



# Water Resources Program Strategic Plan

Fiscal Years 2025-2029



### **Our Foundations**

### **Vision**

Washington State's water resources support thriving ecosystems and communities in the face of climate change.

### **Mission**

We manage water resources to benefit all Washingtonians and to protect the natural environment for current and future generations.

### **Values**

Public Service, Equity, Innovation, Excellence, Teamwork



### **Transformational Changes**

## Climate Change and Population Growth

We must adapt to the impacts of climate change and population growth, which will continue to put pressure on our state's water resources and challenge our ability to fulfill our Mission.

### **Environmental Justice**

We must prioritize environmental justice, including implementation of the 2021 HEAL Act and compliance with Title VI of the Civil Rights Act of 1964, if we are to benefit all Washingtonians.



### Goals

Actively
Manage our
State's Water
Resources

Prepare
for Changing
Conditions and
Needs due to
Climate Change

Hone our Organizational Effectiveness

We can only accomplish these goals in partnership with diverse public, Tribal, and private players.



### 1. Actively Manage our State's Water Resources

- A. Protect instream resources and senior water rights today and into the future.
- B. Advance certainty about existing water rights through adjudication.
- C. Bolster dam safety and well construction inspection activities to ensure protection of public health and safety.
- D. Increase **public understanding** of water resource issues through transparency and proactive education.



## 2. Prepare for Changing Conditions and Needs due to Climate Change

- A. Build a sense of urgency to address the impacts of climate change on water resources.
- B. Improve water supply for instream and out-ofstream needs.
- C. Promote **reforms to state water law** to increase the resilience of our state's water resources to climate change.

We are committed to early and ongoing consultation and cooperation with Tribes in a government-to-government relationship to protect and manage shared water resources.



### 3. Hone Our Organizational Effectiveness

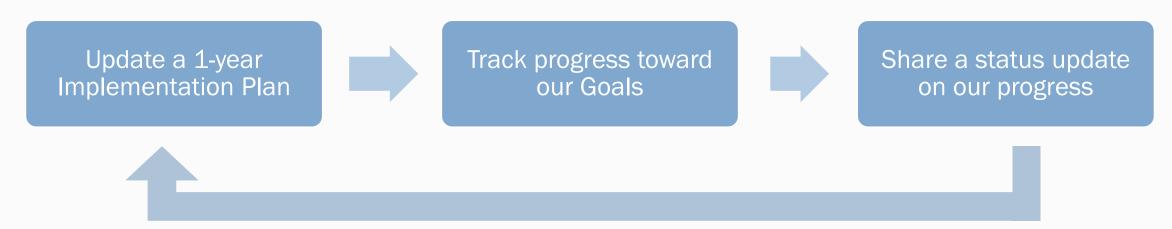
- Cultivate a work environment that supports and retains staff.
- B. Promote staff professional development.
- C. Ensure our processes and procedures are timely, effective, and consistent statewide.
- D. Invest in information technology to meet current and future data needs.

