

SPECIAL WORK SESSION AGENDA

CITY COUNCIL SPECIAL WORK SESSION
THURSDAY
MAY 16, 2024

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

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

*****PUBLIC COMMENT*****

Verbal public comments related to items appearing on the posted agenda may be given in person or online and will be taken at the time the item is discussed.

To provide online verbal comment on an item that appears on the posted agenda, use the link below.

[ONLINE VERBAL PUBLIC COMMENT](#)

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

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 work session, the City Council may vote to go into executive session, which will not be open to the public, for discussion and consultation 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 DAGGETT
VICE MAYOR ASLAN
COUNCILMEMBER HARRIS
COUNCILMEMBER HOUSE

COUNCILMEMBER MATTHEWS
COUNCILMEMBER MCCARTHY
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. Water, Sewer, and Reclaimed Water Rates and Fees Study Special Work Session

City staff and the City's Consultant, Stantec, are addressing questions from the City Council related to the assumptions used in the rate model. City staff and Stantec will facilitate a discussion on financial planning scenarios and how those might influence the outcome of the proposed rates for water, sewer, and reclaimed water rates and fees. The desired outcome is for the Council to provide their direction on the financial planning scenarios.

5. 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 _____, 2024.

Stacy Saltzburg, MMC, City Clerk

THE CITY OF FLAGSTAFF ENDEAVORS TO MAKE ALL PUBLIC MEETINGS ACCESSIBLE TO PERSONS WITH DISABILITIES. With 48-hour advance notice, reasonable accommodations will be made upon request for persons with disabilities or non-English speaking residents. Please call the City Clerk (928) 213-2076 or email at stacy.saltzburg@flagstaffaz.gov to request an accommodation to participate in this public meeting.

NOTICE TO PARENTS AND LEGAL GUARDIANS: Parents and legal guardians have the right to consent before the City of Flagstaff makes a video or voice recording of a minor child, pursuant to A.R.S. § 1-602(A)(9). The Flagstaff City Council meetings are live-streamed and recorded and may be viewed on the City of Flagstaff's website. If you permit your child to attend/participate in a televised Council meeting, a recording will be made. You may exercise your right not to consent by not allowing your child to attend/participate in the meeting.

CITY OF FLAGSTAFF STAFF SUMMARY REPORT

To: The Honorable Mayor and Council
From: Shannon Anderson, Senior Deputy City Manager
Co-Submitter: Erin Young, Water Services Manager, and Shannon Jones,
 Water Services Division Director
Date: 05/09/2024
Meeting Date: 05/16/2024



TITLE:
Water, Sewer, and Reclaimed Water Rates and Fees Study Special Work Session

DESIRED OUTCOME:

City staff and the City's Consultant, Stantec, are addressing questions from the City Council related to the assumptions used in the rate model. City staff and Stantec will facilitate a discussion on financial planning scenarios and how those might influence the outcome of the proposed rates for water, sewer, and reclaimed water rates and fees. The desired outcome is for the Council to provide their direction on the financial planning scenarios.

Executive Summary:

City staff and Stantec have been discussing the rate study components with the Water Commission and City Council since September 2023. There have been discussions about financial planning; capacity fees; rate design priorities; water, sewer, and reclaimed water rates; and miscellaneous fees. During today's presentation, City staff will provide an update to Council on the most recent outreach efforts that continue to provide awareness to the community about the rate study and the proposed rates. City staff will share information about the water services division, operations and maintenance, capital improvements, and the impacts of the proposed rates. This conversation will lead us to the four financial planning scenarios for Council consideration.

Information:

City Council and the Water Commission have committed a significant amount of time learning about the rate study process, policy strategies, financial planning, cost-of-service details, and potential rate designs to create the proposed water, sewer, and reclaimed rates. All of this information is available on the cleanwaterflagstaff.com website. The team of Stantec and City staff members have worked to build a rate calculator that is available on this website, so community members and businesses are able to see what their water and sewer bills may look like for the upcoming five years based on the proposed rates. The group has invested in radio, print, social media, and digital advertising to provide outreach and educational opportunities. In this presentation the team will share some of the outcomes of this outreach and what efforts will continue over the next few months.

During the last several months of meetings, there have been discussions about revenue needs and the opportunities available to meet those financial needs. City staff will spend time during today's presentation providing the operational details behind these numbers. Sharing how these revenues are used to maintain service and what happens when there are shortages or unexpected challenges. The capital improvement plan makes up a large portion of the water services revenue needs and City staff will provide an explanation of the approved, informed, and unfunded capital project lists and how this looks across the community. These future revenue needs are built upon assumptions and staff will provide background on how the assumptions in the rate model were derived based on today's experiences. Given altering these assumptions can result in different outputs, Stantec has created four financial planning scenarios to demonstrate how changing assumptions on growth, cost escalation, debt or CIP execution can alter the

*Please note the attached financial planning scenarios presentation still includes drafts of updated rate projections and bill impacts. These will be finalized following the completion of Stantec's quality control review process.

Attachments: Water, Sewer, and Reclaimed Water Rate Study
Financial Planning Scenarios

City of Flagstaff Future of Water

Water Rate Study Outreach May 2024



Join us and spread the word!

Future of Water Rate Study **COMMUNITY DROP-IN EVENT**



- Free pizza
- Free guest pass to the Aquaplex for all attendees*
- Learn about water and sewer rate changes
- Speak to Mayor Daggett
- Open to City of Flagstaff customers of all ages!

*Guest passes redeemable 5/20/2024 - 12/31/2024



Learn
more:



SATURDAY, MAY 18 | 11AM - 2PM | AQUAPLEX COMMUNITY ROOM

Outreach Update

Community Engagement

- Earth Day at Bushmaster Park – 4/20
- Tourism Commission – 4/25
- Friends of Flagstaff Future – 4/30
- Friends of the Rio at Shultz Basin – 5/2
- ADEQ Roadshow at East Flagstaff Community Library – 5/8
- Northern Arizona Climate Change Alliance – 5/9
- Airport Commission – 5/9
- Community Drop In at Aquaplex – 5/18
- ECONA Advisory Committee – 5/21

Outreach Update

Website Update

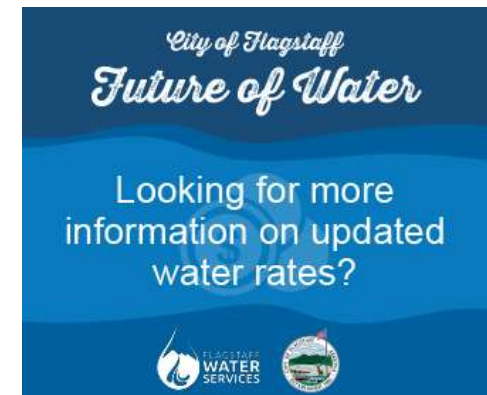
- **7,260 site visitors to date**
- **4,072 site visitors the last 30 days**
- Increased visitation
- Watch past meetings
- Upcoming engagement opportunities
- New resources
- Spanish resource section
- Educational videos
- **Posted rate calculator**
- **Posted draft report and appendices**

Total Water & Sewer Charges - Note that the Proposed Water and or Sewer charges may be lower		
Forecast Time Period*		September 1st, 2024 - December 31st, 2025
Service	Existing	Proposed*
Total Water Charge	\$ 16.64	\$ 14.33
Total Sewer Charge	\$ -	\$ 10.39
Total	\$ 16.64	\$ 24.72

Outreach Update

Marketing & Advertising

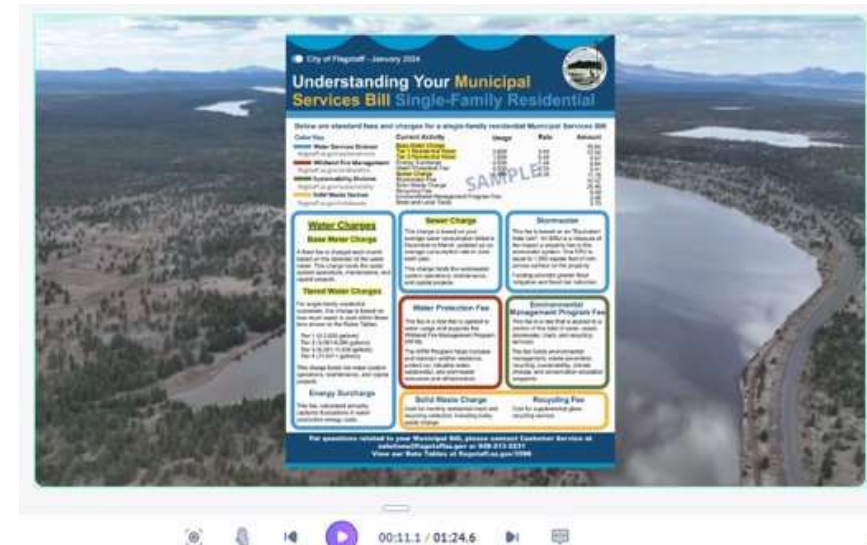
- Digital Ad Campaign
 - **259,614 total impressions to date**
 - **1,353 clicks**
 - Began April 17th through May 15th
- Advertising Website and Community Events
 - Digital ads, social media, and radio
 - Printed water bill inserts
 - Flyer distribution at various locations around town



Outreach Update

Marketing & Advertising

- Outreach videos
 - Rate change impact on residents
 - Rate change impact on businesses and developers
 - Rate calculator demonstration



Council
Discussion

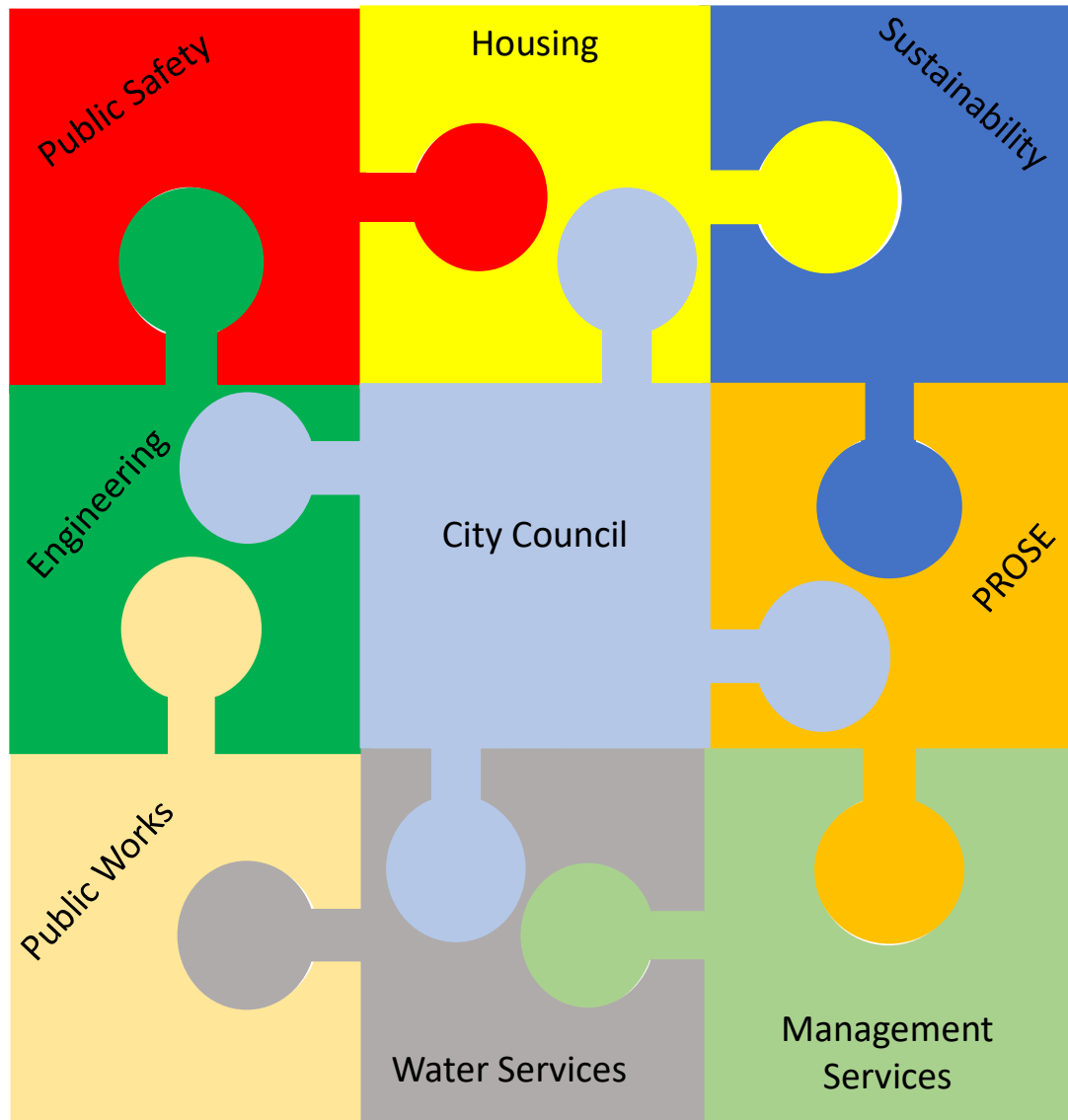
Questions

Additional
Feedback

City of Flagstaff Future of Water

Water Rate Study Presentation May 2024





City Services

- Interconnection of services
- Provide services to community
- Rely on each other for support and resources to provide those services
- Policy direction from Council keeps it all together
- Goal to provide a quality of life for all

Introduction to Water Services

- 4 Treatment Plants – 2 Drinking Water and 2 Water Reclamation Plants
- 8 Large and 6 Small Drinking Water Storage Tank
- 2 – Reclaimed Treated Effluent Storage Tank
- 30 – Drinking Water Wells and Pump Houses
- Over 447 miles of Water Distribution lines
- Over 290 miles of Sewer Collection lines
- Over 3,432 Fire Hydrants
- 5 Standpipes – 3 Drinking Water and 2 Reclaimed Treated Effluent
- Regulatory Compliance
- Water Sustainability and Conservation
- 97 – Staff members

Operations & Maintenance

What's included in Operations & Maintenance

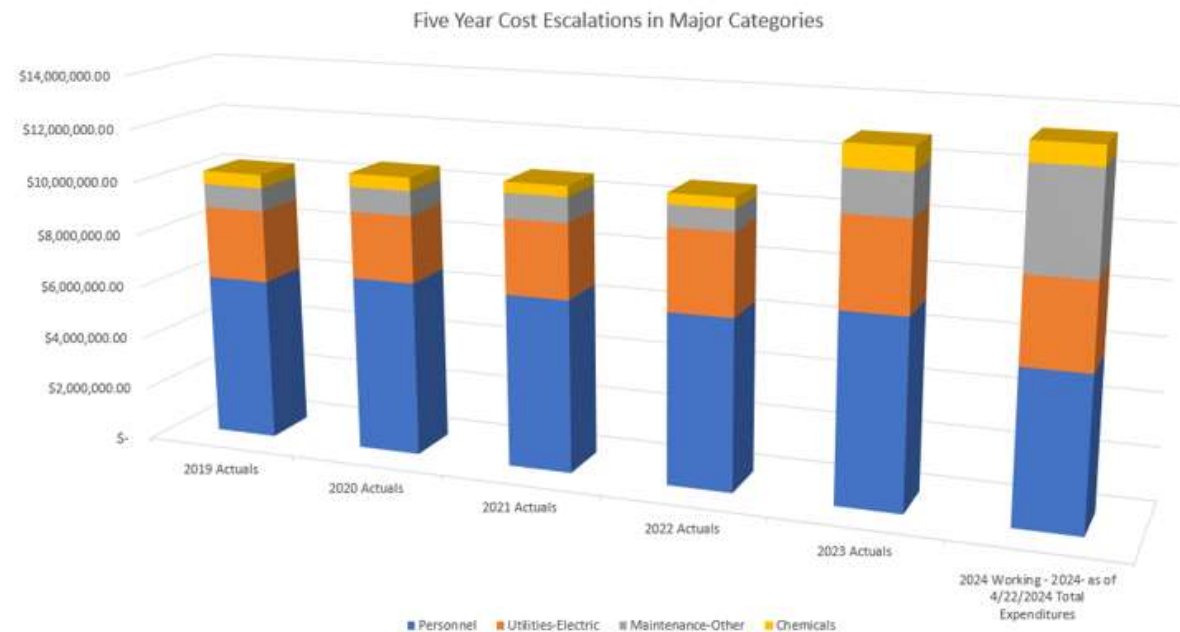
- Process Treatment Equipment
- Buildings and materials
- Parts & labor
- Gas, oil and chemicals
- Service vehicles and machinery
- Personnel



