

Climate Planning and Resilience Sub-Element

Framework, Indicators, and Hazards
Prioritization

Tenino Planning Commission
October 11, 2023

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Climate Planning Required

HB 1181 (adopted 2023) adds a 15th goal to the Growth Management Act, requiring climate planning

All GMA-planning jurisdictions must adopt a climate element and resilience sub-element

Some jurisdictions must also adopt a greenhouse gas emissions reductions sub-element – this is **optional** for Tenino

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Climate Policy Creation

Form Climate Advisory Team

Establish Public Engagement Strategy

Develop a Vision Statement

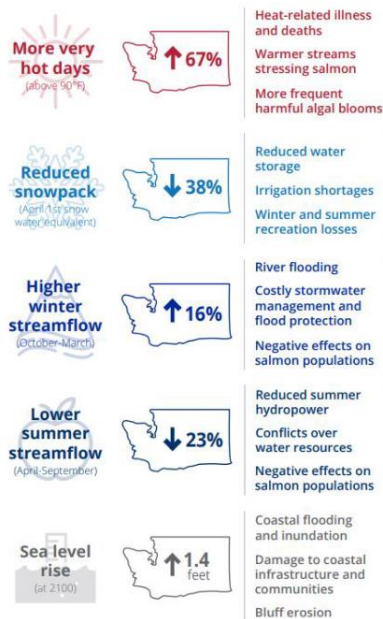
Organize Climate Element for Integration and Consistency

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Importance of Resilience

- Climate changes will have social, economic and environmental impacts
- **Resilience** means “the ongoing process of anticipating, preparing for, and adapting to changes in climate and minimizing negative impacts to our natural systems, infrastructure, and communities.”

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SOURCE: University of Washington Climate Impacts Group

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Importance of Resilience

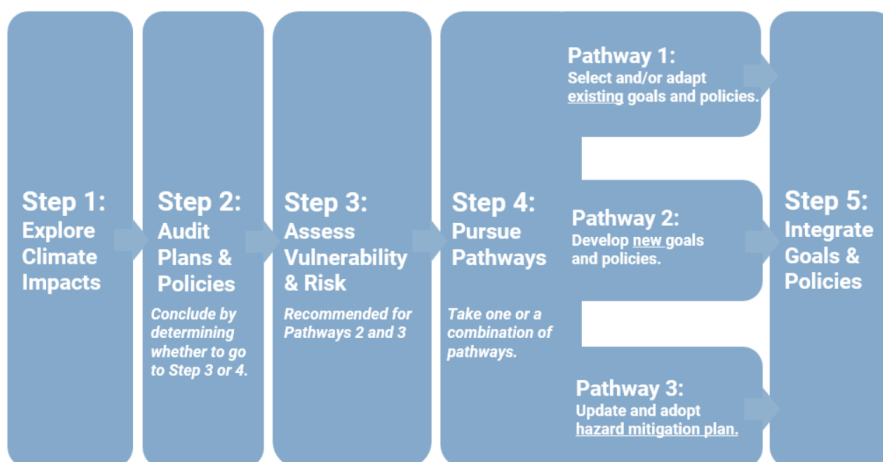
Goals:

- Build capacity by implementing a mix of climate preparedness, response, and recovery policies
- Mitigate natural hazards
- Adapting to unavoidable impacts
- Where appropriate, restore degraded natural areas that provide key ecosystem services
- Consider how climate impacts may vary based on localized experiences



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Resilience Planning Process



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Step 1: Explore Climate Impacts



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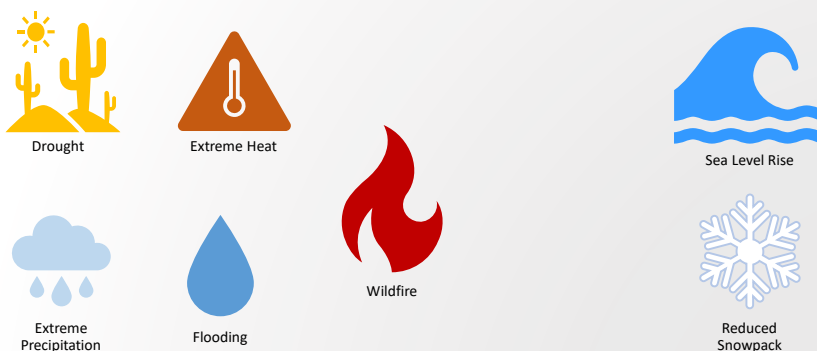
Community Asset Sectors



