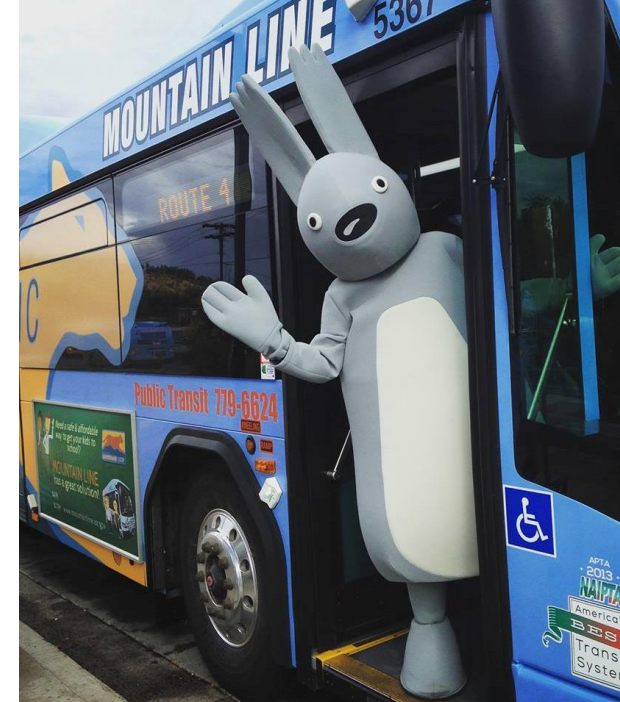


Citizen's Review Session: Carbon Neutrality Amendment to the Regional Plan

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Agenda

1. Review of the amendment

- Regional Plan
- The city's climate work
- Carbon neutrality

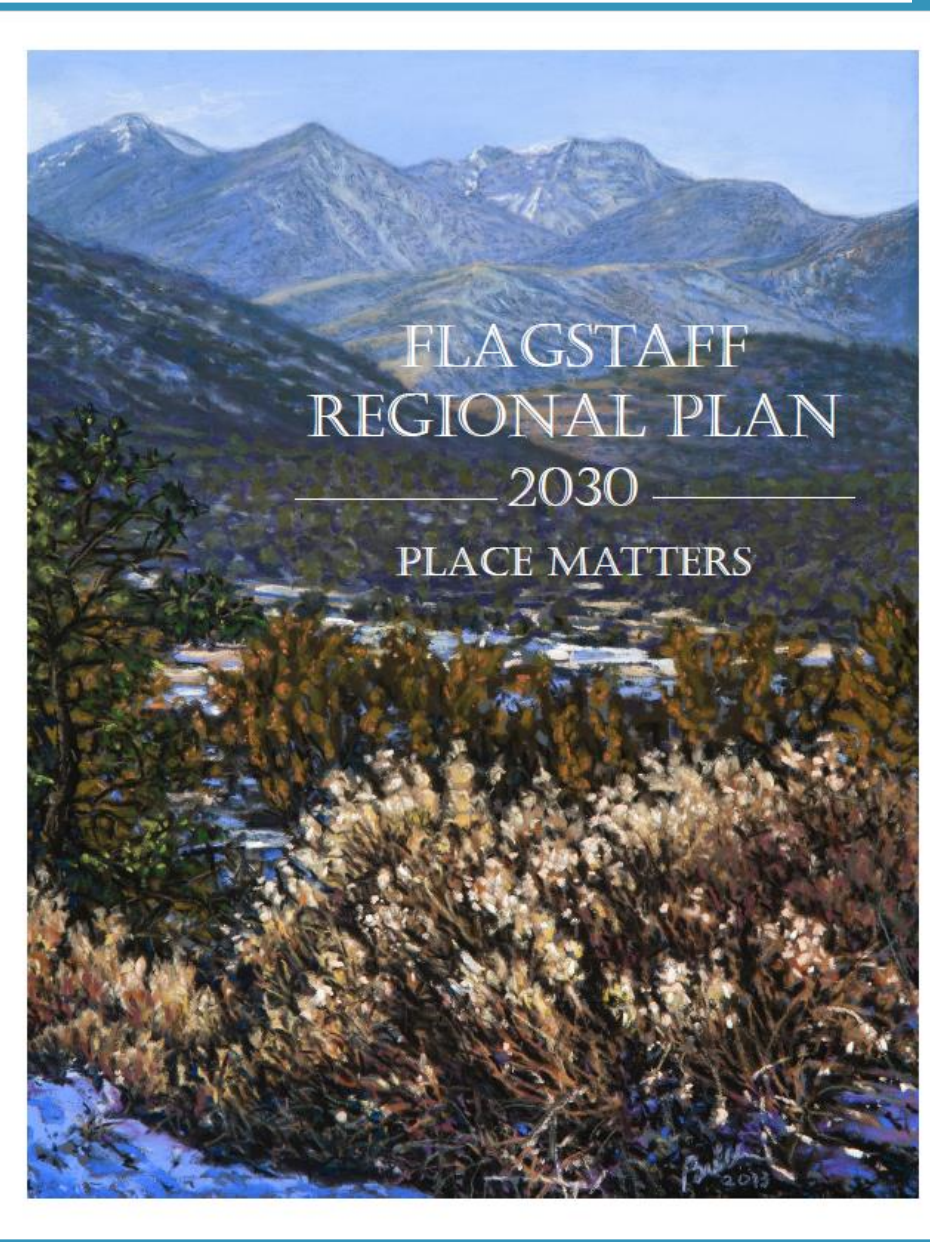
2. The proposed amendment to the Regional Plan