Operations & Maintenance

General Increases in Costs

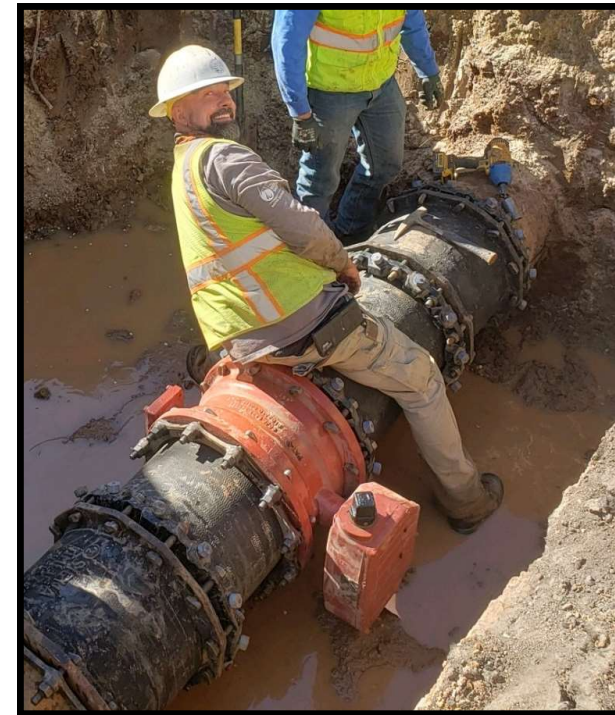
- Electrical Costs
- Treatment Chemical Costs
- Costs of Parts
- Personnel



Operations & Maintenance

Insufficient Funding Impacts

- Defer repair and replacement of aging infrastructure
- Challenge to maintain technology and facilities
- Lack resiliency and robustness
- Limited personnel resources



Operations & Maintenance

Benefits of Funding

- Sustainable use and development of water resources
- Effective water institutions and administrative systems
- Assure water quality and wastewater management
- Invest in repairing and replacing aging infrastructure
- Retain qualified staff to maintain resources



Operations & Maintenance: Water Distribution Lines

Flagstaff averages 6 main breaks per 100 miles of pipe (25 annually)



2023 Clay Avenue



Operations & Maintenance: Sewer Collection Lines

- 290 miles of sewer line
- 8,000 Manholes
- 6 Sanitary Sewer Overflows



Capital Improvements

What do improvements accomplish?

- Address capacity to meet community growth and development
- Fulfill master planning efforts for the future of Flagstaff
- Develop water supply
- Maintain water supply and wastewater collections
- Integrate asset management into Utility infrastructure
- Advance wastewater treatment



Capital Improvement Plan (CIP)

What is a CIP

- Plan includes approved, informed, and unfunded projects
- Plan is conservative
- Dependency on external funding sources
- No capacity for citywide initiatives



CIP - Water

Full Water CIP List

Project	10-Year Project Cost (\$ Millions)
Beulah/University Waterline Relocation	\$404,103
Rio Flood Control Project - Waterline	\$2,275,000
Aging Water Infrastructure Replacements	\$19,966,000
Water Vault/PRV Replacement Program	\$2,275,512
Radio Read Meter Replacements*	\$4,250,000
Reserve	\$3,000,000
Water System Master Plan	\$284,561
Water Rate Study	\$262,000
SCADA Well Upgrades	\$330,000
New Well and Pump House	\$26,248,619
Coconino Estates - Bundle #4	\$938,807
Lake Mary Sedimentation Basins (Flocculations)	\$12,198,994
Soliers Waterline 12" Upsizing	\$3,377,150
Lake Mary Land Acquisition	\$3,000,000
McAllister-Well Design/Construction	\$148,912
Switzer Canyon Transmission Line Phase 4	\$6,823,506
Switzer Canyon Transmission Line Phase 5	\$7,000,000
Fort Tuthill Waterline Loop - Phase 2	\$2,000,000
Water Energy Efficiency Upgrades	\$500,000
Water Resources Master Plan	\$145,000
First Ave TREX Waterline Replacement	\$249,750
Fort Tuthill Well	\$7,592,083
Inner Basin Waterline*	\$16,132,576

*Includes grant funding

Project	10-Year Project Cost (\$ Millions)
Inner Basin Line - Schultz to Reservoir Plant	\$8,200,000
Inner Basin Spring Box and Collection Rehab	\$4,200,000
LM Raw Water Pipeline Rehab*	\$16,000,000
Zone B Storage	\$1,050,000
Lake Mary Dam Repairs	\$250,000
Red Gap Ranch Hydrogeologic Study	\$300,000
Red Gap Ranch ROW Survey and Mapping	\$150,000
Red Gap Ranch Water Quality Study	\$400,000
Railroad Springs #3 Storage Tank	\$1,500,000
Red Gap Ranch NEPA Environ Impact Study*	\$1,250,000
Red Gap Ranch ROW Acquisition Segments 1-3	\$2,000,000
Red Gap Ranch Well Completion (10 Wells)	\$450,000
JW Powell Waterline Oversizing	\$2,300,000
Pine Del Waterline Upsizing	\$2,500,000
Red Gap Ranch Geotechnical Investigation*	\$725,000
Red Gap Ranch Well Field Piping Design	\$750,000
Woody Mountain Wellfield Powerline Burial*	\$3,500,000
Fort Valley Shopping Center	\$600,000
ADOT Cast Iron	\$5,500,000
Turquoise WL Replacement	\$1,100,000
East Side Shop New Building for Equipment Storage	\$1,000,000
Annual Unfunded project	\$9,000,000
Total Water 10-Year CIP	\$182,252,573

CIP - Water Unfunded List

- Lake Mary Treatment Plant – Chlorine Dioxide Generator Replacement
- North Reservoir Treatment Plant – Filter Rehab
- Tank Rehab
- Diesel Engine Replacement
- Flow Meter Replacement
- Booster Station Rehab
- Wellfield Powerline Burial
- Load Out Station
- Red Gap Pipeline design and construction

CIP - Wastewater

Full Wastewater CIP List

Project	10-Year Project Cost (\$ Millions)
Beulah/University Sewer Ext	\$300,000
Master Plan - Collections	\$400,000
Energy Efficiency Program	\$206,637
Rio Two Bar Screens	\$515,917
Aging Infrastructure Replacements	\$13,000,000
Reserve for Improvements	\$3,000,000
Rio de Flag Sewer Relocations	\$4,245,000
Coconino Estates - Bundle #4	\$875,276
Wildcat Dewatering Facility	\$6,100,000
Sewer Rate Study	\$125,000
First Ave Rte 66 Sewer Replacement	\$500,990
Country Club Interceptor to WCH	\$12,300,000
Rio Solids Treatment	\$24,618,500
Sewer Collection AIR Assessments	\$50,000
Wildcat New Elect./Fiber Upgrade	\$3,246,000
Rio de Flag Fiber Upgrade	\$250,000

Project	10-Year Project Cost (\$ Millions)
Wildcat Roof Replacement	\$3,000,000
Wildcat UV Disinfection	\$5,500,000
Rio Main Motor Control Centers	\$3,600,000
BNSF Sewer Relocations	\$1,839,141
Facility Master Plan Update	\$1,150,000
Headworks Rehab	\$3,000,000
East Industrial Sewer Improvements	\$520,000
Sunnyside Trunk Upsizing	\$260,000
Ponderosa Pkwy - McMillan Mesa	\$400,000
East Railhead Upsizing	\$500,000
University Heights Oversizing	\$500,000
Wildcat Solar Drying Facility	\$3,000,000
Rio Roof Replacement	\$2,500,000
Unfunded project estimate	\$20,532,000
Total Wastewater 10-Year CIP	\$116,034,461

*This list does not include projects that are funded by G.O. bonds being paid for by property taxes

CIP - Wastewater Unfunded List

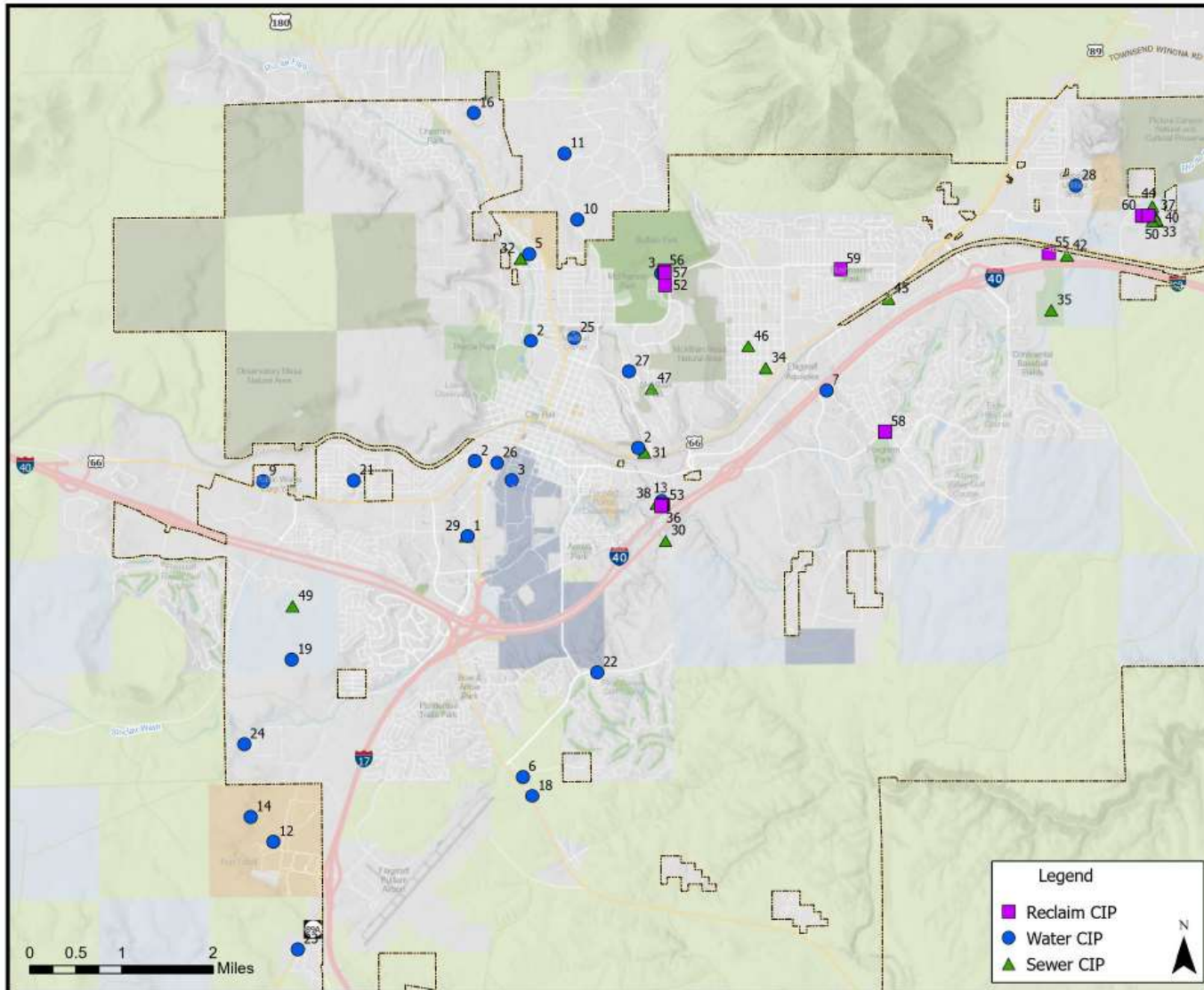
- Influent Grit Removal
- Improved Baffling and Weirs for Secondary Clarifiers
- Add Post Anoxic Zone
- Add Initial Anaerobic Zone
- Septage and Grease Station
- Interceptor (Butler to Country Club)

CIP - Reclaimed

Project	10-Year Project Cost (\$ Millions)
8" Bottleneck - Replacement	\$6,121,983
Rio Reclaim Water PRV Relocation 16"	\$280,000
Rate Study- Reclaimed Portion	\$75,000
Reclaim Water Meters and Vaults	\$225,000
Rio Reclaimed Pump Valve Actuators	\$120,000
AWT Sampling and Testing	\$180,000
Reclaim System PRV/ARV Assessment	\$100,000
BNSF Reclaimed Relocations	\$905,846
Buffalo Park Tank #1 Painting	\$400,000
Buffalo Park Chlorine Bldg Upgrade	\$3,000,000
Reclaim Loop - Fox Glenn to Country Club	\$5,000,000
Bushmaster Park Booster Communications & Flow Meters	\$600,000
WCH Reclaim Booster Building Equipment Upgrade	\$4,000,000
AWT Pilot Project	\$3,000,000
Reclaim Model Projects	\$2,500,000
Rio Storage Tank	\$500,000
WCH Storage tank	\$500,000
Unfunded project estimate	\$29,250,000
Total Reclaimed Water 10-Year CIP	\$56,757,829

