Government Accountability Office
GCD	Glen Canyon Dam
GCN	Grand Canyon National Park Airport
GFFP	Greater Flagstaff Forests Partnership
GIS	Geographic Information System
HAZMAT	Hazardous Materials

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HMGP	Hazard Mitigation Grant Program
HMTA	Hazardous Materials Transportation Act
HMTUSA	Hazardous Materials Transportation Uniform Safety Act
IDF	Inflow Design Flood
IGA	Inter-governmental Agreement
IMAAC	Interagency Modeling and Atmospheric Assessment Center
KCMR	H.A. Clark Memorial Field
LEPC	Local Emergency Planning Committee
LOMR	Letter of Map Revision
MJHMP	Multi-Jurisdictional Hazard Mitigation Plan
MMI	Modified Mercalli Intensity Scale
MOU	Memorandum of Understanding
MRC	Medical Reserve Corps
NACOG	Northern Arizona Council of Governments
NAU	Northern Arizona University
NFIP	National Flood Insurance Program
NID	National Inventory of Dams
NIDIS	National Integrated Drought Information System
NOAA	National Oceanic and Atmospheric Administration
NOFS	United States Naval Observatory Flagstaff Station
NWS	National Weather Service
OPA	Oil Pollution Act
PAO	Public Affairs Officer
PCB	Polychlorinated biphenyls
PDM	Pre-Disaster Mitigation Grant Program
PDSI	Palmer Drought Severity Index
PFAC	Ponderosa Fire Advisory Council
PGA	Page Municipal Airport
PIO	Public Information Officer
RCRA	Resource Conservation and Recovery Act

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RFC	Repetitive Flood Claims
RL	Repetitive Loss
RRSS	Road Repair and Street Safety Initiative
SARS	Severe Acute Respiratory Syndrome
SMSA	Standard Metropolitan Statistical Area
SPCC	Spill Prevention, Control, and Countermeasures
SPI	Standardized Precipitation Matrix
SRL	Severe Repetitive Loss
TBC	Tuba City Airport
TFD	Tusayan Fire Department
TPD	Tusayan Police Department
TPQ	Threshold Planning Quantities
UBC	Uniform Building Code
UFC	Uniform Fire Code
USACE	US Army Corps of Engineers
USCG NRC	United States Coast Guard National Response Center
USDA	United States Department of Agriculture
USDM	United States Drought Monitor
USDOT	United States Department of Transportation
USFS	United States Forest Service
USGS	United States Geological Survey
USSDO	United States Seasonal Drought Outlook
UST	Underground storage tanks
VLE	Valle Airport
VOAD	Volunteer Organizations Active in Disaster
WFAS	Wildland Fire Assessment System
WMD	Weapons of mass destruction
WRCC	Western Region Climate Center
WSSI	Winter Storm Severity Index

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CITY OF FLAGSTAFF

STAFF SUMMARY REPORT

To:	The Honorable Mayor and Council
From:	Ryan Turley, Police Sergeant
Date:	12/01/2021
Meeting Date:	12/07/2021

TITLE:

Consideration and Adoption of Resolution No. 2021-57: A resolution to approve an Intergovernmental Agreement (IGA) between the City of Flagstaff and Maricopa County for the Police Training and Certification of Police Recruits at the Maricopa County Sheriff's Office Training Academy

STAFF RECOMMENDED ACTION:

1) Read Resolution No. 2021-57 by title only
2) City Clerk reads Resolution No. 2021-57 by title only (if approved above)
3) Adopt Resolution No. 2021-57

Executive Summary:

The City of Flagstaff, acting through the Flagstaff Police Department desires to utilize the Maricopa County Sheriff's Office Training Academy to train future police recruits. This provides for a two-year contract during which the training services from Maricopa County will be used.

Financial Impact:

This agreement will cost the Flagstaff Police Department $750.00 per recruit sent to the academy, which is significantly less expensive than most other academies operating throughout the State. These fees are already budgeted through the Flagstaff Police Department travel and training account.

Policy Impact:

None

Connection to PBB Priorities/Objectives, Carbon Neutrality Plan & Regional Plan:

High Performing Governance: Serve the public by providing high-quality internal and external customer service.

High Performing Governance: Encourage public trust through transparency, accessibility, and use of the City's public participation policy.

Has There Been Previous Council Decision on This:

No

Options and Alternatives:

Approve or disapprove the Intergovernmental Agreement for the Flagstaff Police Department to send recruits to the Maricopa County Sheriff's Office Training Academy to become certified Police Officers in the State of Arizona.

Background/History:

A recruit Police Officer must attend an AZPOST (Arizona Police Officer Standard and Training) approved academy and receive a minimum of 663 hours of training before being certified to enforce laws in Arizona. The Maricopa Academy consist of 920 hours. There are currently 6 other police academies that the Flagstaff Police Department uses which have various start dates and run anywhere from 20 to 22 weeks in length. The addition of the Maricopa Academy would open at least 6 additional academy dates the Flagstaff Police Department could use to place recruits. This will allow recruits to start their training process at an earlier date and thus be able to serve our citizens in a much faster time frame.

Key Considerations:

By approving this Intergovernmental Agreement, the Flagstaff Police Department will be able to utilize an additional academy in order to train more recruits to become certified police officers to serve the community.

Community Benefits and Considerations:

The Flagstaff Police Department provides law enforcement services throughout the City. Using this academy will allow the Police Department to sufficiently train new police officers to serve our community.

Community Involvement:

The Maricopa Training Academy is supporting this Intergovernmental Agreement.

Expanded Options and Alternatives:

Approve or disapprove the Intergovernmental Agreement for the Flagstaff Police Department to be able to train at the Maricopa County Sheriff's Office Training Academy and provide trained and certified Officers in the community at a more efficient pace.

Attachments: Res. 2021-57
IGA

RESOLUTION NO. 2021-57

A RESOLUTION OF THE FLAGSTAFF CITY COUNCIL, APPROVING AN INTERGOVERNMENTAL AGREEMENT BETWEEN MARICOPA COUNTY AND THE CITY OF FLAGSTAFF FOR THE POLICE TRAINING AND CERTIFICATION OF RECRUITS AT THE MARICOPA COUNTY SHERIFF'S OFFICE TRAINING ACADEMY

RECITALS:

WHEREAS, Maricopa County (County) and City of Flagstaff (City) desire to enter into an intergovernmental agreement for training and certification of police recruits by the Maricopa County Sheriffs Office Training Academy; and

WHEREAS, a recruit police officer must attend an AZPOST (Arizona Police Officer Standard and Training) approved academy and receive a minimum of 663 hours of training before being certified to enforce law in Arizona; and

WHEREAS, the Maricopa Academy consist of 920 hours and is an AZPOST approved academy; and

WHEREAS, the addition of the Maricopa Academy to the list of available academies used by the Flagstaff Police Department would open at least six additional academy dates allowing the Police Department to place more readily and start their training process throughout the year.

ENACTMENTS:

NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF FLAGSTAFF AS FOLLOWS:

SECTION 1. In General.

The Flagstaff City Council hereby authorizes the Mayor to execute the Intergovernmental Agreement between Maricopa County and the City of Flagstaff, Arizona, attached hereto as Exhibit A.

SECTION 2. Effective Date.

This resolution shall be immediately effective upon adoption.

PASSED AND ADOPTED by the City Council of the City of Flagstaff this 7th day of December, 2021.

_____

MAYOR

ATTEST:

_____
CITY CLERK

APPROVED AS TO FORM:

_____
CITY ATTORNEY

Exhibits:
IGA

INTERGOVERNMENTAL AGREEMENT BETWEEN
MARICOPA COUNTY AND CITY OF FLAGSTAFF
REGARDING MARICOPA COUNTY SHERIFF'S OFFICE
BASIC TRAINING ACADEMY
C-50-22-___-X-00

This INTERGOVERNMENTAL AGREEMENT (IGA) is entered into by and between MARICOPA COUNTY, a political subdivision of the State of Arizona on behalf of the SHERIFF'S OFFICE ("MCSO") and the CITY OF FLAGSTAFF, an Arizona municipal corporation, ("Flagstaff") on behalf of its police department, collectively referred to as the "Parties." Under A.R.S. § 11-952, which authorizes public agencies to enter into Intergovernmental Agreements, the Parties enter into this IGA regarding City of Flagstaff Police Department, "Flagstaff PD," participation in MCSO's Sworn Basic Training Academy.

RECITALS

MCSO offers Sworn Officer Basic Training Academy on an as-needed basis and generally has space for additional participants and whereas Flagstaff has sworn employee recruits that are required to be trained according to the State of Arizona Peace Officer Standard Training ("AZPOST").

AGREEMENT

Wherefore, the Parties enter into the following Agreement January 1, 2022 through December 31, 2023, the Initial Term, upon Maricopa County Board of Supervisor approval.

MCSO will:

1. Provide training space as available for Flagstaff PD recruit officers to attend scheduled Sworn Basic Training Academy.

2. Reserve the right in its sole discretion to decide whether the Flagstaff PD recruits maintain the academic standings necessary to continue in the academy class.

3. Retain the right, in its sole discretion, to dismiss any recruit for training, academic, ethical or disciplinary standards applicable to all sworn officer training academy participants.

4. Provide Flagstaff original individual training records for each Flagstaff PD recruit upon completion of the MCSO Academy or termination of the recruit's attendance at the MCSO Academy. MCSO will maintain records of lesson plans, class rosters, and other documentation common to the class as a whole consistent with the requirements of state law.

5. Treat Flagstaff PD recruits in the same manner as MCSO recruits for purposes of training, academics, ethics and discipline.

6. Require Flagstaff to investigate Flagstaff PD recruits should a situation arise for an internal affairs investigation concerning the actions of a Flagstaff PD recruit.

7. Bill Flagstaff a non-refundable registration in the amount of $750, payable to Maricopa County, per Flagstaff PD recruit.

8. Review its costs annually and, if necessary, process amendments to this Agreement for future increases, not later than April of each fiscal year, to be effective with the new fiscal year.

Flagstaff will:

1. Understand and agree that the curriculum will consist of the standard MCSO training program for MCSO, including MCSO's policies and procedures.

2. Provide worker's compensation insurance, automobile liability, salary, benefits, weapons, ammunition and uniforms for Flagstaff PD recruits and employees participating in MCSO Sworn Training Academy.

3. Ensure its employee participants have received infectious disease testing and required immunizations and have undergone health related pre-requisites applicable MCSO academy attendees prior to the first day of training. Proof of the preceding requirements will be necessary for the participant's records prior to the academy start.

   Specific COVID-19 requirements:

   Ensure that registrants are tested for COVID-19 with negative results before the start of the academy within safe time parameters specified by MCSO Training.

   Ensure that required subsequent COVID-19 testing for current academy participants occurs as directed by MCSO Training. CDC guidelines will be followed for any participants testing positive.

4. Agree to pay MCSO within 30 days of receipt of invoice.

5. Accepts that there is no guarantee that any minimum number of candidates from the Flagstaff PD will be accepted to attend the academy, because enrollment is based MCSO's determination of appropriate space/resource availability and because MCSO candidates have enrollment priority.

The Parties agree:

1. There are no amounts due Maricopa County from the previous training agreements.

2. Each Party (as "indemnitor") agrees to indemnify, defend, and hold harmless the other Party (as "indemnitee") from and against any and all claims, losses, liability, costs, or expenses (including reasonable attorney's fees) (hereinafter collectively referred to as "claims") arising out of the negligent performance of this IGA, but only to the extent that such claims which result in vicarious/derivative liability to the indemnitee are caused by the act, omission, negligence, misconduct, or other fault of the indemnitor, its officers, officials, agents, employees, or volunteers.

3. This Agreement is not intended to constitute, create, give rise to, or otherwise recognize a joint venture agreement, partnership or other formal business association or organization of any kind, and the right and obligations of the Parties shall be only those expressly set forth in this Agreement.

4. Parties acknowledge that under this IGA no employee or participant of the Flagstaff PD is to be considered a County employee, and that no rights of County merit, County retirement, or County personnel rules shall accrue to such individual. Flagstaff PD shall have total responsibility for all salaries, wages, bonuses, retirement, withholdings, workman's compensation, occupational disease compensation, unemployment compensation, other employee benefits, and all taxes and premiums appurtenant thereto concerning such individuals and shall save and hold MCSO harmless with respect thereto.

5. Each Party to this Agreement warrants compliance with the Immigration and Nationality Act (INA using E-verify) and all other federal immigration laws and regulations related to the immigration status of its employees and A.R.S. §23-214(A). Each Party shall obtain statements from its subcontractors certifying compliance and shall furnish the statements to the other Party upon request. These warranties shall remain in effect through the term of this Agreement. Each Party and its subcontractors shall also maintain Employment Eligibility Verification forms (I-9) as required by the Immigration Reform and Control Act of 1986, as amended from time to time, for all employees performing work under this Agreement and verify employee compliance using the E-verify system and shall keep a record of the verification for the duration of the employee's employment or at least three years, whichever is longer. I-9 forms are available for download at USCIS.GOV. Each Party retains the legal right to inspect contractor and subcontractor employee documents performing work under this Agreement to verify compliance with this Agreement. Each Party and its subcontractors shall be given reasonable notice of the other Party's intent to inspect and shall make the documents available at the time and date specified. Should either Party find that the other Party or any of its subcontractors are not in compliance; such non-compliance may be considered a material breach of this Agreement and may pursue any and all remedies allowed by law. Nothing set out herein shall make any subcontractor an agent or employee of either Party.

6. Each party shall comply with all applicable laws, ordinances, executive orders, rules, regulations, standards, and codes of the federal, state, and local government whether or not specifically referenced herein. The Parties agree that there will be no discrimination as to race, sex, religion, color, age, creed, or national origin in regard to obligations, work, and services performed under the terms of any contract ensuing from this engagement. The Parties will comply with the Executive Order No. 11246, entitled "Equal Employment Opportunity" and as amended by Executive Order No. 11375, as supplemented by the Department of Labor Regulations (41 CFR, Part 60).

7. In accordance with A.R.S. § 35-214, all books, accounts, reports, files, electronic data, and other records relating to this Agreement shall be retained and subject at all reasonable times to inspection and audit by the State of Arizona for six (6) years after completion of this Agreement. Upon request, Party shall produce original of any and all such records.

8. Any litigation arising from the IGA or the performance thereof will be decided in the federal or state courts of Maricopa County unless otherwise agreed to between the Parties. The laws of the State of Arizona shall govern the construction and interpretation of this IGA. This Agreement is subject to the provisions of A.R.S. § 12-1518 relating to the use of arbitration.

9. This IGA may be amended only by the mutual written consent of authorized representatives for all Parties and requires Maricopa County Board and Flagstaff City Council approval.

10. This IGA may be terminated at any time by either Party by mailing the other Party written notice of termination by certified mail two (2) months in advance of the requested date of termination. In the event that a Party decides to terminate this IGA, the Parties shall consult prior to the date of termination to ensure termination on the most economical and equitable terms. The Parties agree that any such termination shall not become effective with respect to the current recruits then enrolled in a training rotation until the recruits' training is completed, provided that MCSO continues to have sufficient staffing and other resources to continue the training until that date.

11. Notice is given that pursuant to A.R.S. § 38-511 the Parties may cancel any contract without penalty or further obligation within three years after execution of the contract, if any person significantly involved in initiating, negotiating, securing, drafting or creating the contract on behalf of the Parties is at any time while the contract or any extension of the contract is in effect, an employee or agent of any other party to the contract in any capacity or consultant to any other Party of the contract with respect to the subject matter of the contract. Additionally, pursuant to A.R.S § 38-511 the Parties may recoup any fee or commission paid or due to any person significantly involved in initiating, negotiating, securing, drafting or creating the contract on behalf of the Parties from either Party to the contract arising as the result of the Contract.

12. This IGA is effective when signed by the Parties. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original but all of which together shall constitute the same instrument. Faxed, copied, electronic and scanned signatures are acceptable as original signatures.

13. This document is the complete and exclusive statement of understanding between the Parties, and it supersedes all proposals, oral or written, and other documents or communications between the Parties relative to the subject matter herein covered, unless such documents or communications are specifically included by reference.

14. If any term, covenant, condition or provision of this IGA is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remainder of the provisions hereof shall remain in full force and effect and shall in no way be affected, impaired or invalidated.

15. Any provision of this IGA which is determined to be invalid, void or illegal shall in no way affect, impair or invalidate any other provision hereof, and remaining provisions shall remain in full force and effect.

16. Waiver of any breach of any term, conditions or covenant herein contained shall not be deemed to be a waiver of any subsequent breach of any term, covenant or condition herein.

17. This Agreement will automatically renew for up to two, one-year terms following the Initial Term, unless either Party provides notice to terminate, per Section 9., above.

18. Any notice to be given under this IGA shall be sent to the Parties listed below.

If to MCSO:	**If to** Flagstaff **PD**:
Chief of Administration Maricopa County Sheriff's Office 550 W Jackson, 5th Floor Phoenix, AZ 85003	Flagstaff Police Dept. Chief Dan Musselman 911 E. Sawmill Rd. Flagstaff, AZ 86001

IN WITNESS WHEREOF, the Parties hereto have entered into this Agreement as of the date of the last signature set forth below.

City of Flagstaff, an Arizona Municipal Corporation

BY:

_____
Mayor Date

ATTEST:

_____
City Clerk Date

MARICOPA County, a political subdivision of the State of Arizona

BY:

_____
Chairman Date

ATTEST:

_____
Clerk of the Board Date

City of Flagstaff Police

BY:

_____
Chief Date

Maricopa County Sheriff

BY:

_____
Paul Penzone Date
Sheriff

Approved as to form:

_____
City Attorney Date

Approved as to form:

_____
Deputy County Attorney Date

CITY OF FLAGSTAFF

STAFF SUMMARY REPORT

To:	The Honorable Mayor and Council
From:	Genevieve Pearthree, Senior Planner
Date:	12/01/2021
Meeting Date:	12/07/2021

TITLE:

Consideration and Adoption of Resolution No. 2021-56: A resolution of the City Council of the City of Flagstaff, Arizona authorizing the execution of a Pre-Annexation Agreement between Robert Hoffa and Christine Newell and the City of Flagstaff related to the future annexation of approximately 0.18 acres of real property generally located at 221 South Dunnam Street ***(requiring future annexation as a condition for a connection to the city sewer system).***

STAFF RECOMMENDED ACTION:

1) Read Resolution No. 2021-56 by title only
2) City Clerk reads Resolution No. 2021-56 by title only (if approved above)
3) Adopt Resolution No.2021-56

Executive Summary:

The applicants have requested city sewer service for a property located within a Coconino County island surrounded entirely by the city of Flagstaff. There is an existing single-family house with an aging septic tank that the applicants would like to decommission and replace with a city sewer connection. The Water Services Division requires a Pre-Annexation Agreement prior to providing city service outside of the city limits.

Financial Impact:

No financial impacts are anticipated.

Policy Impact:

State law allows cities to enter into pre-annexation agreements by resolution. The proposed Pre-Annexation Agreement governs the terms and conditions of the future annexation and zoning of the subject property.

Connection to PBB Priorities/Objectives, Carbon Neutrality Plan & Regional Plan:

Priority Based Budget Key Community Priorities and Objectives

- Environmental Stewardship
- Sustainable, Innovative Infrastructure

Regional Plan

- Goal LU.7. Provide for public services and infrastructure.

- Policy LU.7.2. Require unincorporated properties to be annexed prior to the provision of City services, or that a pre-annexation agreement is executed when deemed appropriate.
- Policy WR.4.3. Development requiring public utility services will be located within the Urban Growth Boundary.

Has There Been Previous Council Decision on This:

None for this application.

Options and Alternatives:

The City Council may approve, deny, or modify the Pre-Annexation Agreement as necessary to ensure that the development meets the objectives of the Regional Land Use Plan and the City's development goals.

Background/History:

The applicants request an out-of-city sewer connection for the property at 221 South Dunnam Street. The subject site is part of a larger county island surrounded entirely by the City of Flagstaff. The applicant intends to abandon the existing septic system and connect to the 8-inch city sewer line located on City of Flagstaff property (APN 112-49-122A) directly to the west of the applicants' property. This request covers two adjacent parcels, both owned by the applicants Robert Hoffa and Christine Newell: the primary 0.17-acre parcel (APN 112-03-018) contains a single-family home with the existing septic system; the secondary 0.01-acre parcel (APN 112-49-122H) sits between the primary parcel and the sewer line on City of Flagstaff property. See the attached Concept Plan for more information.

On October 21, 2021, the City's Water Commission reviewed and unanimously approved (4-0 vote in favor) a recommendation by City staff that this property be allowed to connect to the existing sewer main located on the City-owned parcel directly to the west of the Hoffa/Newell parcels. The Water Commission recommends city sewer service is contingent upon the approval of a Pre-Annexation Agreement and the applicants paying the standard capacity fee and sewer tap fee prior to connecting the to the city sewer system (these fees are currently $3,723 and $300.25, respectively but may be amended at any time).

City water service is not requested at this time due to infrastructure limitations.

Key Considerations:

City policy is to require annexation before providing services. In this case, annexation in the future makes more sense than annexing right now because of infrastructure limitations. Thus, a Pre-Annexation Agreement is recommended. With the Pre-Annexation Agreement, the City agrees to provide sewer services to the property prior to the property's annexation into the City. When the City desires that the parcel should annex, the City will require the property owner to take such action as is necessary to annex the property. See the attached draft Pre-Annexation Agreement for more information.

Community Involvement:

None. A Pre-Annexation Agreement does not require public or neighborhood notification.

Attachments:

Presentation
Res. 2021-56
Exhibit A - Legal Description
Exhibit B Draft Pre-Annexation Agreement
Location Map
Concept Plan

IDS Concept Plan Comments
Letter to Water Commission
Water Commission Meeting Minutes

221 S. Dunnam St. Request For Out of City Sewer Service

Resolution 2021-56

City Council – December 7, 2021

Genevieve Pearthree - Senior Planner

TEAM FLAGSTAFF

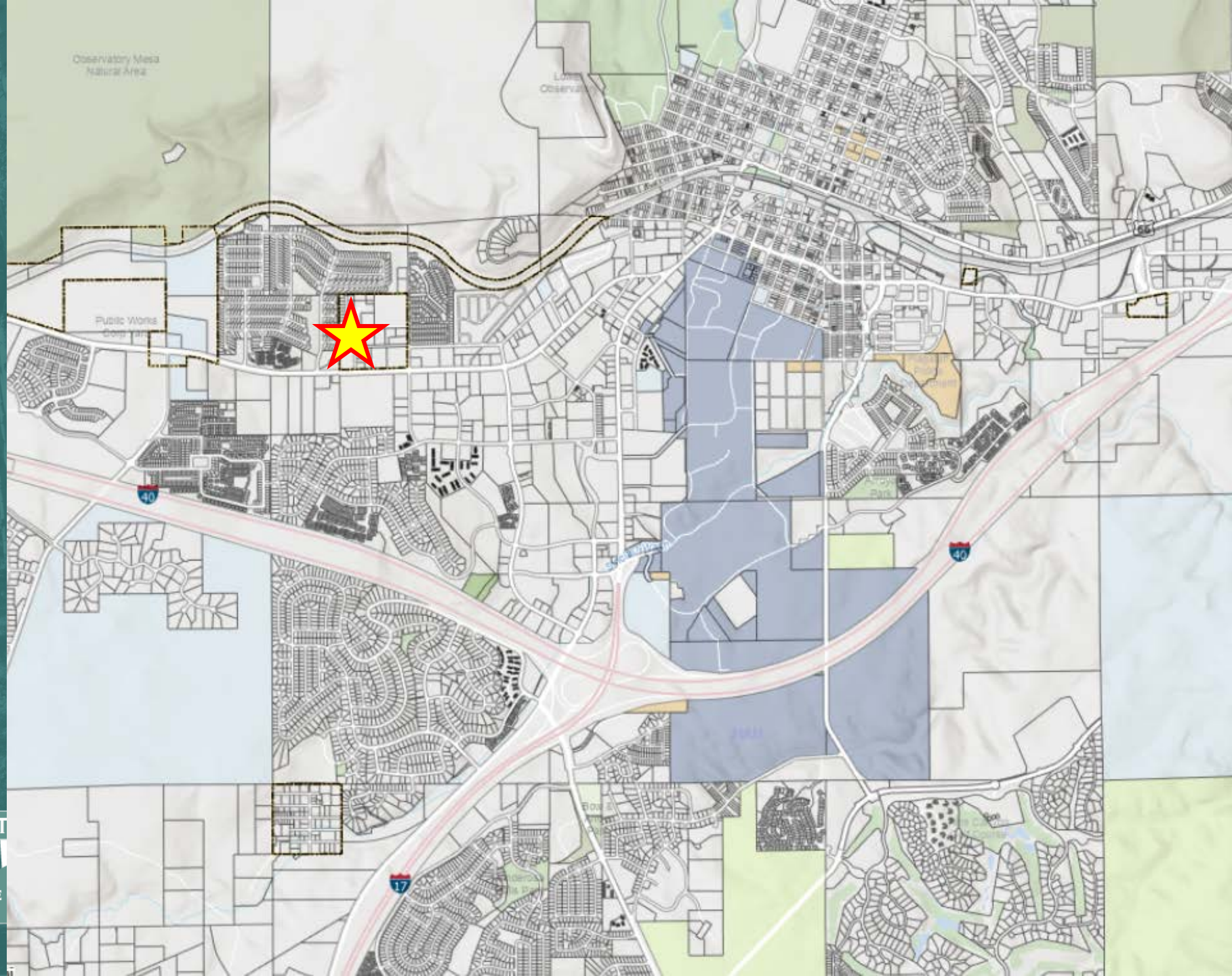
WE MAKE THE CITY BETTER

Request Overview

- Request from current property owners of 221 S. Dunnam St. - Robert Hoffa and Christine Newell
- Includes 2 lots
- Primary lot has existing single family home
- Aging septic system needs replacement
- Request connection to 8” City sewer line adjacent to their property

221 S. Dunnam St.

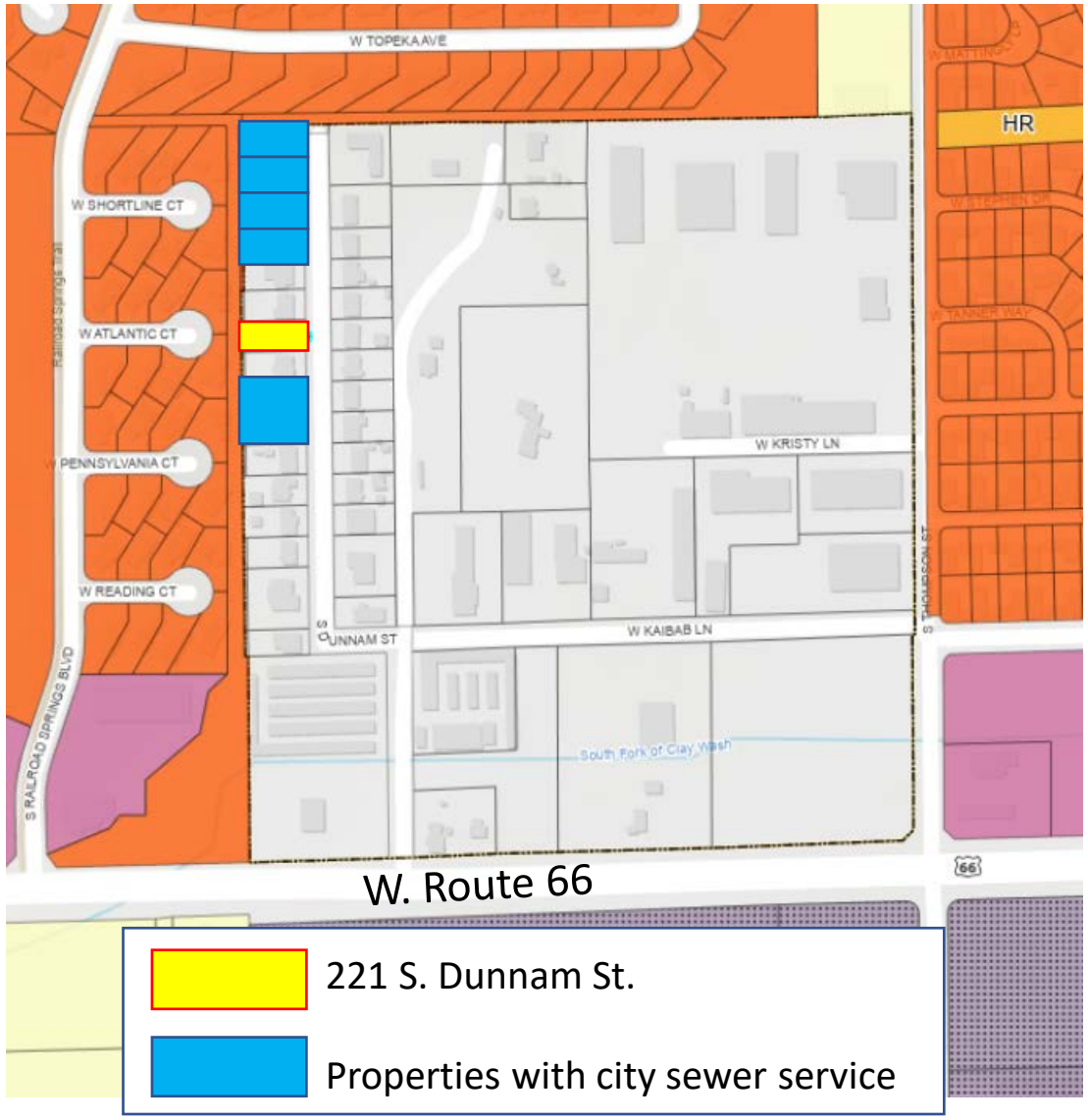
Vicinity Map



TEAM FLAGST

WE MAKE THE CITY BETTER

Dunnam St.



- Located in a county island surrounded entirely by Flagstaff city limits
- Property within the regulatory jurisdiction of Coconino County
- 5 properties on Dunnam St. already connect to City sewer (215, 229, 231, 233, and 235 S. Dunnam St.)

Proposed Sewer Connection

Applicant property
(APNs 112-03-018 & 112-49-122H)

City of Flagstaff property
(APN 112-49-122A)

221 S Dunnam St Pre-Annexation

City Water Services Policy :

- When County resident requests City water or sewer service, a Pre-Annexation Agreement is required
- The City Water Commission recommends approval
  - (4-0 vote in favor in 10/21/21)

221 S. Dunnam St. Pre-Annexation

Staff Recommended Action:

- Read Resolution No. 2021-56 by title only
- City Clerk reads Resolution No. 2021-56 by title only (if approved above)
- Adopt Resolution No. 2021-56

RESOLUTION NO. 2021-56

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF FLAGSTAFF, ARIZONA, AUTHORIZING THE EXECUTION OF A PRE-ANNEXATION AGREEMENT BETWEEN ROBERT HOFFA AND CHRISTINE NEWELL AND THE CITY OF FLAGSTAFF RELATED TO THE FUTURE ANNEXATION OF APPROXIMATELY 0.18 ACRES OF REAL PROPERTY GENERALLY LOCATED AT 221 SOUTH DUNNAM STREET, AND ESTABLISHING AN EFFECTIVE DATE

RECITALS:

WHEREAS, Robert Leo Hoffa and Christine Louise Newell (collectively "the Owner") own approximately 0.18 acres of real property generally located at 221 South Dunnam Street in Coconino County, outside of the City of Flagstaff's corporate boundary and legally described in **Exhibit A** attached hereto and incorporated by reference (the "Property"); and

WHEREAS, the Owner is requesting that the City provide sewer service to the Property for an existing single family residence; and

WHEREAS, the City requires the eventual annexation of the Property in order the permit the connection to City services; and

WHEREAS, Owner and the City wish to enter into a pre-annexation agreement, a proposed copy of which is attached to the staff summary submitted in support of this Resolution, to provide for the terms and conditions under which the Property will be developed and to set forth in detail certain obligations of the Owner and the City; and

WHEREAS, A.R.S. § 9-500.05 authorizes the City to enter into a development agreement with the Owner to establish the conditions for annexation of the Property by the City and other matters relating to the future development of the Property.

ENACTMENTS:

NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF FLAGSTAFF AS FOLLOWS:

SECTION 1. In General.

The Pre-Annexation Agreement, attached hereto as **Exhibit B** and including revisions, if any, requested by Council and reflected in the minutes of the December 7, 2021 Council Meeting, is hereby approved, and the Mayor is hereby authorized and directed to execute the agreement.

SECTION 2. Recording.

The City Clerk is hereby directed to record a copy of the agreement with the Coconino County Recorder no later than ten (10) days after the Pre-Annexation Agreement is fully executed.

SECTION 3. Effective Date.

This Resolution shall become effective thirty (30) days following adoption by the City Council

PASSED AND ADOPTED by the City Council of the City of Flagstaff this 7th day of December, 2021.

MAYOR

ATTEST:

CITY CLERK

APPROVED AS TO FORM:

CITY ATTORNEY

Exhibits:
Exhibit A – Legal Description
Exhibit B – Pre-Annexation Agreement

Exhibit A

Legal Description

Parcel 1

Lot 11, Block 1, of PONDEROSA PARK SUBDIVISION NUMBER ONE, as shown on the plat thereof, recorded in Book 2 of Maps, Page 47, records of Coconino County, Arizona.