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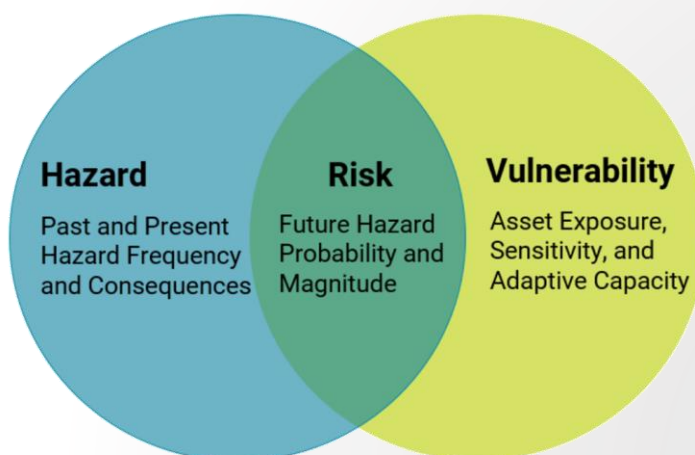
Hazards to Consider in Resilience Planning



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Hazards, Vulnerability and Risk

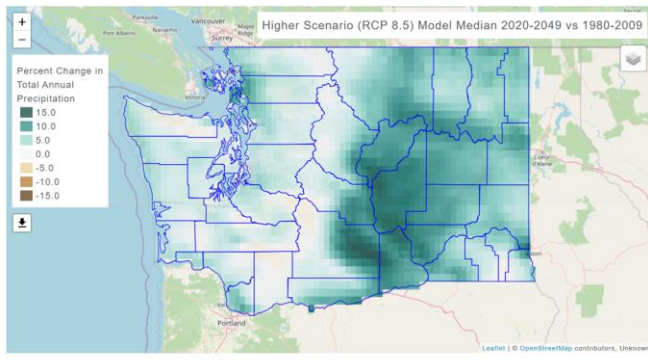


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Source: Washington Department of Commerce

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Climate Mapping for a Resilient Washington (CMRW)



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- State-wide mapping
 - Builds awareness of affects on sectors
 - Lacks granularity at smaller scales
 - Inconsistencies with other planning tools (i.e., WUI map)
- Indicators
 - Tell us where to look
 - Identifies potential vulnerabilities to specific hazards
 - Don't give the full story
 - Don't consider existing policies and resilience measures

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Tenino CMRW Indicators

- CMRW maps 28 indicators, each associated with at least one hazard
- The following slides discuss only indicators with significant changes that point to some vulnerability
- See CMRW tool for all data: <https://data.cig.uw.edu/climatemapping/>

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Tenino CMRW Indicators

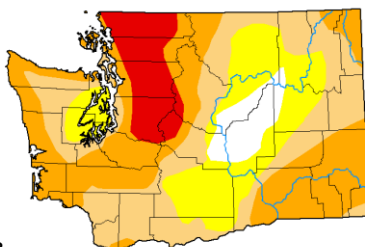
Drought Indicators:

- Less late summer precipitation
- Slightly higher likelihood of precipitation drought
- Lower snowpack and higher likelihood of snowpack drought
- Higher winter streamflow

Based on these indicators, there is likely some vulnerability to drought conditions.

