

Okanogan County Local Drought Preparedness Plan



Buck Mountain – Okanogan-Wenatchee National Forest



Drought Conditions

Two Requirements for declaration.

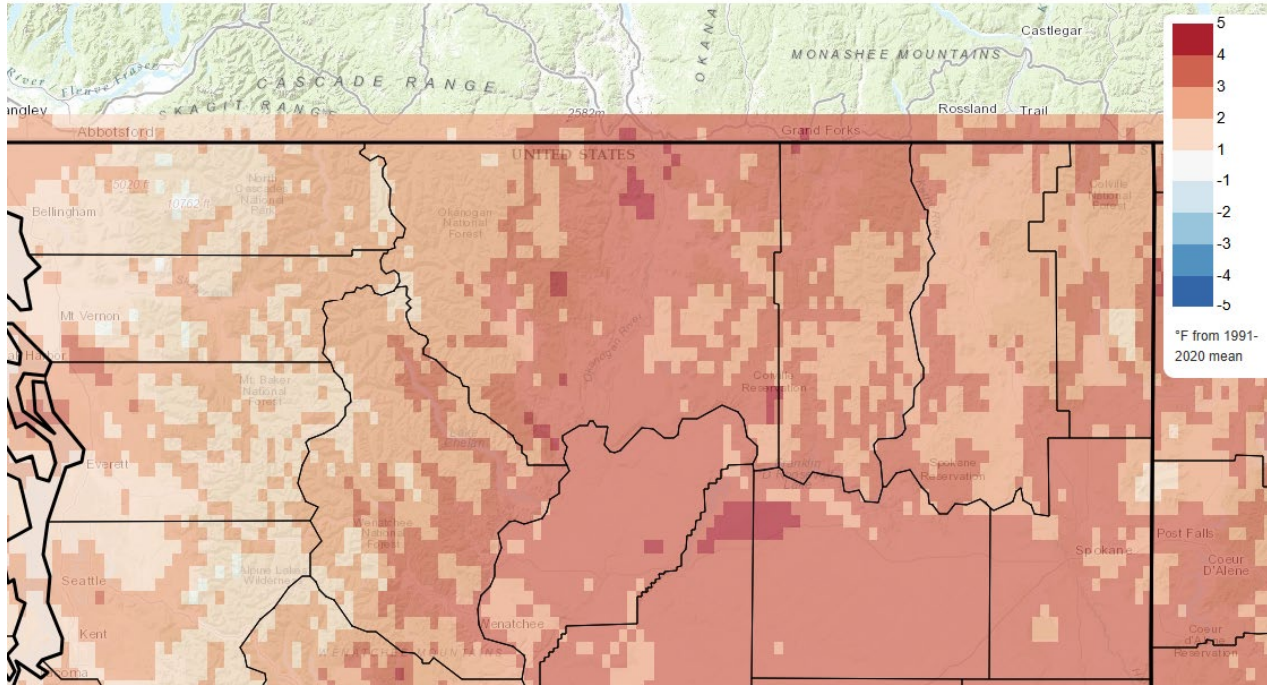
1. Hydrologic Threshold: An area is receiving or is projected to receive, less than 75% of normal supply
2. Hardship Threshold: Water users and the environment are expected to experience undue hardship.

See: RCW 43.83B.405 and WAC 173-166-050

Current conditions

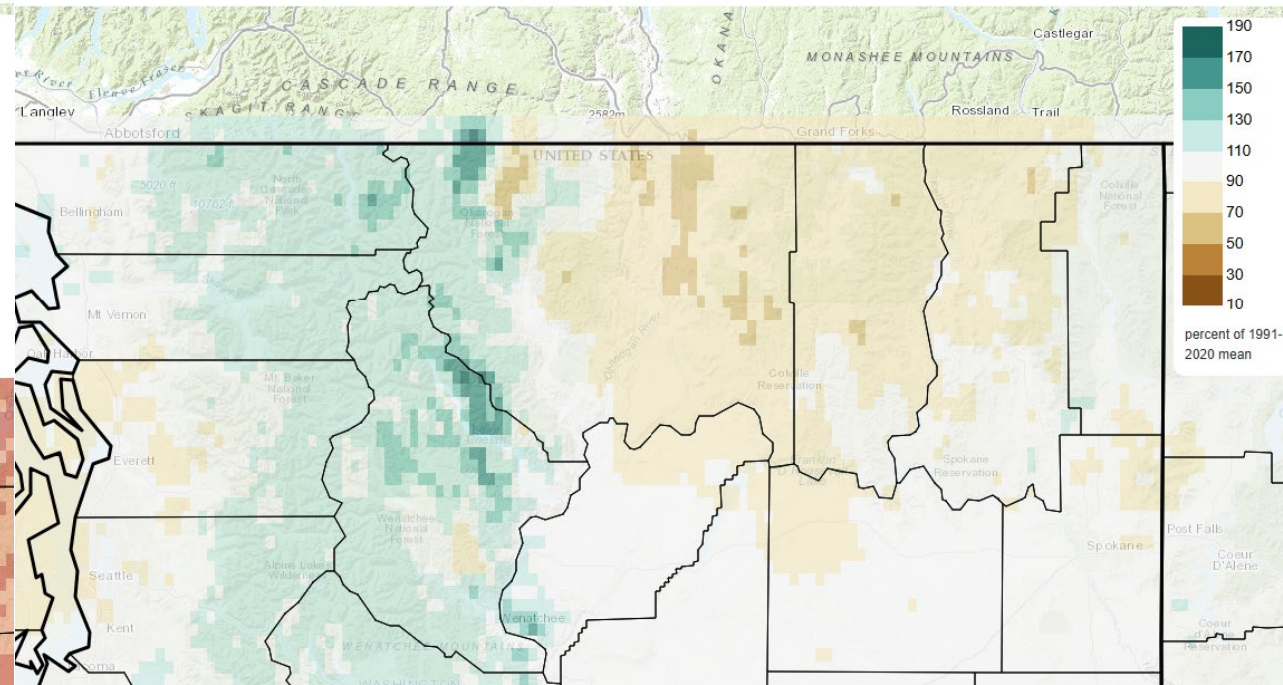
Mean Daily Temperature Anomaly, Since Oct 1st