Parcel 2

A portion of Tract "B", Railroad Springs 66 subdivision as recorded in Case 7, Map 68 of the Records of Coconino County, Arizona (R), situated in the Northwest 1/4 of Section 20, Township 21 North, Range 7 East, Gila and Salt River Meridian, Coconino County, Arizona, more particularly described as follows:

FROM the Southwest lot corner of Lot 1, Ponderosa Park subdivision as recorded in Book 2, Page 47 of the Records of Coconino County, Arizona (R1) and shown on (R), said point being a found 3/4" iron pipe,

thence N 00° 25° 46" W, along the West lot line of Lots 1 through 7, for a distance of 410.20 feet to the West lot corner of Lots 7 and 8 (R1), said point being a found Cap 18215;

thence N 00° 28’ 21" W, along the West lot lines of Lots 8 and 9, for a distance of 119.93 feet to the West lot corner of Lots 9 and 10, said point being a found Cap 14671;

thence N 00° 28’ 21" W, along the West lot line of Lot 10, for a distance of 60.00 feet to a set 1/2" rebar w/Cap 14671 and the TRUE POINT OF BEGINNING;

thence S 88° 06’ 32" W for a distance of 6.16 feet to a set 1/2" rebar w/Cap 14671;

thence N 00° 23’ 46" W and parallel to the West lot line of Lot 11, for a distance of 60.00 feet to a set 1/2" rebar w/Cap 14671;

thence N 88° 05’ 24" E for 6.08 feet to the Northwest lot corner of said Lot 11, said point being a set 1/2" rebar w/Cap 14671;

thence S 00° 28’ 21" E, along West lot line of said Lot 11, for a distance of 60.00 feet to the TRUE POINT OF BEGINNING.

When recorded, return to:
City Clerk
211 W. Aspen Avenue
Flagstaff, Arizona 86001

PRE-ANNEXATION AGREEMENT BETWEEN THE CITY OF FLAGSTAFF AND ROBERT HOFFA AND CHRISTINE NEWELL

This Pre-Annexation Agreement (the "Agreement") is made and entered into this _____ day of _____, 2022 by and between the City of Flagstaff, an Arizona municipal corporation (the "City") and Robert Hoffa and Christine Newell, husband and wife, (the "Owner") (collectively "Parties").

RECITALS

A. The Owner owns two certain parcels of real property located at 221 South Dunnam Street and depicted and legally described in **Exhibit A** attached hereto. For purposes of this Agreement, the parcels described in this exhibit are referred to as the "Property."

B. The Property is currently located in an unincorporated area of Coconino County, Arizona.

C. The City has determined that entering into this Agreement will be in the best interests of the City and the public; will be a proper and legal exercise of City power; will promote orderly development of the Property and the surrounding area; and will promote the health, safety, welfare and economic development of the community in general.

D. Pursuant to Flagstaff City Code §§ 2-04-001-0007 through 2-04-001-0008, the Owner has applied for out-of-City sewer service for the Property. The City's Water Commission has recommended the City grant this extension subject to the condition that the Owner agrees to future annexation of the Property.

E. A.R.S. § 9-500.05 authorizes the City to enter into a development agreement with the Owner for the purpose of establishing the conditions, terms, restrictions and requirements for annexation of the Property by the City and other matters relating to the future development of the Property.

F. The Owner's proposed annexation of the Property is in conformity with the City's Regional Plan 2030 as of the date of this Agreement.

AGREEMENT

NOW, THEREFORE, in consideration of the foregoing premises and agreements herein, the Parties hereto state, confirm and agree as follows:

1. Incorporation of Recitals and Exhibit. The foregoing recitals and exhibit are incorporated into this Agreement by this reference.

2. Annexation of Property. Owner hereby consents to the annexation of the Property into the City pursuant to A.R.S. § 9-471 *et seq.* The Owner acknowledges and understands that other properties adjacent to the Property may be added to future annexation proposals. When the City notifies the Owner that it desires the annexation proceedings, the Owner will a) apply for annexation which includes executing and filing with the City an annexation petition as required by A.R.S. § 9-471 *et seq.* to initiate annexation, and b) sign any lawful annexation petition or other annexation document for the purpose of annexing the Property into the City of Flagstaff. The City will then hold such hearings and take such action as is necessary pursuant to A.R.S. § 9-471 *et seq.* to annex the property. Any successor(s) to Owner shall execute, file or sign any similar petitions or documents necessary to accomplish annexation of the Property.

3. Applicable Zoning. Pursuant to A.R.S. § 9-471(L), upon annexation, the City shall adopt a City zoning classification for the Property that permits densities and uses no greater than those permitted by Coconino County immediately before annexation.

4. Sewer. The City agrees to provide sewer services to the Property, in accordance with the provisions of this Agreement and all applicable City, County and State requirements, prior to the Property's annexation into the City. The sewer shall be designed and extended by Owner at Owner's expense and in accordance with the City of Flagstaff Engineering Design and Construction Standards. The City, County and State shall provide joint review and approval of the construction plans and permits. The City and County shall review and approve the development plans and permits and inspect the off-site sewer service installation(s).

5. Sewer Connection and Capacity Fees. Owner agrees that upon the extension of sewer services to the Property, Owner shall pay all fees required by the Flagstaff City Code as a condition for connection to the City's sewer collection system. Furthermore, the Owner agrees to pay the monthly fees associated with connection as defined by the Flagstaff City Codes and Ordinances.

6. Reserved.

7. City Standards. The Owner agrees that if it develops the Property prior to annexation, it shall develop in general accordance with City development standards, and that it shall develop in specific compliance with City standards related to a) police and fire access and on-site needs, b) Building Form Standards per the City Zoning Code Section 10-40.30.030.C as may be amended from time to time for the Single-Family Residential (R1) zone. Owner agrees to cooperate with the City to provide review by City staff during any development efforts through the County prior to annexation.

8. Waiver of Proposition 207 Rights. The Parties agree that the Property is subject to the provisions of Proposition 207, as adopted by the voters of the State of Arizona at the November 7, 2006, General Election, which is codified at A.R.S. § 12-1131, *et seq.* ("Proposition 207"). The Owner acknowledges that the Owner and the City are empowered to agree to a waiver of the terms and requirements of Proposition 207, in particular those items codified at A.R.S. § 12-1134, pursuant to A.R.S. § 12-1134(I). The Owner on behalf of itself and all other parties having an interest in

the Property acknowledge and knowingly waives the provisions of Proposition 207, in particular A.R.S. § 12-1134, in connection with the future annexation of the Property as well as for any claim for diminution in value as a result of any subsequent rezoning of the Property by the City as the result of the annexation.

9. Negotiated Effort. The Parties agree that this Agreement represents the negotiated joint efforts of the Parties. In the event of a court of competent jurisdiction finds ambiguity, this Agreement shall not be construed against either Party in favor of a non-drafting Party.

10. Authority. All persons executing this document for the City and the Owner have all necessary and legal authority to enter into this Agreement for their respective corporations and the individual(s) executing this Agreement on behalf of their respective Parties are authorized and empowered to bind the party on whose behalf such individual is signing.

11. Successors and Assigns. The burdens and benefits of this Agreement will run with the land and be binding and inure to the benefit of the parties hereto and their respective successor and assigns. Upon the transfer of any portion of the Property, the transferring party will be released from any liability arising after the transfer with respect to the portion of the Property transferred.

12. Jurisdiction. The laws of the State of Arizona shall govern this Agreement and, in the event of a dispute, venue shall be in Coconino County, Arizona.

13. Attorney's Fees. If legal action by either Party is brought because of a breach of this Agreement or to enforce a provision of this Agreement, the prevailing Party is entitled to reasonable attorneys' fees and court costs.

14. Amendment or Cancellation of Agreement. This Agreement may be amended or cancelled, in whole or in part and with respect to all or any portion of the Property, with the mutual written consent of the Parties hereto. Within ten (10) days after any such amendment or cancellation of this Agreement, the City will record such amendment or cancellation in the Official Records of Coconino County, Arizona.

15. Notice.

    15.1. Manner of Service. All notices, filing, consents, approvals or other communications provided for herein or given in connection herewith ("Notices") will be validly given, filed, made, delivered or served if in writing and delivered personally or sent by registered or certified United States postal Service Mail, return receipt requested, postage prepaid to:

If to the City:	City of Flagstaff Attn: City Manager 211 West Aspen Avenue Flagstaff, Arizona 86001
With a copy to:	Flagstaff City Attorney's Office 211 West Aspen Avenue Flagstaff, Arizona 86001

If to the Owner: Robert Hoffa and Christine Newell
221 South Dunnam Street
Flagstaff, Arizona 86001

or to such other addresses as either Party may from time to time designate in writing and deliver in like manner. Any such change of address Notice will be given at least ten (10) days before the date on which the change is to become effective.

15.2. Mailing Effective. Notice given by mail must be certified and will be deemed delivered seventy-two (72) hours following deposit in the U.S. Postal Service, in the manner set forth herein, or the next business day if sent by overnight delivery or courier.

16. Counterparts. This Agreement may be executed in two or more counterparts, each of which will be deemed an original, but all of which together will constitute one and the same instrument.

17. Headings. The description headings of the paragraphs of this Agreement are inserted for convenience only and will not control or affect the meaning or construction of any of the provisions of this Agreement.

18. Entire Agreement. This Agreement constitutes the entire agreement between the Parties and will not be changed or added to except in the manner provided in Section 15. All prior and contemporaneous agreements, representations and understandings of the Parties, oral or written, other than specifically incorporated herein by reference, are superseded by this Agreement. All prior and contemporaneous agreements, representation and understandings or the City with any other parties, oral or written, other than specifically incorporated herein by reference, regarding any portion of or all of the Property, are superseded by this Agreement.

19. Recordation. No later than ten (10) days after the City and the Owner have executed this Agreement, it will be recorded in its entirety by the City in the Official Records of Coconino County, Arizona.

20. Severability. In the event any provision of this Agreement shall be held invalid or unenforceable by any court of competent jurisdiction, such holding shall not invalidate or render unenforceable all other provisions hereof.

21. Cancellation. This Agreement is subject to cancellation for conflict of interest without penalty or further obligation as provided by A.R.S. § 38-511.

22. Term. This Agreement shall be effective upon its recordation and shall automatically terminate upon the effective date of the City Ordinance annexing the Property, provided, however, the City shall not discontinue applicable municipal services to the Property, once commenced, except as permitted by applicable law.

IN WITNESS WHEREOF, the Parties have executed this Agreement to be effective as provided herein:

City of Flagstaff, an Arizona Municipal Corporation

By: _____
Mayor Paul Deasy

Date: _____

Attest:

By: _____
City Clerk

Approved As to Form:

By: _____
City Attorney

OWNER:

By:_____

Name:_____

Title:_____

STATE OF ARIZONA)
) ss.
County of Coconino)

Subscribed and sworn to before me this _____ day of _____, 2021, by _____, the _____ of, an Arizona.

_____
Notary Public

_____
My Commission Expires

OWNER:

By:_____

Name:_____

Title:_____

STATE OF ARIZONA)
) ss.
County of Coconino)

Subscribed and sworn to before me this _____ day of _____, 2021, by _____, the _____ of, an Arizona.

_____
Notary Public

_____
My Commission Expires

Exhibit A

Parcel 1

Lot 11, Block 1, of PONDEROSA PARK SUBDIVISION NUMBER ONE, as shown on the plat thereof, recorded in Book 2 of Maps, Page 47, records of Coconino County, Arizona.

Parcel 2

A portion of Tract "B", Railroad Springs 66 subdivision as recorded in Case 7, Map 68 of the Records of
Coconino County, Arizona (R), situated in the Northwest 1/4 of Section 20, Township 21 North, Range 7 East, Gila and Salt River Meridian, Coconino County, Arizona, more particularly described as follows:

FROM the Southwest lot corner of Lot 1, Ponderosa Park subdivision as recorded in Book 2, Page 47 of the Records of Coconino County, Arizona (R1) and shown on (R), said point being a found 3/4" iron pipe,

thence N 00° 25° 46" W, along the West lot line of Lots 1 through 7, for a distance of 410.20 feet to the West lot corner of Lots 7 and 8 (R1), said point being a found Cap 18215;

thence N 00° 28’ 21" W, along the West lot lines of Lots 8 and 9, for a distance of 119.93 feet to the West lot corner of Lots 9 and 10, said point being a found Cap 14671;

thence N 00° 28’ 21" W, along the West lot line of Lot 10, for a distance of 60.00 feet to a set 1/2" rebar w/Cap 14671 and the TRUE POINT OF BEGINNING;

thence S 88° 06’ 32" W for a distance of 6.16 feet to a set 1/2" rebar w/Cap 14671;

thence N 00° 23’ 46" W and parallel to the West lot line of Lot 11, for a distance of 60.00 feet to a set 1/2" rebar w/Cap 14671;

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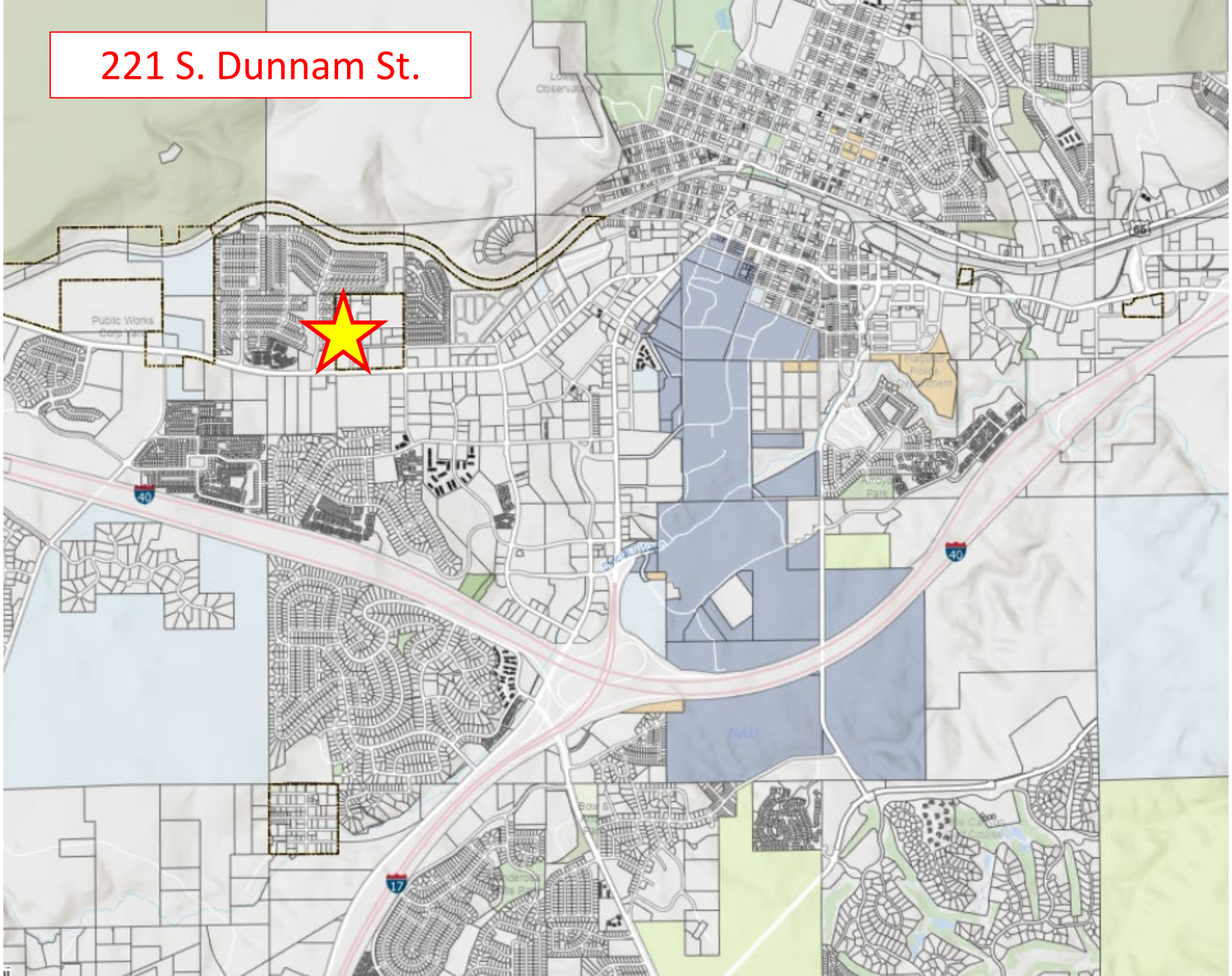
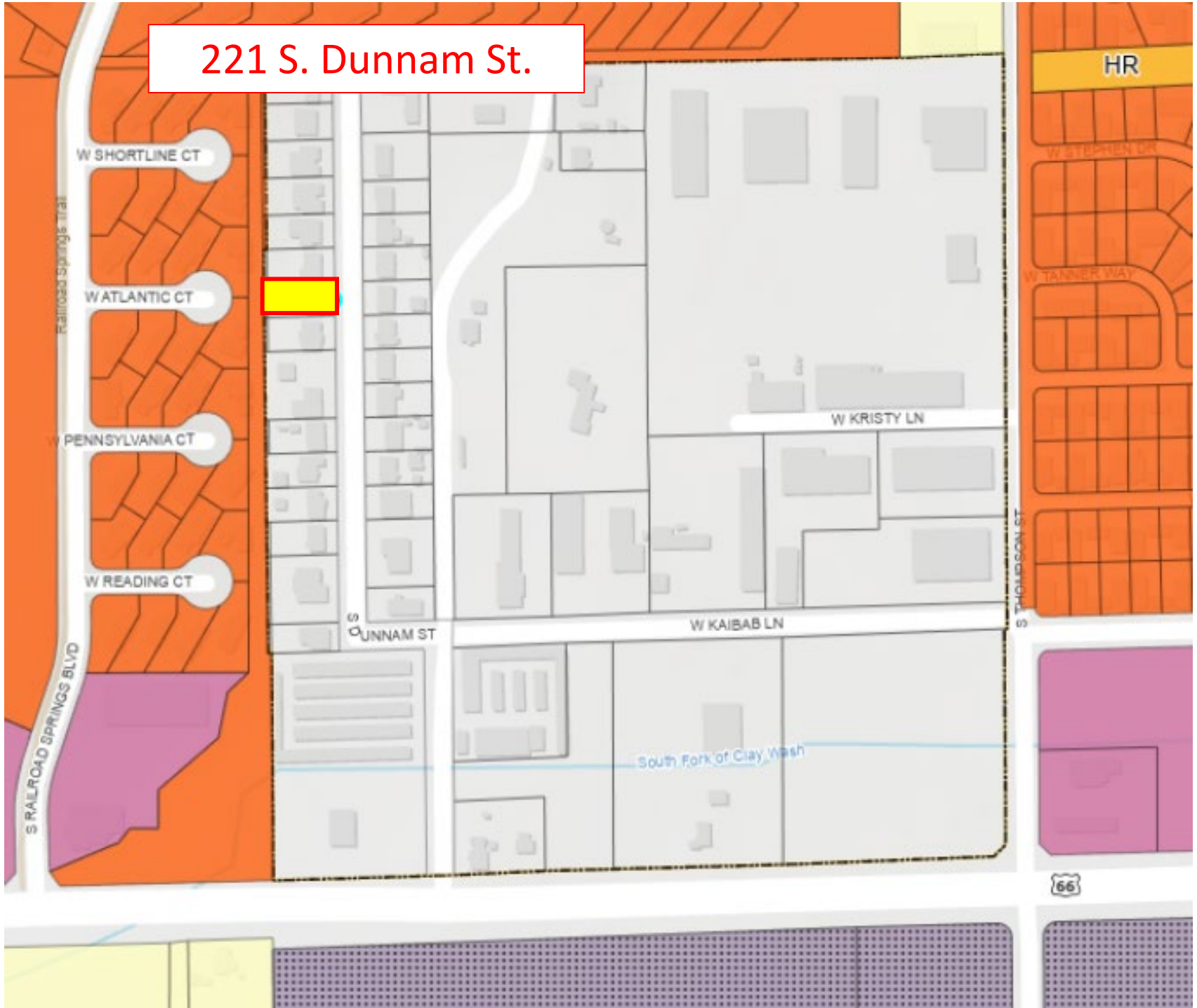

221 S. Dunnam St.
Public Works
40
17
NAU


221 S. Dunnam St.
HR
W SHORTLINE CT
W ATLANTIC CT
W PENNSYLVANIA CT
W READING CT
Railroad Springs Trail
S RAILROAD SPRINGS BLVD
S DUNNAM ST
W KRISTY LN
W KAIBAB LN
S THOMPSON ST
W TANNER WAY
South Fork of Clay Wash
66

II.2 Concept Plan

Project Information

Development Name: Connection to City Sewer line

Site Address: 221 Dunnam St, Flagstaff, AZ 86001

county parcel = APN 11203018 & 11249122H

NFHL Flood Zone = 04005C - Area of minimal flood hazard

Property Owne/Preparer: Robert Hoffa & Christine L. Newell

221 Dunnam St., Flagstaff, AZ 86001, phone = 928-699-1310

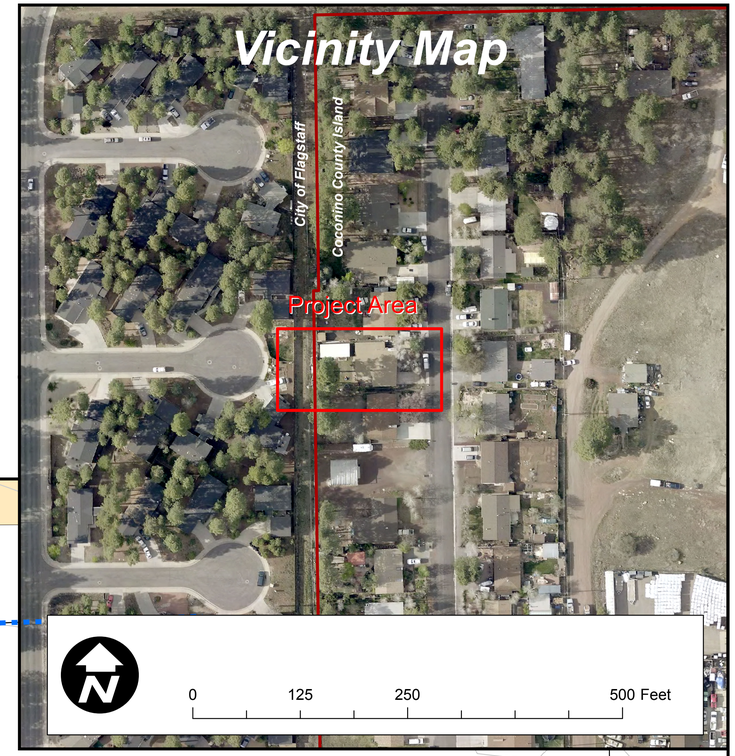
date prepared: 7/26/2021

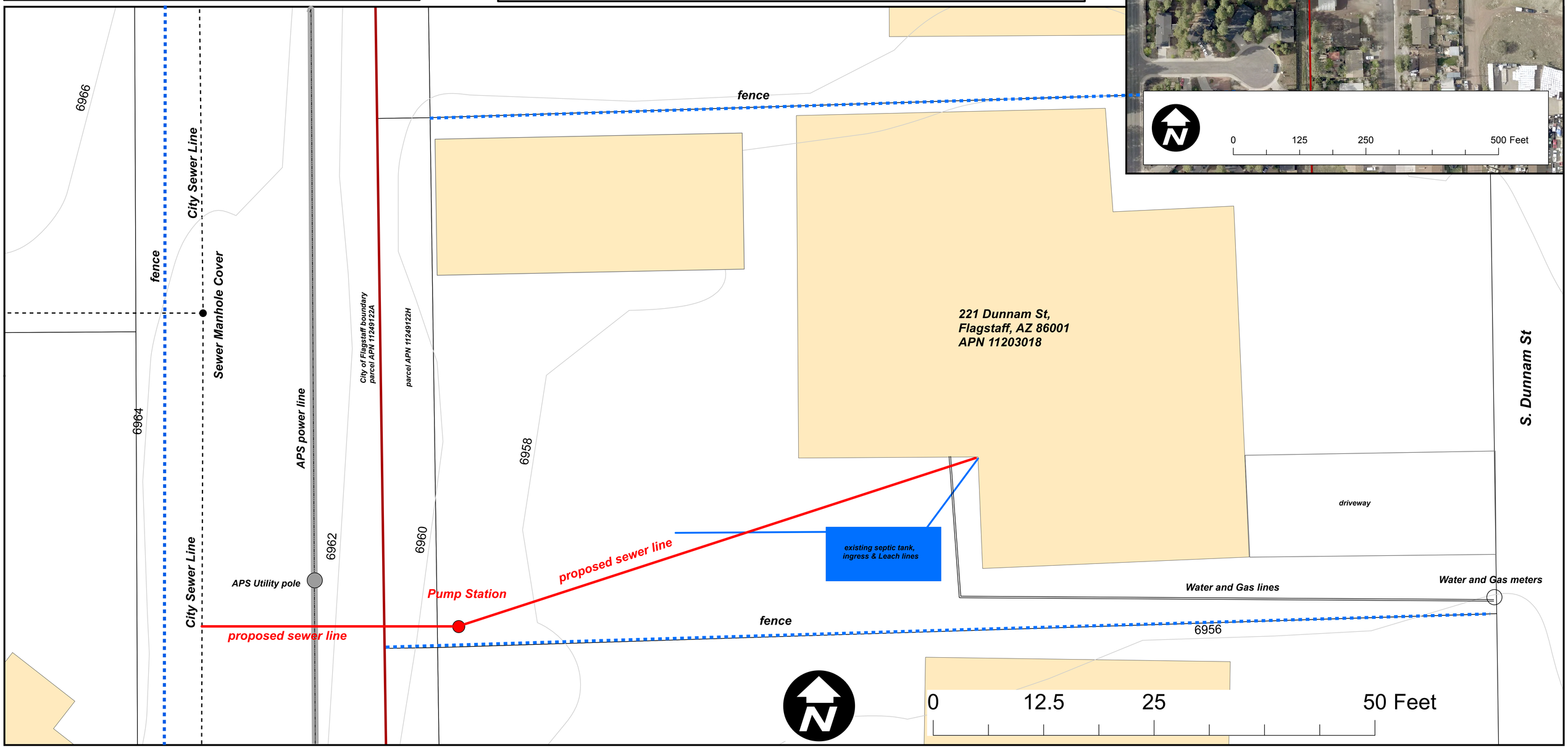
Legend

- proposed sewer line & pump station
- city sewer line & manhole cover
- parcel boundaries
- city boundary
- contour lines - two foot interval
- existing building footprints
- Water and Gas lines & meters
- APS power line & pole
- fence line

Projection: NAD83 State Plane Arizona Central (feet)

Vicinity Map





City of Flagstaff
Community Development
Concept Plan Review Comments

Project Name: Connect to City Sewer
Project No.: PZ-21-00172-01
Project Address: 221 S. Dunnam St.

Date: October 8, 2021

Application Type: Concept Plan
Review Type: Substantive
Review Number: 1

Project Manager: Genevieve Pearthree
E-mail: gpearthree@flagstaffaz.gov
Phone: 928-213-2603

Status of Review: Complete with Conditions
The City of Flagstaff Inter-Division Staff (IDS) reviewed and accepted this Concept Plan application with the conditions and comments listed below. Please see the comments below for next steps.

Project Summary
The applicant requests an out of city sewer connection for the property at 221 S Dunnam St. The property is part of a larger county island surrounded entirely by the City of Flagstaff. The applicant intends to abandon the septic system and connect to the 8-inch city sewer line located on City of Flagstaff property (APN 112-49-122A) to the west. This request includes two adjacent parcels: the primary 0.16-acre parcel (APN 112-03-018) contains a single-family home with the existing septic system; the secondary 0.01-acre parcel (APN 112-49-122H) sits between the primary parcel and the sewer line on City of Flagstaff property. Out of city sewer service requests are required to be accompanied by a pre-annexation agreement, which must be approved by City Council (the pre-annexation agreement must include both parcels). Prior to the City Council hearing, the Water Commission hears out of city service requests and makes a recommendation to City Council for approval or denial.

CONDITIONS/COMMENTS:

Current Planning:
First Review, **Approved with Conditions,** 10/8/21
Genevieve Pearthree, Senior Planner

Conditions of Approval

1. Staff approval of this application is contingent City Council approval of the Pre-Annexation Agreement.
2. Staff will draft a Pre-Annexation Agreement if the Water Commission recommends approval of the request. Once the agreement is complete, it will be reviewed and initialed by the applicant. The appropriate final signatures and recording of the Resolution and Agreement will follow final Council approval.
3. A valid legal description of the area subject to the pre-annexation agreement (APN 112-03-018 and APN 112-49-122H) will need to be attached to the City Council Resolution approving the Pre-Annexation Agreement. If the applicant does not have a valid legal description of this area, the property will need to be surveyed by a Registered Land Surveyor in the State of Arizona. The valid legal description will need to be provided to City Staff

no later than three (3) weeks in advance of the scheduled City Council hearing.

General Comments

1. The County zoning designation for this property is RS-6,000.

Future Submittal Requirements/Process

1. Water Commission Hearing – tentatively scheduled for Thursday, October 21st at 4pm
2. City Council Hearing – Staff will work with the applicant to select the City Council date
3. Permits from Coconino County for work on the applicant's property
4. Right of Way Permit from the City of Flagstaff (for work on City of Flagstaff property to connect to the sewer line)

Building & Safety:
First Review, **Approved with Conditions,** 8/12/21
Victoria St. Clair, Building Plans Examiner

Conditions of Approval

1) Because the parcel is located in a county island - Coconino County is authority having jurisdiction (AHJ); any permits, where required shall be obtained from Coconino County. Examples include but not limited to new sewer yard line(s), grinder pump installation and associated electrical, abandonment or removal of existing septic tank and lines etc.

General Comments

1) None

Future Submittal Requirements

1) None

Engineering:
First Review, **Approved with Conditions,** 8/13/21
Dave Millis, Development Engineering Project Manager

Conditions of Approval

1. Pump/lift station shown on plans must result in gravity (not pressure) flow where it exits the subject property all the way to the City Main.
2. Verify all property rights and easements exist between the sewer main and property boundary to the subject parcel, there is a narrow strip of private land and also a City-owned parcel.
3. Right of Way permit required for that portion of the work within the Sewer Main PUE.
4. All on-lot plumbing/yard line work permitting under jurisdiction of Coconino County.

General Comments

1. None

Future Submittal Requirements

1. None

Water Services:
First Review, **Approved with Conditions,** 8/4/21
Jim Davis, Water Services Plan Reviewer

Conditions of Approval

1. The new private sewer service connection to the existing sewer main must be a gravity service, no private pressure sewer services are allowed.

General Comments

1. None

Future Submittal Requirements

1. None

Heritage Preservation:
First Review, **Approved,** 8/5/21
Mark Reavis, Neighborhood Planner/Heritage Preservation Officer

Conditions of Approval

1. None

General Comments

1. No impacts or Heritage Preservation concerns.

Future Submittal Requirements

1. None

Fire Prevention:
First Review, **Approved,** 8/12/21
Chris Jack, Fire Inspector

Public Works:
First Review, **Approved,** 8/16/21
Scott Overton, Streets Section Director—Public Works

Stormwater:
First Review, **Approved,** 8/11/21
Douglas Slover, Project Manager

Traffic:
First Review, **Approved,** 8/12/21
Reid Miller, Traffic Engineering Project Manager

Housing:
First Review, **Approved,** 8/3/21
Jennifer Mikelson, Housing Analyst

Parks:
First Review, **Approved,** 8/9/21
Amy Hagin, Parks Manager

Sustainability:
First Review, **Approved,** 8/18/21
Jenny Niemann, Climate and Energy Specialist

Multimodal:
First Review, **Approved,** 8/19/21
Martin Ince, Project Manager

City of Flagstaff

Water commission

211 Aspen Avenue

Flagstaff, AZ 86001

Dear Water Commission members,

We own a residential property located within a county Island at 221 Dunnam St. (APN 11203018) and am requesting to connect to the city sewer system. The existing, 56 year old septic system is leaking and requires abandonment and connection to the city sewer system, or replacement. A city sewer line is located adjacent to west side of property, in city property (APN 11249122A – utilities access easement) along eastern edge of Railroad Springs development. This is a single family residence with two bedrooms and one bathroom. The elevation of the property is approximately 4 ft below elevation of sewer line and would require a grinder pump system to attain elevation of sewer line. There are five properties on the street that are already connected to the city sewer line. I have attended a pre-application meeting and have prepared an IDS Concept Plan, as specified in the City's out of service request policy guidelines.

Thank you,

Robert L Hoffa Christine Newell

Robert Hoffa and Christine L. Newell

221 Dunnam St.

Flagstaff, AZ 86001

CITY OF FLAGSTAFF
WATER COMMISSION
October 21, 2021
Virtual Meeting
SUMMARIZED MINUTES

MEMBERS PRESENT	MEMBERS ABSENT	STAFF PRESENT	OTHERS PRESENT
Ward Davis	Elizabeth Christy	Andy Bertelsen	Robert Vane
Malcolm Alter		Marion Lee	Robert Huffa
Timothy Bowers		Erin Young	
Ben Ruddell		Ed Schenk	
Marie Jones (P&Z Rep)		Gregg Clifton	
		Jim Huchel	
		Bill Case	
		Jolene Montoya	
		Genevieve Pearthree	
		Steve Camp	
		Sterling Solomon	

I. CALL TO ORDER

Chair, Ward Davis called the meeting to order at 4:06 p.m.

