



DEPARTMENT OF
ECOLOGY
State of Washington

WRAC Water Supply & Drought Update

WR Statewide Drought Lead, Caroline Mellor

May 13, 2024

Quick agenda

- 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

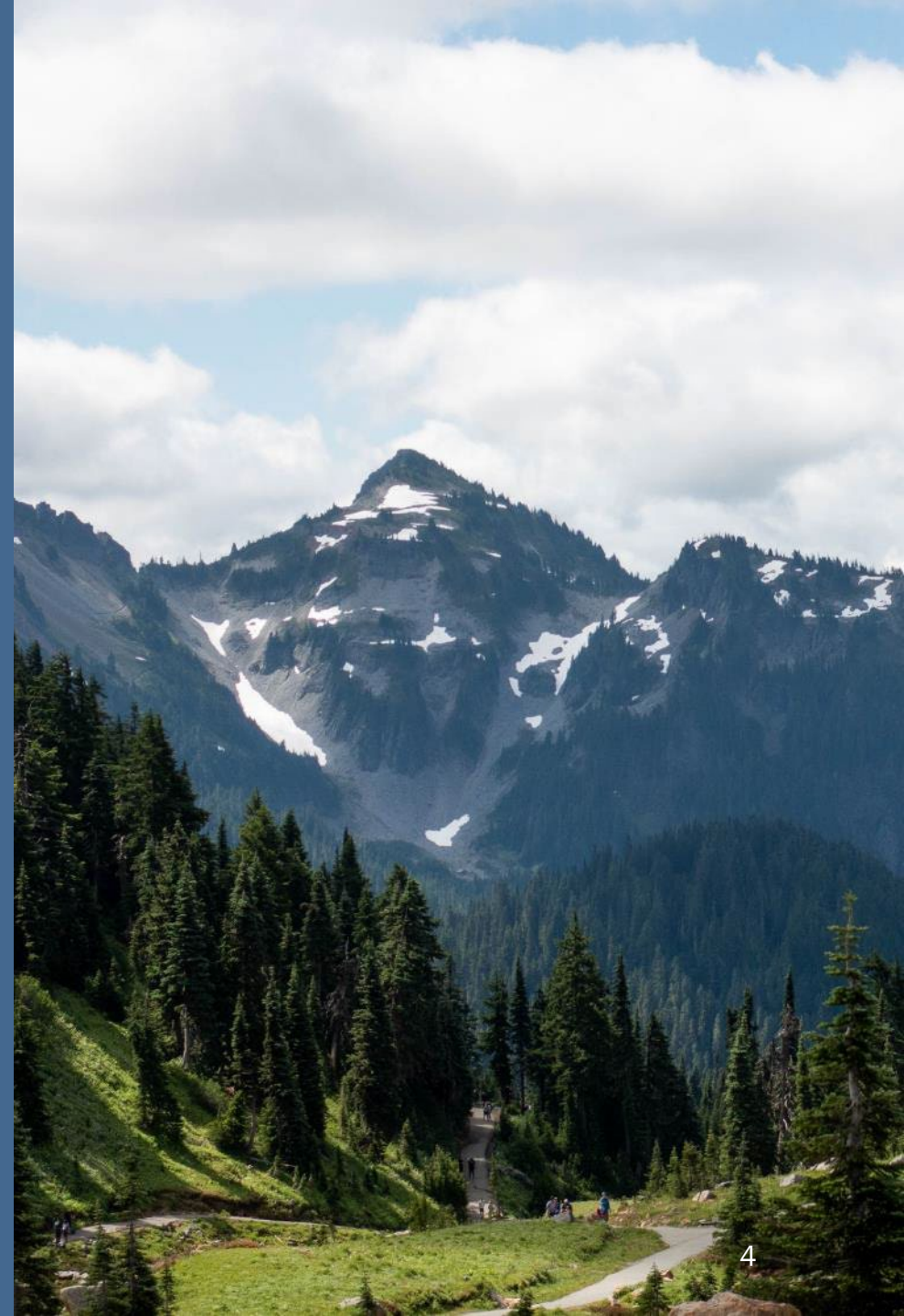
On April 16, 2024, Ecology declared a Statewide drought due to low snowpack and warm and dry forecast.

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





Drought Declaration Process



Drought Conditions

Drought conditions - two requirements:

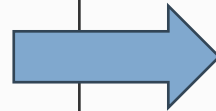
- 1. Hydrologic threshold** – An area is receiving, or is projected to receive, less than seventy-five percent of normal water supply.
- 2. Hardship threshold** – Water users and the environment are or are expected to experience undue hardship.

See: [RCW 43.83B.405](#) and [WAC 173-166-050](#).

Drought Conditions: Water Supply Factors

Factors for water supply:

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



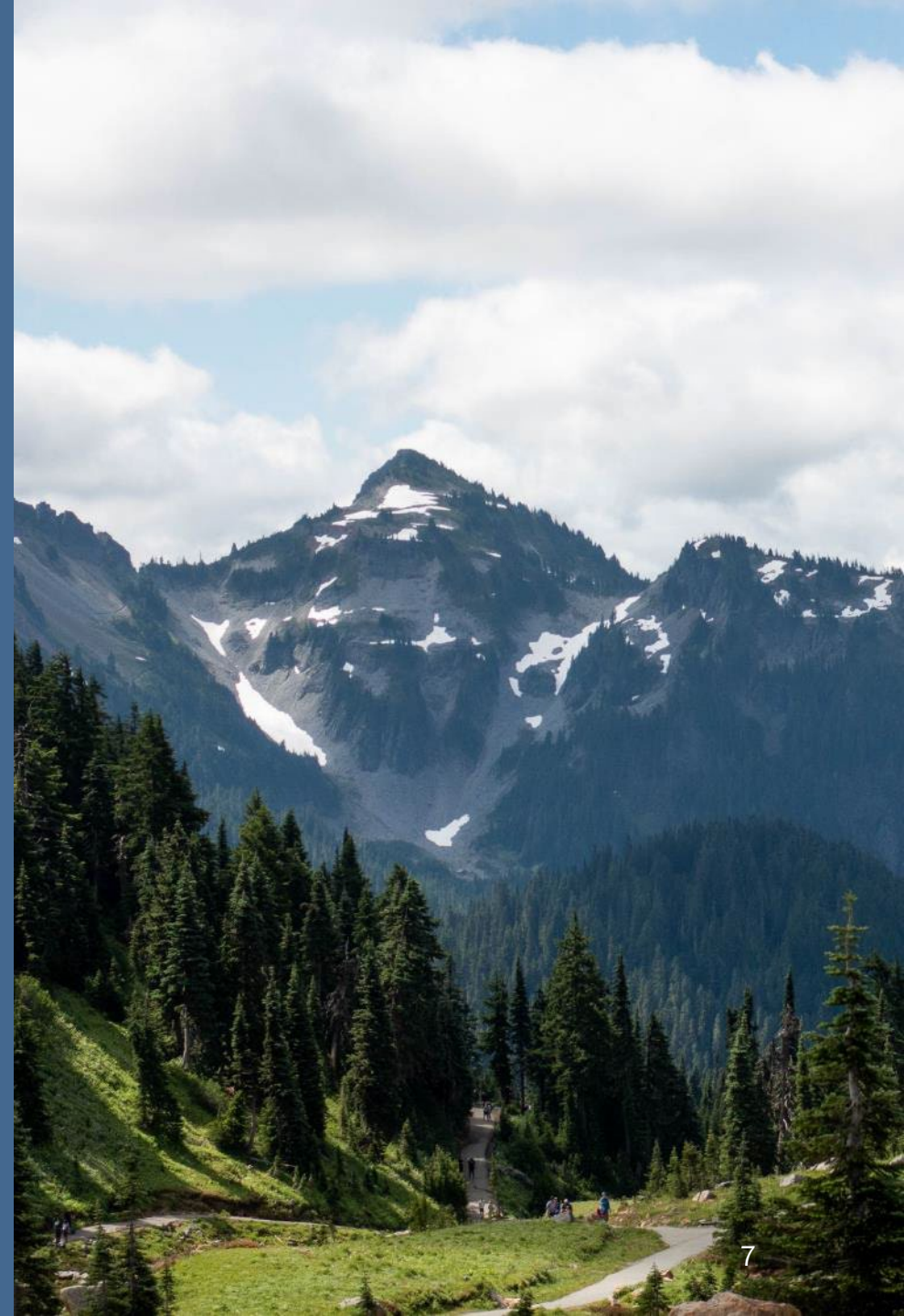
With all factors combined, the hydrologic threshold for drought is met.



Hurricane Ridge Webcam, National Park Service
Olympic National Park



Implications of a Drought Declaration



**Provides
Ecology
with the
authority
to:**

Expedite emergency
water transfer
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Establish a grant
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Provides Ecology with the authority to:

1. Expedite emergency water transfer applications.
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**What Does a
Declaration
Do?**

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

Drought response grants - Washington State Department of Ecology

Water resources drought response grants

This funding opportunity opens April 17, 2024.

We issued a [Drought Emergency Declaration](#) 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.

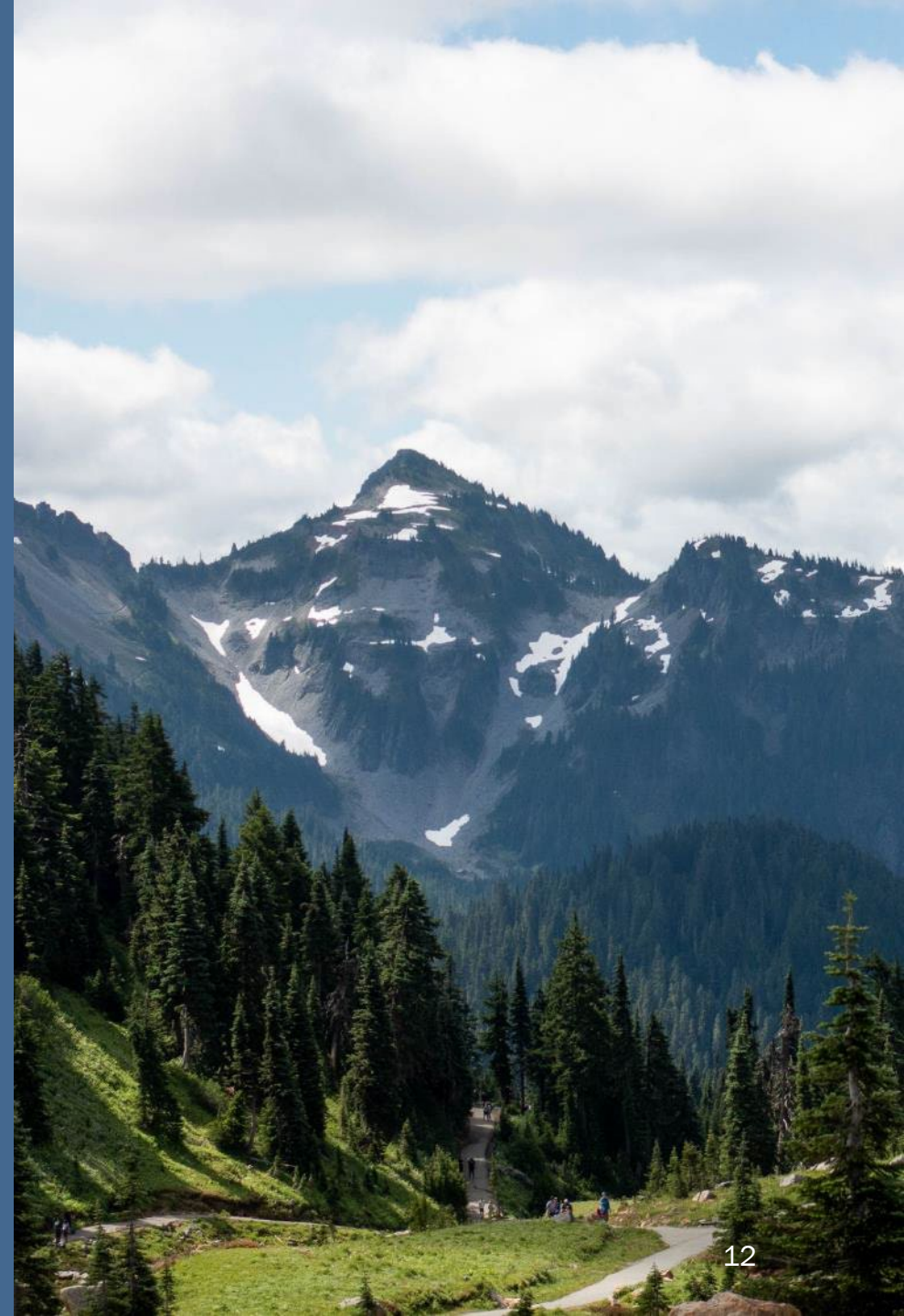
Ecology may extend the emergency rule based on evolving drought conditions. If the emergency rule is extended, these guidelines will be updated to reflect the extended date to which applications may be submitted.

