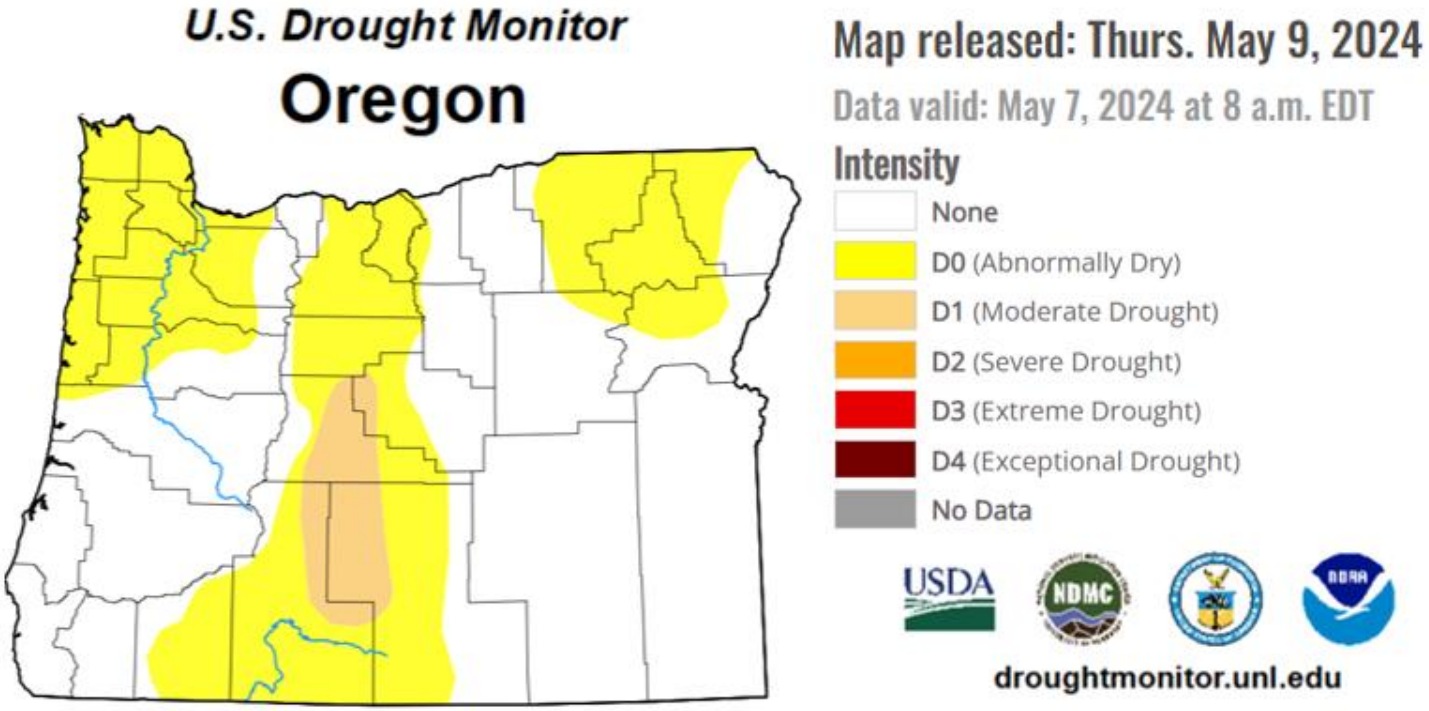
Water Supply Outlook
National Weather Service Portland OR
8 AM PST Thursday May 9 2024

**OREGON WATER SUPPLY SUMMARY AND SPRING FLOOD OUTLOOK AS OF MAY 7th, 2024**

The water supply forecast for the spring and summer of 2024 is near average for watersheds for most of Oregon, with some notable exceptions. Water supply forecasts are below average for the Klamath basin, some watersheds in southwest Oregon, and portions of far-northeast Oregon. Meanwhile, water supply forecasts are above average for most of southeast Oregon. Seasonal forecasts increased 10 to 20 percent from mid April to early May for most Oregon watersheds due to precipitation and increased mountain snowpack. The potential for spring snowmelt flooding in northeast Oregon is low, generally less than 5 percent. Any flooding that occurs would likely be caused by either a period of much-above average temperatures or a combination of above-average temperatures and moderate to heavy precipitation. Spring flooding is highly unlikely for central and southeast Oregon. For areas west of the Cascades, spring snowmelt flooding has historically not occurred and is not expected this year.

Precipitation so far this water year (October 2023 - April 2024) is near average for most of the state but above average for far-southwest and far-southeast Oregon and below average for south-central Oregon. Temperatures for the water year thus far are above average and notably so for portions of northeast and south-central Oregon.