II. APPROVAL OF MINUTES – August 19, 2021

Moved by Timothy Bowers and seconded by Malcolm Alter to approve the meeting minutes of August 19, 2021. Motion carried unanimously.

III. PUBLIC PARTICIPATION – None

IV. NEW BUSINESS

A. Update the Enforcement Response Plan – Steve Camp

Steve Camp, Regulatory Compliance Manager presented the Update of the Enforcement Response Plan. The Enforcement Response Plan (ERP) adopted by Council has been extremely effective in outlining the expectations of staff and our regulated customers. The plan covers the Pretreatment, Stormwater and Cross Connection programs and was adopted by resolution in December 2018.

Currently there is no requirement for operators to upload testing information to our database within 5 days, as directed by City Code. Each backflow device is required to be tested annually. Water customers with a backflow device typically contract with a backflow tester to have their device tested. The device is tested within the one-year period and the customer has done their part to comply with the City Code. However, if the tester does not enter the data into our database within 5 days and the one-year period has expired, Industrial Pretreatment ends up issuing issue warning letters to water customers. Regulatory Compliance needs the option of issuing warning letters to

the backflow testers for not entering the data within 5 days. This keeps our backflow testers honest and provides a level playing field for the testers that upload data within 5 days.

The proposed change:

7-03-001-0015.K.4 (CODE)

"The tester shall provide a copy of the test report to the City of Flagstaff Industrial Pretreatment Section within five (5) working days from the date of the test."

- Add violation in ERP to address backflow testers not uploading or submitting backflow information to the Pretreatment Section.
  - The requirement is in code – The violation is not specifically listed in the ERP
- Since this is a Council approved document, the change must be approved by Council.

The Water Commission did not have any input to the proposed changes, so staff will move forward.

B. Out of City Sewer Service Request at 221 S. Dummam St. – Genevieve Pearthree

Genevieve Pearthree, Senior Planner presented the Out of City Sewer service request. Robert Hoffa and Christine Newell, the current owners of the real property located at 221 S. Dunnam Street. The property contains a single-family home and is part of a larger county island surrounded entirely by the City of Flagstaff. The applicant intends to abandon the septic system, and requests to connect to the 8-inch city sewer line on City of Flagstaff property (APN 112-49-122A) immediately to the west.

Staff recommends approval of the request for Out of City Sewer Service contingent on the owner entering into a Pre-Annexation Agreement with the City of Flagstaff, payment of applicable fees, and compliance with all conditions of approval from the Concept Plan review associated with this request. The Pre-Annexation Agreement is an agreement to annex in the future if annexation becomes possible and may include other development understandings. The Pre-Annexation Agreement must be approved by a resolution of the City Council and will be recorded against the property so that it will apply to future property owners in the event of ownership changes.

City Code sections 2-04-001-007 and 2-04-001-008 require the Water Commission to consider any application for water and/or sewer service to serve a residence or development in an area outside of corporate city limits. The Water Commission is required to review each application and forward a recommendation to the City Council. The Mayor and Council have the final decision based on the request and the recommendation of the Water Commission.

The Utilities Integrated Master Plan requires requests for Out of City Service to be evaluated by a cross-divisional internal team. The applicant participated in a Pre-Application Meeting with City Staff on July 9, 2021 and submitted a Concept Plan (project number: PZ-21-00172-01), which was reviewed and accepted by the City Inter-Division Staff (IDS) on October 8, 2021.

Five (5) other properties on Dunnam St. already receive city sewer service (215, 229, 231, 233, and 235 S. Dunnam St.); at least four (4) of these properties have a Pre-Annexation Agreement with the City of Flagstaff. Before connection to the sewer service is made, the applicant will pay sewer capacity fees based on the standard capacity fees of a single-family home that is currently $3,723 and a sewer tap fee of $300.25.

Moved by Timothy Bowers and seconded by Malcolm Alter to approve and recommend to City Council the request for Out of City Sewer Service contingent on the owner entering into a Pre-Annexation

Agreement with the City of Flagstaff, payment of applicable fees, and compliance with all conditions of approval from the Concept Plan review associated with this request. Motion carried unanimously.

V. OLD BUSINESS - None

VI. INFORMATIONAL ITEMS TO/FROM THE CHAIR, COMMISSION OR STAFF

A. Update on City Council Retreat – Jim Huchel

Jim Huchel, Wastewater Treatment Manager gave an update on a briefing of the Wastewater Treatment Plant which was presented at the last City Council Retreat.

Topics:

1. Wastewater Treatment Objectives and Standards
2. Flagstaff Water Reclamation Plants
3. History of Wildcat Hill Plant
4. Wildcat Hill Plant Issues, Urgency
5. Wildcat Hill Solids Treatment and Handling Improvements
6. Options for Increasing Wildcat Hill Hydraulic Capacity
7. Future Updates, Discussions

Wildcat Hill Water Plant Issues, Urgency

- Solids Treatments Capacity is at **88 %**
- Liquids Treatment Capacity is at **87%**
- Redundancy
  - ✓ Multiple Single Points of Potential Failure
  - ✓ Limited Operational and Mechanical Flexibility
- Rehabilitation and Replacement
  - ✓ Budget Constraints
  - ✓ Lack of Redundancy to Make Repairs
- Peak Flow Events Increasing Due to Climate Change (3X Daily Flows)

Solids Treatment and Handling at Wildcat Hill

- Two New Digesters
  - ✓ Design funded in FY2022 wastewater capital program
  - ✓ Construction partially funded in FY2022/24, estimated to be completed in 2024
- Solids Dewatering and Handling - Funded in FY 2023-2025
- Solar Drying (Class A Biosolids - Green Energy) – Funded in FY2025-2027
  - ✓ Alternate disposal options (landfill cover, mulch, etc.)
- Rehabilitation and Replacement
  - ✓ Refurbishing existing (2) digesters – After new digesters are completed
  - ✓ Keeping the solids treatment and handling processes operational

Wildcat Hill- Liquids Treatment Capacity
Option 1 – Phased Expansion (Staff Recommendation)

- Fund new treatment plant at 6 Million Gallons per Day (~$150M)
  - ✓ Provides new capacity for growth and incorporates redundancy
  - ✓ Adaptive management - right size, right time, future technology
  - ✓ Foundation for implementing advanced treatment – Indirect Potable Reuse (IPR), Direct Potable Reuse (DPR), and addressing Constituents of Emerging Concern (CECs)
- Continue to operate Wildcat Hill at 6 MGD until next expansion (+/- 20 years)

- ✓ Fund repair and replace of existing plant - ~$30M
- Total Cost - ~$180M (today's costs)

Option 2 – Single Expansion
- Fund new treatment plant at 12 Million Gallons per Day (~$300M?)
  - Provides new capacity for growth and incorporates redundancy
  - Foundation for implementing advanced treatment – IPR, DPR, and addressing CECs
- Retire Wildcat Hill (+/- 7 years)
  - Fund repair and replace of existing plant - ~$13M
- Total Cost - $313M (today's cost)

Future Updates & Discussions
- Wildcat Hill Site Expansion - Options 1 or 2
  - ✓ Capital costs, timeframes, and extending life of the current plant
  - ✓ Sustainability Issues
  - ✓ Continuing assessment of climate change impacts
  - ✓ Integration of Carbon Neutrality Plan provisions
- Reclaimed Water Considerations
  - ✓ Urgency/timeframes for developing unused reclaimed water
  - ✓ Treatment requirements for IPR or DPR uses if applicable
  - ✓ Addressing CECs

Ward Davis asked how this will move forward and Jim indicated staff plan to meet with City Council on November 2nd on funding options. The plan on future expansion will follow.

Robert Vane asked if the digester fund will come from rates but staff does not have answers until after November 2nd. Gregg Clifton, City Manager commented that he does not believe the costs will come from rate increases and mostly likely come from grants and appropriations of state/federal funding sources.

Ed Schenk, Stormwater Manager gave a brief update on his presentation at Council Retreat on September 30th.

Current Capital Projects from 5-year Capital Plan, focused on:
- Rio De Flag Flood Control Project
- Side Laterals/Improvements that connect to Rio De Flag
- Spot Improvements – Annual Allocation
  -Dedicated to ongoing drainage issues

Funded through current (2019) stormwater rate fee
- $3.74 per Equivalent Runoff Unit - ERU (1500 sq ft impervious surface)
- Projects identified in 2007-2010 Northeast Area Master Drainage Study (NEAMDS)

FY22 Projects, Prioritized Annually:
- Phoenix Ave Bridge (underway in 2021)
- Linda Vista Culvert at Spruce Wash (completed in 2020)
- Rio De Flag Lateral – Santa Fe Ave.
- Rio De Flag Lateral – Malpais (Clay Wash)
- Columbia Circle ~ replaced with Steve's Wash at Soliere Ave. (early 2020)
- Rio De Flag Lateral – Downtown
- A 2021 FEMA BRIC grant application was denied as uncompetitive
- Fanning Wash at Route 66

FY22 Stormwater Capital Budget $8.3 Million
Includes Annual Base Budget Allocation of $700,000 for Improvements and Rio De Flag projects

>**Spruce Wash** (Museum Fire response)
- Dortha Channel Improvements
- Killip Detention Basin- design
- Channel improvements
  - FY22 $1.8 Million
- No funding for other watersheds

> **Rio De Flag Projects and related Laterals**
- FY22 4.2 Million

>**Other Projects, Reserves**
- Phoenix Bridge
- Spot Improvements
  - FY22 $2.3 Million

Museum Fire

Review Options:

Option 1. Continue Annual Response
Potentially $1.8 million annually in clean-up response, or $18 million over 10 years.

Option 2. Spruce Channel Improvements
Improvements to existing infrastructure footprint at $12-$18 million

Option 3. New Stormwater infrastructure
Add 6-8 ft dia. pipe/tunnel, running parallel to existing wash at $10-$30 million

Mitigation Costs
- Detention basin on Pipeline property
  - ✓ Mitigates flooding through Shadow Mountain neighborhood
  - ✓ Cost: $2.9 million
- Channel diversion on Pipeline property
  - ✓ Mitigates flooding of Appalachian Dr. and Monte Vista Dr.
  - ✓ Cost: $830,000
- Fanning Wash improvements
  - ✓ Needed to mitigate Steve's Blvd, Hemberg Dr. and Route 66
  - ✓ Cost: Unknown, likely $2 million range

CIP and Maintenance
- CIP annual budget approximately $700,000
- Maintenance budget approximately $300,000
  - ✓ 33% open channel, 66% closed system
- Additional funding needs:
  - ✓ Museum Fire mitigations: $18M – Option 1 or Option 2 (CIP)
  - ✓ Mt. Elden mitigations: $6M (CIP)
  - ✓ Additional maintenance: $80,000/year in additional maintenance
  - ✓ Long-term Museum Fire funding -Option 3: $10-$30M (estimate)

Stormwater
- Post wildfire flood mitigation – Museum fire flood area - $12-18 Million over next 5 yrs
- Mt Elden Drainage Mitigations - $6 Million over next 5 years
- Additional annual maintenance needs: $80,000

VII. ADJOURNMENT

Meeting adjourned at 5:55 p.m.

13. D.

CITY OF FLAGSTAFF

STAFF SUMMARY REPORT

To: The Honorable Mayor and Council

:

Co-Submitter: Rick Tadder, Management Services Director

Co-Submitter: Sterling Solomon

Date: 11/24/2021

Meeting Date: 12/07/2021

TITLE:

Consideration and Adoption of Resolution No. 2021-59 and Resolution No. 2021-60 to Settle Pending Litigation: Proposed Settlements of Pending Litigation in two separate cases, *City of Phoenix v. Orbitz Worldwide Inc.*, 247 Ariz. 234 (2019) and *Terry v. City of Flagstaff, et. al., CV2018-00150* are before the Council for Consideration.

STAFF RECOMMENDED ACTION:

1) Read Resolution No. 2021-59 by title only
2) City Clerk Reads Resolution No. 2021-59 by title only (if approved above)
3) Adopt Resolution No. 2021-59

4) Read Resolution No. 2021-60 by title only
5) City Clerk Reads Resolution No. 2021-60 by title only (if approved above)
6) Adopt Resolution No. 2021-60

Executive Summary:

With regard to *City of Phoenix v. Orbitz Worldwide Inc.*, 247 Ariz. 234 (2019):

City staff is requesting City Council authorize the partial settlement of the lawsuit, *City of Phoenix v. Orbitz Worldwide Inc.*, 247 Ariz. 234 (2019), which continues to be litigated on remand in the trial court. This tax litigation was filed in order to collect local transaction privilege taxes, penalties and interest from online travel companies ("OTCs").

The City has reached a tentative partial settlement of this particular litigation subject to the approval of the City Council. The tentative settlement and legal advice related thereto were discussed with the City Council in executive session on November 30, 2021.

With regard to *Terry v City of Flagstaff, et. al., CV2018-00150:*

This litigation was filed against the City of Flagstaff, the Police Department and Terros, after Police responded to check the welfare of a suicidal subject and Called Terros to conduct a mental health assessment.

The City has reached a tentative partial settlement of this particular litigation subject to the approval of the City Council. The tentative settlement and legal advice related thereto will be discussed with the City Council in executive session on December 7, 2021.

Financial Impact:

With regard to *City Of Phoenix v. Orbitz Worldwide Inc*., financial impact is confidential. State law prohibits disclosure of taxpayer information without consent of the taxpayer.

With regard to *Terry v City of Flagstaff, et. al.*, funding for this settlement is available through the City's applicable insurance.

Policy Impact:

None.

Connection to PBB Priorities/Objectives, Carbon Neutrality Plan & Regional Plan:

N/A

Has There Been Previous Council Decision on This:

With Regard to *City of Phoenix v. Orbitz Worldwide Inc*.:

In 1987, the City Council adopted the Model City Tax Code, which includes authority to pursue collection of local transaction privilege taxes.

In 2013 the City Council approved an agreement with outside legal counsel for collection of local taxes from the online travel companies. The Cities are being represented by an Arizona firm, Wright Welker & Pauole PLC, and a law firm based in Atlanta, Georgia. As consideration for legal services, outside legal counsel is entitled to payment of a 27% contingency fee from any amount recovered plus its costs.

City Council has received legal advice and litigation updates regarding this lawsuit on several occasions. In September 2021 the City Council received legal advice and provided direction to City staff regarding this lawsuit. October 5, 2021 the City Council approved a partial settlement of this lawsuit with one of the online travel companies.

W*ith regard to Terry v. City of Flagstaff, et. al.:*

City Council has received legal advice and litigation updates regarding this lawsuit on several occasions, the last being on November 8, 2021, in anticipation of the mediation on this matter which took place on November 15, 2021.

Background/History:

With regard to *City of Phoenix v. Orbitz Worldwide Inc., 247 Ariz. 234 (2019)*:

This lawsuit arose because the Cities conducted a multi-jurisdictional audit of the OTCs for the audit period of 2000-2009. As a result of the audit, in 2013 an assessment was issued against the OTCs. However, the OTCs asserted they are not legally obligated to pay taxes, and appealed through all levels of the courts.

In November 2019 the Arizona Supreme Court ruled that OTCs are liable for payment of tax on gross income under Section -444 Hotels of the Model City Tax Code, but not under Section -447 Transient Lodging. City of Phoenix v. Orbitz Worldwide Inc., 247 Ariz. 234 (2019) Taxes are due from and after the court's decision. However, the case was remanded to the trial court to determine whether or not the taxpayers are liable for payment of taxes prior to the court's decision. The parties have continued to litigate the case to reach such a determination.

All of the above information is a matter of public record.

Attachments: Res. 2021-59
Res. 2021-60

RESOLUTION NO. 2021-59

A RESOLUTION OF THE FLAGSTAFF CITY COUNCIL AUTHORIZING THE PARTIAL SETTLEMENT OF CITY OF PHOENIX ET AL. V ORBITZ WORLDWIDE ET AL, RELATING TO COLLECTION OF LOCAL TRANSACTION PRIVILEGE TAXES FROM ONLINE TRAVEL COMPANIES

RECITALS:

WHEREAS, the City Council has determined it is in the best interests of the City to enter into a partial settlement of the pending litigation, City of Phoenix et al. v Orbitz Worldwide et al; and

WHEREAS, state law provides for the confidentiality of taxpayer information.

ENACTMENTS:

NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF FLAGSTAFF AS FOLLOWS:

SECTION 1. The City Council hereby authorizes partial settlement of the pending litigation, City of Phoenix et al. v Orbitz Worldwide et al, on remand in Arizona Tax Court, Case No. TX2014-000470 as discussed in Executive Session.

SECTION 2. The City Manager and City Attorney are authorized and directed to execute such documents and take such other actions as are necessary to carry out the purpose of this Resolution.

PASSED AND ADOPTED by the City Council of the City of Flagstaff this 7th day of December, 2021.

_____
MAYOR

ATTEST:

_____
CITY CLERK

APPROVED AS TO FORM:

_____
CITY ATTORNEY

S:\Legal\Civil Matters\2011\2011-539 Online Travel Companies MJAC Tax Audit Protest\RES21-XX Authorization to settle Orbitz.docx

RESOLUTION NO. 2021-60

A RESOLUTION OF THE FLAGSTAFF CITY COUNCIL AUTHORIZING THE SETTLEMENT OF THE MATTER OF GEORGIA TERRY V. CITY OF FLAGSTAFF, ET AL., CASE NO. CV2018-00150, CURRENTLY PENDING IN COCONINO COUNTY SUPERIOR COURT

RECITALS:

WHEREAS, Georgia Terry filed a civil lawsuit against the City of Flagstaff, The police Department and Terros seeking to recover monetary damages resulting from Police Officers responding to conduct a welfare check on a suicidal subject and calling Terros to assist on March 21, 2017; and

WHEREAS, the City has decided to resolve the disputed claims in the lawsuit by reaching a settlement with Ms. Terry; and

WHEREAS, it is in the best interest of the City to effectuate a settlement of the matter of *Georgia Terry v. City of Flagstaff, et al.*, Coconino County Superior Court, Case No. CV2018-0150.

ENACTMENTS:

NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF FLAGSTAFF AS FOLLOWS:

SECTION 1. That the City Council authorizes settlement of the matter of *Georgia Terry v. City of Flagstaff, et al.*, Coconino County Superior Court, Case No. CV2018-0150, pursuant to the terms discussed in executive session, funding for which will be provided through the City's insurer.

SECTION 2. That the City Manager and City Attorney are authorized and directed to execute such documents and take such other actions as are necessary to carry out the purpose of this Resolution.

PASSED AND ADOPTED by the City Council of the City of Flagstaff this 7th day of December 2021.

_____
MAYOR

ATTEST:

_____
CITY CLERK

APPROVED AS TO FORM:

_____
CITY ATTORNEY

CITY OF FLAGSTAFF

STAFF SUMMARY REPORT

To:	The Honorable Mayor and Council
From:	Tiffany Antol, Senior Planner
Date:	12/01/2021
Meeting Date:	12/07/2021

TITLE:

Consideration and Approval of Parking Demand Study: Request by Mountain Line to approve a Parking Demand Study for the new Downtown Connection Center subject to the issuance of a Conditional Use Permit.

STAFF RECOMMENDED ACTION:

Staff recommends the City Council approve the Parking Demand Study as presented.

Executive Summary:

Section 10-50.80.060.C of the City of Flagstaff Zoning Code allows a property owner to submit a study or plan prepared in accordance with the established professional traffic and parking practices by a registrant licensed to practice in the State of Arizona to allow reduced parking for any development. The study or plan is required to document how any reductions are calculated and the assumptions utilized in the calculations. The Planning Director may approve a reduction equal to, or less than, 30 percent of the total parking spaces required by this Division. Any request greater than 30 percent requires the approval of the City Council. The applicant is requesting to meet the required on-site parking by managing demand with the use of bus passes for employees and to utilize existing paid public parking.

*****A formal presentation will be included in the final packet*****

Financial Impact:

None

Policy Impact:

None

Connection to PBB Key Community Priorities/Objectives & Regional Plan:

Priority Based Budget Key Community Priorities and Objectives

Environmental Stewardship: Implement sustainable building practices, enhance waste diversion program, alternative energy programs and multi-modal transportation options.
Livable Community: Provide amenities and activities that support a healthy lifestyle.
Sustainable, Innovative Infrastructure: Provide effective management of and infrastructure for all modes of transportation.

Regional Plan

Goal T.7. Provide a high-quality, safe, convenient, accessible public transportation system, where

feasible, to serve as an attractive alternative to single-occupant vehicles.
Policy T.7.2 Provide public transit centers and options that are effectively distributed throughout the region to increase access to public transit.
Policy T.7.3.Support a public transit system design that encourages frequent and convenient access points, for various transportation modes and providers, such as private bus and shuttle systems, park-and-ride lots for cars and bicycles, and well placed access to bus, railroad, and airline terminal facilities.

Previous Council Decision on This:

There has been no previous Council decision on the Parking Demand Study affiliated with the Mountain Line Downtown Connection Center.

Options and Alternatives:

1. The City Council may approve the Mountain Line DCC Parking Demand Study as written.
2. The City Council may approve the Mountian Line DCC Parking Demand Study with conditions.
3. The City Council may deny the Mountain Line DCC Parking Demand Study.

Background/History:

Section 10-40.30.040.B of the Flagstaff Zoning Code (Page 40.30-15), Allowed Uses, identifies "Passenger Transportation Facilities" as an allowed land use in the Commercial Service (CS) Zone subject to the approval of a Conditional Use Permit (CUP) by the Planning Commission. A Passenger Transportation Facility is defined as "facilities for public and commuter transportation including railroad or bus terminals, and service facilities for commercial motor vehicles used for commercial passenger transportation but excluding travel agencies or taxicabs."

The applicant, Mountain Line, has been using part of the existing site as a Passenger Transportation Facility since approximately 2008. At the time the use was established, a Conditional Use Permit was not required under the Land Development Code. In 2011, the City replaced the Land Development Code with the Flagstaff Zoning Code, which now requires a Conditional Use Permit for Passenger Transportation Facilities.

The applicant is proposing to demolish an existing storage building, which includes the existing Mountain Line Comfort Station, and construct a new two-story 18,983 square foot structure intended to house Mountain Line staff, bus operator facilities, and patron amenities, as well as develop community civic space, and expand the existing bus plaza as part of a multi-phased development. The City has preserved areas for future parking and the potential for a future parking garage as the site develops over time.

The applicant is proposing to redevelop the site in several phases. Phase 1 includes the new structure located at the intersection of Milton Road and Phoenix Avenue, associated site improvements, and public civic spaces adjacent to the building. During Phase 1, the existing parking and transit operations remain as they are currently. A temporary pedestrian way will be developed to connect the two areas as part of Phase 1. Phase 2, which is dependent on the completion of the Rio de Flag flood control project on this site, includes the expansion of the bus plaza and extension of the FUTS trail through this site. It is anticipated that the Rio de Flag work on-site will remove the existing pedestrian bridge that connects the site to Beaver Street. At the time Phase 2 is constructed, pedestrian access will have to be relocated if this bridge is removed. Phase 2 may likely occur within two separate steps by two different entities (Mountain Line and the City of Flagstaff). As the bus plaza area expands, a large portion of the existing parking area is removed. The City has worked with Mountain Line to maximize public parking on the remaining area along the north boundary of the parcel. In Phase 2 this will be done by constructing an interim surface parking lot that connects with the existing surface parking lot on Beaver St. Phase 2 also includes a larger expanded civic space that is intended to serve the larger neighborhood/community. Additionally, the City has worked with Mountain Line to protect the possibility of a future Phase 3, which

includes the construction of a parking garage by the City of Flagstaff on the subject site to increase the availability of public parking in the downtown area. It is likely that the FUTS will have to be relocated on-site to accommodate a garage.

Key Considerations:

The Downtown Connection Center is a unique use which is not adequately covered by the parking standards found within the Zoning Code. There is no designated parking calculation for a passenger transportation facility. The closest use, office use, requires one parking space for every 300 square feet. That would result in a requirement of 63 parking spaces for this facility.

However, given the unique nature of this development, applicants can submit a parking demand study to show why their use requires a specific amount of parking. Large portions of the proposed building are used by patrons and drivers of the Mountain Line buses. They are not in need of parking spaces to access all the resources of the Downtown Connection Center. The portion of the facility designed for these uses is eliminated from the parking requirements for the site. The parking demand study focuses on the portion of the building occupied by employees that need to travel to and from the site daily. The study removes all unoccupied areas of the building from the parking calculations including storage areas, hallways, and corridors. The study also applies travel demand management options provided to the employees who will occupy the building to use alternative modes of transportation. Utilizing these techniques reduces the total amount of parking required for the building to 15 spaces. The concept plan shows five new parking spaces proposed within the existing right-of-way for Phoenix Avenue extending onto the subject property. These five spaces are still preliminary as they may need to be replaced with a future turn lane to accommodate improvements as proposed to the Milton Road/Phoenix Avenue intersection. If that is the case, then all 15 required parking spaces will need to be provided within the existing parking areas located on-site and currently managed by Park Flag. A separate agreement between Mountain Line and the City of Flagstaff will need to be completed in order to allow the use of these spaces for the Downtown Connection Center.

Attachments:

Presentation
Parking Demand Study
Staff Conditional Use Report
DCC Plans Part 1
DCC Plans part2
DCC Elevations

Mountain Line Downtown Connection Center Parking Demand Study

December 7, 2021

CITY OF FLAGSTAFF · ARIZONA · ESTABLISHED 1882 ·

TEAM FLAGSTAFF

WE MAKE THE CITY BETTER

Downtown Connection Center

Request

- Request by Mountain Line to approve a Parking Demand Study for the new Downtown Connection Center subject to the issuance of a Conditional Use Permit.

- **Section 10-50.80.060.C** of the Zoning Code allows a study or plan prepared in accordance with the established professional traffic and parking practices by a registrant licensed to practice in the State of Arizona to reduce parking for any development. The study or plan is required to document how any reductions are calculated and the assumptions utilized in the calculations.
- Any request greater than 30 percent requires the approval of the City Council. The applicant is requesting to meet the required on-site parking by managing demand with the use of bus passes for employees, providing incentives to employees, and to utilize existing paid public parking.

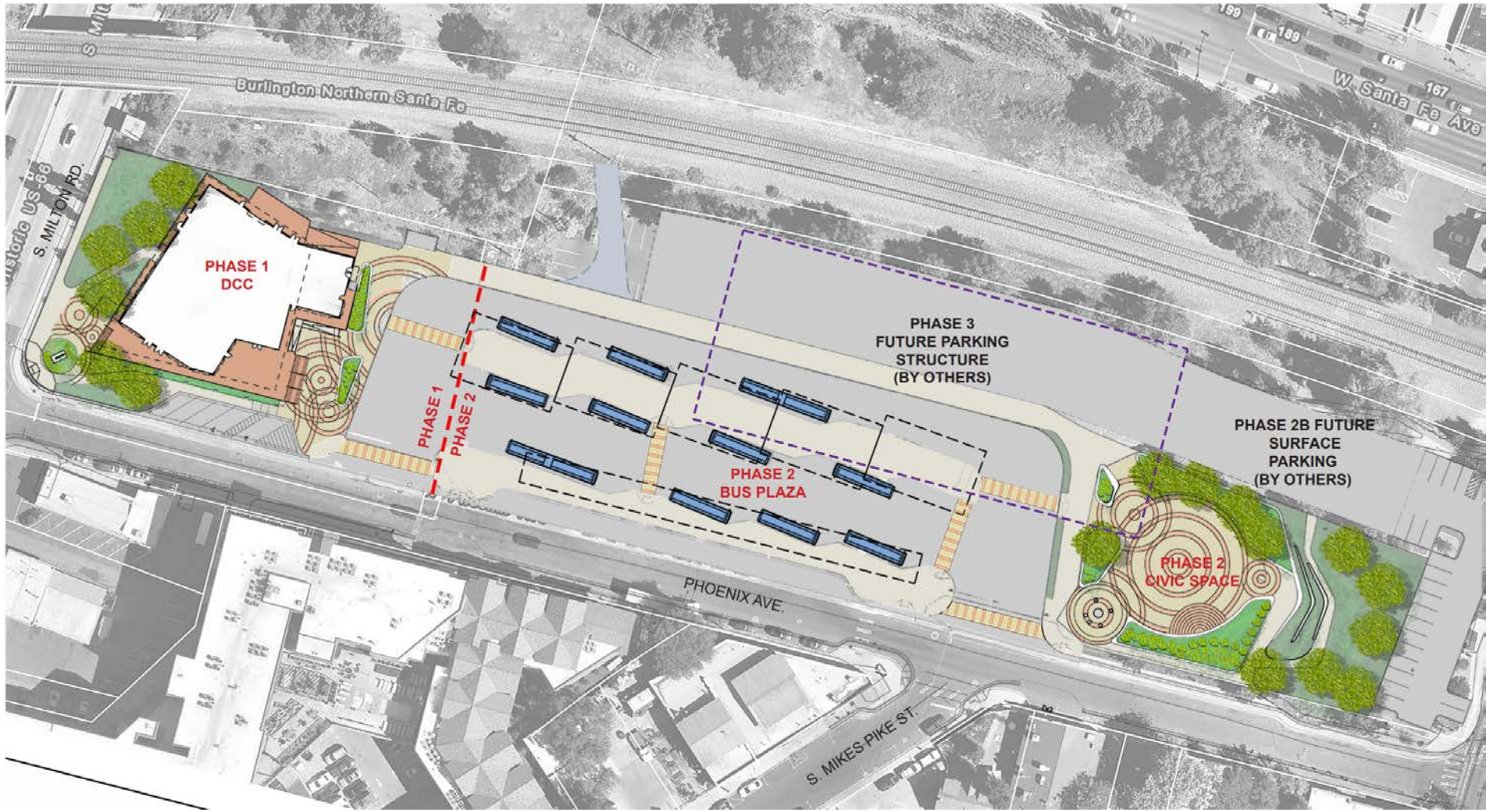
Downtown Connection Center

Mountain Line Proposal

- Redevelop the existing Downtown Connection Center located on Phoenix Avenue in the Southside Community on City owned property through a multi-phased development approach.
- The Downtown Connection Center falls under the “Passenger Transportation Facility” as defined in the Zoning Code. As of 2011, this use requires the issuance of a Conditional Use Permit (CUP).
- City staff has been working with Mountain Line on a “concept plan”. This concept plan has been submitted in conjunction with the required CUP application which is scheduled to be heard by the Planning & Zoning Commission on December 8, 2021.

Downtown Connection Center

Concept Plan



Downtown Connection Center

Parking Demand Study

- The Downtown Connection Center is a unique use which is not adequately covered by the parking standards found within the Zoning Code.
- There is no designated parking calculation for a passenger transportation facility.
- The closest use, office use, requires one parking space for every 300 square feet (gross). That would result in a requirement of 63 parking spaces for this facility.

Downtown Connection Center

Parking Demand Study

- Large portions of the proposed building are used by patrons and drivers of the Mountain Line buses. They are not in need of parking spaces to access all the resources of the Downtown Connection Center. The portion of the facility designed for these uses is eliminated from the parking requirements for the site.
- The parking demand study focuses on the portion of the building occupied by employees that need to travel to and from the site daily. The study removes all unoccupied areas of the building from the parking calculations including storage areas, hallways, and corridors (net rather than gross).
- The study also applies travel demand management options provided to the employees who will occupy the building to use active modes of transportation.

Downtown Connection Center

Parking Demand Study

- Utilizing these techniques reduces the total amount of parking required for the proposed building to 15 spaces.
- All 15 required parking spaces will need to be provided within the existing paid parking areas located on-site and currently managed by Park Flag.
- A separate agreement between Mountain Line and the City of Flagstaff will need to be completed in order to allow the use of these spaces for the Downtown Connection Center.

Parking Demand Study

1. Council may approve the Parking Demand Study as presented
2. Council may approve the Parking Demand Study with conditions.
3. Council may deny the Parking Demand Study.

Parking Demand Study

Questions?

AECOM
7720 N. 16th St, Suite 100
Phoenix, AZ 85020
aecom.com

Project name: Mountain Line DCC

To: City of Flagstaff Planning Department

From:
PREPARER: JENNIFER LOVE, PE, AECOM, (602) 648-2423

PROPERTY OWNER: BRYCE DOTY, CITY OF FLAGSTAFF, (928) 637-8384

DEVELOPER: KATE MORLEY, MOUNTAIN LINE, (928) 679-8903

Date: Oct 14, 2021

Memo

Subject: Mountain Line DCC Parking Demand Study

Background

On behalf of Mountain Line, AECOM has conducted this parking demand study for the proposed Downtown Connection Center (DCC) building that will be located north of Phoenix Avenue and east of Milton Road in Flagstaff, Arizona. The project is proposed to be implemented in phases, as defined below:

- **Phase 1:** the proposed DCC building, surrounding infrastructure and public spaces adjacent to the building, and is located on the westernmost parcel, APN 10043003B. It is anticipated the existing parking and transit operations would remain on parcel APN 10044005A.
- **Phase 2:** area pending construction and phasing of the RDF project through this site. Phase 2 can be considered in two steps, as described below:
    - **Phase 2a:** bus bays and civic space to be completed by Mountain Line
    - **Phase 2b:** additional surface parking on site constructed by the city,

The approximately 21,616 square foot building will house Mountain Line employees, provide a break room for bus operators, offer public space for transit patrons, provide meeting rooms and office space for other agencies. The purpose of this parking study is to provide justification for a reduction in required parking.