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 \(wa.gov\)](https://www.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 \(wa.gov\)](https://www.wa.gov)

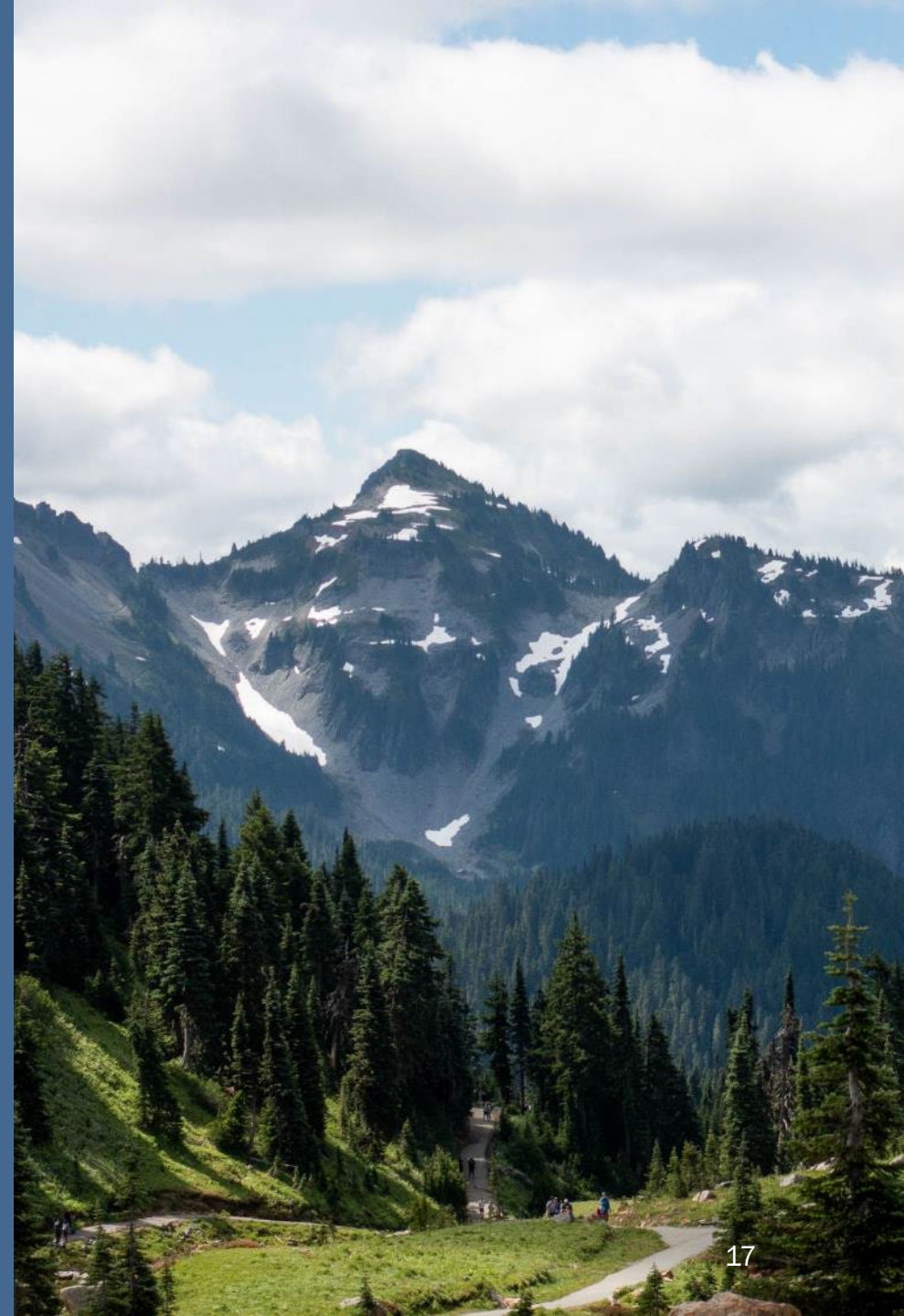
Fisheries and wildlife

- 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 \(wa.gov\)](https://www.wa.gov)