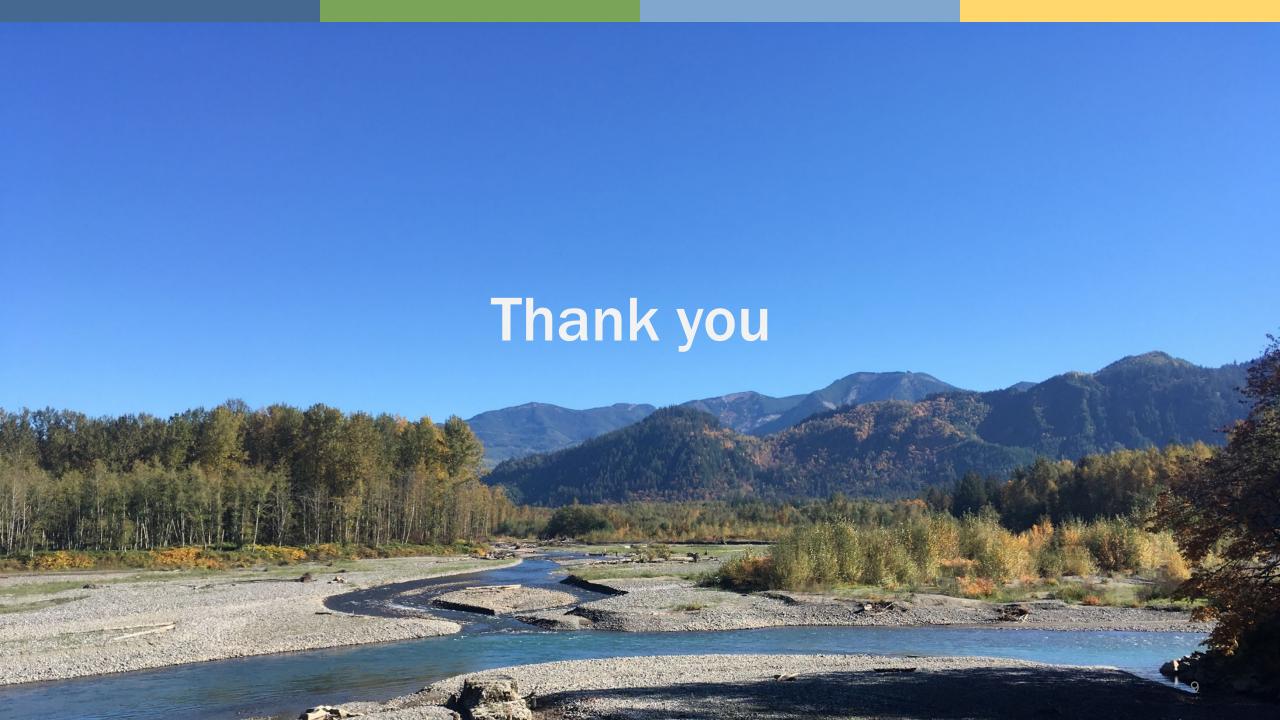


### **Implementation**

The ambitions contained in this Strategic Plan are significantly greater than we can achieve with existing resources. We will identify where additional resources are necessary to advance the Plan.

### **Annual Planning Cycle**







### **Appendix**



### **Our Values**

Public Service
Equity
Innovation
Excellence
Teamwork

### **Public Service**

We work for Washington as we balance the needs of people and the natural environment. We are courteous and responsive to customers, build and maintain relationships with the communities we serve, and operate with integrity, honesty, and transparency.

### **Equity**

We promote equitable application of our State's water law and access to state resources. Our work helps overburdened communities and vulnerable populations as we aim to benefit all Washingtonians.



### **Our Values**

Public Service
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### **Innovation**

We support a forward-looking, solutions-oriented approach to managing Washington's water resources. We seek to apply the best science, methods, and tools, and we advance opportunities to modernize our state's approach to water management.

### **Excellence**

We recruit, develop, and retain dedicated, talented staff and hold one another to the highest standard. We are thorough, productive, accurate, and communicative.



### **Our Values**

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### **Teamwork**

We support one another and partner with communities to achieve our Mission. We build and celebrate inclusive teams, encourage diverse perspectives, and foster strong and respectful relationships with internal and external partners.





### WRAC Water Supply & Drought Update

WR Statewide Drought Lead, Caroline Mellor August 12, 2024

### Overview

- **1** Goals for WRAC
- 2 Recap: Drought declaration and process
- 3 Water supply and drought conditions update
- 4 Next steps for drought

### **Drought Emergency Declaration**



On April 16, 2024, Ecology declared a Statewide drought due to low snowpack and warm and dry forecast.

Limited exceptions for Puget Sound metro areas with healthy water storage.