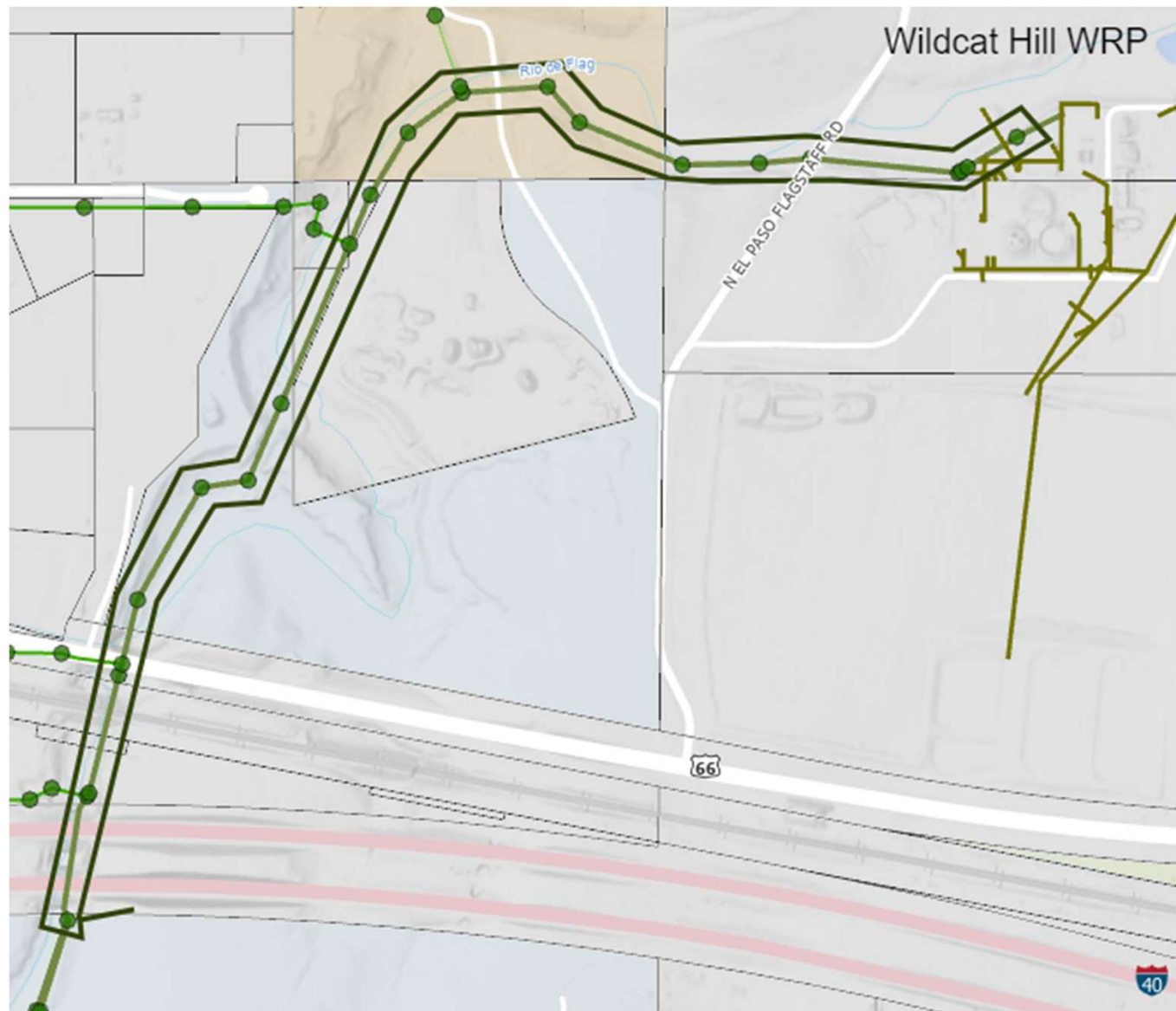
CIP - Reclaimed Unfunded List

- Bushmaster Booster Station, Pump, and Automatic Valve
- Rio Reclaim Booster Pump Station Upgrades
- Master Radio Tower – Rio de Flag
- Cemex and County Yard Flow Monitoring Stations
- Rio Reclaim Distribution System Upgrades
- Water System Expansion - Westside

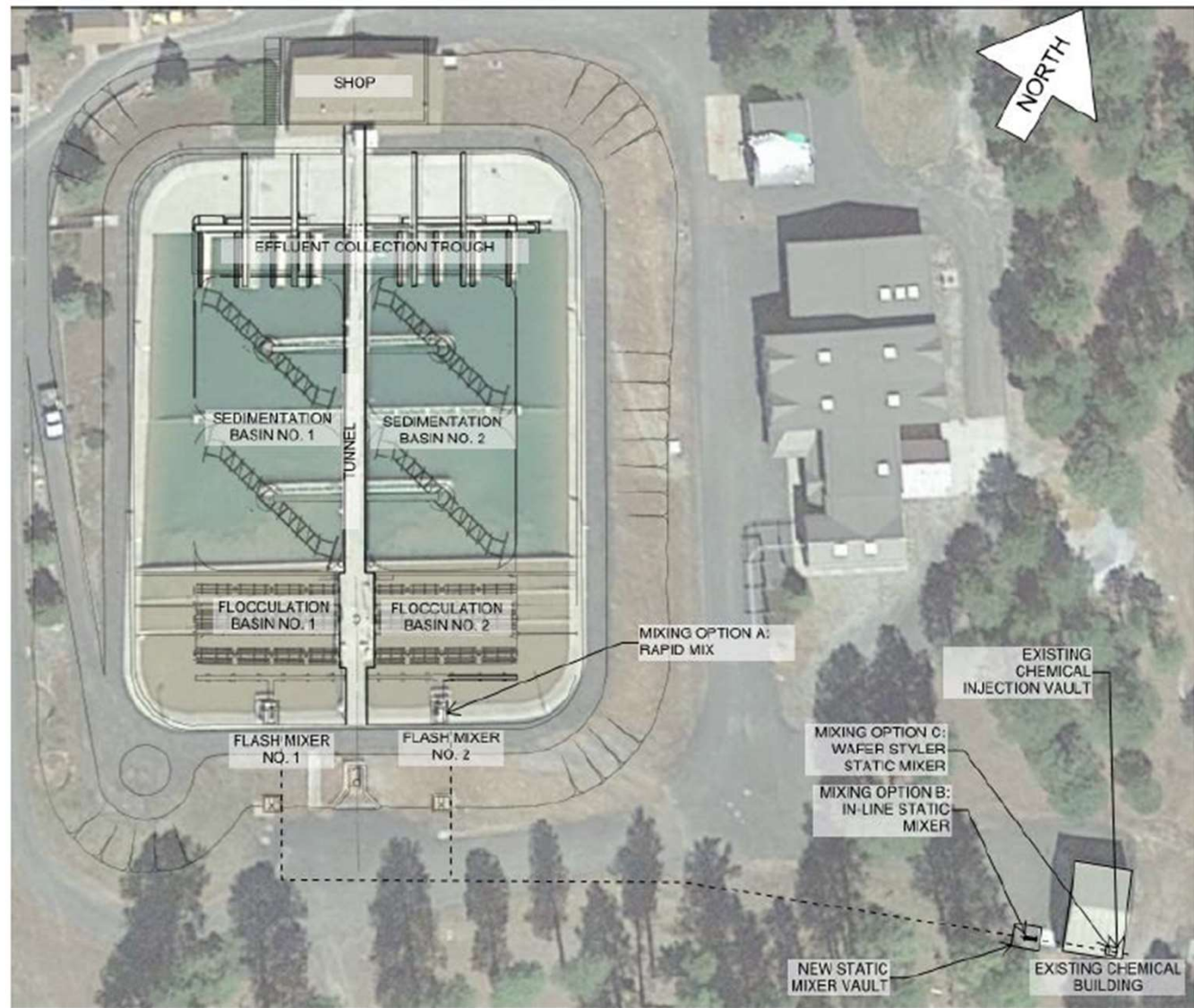


1. Beulah/University Waterline Relocation
2. Rio de Flag Flood Control Project- Waterline
3. Water Vault/PRV Replacement Program
4. New Well and Pumphouse
5. Coconino Estates- Bundle #4
6. Lake Mary Sedimentation Basin (Flocculation)
7. Soliere Waterline 12" Upsizing
8. Lake Mary Land Acquisition
9. McAllister-Well Design/Construction
10. Switzer Canyon Transmission Line Phase 4
11. Switzer Canyon Transmission Line Phase 5
12. Fort Tuthill Waterline Loop-Phase 2
13. First Ave TREX Waterline Replacement
14. Fort Tuthill Well
15. Inner Basin Waterline
16. Inner Basin Line- Schultz to Reservoir Plant
17. Inner Basin Spring Box and Collection Rehab
18. Lake Mary Raw Water Pipeline Rehab
19. Zone B Storage
20. Lake Mary Dam Repairs
21. Railroad Springs #3 Storage Tank
22. JW Powell Waterline Oversizing
23. Pine Del Waterline Upsizing
24. Woody Mountain Wellfield Powerline Burial
25. Fort Valley Shopping Center
26. ADOT Cast Iron
27. Turquoise WL Replacement
28. East Side Shop New Building for Equipment Storage
29. Beulah/University Sewer Exit
30. Rio de Flag Water Reclamation Facility Two Bar Screens
31. Rio de Flag Sewer Relocations
32. Coconino Estates-Bundle#4
33. Wildcat Dewatering Facility
34. First Ave Rte. 66 Sewer Replacement
35. Country Club Interceptor to WCH
36. Rio de Flag Water Reclamation Facility Solids Treatment
37. Wildcat New Elect./Fiber Upgrade
38. Rio de Flag Fiber Upgrade
39. Wildcat Roof Replacement
40. Wildcat UV Disinfection
41. Rio de Flag Water Reclamation Facility Main Motor Control Centers
42. BNSF Sewer Relocations
43. Facility Master Plan Update
44. Headworks Rehab
45. East Industrial Sewer Improvements
46. Sunnyside Trunk Upsizing
47. Ponderosa Pkwy- McMillan Mesa
48. East Railroad Upsizing
49. University Heights Oversizing
50. Wildcat Solar Drying Facility
51. Rio de Flag Water Reclamation Facility Roof Replacement
52. 8" Bottleneck- Replacement
53. Rio de Flag Water Reclamation Facility Water PRV Relocation 16"
54. Rio de Flag Water Reclamation Facility Pump Value Actuators
55. BNSF Reclaim Relocations
56. Buffalo Park Tank #1 Painting
57. Buffalo Park Chlorine Bldg Upgrade
58. Reclaim Loop-Fox Glenn to Country Club
59. Bushmaster Park Booster Communications & Flow Meters
60. WCH Reclaim Booster Building Equipment Upgrade
61. Rio de Flag Water Reclamation Facility Storage Tank
62. WCH Storage Tank

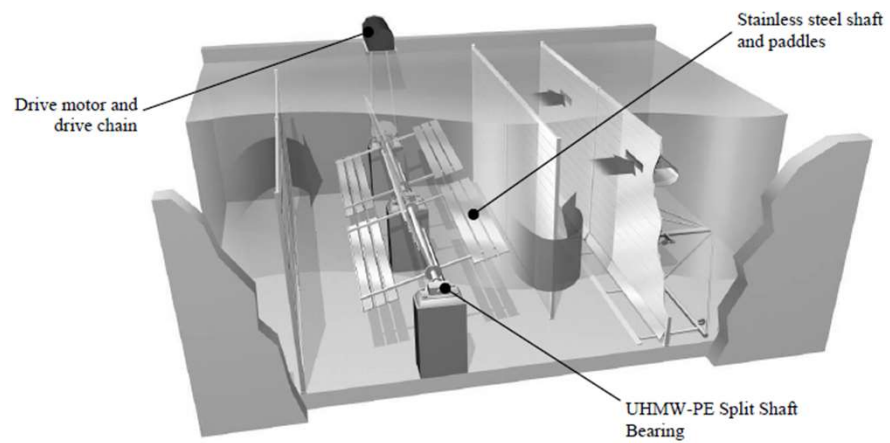
CIP: Wildcat Interceptor Line



CIP: Lake Mary Sedimentation Basin



CIP: Lake Mary Sedimentation Basin



CIP Funding

Fund		Approved CIP ¹	Approved + Informed CIP ²	Approved + Informed + Unfunded CIP ³
Water	<i>Annual Average</i>	\$13.1	\$19.7	\$20.8
	<i>Total CIP Funding FY24 – FY33</i>	\$130.7	\$196.9	\$207.9
Wastewater	<i>Annual Average</i>	\$8.7	\$10.0	\$12.5
	<i>Total CIP Funding FY24 – FY33</i>	\$86.7	\$99.5	\$124.6
Reclaimed	<i>Annual Average</i>	\$0.5	\$3.3	\$6.9
	<i>Total CIP Funding FY24 – FY33</i>	\$5.2	\$32.8	\$68.6

¹ Conforms to anticipated revenues projected by Utility (partial CIP list).

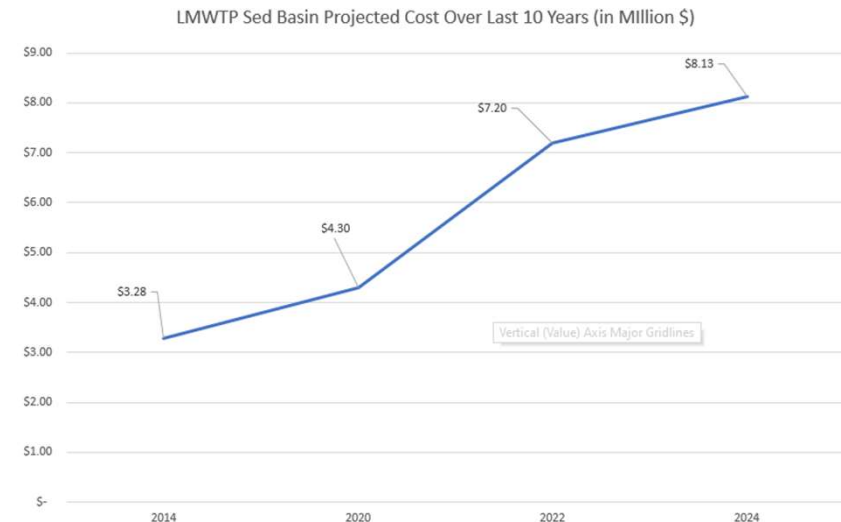
² From complete CIP list informed by Master Plan recommended projects (e.g., Water Infrastructure Master Plan, Sewer Master Plan).

³ Needed projects without an identified funding source.