U.S. Drought Monitor
Washington

October 3, 2023
(Released Thursday, Oct. 5, 2023)
Valid 8 a.m. EDT



Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/about.aspx>

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droughtmonitor.unl.edu

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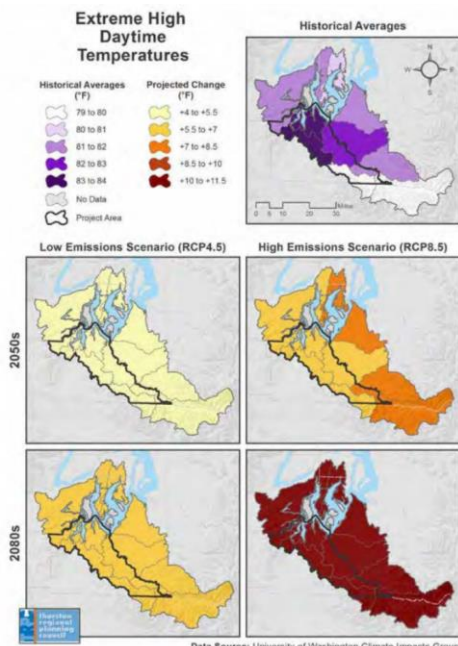
Tenino CMRW Indicators

Extreme Heat Indicators:

- Hotter average summer (+3.2°F max temp)
- More hot days (+17 days above 90°F, +7 days above 65°F)
- Increased summer stream temperatures

Based on these indicators, there is likely some vulnerability to extreme heat conditions.

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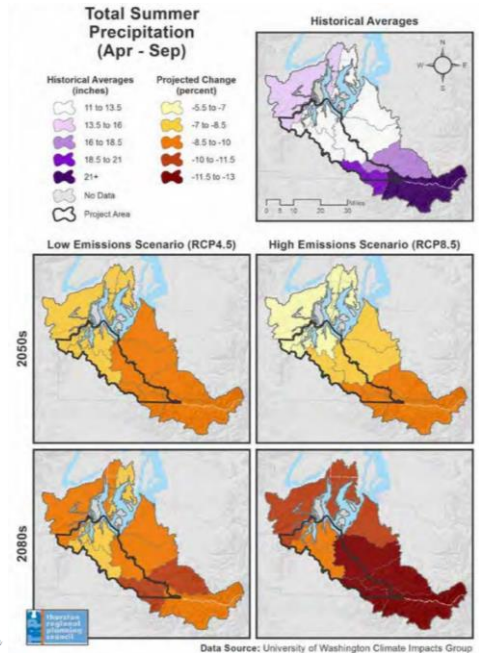


Tenino CMRW Indicators

Extreme Precipitation Indicators:

- More precipitation in a typical two-year storm

Based on this indicator, there is likely less vulnerability to extreme precipitation conditions.



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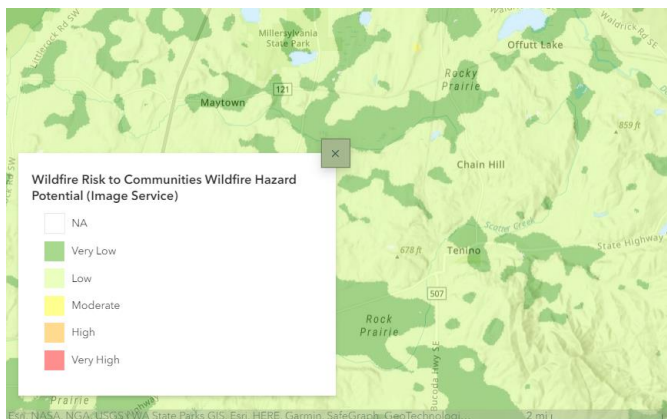
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Tenino CMRW Indicators

Wildfire Indicators

- Increase in number of high fire danger days per year (+6 days)
- Indicators do not appear to align with DNR’s WUI vulnerability map

Based on this indicator, there may be vulnerability to wildfire.



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Tenino CMRW Indicators

Flooding Indicators

- No significant changes mapped

Reduced Snowpack Indicators

- Changes likely, contributing to drought vulnerability
- No other significant changes mapped

High Sea Level Rise

- No significant changes mapped



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Form Climate Policy Advisory Team

Coordinate the primary planning and public engagement efforts associated with updating housing, land use, transportation, and other comp plan elements.

Focus

1. Develop Vision Statement
2. Analyze climate information gathered through engagement processes
3. Provide recommendations on areas of focus

Could make recommendations on

1. Goals with near-term due dates
2. Actions that can be implemented readily
3. Strategies for longer-term actions



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