Proposed Conditions

The proposed two-story building is currently estimated to be approximately 21,616 sq feet gross floor area (GFA) and is proposed to be constructed in Phase 1. The main components of the building, their size and the anticipated number of full-time equivalent employees are shown in Table 1. The proposed site is currently planned to provide 5 off-street parking stalls in Phase 1, and retain existing parking on the eastern portion of the site. In Phase 2, new kiss and ride/loading/unloading zone on the north side of

Phoenix Avenue would be provided in Phase 2a and additional parking would be provided in Phase 2b. Phase 2a also accommodates tour buses in the kiss and ride area. See Appendix A for the proposed concept plan.

Mountain Line bus drivers will have access to the building and will use the space as a break room. Bus drivers will not generate a need for vehicle parking as employee parking for bus drivers will be provided at the Kaspar Drive Facility where they will continue to report for duty. The DCC site will not operate as a park-and-ride facility, so no transit patron parking will be provided. Park-and-rides typically are located outside a central area bringing people in, not vice versa. As the office space in the building is primarily Mountain Line staff, Mountain Line will employ travel demand strategies to reduce or eliminate staff parking needs. All building users are anticipated to arrive by bus, bike, walking, or kiss and ride.

If we analyze the DCC without the bus operations component, public space, and community space components, the space for office use is anticipated to be approximately 7,510 square feet. Parking requirements for this space is estimated in the subsequent sections.

Table 1. Anticipated Building Use

Use	Approximate Floor Area (sq ft)	Anticipated Employees (FTE)
Admin Space (Mountain Line Offices)	5,670	25
Flagstaff PD	300	1
MetroPlan and Human Services (Office Space)	1,540	3
Total	***7,510***	***29***

City Parking Requirements

According to the City of Flagstaff's Zoning Code (Table 10-50.80.040.A) a development with this square footage would be required to have 25 parking stalls, as shown in Table 2. A 10% reduction is assumed based on the building's proximity to permanent transit (10-50.80.060 A), a 5% reduction is assumed based on the building providing bicycle parking (10-50.80.060 F), and a 30% reduction for parking demand management (10-50.80.060 C).

Table 2. City Code Parking Requirements

Land Use	Code Required Parking	Detailed GSF*	Number of Required Spaces
Offices: General (Admin Space, Flagstaff PD, MetroPlan, Human Services)	1 per 300 GSF	7,510	25
Sub Total			***25***
Proximity to transit Reduction (10%)			-3
Bike Parking Reduction (5%)			-1
Sub Total			***21***
Employee TDM Program Reduction (30%)			-6
Total			***15***

Parking Demand

Parking demand was estimated using parking rates obtained from the most recent edition of Institute of Transportation Engineers (ITE) *Parking Generation Manual*, 5th Edition (2019). Several relevant land use codes include:

- General Office (710)
- Small Office (712)
- Single Tenant Office (715)

Parking demand estimates are provided based on square footage and the number of employees. Average rates for office land use in urban/suburban areas range between 2.4 and 3.1 parked vehicles per 1,000 square feet and between 0.78 and 1.33 parked vehicles per employee. Lower average rates are reported for office uses in more dense/multi-use locations as shared parking reduces parking demand. These reduced rates range from 1.63 to 2.43 parked cars per 1,000 square feet and between 0.58 and 0.75 parked cars per employee.

Based on these rates, the anticipated average peak parking demand for this use would be between **12 and 39 vehicles**. See Appendix B for ITE parking demand rates and calculations.

These estimates do not account for parking demand associated with any events in the community space. Supplying parking for occasional larger events is not recommended. Public transit use or the use of other public parking should be encouraged for these types of events.

Travel and Parking Demand Strategies

Pursuant to City of Flagstaff Zoning Code 10-50.80.060 C and D, required elements justifying the parking reduction are provided below:

Single User/Owner

Although the building will have multiple users, there will be one primary owner which provides long-term ability to control parking demand. The other tenants are government or quasi government entities with incentive to meet the needed parking restrictions. As a note, MetroPlan employees are "on-loan" from Mountain Line and subject to the Mountain Line all Mountain Line policies including parking management strategies.

Parking Management Strategies

As a transit agency, the primary occupant of the building, Mountain Line, is committed to promoting alternative forms of transportation for its employees. As such the following programs and infrastructure have been proposed to reduce the demand for off-street parking (see also "Employee and Visitor Transportation Demand Management Program for the New Mountain Line Downtown Connection Center" in Appendix C):

- Transit:
  - Transit Passes – Mountain Line will provide free transit passes to all employees and their immediate family as well as one non-family member of their choosing. Mountain Line also offers a guaranteed ride home program.

  - Proximity to Transit – The office is located directly adjacent to the DCC bus stops which will provide multiple transit options to employees (the current Mountain Line office space at the Kaspar Drive Facility is only served by two transit lines).
  - Park and Ride – The Kaspar facility will serve as an east side park and ride facility for employees providing direct connection to the DCC every 20 minutes via Route 2. Staff may count time commuting between facilities as paid time. Mountain Line will also establish a west side park and ride.
- Bike Amenities:
  - Bike Parking – Bike parking will be provided on-site.
  - Bike Reimbursement – Bike reimbursement program for employees committed to commuting at least 50% by bike.
  - Shared Bikes – Mountain Line will provide bikes/e-bikes/scooters on site for check-out for midday trips and for commuting.
- Bike/Pedestrian Infrastructure – The proposed building is located near multiple bicycle and pedestrian facilities, including sidewalks and a well-connected grid network, a railroad crossing and signalized crossing of US 66 to downtown Flagstaff. Additionally, there are several planned bicycle and pedestrian facilities, including a proposed signalized crossing at Milton Road to connect to La Plaza Vieja, connectivity to the Flagstaff Urban Trails System (FUTS), and bike lanes on Beaver Street and Butler Avenue.
- Teleworking/Flexible Schedules – Teleworking is available for staff.

Long-term Outlook

The building is located next to a proposed permanent bus facility. Changing the building's future use to anything other than the DCC facility would likely require the removal of the bus bays, therefore freeing up space for parking. Therefore, risk of long-term changes to land use and parking demand are minimal.

Additionally, approximately 106 future parking spaces as part of Phase 2b will be built by the City of Flagstaff to the north of the bus plaza area, and the existing 24 car parking lot along Beaver will remain. The new parking area to the north of the bus plaza will be built by the City and managed by ParkFLG. Although none of the spaces will be designated for DCC building users, the users will pay to utilize this parking area when accessing the building.

Key Findings

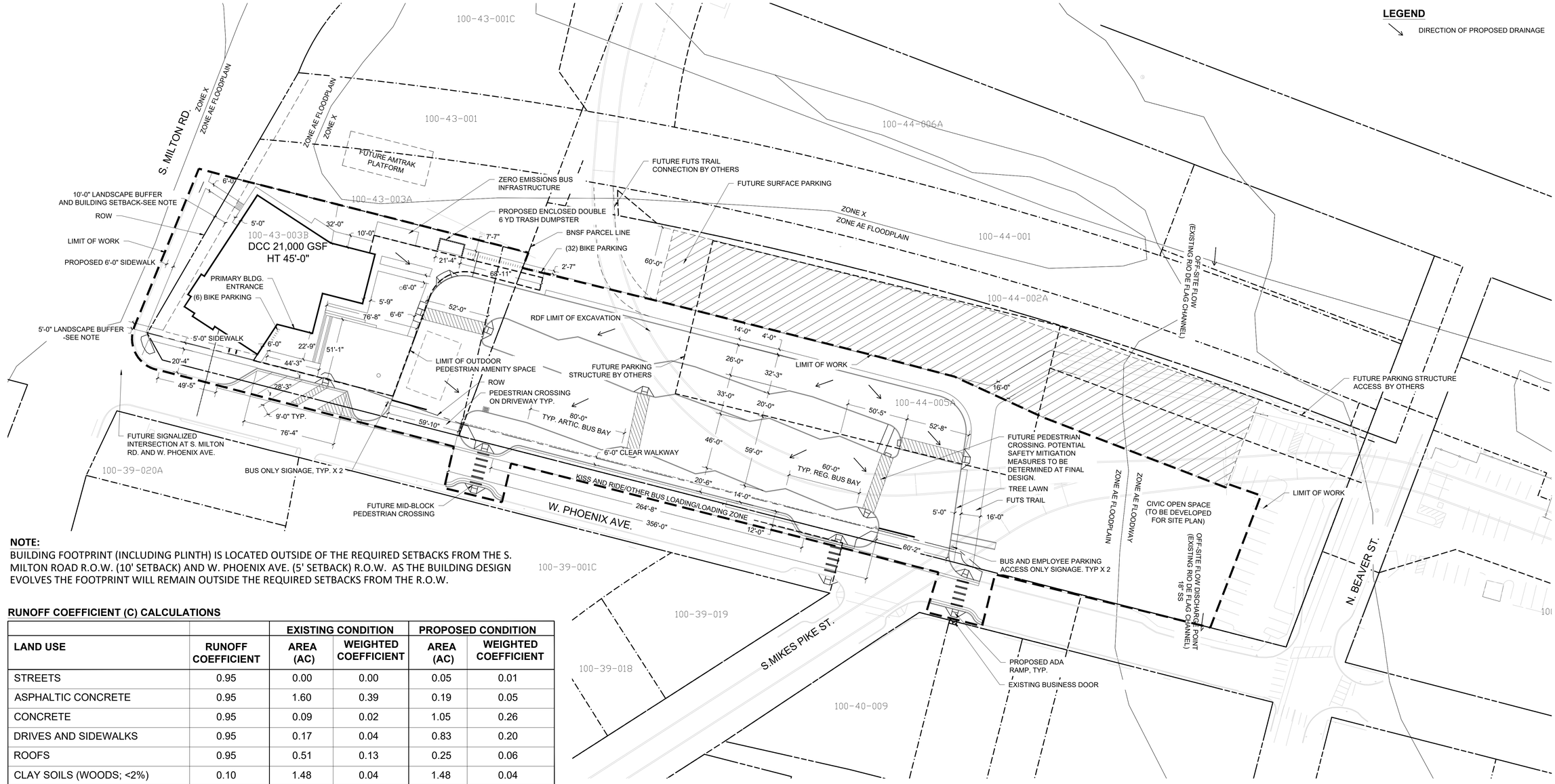
The following key findings are made regarding parking for the proposed project:

- The proposed 21,616 square foot building will provide 5 off-street parking stalls.
- City code requires 25 parking stalls. However, with allowable reductions per city code are permitted, 15 are required.
- A significant parking reduction is requested based on parking management strategies—particularly the fact that the primary user is Mountain Line which can provide travel demand management strategies to its employees.
- A future parking lot, estimated at 106 parking spaces, will be built by the City of Flagstaff and managed by ParkFLG and DCC building users will have to pay to park in this lot.

Requested Action

Mountain Line acknowledges the City codes identifies a need for 15 parking spaces, though that reduction is subject to the approval of City Council. However, Mountain Line would like to propose that any requirement for dedicated parking for Mountain Line be waived entirely to serve a higher public interest in maximizing public parking. Mountain Line proposes making all space available for parking public and under the purview of ParkFlag. Mountain Line would require employees to pay ParkFlag to park onsite. Using rough costs, if a parking space costs $4,000 to build and employee parks in a space 2000 hours a year, Mountain Line would essentially be reimbursing ParkFLag for those spaces in a 2 year timeframe. In addition, ParkFlag would be generating additional revenue off those spaces in evenings, on weekend and beyond the first two years. Mountain Line believes this this scenario serves the highest community good by prioritizing all available space for public parking over dedicated Mountain Line parking.

APPENDIX A: Site Plan



NOTE:
BUILDING FOOTPRINT (INCLUDING PLINTH) IS LOCATED OUTSIDE OF THE REQUIRED SETBACKS FROM THE S. MILTON ROAD R.O.W. (10' SETBACK) AND W. PHOENIX AVE. (5' SETBACK) R.O.W. AS THE BUILDING DESIGN EVOLVES THE FOOTPRINT WILL REMAIN OUTSIDE THE REQUIRED SETBACKS FROM THE R.O.W.

RUNOFF COEFFICIENT (C) CALCULATIONS

		EXISTING CONDITION		PROPOSED CONDITION	
LAND USE	**RUNOFF COEFFICIENT**	**AREA (AC)**	**WEIGHTED COEFFICIENT**	**AREA (AC)**	**WEIGHTED COEFFICIENT**
STREETS	0.95	0.00	0.00	0.05	0.01
ASPHALTIC CONCRETE	0.95	1.60	0.39	0.19	0.05
CONCRETE	0.95	0.09	0.02	1.05	0.26
DRIVES AND SIDEWALKS	0.95	0.17	0.04	0.83	0.20
ROOFS	0.95	0.51	0.13	0.25	0.06
CLAY SOILS (WOODS; <2%)	0.10	1.48	0.04	1.48	0.04
	TOTALS	3.85	**0.62**	3.85	**0.62**

FAR CALCULATIONS

APN10043003B PARCEL SIZE	BUILDING GFA	FAR
39,639.6 SF	21,616 SF	0.545 (21,616 GFA / 39639.6 BUILDABLE AREA)
SITE SIZE	BUILDING GFA	FAR
174,000 SF	21,616 SF	0.124 (21,616 GFA / 174,000 BUILDABLE AREA)

CODE SECTION 10-50.80.050 BICYCLE PARKING	SPACES REQUIRED	SPACES PROVIDED
TWO BICYCLE PARKING SPACES, OR FIVE PERCENT OF REQUIRED OFF-STREET PARKING SPACES, WHICHEVER IS GREATER.	4 (BASED ON 21,000 GFA BUILDING SIZE)	38

40 20 0 40
GRAPHIC SCALE : FEET

N

OUTDOOR AMENITY SPACE CALCULATION

DEVELOPMENT SITE AREA	REQUIRED OUTDOOR PEDESTRIAN AMENITY SPACE (5%)	PROVIDED OUTDOOR PEDESTRIAN AMENITY SPACE
174,000 SF	8,700 SF	10,767.0 SF

SITE PLAN

REV	DATE	DESCRIPTION

Submittal: **CONCEPT PLAN**

Seal: **PRELIMINARY NOT FOR CONSTRUCTION**

Consultant: AECOM
7720 North 16th Street
Suite 100
Phoenix, AZ 85020
Phone: (602) 371-1100

Submitted By: _____

Client: Northern Arizona Intergovernmental NAIPTA Public Transportation Authority; MOUNTAIN LINE

Approved By: _____

Designed By:
Drawn By:
Checked By:
Approved By:

NAIPTA DOWNTOWN CONNECTION CENTER

216 W. PHOENIX AVENUE, FLAGSTAFF, AZ 86001
ASSESSOR'S PARCEL NUMBER (APN): 1004405A, 10043003B, 10043001D

PROPERTY OWNER: BRYCE DOTY, CITY OF FLAGSTAFF, (928) 637-8384
DEVELOPER: KATE MORLEY, MOUNTAIN LINE, (928) 679-8903
PREPARER: JENNIFER LOVE, AECOM, (602) 648-2423

@ 24X36
CADD Filename: 60595394_DCC_Concept_Plan.dwg
Submittal Date: 10/13/2021
Contract No.: TBD
Sheet No.: 6

DWG File: C:\Users\kenneth.biesiada\AECOM\NAIPTA DCC - General\DCC Concept Plan\920_929_GIS_Graphics\DCC_Concept Plan Submittal\10_12_2021\60595394_DCC_Concept_Plan.dwg
Biesiada, Kenneth
13-Oct-2021 14:17

APPENDIX B: Parking Demand Calculations

		Rates				Proposed Site		Parking Generation			
		General Suburban		Dense Multi-use Urban				General Suburban		Dense Multi-use Urban	
Use	ITE LU Code	Sq Ft	Employees	Sq Ft	Employees	Sq Ft	Employees	Sq Ft	Employees	Sq Ft	Employees
General Office	710	2.39	0.84	1.63	0.58	12,607	29	30	24	21	17
Small Office	712	2.56	1.33	--	--	12,607	29	32	39	--	--
Single Tenant	715	3.1	0.78	2.43	0.75	12,607	29	39	23	31	22

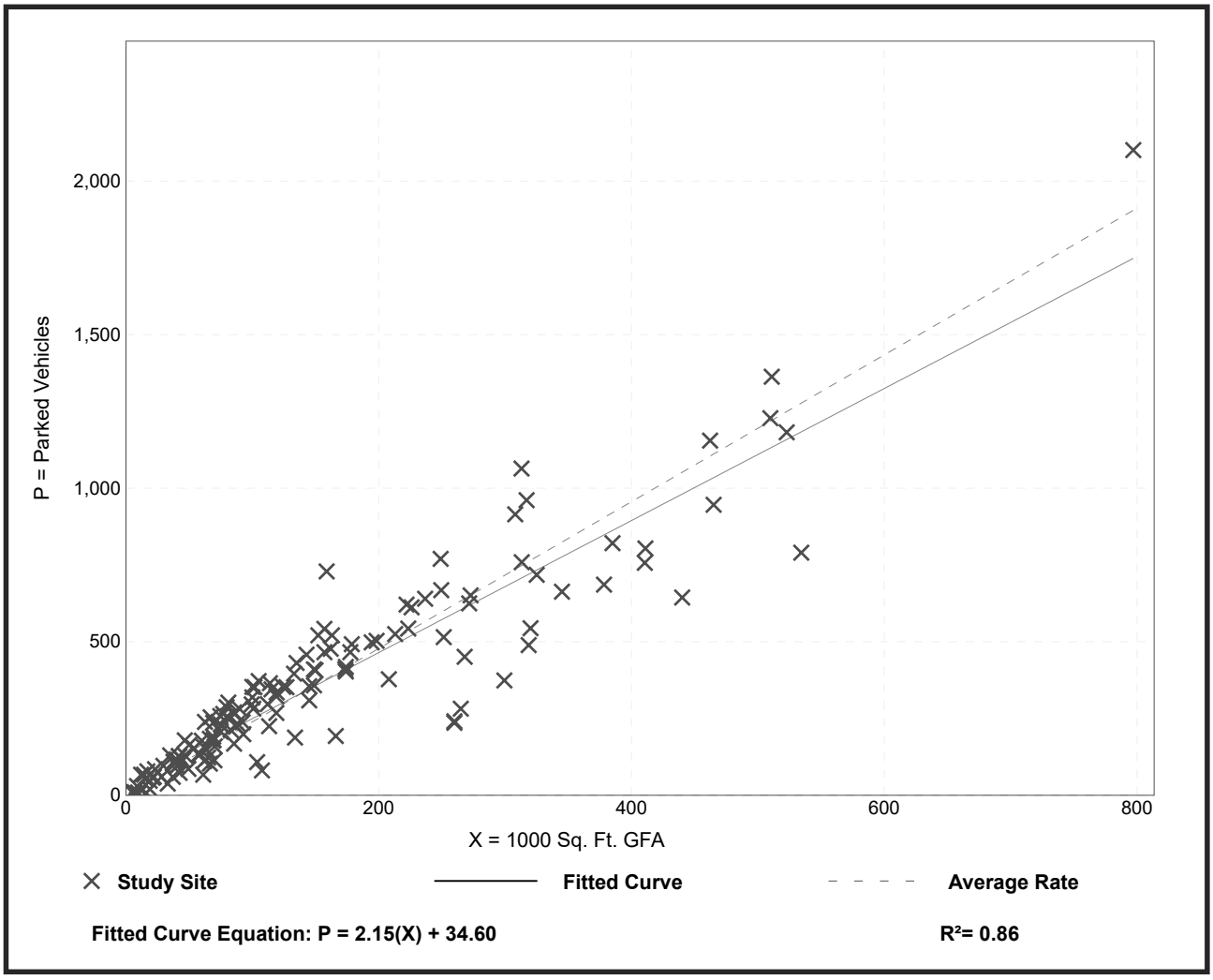
General Office Building
(710)

Peak Period Parking Demand vs: **1000 Sq. Ft. GFA**
On a: **Weekday (Monday - Friday)**
Setting/Location: **General Urban/Suburban**
Peak Period of Parking Demand: **9:00 a.m. - 3:00 p.m.**
Number of Studies: 148
Avg. 1000 Sq. Ft. GFA: 145

Peak Period Parking Demand per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
2.39	0.50 - 5.58	2.30 / 3.30	2.28 - 2.50	0.69 (29%)

Data Plot and Equation



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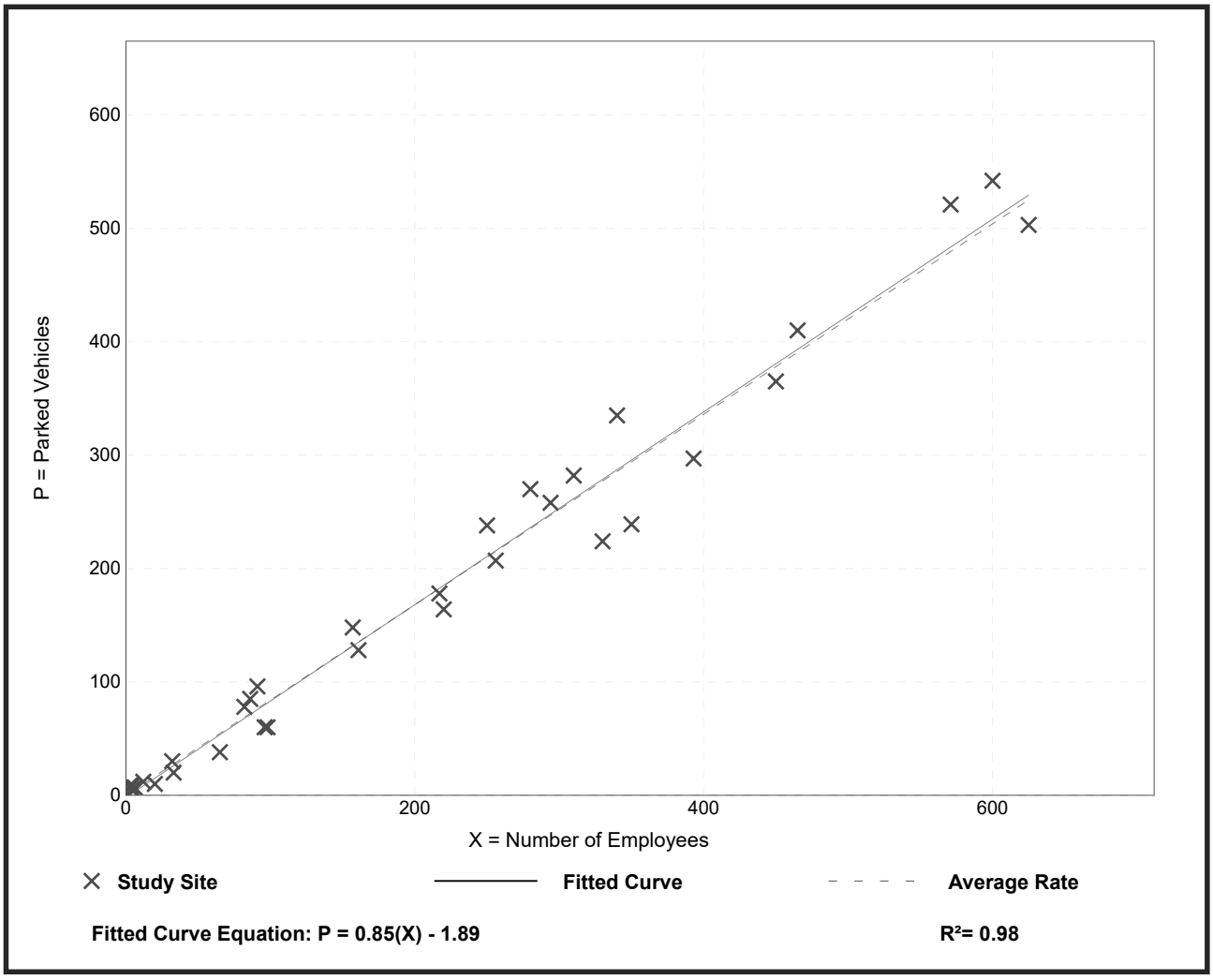
General Office Building
(710)

Peak Period Parking Demand vs: **Employees**
On a: **Weekday (Monday - Friday)**
Setting/Location: **General Urban/Suburban**
Peak Period of Parking Demand: **9:00 a.m. - 3:00 p.m.**
Number of Studies: 33
Avg. Num. of Employees: 209

Peak Period Parking Demand per Employee

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
0.84	0.50 - 3.00	0.80 / 1.05	0.80 - 0.88	0.12 (14%)

Data Plot and Equation



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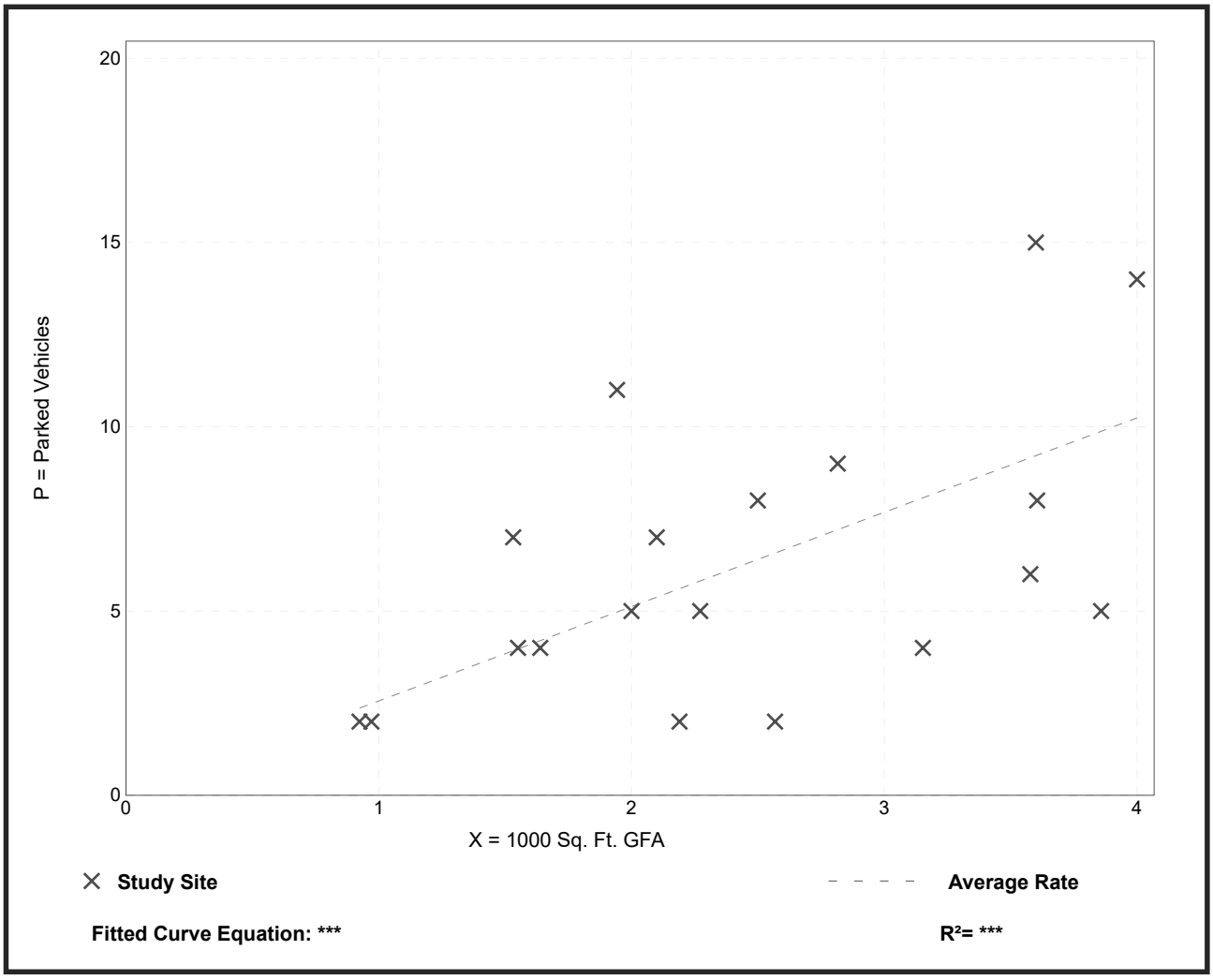
Small Office Building
(712)

Peak Period Parking Demand vs: **1000 Sq. Ft. GFA**
On a: **Weekday (Monday - Friday)**
Setting/Location: **General Urban/Suburban**
Peak Period of Parking Demand: **10:00 a.m. - 5:00 p.m.**
Number of Studies: 19
Avg. 1000 Sq. Ft. GFA: 2.4

Peak Period Parking Demand per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
2.56	0.78 - 5.66	2.12 / 4.17	***	1.26 (49%)

Data Plot and Equation



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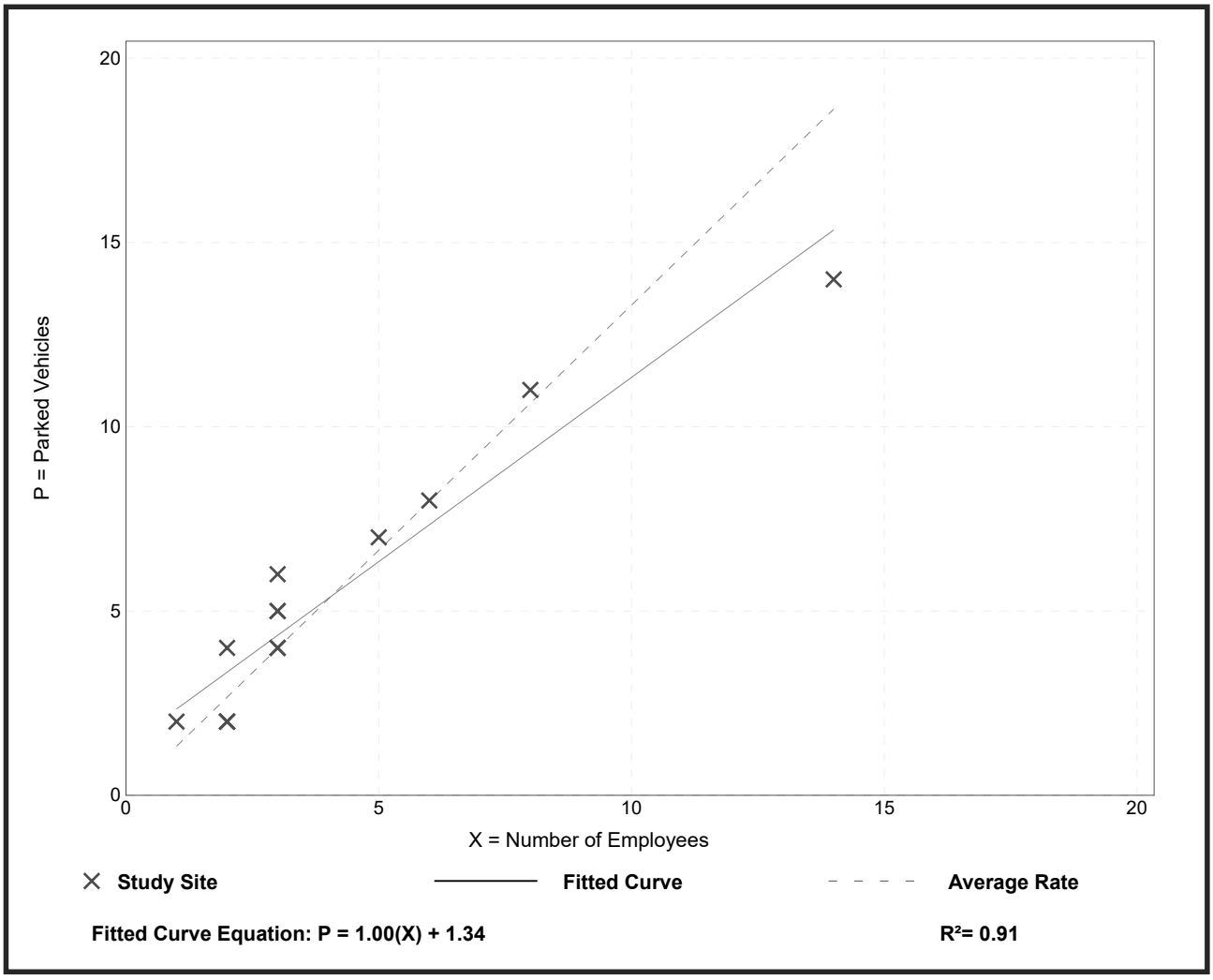
Small Office Building
(712)

Peak Period Parking Demand vs: **Employees**
On a: **Weekday (Monday - Friday)**
Setting/Location: **General Urban/Suburban**
Peak Period of Parking Demand: **10:00 a.m. - 5:00 p.m.**
Number of Studies: 14
Avg. Num. of Employees: 4.0