CIP Funding

Impacts of Insufficient Funding

- Value engineer and/or strip components of project
- Consistently reprioritizing projects based on available funding
 - Reduces funding for other projects
 - More projects become underfunded
- Move project(s) to unfunded list
 - Project placed on hold
 - Project is removed from the 5-year plan
 - Postponing projects tends to cost two to three times more



Rate Study Background

- Rates and fees provide funding for operations, maintenance, and capital improvements
- Objectives of the Study
 - Build a financial model
 - Establish a Cost-of-Service
 - Review Rate Structure
 - Adjust rates and fees
- Last rate study was completed in 2015
- Last rate increase went into effect in 2020
- Began discussions with City Council in September 2023
- Public Hearing are scheduled for June 18, and July 2, 2024
- Rate changes effective September 1, 2024

Rate Study Priorities

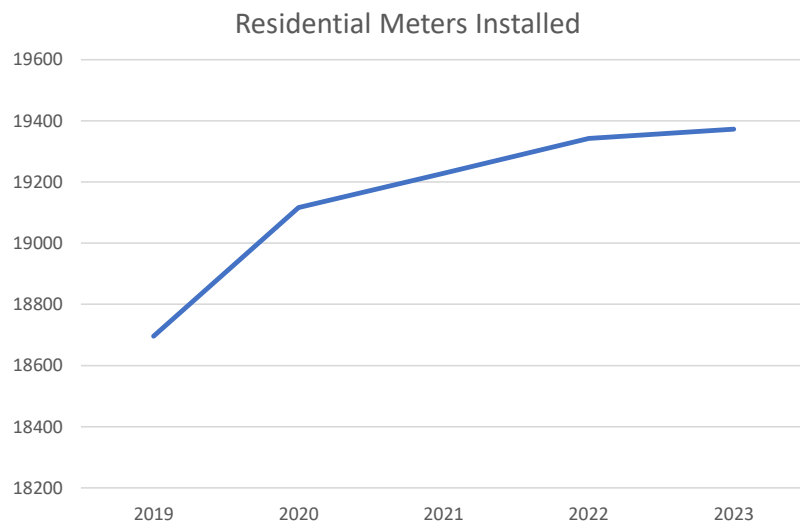
Create sufficient resources through rates to support:

- **Provide High-Quality Water:** Bring clean, safe and reliable water supply by balancing variable supply and customer demand
- **Develop Reliable Sources of Water:** Invest ongoing to maintain three independent water supplies and careful use of natural resources
- **Address Aging Water Infrastructure:** Reduce increased maintenance costs, ongoing service problems, breakage, and water loss
- **Use of Reclaimed Water:** Offsets demand for potable water up to 20%
- **Fulfill Regulatory Requirements:** Produce potable water and reclaimed water within State and Federal guidelines

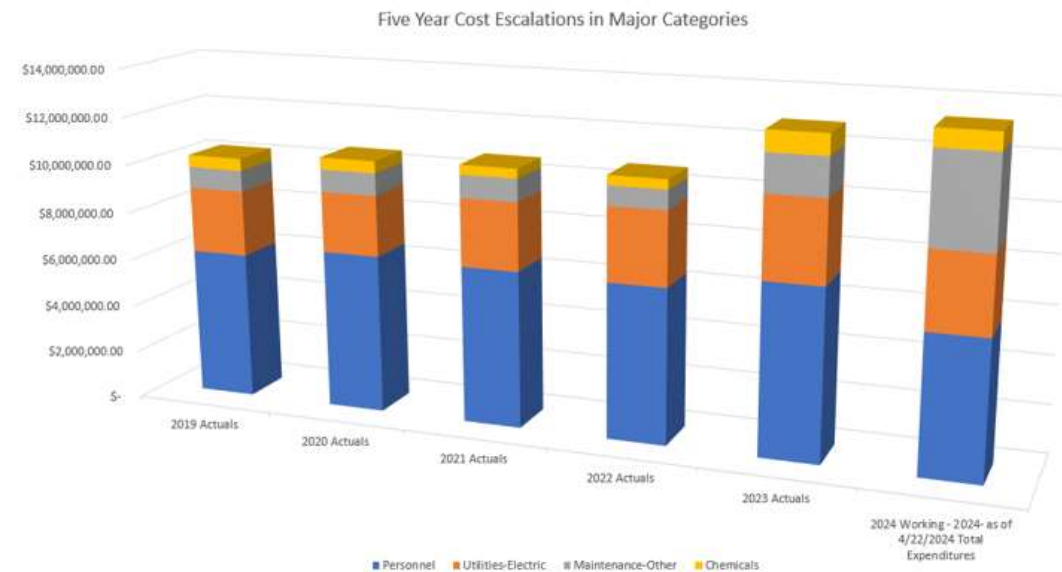
Rate Study Model Assumptions

Assumption	Details
Growth in Accounts	1.00% annually
Reserve Targets	90 days O&M
Debt Service Coverage	Target: 1.25x Minimum: 1.20x
Debt Service Policy	Annual payment less than or equal to 20% of operating revenues for Water, Wastewater, Reclaimed Water, and Stormwater enterprise funds
Base Operating Budget	"Balanced" O&M budget adjusted to reflect average spending rate, carry-forwards, one-time requests, and operating capital
Cost Escalation Factors	Default inflation factor at 3.5% Chemical, Utilities, Equipment Maintenance at 6.00%
CIP Escalation	Full CIP adjusted for 4% annual cost escalation beginning in FY 2025
Funding Sources	Rate revenues, fund balances, debt, grant funding, and capacity fees
Grant Funding	\$21.9M in Water; \$3.2M in Reclaimed Water
Major Projects	Water – Water Supply Security Projects Wastewater – Wildcat Hill Wastewater Treatment Plant Design & Expansion

Rate Study Model Assumptions

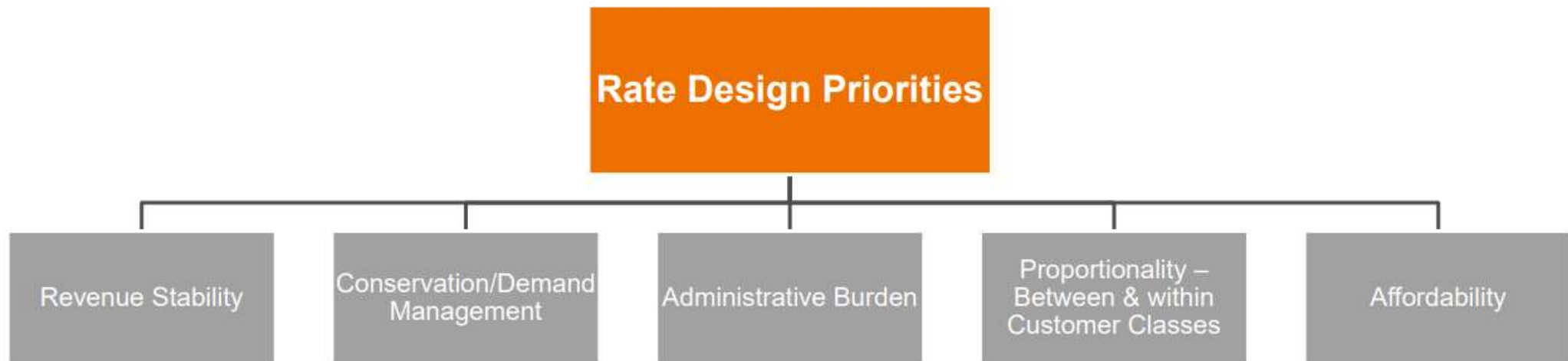


Water Service has seen an average 3.5% growth in meter installations over the last five years. Financial model assume a 1% growth over the planning period.



Financial Model assumes 3.5% cost escalator, and a 6% for Chemicals, Electrical, and Maintenance (CEM). CEM has seen a 29% cost escalation in these expenses.

Rate Design Priorities



Proposed Water Rates

WATER RATES - Proposed (Fixed Charge)							
		Current Fixed Charge	September 1st, 2024 - December 31st, 2025	January 1st, 2026 - December 31st, 2026	January 1st, 2027 - December 31st, 2027	January 1st, 2028 - December 31st, 2028	January 1st, 2029 - December 31st, 2029
Meter Size:		Inside City Limits	Inside City Limits	Inside City Limits	Inside City Limits	Inside City Limits	Inside City Limits
0.75		\$16.64	\$14.33	\$16.48	\$18.96	\$21.80	\$25.07
1		\$19.60	\$19.86	\$22.83	\$26.26	\$30.20	\$34.73
1.5		\$26.98	\$33.66	\$38.71	\$44.52	\$51.19	\$58.87
2		\$35.84	\$50.23	\$57.76	\$66.42	\$76.39	\$87.85
3		\$56.52	\$102.68	\$118.09	\$135.80	\$156.17	\$179.59
4		\$86.05	\$144.10	\$165.71	\$190.57	\$219.15	\$252.03
6		\$159.88	\$364.97	\$419.72	\$482.67	\$555.08	\$638.34
8		\$248.47	\$447.80	\$514.97	\$592.21	\$681.05	\$783.20
10		\$351.83	\$1,165.64	\$1,340.48	\$1,541.55	\$1,772.79	\$2,038.71
WATER RATES - Proposed (Volume)							
		Current Volume Charge	September 1st, 2024 - December 31st, 2025	January 1st, 2026 - December 31st, 2026	January 1st, 2027 - December 31st, 2027	January 1st, 2028 - December 31st, 2028	January 1st, 2029 - December 31st, 2029
POTABLE WATER: (per 1,000 gallons)			Inside City Limits	Inside City Limits	Inside City Limits	Inside City Limits	Inside City Limits
Single Family	Tier 1 (0 - 3,500 gallons)	\$3.44	\$4.39	\$ 5.04	\$ 5.80	\$ 6.67	\$ 7.67
	Tier 2 (3,501 - 6,200 gallons)	\$4.45	\$4.72	\$ 5.42	\$ 6.24	\$ 7.17	\$ 8.25
	Tier 3 (6,201 - 11,500 gallons)	\$6.86	\$9.43	\$ 10.85	\$ 12.47	\$ 14.34	\$ 16.50
	Tier 4 (11,501+ gallons)	\$13.72	\$18.86	\$ 21.69	\$ 24.95	\$ 28.69	\$ 32.99
Multi-Family		\$4.42	\$4.97	\$ 5.72	\$ 6.57	\$ 7.56	\$ 8.69
Commercial/Schools		\$4.69	\$5.88	\$ 6.76	\$ 7.78	\$ 8.94	\$ 10.29
Institutional		\$4.30	\$5.88	\$ 6.76	\$ 7.78	\$ 8.94	\$ 10.29
Manufacturing		\$4.63	\$5.56	\$ 6.39	\$ 7.35	\$ 8.45	\$ 9.72
Landscaping/Lawn Meters		\$4.69	\$10.51	\$ 12.09	\$ 13.90	\$ 15.99	\$ 18.39
Hydrant Meter		\$7.17	\$7.60	\$ 8.74	\$ 10.05	\$ 11.56	\$ 13.29
Standpipe**		\$9.56	\$7.55	\$ 8.68	\$ 9.98	\$ 11.48	\$ 13.20

Proposed Sewer Rates

SEWER RATES - Proposed (Fixed Charge)					
	September 1st, 2024 - December 31st, 2025	January 1st, 2026 - December 31st, 2026	January 1st, 2027 - December 31st, 2027	January 1st, 2028 - December 31st, 2028	January 1st, 2029 - December 31st, 2029
Meter Charge	Inside City Limits	Inside City Limits	Inside City Limits	Inside City Limits	Inside City Limits
0.75	\$10.39	\$12.99	\$14.94	\$16.43	\$17.25
1	\$17.32	\$21.65	\$24.90	\$27.39	\$28.76
1.5	\$34.63	\$43.29	\$49.78	\$54.76	\$57.50
2	\$55.41	\$69.26	\$79.65	\$87.62	\$92.00
3	\$121.22	\$151.53	\$174.25	\$191.68	\$201.26
4	\$173.17	\$216.46	\$248.93	\$273.83	\$287.52
6	\$346.33	\$432.91	\$497.85	\$547.63	\$575.02
8	\$554.13	\$692.66	\$796.56	\$876.22	\$920.03

SEWER RATES - Proposed (Volume)					
	September 1st, 2024 - December 31st, 2025	January 1st, 2026 - December 31st, 2026	January 1st, 2027 - December 31st, 2027	January 1st, 2028 - December 31st, 2028	January 1st, 2029 - December 31st, 2029
SEWER: (per 1,000 gallons)	Inside City Limits	Inside City Limits	Inside City Limits	Inside City Limits	Inside City Limits
<u>Residential</u>					
Residential	\$5.50	\$6.88	\$7.91	\$8.70	\$9.13
<u>Non-Residential</u>					
Non-Residential A	\$4.45	\$5.56	\$6.40	\$7.04	\$7.39
Non-Residential B	\$7.05	\$8.81	\$10.13	\$11.15	\$11.71
Non-Residential C	\$29.96	\$37.45	\$43.07	\$47.37	\$49.74

*Residential usage based on WQA (usage billed in winter months of December, January, February, March)

Proposed Reclaimed Rates

RECLAIMED WATER RATES - Proposed (Fixed Charge)							
		Current Fixed Charge	September 1st, 2024 - December 31st, 2025	January 1st, 2026 - December 31st, 2026	January 1st, 2027 - December 31st, 2027	January 1st, 2028 - December 31st, 2028	January 1st, 2029 - December 31st, 2029
Meter Size:			Inside City Limits	Inside City Limits	Inside City Limits	Inside City Limits	Inside City Limits
0.75		\$16.64	\$14.33	\$16.48	\$18.96	\$21.80	\$25.07
1		\$19.60	\$19.86	\$22.83	\$26.26	\$30.20	\$34.73
1.5			\$33.66	\$38.71	\$44.52	\$51.19	\$58.87
2		\$35.84	\$50.23	\$57.76	\$66.42	\$76.39	\$87.85
3		\$56.52	\$102.68	\$118.09	\$135.80	\$156.17	\$179.59
4		\$86.05	\$144.10	\$165.71	\$190.57	\$219.15	\$252.03
6		\$159.88	\$364.97	\$419.72	\$482.67	\$555.08	\$638.34
8		\$248.47	\$447.80	\$514.97	\$592.21	\$681.05	\$783.20
10		\$351.83	\$1,165.64	\$1,340.48	\$1,541.55	\$1,772.79	\$2,038.71

RECLAIMED WATER RATES - Proposed (Volume)								
		Current Volume Charge	September 1st, 2024 - December 31st, 2025	January 1st, 2026 - December 31st, 2026	January 1st, 2027 - December 31st, 2027	January 1st, 2028 - December 31st, 2028	January 1st, 2029 - December 31st, 2029	Percent of Potable Water Rate
RECLAIMED WATER: (per 1,000 gallons)			Inside City Limits	Inside City Limits	Inside City Limits	Inside City Limits	Inside City Limits	Inside City Limits
Private Residential	Tier 1 (0 - 3,500 gallons)	\$1.63	\$1.97	\$2.20	\$2.46	\$2.77	\$3.12	35%
	Tier 2 (3,501 - 6,200 gallons)	\$1.99	\$2.08	\$2.33	\$2.62	\$2.94	\$3.32	
	Tier 3 (6,201 - 11,500 gallons)	\$2.83	\$3.73	\$4.23	\$4.80	\$5.45	\$6.21	
	Tier 4 (11,501+ gallons)	\$5.24	\$7.04	\$8.03	\$9.17	\$10.47	\$11.98	
Commercial (no main Ext):		\$2.08	\$2.49	\$2.80	\$3.16	\$3.56	\$4.03	35%
Commercial (w/ main Ext):		\$4.44	\$5.34	\$6.00	\$6.76	\$7.64	\$8.64	75%
Manufacturing (no main Ext):		\$2.05	\$2.38	\$2.67	\$3.01	\$3.39	\$3.83	35%
Manufacturing (w/ main Ext):		\$4.40	\$5.10	\$5.72	\$6.44	\$7.27	\$8.22	75%
NAU (No main extension):		\$1.94	\$2.49	\$2.80	\$3.16	\$3.56	\$4.03	35%
NAU (with main extension):		\$4.16	\$5.34	\$6.00	\$6.76	\$7.64	\$8.64	75%
Hydrant Meter		\$4.21	\$4.42	\$4.99	\$5.65	\$6.40	\$7.27	50%
Standpipe		\$4.79	\$4.39	\$4.96	\$5.61	\$6.36	\$7.22	50%
Off Peak/Golf Course*		\$1.81	\$2.17	\$2.44	\$2.75	\$3.10	\$3.51	87%

*Rate is 87% of the Commercial (no main extension) reclaimed water rate

Capacity Fees

WATER

Meter Size	ERU Factor	Existing Fee	Proposed Fee
¾"	1.0	\$5,728	\$8,266
1"	1.67	\$9,566	\$13,804
1 ½"	3.33	\$19,074	\$27,526
2"	5.33	\$30,530	\$44,058
3"	10.00	\$57,279	\$82,660
4"	16.67	\$95,484	\$137,795
6"	33.33	\$190,910	\$275,506
8"	53.33	\$305,468	\$440,827
10"	76.67	\$439,157	\$633,756

WASTEWATER

Meter Size*	Existing Fee	ERU Factor	Proposed Fee
¾"	\$3,723	1.0	\$4,086
1"	\$6,218	1.67	\$6,824
1 ½"	\$12,399	3.33	\$13,608
2"	\$19,845	5.33	\$21,780
3"	\$37,233	10.00	\$40,863
4"	\$62,068	16.67	\$68,120
6"	\$124,099	33.33	\$136,198
8"	\$198,566	53.33	\$217,927
10"	\$285,468	76.67	\$313,302

Miscellaneous Fees

- Water Meter Installations
- Water and Sewer Tap Fees
- Service Charges
 - Establishment
 - Non-Payment
 - Meter Testing
 - Backflow Prevention Permit
 - Backflow Compliance
 - Malicious Damage
- Sewer Fees
 - Industrial Pre-Treatment Discharge
 - Septage
 - Restaurant Grease
 - Mud Sump
 - After Hours Dumping
 - Scavenger Waste Permit
- High Strength Waste Surcharge

Rate Calculator Demonstration

<https://cleanwaterflagstaff.com/rate-calculator>

Below are standard fees and charges for a Single-Family Residential Municipal Services Bill.