2025/10/01 - 2026/07/12



Total Precipitation Anomaly, Since Oct 1st

2025/10/01 - 2026/07/12



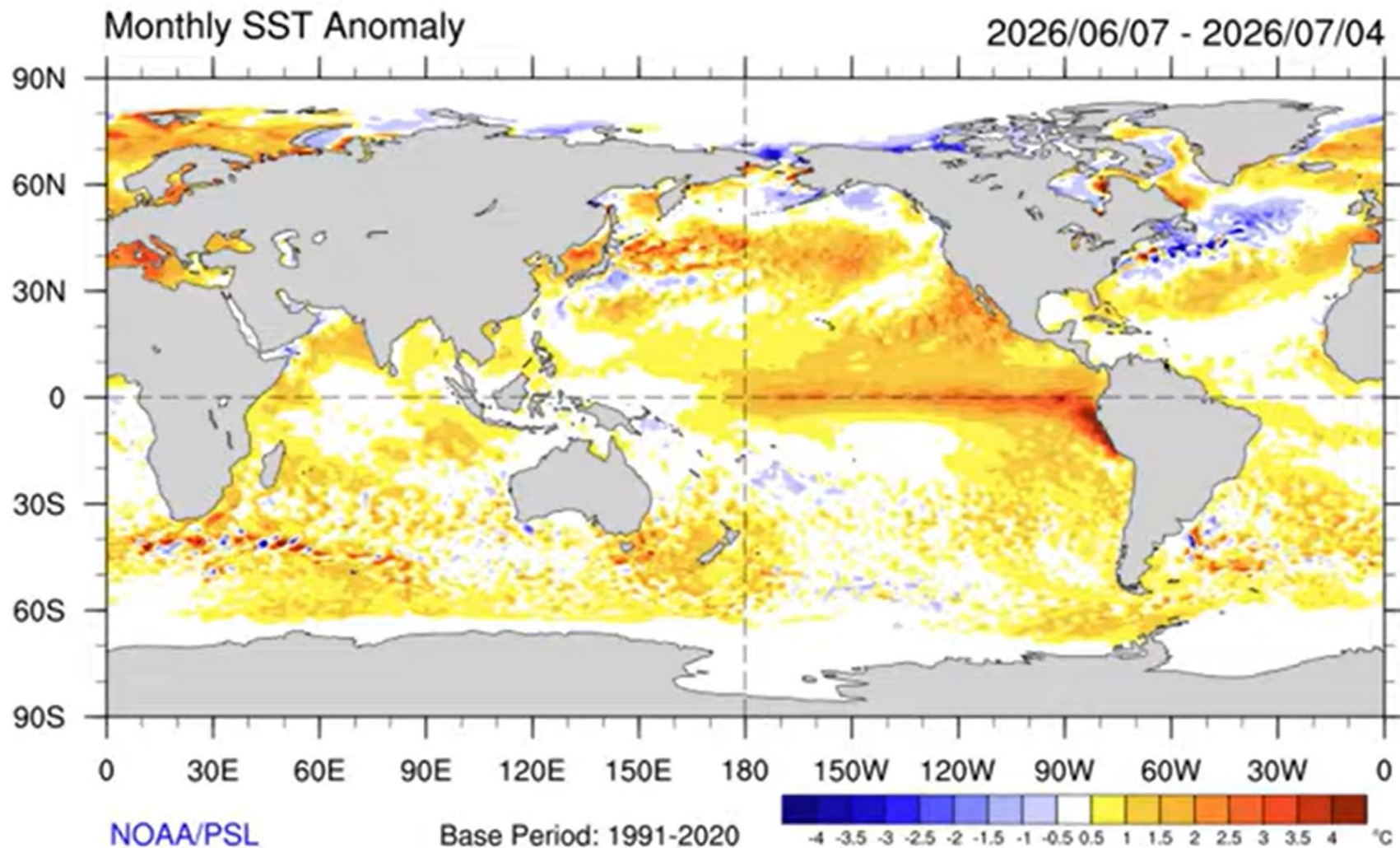
<https://climatetoolbox.org/>

Water Year Update:

- Statewide average: Oct-May 4th warmest (+2.7F) on record
- Statewide average: Oct-May precipitation was near normal.