See: <a href="https://ecology.wa.gov/water-shorelines/water-supply/water-availability/statewide-conditions/drought-response-be



### **Takeaways**

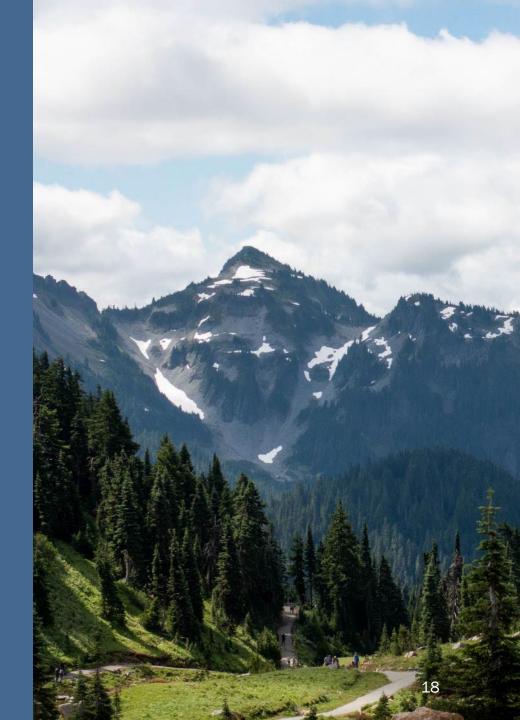
• Ecology anticipates re-issuing the Emergency Drought Funding rule this week. We may re-issue the emergency rule again in December, depending on evolving conditions.

• Emergency drought response tools continue to be available.

 Ecology is closely monitoring conditions and coordinating with partners.



# Drought Declaration **Process**





# **Drought Conditions**

### Drought conditions - two requirements:

- Hydrologic threshold An area is receiving, or is projected to receive, less than seventy-five percent of normal water supply.
- 2. Hardship threshold Water users and the environment are or are expected to experience undue hardship.

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

### Drought Conditions: Water Supply Factor ECOLOGY State of Washington

### Factors for water supply:

- Water Year to Date:
  - Snowpack
  - Precipitation
  - Temperature
  - Soil moisture
- Forecasts
  - Streamflow
  - Precipitation
  - Temperature
  - Soil moisture

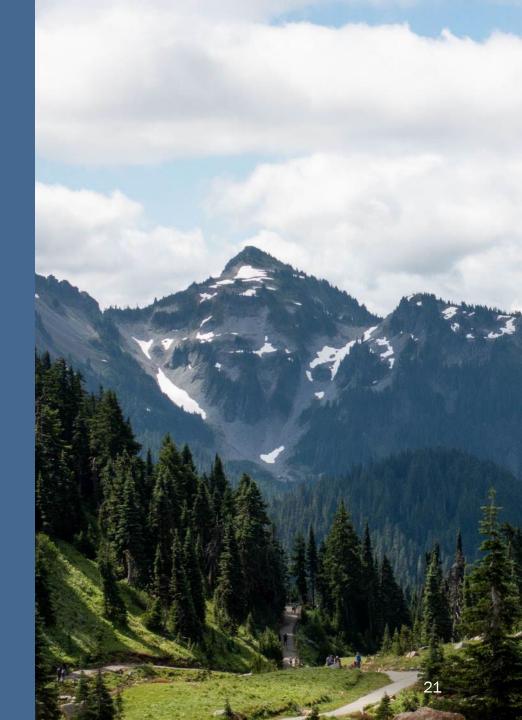
With all factors combined, the hydrologic threshold for drought is met.



Hurricane Ridge Webcam, National Park Service Olympic National Park



# Implications of a Drought Declaration





# What Does a Declaration Do?

### Provides Ecology with the authority to:

- 1. Expedite emergency water transfer applications.
- 2. Establish a grant program to mitigate hardships to water users and the environment.





# Emergency response funding

### Grants to governmental entities:

- Federally recognized tribes.
- Counties, cities, and towns.
- Water and sewer districts formed under chapter 57.02 RCW.
- Public utility districts formed under chapter 54.04 RCW.
- Port districts formed under chapter 53.04 RCW.
- Conservation districts formed under chapter 89.08 RCW.
- Irrigation districts formed under chapter 87.03 RCW.
- Watershed management partnerships formed under RCW 39.34.200.

### Interagency agreements to state agencies













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### <u>Drought response grants - Washington State Department of Ecology</u> Water resources drought response grants

This funding opportunity opens April 17, 2024.

We issued a <u>Drought Emergency Declaration</u> on April 16, 2024. On April 10, 2024, the state Executive Water Emergency Committee determined that specific areas in Washington meet the statutory criteria for drought conditions described in Chapter 43.83B RCW , "water supply is less than 75 percent of normal, resulting in undue hardships to water users and the environment." Under SHB 1138, Emergency Drought Response &, funding became available to alleviate immediate conditions from this drought. The adopted emergency drought funding rule, Chapter 173-167 WAC, remains effective until Aug. 14, 2024.