Drought Conditions Outlook



Snow Water Equivalent

Washington SNOTEL

May 12, 2024, end of day

Percent NRCS 1991-2020 Median

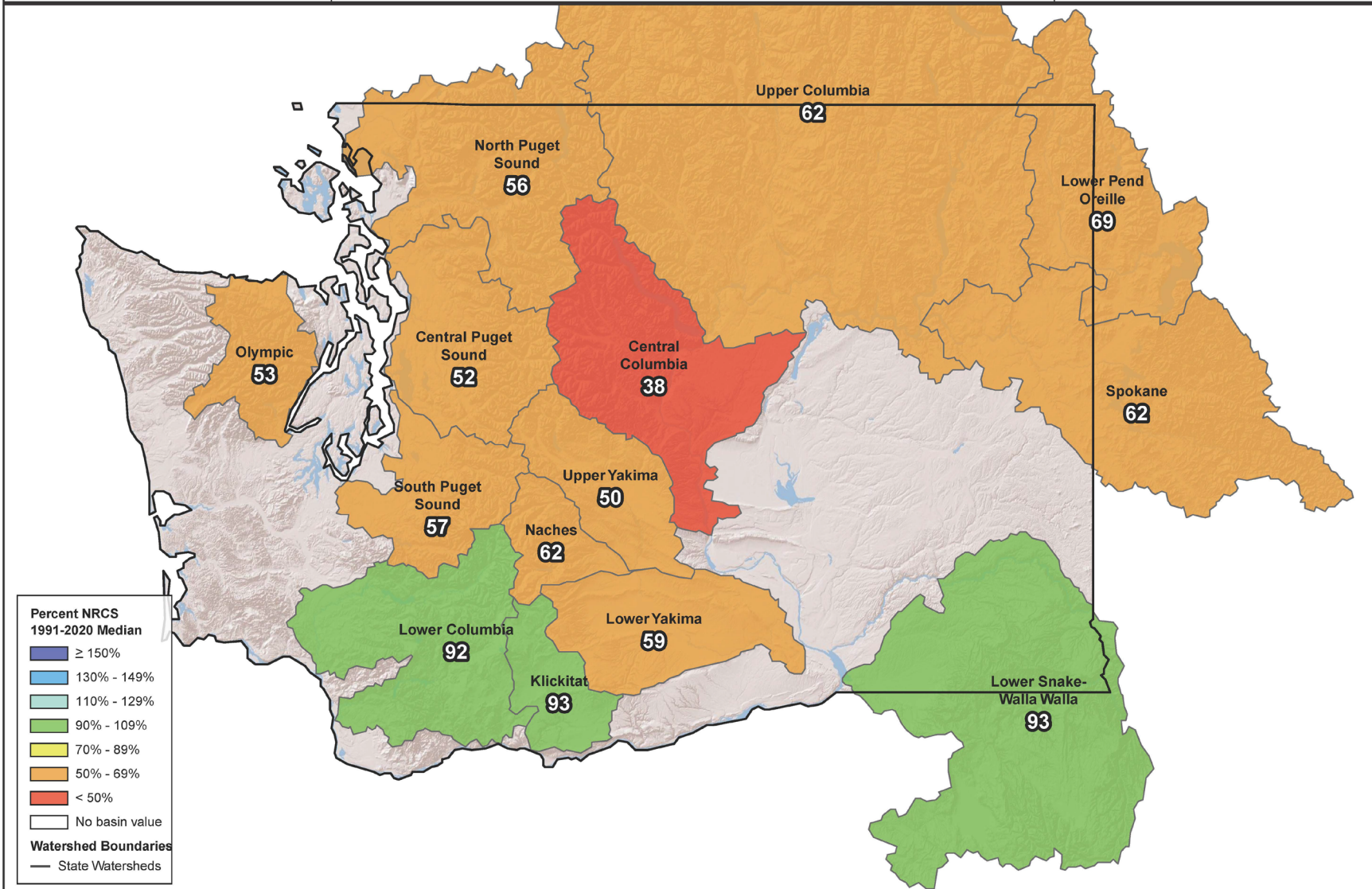


Snowpack Conditions

Statewide Snow Water Equivalent (SWE) = 62% today.

This date in 2015, Statewide SWE was 16%.

(Source: NRCS).



Percent NRCS 1991-2020 Median

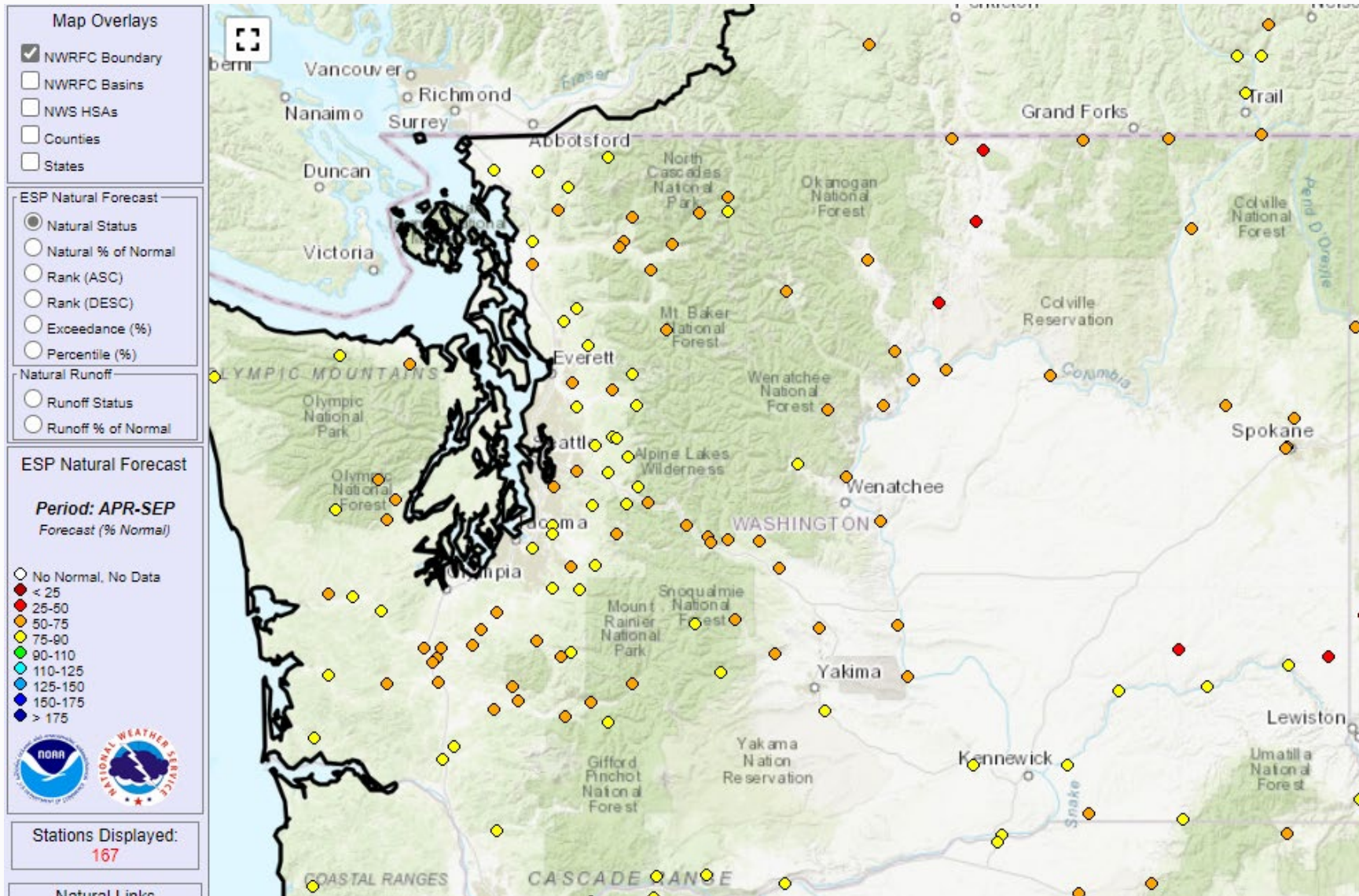
- ≥ 150%
- 130% - 149%
- 110% - 129%
- 90% - 109%
- 70% - 89%
- 50% - 69%
- < 50%
- No basin value