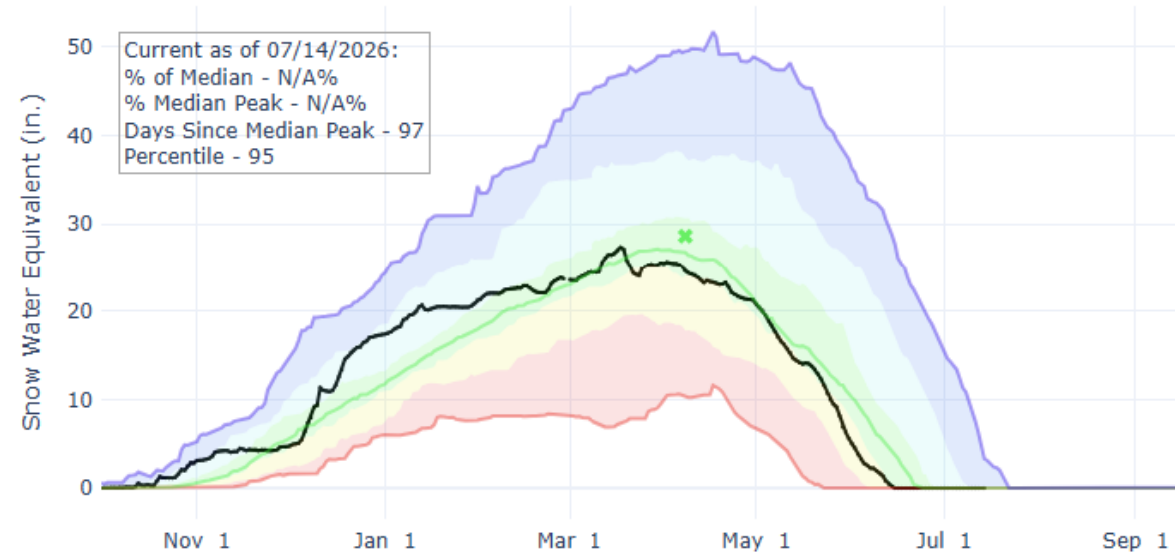
Current Status: El Niño

El Niño Advisory

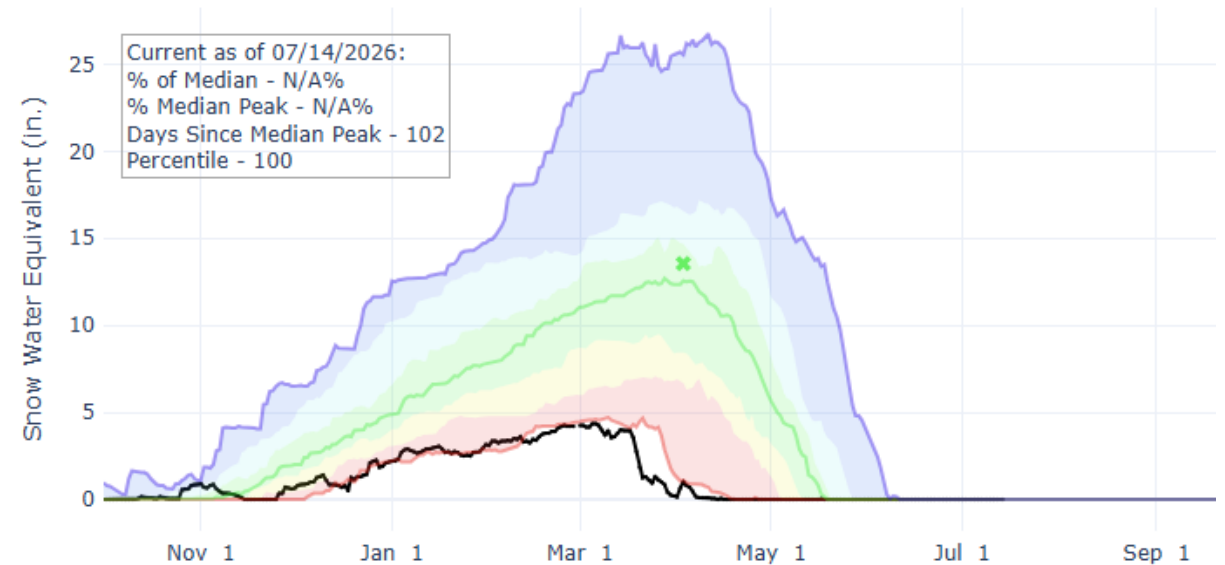


Current conditions

AWS Plot | SNOW WATER EQUIVALENT IN METHOW



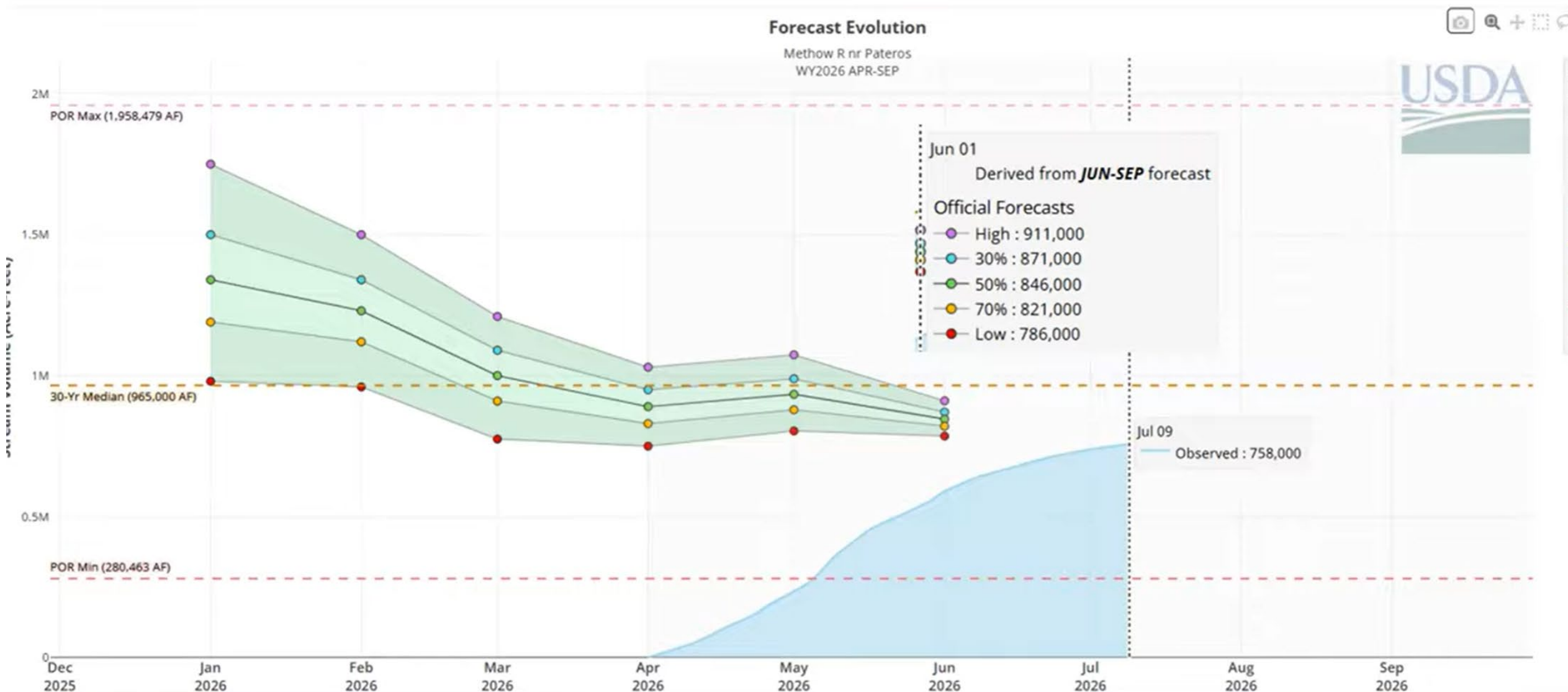
AWS Plot | SNOW WATER EQUIVALENT IN OKANOGAN



<https://nwcc-apps.sc.egov.usda.gov/imap>