The 2024 Rate Study is evaluating the base meter charge, tiered water charges, and sewer charge for adjustments required to meet the cost of service. See the "Understanding Your Municipal Services Bill" factsheet for an explanation of all items listed.

Current Activity	Usage	Rate	Amount
Base Meter Charge			16.64
Tier 1 Residential Water	3,500	\$3.44	12.04
Tier 2 Residential Water	1,050	\$4.45	4.67
Energy Surcharge	4,550	\$1.24	5.64
Water Protection Fee	4,550	\$0.53	2.41
Sewer Charge	2,090	\$5.35	11.18
Stormwater Fee			12.57
Solid Waste Charge			25.45
Recycling Fee			5.09
Environmental Management Program Fee			2.48
State and Local Taxes			3.73
Total			\$101.90

Water		
Enter information from your Municipal Services Statement in the orange highlighted spaces below, or you can estimate your water use and meter size from the list below. Most residents have a 3/4" meter size.		
Enter Monthly Usage in Gallons (for residential, add up usage over the different tiers, or use the value from "Energy Surcharge" similar to how shown in this example):		
Current Activity	Usage	
Base Meter Charge		
Tier 1 Residential Water	3,500	
Tier 2 Residential Water	1,050	
Energy Surcharge	4,550	
Enter Monthly Base Meter Charge from your bill:		\$16.64
Enter your customer class:		Institutional
New Proposed Customer Class (if applicable)		Commercial/Schools
Amount	Existing	Proposed
Water Base Charge	\$ 16.64	\$ 14.33
Water Volume Charge	\$ -	\$ -
Total Water Charge	\$ 16.64	\$ 14.33

Rate Calculator – Residential Example

- Residential customer who usage is 4,577 gallon
- Current monthly bill - \$51.30 (Water \$33.47, Sewer \$17.83)
- Year 1 bill - \$63.48 (Water \$34.76, Sewer \$28.72)
- Year 2 bill - \$75.88 (Water \$39.98, Sewer \$35.90)
- Year 3 bill - \$87.26 (Water \$45.97, Sewer \$41.29)
- Year 4 bill - \$98.29 (Water \$52.87, Sewer \$45.42)
- Year 5 bill - \$108.49 (Water \$60.80, Sewer \$47.69)

Rate Calculator – Commercial Example

- Commercial customer who usage is 51,750
- Currently monthly bill - \$553.29 (Water \$259.35, Sewer \$293.94)
- Year 1 bill - \$559.33 – (Water \$318.65, Sewer \$240.68)
- Year 2 bill - \$667.30 – (Water \$366.45, Sewer \$300.85)
- Year 3 bill - \$767.39 – (Water \$421.42, Sewer \$345.97)
- Year 4 bill - \$865.20 – (Water \$484.63, Sewer \$380.57)
- Year 5 bill - \$956.53 – (Water \$557.33, Sewer \$399.60)

Rate Study Council Direction

Minimizing the Impact to the Rate Payer:

- ✓ Utilized Actual Flow Data versus Design Flow Data to minimize Capacity Fee increase
- ✓ Added Solids Loading component to the Capacity Fee calculation to minimize impact to new developments and align costs to those producing higher solids
- ✓ Reduced revenue recovered from Water Base Fee from 29% to 25% to empower water users to have more control over their bill
- ✓ Assumed a 90% execution rate of operating budget
- ✓ Adjusted Residential Tier Rates to reduce bills for water smart customers in both Tier 1 and Tier 2
- ✓ Consolidated Customer Classes to make the structure simpler and reduced rate increases in some cases
- ✓ Adjusted Other Miscellaneous Fees so those receiving services pay those costs and it is not passed on to the rate payer

Council
Discussion

Questions

Additional
Feedback



City of Flagstaff, AZ

Water, Reclaimed Water, & Wastewater Cost-of-Service Study

Financial Planning Scenarios

City Council Work Session
May 16, 2024



Financial Planning Scenarios

- Growth
- Escalation
- Percentage of Debt
- Capital Execution



Key Financial Assumptions & Adjustments

Assumption	Details
Growth	1.00% annually
Reserve Targets	90 days O&M
Debt Service Coverage	Target: 1.25x Minimum: 1.20x
Debt Service Policy	Annual payment less than or equal to 20% of operating revenues for Water & Wastewater; Reclaimed Water and Stormwater enterprise funds included
Base Operating Budget	“Balanced” O&M budget adjusted to reflect average spending rate, carry-forwards, one-time requests, and operating capital
Cost Escalation Factors	Default inflation factor at 3.5% Chemical, Utilities, Equipment Maintenance at 6.00%
CIP Escalation	Full CIP adjusted for 4% annual cost escalation beginning in FY 2025
Funding Sources	Rate revenues, fund balances, debt, grant funding, and capacity fees
Grant Funding	\$21.9M in Water; \$3.2M in Reclaimed Water
Major Projects	Water – Water Supply Security Projects Wastewater – Wildcat Hill Wastewater Treatment Plant Design & Expansion



Borrowing Funds for Capital Improvements

Notes about debt

- Total debt subject to City policy that was adopted to include four enterprise funds: Water, Wastewater, Reclaimed Water, and Stormwater
- What is optimal amount of debt?
 - City policy
 - Bond rating agencies look at multiple factors
 - Fitch Rating agency metrics for highly rated water & sewer utilities (AAA, AA, A)
 - Percent of CIP funded with debt = 36%
 - Debt Service Coverage (DSC) ratios = 2.4X
 - All in Debt Service payments as % of gross revenues = 18%
- Favorable bond ratings generally lead to lower interest rates = rate payer savings



Growth in Accounts



Growth in Accounts

What does growth influence in rate models?

- Rate revenues
- Capacity fee revenues
- Lower growth = less revenue from proposed rates
 - Increase rates to recover same revenue requirements
 - Holding proposed rates constant, increase debt to fund full CIP
- Higher growth = more revenue from proposed rates
 - Decrease rates to recover same revenue requirements
 - Holding proposed rates constant, less debt needed to fund full CIP
- Current rate model assumption: 1% account growth per year
 - 2023 Report to the Water Commission – water production change 1.15% per year
 - Regional Plan 2030 – population growth ranges from 0.8% to 1.3% annually
 - 3.5% increase in meter installations from FY 2019 to FY 2023 ~0.7% annually



Water Fund FAMS Control Panel – Reduced Growth (0.5%)



CITY OF FLAGSTAFF WATER FUND



CALC SAVE CTRL LAST OVR

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2029	FY 2033
Water Rate Plan	0.00%	0.00%	15.00%	15.00%	15.00%	15.00%	15.00%	5.00%	5.00%	5.00%	5.00%	101.20%	144.59%
Last Plan	0.00%	0.00%	15.00%	15.00%	15.00%	15.00%	15.00%	5.00%	5.00%	5.00%	5.00%	101.20%	144.59%
All-In DSC	1.89	3.05	2.49	2.62	2.61	3.34	3.64	4.20	4.14	4.05	4.45	Total Debt Current Plan	\$54.95
Last Plan	1.89	3.01	2.40	2.39	2.28	2.81	2.98	3.30	3.12	2.96	3.06	Total Debt Last Plan	\$78.94
Total Funded O&M	\$14.747	\$13.250	\$16.380	\$16.026	\$16.712	\$17.475	\$18.189	\$18.934	\$19.711	\$20.524	\$21.372	Average CIP	\$20.36
Total Funded CIP	\$4.606	\$28.954	\$22.660	\$21.621	\$19.843	\$11.032	\$27.959	\$17.183	\$28.727	\$14.069	\$22.460		
Combined DS %	13.7%	21.7%	17.1%	20.9%	20.9%	19.8%	16.6%	15.4%	15.2%	15.0%	14.0%		

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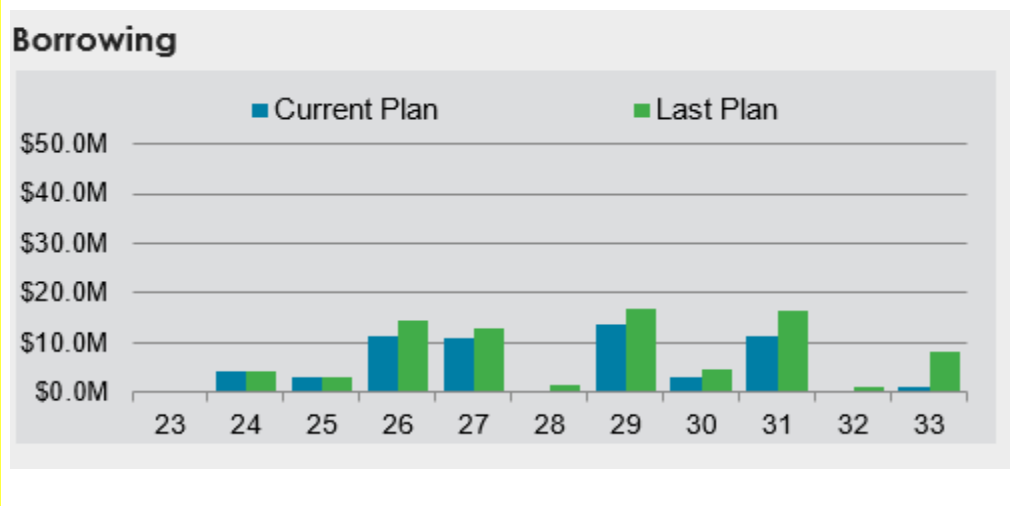
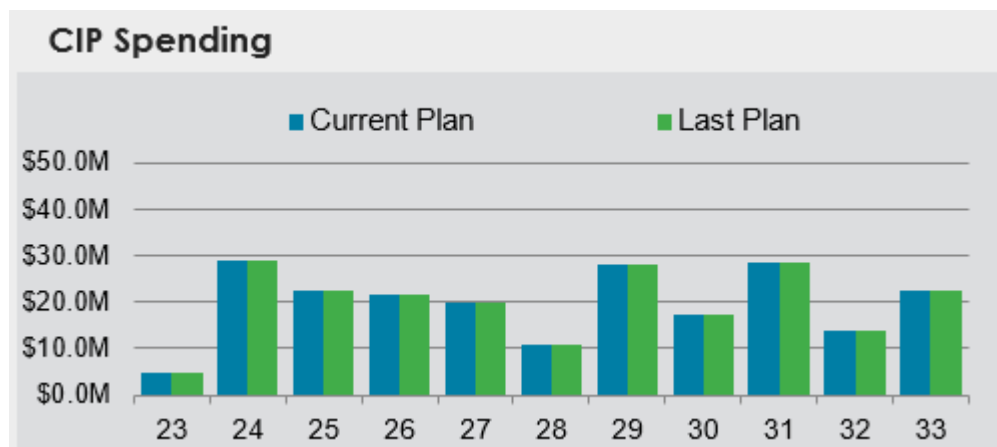
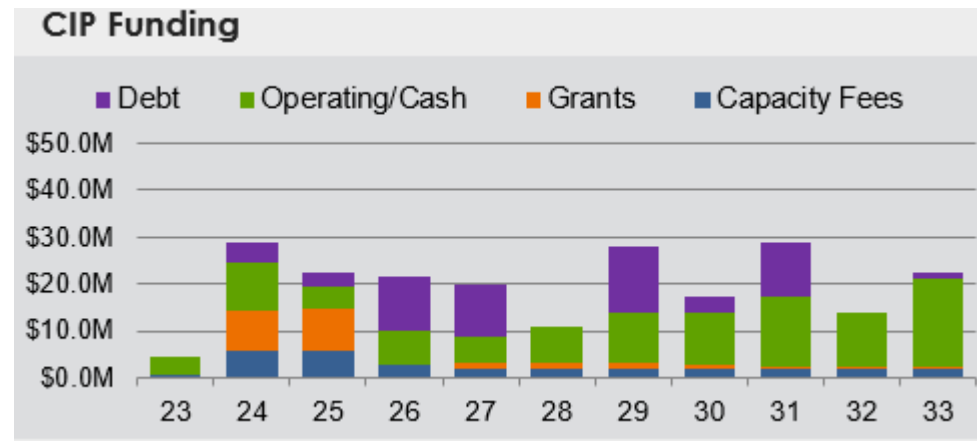
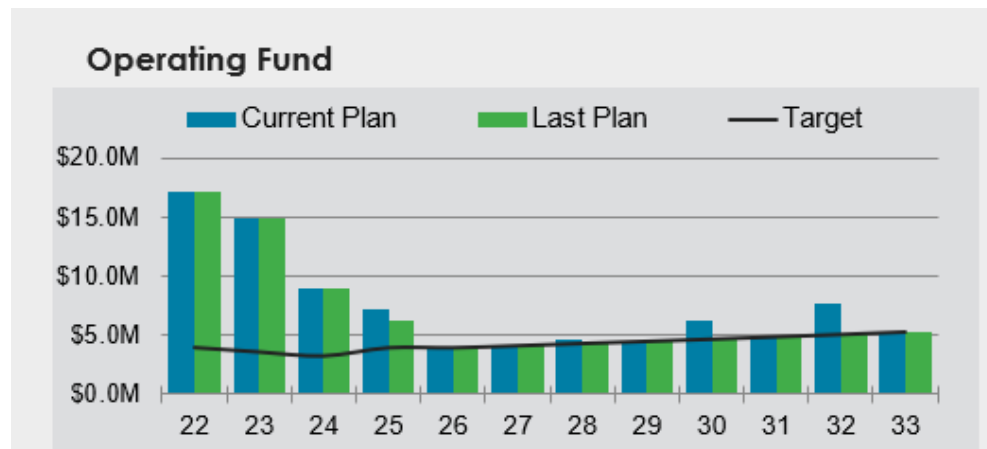
Estimated borrowing

Water Rate Plan (Current Plan) = Proposed Rates with Full CIP Funding

Last Plan = Results with 0.5% Growth (rates held constant, borrowing adjusted)



Water Fund FAMS Control Panel – Reduced Growth (0.5%)



Water Rate Plan (Current Plan) = Proposed Rates with Full CIP Funding

Last Plan = Results with 0.5% Growth (rates held constant, borrowing adjusted)



Impact of Growth on Borrowing

*Held Constant: Rate Plan & CIP				Annual Rate Increase				
	Total CIP (FY 25 – FY 33)	Total CIP Funding from Debt Proceeds (FY 25 – FY 33)		FY 25	FY 26	FY 27	FY 28	FY 29
1% Growth	\$185.6M	\$54.9M	(30%)	15%	15%	15%	15%	15%
0.5% Growth		\$78.9M	(43%)	15%	15%	15%	15%	15%
1.25% Growth		\$46.0M	(25%)	15%	15%	15%	15%	15%
1% Growth	\$112.6M	\$24.0M	(21%)	25%	25%	15%	10%	5%
0.5% Growth		\$27.7M	(25%)	25%	25%	15%	10%	5%
1.25% Growth		\$22.2M	(20%)	25%	25%	15%	10%	5%
Water Factors		Wastewater Factors		% CIP funded w-Debt				



Impact of Growth on Rates

*Held Constant: Rate Plan & CIP			Annual Rate Increase				
	Total CIP (FY 25 – FY 33)	Total CIP Funding from Debt Proceeds (FY 25 – FY 33)	FY 25	FY 26	FY 27	FY 28	FY 29
1% Growth	\$185.6M	\$54.9M (30%)	15%	15%	15%	15%	15%
0.5% Growth		\$54.3M (29%)	17.50%	17.50%	17.50%	17.50%	17.50%
1.25% Growth		\$54.6M (29%)	14.00%	14.00%	14.00%	13.50%	13.50%
1% Growth	\$112.6M	\$24.0M (21%)	25%	25%	15%	10%	5%
0.5% Growth		\$24.7M (22%)	28%	28%	15%	10%	5%
1.25% Growth		\$24.2M (21%)	23%	23%	15%	10%	5%

Water Factors

Wastewater Factors

% CIP funded w-Debt



Cost Escalation Factors



Cost Escalation Factors

What do cost escalation factors influence in rate models?