Peak Period Parking Demand per Employee

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
1.33	1.00 - 2.00	1.32 / 2.00	***	0.33 (25%)

Data Plot and Equation



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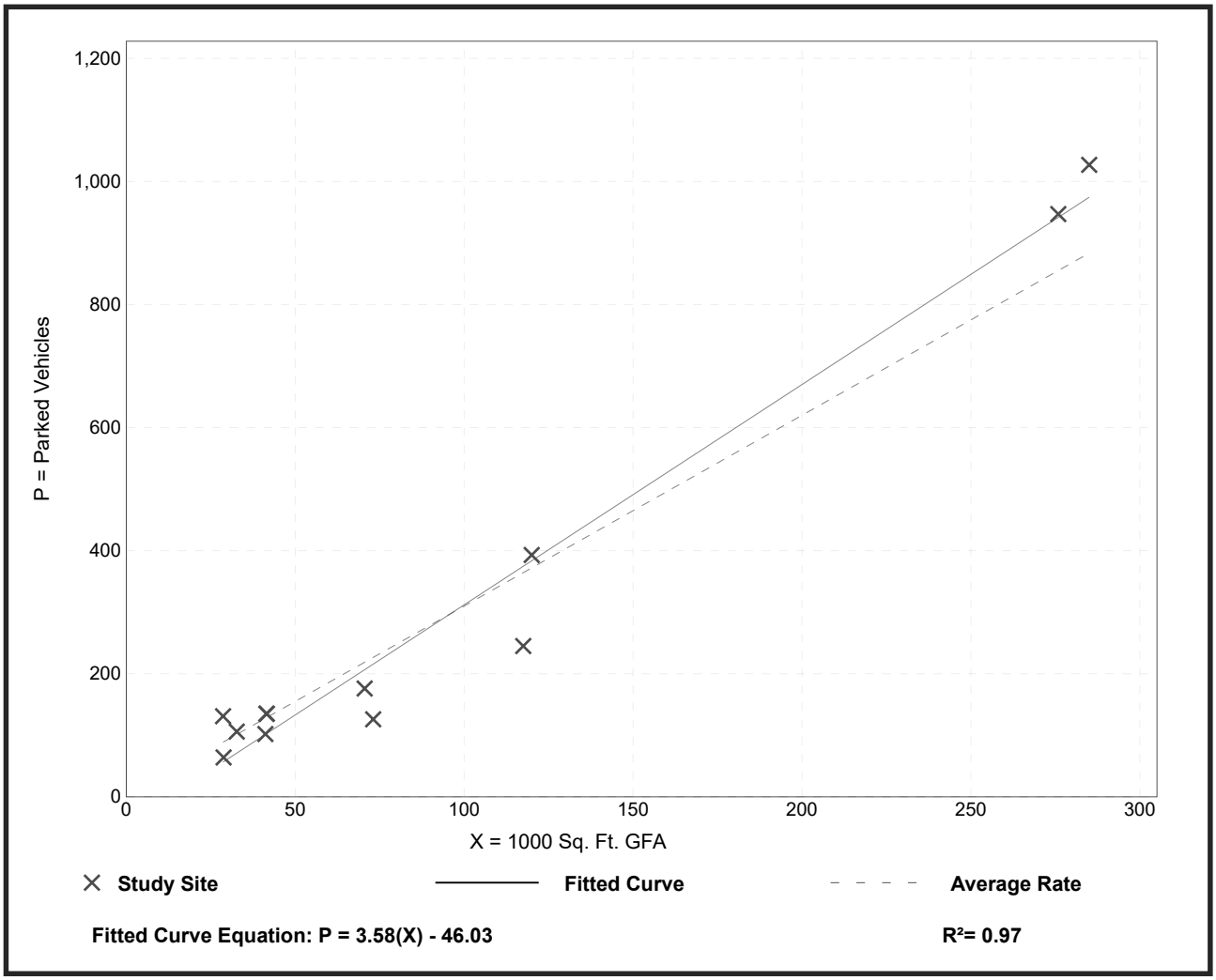
Single Tenant Office Building
(715)

Peak Period Parking Demand vs: **1000 Sq. Ft. GFA**
On a: **Weekday (Monday - Friday)**
Setting/Location: **General Urban/Suburban**
Peak Period of Parking Demand: **10:00 a.m. - 4:00 p.m.**
Number of Studies: 12
Avg. 1000 Sq. Ft. GFA: 96

Peak Period Parking Demand per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
3.10	1.72 - 4.57	2.48 / 3.65	***	0.68 (22%)

Data Plot and Equation



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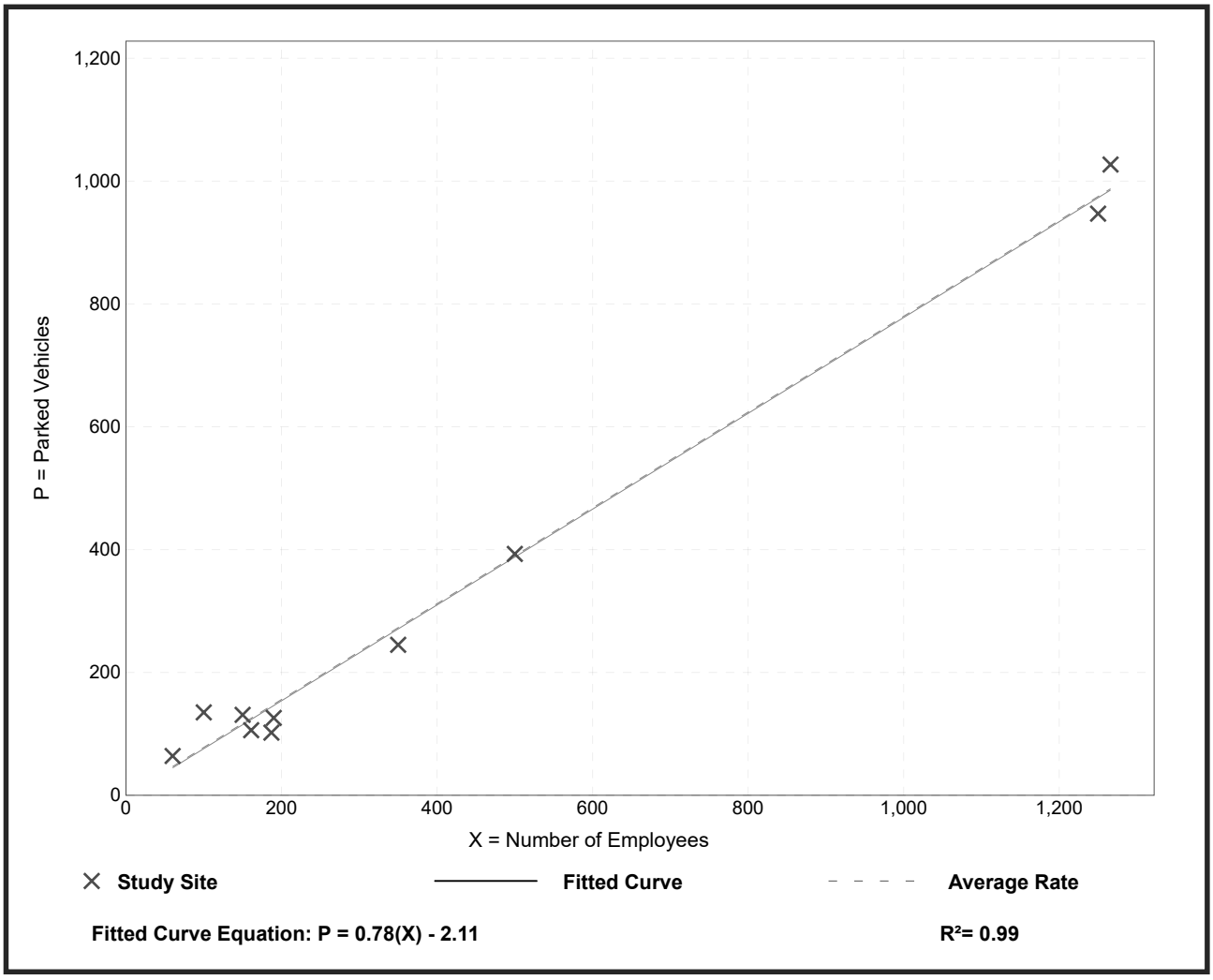
Single Tenant Office Building
(715)

Peak Period Parking Demand vs: **Employees**
On a: **Weekday (Monday - Friday)**
Setting/Location: **General Urban/Suburban**
Peak Period of Parking Demand: **10:00 a.m. - 4:00 p.m.**
Number of Studies: 10
Avg. Num. of Employees: 421

Peak Period Parking Demand per Employee

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
0.78	0.55 - 1.35	0.69 / 1.17	***	0.12 (15%)

Data Plot and Equation



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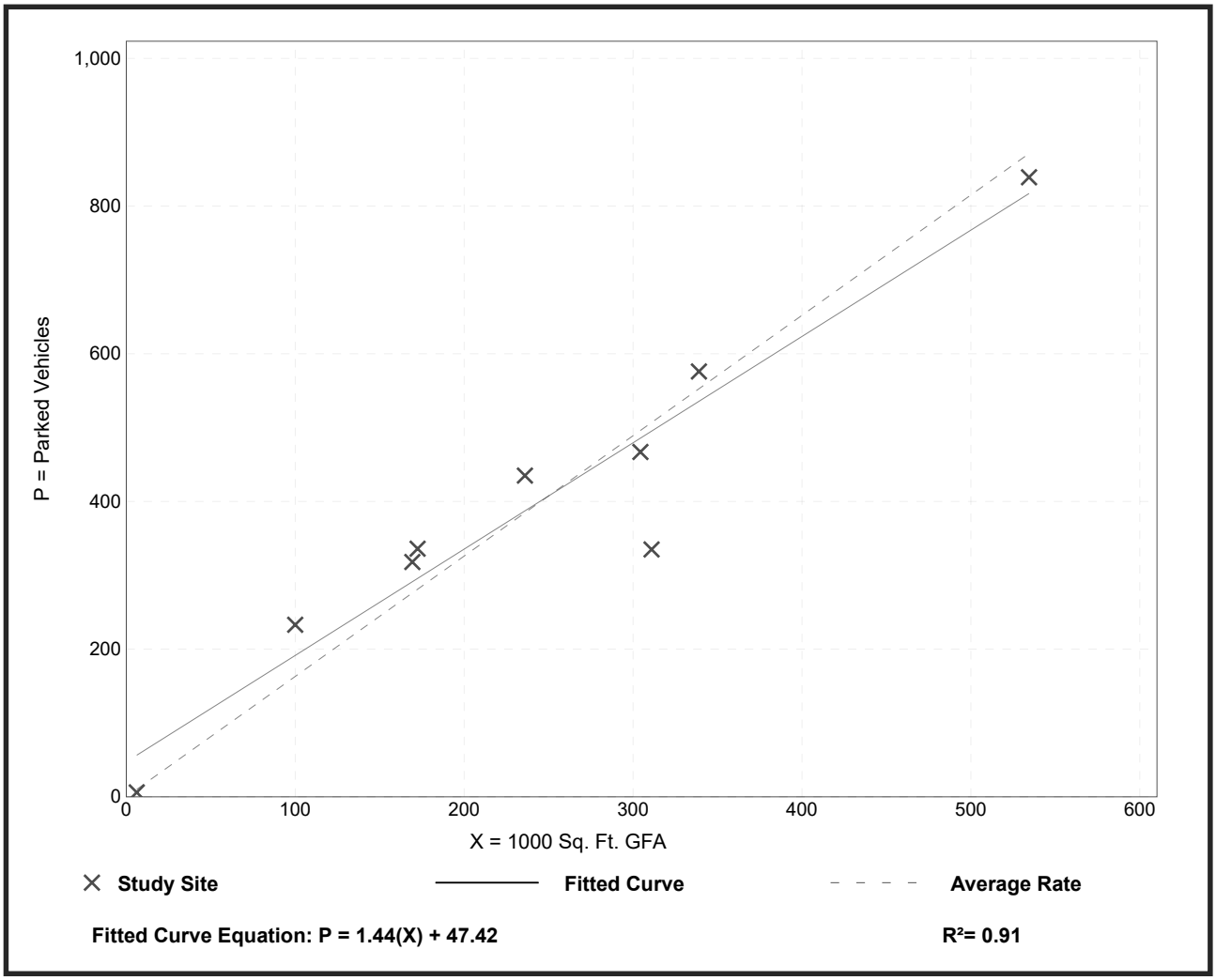
General Office Building
(710)

Peak Period Parking Demand vs: **1000 Sq. Ft. GFA**
On a: **Weekday (Monday - Friday)**
Setting/Location: **Dense Multi-Use Urban**
Peak Period of Parking Demand: **9:00 a.m. - 4:00 p.m.**
Number of Studies: 9
Avg. 1000 Sq. Ft. GFA: 241

Peak Period Parking Demand per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
1.63	0.97 - 2.33	1.55 / 2.14	***	0.32 (20%)

Data Plot and Equation



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General Office Building
(710)

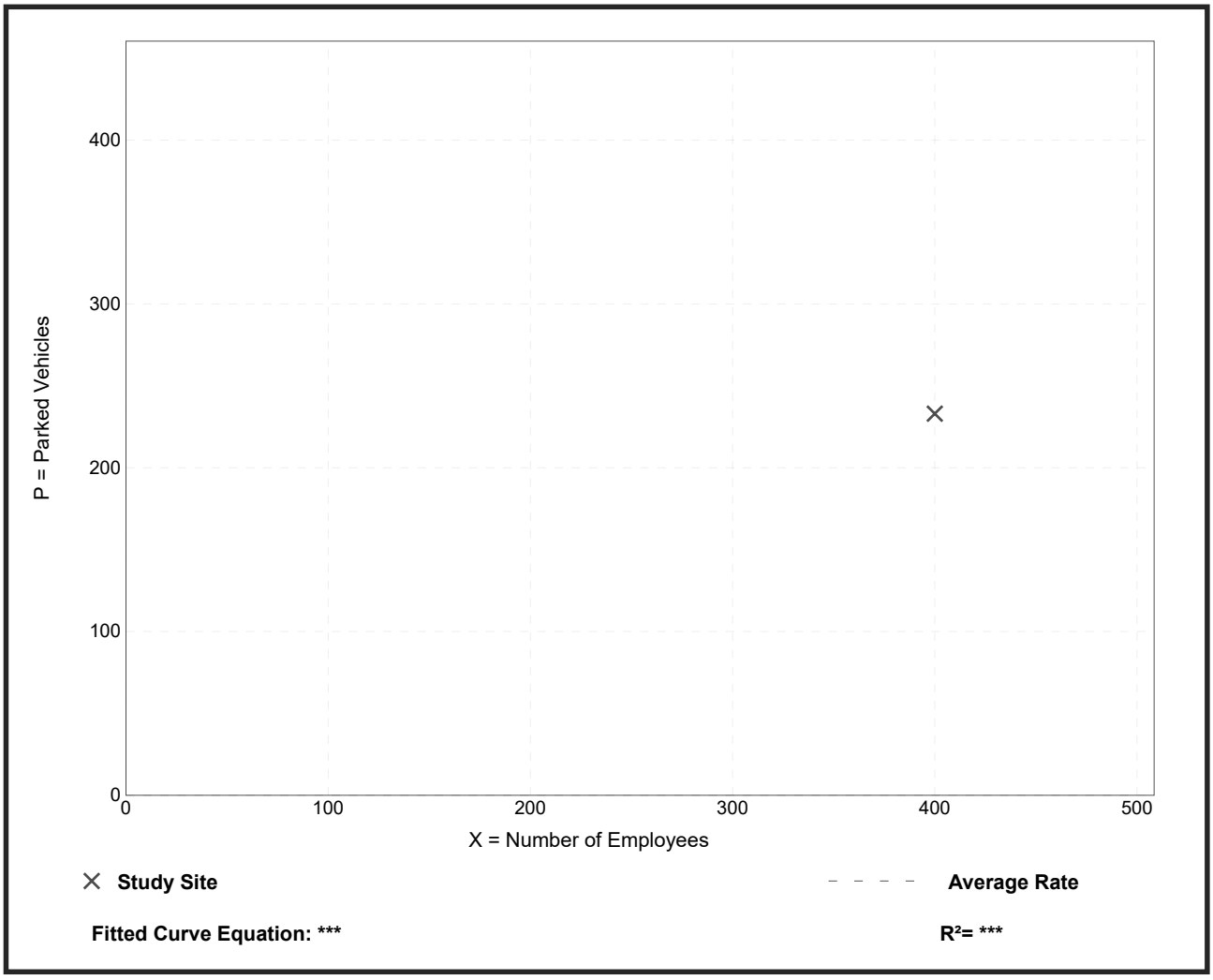
Peak Period Parking Demand vs: **Employees**
On a: **Weekday (Monday - Friday)**
Setting/Location: **Dense Multi-Use Urban**
Peak Period of Parking Demand: **9:00 a.m. - 4:00 p.m.**
Number of Studies: 1
Avg. Num. of Employees: 400

Peak Period Parking Demand per Employee

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
0.58	0.58 - 0.58	*** / ***	***	***

Data Plot and Equation

Caution – Small Sample Size



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Single Tenant Office Building
(715)

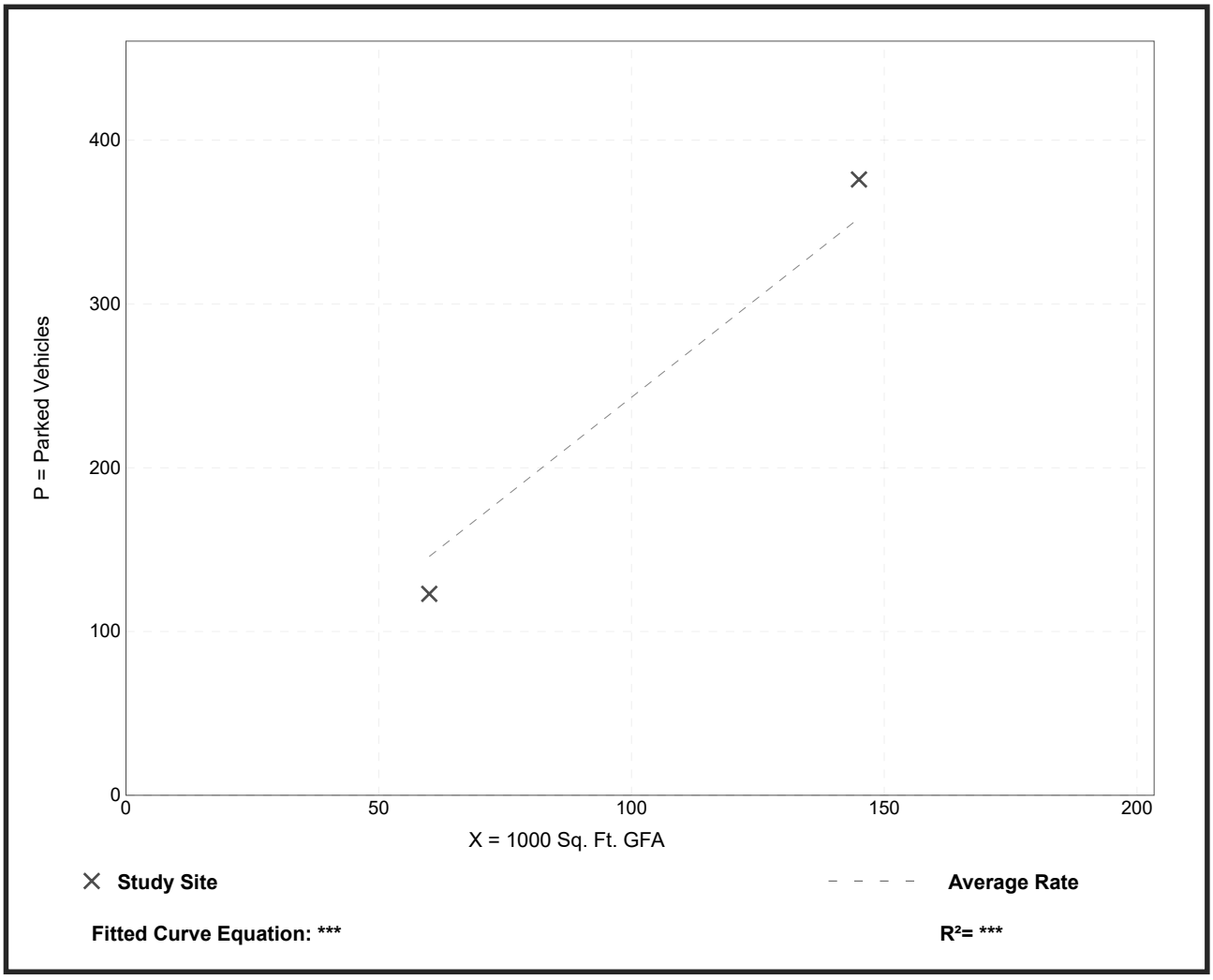
Peak Period Parking Demand vs: **1000 Sq. Ft. GFA**
On a: **Weekday (Monday - Friday)**
Setting/Location: **Dense Multi-Use Urban**
Peak Period of Parking Demand: **10:00 a.m. - 4:00 p.m.**
Number of Studies: 2
Avg. 1000 Sq. Ft. GFA: 103

Peak Period Parking Demand per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
2.43	2.05 - 2.59	*** / ***	***	***

Data Plot and Equation

Caution – Small Sample Size



Fitted Curve Equation: ***

R^2= ***

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Single Tenant Office Building
(715)

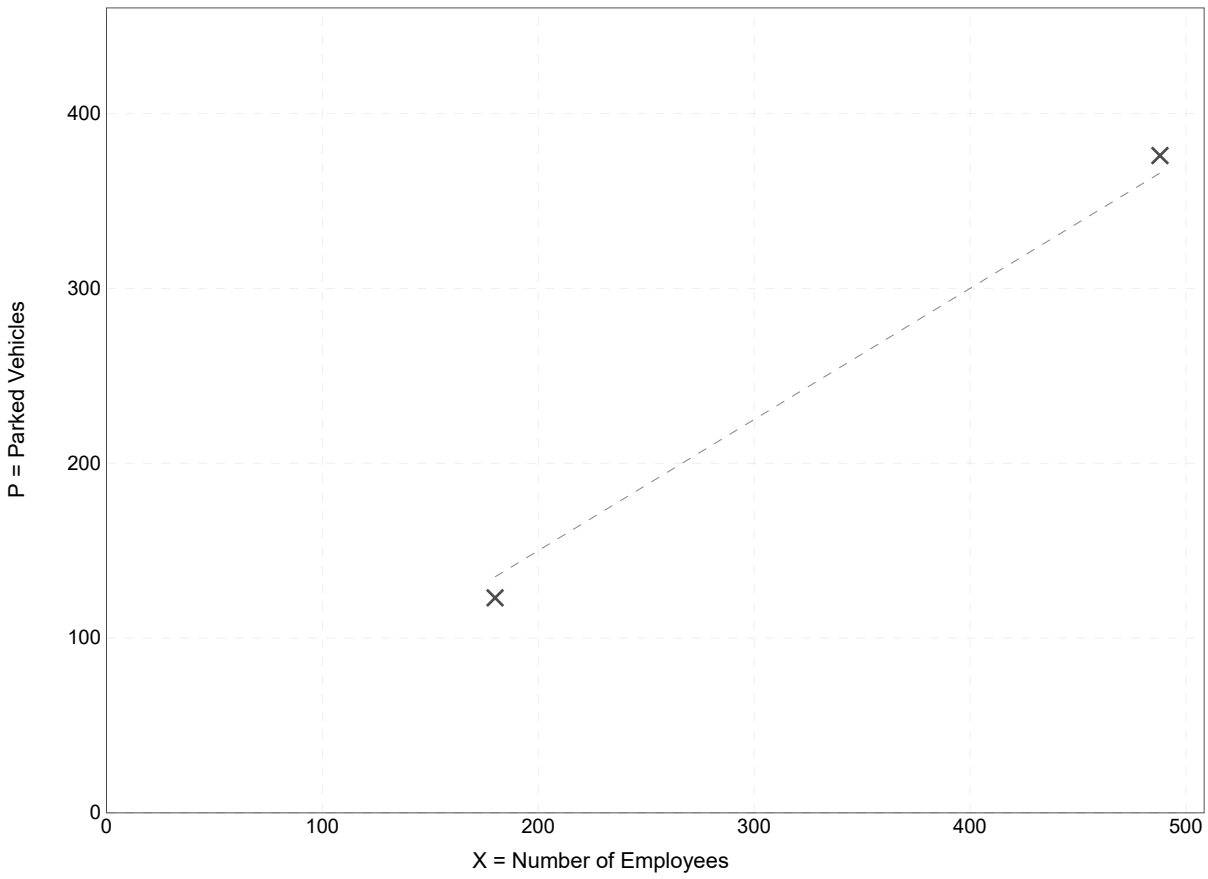
Peak Period Parking Demand vs: **Employees**
On a: **Weekday (Monday - Friday)**
Setting/Location: **Dense Multi-Use Urban**
Peak Period of Parking Demand: **10:00 a.m. - 4:00 p.m.**
Number of Studies: 2
Avg. Num. of Employees: 334

Peak Period Parking Demand per Employee

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
0.75	0.68 - 0.77	*** / ***	***	***

Data Plot and Equation

Caution – Small Sample Size



Fitted Curve Equation: ***

R^2= ***

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APPENDIX C: Mountain Line TDM Policy

Northern Arizona Intergovernmental Public Transportation Authority
3773 N. Kaspar Drive · Flagstaff, AZ 86004 · 928-679-8900 · FAX 928-779-6868 · www.mountainline.az.gov

Employee and Visitor Transportation Demand Management Program for the New

Mountain Line Downtown Connection Center

Transportation Demand Management (TDM) is an important component of Mountain Line's work. Mountain Line employs one of the first TDM certified professionals in the country and is a member of the Association for Commuter Transportation, which is the foremost TDM professional organization in the country. Mountain Line has also developed multiple plans to enhance TDM within the city including the US 180 Plan, the On Demand Plan, Transit Guidelines and the 5-Year Plan. With that, Mountain Line is committed to be a model employer TDM program as we move forward with the DCC. Key components of the TDM program will include:

Bus passes:

- Every Mountain Line employee is automatically issued a free bus pass embedded in their employee ID. No opt in or extra steps needed.
- All employees are given free annual buses passes for family and an additional community member pass, further reducing driving to site by personal visitors.
- Mountain Line also offers a guaranteed ride home program.

Park and Ride

- Mountain Line will identify park and ride locations that can be used by employees traveling to the new DCC location – the existing Kaspar facility on the east side and is working on a to be determined location the west side.
- The Kaspar location will act as a park and ride for employees working at DCC. Route 2 runs every 20 minutes directly from this site to DCC. Employees will be allowed to clock in for travel time.

Biking Programs:

- Mountain Line will keep a fleet of mobility devices including bikes, e-bikes and scooters, at the DCC for staff, free of charge for mid-day trips. Mobility devices may be checked out to take home at night for commuting to and from work as well in a bike library format.
- Mountain Line will incentivize commuting by bike offer a bike reimbursement program to employees who commute by bike for 50% or more of their commuting trips each year.

Teleworking and Flexible Schedules:

Mountain Line has both teleworking and flextime policies available to staff whose job is conducive to alternative work schedules and environments. Teleworking days are unlimited but

Updated 6/15/2021

eligible employees commit to regular schedules. Mountain Line spreads telework days out evenly amongst to ensure teleworking is evenly spread throughout the week. Flex schedules allow for reduction of required staff in the office and promote shared work spaces.

Education

Mountain Line offers regular travel training programs, showing people how to commute on alternatives modes with one on one trainer who travels their route with them and offers continuing lunch and learn programs to help people reduce trips to the worksite.

Updated 6/15/2021

PLANNING AND DEVELOPMENT SERVICES REPORT
CONDITIONAL USE PERMIT

PUBLIC HEARING | **DATE:** November 17, 2021
PZ-21-00094-02 | **MEETING DATE:** December 8, 2021
REPORT BY: Tiffany Antol, AICP

REQUEST:

A Conditional Use Permit request from Mountain Line to allow for the use of City-owned property as a Passenger Transportation Facility which includes a multi-phase development plan including the construction of a new 18,983 square foot structure, bus plaza, open space, and parking in the Commercial Service (CS) Zone, located at 216 W Phoenix Avenue.

STAFF RECOMMENDATION:

In accordance with the findings presented in this report, staff recommends approval of PZ-21-00094-02 with conditions.

PRESENT LAND USE:

This location is developed with an existing structure used for storage as well as parking and the existing Mountain Line Downtown Connection Center.

PROPOSED LAND USE:

The applicant proposes to develop the property in three phases including a new 18,983 square foot, two-story building, civic space, parking, and enlarged bus plaza.

NEIGHBORHOOD DEVELOPMENT:

North: Burlington & Santa Fe Railroad and Right-of-Way
East: Beaver Street Right-of Way, Commercial Development, Community Services (CS) Zone
South: Mixed Use Development, Restaurant, and Retail uses, utilizing a mix of Transect and Conventional Zones
West: Milton Road Right of-Way, Residential, Single-Family Residential Neighborhood (R1N) Zone

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I. Project Introduction

A. Background/Introduction

Section 10-40.30.040.B of the Flagstaff Zoning Code (Page 40.30-15), *Allowed Uses*, identifies "Passenger Transportation Facilities" as an allowed land use in the Commercial Service (CS) Zone subject to the approval of a Conditional Use Permit (CUP) by the Planning Commission. A Passenger Transportation Facility is defined as "facilities for public and commuter transportation including railroad or bus terminals, and service facilities for commercial motor vehicles used for commercial passenger transportation but excluding travel agencies or taxicabs."

The applicant, Mountain Line, has been using the existing site as a Passenger Transportation Facility since approximately 2008. At the time the use was established, a Conditional Use Permit was not required under the Land Development Code. In 2011, the City replaced the Land Development Code with the Flagstaff Zoning Code, which now requires a Conditional Use Permit for Passenger Transportation Facilities.

The applicant is proposing to demolish an existing storage building, which includes the existing Mountain Line Comfort Station, and construct a new two-story 18,983 square foot structure intended to house Mountain Line staff, bus operator facilities, and patron amenities, as well as develop community civic space, and expand the existing bus plaza as part of a multi-phased development. The City has preserved areas for future parking and the potential for a future parking garage as the site develops over time.

The applicant is proposing to redevelop the site in several phases. Phase 1 includes the new structure located at the intersection of Milton Road and Phoenix Avenue, associated site improvements, and public civic spaces adjacent to the building. During Phase I the existing parking and transit operation remain as they are currently. A temporary pedestrian way will be developed to connect the two areas as part of Phase 1. Phase 2, which is dependent on the completion of the Rio de Flag project work on this site, includes the expansion of the bus plaza and extension of the FUTS trail through this site. It is anticipated that the Rio de Flag work on-site will remove the existing pedestrian bridge that connects the site to Beaver Street. At the time Phase 2 is constructed, pedestrian access will have to be relocated if this bridge is removed. Phase 2 may likely occur within two separate steps by two different entities (Mountain Line and the City of Flagstaff). As the bus plaza area expands, a large portion of the existing parking area is removed. The City intends to replace the lost parking through one of two options, which includes interim surface parking or the construction of a parking garage. Phase 2 also includes a larger expanded civic space that is intended to serve the larger neighborhood/community. Phase 3 is the construction of a parking garage by the City of Flagstaff on the subject site. It is likely that the FUTS will have to be relocated on-site to accommodate a garage.

Mountain Line is also working with ADOT to improve the intersection of Phoenix Avenue and Milton Road to increase the efficiency and effectiveness of transit service. A traffic impact analysis is currently in review.

II. Required Findings

The Planning Commission may approve the Conditional Use Permit only after making a finding that:

A. Finding #1:

The conditional use is consistent with the objectives of the Zoning Code and the purpose of the Zone in which the site is located.

"The Commercial Service (CS) zone applies to areas of the City appropriate for those service industries and support activities necessary to maintain viable commercial retail trade centers. The development of residential uses in addition to commercial uses is encouraged in this zone; provided, that residential uses are located above or behind the primary commercial service use."

A Passenger Transportation Facility as a service is listed as being appropriate as a supporting activity in the Commercial Service (CS) zone.

B. Finding #2

That granting the conditional use will not be detrimental to the public health, safety, or welfare.

If the proposed project is developed in accordance with City codes, standards, and requirements, the project should not be detrimental to the public health, safety, or welfare. The site is currently used as a Passenger Transportation Facility. The conditional use permit specifically approves the expansion, redesign, and construction of new facilities related to the existing use on-site.

C. Finding #3

The characteristics of the conditional use as proposed, and as it may be conditioned, are reasonably compatible with the types of uses permitted in the surrounding area. The Conditional Use Permit shall be issued only when the Planning Commission finds that the Applicant has considered and adequately addressed the following to ensure that the proposed use will be compatible with the surrounding area (Flagstaff Zoning Code Section 10-20.40.050.E.3):

- Access, traffic, and pedestrian, bicycle, and vehicular circulation;
- Adequacy of site and open space provisions, including resource protection standards, where applicable;
- Noise, light, visual, and other pollutants;
- Proposed style and siting of structure(s), and relationship to the surrounding neighborhood;
- Landscaping and screening provisions, including additional landscaping in excess of otherwise applicable minimum requirements;
- Impact on public utilities;
- Signage and outdoor lighting;
- Dedication and development of streets adjoining the property; and
- Impacts on historical, prehistoric, or natural resources.