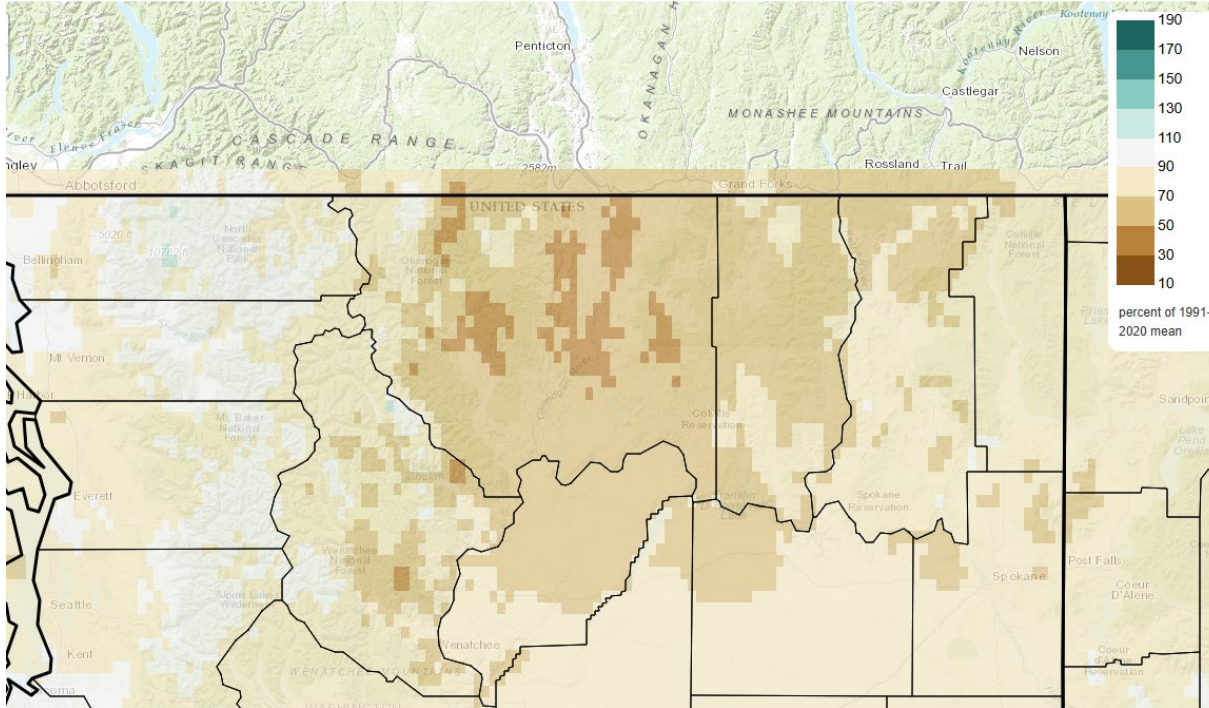
- Basin wide, the Methow experienced near-normal snowpack this year, however the warmer winter led to melt-out between 1- 3 week earlier than average.
- The lower elevation Okanogan basin is more representative of the winter that most of us experienced (i.e. poor ski season)