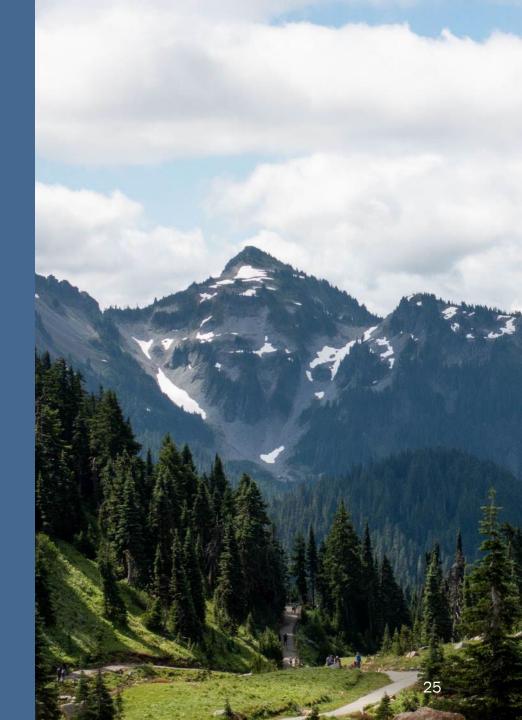
Ecology may extend the emergency rule based on evolving drought conditions. If the emergency rule is extended, these guidelines will be updated to reflect the extended date to which applications may be submitted.

### I want to...

- Apply for or manage a grant or loan
- Get guidance for managing a grant or loan
- Learn more about the 2024 drought



### **Drought impacts**





# **Anticipated Hardships**

- Instream flows, fish and wildlife
- Agricultural and livestock
- Public water systems and domestic uses





# Example Drought Response Grant Projects

### Agriculture or livestock

- Purchasing or leasing water or water rights to be used during the drought period for instream or out-of-stream beneficial uses.
- Developing alternate source(s) of water supply, or mitigating use of existing emergency sources, to supplement an insufficient source.
- Replacing intakes, pumps, and related accessories.

See: 2024 Drought Response Grant Funding Guidance (wa.gov)



# Example Drought Response Grant Projects

### Public water supply

- Developing alternate source(s) of water supply, or mitigating use of existing emergency sources, to supplement an insufficient source.
- Transportation of emergency water supplies for public health and sanitation.

Implementing water conservation strategies.

See: 2024 Drought Response Grant Funding Guidance (wa.gov)



# Example Drought Response Grant Projects

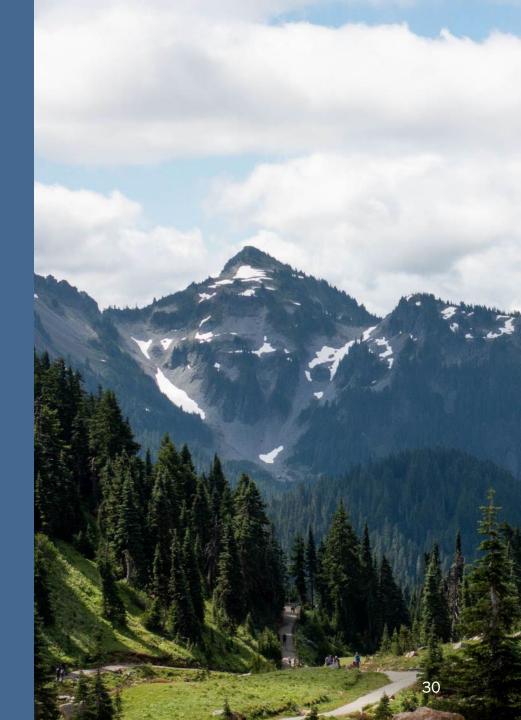
### Fisheries and wildlife

- Projects that eliminate migration barriers, such as temporary structures to increase flow velocity or depth.
- Modifying stream channels adjacent to a hatchery to ensure passage to the facility.
- Stream channel modification such as trenching, sandbagging, or creating berms to protect spawning gravels or to provide migratory channels for fish passage.