1. Access and Traffic; Pedestrian, Bicycle, and Vehicular Circulation

Primary access to the existing and proposed Downtown Connection Center is provided from Phoenix Avenue. Phase 1 development will not alter the current configuration of driveways, access points, or vehicular parking areas within the bus plaza area, however, existing parking is removed and is replaced with a new building. In Phase 2, two access points on Phoenix Avenue will be solely for the use of buses accessing the site. All other vehicle access to parking areas will be accommodated through driveways on both Phoenix Avenue and Beaver Street.

Project development includes a new sidewalk and parkway improvements along both Phoenix Avenue and Milton Road. These improvements will also be phased throughout the development of the site. A FUTS trail will also be accommodated through the site within Phase 2 of the development.

This Passenger Transportation Facility, also referred to as the Downtown Connection Center (DCC), is a unique use which is not adequately covered by the parking standards found within the Zoning Code. In these situations, applicants can submit a parking demand study to show why their use requires a specific amount of parking. Large portions of the proposed building are used by patrons and drivers of the Mountain Line buses. They are not in need of parking spaces to access all the resources of the DCC. The portion of the facility designed for these uses is eliminated from the parking requirements for the site. The parking demand study focuses on the portion of the building occupied by employees that need to travel to and from the site daily. The study removes all unoccupied areas of the building from the parking calculations including storage areas, hallways, and corridors. The study also applies travel demand management options provided to the employees who will occupy the building to use alternative modes of transportation. Utilizing these techniques reduces the total amount of parking required for the building to 15 spaces. The concept plan shows five new parking spaces proposed within the existing right-of-way for Phoenix Avenue extending onto the subject property. These five spaces are still preliminary as they may need to be replaced with a future turn lane to accommodate improvements as proposed to the Milton Road/Phoenix Avenue intersection. If that is the case, then all 15 required parking spaces will need to be provided within the existing parking areas located on-site and currently managed by Park Flag. A separate agreement between Mountain Line and the City of Flagstaff will need to be completed in order to allow

the use of these spaces for the DCC.

2. Adequacy of Site/Open Space/Resource Provisions

The Applicant is proposing to construct an approximately 18,983 square foot building on the western portion of the property at the intersection of Milton Road and Phoenix Avenue. For developments with over 20,0000 square feet, civic space is required to be provided at a rate of 5% of the gross development site. The building does not meet this threshold to require civic space be provided but abundant civic space has been added to the site based on the nature of the use as well as suggestions within the Southside Community Plan. The concept plan shows the proposed building complying with all the required development standards of the Commercial Services (CS) Zone including setbacks, building height, and Floor Area Ratio (FAR). Dedicated open space is not required in commercial and industrial developments and is instead accomplished through compliance with landscaping standards. The subject property is not located in the Resource Protection Overlay.

3. Noise, Light, Visual, and Other Pollutants

It is not anticipated that the proposed use will create any noise, visual, or other pollutants into the area. All exterior lighting will be required to comply with the City of Flagstaff's strict outdoor lighting requirements which supports and maintains our designation as an International Dark Sky City.

4. Style and Siting of Structure(s) and Relationship to Surrounding Neighborhood

The proposed building elevations have been designed in accordance with the Site Planning Design and Architectural Design Standards as identified in the Zoning Code. The architecture could be called "modern mountain" using rusticated and natural materials with a modern building form. This includes a building forward design with prominent pedestrian access points and ample civic space. Public civic spaces are provided in conjunction with the construction of the DCC building in Phase 1 as well as with the development of the bus plaza area as part of Phase 2. The proposed building is similar in profile and shape to many of the buildings within the surrounding neighborhood and meets the compatibility elements as addressed in the Zoning Code.

5. Landscaping and Screening

The site is proposed to be landscaped in accordance with the requirements of the Zoning Code. A concept landscape plan is provided for Phase 1 of the development of the site. Phase 2 landscape plans will be prepared in conjunction with the development plans affiliated with that phase.

6. Impact on Public Utilities

Only new service lines are required to serve the proposed structure with water and sewer. A water/sewer impact analysis was not required for this project and no off-site improvements are required.

7. Signage and Outdoor Lighting

The application does not include any proposed signage or lighting as the plans are currently still preliminary. Any new signage or lighting will have to comply with the relevant Zoning Code requirements.

8. Dedication and Development of Streets

No new right-of-way dedication is required for this project at this time.

9. Impacts on Resources

This subject property is not located within the Resource Protection Overlay. A natural resource protection

plan was not required or reviewed in conjunction with the site plan for this development. The buildings on-site are not over 50 years of age.

Conditions of approval will only be imposed if they are necessary to ensure the intent and purpose of the Zoning Code are met; to ensure compatible and complementary development of the property; and to ensure the provision of appropriate off-site improvements will be fulfilled.

III. Citizen Participation

The applicant has gone above and beyond the minimum requirements for public involvement on the case. The attached public involvement plan details the meetings that have been held over time to discuss this project. The applicant held three virtual neighborhood meetings on September 15, 2021, and September 30, 2021, to fulfill the requirements for this CUP. A total of 27 community members participated in the virtual public meetings. In total, Mountain Line received 35 comments from the public. The comments are detailed in the applicant's report as either complimentary, neutral, or critical, and each with responses on how the comments were addressed. To date, staff has received one comment from the public about this application which is also attached.

IV. Recommendation:

The Inter-Division Staff (IDS) team approved the concept plan for this project on October 26, 2021. Staff recommends that the request for the CUP be granted by the Planning Commission with the requirements included in Conditional Use Permit No. PZ-21-00094-02 and as follows:

1. The development of the site shall substantially conform to the plans as presented with the Conditional Use Permit application and the concept plan as approved by the Inter-Division Staff on October 26, 2021.
2. Development of the site shall not occur until an Intergovernmental Agreement (IGA) has been executed by both the City of Flagstaff and Mountain Line that details the terms for the use of the property owned by the City of Flagstaff. Any modifications to the development plan because of the executed IGA shall be reviewed by the Inter-Division Staff for compliance with all codes and requirements.
3. The City Council shall approve the associated Parking Demand Study prior to the submission of building permits. The City Council shall agree to provide the required parking spaces for the new DCC building within the existing and future parking areas on-site.

V. Attachments:

The draft documents have been prepared in accordance with the staff recommendation and do not indicate the Commission's final decision. These documents will be updated after the public hearing on this case to reflect the Commission's decision.

- Draft Conditional Use Permit No. PZ-20-00071-05
- Draft Notice of Decision
- Conditional Use Permit Application
    - Narrative
    - Public Involvement Plan
    - Public Feedback Summary
    - Parking Demand Study
    - Concept Plan Plan
        - Phasing Plan
        - Phase 1 Landscape Plan
        - Building Elevations

NAIPTA MOUNTAIN LINE
DOWNTOWN CONNECTION CENTER (DCC)
216 W. PHOENIX AVENUE, FLAGSTAFF, AZ 86001
APN: 100-43-003B

CONDITIONAL USE PERMIT
NOVEMBER 5, 2021

PROPERTY OWNER

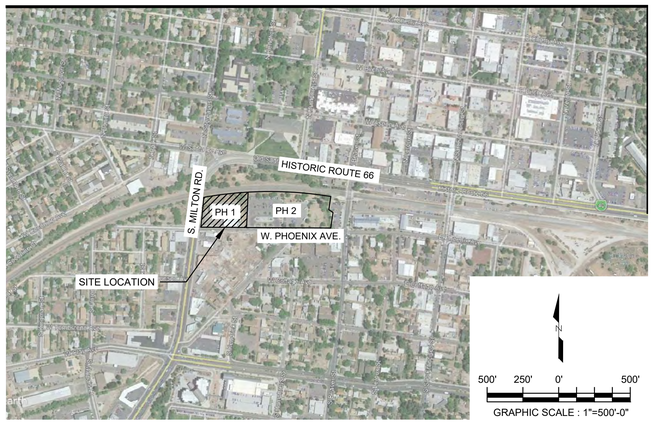
CITY OF FLAGSTAFF
211 W. ASPEN AVENUE
FLAGSTAFF, AZ 86001
(928) 637-8384
CONTACT: BRYCE DOTY

DEVELOPER

MOUNTAIN LINE
3773 N. KASPER DRIVE
FLAGSTAFF, AZ 86004
(928) 679-2423
CONTACT: KATE MORLEY

PREPARER

AECOM
7720 N. 16TH STREET, SUITE 100
PHOENIX, AZ 85020
(602) 371-1100
CONTACT: JENNIFER LOVE



VICINITY MAP

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SITE MASTER PLAN

REV	DATE	DESCRIPTION

Submittal: **CONDITIONAL USE PERMIT**

Seal: **PRELIMINARY** NOT FOR CONSTRUCTION

Consultant: AECOM
7720 North 16th Street
Suite 100
Phoenix, AZ 85020
Phone: (602) 371-1100

Submitted By:

Client: Northern Arizona Intergovernmental NAIPTA Public Transportation Authority; MOUNTAIN LINE

Approved By:

Designed By:	JM
Drawn By:	KB/JM
Checked By:	CL
Approved By:	

NAIPTA MOUNTAIN LINE
DOWNTOWN CONNECTION CENTER (DCC)

216 W. PHOENIX AVENUE, FLAGSTAFF, AZ 86001
ASSESSOR'S PARCEL NUMBER (APN) 1004405A, 10043003B, 10043001D

PROPERTY OWNER: BRYCE DOTY, CITY OF FLAGSTAFF, (928) 637-8384
DEVELOPER: KATE MORLEY, MOUNTAIN LINE, (928) 679-8903
3773 N. KASPER DRIVE, FLAGSTAFF, AZ 86004
PREPARER: JENNIFER LOVE, AECOM, (602) 648-2423

@ 24X36

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Submittal Date:	11/5/2021
Contract No.:	60595394
Sheet No.:	2

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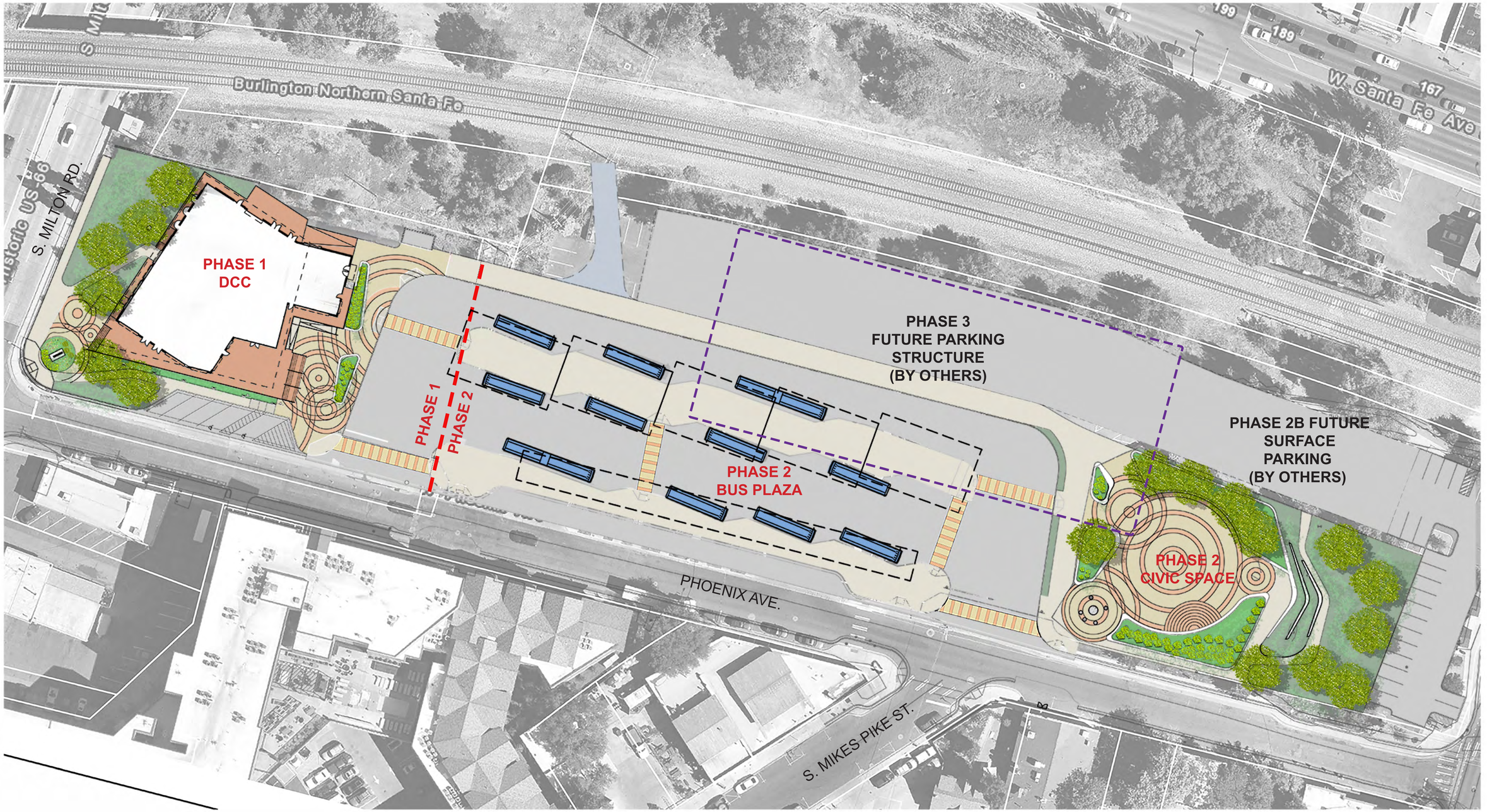

PHASING PLAN

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REV	DATE	DESCRIPTION

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Seal: **PRELIMINARY NOT FOR CONSTRUCTION**

Consultant:
AECOM
7720 North 16th Street
Suite 100
Phoenix, AZ 85020
Phone: (602) 371-1100

Submitted By: _____

Client: Northern Arizona Intergovernmental Public Transportation Authority (NAIPTA); MOUNTAIN LINE

Approved By: _____

Designed By:	JM
Drawn By:	KB/JM
Checked By:	CL
Approved By:	

NAIPTA MOUNTAIN LINE
DOWNTOWN CONNECTION CENTER (DCC)

216 W. PHOENIX AVENUE, FLAGSTAFF, AZ 86001
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Submittal Date:	11/5/2021
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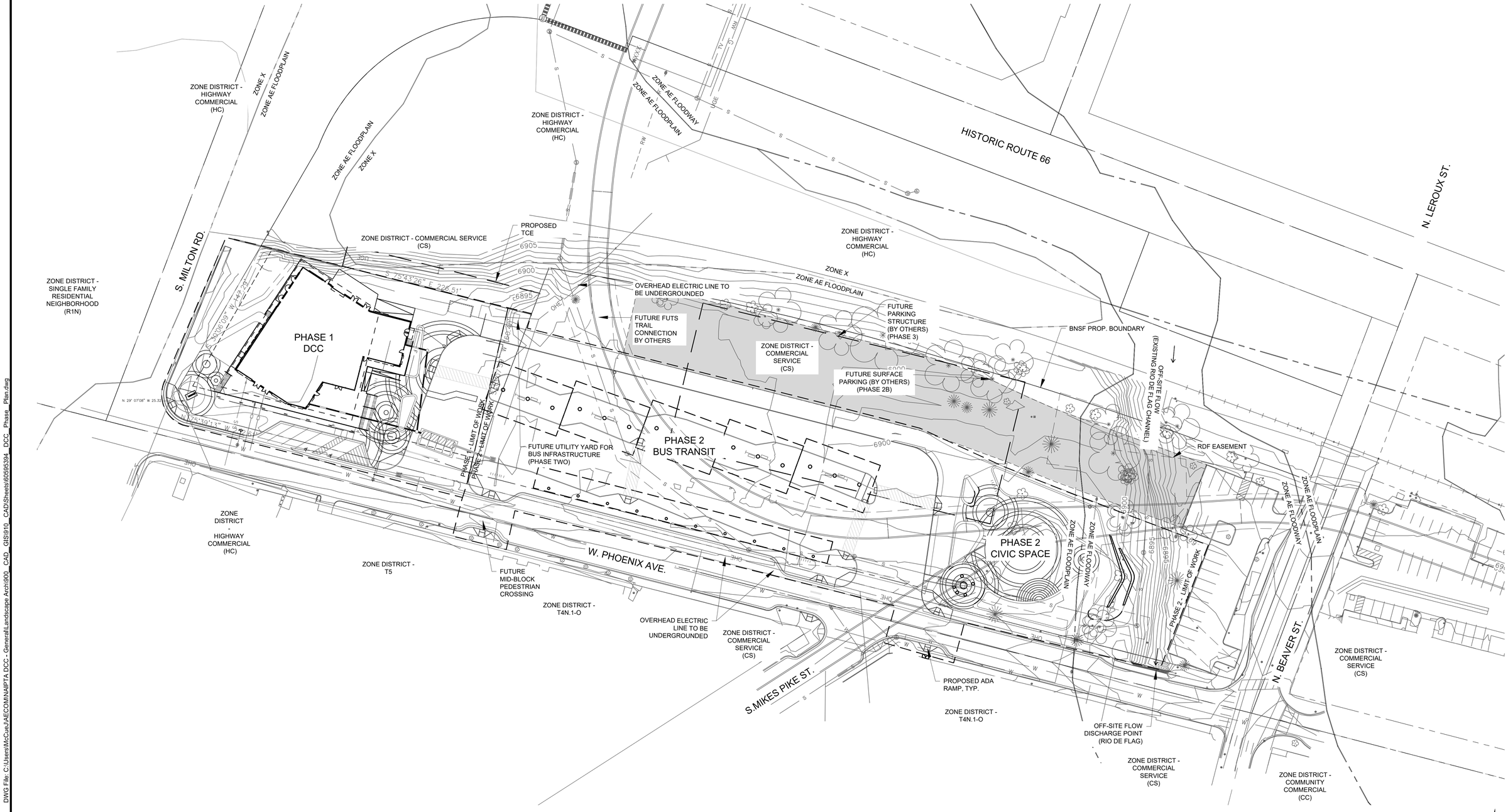
Sheet No.:	3



SITE PLAN
PHASING PLAN

REV	DATE	DESCRIPTION
	15-11	
	28-Oct-2021	

Submittal: CONDITIONAL USE PERMIT

Seal: **PRELIMINARY** NOT FOR CONSTRUCTION

Consultant: AECOM
7720 North 16th Street
Suite 100
Phoenix, AZ 85020
Phone: (602) 371-1100

Submitted By: _____

Client: Northern Arizona Intergovernmental NAIPTA Public Transportation Authority; MOUNTAIN LINE

Approved By: _____

Designed By: JM
Drawn By: KB/JM
Checked By: CL
Approved By:

NAIPTA MOUNTAIN LINE
DOWNTOWN CONNECTION CENTER (DCC) - PHASE ONE
216 W. PHOENIX AVENUE, FLAGSTAFF, AZ 86001
ASSESSOR'S PARCEL NUMBER (APN) 1004405A, 10043003B, 10043001D

PROPERTY OWNER: BRYCE DOTY, CITY OF FLAGSTAFF, (928) 637-8384
DEVELOPER: KATE MORLEY, MOUNTAIN LINE, (928) 679-8903
3773 N. KASPER DRIVE, FLAGSTAFF, AZ 86004
PREPARER: JENNIFER LOVE, AECOM, (602) 648-2423

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Submittal Date: 11/05/21
Contract No.: 60595394
Sheet No.: 4

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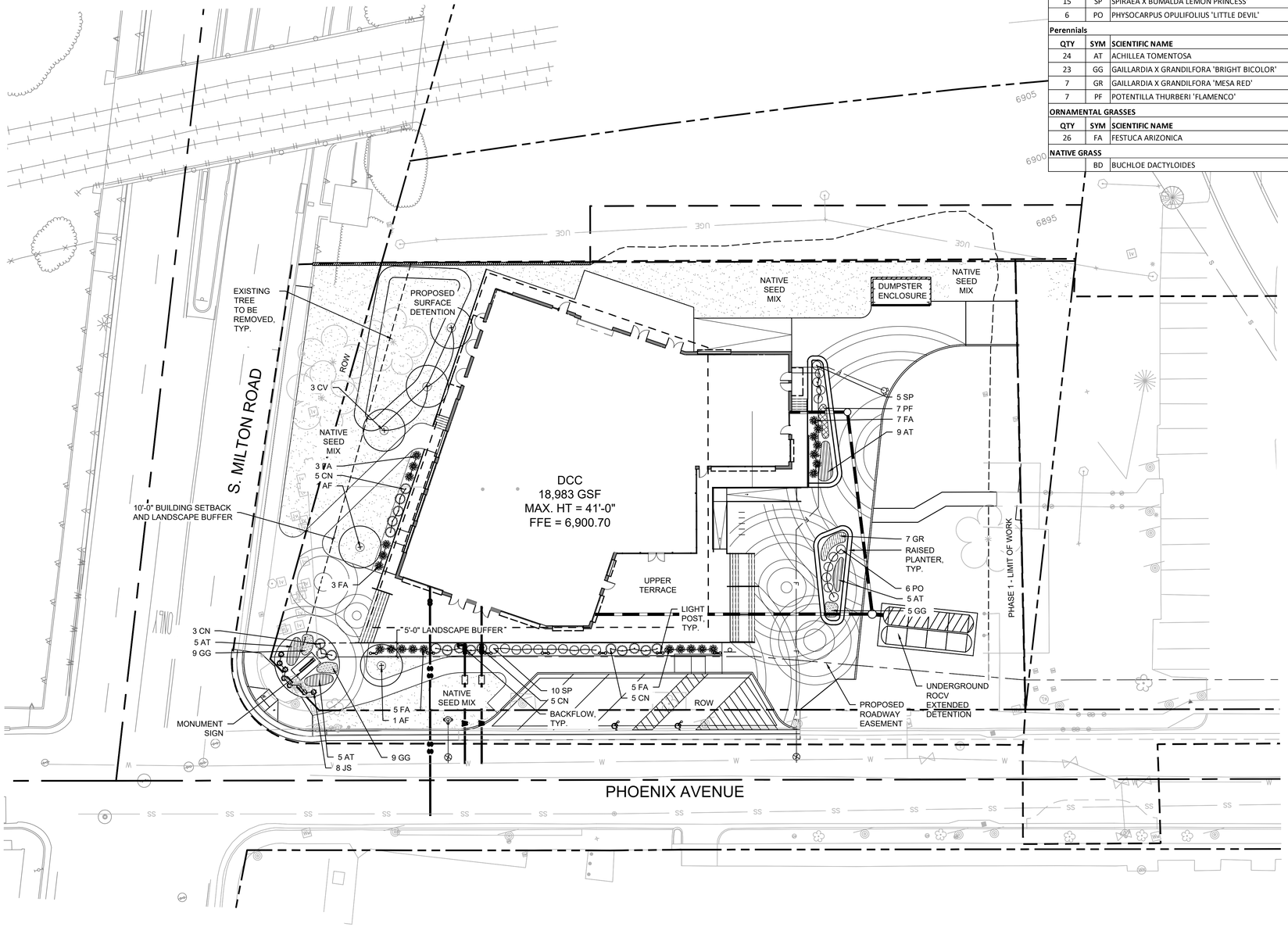
McCue, Jodi

PHASE ONE - DCC PLANTING SCHEDULE							
Trees							
QTY	**SYM**	**SCIENTIFIC NAME**	**COMMON NAME**	**SIZE**	**CONDITION**	**COMMENTS**	**NATIVE**
2	AF	ACER X FREEMANII 'ARMSTRONG'	ARMSTRONG MAPLE	2" CAL.	B&B	SPACING AS PER PLAN	NATURALIZED
Ornamental Trees							
QTY	**SYM**	**SCIENTIFIC NAME**	**COMMON NAME**	**SIZE**	**CONDITION**	**COMMENTS**	
3	CV	CRATAEGUS VIRIDIS 'WINTER KING'	WINTER KING HAWTHORN	2" CAL.	B&B	SPACING AS PER PLAN	NATURALIZED
Shrubs							
QTY	**SYM**	**SCIENTIFIC NAME**	**COMMON NAME**	**SIZE**	**CONDITION**	**COMMENTS**	
13	CN	CHRYSOTHAMNUS NAUSEOSUS VAR. NAUSEOUSUS	DWARF BLUE RABBITBUSH			SPACING AS PER PLAN	NATIVE
8	JS	JUNIPERUS SQUAMATUS 'BLUE STAR'	BLUE STAR JUNIPER	18"	CONT.	SPACING AS PER PLAN	NATURALIZED
15	SP	SPIRAEA X BUMALDA LEMON PRINCESS'	LEMON PRINCESS SPIRAEA	18"	CONT.	SPACING AS PER PLAN	NATURALIZED
6	PO	PHYSOCARPUS OPULIFOLIUS 'LITTLE DEVIL'	LITTLE DEVIL NINEBARK	18"	CONT.	SPACING AS PER PLAN	NATIVE
Perennials							
QTY	**SYM**	**SCIENTIFIC NAME**	**COMMON NAME**	**SIZE**	**CONDITION**	**COMMENTS**	
24	AT	ACHILLEA TOMENTOSA	WOOLY YARROW	NO. 1	CONT.	24 IN. SPACING; CLUMP	NATIVE
23	GG	GAILLARDIA X GRANDILFORA 'BRIGHT BICOLOR'	BRIGHT BICOLOR BLANKET FLOWER	NO. 1	CONT.	12 IN. SPACING; CLUMP	NATIVE
7	GR	GAILLARDIA X GRANDILFORA 'MESA RED'	MESA RED BLANKET FLOWER	NO. 1	CONT.	24 IN. SPACING; CLUMP	NATIVE
7	PF	POTENTILLA THURBERI 'FLAMENCO'	FLAMENCO CINQUFOIL	NO. 1	CONT.	24 IN. SPACING; CLUMP	NATIVE
ORNAMENTAL GRASSES							
QTY	**SYM**	**SCIENTIFIC NAME**	**COMMON NAME**	**SIZE**	**CONDITION**	**COMMENTS**	
26	FA	FESTUCA ARIZONICA	ARIZONA FESCUE	NO. 1	CONT.	SPACING AS PER PLAN	NATIVE
NATIVE GRASS							
	BD	BUCHLOE DACTYLOIDES	BUFFALO GRASS	SOD			NATIVE



LANDSCAPE PLAN - PHASE 1

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20' 10' 0' 20'
1"=20'-0"

REV	DATE	DESCRIPTION

Submittal: CONDITIONAL USE PERMIT

Seal: PRELIMINARY NOT FOR CONSTRUCTION

Consultant:
AECOM
7720 North 16th Street
Suite 100
Phoenix, AZ 85020
Phone: (602) 371-1100
Submitted By: _____

Client:
Northern Arizona Intergovernmental NAIPTA Public Transportation Authority
MOUNTAIN LINE
Approved By: _____

Designed By: JM
Drawn By: JM
Checked By: CL
Approved By:

NAIPTA MOUNTAIN LINE
DOWNTOWN CONNECTION CENTER (DCC) - PHASE ONE
216 W. PHOENIX AVENUE, FLAGSTAFF, AZ 86001
ASSESSOR'S PARCEL NUMBER (APN): 1004405A, 1004303B, 1004301D
PROPERTY OWNER: BRYCE DOTY, CITY OF FLAGSTAFF, (928) 637-8384
DEVELOPER: KATE MORLEY, MOUNTAIN LINE, (928) 679-8903
3773 N. KASPER DRIVE, FLAGSTAFF, AZ 86004
PREPARER: JENNIFER LOVE, AECOM, (602) 648-2423

@ 24X36
CADD Filename: 60595394_DCC_Landscape_Plan.dwg
Submittal Date: 11/05/21
Contract No.: 60595394
Sheet No.: 5

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BUILDING PERSPECTIVE EAST

10/29/2021 3:22:56 PM

REV	DATE	DESCRIPTION

Submittal:

CONDITIONAL USE PERMIT

Seal:

PRELIMINARY
NOT FOR CONSTRUCTION

Consultant:

AECOM
7720 North 16th Street
Suite 100
Phoenix, AZ 85020
Phone: (602) 371-1100

Submitted By: _____

Client:

Northern Arizona Intergovernmental NAIPTA Public Transportation Authority

MOUNTAIN LINE

Approved By: _____

Designed By:	PA
Drawn By:	PA
Checked By:	NM, AH, TM
Approved By:	NM, AH

60595394 - NAIPTA DOWNTOWN CONNECTION CENTER

NAIPTA MOUNTAIN LINE
DOWNTOWN CONNECTION CENTER (DCC) - PHASE ONE
216 W. PHOENIX AVENUE, FLAGSTAFF, AZ 86001
ASSESSOR'S PARCEL NUMBER (APN): 100-44-005A, 100-43-003B, 100-43-001D
PROPERTY OWNER: BRYCE DOTY, CITY OF FLAGSTAFF, (928) 637-8364
DEVELOPER: KATE MORLEY, MOUNTAIN LINE, (928) 679-8903
3773 N. KASPER DRIVE, FLAGSTAFF, AZ 86004
PREPARER: JENNIFER LOVE, AECOM, (602) 648-2423C

@ 24X36	
Title:	Perspective View
Submittal Date:	11/5/21
Contract No.:	TBD
Sheet No.:	6

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Arizona Blue Stake, Inc.

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BUILDING PERSPECTIVE WEST

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REV	DATE	DESCRIPTION

Submittal: CONDITIONAL USE PERMIT

Seal: PRELIMINARY NOT FOR CONSTRUCTION

Consultant:
AECOM
7720 North 16th Street
Suite 100
Phoenix, AZ 85020
Phone: (602) 371-1100

Submitted By: _____

Client:
Northern Arizona Intergovernmental NAIPTA Public Transportation Authority
MOUNTAIN LINE

Approved By: _____

Designed By: PA
Drawn By: PA
Checked By: NM, AH, TM
Approved By: Approver

60595394 - NAIPTA DOWNTOWN CONNECTION CENTER

NAIPTA MOUNTAIN LINE
DOWNTOWN CONNECTION CENTER (DCC) - PHASE ONE
216 W. PHOENIX AVENUE, FLAGSTAFF, AZ 86001
ASSESSOR'S PARCEL NUMBER (APN): 100-40-05A, 100-40-003B, 100-40-001D
PROPERTY OWNER: BRYCE DOTY, CITY OF FLAGSTAFF, (928) 637-5384
DEVELOPER: KATE MORLEY, MOUNTAIN LINE, (928) 679-8903
3773 N. KASPER DRIVE, FLAGSTAFF, AZ 86004
PREPARER: JENNIFER LOVE, AECOM, (602) 648-2423C

@ 24X36
Title: Perspective View
Submittal Date: 11/05/21
Contract No.: TBD
Sheet No.: 7

CITY OF FLAGSTAFF

STAFF SUMMARY REPORT

To:	The Honorable Mayor and Council
From:	Erin Young, Water Resources Manager
Co-Submitter:	Andy Bertelsen
Date:	12/01/2021
Meeting Date:	12/07/2021

TITLE

Consideration and Possible Approval: Deviate from existing out of City Limits Water Policy and offer water service in exchange for acquiring easements, rather than purchase property rights for water line easements, for areas adjacent and surrounding Phases IV and V of the Switzer Canyon Water Transmission Main Project - OR - not deviate from policy, not offer water service, and move forward with purchase of property rights for water line easements.

STAFF RECOMMENDED ACTION:

Accept the Water Commission's recommendation *not* to deviate from policy, *not* to offer water service in exchange for property rights, and to move forward with purchase of property rights for waterline easements outside City limits along the Switzer Canyon Water Main Transmission Project, Phase IV & V.

EXECUTIVE SUMMARY:

Previous Council directed staff to explore the option of offering water service to parcels located outside the City limits and Urban Growth Boundary adjacent to phases IV and V of the Switzer Canyon Water Transmission Main project, possibly in exchange for property rights for waterline easements. On November 18, 2021, seeking clarification of the Water Commission's previous recommendation, staff brought this issue to the Water Commission, resulting in a revised recommendation not to deviate from existing Water Policy and purchase property rights for easements (see attached).

INFORMATION:

The Switzer Canyon Water Transmission Main Project replaces a 1950's transmission main with two new transmission mains. Starting in 2012 the City has completed three of five planned phases starting at the intersection of Switzer Canyon Road and Route 66 and heading North until the intersection of Fir Avenue and San Francisco Street. Phase IV and V will install the line up San Francisco Street, generally following the existing 16" water line across private property located in Coconino County and ending at City reservoirs two miles away.

On August 27, 2019, during an agenda item authorizing real property acquisitions for Phase IV and V, Council gave direction to staff to explore the option of offering water service in the areas outside the City Limits, possibly in exchange for property rights for waterline easements.