June 1, 2026 Forecast Evolution Methow River



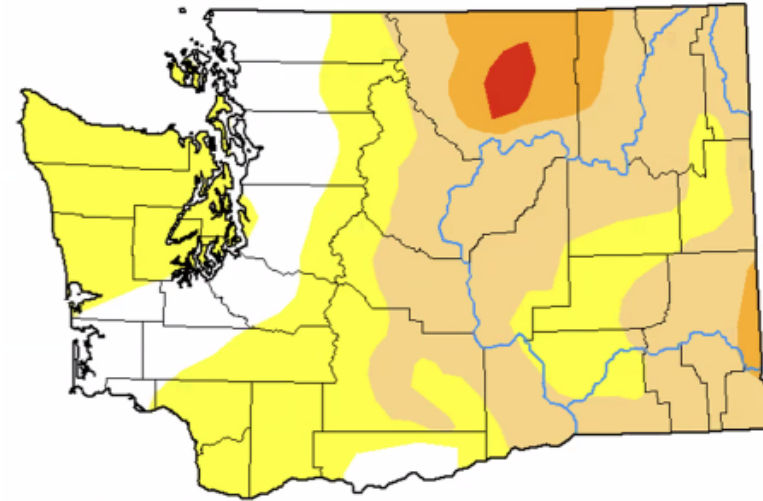
Current conditions

Total Precipitation Anomaly **Since Jan 1st**
2026/01/01 - 2026/07/12



U.S. Drought Monitor Washington

July 7, 2026
(Released Thursday, Jul. 9, 2026)
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>

Author:

Curtis Riganti
National Drought Mitigation Center



droughtmonitor.unl.edu

- Excluding the December atmospheric rivers, precipitation across Okanogan County has been well below normal
- This has led to D2 & D3 drought conditions developing in parts of the county
- 4th consecutive year of drought emergency declaration in Okanogan County

Current conditions



- View looking south from North Gardner Mountain 7/11/2026

Okanogan Drought Preparedness Plan Outline



Introduction



Planning Process
Community Profile



Risk Assessment



Literature review
Survey results (Purveyor, Individual)
Climate assessments (Current,
Projected)



Project Table



Compile current and potential projects
to address risks identified



Geographic Subregions



WHERE WE ARE IN THE PROCESS



Project
Initiation



Public Survey
& Initial
Outreach



Literature Review
& Data
Collection



Risk
Assessment
(Current)



Project
Identification &
Outreach
(Beginning)