See: 2024 Drought Response Grant Funding Guidance (wa.gov)



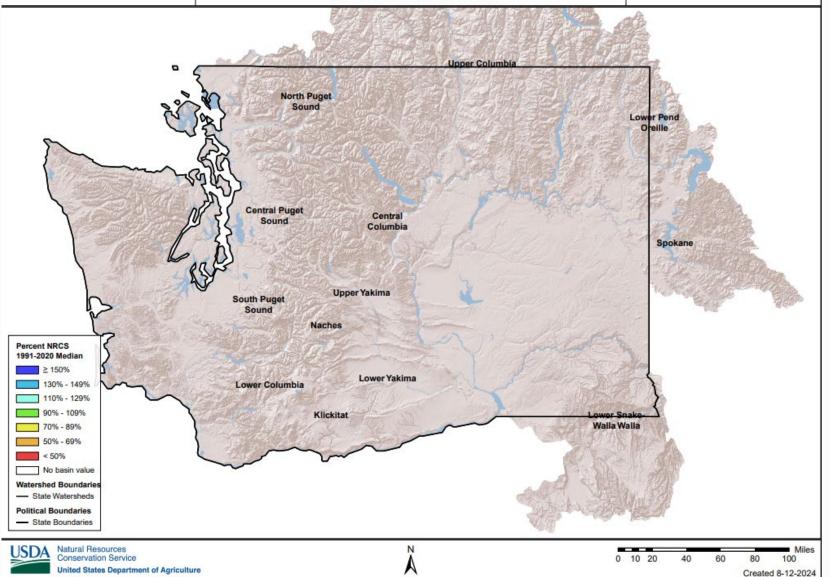
# Drought Conditions Outlook



Snow Water Equivalent

Washington SNOTEL
Percent NRCS 1991-2020 Median

August 11, 2024, end of day





## **Snowpack Conditions**

Snowpack is fully melted at all SNOTEL sites.

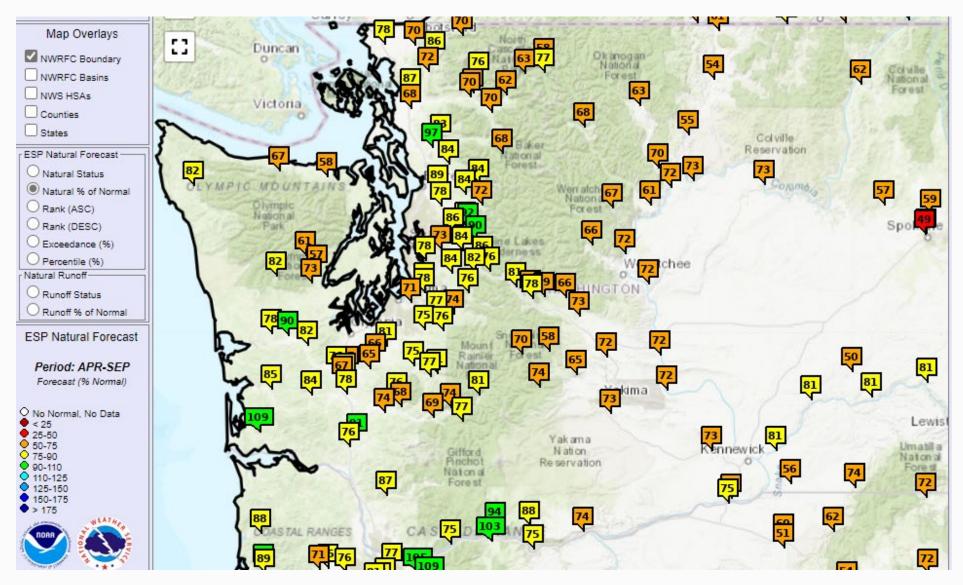
Statewide precipitation today is at 89%.

This date in 2015, Statewide SWE was 0% & precip was at 88%

(Source: NRCS).