- Operating expenses forecast
- Future capital improvement expenses

What impacts do we see?

- Total debt to fund full CIP
- Rate projections

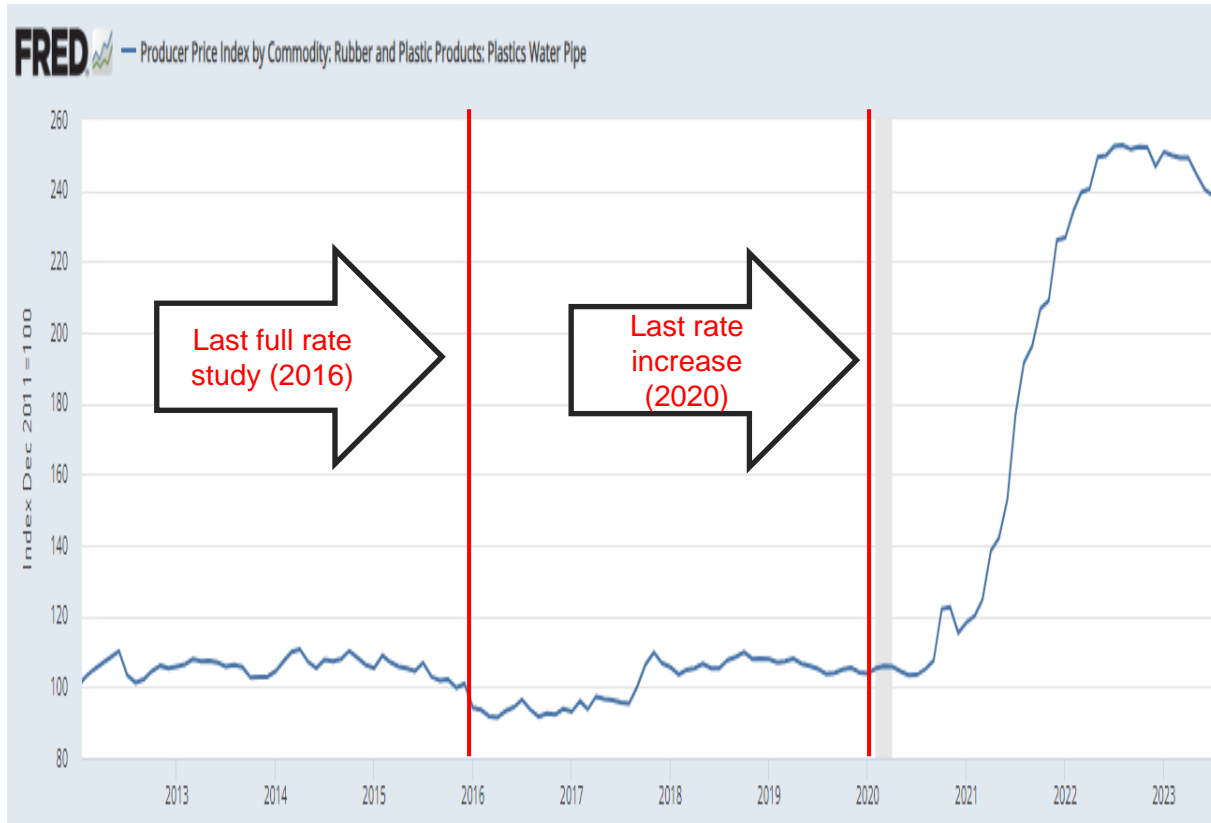
References for cost escalation factors

- Philadelphia Federal Reserve Bank Headline CPI forecast: 2023 – 2032 = 2.4%
- For capital improvements, Engineering News Record Construction Cost Index = 4%
- Recent changes in production cost increases
- Actual Water Services expenses forecast = 3.5%

				WATER FUND		WASTEWATER FUND	
Factor	Notes	Annual Inflation	Used in Model	FY24 Budget (\$M)	Percent of Budget	FY24 Budget (\$M)	Percent of Budget
Default Operating	7% average in actual O&M from FY19-23 Water Pipe Maintenance index: Up 132% from Jan 2020	7.0% 37.7%	3.5%	\$11.29	77%	\$5.72	75%
Chemicals, Maintenance, Vehicle and Other	29% increase in costs over 5 years National Water Treatment Chemical Index: Up 31% from Jan 2020	5.8% 8.9%	6.0%	\$3.43	23%	\$1.93	25%
CIP							
General Construction	Up 33% from January 2020 to June 2023	9.4%	4%				
Industrial Construction	Up 40% from January 2020 to June 2023	11.4%					
Engineering News Record Construction Cost Index	Average Change: Dec 2019 - Dec 2023	3.8%					

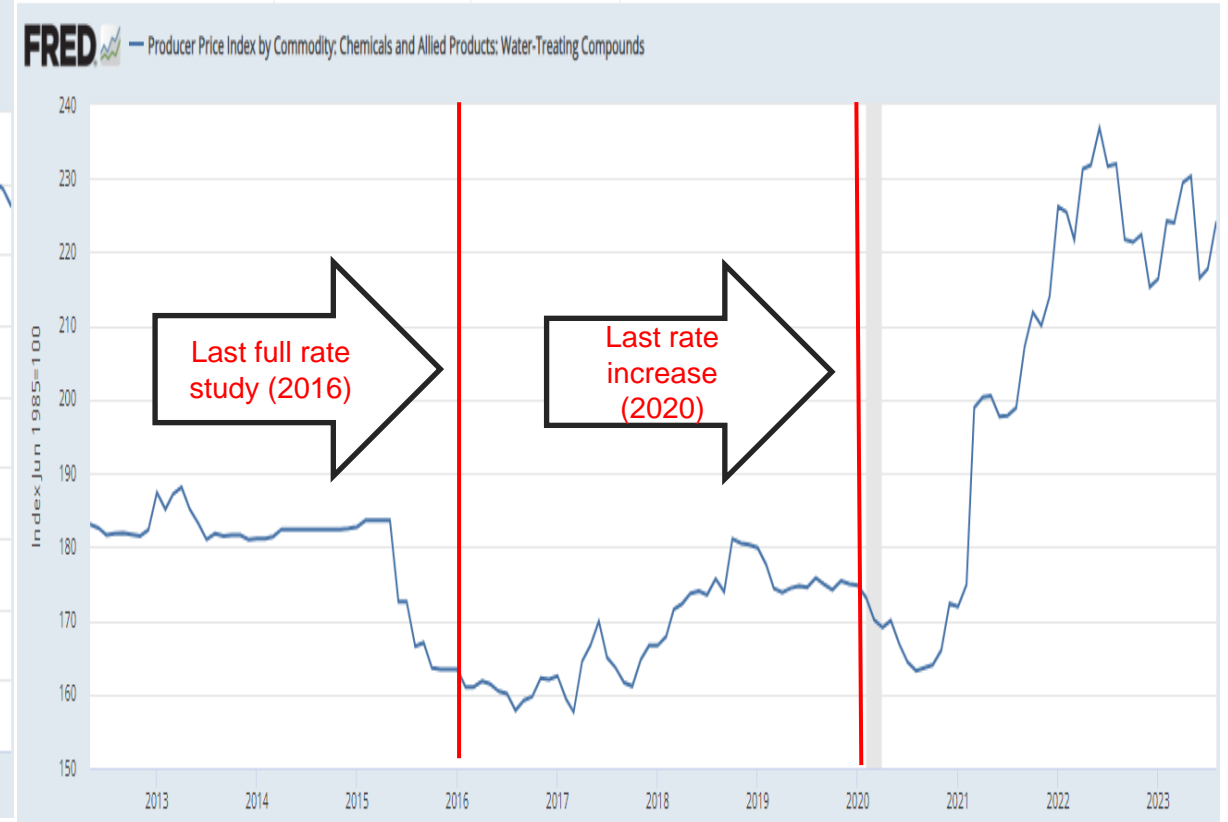


Operations/Material Cost Inflation: 2020-2024



National Commodity Index – Plastic Water Pipe

- Up 132% from Jan 2020 to June 2023

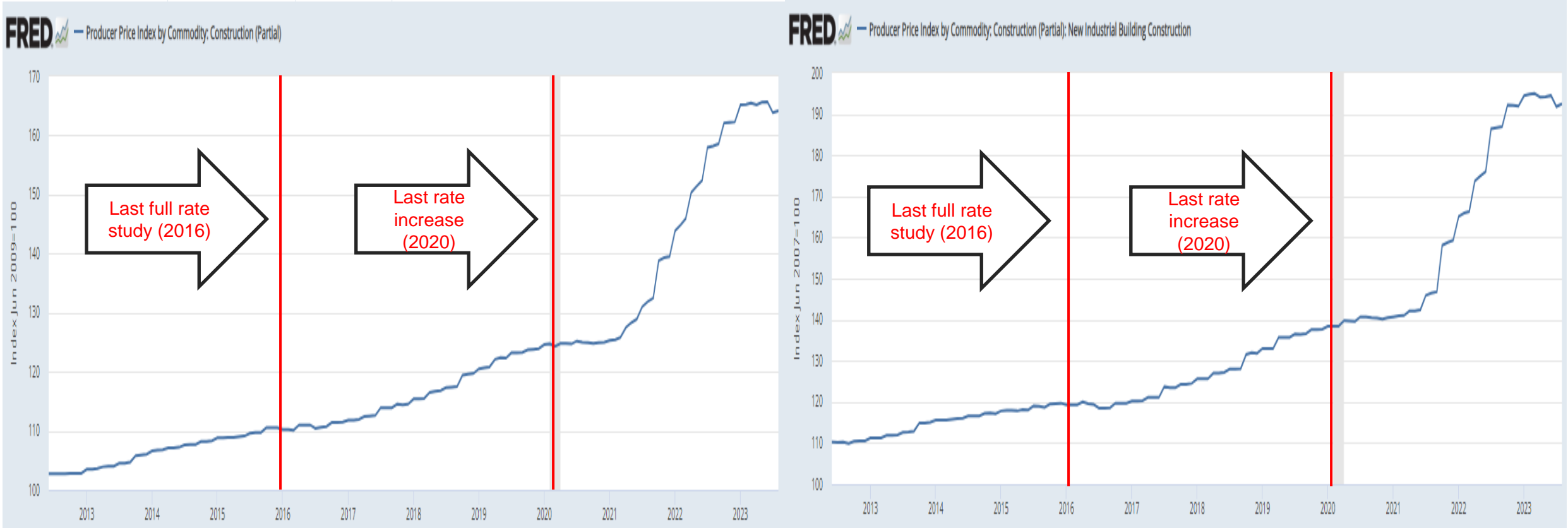


National Water Treatment Chemical Index

- Up 31% from Jan 2020 to June 2023



Construction Cost Inflation: 2020-2024



National Cost Index – Construction

- **General Construction - Up 33% from Jan 2020 to June 2023**
- **Industrial Construction - Up 40% from Jan 2020 to June 2023**
- **Last rate increase was in 2020**



Water Fund FAMS Control Panel – Reduced Escalation Factor (2.4%) and Rate Projections



CITY OF FLAGSTAFF WATER FUND



CALC SAVE CTRL LAST OVR

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2029	FY 2033
Water Rate Plan	0.00%	0.00%	15.00%	15.00%	15.00%	15.00%	15.00%	5.00%	5.00%	5.00%	5.00%	101.20%	144.59%
Last Plan	0.00%	0.00%	14.25%	14.25%	14.25%	14.25%	14.25%	5.00%	5.00%	5.00%	5.00%	94.71%	136.72%
All-In DSC	1.89	3.05	2.49	2.62	2.61	3.34	3.64	4.20	4.14	4.05	4.45	Total Debt Current Plan	\$54.95
Last Plan	1.89	3.05	2.50	2.64	2.62	3.32	3.59	4.13	4.08	4.01	4.41	Total Debt Last Plan	\$55.48
Total Funded O&M	\$14.747	\$13.250	\$16.380	\$16.026	\$16.712	\$17.475	\$18.189	\$18.934	\$19.711	\$20.524	\$21.372	Average CIP	\$20.36
Total Funded CIP	\$4.606	\$28.954	\$22.660	\$21.621	\$19.843	\$11.032	\$27.959	\$17.183	\$28.727	\$14.069	\$22.460		
Combined DS %	13.7%	21.7%	17.1%	20.9%	20.9%	19.8%	16.6%	15.4%	15.2%	15.0%	14.0%		

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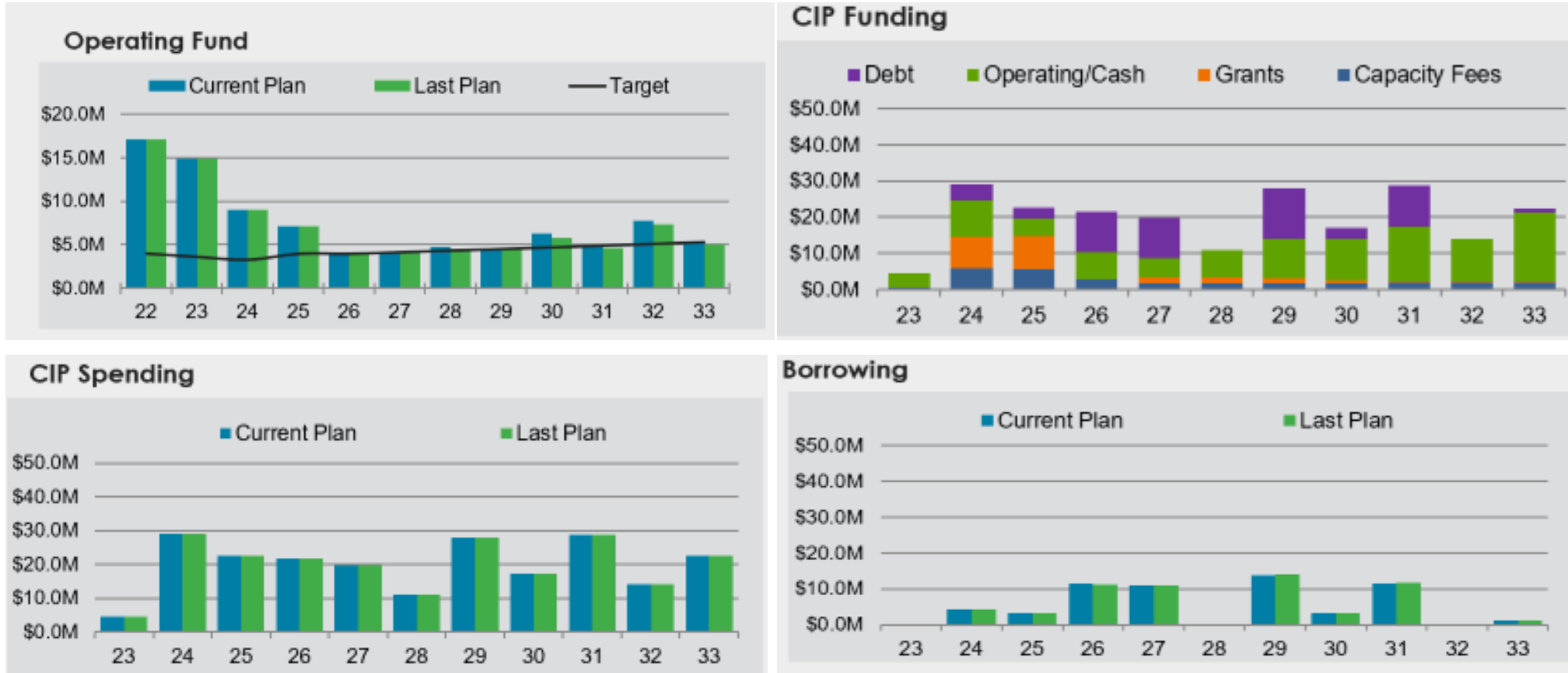
Rate Projections