- Why
- Amendment text

3. Questions and discussion

The Flagstaff Regional Plan

- Adopted in **2014** after a years-long development and engagement process
- A planning document that serves as a **roadmap to implement the community's vision.**
- **Three themes:**
 - Promote growth that protects our scenic beauty and unique ecosystem
 - Encourage efficient transportation modes and better connectivity, with housing and job opportunities
 - Grow our businesses by making the most of our educated, entrepreneurial, and creative citizens



The Flagstaff Regional Plan

- Four sections:
 - Introduction
 - Natural Environment
 - Climate Change and Adaptation
 - Built Environment
 - Human Environment

ENVIRONMENTAL PLANNING & CONSERVATION



The Flagstaff region is rich with natural resources. Underlying the *Flagstaff Regional Plan* is the basic principle that a healthy natural environment is necessary for a healthy and prosperous human community and economy. The protection of the natural environment is a common thread running through most chapters of this Plan.

Where Are Our Natural Resources?

Lands in the Flagstaff region include those owned and managed by the City of Flagstaff, Coconino County, Arizona State Land Department, U.S. Forest Service, Department of Defense, National Park Service, and private land. Land management areas and boundaries are shown on Map 6. Map 7 illustrates significant natural resources in the area including wildlife, vegetation, hydrology, and geology. Map 8 illustrates the concentration of natural resources in the region. Following the maps are suggestions for planners, decision makers, and developers to consider with respect to natural and cultural resources in their development projects. The data sources for all three natural environment maps are listed in Appendix C.

Arizona law requires this Plan to consider conservation, development, and utilization of forests, soils, rivers and other harbors, fisheries, wildlife, minerals, and other natural resources. To the extent applicable to the region covered by the Plan, their development, conservation, and utilization have been considered, primarily in this Environmental Planning & Conservation chapter.

Inside this Chapter:

Where are Our Natural Resources?	IV-1
Considerations for Development	IV-8
Air Quality	IV-10
Climate Change and Adaptation	IV-11
Dark Skies	IV-13
Ecosystem Health	IV-14
Environmentally Sensitive Lands	IV-16
Natural Quiet	IV-16
Soils	IV-17
Wildlife	IV-18



Photo credit: Dover Kohl & Partners

Our Vision for the Future

In 2030, the long-term health and viability of our natural environment is maintained through strategic planning for resource conservation and protection.

Climate action in the Flagstaff Regional Plan

Climate change in the Flagstaff 2030 Regional Plan:

- Climate change is addressed over two pages in the Plan: Natural Environment Chapter, pages IV-11 and IV-12.

The climate change section includes three goals:

- E&C.2: Reduce greenhouse gas emissions
- E&C.3: Strengthen community and natural environment resiliency through climate adaptation efforts.
- E&C.4: Integrate available science into policies governing the use and conservation of Flagstaff's natural resources.

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.

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.

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.



Photo credit: Coconino National Forest



Photo credit: Arizona Daily Sun

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 hazards such as flooding, wildfires, and other natural disasters are key examples of large-scale preparation and adaptation. (City of Flagstaff *and Preparedness Study* (2012).

For the purposes of the Flagstaff Region's Climate Change Adaptation Plan, the region will have an impact on our reduction of greenhouse gas emissions and mitigation of climate change.

Goal 1 is to reduce greenhouse gas emissions.



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.



Background: Climate Action in Flagstaff



Climate Change in Flagstaff

Compared to today, by 2050, on average we can expect to see...



- Hotter temperatures.
- Increased aridity and more severe drought conditions.



- Less snowpack.
- More precipitation as rainfall instead of snowfall.



- Increased wildfire risk.

Vulnerabilities: What's at Risk?

Climate change will have cascading impacts in our community from health to housing.