### Streamflow natural forecast as % of normal ECOLOGY State of Washington

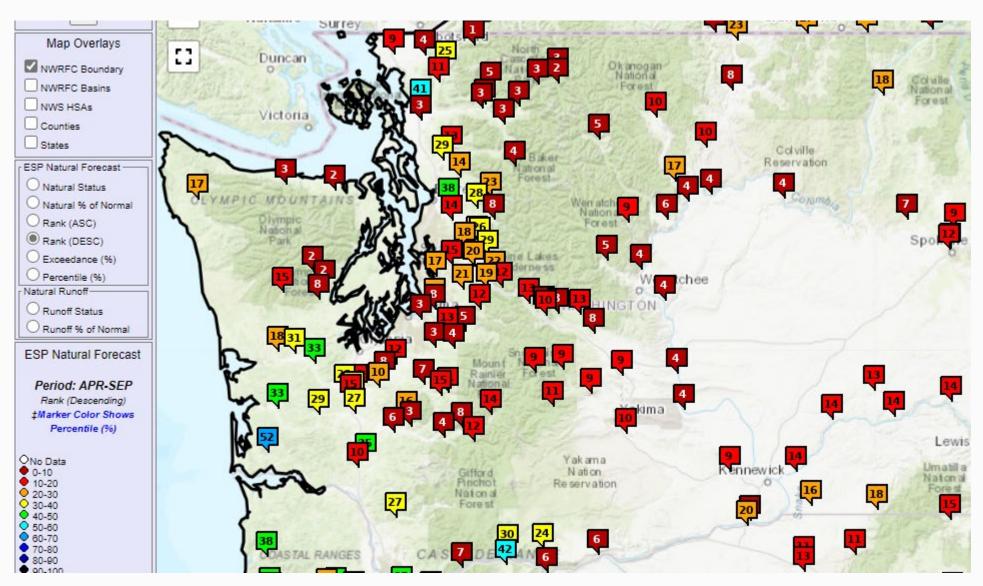




Source: NW River Forecast Center

### Rank compared to historical record

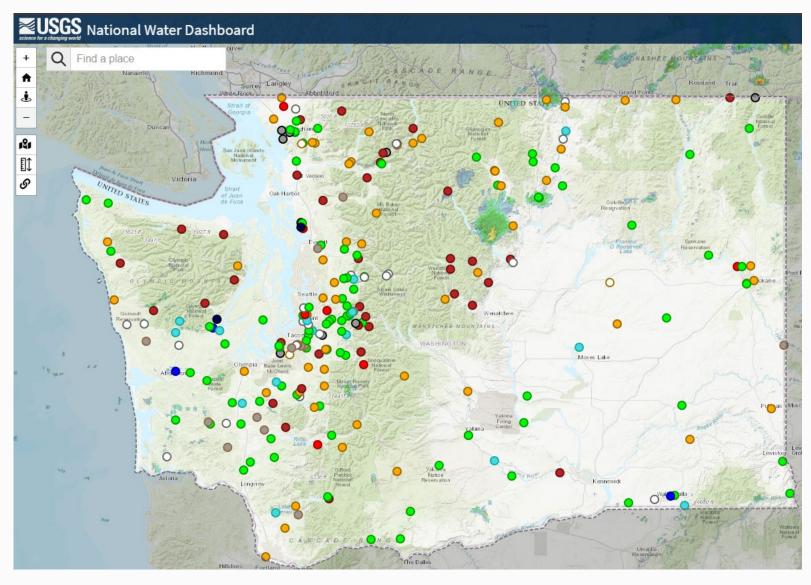




Source: NW River Forecast Center

### **USGS Stream Gauges**





Source: <u>USGS Water Dashboard</u>

### **Soil Moisture**

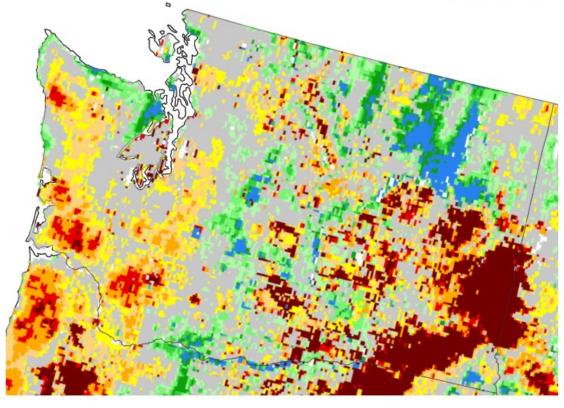
#### 0-100 cm Soil Moisture Percentile



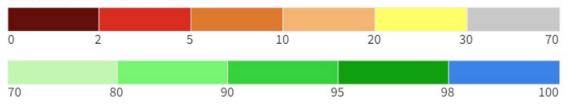