Watershed Boundaries

- State Watersheds

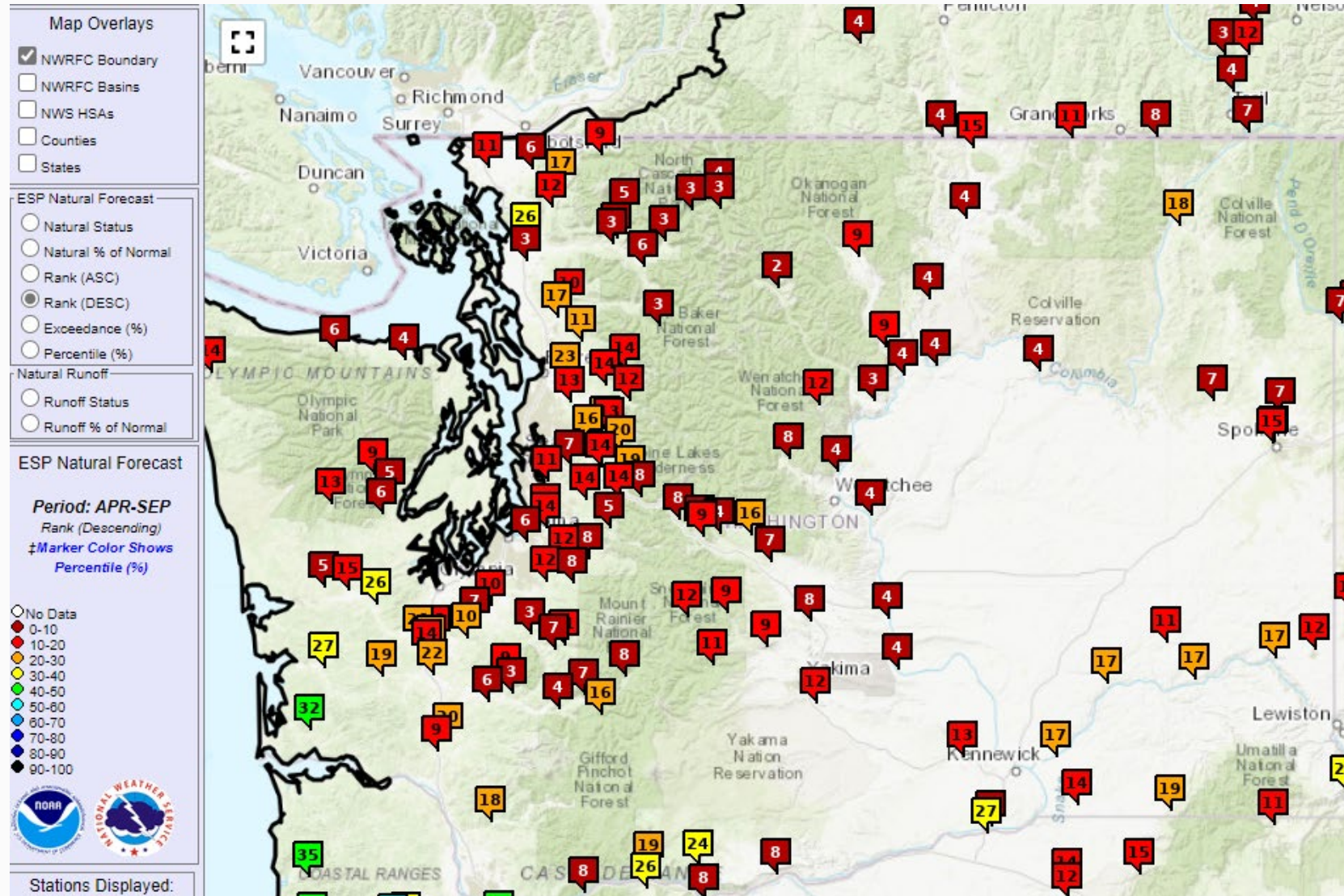


Streamflow natural forecast as % of normal



Source: [NW River Forecast Center](#)

Rank compared to historical record



Source: [NW River Forecast Center](#)