On November 19, 2020, staff brought the issue to the Water Commission, which made a recommendation to allow limited water service outside City limits to properties adjacent to the project under the following limited conditions:

- One meter per then existing parcel
- Enter into an agreement not to develop any further on each parcel
- Pay all applicable fees

On November 18, 2021, seeking clarification on the Water Commission's previous recommendation, staff brought the issue to the Water Commission again, explaining the challenges with offering or exchanging water service for real property rights in an equitable manner. Additionally, providing water service to some parcels may require the City provide water service to all parcels within the area/HOA. Sharing this information resulted in a revised recommendation not to offer water service in exchange for easements.

Phase IV is estimated at $1.7 million dollars, which includes design, property acquisition and construction. Account number 202-08-370-3428-0-4466. The City obtained appraisals with the cost for permanent and temporary easement acquisition estimated at $48,000 and $94,000, respectively.

Attachments: Presentation
Water Policy Service Outside City Limits

Update on Recommendation for Out-of-City Service: Switzer Phase IV

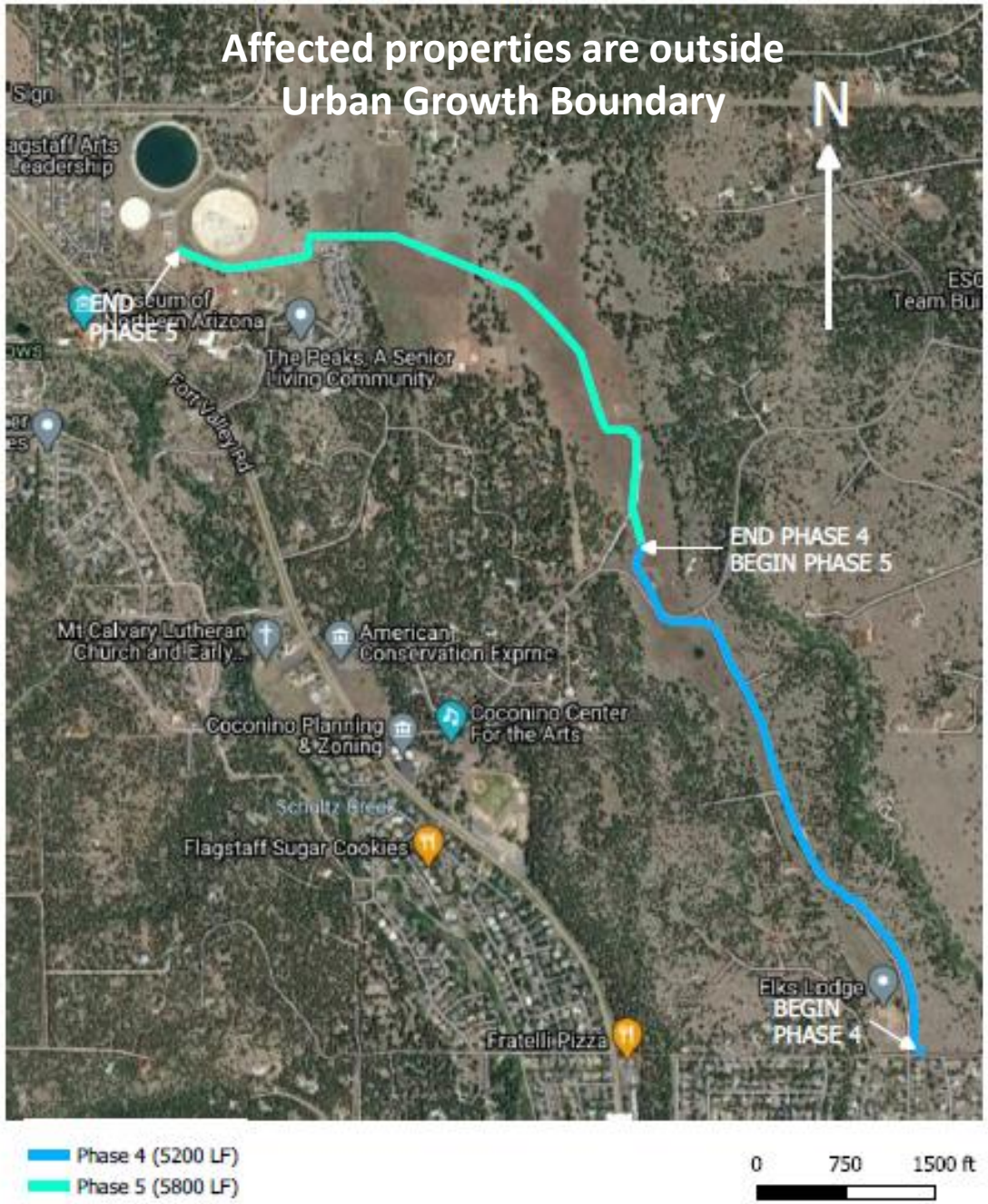
Andy Bertelsen

Water Services Division

TEAM FLAGSTAFF

WE MAKE THE CITY BETTER

FIGURE 1 - SWITZER CANYON WATER LINE
PHASE IV & V CURRENT ALIGNMENT



- 8/27 & 9/17 2019 Council meetings
  - Council authorized the acquisition of real property and/or easements for the Switzer Canyon Water Transmission Main Project – Phase IV & V
  - Council requested Staff explore exchanging or offering water services to offset land acquisition costs; return to Council with information

Water Commission 11/19/2020

- City Code 2-04-001-007 and Water Policy requires any person outside city limits apply to the Commission for water service
- Staff made recommendation to provide water service for these residents, with conditions outlined in a non-annexation type agreement, in exchange for or to offset costs of acquisition
- Staff will also seek appraisals of the property rights needed and negotiate with property owners to offset the cost of the fees necessary for the out of City water service.

New Information

- Appraisals estimated for Phase IV: $48,000 for permanent easement and $94,000 for temporary easement (total project cost = $1.7 million)
- Cost of acquisition varies for each parcel
- Adjacent properties part of HOA have requested water service
- No policy exists for providing a fair and equitable method for trading or providing water service in exchange for real property, where more than one property is affected

Staff Revised Recommendation

Staff have concerns

- Difficult to determine an exchange value in an equitable and fair manner
- Not all property owners responded
- Access to stub-outs require some property owners to allow pipeline access to neighbor properties
- Water service agreement binds property owners to criteria on meter size, number of meters/acre
- Setting precedent to offer water service in exchange for property on all waterline replacement projects that cross County properties?
- Setting precedent to design and construct stub-outs on all future transmission main projects? (e.g. Lockett Ranches, Harold Ranch Road)
- Hydrants, valves and stub-outs are additional points of potential leakage and maintenance, unless required for operation and maintenance of the system

Tonight's Question

Does Council wish to provide out of City Limits water service in exchange for easement rights?

Update Policy(s) and create a non-annexation agreement?

Staff recommendation: Accept the Water Commission's recommendations *not to deviate from policy, not to offer water service in exchange for real property, and move forward with purchase of real property needed for waterline easements* outside City limits along the Switzer Canyon Water Main Transmission Project, Phase IV &V

Discussion and Recommendation

WATER SERVICES DIVISION

Administration

Water and Sewer Service Outside Corporate City Limits

The City of Flagstaff provides water and sewer service to some customers who use the service in areas outside its City corporate limits. Water and sewer service to new customers who use the service outside the City limits is within the City's discretion, when the property is within the Urban Growth Boundary (FRP30 Policy WR4.3) These areas include unincorporated areas of Coconino County such as portions of Doney Park, Camp Townsend, Pine Del, Ft. Tuthill, and county islands within Flagstaff corporate limits. The purpose of this policy is to describe the conditions, requirements, and procedures for obtaining City of Flagstaff water (i.e., potable) and sewer service connections to areas located outside the corporate limits of the City of Flagstaff and within the Urban Growth Boundary.

Any property owner that would like to request public utility services outside of the urban growth boundary must first request and receive a major plan amendment to the Flagstaff Regional Plan 2030. The only exception are properties that are already receiving water services from the City based on an agreement dated prior to May 20, 2014. The Planning and Development Services can provide further information on these processes.

Per City Code 2-04-001-007 and the Utilities Integrated Master Plan/ Principles of Sound Water Management, the City of Flagstaff will consider out of city requests for water, sewer and reclaimed water service from prospective customers in unincorporated County areas that are located within or contiguous to the City of Flagstaff corporate limits using the following criteria:

a. All requests for out of city water, sewer or reclaimed water service must submit a written application to the Water Commission that will be processed by the Water Services and Planning Sections.
b. The applicant is encouraged to attend an Inter-Division Staff (IDS) Pre-application Meeting. This a free/ no cost meeting for the applicant, recommended for property owners wishing to have out of city services. The meeting will generally identify the relevant city codes, policies, site constraints, application requirements, associated fees, permitting and the review process.
c. The applicant must annex the parcel prior to receiving the requested service. If the parcel cannot be annexed the applicant must agree to and sign a pre-annexation agreement that will be developed by City staff.
d. The applicant must submit an Inter-Division Staff (IDS) Concept Plan application. Requests for service shall be evaluated by a cross-

divisional internal team. The City will consider the economic value, potential costs to existing ratepayers, operation and maintenance costs, impacts to water resources, adequateness of infrastructure, and regional land use plans prior to granting service requests. This will involve the entire City IDS review team and if required any external partners that may be affected. The estimated cost of the Concept Plan review is currently $812.00.

e. If an Impact Analysis (e.g. Water and Sewer, Traffic and Drainage) is warranted based on several criteria including land use intensity, a Site Plan review should follow. The applicant will provide staff with a Site Plan created by an Arizona Registered Professional Engineer or Architect using the Community Development Planning Section's Site Plan Checklist.

f. The applicant must also have the property surveyed by a Registered Land Surveyor in the State of Arizona and/ or provide a valid legal description of the parcel that will be attached to the Pre-Annexation Agreement.
(The estimated cost of paragraph (e) and (f) could be several thousand dollars.)

g. The City of Flagstaff's Legal Division and Planning Section will analyze the parcel to see if it meets the State's annexation criteria. If the property can be annexed the applicant must complete the Community Developments Annexation process before the service is provided.

h. After the Concept and/or Site plan Approval, Water Services will schedule the applicants request before the Water Commission for their review and recommendation for approval or denial. The Commission's reccomendation will then to be forwarded to the City Council.

i. If the application is approved by the Water Commission and the property cannot be annexed, the Planning Section will submit a legal request for the Pre-Annexation Agreement to be drafted. The draft will include any additional requirements identified by City staff. Once the Agreement is complete it will be reviewed and initialed by the applicant, appropriate final signatures and recording of the Resolution and Agreement will follow the final Council approval.

j. The applicant's proposed out-of-City water service will require a deviation from the Council's adopted Water Policy if the Property is not located within or contiguous to the City of Flagstaff corporate limits.

k. One requirement for all Agreements is to limit the number of parcels that may be serviced by the service and /or water meter to one parcel. The new service may not serve multiple parcels under single ownership.

l. Once all of the required reviews and approvals are in place, the Planning Section will schedule the final review on the next regular Council meeting agenda.

m. Applicant shall be required to pay all applicable outside City of Flagstaff development fees, capacity fees, connection fees, repayment agreement fees, construction plans and City, County and/ or State right-of-way permit fees.

n. In addition City Code requires that all water taps or connections made outside the corporate limits of the City shall pay the "Out of City" rate (currently at 110%) of the standard charges, fees and/ or deposits. Before connection to the water service is made, the applicant will pay water capacity fees based on the size of their new water meter.

CITY OF FLAGSTAFF

STAFF SUMMARY REPORT

To:	The Honorable Mayor and Council
From:	Barney Helmick, Airport Director
Co-Submitter:	Rick Tadder
Date:	12/01/2021
Meeting Date:	12/07/2021

TITLE:

Consideration and Adoption of Ordinance No. 2021-23: An ordinance of the City Council of the City of Flagstaff, amending the Flagstaff City Code, Title 3 Business Regulations, Chapters 3-10 User Fees, to establish airport parking fees, and amending Title 8 Public Ways and Property, Chapter 8-06, Airport Rules and Regulations, Section 001-8-06-001-0006.3 to provide for enforcement of airport parking and exemptions from parking fees; providing for penalties, repeal of conflicting ordinances, severability, and establishing an effective date

STAFF RECOMMENDED ACTION:

At the December 7, 2021 Council Meeting:
1) Read Ordinance No. 2021-23 by title only for the first time
2) City Clerk reads Ordinance No. 2021-23 by title only (if approved above)
At the December 28, 2021 Council Meeting:
3) Read Ordinance No. 2021-23 by title only for the final time
4) City Clerk reads Ordinance No. 2021-23 by title only (if approved above)
5) Adopt Ordinance No. 2021-23

Executive Summary:

This Ordinance will establish paid parking rates for Flagstaff Pulliam Airport effective January 28, 2022, and a rate increase effective July 1, 2023. The proposed rates have been presented to multiple groups including the Chamber of Commerce, the Airport Commission and Tourism Commission. The parking rates will help generate revenue to recover the cost of parking construction and ongoing expenses for airport parking.

Financial Impact:

Currently, parking at the Airport is free, and the City is constructing additional public parking space to meet parking needs. Adoption of a paid parking program will help the Airport to operate as an enterprise fund within the city. The parking rates are expected to cover the cost of construction of the new parking lot, operational costs and eliminate reliance on the City's General Fund in the annual budget process.

Enterprise Funds are used to account for operations that provide services to the general public for a fee. Enterprise funds are also required for any activity whose principal revenue sources meet any of the following criteria: 1) any activity that has issued debt backed solely by the fees and charges of the activity, 2) if the cost of providing services for an activity, including capital costs such as depreciation or debt service, must legally be recovered through fees and charges, or 3) it is the policy of the City to establish activity fees or charges to recover the cost of providing services, including capital costs.

Policy Impact:

This Ordinance will provide fiscal stability, and help control illegal use (e.g. personal storage of vehicles not related to airport travel).

Connection to PBB Priorities/Objectives, Carbon Neutrality Plan & Regional Plan:

Priority Based Budget Key Community Priorities and Objectives

High Performing Governance
Enhance the organization's fiscal stability and increase efficiency and effectiveness.

Carbon Neutrality Plan

Sustainable Innovative Infrastructure
Provide effective infrastructure for all modes of transportation

Regional Plan

Goal T.3.4 Actively manage parking, including cost and supply to support land use, transportation and economic development goals.

Has There Been Previous Council Decision on This:

December 10, 2019 Work Session: Staff provided an update on the temporary parking lot solutions and plans for developing additional airport parking including a paid parking system.
April 21, 2020 Council Meeting: Staff presented design concepts for the new airport parking lot and provided information on a paid parking system.
March 16, 2021 Council Meeting: Council awarded a contract for the construction of a new airport parking lot.
November 23, 2021 Work Session: Discussion on the proposed airport parking rates.

Options and Alternatives:

- Approve the Ordinance as written.
- Amend the Ordinance by changing rates or effective dates and provided direction to staff.
- Do not approve an Ordinance.

Background/History:

The Flagstaff Pulliam Airport is a key component to the global marketplace, facilitating local, national, and international commerce as well as supporting our number one economic driver, tourism. Business activity is dependent upon the existence of efficient access to all transportation modes, one being local air service. A recent economic study, performed by Arizona Department of Transportation, identified that the Flagstaff Pulliam Airport generates $60 million annually for our economy.

American Airlines and United Airlines both provide commercial service daily at our airport. American has routes to Phoenix and Dallas-Fort Worth and United provides a route to Denver. With the addition of United Airlines, our passenger enplanements grew by 72%. In 2020, during the height of the COVID pandemic, over 86,000 passengers continued flying out of Flagstaff Pulliam Airport with our highest enplanement year in 2019 reaching 123,957. This increased patron activity added to our need to increase parking capacity by constructing a second parking lot that will be complete in 2022.

Important to mention that long before we added more passengers to our footprint, we had several other factors that created parking issues for our patrons. We had several people parking at our airport that did not have airport business but merely were meeting at the airport, parking, and driving to their other destination. We also had some residents actually parking other vehicles in our lots as though it were a storage unit. In order for us to remove people that have no airport business from our lots, as well as serve our increased patron enplanement traffic, we recommend a paid parking program for both our

existing lot and the new lot that is almost complete. A paid parking model will help offer more spots to our flying public as well as create a long term revenue source for the airport to recover the cost of construction, provide for ongoing operational and maintenance and help the Airport become self-sustaining as an enterprise fund.

Our new parking lot will add 413 parking spaces to the total inventory, a bus turnout, wider sidewalks leading to the terminal, bicycle lanes, and we are including artwork and internal walk paths. The existing lot has 385 parking spaces and will need upgrades that will begin next summer. These upgrades will include a pavement seal coat, curb improvements, fencing, and paint striping.

The City of Flagstaff Management Services Division has prepared a financial plan including a rate analysis for the Flagstaff Pulliam Airport Parking Plan. The proposed rates are to ensure our Airport Fund has sufficient revenues to meet operational and capital obligations. It is our desire to establish service charges and rates that fully fund operations, maintenance, and capital for present and future airport funds.

The airport paid parking system will be different from our downtown ParkFlag's system in that airport users do not typically park by the hour. We will use a gate arm system that will include possible other elements within the airport terminal with a kiosk and even an ability to pay from your phone. These elements will be further discussed with our parking vendor. We have researched and found that we should not use a kiosk solely model like ParkFlag. Staff proposes a gated system will also help with security of the parked vehicles and much more.

Even though the airport system will be different than downtown's, our intent is to have the program managed by the same team within ParkFlag. Costs for staff and additional needs have been put into the attached financial plan. We anticipate that there will be efficiencies in using the same staff to manage the two programs, and we will have the parking experts monitoring all areas.

Prior to 2019, parking at the airport was always a negative situation during the key holiday travel periods. When the increase in passenger usage began in 2019 this impact became year around. This year we have seen a return of 95% of the 2019 passenger counts. We fully expect to see continued growth which will increase demand and a paid parking system will be a key solution to making sure our flying public has a good experience.

In 2022, we plan to monitor usage of both lots. This will allow us to continually look at options in the future to encourage alternative methods of travel to the airport that don't require always parking.

Community Involvement:

Staff posted a Notice of Proposed New Rates or Fees Related to Airport Parking on October 22, 2021 which provided a detailed analysis of the proposed airport parking rates. This notice provided the dates proposed for the Council consideration of airport parking rates and the Management Services phone number. We also posted this notice on the City of Flagstaff Facebook page. The public is welcome to attend the Council meeting and speak on the subject.

Airport staff presented a discussion on airport parking rates to the Airport Commission on October 17, 2021, to the Flagstaff Chamber of Commerce on November 14, 2021, and to the Tourism Commission on November 23, 2021.

Attachments: Ord. 2021-23
Financial Plan and Rate Analysis
Presentation

ORDINANCE NO. 2021-23

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF FLAGSTAFF, AMENDING THE FLAGSTAFF CITY CODE, TITLE 3 BUSINESS REGULATIONS, CHAPTER 3-10 USER FEES, TO ESTABLISH AIRPORT PARKING FEES, AND AMENDING TITLE 8 PUBLIC WAYS AND PROPERTY, CHAPTER 8-06, AIRPORT RULES AND REGULATIONS, SECTION 001-8-06-001-0006.3 TO PROVIDE FOR ENFORCEMENT OF AIRPORT PARKING AND EXEMPTIONS FROM PARKING FEES; PROVIDING FOR PENALTIES, REPEAL OF CONFLICTING ORDINANCES, SEVERABILITY, PROVIDING FOR CLERICAL CORRECTIONS, AND ESTABLISHING AN EFFECTIVE DATE

RECITALS:

WHEREAS, the City has authority to establish, operate, maintain, and improve airports pursuant to A.R.S. § 28-8411; and

WHEREAS, the City has constructed new parking lots at the Flagstaff Pulliam Airport and desires to establish a paid parking program; and

WHEREAS, the City has published and distributed notice of the proposed park parking rates or fees pursuant to A.R.S. § 9-499.15.

ENACTMENTS:

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF FLAGSTAFF AS FOLLOWS:

SECTION 1. In General.

The Flagstaff City Code, Title 3 Business Regulations, Chapter 3-10 User Fees, Section 3-10-001-009 Annual Adjustments; Adoption; Verification is renumbered as Section 3-10-001-010, and a new Section 3-10-001-009 is added to read as follows (additions shown as capitalized text):

3-10-001-009 PARKING FEES

A. RESERVED.

B. AIRPORT PARKING LOTS.

RATES	EFFECTIVE JANUARY 28, 2022	EFFECTIVE JULY 1, 2023
1ST HOUR	FREE	FREE
PER HOUR RATE (AFTER 1ST HOUR)	$ 2.00	$ 2.00
PER DAY RATE – TERMINAL LOT	$ 7.00	$ 8.00
PER DAY RATE – TERMINAL ECONOMY LOT	$ 5.00	$ 6.00
WEEKLY RATE – TERMINAL LOT	$ 42.00	$ 48.00
WEEKLY RATE – TERMINAL ECONOMY LOT	$ 30.00	$ 36.00

The Flagstaff City Code, Title 8 Public Ways and Property, Chapter 8-06 Airport Rules and Regulations, Section 8-06-001-006.3 Vehicle Parking Restrictions – A.R.S. §28-644 is hereby amended as set forth below (deletions shown as stricken, additions shown as capitalized text):

8-06-001-0006.3 VEHICLE PARKING RESTRICTIONS – ~~A.R.S. §28-644~~

A. No person shall park any motor vehicle on the Airport premises, except within designated parking areas.

B. No person shall park a motor vehicle or permit the same to remain halted on a vehicular parking area, aircraft movement area, fuel storage area or cargo facility except at such places and for such periods of time as may be prescribed by the Airport Manager.

C. No aircraft refueling, defueling, or other aircraft servicing equipment or apparatus shall be parked except in areas designated by the Airport Manager.

D. No person shall park a motor vehicle within any vehicular parking area except upon the payment of such parking fees and charges as may be prescribed. ANY PERSON PARKING AT THE FLAGSTAFF PULLIAM AIRPORT PUBLIC PARKING LOTS SHALL PAY RATES AS SET FORTH IN SECTION 3-10-001-009 PARKING FEES, WITH THE FOLLOWING EXCEPTIONS: CITY EMPLOYEES AND AIRPORT COMMISSIONERS PARKING AT THE AIRPORT FOR OFFICIAL CITY BUSINESS, EMPLOYEES OF AIRPORT TERMINAL LESSEES FOR LESSEE BUSINESS OPERATIONS, LAW ENFORCEMENT OFFICERS ON DUTY, AND U.S. POSTAL SERVICE EMPLOYEES ON DUTY.

E. Certain areas of the Airport shall be designated and properly marked with signs by the Airport Manager as reserved parking areas for "rental car" companies or other Airport tenant use only.

F. No camping is allowed on the Airport premises except by express permission of the Airport Manager.

G. PARKING RESTRICTIONS SHALL BE ENFORCED BY THE CITY PURSUANT TO CHAPTER 9-01 CITY TRAFFIC CODE. PARKING VIOLATIONS ARE SUBJECT TO FINES AND PENALTIES AS SET FORTH IN SAID CHAPTER 9-01.

SECTION 2. Penalties

Any person found in violation of this ordinance shall be guilty of a civil infraction and shall be fined a sum not to exceed five hundred dollars ($500.00). Any violation which is continuing in nature shall constitute a separate offense on each successive date the violation continues, unless otherwise provided.

SECTION 3. Repeal of Conflicting Ordinances

All ordinances and parts of ordinances in conflict with the provisions of the code adopted herein are hereby repealed.

SECTION 4. Severability

If any section, subsection, sentence, clause, phrase or portion of this ordinance or any part of the code adopted herein by reference is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions thereof.

SECTION 5. Clerical Corrections

The City Clerk is hereby authorized to correct clerical and grammatical errors, if any, related to this ordinance, and to make formatting changes appropriate for purposes of clarity, form, or consistency with the Flagstaff City Code.

SECTION 6. Effective Date

This Ordinance shall be effective thirty (30) days following adoption by the City Council.

PASSED AND ADOPTED by the City Council of the City of Flagstaff this 28th day of December, 2021.

_____
MAYOR

ATTEST:

_____
CITY CLERK

APPROVED AS TO FORM:

_____
CITY ATTORNEY

CITY OF FLAGSTAFF, ARIZONA

Airport Parking

Financial Plan and Rate Analysis Report - 2021

Management Services and Economic Vitality Divisions

October 2021

Executive Summary

The City Management Services Division has prepared a financial plan, including a rate analysis for the Airport Parking Plan of the Economic Vitality. The proposed rates are to ensure the Airport Fund has sufficient revenues to meet their operational and capital obligations.

The City desires service charges and rates that fully fund operations, maintenance, and present and future capital costs for Airport Fund. The purpose of the fiscal analysis is to provide a financial review of revenues that will cover the necessary expenditures.

Staff intends to provide City Council with a recommendation for parking rates at the December 7, 2021 and December 21, 2021 Council meetings. It is anticipated an Ordinance will be adopted with the new rates at the December 21, 2021 Council meeting with an effective date of January 21, 2022.

Airport Overview

The Flagstaff Pulliam Airport is a key component of Flagstaff's link to the global marketplace, facilitating local, national and international commerce as well as support the local tourism industry. Business activity is dependent upon the existence of efficient access to local air service. A recent economic study performed by Arizona Department of Transportation identified that the Flagstaff Pulliam Airport generates $60 million annually.

American Airlines and United Airlines both provide commercial service daily. American has routes to Phoenix and Dallas Fort-Worth and United provides a route to Denver. With the addition of United Airlines, our passenger enplanement has grown by 72%. Last year, over 86,000 passengers flew out of Flagstaff Pulliam Airport with our highest enplanement year reaching 123,957.

The airport offers 61 airport hangars that can be rented on a monthly basis for storage of personal aircraft. Out of the 61, we have 5 that are executive style that offer a larger storage capacity. The Airport Business Park has numerous businesses, such as T-Gen North, Joy Cone, and the airport has a partnership with Wiseman Aviation as our fixed based fuel operator.

The Airport Funds operates as an enterprise fund within the City of Flagstaff's municipal operations. Enterprise Funds are used to account for operations that provide services to the general public for a fee. Under GASB Statement No. 34, enterprise funds are also required for any activity whose principal revenue sources meet any of the following criteria: 1) any activity that has issued debt backed solely by the fees and charges of the activity, 2) if the cost of providing services for an activity, including capital costs such as depreciation or debt service, must legally be recovered through fees and charges, or 3) it is the policy of the City to establish activity fees or charges to recover the cost of providing services, including capital costs.

Airport Parking Cost Considerations

Overview

The City of Flagstaff's Airport Fund is investing approximately $4.9 Million to construct additional parking capacity and upgrade to a paid parking program. When developing the parking rates, staff is considering several components to assure our Airport Fund can sustain operations as an enterprise fund. Four areas developed within the rates are: recovery of capital investments, new operational expenses, capital investments for parking lot improvements/parking capital equipment and reducing the impact to the City's General Fund.

Capital Investment Recovery

The first portion of the parking rates consideration is to recover costs related to the capital investments made to expand parking at the airport. The airport utilized a short-term loan from our General Fund to complete the design, construction and upgrades related to the expanded parking. It is recommended that parking rates assist with paying for the investments made. The recovery period is currently set for a 15-year return which would require $330,000 in annual revenues.

Operational Expenses

Next, we have analyzed the cost of maintain a paid parking program including increase parking capacity. Airport staff has identified the following increased annual costs for the program:

- Parking Staff: $80,000
- Increased utilities: $10,000
- Increased landscape maintenance: $21,000
- Increase snow management: $19,000
- Hardware and software maintenance: $48,000
- Credit card fees: $90,000
- Annual striping and pavement maintenance: $20,000
    - Total annual costs: $288,000

As part of the long-range plan, staff is including an annual 3% inflation factor to the annual cost to assure that parking rates cover future growth in expenditures.

Capital investments for parking lot improvements/parking capital equipment

The existing premium parking lot will need to undergo improvements over the next 2-5 years at a cost of approximately $1,250,000. The project is expected to be phased in over multiple years are paid parking revenues are available. As the lot is related to the parking program, it would be important to include these costs in the rates being adopted.

Reducing the impact to the City's General Fund

While the Airport Fund operates as an Enterprise type fund, there is often a reliance on the General Fund to assist funding of annual budget requests. Our goal with this rate adoption is to allow the Airport Fund to be self-sustaining through annual revenues. This approach is critical to allow the city airport to make operational and capital decisions with our competing for limited revenues on an annual basis. The airport has benefited from recent federal funding during the pandemic which has eliminated the reliance on the General Fund, however these funds are one-time benefits. In the Fiscal Year 2021-2022, the Airport Fund shows a $450,000 annual ongoing need beginning in Fiscal Year 2024-2025. The parking rates proposed will allow for the Airport fund to eliminate its revenue reliance.

Summary Airport Fund Cost Recovery

Below is a summary of the cost being considered with the new paid parking program.

Financial Plan	FY 2021-22 (5 Months)	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
Costs						
Capital Investment Recovery	$ -	330,000	330,000	330,000	330,000	330,000
Operations Expenses	120,000	288,000	296,640	305,539	314,705	324,147
Capital Improvements/Equipment	-	500,000	450,000	300,000	-	-
Airport Operations	-	-	-	150,000	450,000	450,000
Total Cost for Recovery	$ 120,000	1,118,000	1,076,640	1,085,539	1,094,705	1,104,147

Airport Parking Rate Proposal

Staff Proposal

Staff has developed a parking rate proposal that will meet the proposed cost considerations for the airport. Parking rates were developed based on two considerations.

First is the financial consideration to assure that rates meet the cost recovery needs of the airport. Rates are proposed that will provide a balanced financial plan. We recognize that rate increases may be necessary in the future and recommend an increase effective July 1, 2023 after the initial rates go into effect to assist in keeping up with inflationary impacts. In addition to assure the Airport Fund eliminates the reliance on the General Fund, this rate is necessary. Rates also take into consideration of utilization of the airport parking lots after implementation. Our rates are proposed base on an estimated 400 cars utilizing the airport paid parking program. For simplicity of this analysis, we broke down the utilization with 200 daily use in the premium lot and 200 daily use in the economy lot. We look forward to gathering data after implementation of the parking program to reassure our revenues are meeting the airports revenue needs.

The second consideration is related to parking rates that other communities charge at their airports. Airport staff reviewed rates from seven airports in the region, which are summarized in the table below.

Airport	Parking Lot	Free Period	Hourly Rate	Daily Rate	Notes
Prescott Regional	Main	N/A	Free	Free	Up to 10 days free
Laughlin/Bullhead International	Main	N/A	Free	Free	
Montrose Regional	Main	½ hour	None	$8.00	$95 monthly & $750 annual
St. George Regional	Main	½ hour	None	$7.00	
Durango – La Plata Co.	Main Terminal	½ hour	$2.00	$7.00	$1 per 30 min up to daily rate
	Credit Card	None	$2.00	$7.00	$1 per 30 min up to daily rate
Tucson International	Hourly	None	$2.00	$13.00	$1 per 30 min up to daily rate
	Daily	None	$2.00	$10.00	In front of Terminal
	Economy	None	None	$4.50	Requires shuttle ride
PHX Sky Harbor International	East Economy (Uncovered)	None	$4.00	$12.00	Requires Sky Train ride

These airports can be broadly placed in three categories in relation to the Flagstaff Pulliam Airport, which has currently has nine arrivals daily. Prescott Regional Airport and Laughlin/Bullhead International Airport have fewer flights than Flagstaff with one to three arrivals daily. Durango – La

Plata County Airport, St. George Regional Airport, and Montrose Regional Airport have slightly more flights than Flagstaff with between 10 and 15 arrivals daily. Phoenix Sky Harbor International Airport and Tucson International Airport are significantly busier than Flagstaff with dozens or hundreds of arrivals daily.

Based on these considerations, staff is proposing the following rate structure:

Staff Proposed Rates	Effective January 21, 2022	Effective July 1, 2023
1st hour	Free	Free
Per hour rate (after 1st hour)	$ 2.00	$ 2.00
Per day rate – Premium Lot	$ 7.00	$ 8.00
Per day rate – Economy Lot	$ 5.00	$ 6.00
Weekly rate – Premium Lot	$ 42.00	$ 48.00
Weekly rate – Economy Lot	$ 30.00	$ 36.00

Relative to the comparison airports, the proposed rates are higher than the airports with less traffic (Prescott, Laughlin/Bullhead), and lower than or comparable to the airports with slightly more traffic (Durango – La Plata Co., St. George Regional, Montrose Regional).

Staff also recognizes that we will need to develop an employee parking program for businesses operating out of our airport. The cost of the program should also be covered by the businesses that will be utilizing the parking lots. These rates will be brought forward for Council adoption.

Review of five-year plan

Base on the parking rate proposal and the costs being considered, staff has developed a five-year plan to demonstrate the balanced approach.

Financial Plan	FY 2021-22 (5 Months)	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
Beginning Balance	$ -	245,000	20,520	6,760	4,541	13,596
Resources						
Parking Revenue	$ 365,000	893,520	1,062,880	1,083,320	1,103,760	1,124,200
Other Revenue	-	-	-	-	-	-
Total Resources and Balance	$ 365,000	1,138,520	1,083,400	1,090,080	1,108,301	1,137,796
Uses of Funds						
Capital Investment Recovery	$ -	330,000	330,000	330,000	330,000	330,000
Operations Expenses	$ 120,000	288,000	296,640	305,539	314,705	324,147
Capital Improvements	-	500,000	450,000	300,000	-	-
Airport Operations	-	-	-	150,000	450,000	450,000
Total Uses of Funds	$ 120,000	1,118,000	1,076,640	1,085,539	1,094,705	1,104,147
Ending Balance	$ 245,000	20,520	6,760	4,541	13,596	33,649

Airport Commission Meeting

At the October 14, 2021, staff has provided the Airport Commission the parking rate considerations. Commission was supportive of the rates that staff proposed.