#### 0-100 cm Soil Moisture Percentile



This NASA SPORT-LIS soil moisture map shows the moisture content of the top 100 cm of soil compared to historical conditions (1981–2013), based on the Noah unified land surface model. Red and orange hues indicate drier soils, while greens and blues indicate greater soil moisture. Source(s): NASA

Source(s): NASA Data Valid: 08/07/24

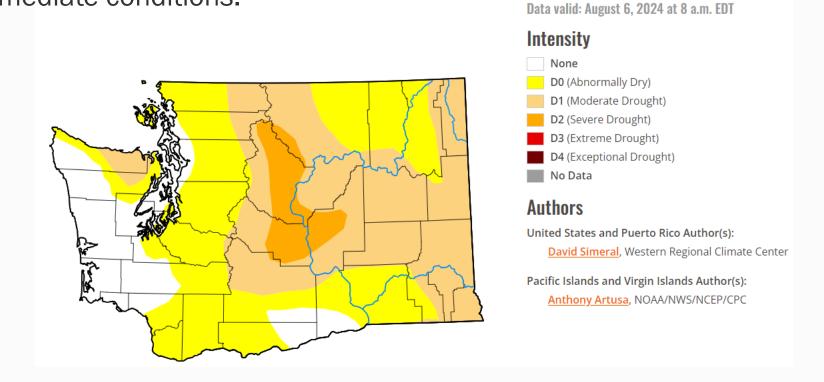
**Drought.gov** 

### **Current US Drought Monitor**



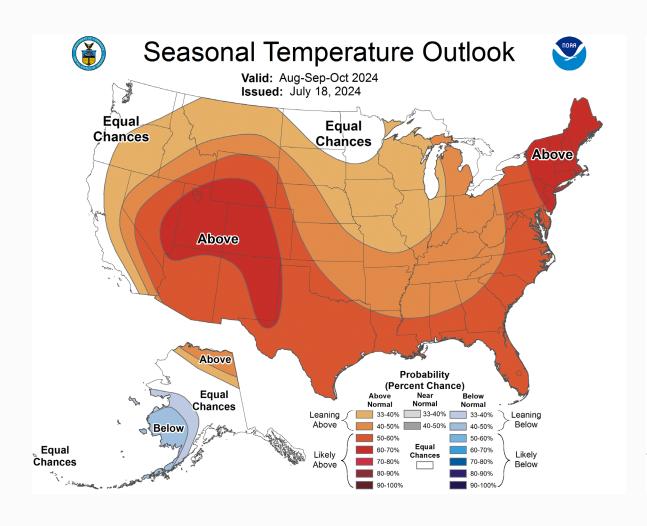
\*The US Drought Monitor does not reflect snowpack or water supply waters but is a statement on immediate conditions.