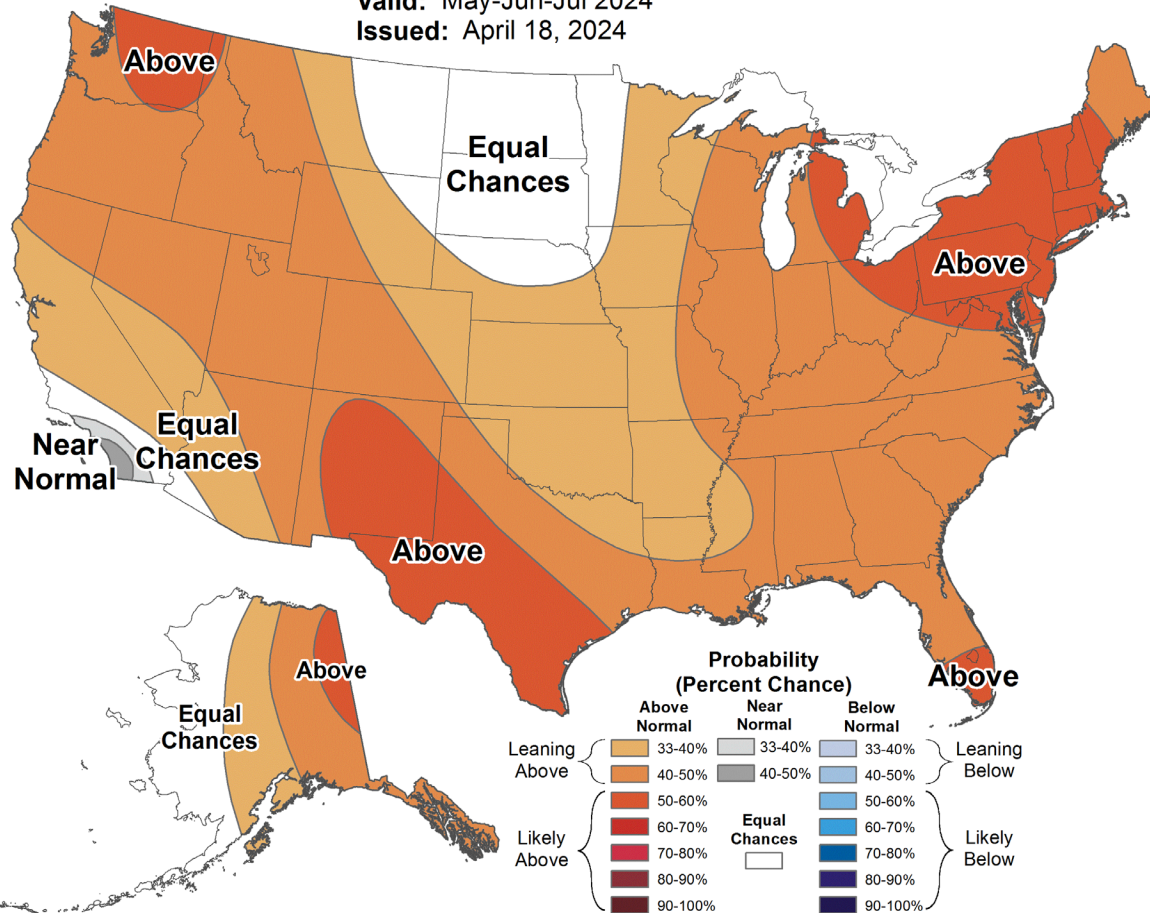
Conditions: Three-month Outlook



Seasonal Temperature Outlook



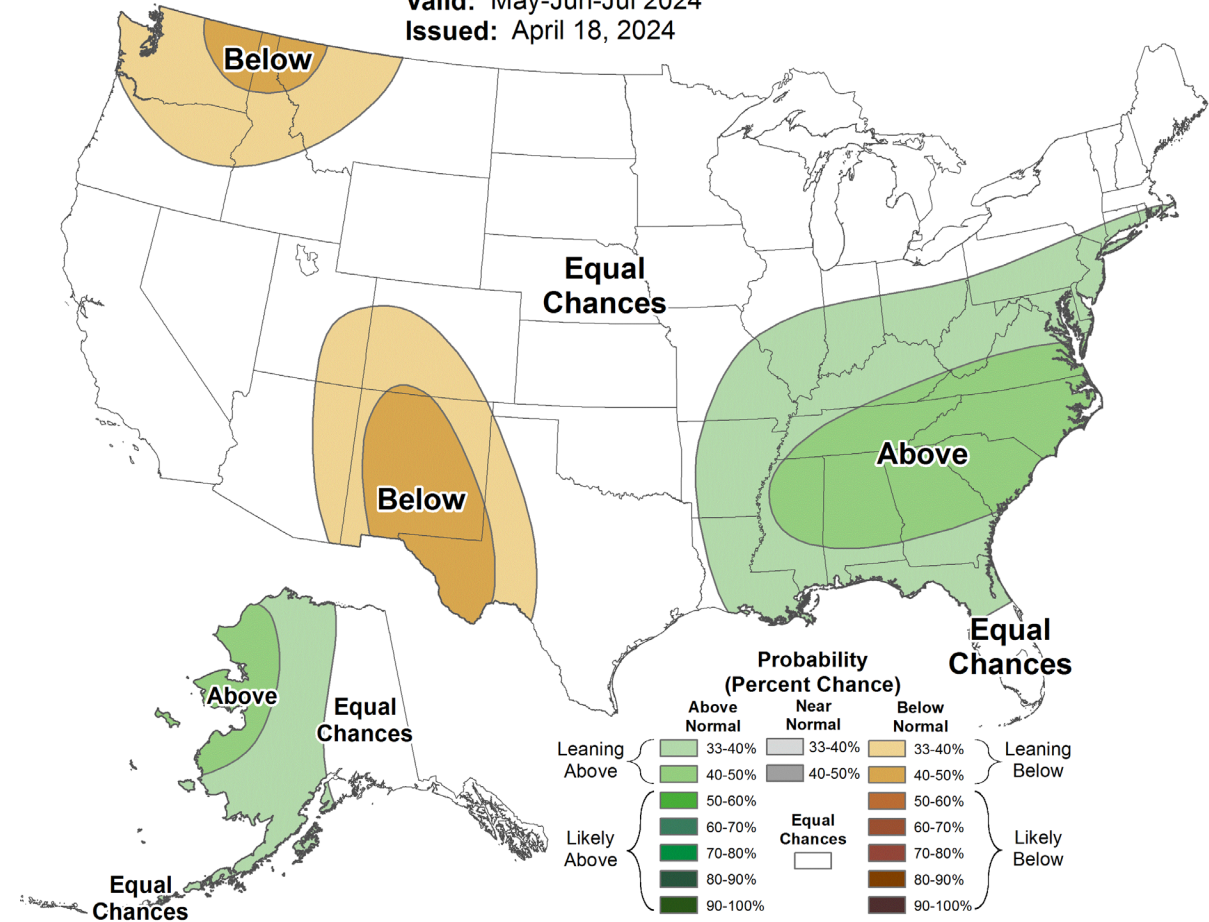
Valid: May-Jun-Jul 2024
Issued: April 18, 2024