Water Rate Plan (Current Plan) = Proposed Rates with Full CIP Funding

Last Plan = Results with 2.4% Escalation Factor (borrowing held constant, rates adjusted)



Water Fund FAMS Control Panel – Reduced Escalation Factor (2.4%) and Rate Projections



Water Rate Plan (Current Plan) = Proposed Rates with Full CIP Funding

Last Plan = Results with 2.4% Escalation Factor (borrowing held constant, rates adjusted)



Cost Escalation Impact on Rate Projections

*Held Constant: CIP & Debt			Annual Rate Increase				
	Total CIP (FY 25 – FY 33)	Total CIP Funding from Debt Proceeds (FY 25 – FY 33)	FY 25	FY 26	FY 27	FY 28	FY 29
Current (3.5%)	\$185.6M	\$54.9M (30%)	15%	15%	15%	15%	15%
2.4%	\$185.6M	\$55.5M (30%)	14.25%	14.25%	14.25%	14.25%	14.25%
4.5%	\$185.6M	\$54.8M (30%)	15.75%	15.75%	15.75%	15.50%	15.50%
Current (3.5%)	\$112.6M	\$24.0M (21%)	25%	25%	15%	10%	5%
2.4%	\$112.6M	\$24.3M (22%)	24%	24%	15%	10%	2.5%
4.5%	\$112.6M	\$24.0M (21%)	25.75%	25.75%	15.00%	10.00%	10.00%

Water Factors

Wastewater Factors



Debt Factors



Increased Percentage of Debt

What does the percentage of debt influence in rate models?

- Rate projections
- Capital projects funding

What impacts do we see?

- Lower typical bills
- Increased percentage of debt funding for capital projects



Projected Debt Financed Projects

Project	FY 2025 – FY 2033 Project Cost
Switzer Canyon Transmission Line Phase 5	\$7,000,000
Fort Tuthill Well	\$6,820,000
Inner Basin Line - Schultz to Reservoir Plant	\$8,200,000
LM Raw Water Pipeline Rehab	\$4,950,000
Zone B Storage	\$1,000,000
Red Gap Ranch ROW Acquisition Segments 1-3	\$2,000,000
JW Powell Waterline Oversizing	\$2,300,000
Pine Del Waterline Upsizing	\$2,500,000
Red Gap Ranch Geotechnical Investigation	\$125,000
Woody Mountain Wellfield Powerline Burial	\$2,000,000
Fort Valley Shopping Center	\$600,000
ADOT Cast Iron	\$5,500,000
Turquoise WL Replacement	\$1,100,000
East Side Shop New Building for Equipment Storage	\$700,000
LM Raw Water Pipeline Rehab	\$4,950,000
Annual Unfunded project	\$9,000,000



Water Fund FAMS Control Panel – Increased Borrowing and Rate Projections



CITY OF FLAGSTAFF WATER FUND



CALC SAVE CTRL LAST OVR

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2029	FY 2033
Water Rate Plan	0.00%	0.00%	15.00%	15.00%	15.00%	15.00%	15.00%	5.00%	5.00%	5.00%	5.00%	101.20%	144.59%
Last Plan	0.00%	0.00%	10.00%	10.00%	10.00%	10.00%	10.00%	5.00%	5.00%	5.00%	5.00%	61.00%	95.73%
All-In DSC	1.89	3.05	2.49	2.62	2.61	3.34	3.64	4.20	4.14	4.05	4.45	Total Debt Current Plan	\$54.95
Last Plan	1.89	3.05	2.21	2.12	1.88	2.11	2.03	2.10	1.91	1.77	1.79	Total Debt Last Plan	\$103.62
Total Funded O&M	\$14.747	\$13.250	\$16.380	\$16.026	\$16.712	\$17.475	\$18.189	\$18.934	\$19.711	\$20.524	\$21.372	Average CIP	\$20.36
Total Funded CIP	\$4.606	\$28.954	\$22.660	\$21.621	\$19.843	\$11.032	\$27.959	\$17.183	\$28.727	\$14.069	\$22.460		
Combined DS %	13.7%	21.7%	17.1%	20.9%	20.9%	19.8%	16.6%	15.4%	15.2%	15.0%	14.0%		

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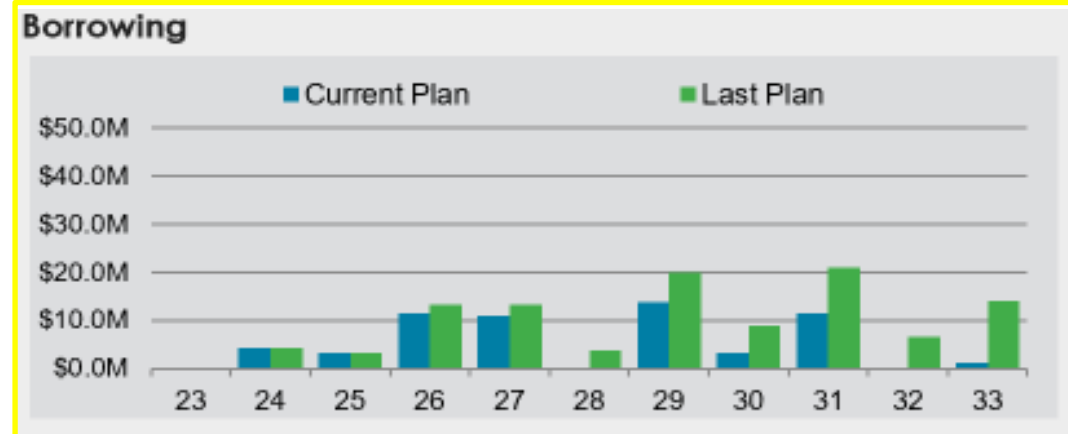
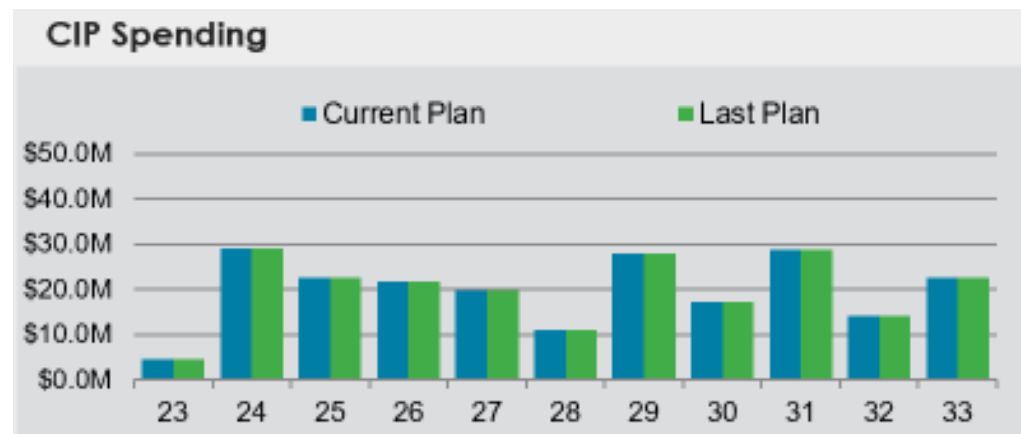
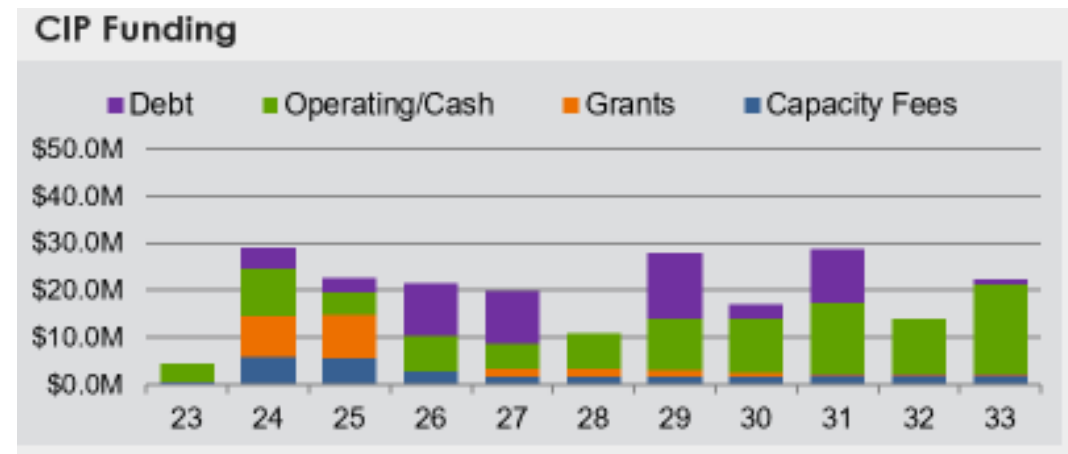
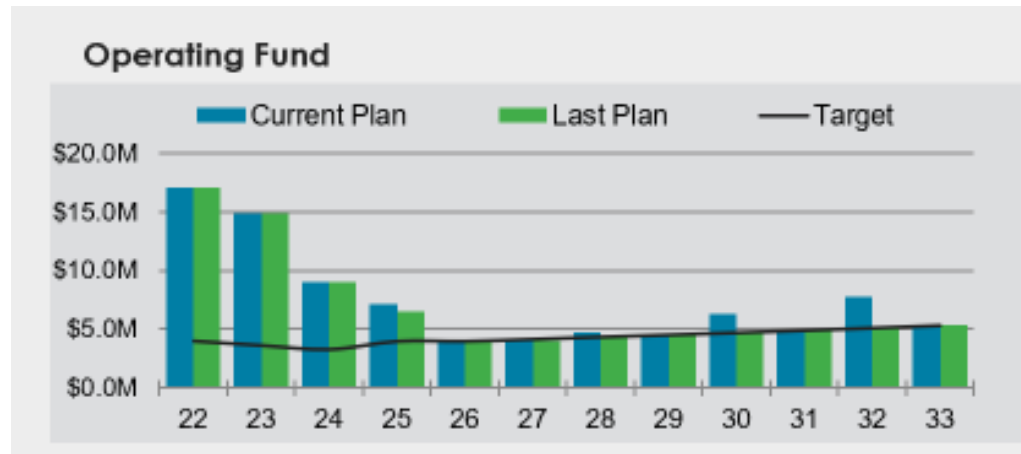
Estimated borrowing

Water Rate Plan (Current Plan) = Proposed Rates with Full CIP Funding

Last Plan = Results with 5% Rate Plan Reduction (borrowing adjusted)



Water Fund FAMS Control Panel – Increased Borrowing and Rate Projections



Water Rate Plan (Current Plan) = Proposed Rates with Full CIP Funding

Last Plan = Results with 5% Rate Plan Reduction (borrowing adjusted)



Increased Borrowing Impact on Rate Projections

*Held Constant: CIP			Annual Rate Increase				
	Total CIP (FY 25 – FY 33)	Total CIP Funding from Debt Proceeds (FY 25 – FY 33)	FY 25	FY 26	FY 27	FY 28	FY 29
Current	\$185.6M	\$54.9M (30%)	15%	15%	15%	15%	15%
Increased Borrowing	\$185.6M	\$103.6M (56%)	10%	10%	10%	10%	10%
Current	\$112.6M	\$24.0M (21%)	25%	25%	15%	10%	5%
Increased Borrowing	\$112.6M	\$34.0M (30%)	20%	20%	15%	10%	5%

Water Factors

Wastewater Factors

% CIP & Rate Projections



CIP Execution Factors



CIP Execution Reduction

What does the CIP execution percentage influence in rate models?

- Capital improvement plan spending
- Revenue requirements

What impacts do we see?

- Capital improvements cut
- Lower typical bills
- Less borrowing (primarily for wastewater fund)



Water Fund FAMS Control Panel – Capital and Rate Reduction

FAMS

Financial Analysis & Management System | By Stantec

CITY OF FLAGSTAFF WATER FUND

Stantec

CALC

SAVE

CTRL

LAST

OVR

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033		FY 2029	FY 2033
Water Rate Plan	0.00%	0.00%	15.00%	15.00%	15.00%	15.00%	15.00%	5.00%	5.00%	5.00%	5.00%		101.20%	144.59%
Last Plan	0.00%	0.00%	10.00%	10.00%	10.00%	10.00%	10.00%	5.00%	5.00%	5.00%	5.00%		61.00%	95.73%
All-In DSC	1.89	3.05	2.49	2.62	2.61	3.34	3.64	4.20	4.14	4.05	4.45		Total Debt Current Plan	\$54.95
Last Plan	1.89	3.05	2.21	2.35	2.27	2.75	2.78	3.15	3.04	2.91	3.09		Total Debt Last Plan	\$54.63
Total Funded O&M	\$14.747	\$13.250	\$16.380	\$16.026	\$16.712	\$17.475	\$18.189	\$18.934	\$19.711	\$20.524	\$21.372		Average CIP	\$20.36
Total Funded CIP	\$4.606	\$28.954	\$22.660	\$21.621	\$19.843	\$11.032	\$27.959	\$17.183	\$28.727	\$14.069	\$22.460			
Combined DS %	13.7%	21.7%	17.1%	20.9%	20.9%	19.8%	16.6%	15.4%	15.2%	15.0%	14.0%			