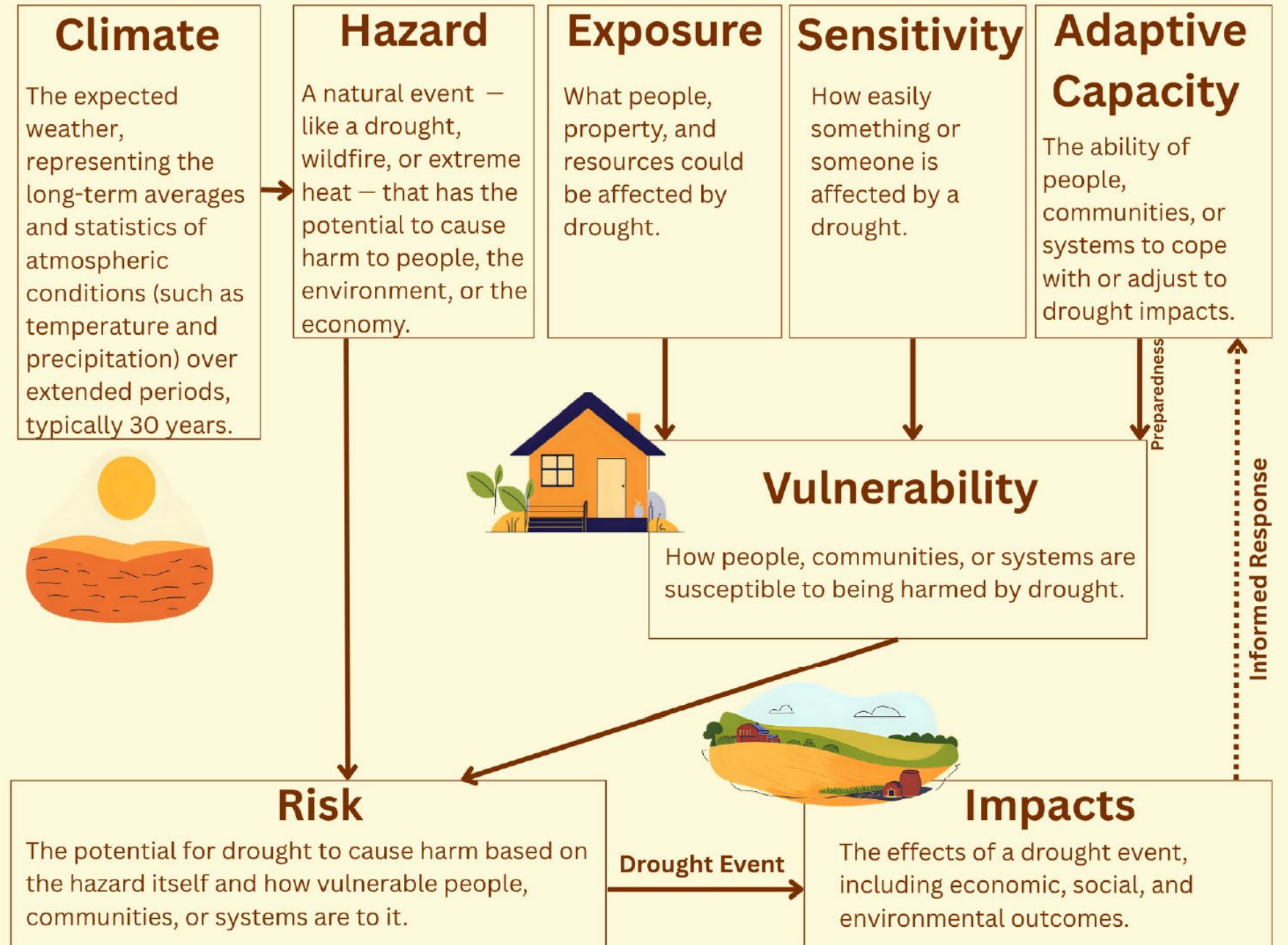
Project
Prioritization



Final Drought
Preparedness
Plan



Framework for assessing risk



COMMON THEMES ACROSS THE RISKS

Rather than treating each risk independently, several common challenges appear throughout the assessment.



Declining snowpack and changing runoff timing

Less snow and earlier melt shift when water is available.



Reduced summer streamflows

Lower flows in rivers and creeks during the summer months.



Increased water demand

Growing communities, agriculture, and other uses increase pressure on limited supplies.



Aging or limited water infrastructure

Outdated or insufficient systems limit reliability and resilience.



Water rights and regulatory constraints

Complex laws, rules, and competing priorities affect water availability and use.



Limited funding and coordination

Financial resources and collaboration are needed to plan and implement solutions.



Increasing wildfire impacts

More frequent and severe wildfires worsen watershed health, water quality, and infrastructure risks.



Growing need for education and preparedness

More awareness, planning, and preparedness are essential to reduce impacts.



These common themes suggest that many projects can reduce multiple risks at once.





THE EIGHT DRAFT DROUGHT RISK CATEGORIES

These risks were identified through surveys, climate data, and scientific literature.

Preliminary results – to be refined through partner and community input.

1

AGRICULTURAL & IRRIGATION WATER SUPPLY



Reduced water availability for irrigated agriculture due to declining snowpack, changing streamflows, and increased demand.

2

MUNICIPAL & DOMESTIC WATER SUPPLY



Drinking water systems and private wells become less reliable during drought.

3

INSTREAM FLOWS, FISH & HABITAT



Low flows and warmer water threaten fish, wildlife, and ecosystem health.

4

WATER QUALITY (LOW-FLOW)



Low flows contribute to warmer water, algae, sediment, and declining water quality.

5

WILDFIRE-COMPOUNDED DROUGHT



Drought increases wildfire risk, while wildfire further impacts water supplies, watersheds, and infrastructure.

6

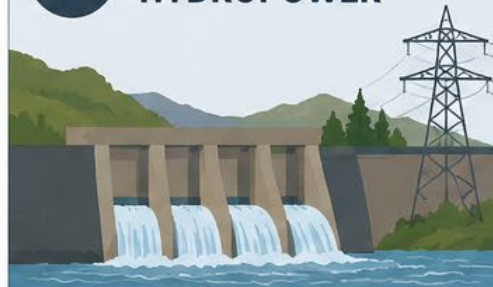
EQUITY & VULNERABLE COMMUNITIES



Some residents and communities experience disproportionate impacts and have fewer resources to adapt.