Seasonal Precipitation Outlook



Valid: May-Jun-Jul 2024
Issued: April 18, 2024



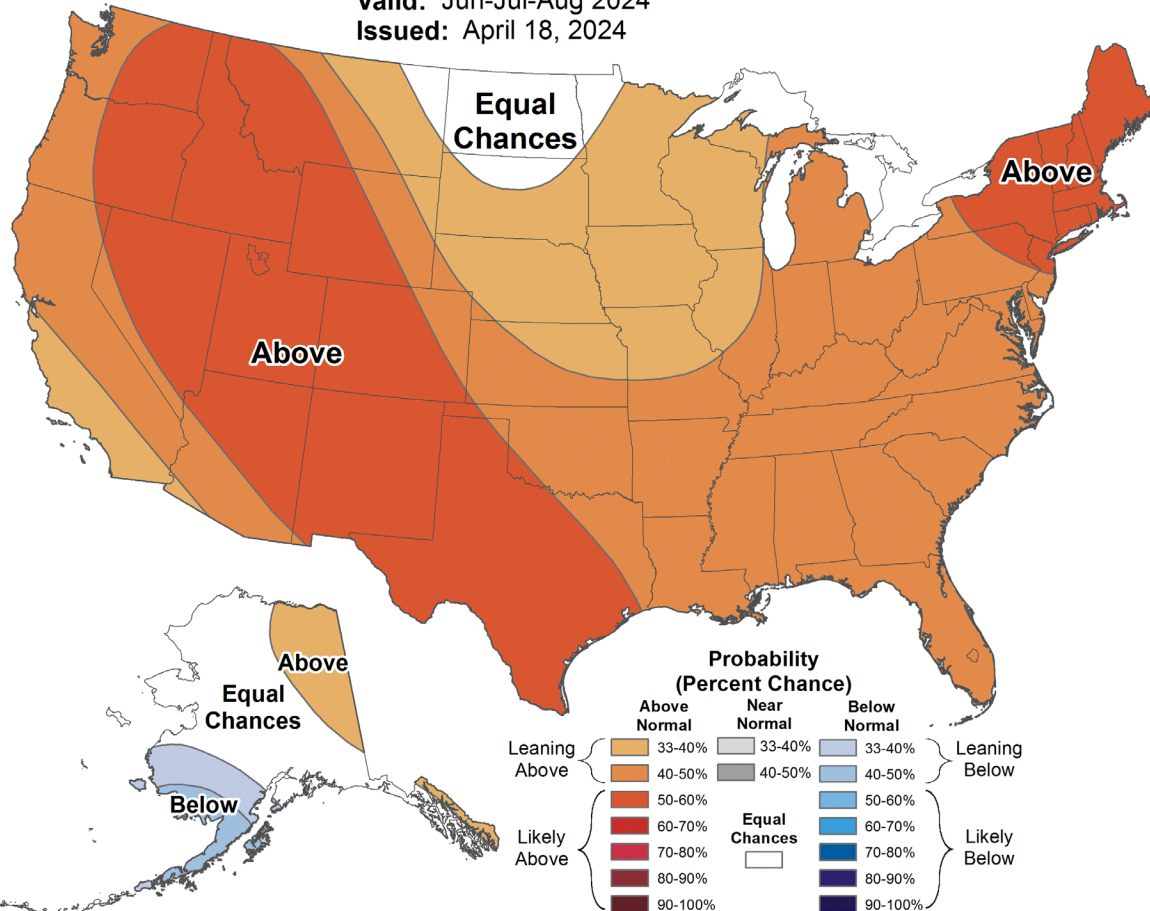
Conditions: Three-month Outlook



Seasonal Temperature Outlook



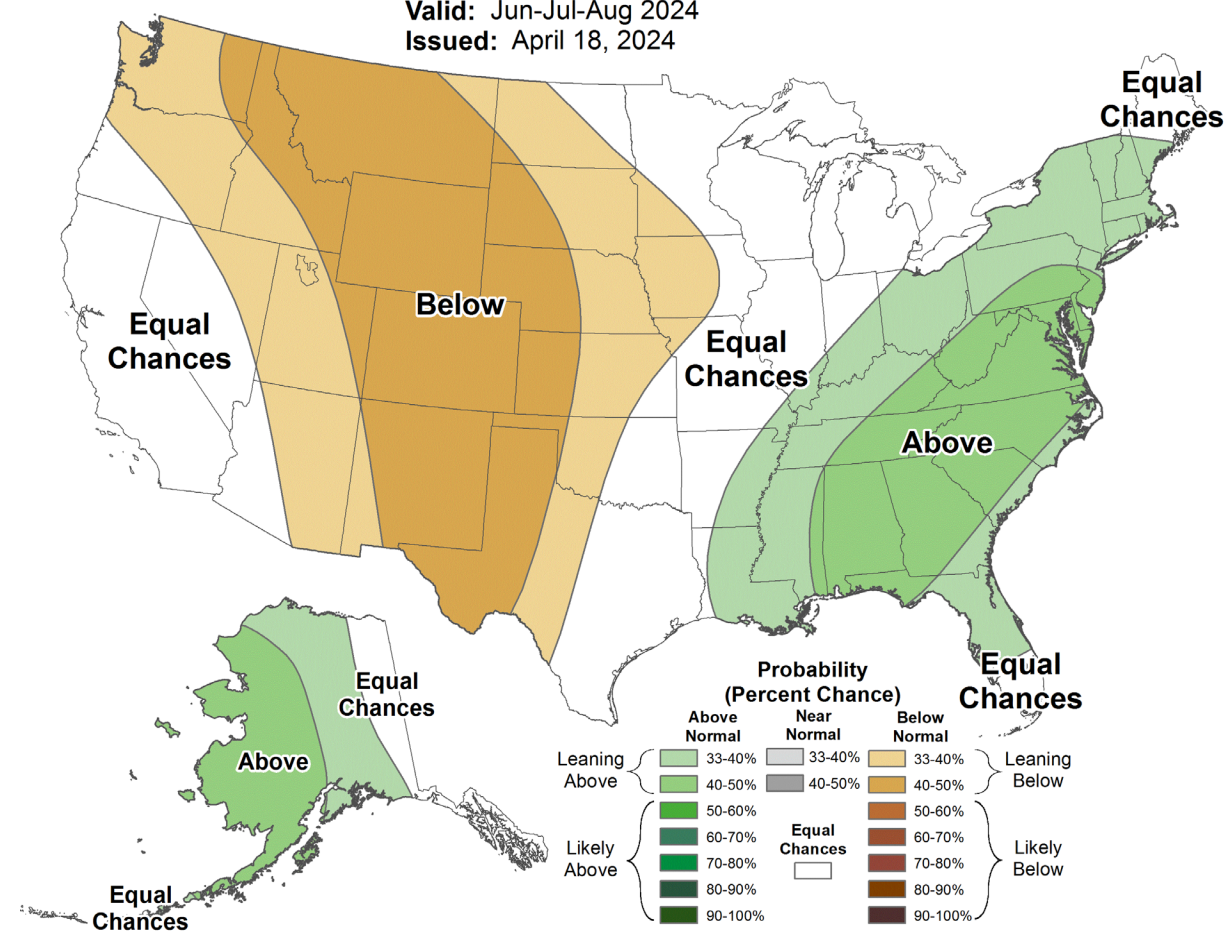
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Seasonal Precipitation Outlook

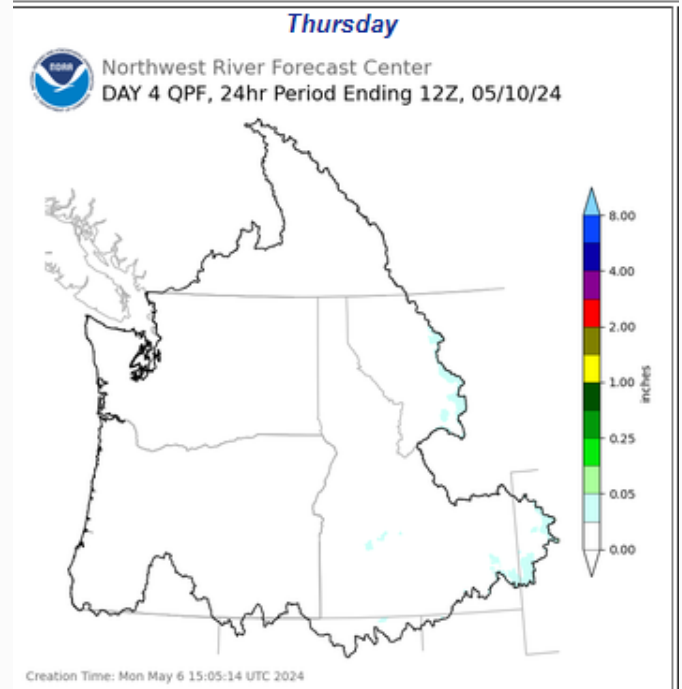
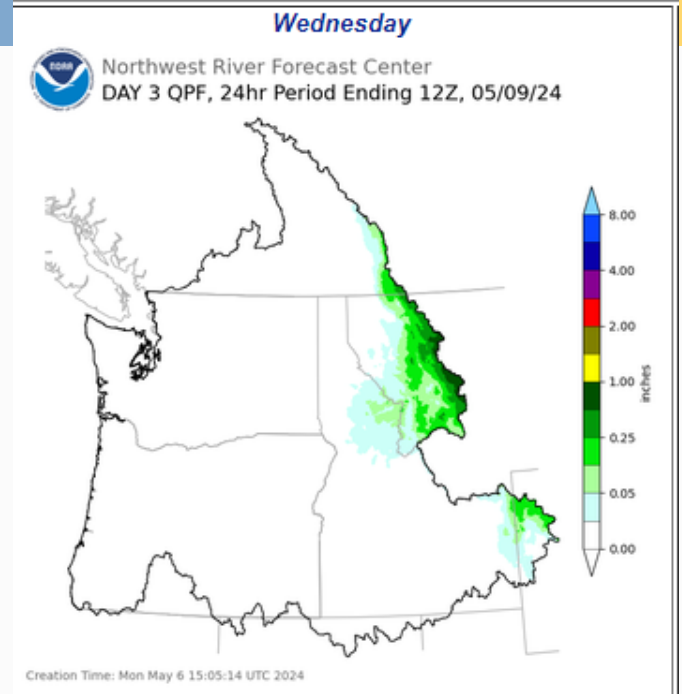


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Drought Conditions

- Water year 2024 has had above normal temperatures and normal to below normal precipitation for a majority of WA.
- Warm spells this past month have melted off mid-to-lower elevation snow.
- Water supply forecasts are for below normal streamflow and below normal precipitation.
- Yakima Project: Bureau of Reclamation(BOR) estimates 54% projected for junior water right holders; low estimate 46%.



Communications

- [WSAC website](#) updated with meeting materials and presentation recording.
 - Next meeting tentatively May
- April 16, 2024, Press release: [Apr. 16 - Drought Declaration - Washington State Department of Ecology](#)
- Updated drought website: [Drought Response - Washington State Department of Ecology](#)

Takeaways

- Water users should plan for a drier than normal year. The magnitude of impacts is different for different areas of the state.
- Emergency drought response tools are now activated - application open.
- Ecology is closely monitoring conditions and coordinating with partners.



Questions?



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26



Thank you

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