Water



Land Use & Housing



Tourism & Economy



Health

Not all people face the same threats from climate change

Climate change threats and vulnerabilities can vary based on:

- Age
- Health conditions
- Income
- Race and ethnicity
- Physical ability
- Neighborhood
and more.



Three Core Types of Climate Action

AKA
Mitigation, or
reducing our
greenhouse gas
emissions, which are
how we contribute
to climate change

Reducing
our impact

Preparing
for change

AKA
Adaptation, or
building
resilience to
long-term
changes and
short-term
shocks

AKA
Equity, or ensuring
fair distribution of
resources, access
and opportunities

Helping
the most
vulnerable

Background: City of Flagstaff climate goals

- 2007** The City of Flagstaff joins the U.S. Mayor's Climate Protection Agreement
- 2012** The City of Flagstaff adopts its first guiding document on climate, the **Resiliency and Preparedness Study**.
- 2014** The **Flagstaff Regional Plan 2030** is adopted.
This Plan sets three goals in the climate change section, including a goal to reduce greenhouse gas (GHG) emissions.
- 2018** The **Flagstaff Climate Action and Adaptation Plan** is adopted.
This Plan sets a goal to reduce GHG emissions by 80% by 2050.



The Climate Emergency Declaration

January 2020

Hundreds of well-organized community members spoke at City Council, making the case for the climate emergency declaration

June 2020

The Climate Emergency Declaration Resolution 2020-09 was adopted unanimously by City Council

June 2021

The Flagstaff Carbon Neutrality Plan is adopted by City Council, detailing how the City will achieve carbon neutrality by 2030.

The Climate Emergency Declaration

1. Calls for a dramatic increase in **ambition and city-wide mobilization**.
2. Discusses the need for **full community** participation.
3. Calls on the city to prepare for future change and prioritize **vulnerable communities while reducing emissions**.
4. Sets a goal of **carbon neutrality by 2030**

Flagstaff Carbon Neutrality Plan

draft review



Carbon Neutrality means...

1. Reducing our community emissions (our impact) as much as possible.
2. Balancing the remaining emissions with projects that **REMOVE carbon dioxide** from the atmosphere – to achieve ‘neutrality’ – or zero NET impact.

Unavoided CO2 emissions remaining

Sequestration and other negative emissions initiatives



Carbon Neutrality Plan: Goals

Mitigation

- Achieve carbon neutrality by 2030

Adaptation (2018 CAAP)

- Prepare the city's communities, systems, and resources to be more resilient to climate change impacts.

Equity (2018 CAAP)

- 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.

CNP: Nine Target Areas of Action



The Proposed Amendment to the Regional Plan



Major Amendments to the Regional Plan

- The major amendment to the Flagstaff Regional Plan process involves significant documentation, staff analysis and public participation between April 1st and December of each year.
- This amendment was initiated by the Planning or Zoning Commission, at the request of the Sustainability Commission
- This amendment will update the Regional Plan to **align with the goals** of the Carbon Neutrality Plan.

Need for this amendment

- This amendment will update the Regional Plan to align with the goals of the Carbon Neutrality Plan.
- The climate action work of the City has evolved rapidly since the 2014 adoption of the Regional Plan
- There is a **significant gap** between the Regional Plan's current climate goals and policies, and the City's climate goals as developed in its climate plans.
- The different goals have large differences in ambition and requisite actions, reflecting the growth in urgency for climate action.

Benefits of this amendment

- **Restores 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.
- **Formally recognizes** the climate action efforts of the City of Flagstaff and its partners will increase understanding within the Flagstaff community.
- Provide decision-makers with **support** when making decisions based on the City's climate action goals.
- Provides **transparency and clarity** on the City's decisions.

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**

Updates to the narrative:

1. Updates to projected changes, using data from the 2017 Flagstaff and Coconino County Climate Profile
2. Defining the three types of climate action: mitigation, adaptation, and equity.
3. Updated list of possible climate actions, to align with the target areas in the Flagstaff Carbon Neutrality Plan.

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 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 small 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.

Outreach

Information

- Amendment webpage
- Social media postings
- Newsletter articles
- DailySun advertisement
- Direct outreach via mail and email

Events

- Two online information sessions: July & September
- One in-person Open House: August
- Coffee & Climate online interview: September

Other feedback opportunities

- Flagstaff community forum feedback form
- Direct contact with staff

Next steps in this process

Oct. 27 th	Public Hearing #1 at the Planning and Zoning Commission
Nov. 10 th	Public Hearing #2 at the Planning and Zoning Commission
Nov. 16 th	City Council worksession to discuss the Amendment
Dec. 7 th	Public Hearing at the Flagstaff City Council and potential adoption

Questions & Discussion

Thank you!

www.Flagstaff.AZ.gov/CNP

Contact me any time:

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