7

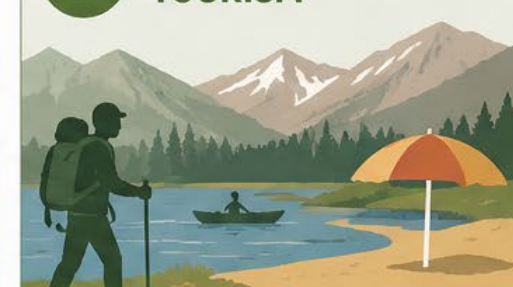
ENERGY & HYDROPOWER



Changing streamflows may affect hydropower generation and energy reliability.

8

RECREATION & TOURISM



Reduced snowpack and low river flows impact recreation, tourism, and local businesses.

WHERE WE ARE IN THE PROCESS



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Initiation



Public Survey
& Initial
Outreach



Literature Review
& Data
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Risk
Assessment
(Current)



Project
Identification &
Outreach
(Beginning)



Project
Prioritization



Final Drought
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PROPOSED MITIGATION APPROACHES

Strategies and projects that can reduce drought risks and build long-term resilience in Okanogan County.



INFRASTRUCTURE ENHANCEMENTS



- Build or improve storage and conveyance
- Upgrade or expand water systems
- Improve irrigation efficiency
- Develop backup and alternative supplies
- Enhance monitoring and data systems



PROGRAM DEVELOPMENT



- Create or expand cost-share programs
- Provide technical assistance
- Support drought planning and readiness
- Develop monitoring and assessment programs
- Strengthen local and regional coordination



POLICY



- Adopt water conservation policies
- Update land use and development policies
- Establish drought response protocols
- Support water rights and regulatory clarity
- Integrate drought resilience in planning



COMMUNITY OUTREACH & EDUCATION



- Increase public awareness and education
- Offer workshops and training
- Promote water conservation practices
- Share resources and success stories
- Engage youth and community leaders



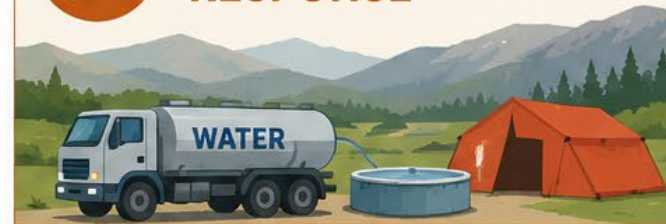
RESTORATION



- Restore rivers, floodplains, and wetlands
- Replant native vegetation and riparian areas
- Improve watershed health and forest resilience
- Reduce erosion and sediment
- Enhance habitat for fish and wildlife



EMERGENCY RESPONSE



- Develop drought contingency plans
- Ensure emergency water supplies
- Establish communication systems
- Coordinate wildfire and drought response
- Strengthen community preparedness



These approaches work best together. Many projects will support multiple risks and strengthen overall community resilience.

Activity:

Community Brainstorming Workshop



Example of projects identified to date:

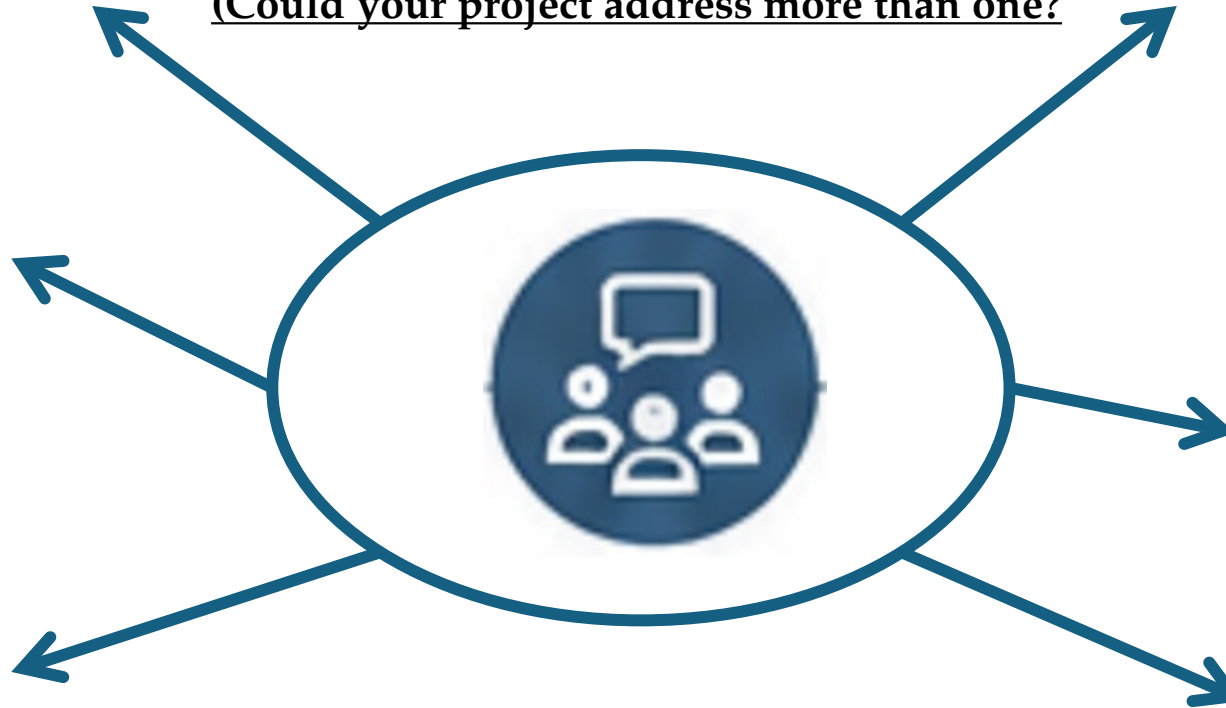
LDPP Task 4									
Identification of Water Supply & Drought Mitigation Projects									
Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8	Column 9	Column 10
Mitigation Approach	Specific Project	Project Description/Rationale	Risks addressed	Costs	Timeline for Completeion	Timeline for Project Benefits	Project Readiness	Funding status	Reference to existing plan
Infrastructure Enhancements	City of Okanogan: Murray Reservoir	Construct 200,000-gallon reservoir in the Murray pressure zone. The project includes construction of a transfer station for water transfer to the lower zone, as necessary; pressure reducing valve stations in order to provide adequate service throughout the pressure zones; approximately 5,000 feet of 12” PVC C900 water main, valves and appurtenances. These improvements are needed to provide adequate pressures and fire suppression storage for the Murray pressure zone as well as provide additional fire suppression storage for the Lower pressure zone. (20-year plan).	R2, R5	Undefined	Medium term	Short term	Scoped	Funding not identified	City of Okanogan Water System Plan
	Upper Chewuch Canal Piping	Replace unlined diversion ditch with pipe to eliminate leakage and evaporation losses. Water savings will be divided with a portion dedicated to instream flows and a portion retimed to serve as domestic supply for the Town of Winthrop	R1, R2, R3, R4	\$10,000,000	Medium Term	Immediate	Scoped	Pursuing Funding	
Program development	Irrigation Water Management assistance program	Develop program for ag producers to receive free technical assistance and training on managing irrigation water for efficiency and crop health	R1, R3, R4						
	Xeriscaping assistance program	Develop program for homeowners to receive free technical assistance on xeriscaping or drought tolerant landscaping	R2, R3, R4						
Policy									
Community Outreach & Education	Trust Water Rights Program (TWRP) education campaign	Develop educational materials related to the Washington State Trust Water Rights Program to inform and educate ag producers on the option of trusting water rights.	R1, R3, R4						
	Water themed festival, holiday, or community celebration	Host community events themed around the county about the benefits of the efficient use of water.	R1, R2, R3, R4, R8						
Restoration	Conservancy Island Side Channel Reactivation	Restore Conservancy Island side channel connectivity with Okanogan River, providing access to historical Chinook salmon and steelhead spawning and rearing habitat.	R3, R4	\$850,000	Short Term	Medium Term	Scoped	Funding identified	Okanogan Watershed Plan
	Tunk Valley Dry Forest Restoration	1,100-acre project to create long-term habitat quality and ecological integnty by moving stands back towards more dispersed, larger diameter trees at a much-reduced density.	R3, R5, R8	Unspecified	Short Term	Long Term	Conceptual	Funding not identified	Okanogan Watershed Plan
	Low-tech riparian restoration projects	Increase late season streamflow by adding and improving channel structure and floodplain connection to restore natural watershed functions.	R3, R4, R5						
Emergency Response	Installing turnouts for fire engines on piped irrigation ditches.								

RISK CATEGORIES

- 1 AGRICULTURAL & IRRIGATION WATER SUPPLY
- 2 MUNICIPAL & DOMESTIC WATER SUPPLY
- 3 INSTREAM FLOWS, FISH & HABITAT
- 4 WATER QUALITY (LOW-FLOW)
- 5 WILDFIRE-COMPOUNDED DROUGHT
- 6 EQUITY & VULNERABLE COMMUNITIES
- 7 ENERGY & HYDROPOWER
- 8 RECREATION & TOURISM

What Risks could your project idea address?

(Could your project address more than one?)



What mitigation approach would be used for your project idea?



Want to encourage your friends and neighbors to submit a project idea??

Think you may have more ideas to share after time to think??

GREAT NEWS!!

Survey still active for project ideas! Submissions accepted until September 1st!!



https://wsu.co1.qualtrics.com/jfe/form/SV_2hirI3TNfF6cPeS

Next Steps



Thank You!!

Questions or Ideas?
Call or email Davis Clark, Agricultural Lead
Davis@okanogancd.org
509-429-5231



Cascade Range – Okanogan-Wenatchee National Forest