Public Outreach Meetings

City staff presented to the Airport Commission on October 14, 2021. Information about the airport paid parking was presented in the last Flagstaff Business News. Staff will be preparing a presentation to the Tourism Commission on November 23, 2021. Staff will provide a press release related to airport paid parking program in November as well as posting notices about the proposed airport parking rates at in the airport terminal.

City Council Meetings

On December 7, 2021, the City will hold a public hearing and staff will present an ordinance along with the rate analysis information to the Council. Council could accept staff recommendation or adjust, such as increasing or decreasing the parking rates. Or the Council could choose to not read the ordinance the first time and direct staff to bring the item back with amendments. If Council completes the first read of the ordinance, a second read will be required at the December 21, 2021 meeting prior to adopting the parking rates. To meet the funding outlined in this analysis, the parking rates would need to be effective January 21, 2022.

Flagstaff Pulliam Airport Paid Parking Rates Ordinance

Airport Parking Lots

Existing Lot:

- Now referred to as the **Terminal Lot** consisting of 385 spaces
- Will be renovated
- Will have paid parking entry and exit gate arm system

New Lot:

- Now referred to as the **Terminal Economy Lot**
- 413 new spaces
- Internal walkways, head light wall, 8’ wide sidewalk to terminal
- Two entry/exit locations w/ gate arm system

Benefits of Paid

Parking:

- The new lot will increase existing inventory, provide for bus use, future expansion of electric vehicle charging, and bicycle paths

Revenues:

- The revenues from the paid parking will pay for the construction costs and will help us with ongoing operational and maintenance needs.

Public Input

Presentations:

- Airport Commission recommended the rates
- Flagstaff Chamber of Commerce Advisory Council
- Tourism Commission

Questions from Facebook

Q: What will it cost those who park along the islands not in marked spots? Is that the premium?

A: Parking must be in marked spots only. Parking outside of the parking lots will be subject to a parking enforcement.

Q: When will enforcement begin?

A: We are finishing up the overall construction of the lot. Once we get further along, we will notify the public of start dates.

Questions from Facebook

Q: Will there be more parking in the future after these rates are in place?

A: 385 plus the 413 spots will be available for the airport patrons.

Q: When will this new lot open?

A: We are aiming for a soft opening with no paid parking element for February 1. The paid parking element will come after our gate arm system is installed.

Questions from Facebook

Q: Wait, so we have to pay for parking now?

A: No, for now we are in the construction phase and still completing several processes. We will be in front of the Council on 12/7 for a first read of the rates and a second read on 12/28. Rates will be ready to be in effect by January 28, 2022. We will not charge for parking until we have the entire system in place and will notify the public.

New Terminal Economy Lot

Costs:

- The new lot and upgrades to existing lot $4.9 million
- Parking Staff $80,000
- Increase utilities $10,000
- Landscape maintenance $21,000
- Snow management $19,000
- Hardware and software $48,000
- Credit card fees $90,000
- Annual pavement maintenance $20,000
    - Total $288,000

Financial Plan

Addresses: Capital Investment Recovery, Future Capital Investments, Operation Expenses, General Fund Reliance

Financial Plan	FY 2021-22 (5 Months)	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
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Ending Balance	$ 245,000	20,520	6,760	4,541	13,596	33,649

Proposed Parking Rates

Rates developed to achieve a balanced financial plan:

Staff Proposed Rates	Effective January 21, 2021	Effective July 1, 2022
1st hour	Free	Free
Per hour rate (after 1st hour)	$ 2.00	$ 2.00
Per day rate Terminal Lot	$ 7.00	$ 8.00
Per day rate – Terminal Economy Lot	$ 5.00	$ 6.00
Weekly rate – Terminal Lot	$ 42.00	$ 48.00
Weekly rate – Terminal Economy Lot	$ 30.00	$ 36.00

Flagstaff Pulliam Airport

THANK YOU!

TEAM FLAGSTAFF
WE MAKE THE CITY BETTER

Council Action

- **Dec 7th** 1st Read of Ordinance 2021-23
- **Dec 28th:** 2nd Read and Adoption of Ordinance 2021-23

CITY OF FLAGSTAFF

STAFF SUMMARY REPORT

To:	The Honorable Mayor and Council
From:	Bryce Doty, Real Estate Manager
Co-Submitter:	Anja Wendel
Date:	12/02/2021
Meeting Date:	12/07/2021

TITLE:

Consideration and Adoption of Ordinance No. 2021-24: An ordinance of the Flagstaff City Council authorizing the acquisition of drainage easements, temporary construction easements, and any other necessary property rights for drainage and flood control improvement to the Spruce Avenue Wash; providing for delegation of authority, subsequent Council approvals, severability, authority for clerical corrections, and declare an emergency

STAFF RECOMMENDED ACTION:

1) Read Ordinance No. 2021-24 by title only for the first time
2) City Clerk reads Ordinance No. 2021-24 by title only (if approved above)
3) Read Ordinance No. 2021-24 by title only for the final time (requires unanimous vote)
4) City Clerk reads Ordinance No. 2021-24 by title only (if unanimously approved above)
5) Adopt Ordinance No. 2021-24 (requires unanimous vote)

Executive Summary:

This ordinance authorizes all necessary property acquisitions to complete the improvements for the Spruce Avenue Wash from Cedar Avenue to Dortha Avenue and inlet Project.

Financial Impact:

The Spruce Wash – Cedar to Dortha and inlet Project was not specifically budgeted in FY21 due to the unforeseen nature of the project, but funds in the amount of $2,000,000 have been allocated in the Stormwater fund, Account Number 206-08-385-3479-0.

Policy Impact:

The project and the acquisition of property related to the project align with current policy.

Connection to PBB Priorities/Objectives, Carbon Neutrality Plan & Regional Plan:

Priority Based Budget Key Community Priorities and Objectives

Safe & Healthy Community

- Provide public safety services with resources, staff & training responsive to the community's needs

Sustainable, Innovative Infrastructure

- Deliver outstanding services to residents through a healthy, well maintained infrastructure system

Environmental Stewardship

- Promote, protect & enhance a healthy, sustainable environment & its natural resource
- Strengthen Flagstaff's resilience to climate change impacts on built, natural, economic, health, & social systems

Carbon Neutrality Plan

Community Resilience

- CR-1 Ensure all mitigation actions improve Flagstaff's ability to adapt to the future.
- CR-2 Strengthen existing community systems to create resilience to both short-term shocks and long-term change.

Regional Plan

Goal WR.5: Manage watersheds and stormwater to address flooding concerns, water quality, environmental protections, and rainwater harvesting.

Policy WR.5.1. Preserve and restore existing natural watercourse corridors, including the 100-year floodplain, escarpments, wildlife corridors, natural vegetation, and other natural features using methods that result in a clear legal obligation to preserve corridors in perpetuity, where feasible.

Has There Been Previous Council Decision on This:

February 25, 2020: Council approved the Linda Vista Culvert Upsizing project to help mitigate flooding impacts;

July 15, 2021: Council declared an emergency for the Spruce Wash flooding as part of efforts to obtain relief funding;

November 2, 2021: Council approved an on-call contract for stormwater open channel maintenance.

Options and Alternatives:

Do not construct the improvements to the Spruce Avenue Wash in this area

Background/History:

The Spruce Avenue Wash is located in the Sunnyside neighborhood in central Flagstaff and serves as the primary drainage for the watershed located to the north in the Elden Hills. In 2019, the Museum Fire burned a portion of the Coconino National Forest and left a burn scar north of the neighborhood. After the fire in 2019, Coconino County and the City established a flood response team, began mapping the modified watershed, and crews installed barricades and sandbags for protective measures along Paradise Road, Grandview Drive, and the greater Sunnyside neighborhood to the south.

After several dry monsoon seasons in prior years, in 2021 Flagstaff experienced a heavy monsoon season which sent a large amount of runoff through the neighborhood and caused unprecedented flooding and property damage. The flood response team, which includes local hydrologic and civil engineers, was now able to see the impacts of the modified watershed and started planning

improvements throughout the neighborhood in the drainage way. Due to the changed conditions in the national forest and the increased runoff, the existing Spruce Wash drainage does not have the capacity to convey the water the community saw last summer. Therefore, the team began planning and designing improvements for the channel.

One of the first projects slated for construction is the section of the Spruce Avenue Wash open channel from Cedar Avenue to Dortha Avenue; this project also includes the undercrossing of Dortha, referred to as the inlet. The improvements will include adding a concrete and rip-rap-lined channel from Cedar to Dortha and an upsized culvert under Dortha Avenue. The culvert may be extended to the north as schedule and budget allow.

There are no recorded drainage easements on the subdivision plat for the Spruce Avenue Wash between Cedar and Dortha Avenues. In order to construct the planned improvements, the City will acquire all necessary property rights.

Community Benefits and Considerations:

The property owners from whom we need easements from will experience greater assurance that flooding in the Spruce Avenue Wash will not impact structures. The improvements will protect existing utility infrastructure from flooding impacts. The surrounding neighborhood and downstream residents will experience fewer flooding impacts during events.

Community Involvement:

Both the City and County have worked with the community to mitigate flooding impacts in this area. The community and affected property owners will be kept informed of the channel improvement project.

Attachments: Ord. 2021-24
Exhibit A
Presentation

ORDINANCE NO. 2021-24

AN ORDINANCE OF THE FLAGSTAFF CITY COUNCIL AUTHORIZING THE ACQUISITION OF DRAINAGE EASEMENTS, TEMPORARY CONSTRUCTION EASEMENTS, AND ANY OTHER NECESSARY PROPERTY RIGHTS FOR DRAINAGE AND FLOOD CONTROL IMPROVEMENTS TO THE SPRUCE AVENUE WASH; PROVIDING FOR DELEGATION OF AUTHORITY, SUBSEQUENT COUNCIL APPROVALS, SEVERABILITY, AUTHORITY FOR CLERICAL CORRECTIONS, AND DECLARING AN EMERGENCY

RECITALS:

WHEREAS, pursuant to Article VII, Section 5 of the Flagstaff City Charter the City shall acquire real property by ordinance; and

WHEREAS, pursuant to Article I, Section of the Flagstaff City Charter the City may acquire real property, easements, and other real property interests by purchase, gift, devise, exchange, or condemnation; and

WHEREAS, the City may exercise the power of eminent domain to acquire property rights necessary for channel improvements pursuant to A.R.S. Section 12-1111 and for public works projects pursuant to A.R.S. Section 12-1142; and

WHEREAS, it is necessary for the preservation of the peace, health and safety of the City of Flagstaff, Arizona, an emergency is declared to exist, and this ordinance shall become immediately operative and in force from and after the date of posting hereof.

ENACTMENTS:

NOW THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF FLAGSTAFF AS FOLLOWS:

SECTION 1. In General.

The City of Flagstaff shall acquire drainage easements, temporary construction easements, and any other necessary property rights for drainage and flood control improvements to the Spruce Avenue Wash ("the property rights"), generally following the route shown on the map attached hereto as Exhibit A with the final project boundaries to be approved by the City Engineer.

SECTION 2. Delegation of Authority.

The Mayor, City Manager, City Attorney, City Engineer, City Clerk, Finance Director, Real Estate Manager, or their delegates or agents, are hereby authorized and directed to take all steps and execute all documents necessary to acquire the property rights and to carry out the purpose and intent of this ordinance, and to acquire such easements through purchase, exchange, gift, donation, dedication, or condemnation for a public use.

The City Engineer is directed to determine the final project boundaries for the Spruce Avenue Wash drainage and flood control improvements, and to obtain legal descriptions and maps for the property rights to be acquired for the project.

The Real Estate Manager is directed to obtain appraisals of the property rights to be acquired, and to proceed with acquisitions. All final agreements for acquisition are subject to the City Manager's final approval.

SECTION 3. Subsequent Council Approvals.

The City Council shall approve any condemnation necessary for public use, including site access, by resolution referencing this ordinance, and including a legal description and map of the properties sought to be condemned, which resolution shall be immediately effective.

Any easements and necessary property rights acquired pursuant to this ordinance will be presented to the City Council at a future council meeting for formal acceptance.

SECTION 4. Severability.

That if any section, subsection, sentence, clause, phrase or portion of this ordinance or any part of the City Code adopted herein by reference is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions thereof.

SECTION 5. Clerical Corrections

The City Clerk is hereby authorized to correct clerical and grammatical errors, if any, related to this ordinance, and to make formatting changes appropriate for purposes of clarity, form, or consistency with the Flagstaff City Code.

SECTION 6. Effective Date.

It is necessary for the preservation of the peace, health and safety of the City of Flagstaff, Arizona, an emergency is declared to exist, and this ordinance shall become immediately operative and in force from and after the date of adoption by the City Council.

PASSED AND ADOPTED by the City Council of the City of Flagstaff this 7th day of December, 2021.

_____
MAYOR

ATTEST:

_____
CITY CLERK

APPROVED AS TO FORM:

_____
CITY ATTORNEY

Exhibits:
Exhibit A - Map

PLOTTED: Dec 01, 2021-9:58am

DRAINAGE EASEMENTS

ITEM	APN#	OWNER	TOTAL AREA (SF)	TOTAL AREA (AC)	COMMENT	STATUS
1	109-08-013	GARCIA RAMON & VERONICA	TBD	TBD		NOT READY FOR LEGAL DESCRIPTION
2	109-08-014A	BROWN KURT B	TBD	TBD		NOT READY FOR LEGAL DESCRIPTION
3	109-08-033A	REILLY GARRETT B	TBD	TBD		NOT READY FOR LEGAL DESCRIPTION
4	109-08-148B	CLEEK ROBERT L	TBD	TBD		NOT READY FOR LEGAL DESCRIPTION
5	109-08-150	GARCIA MATTHEW J & LAURIE T	TBD	TBD		NOT READY FOR LEGAL DESCRIPTION
6	109-08-151	TORREZ ELMO DEWAYNE	TBD	TBD		NOT READY FOR LEGAL DESCRIPTION
7	109-08-152	JEFF KNORR INVESTMENTS LLC	TBD	TBD		NOT READY FOR LEGAL DESCRIPTION
8	109-08-153	SURRY FAMILY TRUST DTD 2-22-10	TBD	TBD		NOT READY FOR LEGAL DESCRIPTION
9	109-08-154	BACA LAUREL J & RICARDO F	TBD	TBD		NOT READY FOR LEGAL DESCRIPTION
10	109-08-155	SERRANO RICARDO	TBD	TBD		NOT READY FOR LEGAL DESCRIPTION
11	109-08-156	LUNDLORD HOLDINGS LLC	TBD	TBD		NOT READY FOR LEGAL DESCRIPTION
12	109-08-157	W&C GROUP LLC-SUNNYSIDE	TBD	TBD		NOT READY FOR LEGAL DESCRIPTION
13	109-08-158	HERNANDEZ BETTY B	TBD	TBD		NOT READY FOR LEGAL DESCRIPTION
14	109-08-159A	MARTINEZ ANGELINA	TBD	TBD		NOT READY FOR LEGAL DESCRIPTION
15	109-08-162	HOOD FAMILY TRUST DTD 01-04-91	TBD	TBD		NOT READY FOR LEGAL DESCRIPTION
16	109-08-163	HOOD FAMILY TRUST DTD 01-04-91	TBD	TBD		NOT READY FOR LEGAL DESCRIPTION
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18	109-08-164B	PONDEROSA BAPTIST CHURCH	TBD	TBD		NOT READY FOR LEGAL DESCRIPTION
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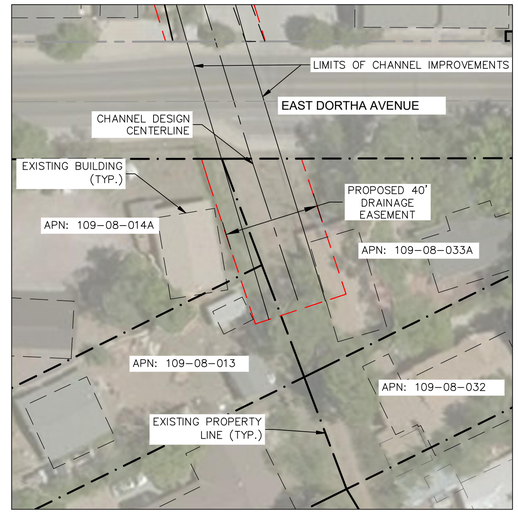
21	109-08-168	SURREY FAMILY TRUST DTD 2-22-10	TBD	TBD		NOT READY FOR LEGAL DESCRIPTION
22	109-08-170B	CATHOLIC CHARITIES COMMUNITY SERVICES	TBD	TBD		NOT READY FOR LEGAL DESCRIPTION



SCALE 1" : 30'
0 15 30

SCALE 1" : 30'
0 15 30

LEGEND

- EXISTING BOUNDARY LINE
- EXISTING BUILDING
- PROPOSED DRAINAGE EASEMENT
- CHANNEL CENTERLINE
- CHANNEL LIMITS

CITY OF FLAGSTAFF
APPROVAL STAMP

PRELIMINARY

NOT FOR CONSTRUCTION, BIDDING OR RECORDING

C.O.F. #PZ-##-#####

FLAGSTAFF
ARIZONA

SPRUCE WASH

LEGAL DESCRIPTION EXHIBIT

JOB NO: 20285
DATE: DEC 21
SCALE: AS SHOWN
DRAWN: HAS
DESIGN: SCI
CHECKED: SCI

110 W. Dale Avenue
Flagstaff, AZ 86001
928.773.0354
928.774.8934 fax
www.swiaz.com

Shephard Wesnitzer, Inc.

REVISIONS

NO.	DESCRIPTION	DATE	BY

Call at least two full working days before you dig, it's the law!
ARIZONA811 Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)

DRAWING NO.
EX01

SHT NO. 1 OF 1

FILE: P:\2020\20285\SURVEY\LEGAL DESCRIPTIONS\20285 - LEGAL DESCRIPTIONS APN EXHIBITS.DWG HSCHNOEBELEN

Real Property Acquisitions for Spruce Ave Wash Project

December 7, 2021

TEAM FLAGSTAFF

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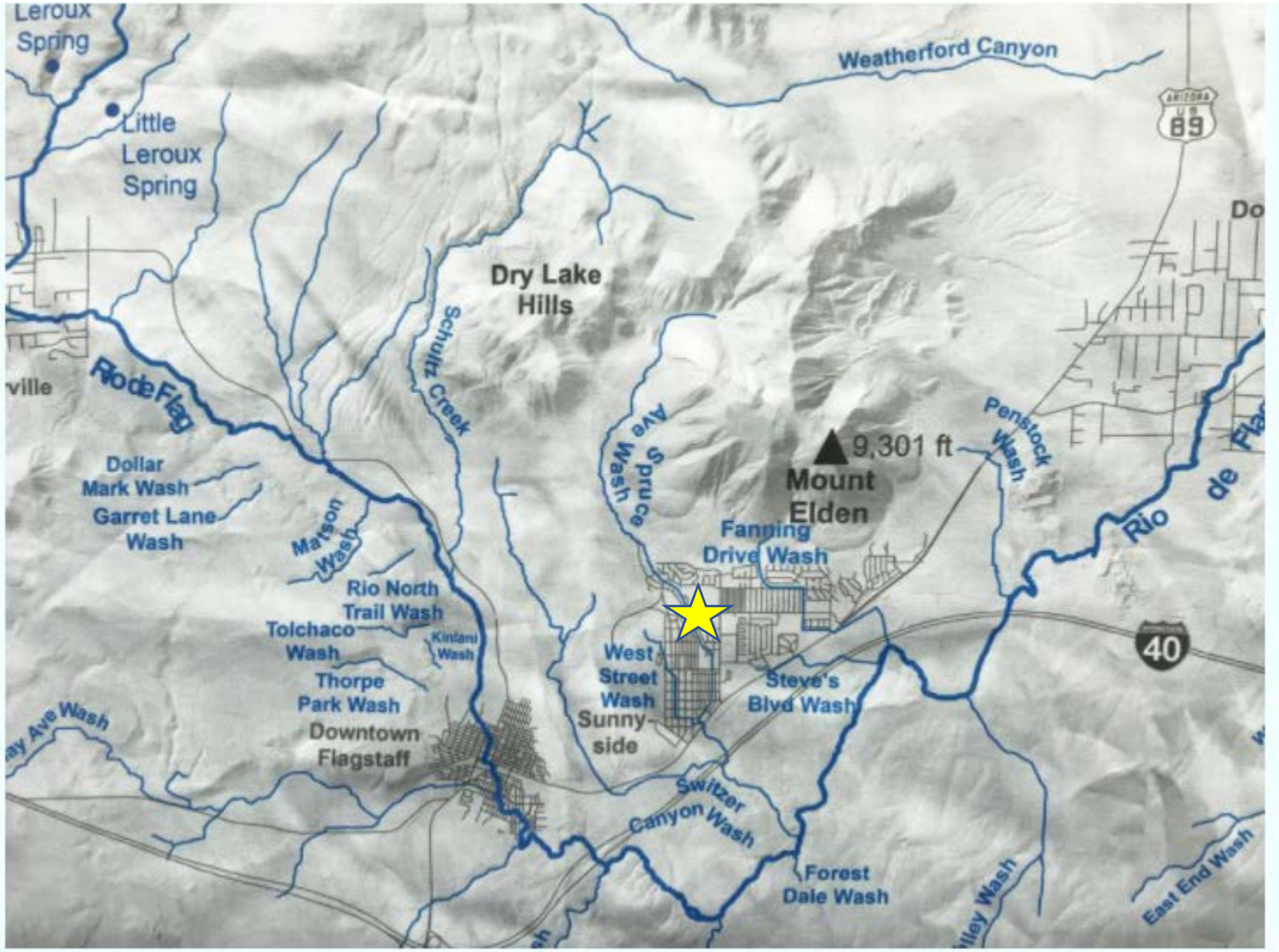
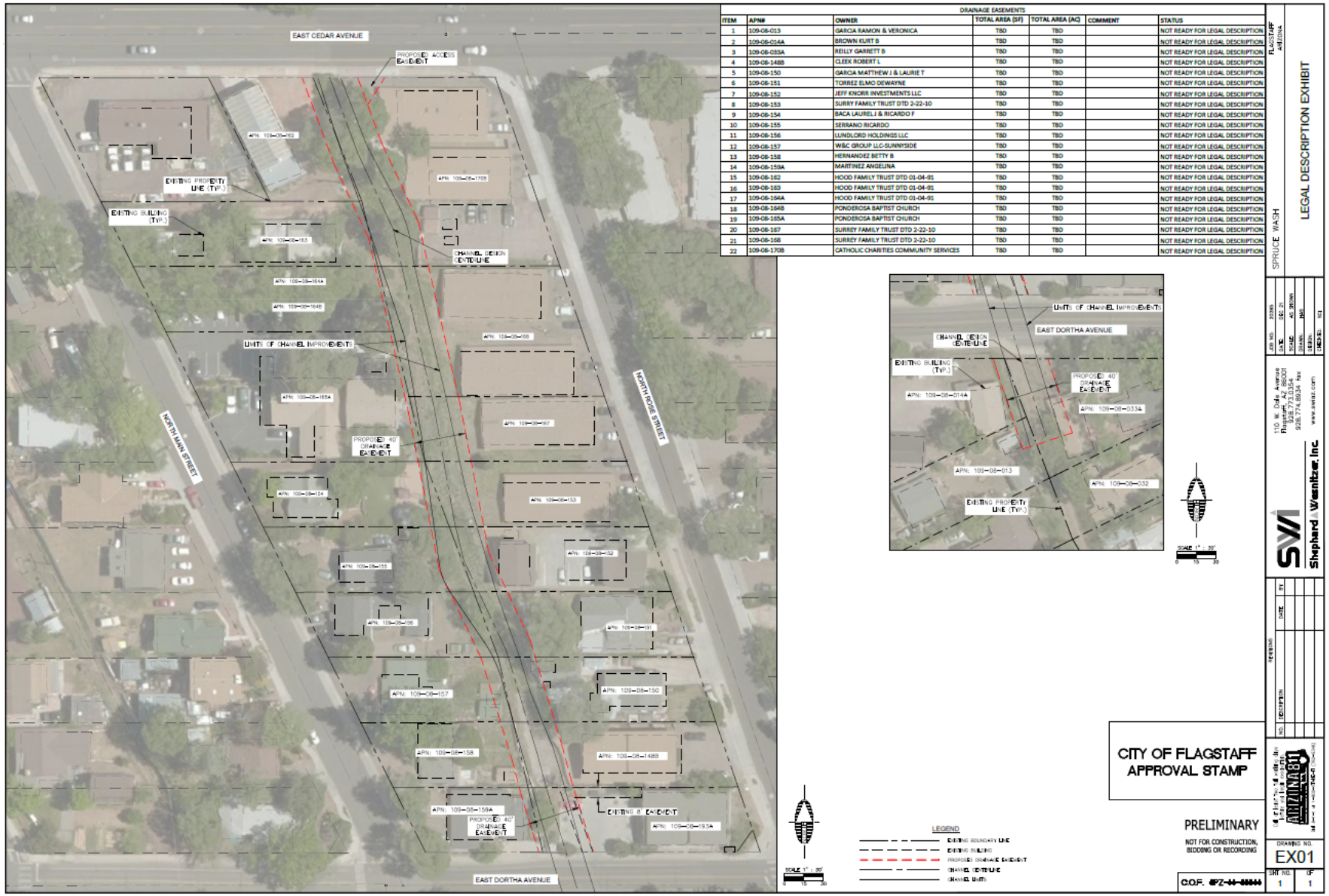
Vicinity Map



Vicinity Map

Affected Property Owners



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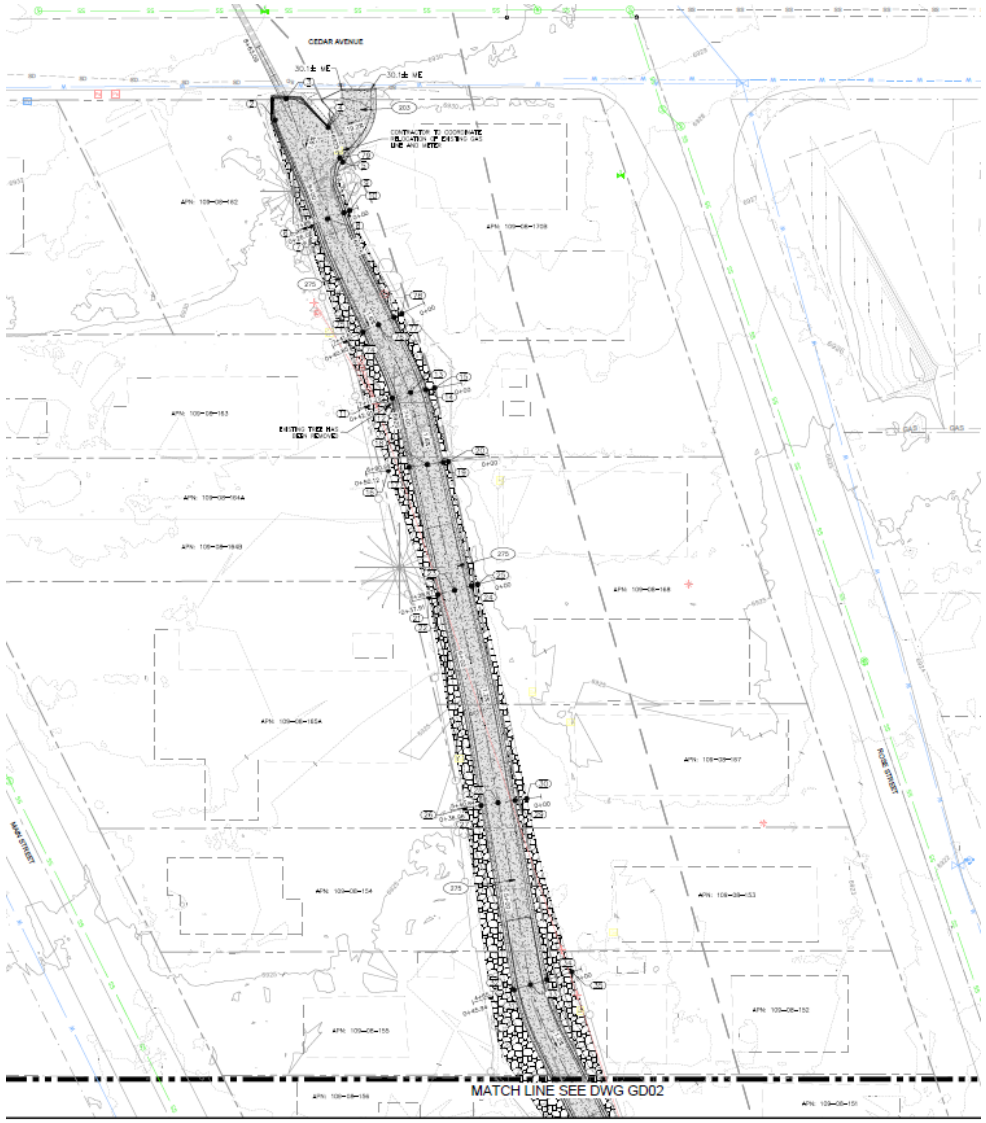
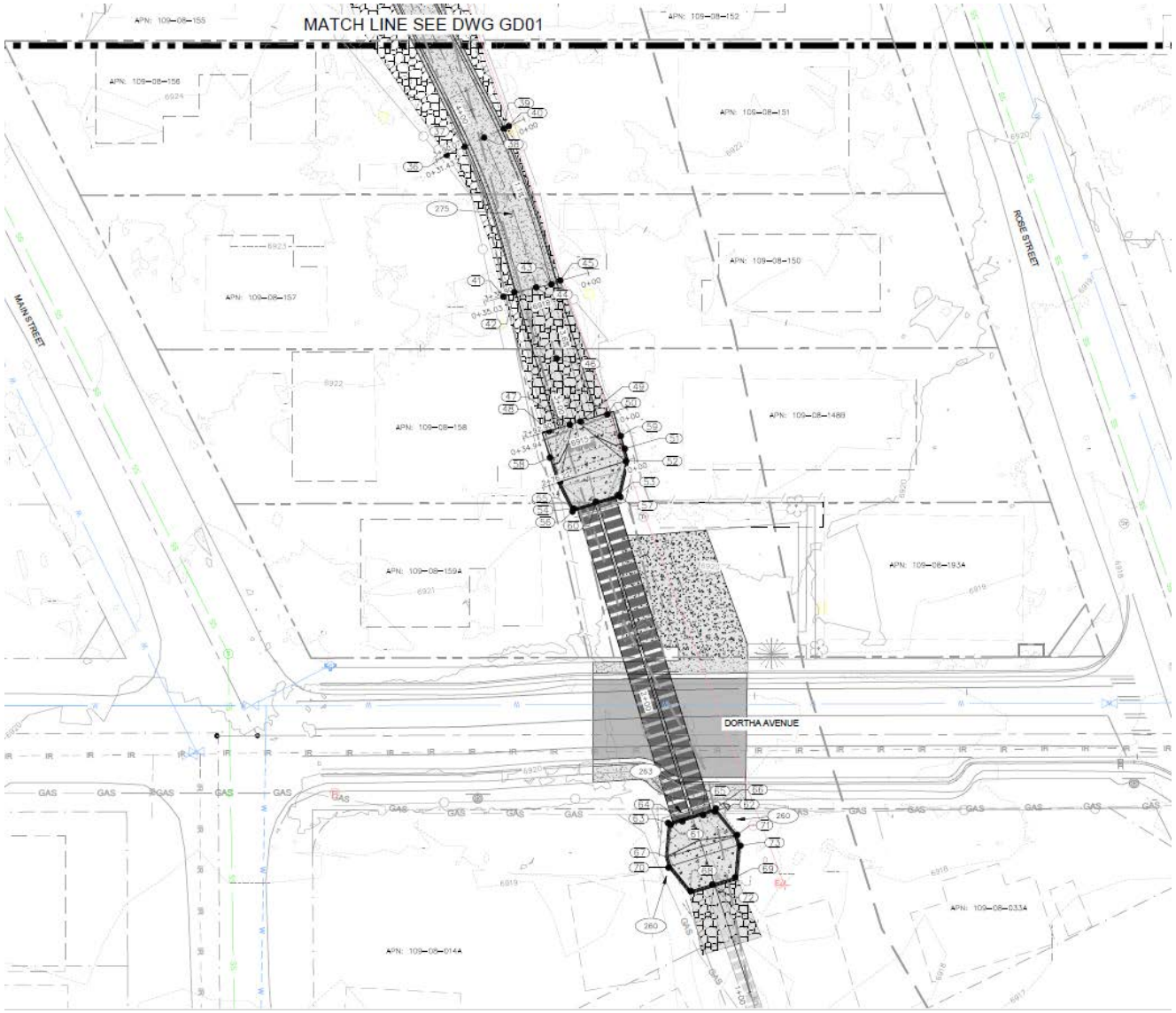
Current Design Overview





Council Discussion

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