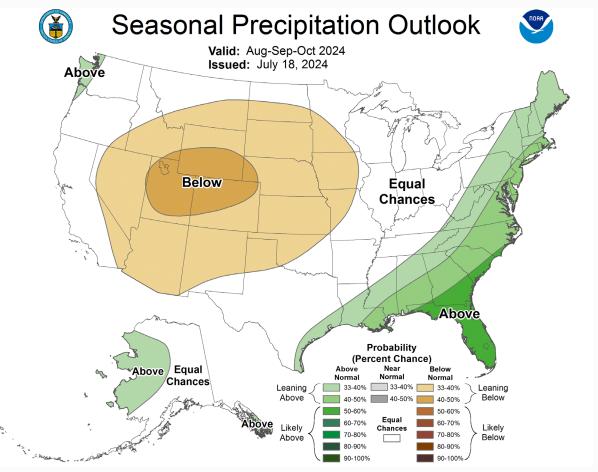
Map released: Thurs. August 8, 2024



### **Conditions: Three-month Outlook**











### **Groundwater Modeling Proviso**

Dave Christensen, Deputy Program Manager August 12, 2024



### Overview

- Proviso Details
- 2 Progress to date
- 3 Next steps
- 4 Discussion



### Groundwater modeling proviso

- Supplemental Budget, Engrossed Substitute Senate Bill (ESSB) 5950 Section 302(64)
- \$400,000 GF-S for FY 2025 (July 1, 2024).
- Funds provided to develop a groundwater modeling guidance publication.
- Purpose: to establish best practices for groundwater modeling in the water right permitting process.
- Does not change the law or create a new administrative rule.



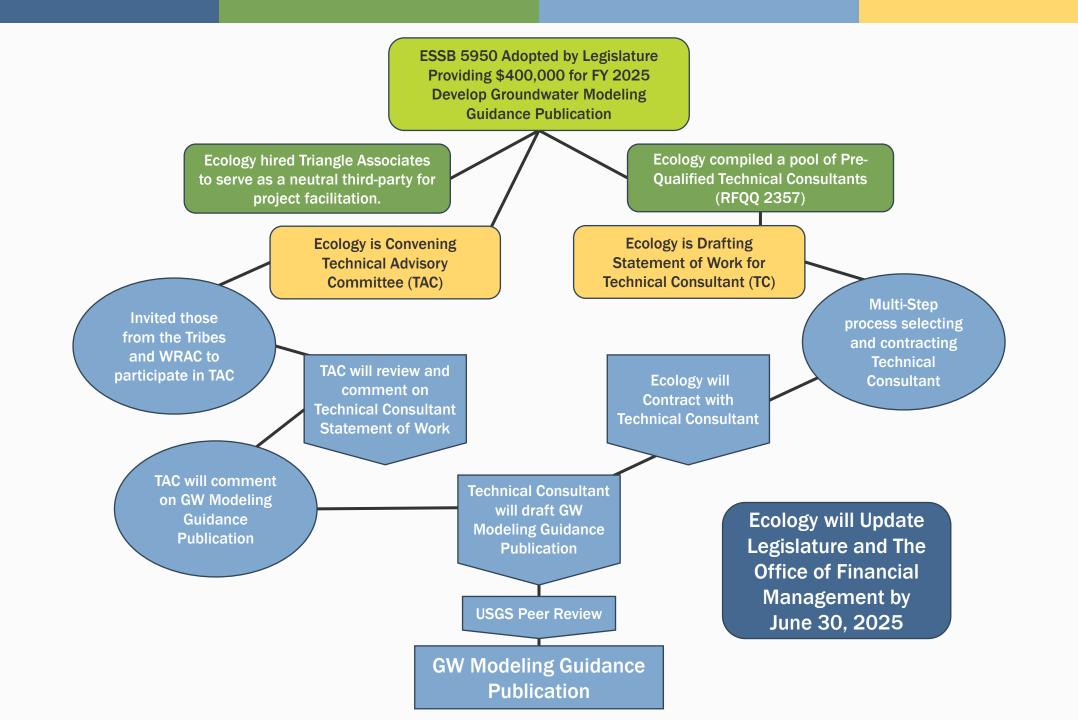
### **Progress since July 1**st

- Contracted with Triangle Associates for facilitation.
- Solicited for Technical Advisory Committee (TAC).
  - Licensed hydrogeologist or professional engineers with experience in groundwater modeling.
  - Invited "federally recognized Indian tribes that may be potentially affected by the publication to participate."
  - Deadline to submit information: August 19.
- Intend to notify participants by August 21.



### Next steps

- Convene the TAC. First meeting scheduled for September 4.
- Develop a scope of work for a technical contractor to draft guidance. TAC advises on scope and selection.
- We intend to use existing pre-approved list of technical consultants.
- Periodic updates at WRAC.
- Peer review of guidance by USGS.
- Ecology to provide update to the Legislature and the Office of Financial Management by June 30, 2025.







### Thank you!

Dave Christensen

Deputy Program Manager

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