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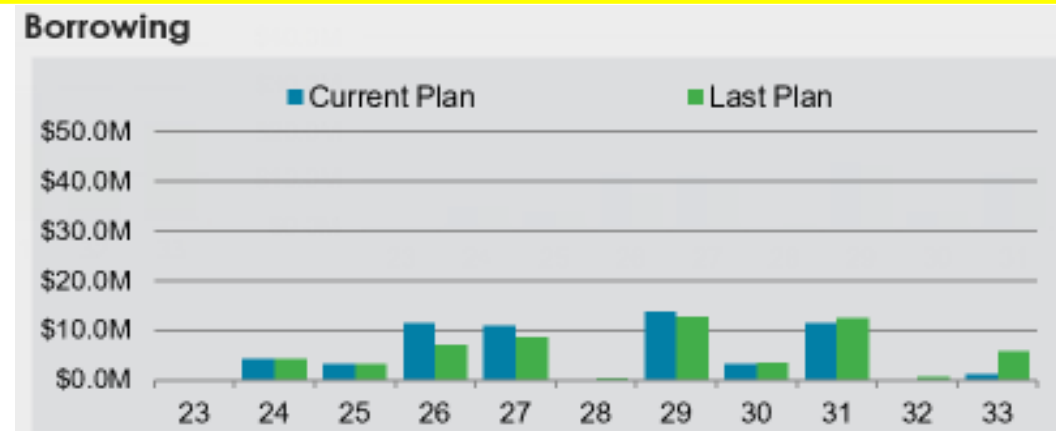
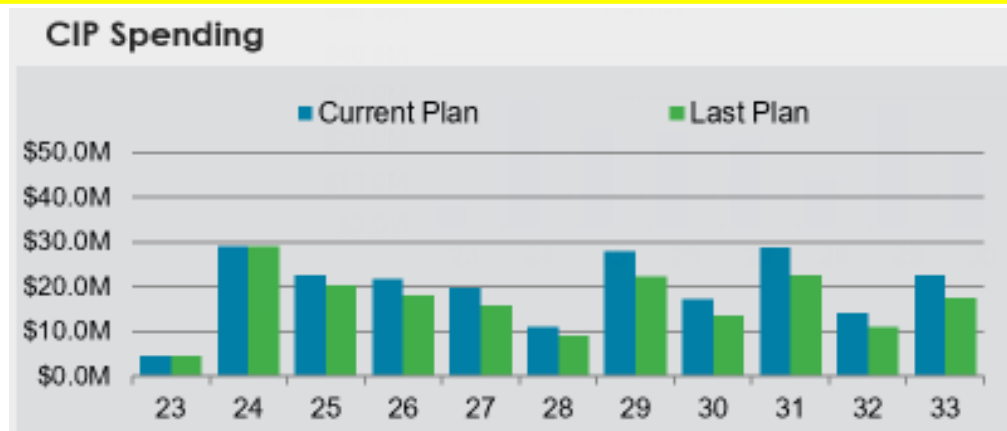
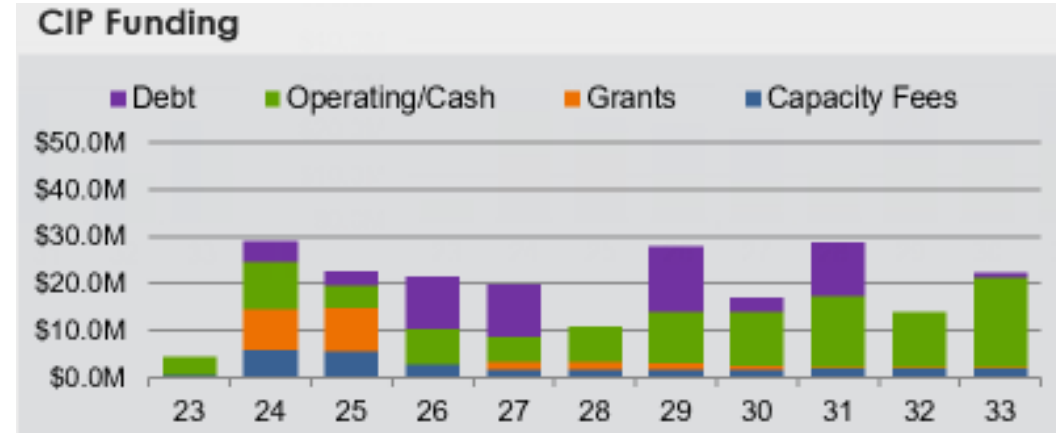
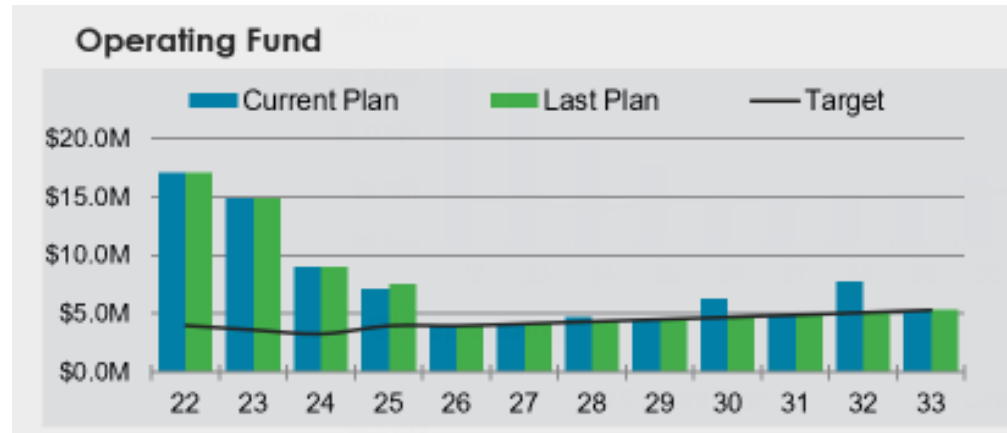
Rate Projections

Water Rate Plan (Current Plan) = Proposed Rates with Full CIP Funding

Last Plan = Results with 5% Rate Plan Reduction & 78% CIP Execution (borrowing held constant)



Water Fund FAMS Control Panel – Capital and Rate Reduction



Water Rate Plan (Current Plan) = Proposed Rates with Full CIP Funding

Last Plan = Results with 5% Rate Plan Reduction & 78% CIP Execution (borrowing held constant)



Reduced CIP Execution Impact on Rate Projections

*Held Constant: Current Debt			Annual Rate Increase				
	Total CIP Funding from Debt Proceeds (FY 25 – FY 33)	Total CIP Funding (FY 25 – FY 33)	FY 25	FY 26	FY 27	FY 28	FY 29
Current Rate Plan	\$54.9M	\$185.6M (30%)	15%	15%	15%	15%	15%
CIP Execution Percentage			100%	100%	100%	100%	100%
5% Rate Reduction	\$54.6M	\$150.2M (36%) (Reduction of \$35.4M)	10%	10%	10%	10%	10%
CIP Execution Percentage			78%	78%	78%	78%	78%
Current	\$24.0M	\$112.6M (21%)	25%	25%	15%	10%	5%
CIP Execution Percentage			100%	100%	100%	100%	100%
5% Rate Reduction	\$19.02M	\$91.2M (21%) (Reduction of \$21.4M)	20%	20%	10%	5%	5%
CIP Execution Percentage			81%	81%	81%	81%	81%

Water Factors

Wastewater Factors

CIP & Rate Projections



Projected Bill Impacts



Water Rate Structure – CIP Reduction Rate Projections

- CIP Reduction – average \$4M per year
- Rate Projection – 5% reduction
- Total Bill = Fixed Monthly Meter Charge + Volume Charge

WATER RATES - CIP Reduction (Fixed Charge)						
		September 1st, 2024 - December 31st, 2025	January 1st, 2026 - December 31st, 2026	January 1st, 2027 - December 31st, 2027	January 1st, 2028 - December 31st, 2028	January 1st, 2029 - December 31st, 2029
Meter Size:		Inside City Limits	Inside City Limits	Inside City Limits	Inside City Limits	Inside City Limits
0.75		\$14.01	\$15.41	\$16.95	\$18.65	\$20.51
1		\$18.67	\$20.54	\$22.59	\$24.85	\$27.33
1.5		\$30.30	\$33.33	\$36.66	\$40.33	\$44.36
2		\$44.27	\$48.70	\$53.57	\$58.92	\$64.82
3		\$88.50	\$97.35	\$107.09	\$117.79	\$129.57
4		\$123.41	\$135.75	\$149.33	\$164.26	\$180.68
6		\$309.62	\$340.58	\$374.64	\$412.10	\$453.31
8		\$379.45	\$417.40	\$459.13	\$505.05	\$555.55
10		\$984.64	\$1,084.10	\$1,191.41	\$1,310.56	\$1,441.61

WATER RATES - CIP Reduction (Volume)						
		September 1st, 2024 - December 31st, 2025	January 1st, 2026 - December 31st, 2026	January 1st, 2027 - December 31st, 2027	January 1st, 2028 - December 31st, 2028	January 1st, 2029 - December 31st, 2029
POTABLE WATER: (per 1,000 gallons)		Inside City Limits	Inside City Limits	Inside City Limits	Inside City Limits	Inside City Limits
Single Family	Tier 1 (0 - 3,500 gallons)	\$4.30	\$4.73	\$5.20	\$5.72	\$6.29
	Tier 2 (3,501 - 6,200 gallons)	\$4.62	\$5.08	\$5.59	\$6.15	\$6.76
	Tier 3 (6,201 - 11,500 gallons)	\$9.24	\$10.16	\$11.18	\$12.30	\$13.53
	Tier 4 (11,501+ gallons)	\$18.48	\$20.32	\$22.36	\$24.59	\$27.05
Multi-Family		\$4.70	\$5.18	\$5.69	\$6.26	\$6.89
Commercial/Schools		\$5.60	\$6.16	\$6.78	\$7.46	\$8.20
Institutional		\$5.60	\$6.16	\$6.78	\$7.46	\$8.20
Manufacturing		\$5.27	\$5.80	\$6.38	\$7.01	\$7.71
Landscaping/Lawn Meters		\$9.97	\$10.96	\$12.06	\$13.27	\$14.59
Hydrant Meter		\$7.42	\$8.16	\$8.98	\$9.88	\$10.86
Standpipe**		\$7.36	\$8.10	\$8.91	\$9.80	\$10.78

*Inside city rates. All rates exclude taxes and energy fee

DRAFT – FOR DISCUSSION PURPOSES



Water Projected Average Bill Impacts – CIP Reduction Scenario

Customer Class	Rep. Meter Size	Avg. Bill Volume (kgals)	Avg. FY 2024 Water Bill	Effective Date 9/1/2024			Effective Date 1/1/2026		Effective Date 1/1/2027		Effective Date 1/1/2028		Effective Date 1/1/2029	
				Total Bill*	\$ Change	% Change	Total Bill*	\$ Change	Total Bill*	\$ Change	Total Bill*	\$ Change	Total Bill*	\$ Change
Proposed Rates							(15% Rate Increase)		(15% Rate Increase)		(15% Rate Increase)		(15% Rate Increase)	
Single Family	¾"	4	\$30.91	\$32.04	\$1.13	3.7%	\$36.84	\$4.81	\$42.37	\$5.53	\$48.72	\$6.36	\$56.03	\$7.31
Commercial/ Schools	1"	40	\$207.20	\$255.08	\$47.88	23.1%	\$293.34	\$38.26	\$337.35	\$44.00	\$387.95	\$50.60	\$446.14	\$58.19
CIP and Rate Reduction							(10% Rate Increase)		(10% Rate Increase)		(10% Rate Increase)		(10% Rate Increase)	
Single Family	¾"	4	\$30.91	\$31.36	\$0.45	1.5%	\$34.49	\$3.14	\$37.94	\$3.45	\$41.73	\$3.79	\$45.91	\$4.17
Commercial/ Schools	1"	40	\$207.20	\$242.67	\$35.47	17.1%	\$266.93	\$24.27	\$293.63	\$26.69	\$322.99	\$29.36	\$355.29	\$32.30

*Total Bill = Water Fixed Charge + Water Volume Charge



Wastewater Rate Structure – CIP Reduction Rate Projections

- CIP Reduction – average \$2.3M per year
- Rate Projection – 5% reduction
- Total Bill = Fixed Monthly Meter Charge + Volume Charge

SEWER RATES - CIP Reduction (Fixed Charge)					
	September 1st, 2024 - December 31st, 2025	January 1st, 2026 - December 31st, 2026	January 1st, 2027 - December 31st, 2027	January 1st, 2028 - December 31st, 2028	January 1st, 2029 - December 31st, 2029
Meter Charge	Inside City Limits	Inside City Limits	Inside City Limits	Inside City Limits	Inside City Limits
0.75	\$10.03	\$12.04	\$13.24	\$13.90	\$14.60
1	\$16.75	\$20.10	\$22.11	\$23.22	\$24.38
1.5	\$33.40	\$40.08	\$44.09	\$46.29	\$48.61
2	\$53.46	\$64.15	\$70.57	\$74.10	\$77.80
3	\$117.05	\$140.46	\$154.51	\$162.23	\$170.34
4	\$167.20	\$200.64	\$220.70	\$231.74	\$243.33
6	\$334.30	\$401.16	\$441.28	\$463.34	\$486.51
8	\$554.30	\$641.88	\$706.07	\$741.37	\$778.44
SEWER RATES - CIP Reduction (Volume)					
	September 1st, 2024 - December 31st, 2025	January 1st, 2026 - December 31st, 2026	January 1st, 2027 - December 31st, 2027	January 1st, 2028 - December 31st, 2028	January 1st, 2029 - December 31st, 2029
SEWER: (per 1,000 gallons)	Inside City Rate	Inside City Rate	Inside City Rate	Inside City Rate	Inside City Rate
<u>Residential</u>					
Residential	\$5.29	\$6.35	\$6.98	\$7.33	\$7.70
<u>Non-Residential</u>					
Non-Residential A	\$4.34	\$5.21	\$5.73	\$6.02	\$6.32
Non-Residential B	\$6.77	\$8.12	\$8.94	\$9.38	\$9.85
Non-Residential C	\$28.21	\$33.85	\$37.24	\$39.10	\$41.05

*Residential usage based on WQA (usage billed in winter months of December, January, February, March)

**Inside city rate. All rates exclude taxes

DRAFT – FOR DISCUSSION PURPOSES



Wastewater Projected Average Bill Impacts – CIP Reduction Scenario

Customer Class	Rep. Meter Size	Avg. Bill Volume (kgals)	Avg. FY 2024 Wastewater Bill	Effective Date 9/1/2024			Effective Date 1/1/2026		Effective Date 1/1/2027		Effective Date 1/1/2028		Effective Date 1/1/2029	
				Total Bill*	\$ Change	% Change	Total Bill*	\$ Change	Total Bill*	\$ Change	Total Bill*	\$ Change	Total Bill*	\$ Change
Proposed Rates							(25% Rate Increase)		(15% Rate Increase)		(10% Rate Increase)		(5% Rate Increase)	
Residential	¾"	4.88	\$26.13	\$38.37	\$12.24	46.8%	\$47.96	\$9.59	\$55.15	\$7.19	\$60.67	\$5.52	\$63.70	\$3.03
Commercial	1"	17.60	\$99.96	\$102.69	\$2.73	2.7%	\$128.36	\$25.67	\$147.62	\$19.25	\$162.38	\$14.76	\$170.50	\$8.12
CIP and Rate Reduction							(20% Rate Increase)		(10% Rate Increase)		(5% Rate Increase)		(5% Rate Increase)	
Residential	¾"	4.88	\$26.13	\$35.86	\$9.71	37.2%	\$43.01	\$7.17	\$47.32	\$4.30	\$49.68	\$2.37	\$52.17	\$2.48
Commercial	1"	17.60	\$99.96	\$93.13	(\$6.83)	(6.8%)	\$111.76	\$18.63	\$122.94	\$11.18	\$129.08	\$6.15	\$135.54	\$6.45

*Total Bill = Wastewater Fixed Charge + Wastewater Volume Charge



Discussion

City Council thoughts on scenarios and direction forward



Next Steps

- May 17 – Water Commission comments on draft report are due
- June 4 – Final rate package review and last update to Council before the public hearing
- June 18 and July 2, 2024 - Public hearings on changes in rates and fees
- September 1, 2024 - new rates are effective



Thank you