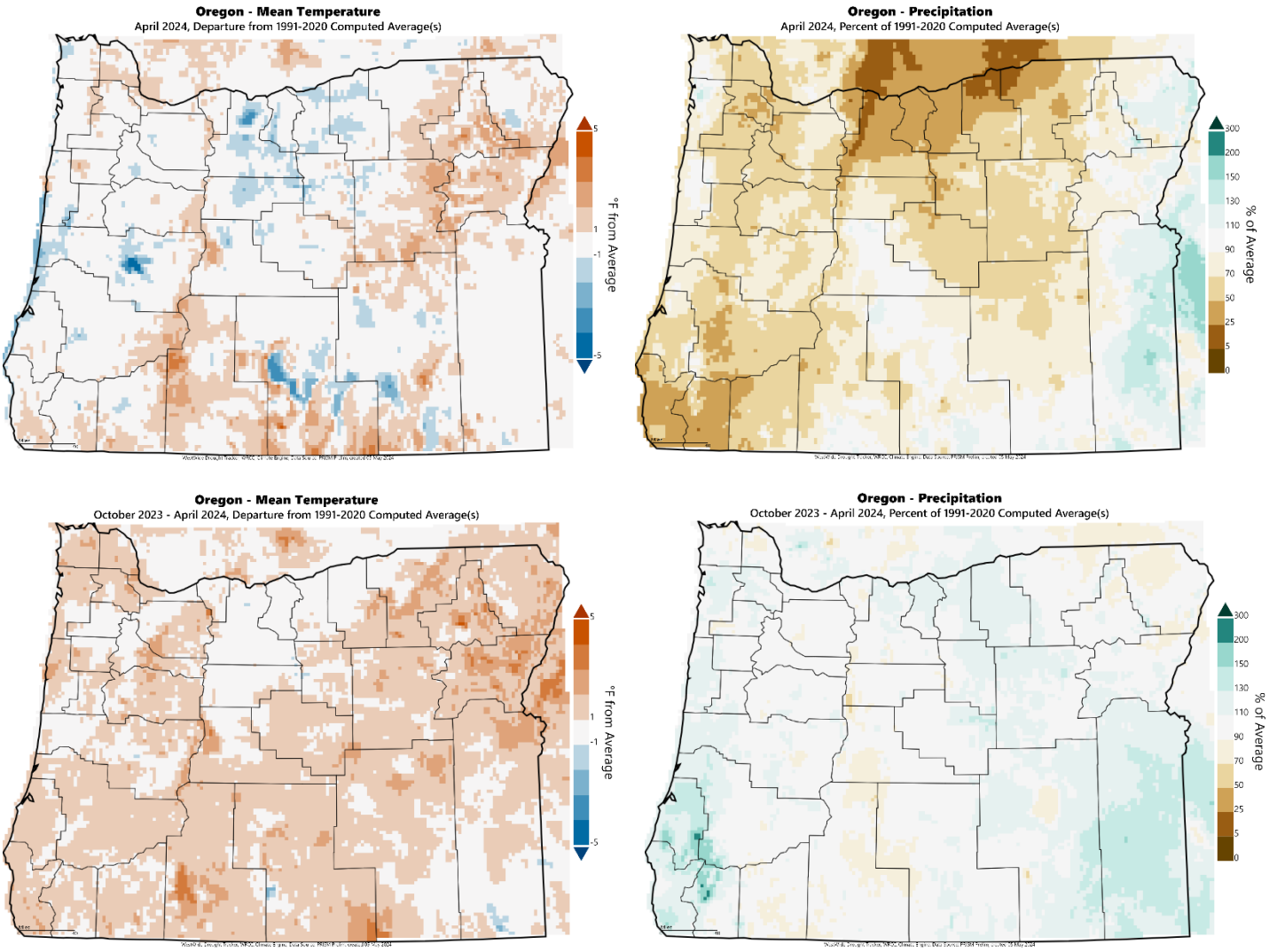
Refer to the sections below and links provided for details regarding snowpack, precipitation, seasonal climate outlooks, reservoirs, streamflow, and water supply forecasts. The last update for this water year will be issued by June 5, 2024.



**PRECIPITATION AND TEMPERATURES ACROSS OREGON**

Precipitation for the 2024 water year thus far (Oct 2023 - Apr 2024) ranges from 80 to 115 percent of average in Oregon, but most portions of the state are near average, 90 to 110 percent. The lowest values relative to normal are in far-northeast Oregon and the Klamath basin, and the highest are in southeast Oregon. April precipitation was below average for all but far-southeast Oregon, but the last week of April and first week of May saw above-average precipitation for most of the state.

Temperatures for October through April were 1 to 4 degrees above average for almost all of Oregon, except near normal for the Columbia basin portion of north-central Oregon. April temperatures ranged from 2 degrees below normal to 2 degrees above normal, with most of the state being near normal.




Details on precipitation and temperatures:

NOAA National Weather Service - Northwest River Forecast Center
www.nwrfc.noaa.gov/water_supply/wy_summary/wy_summary.php

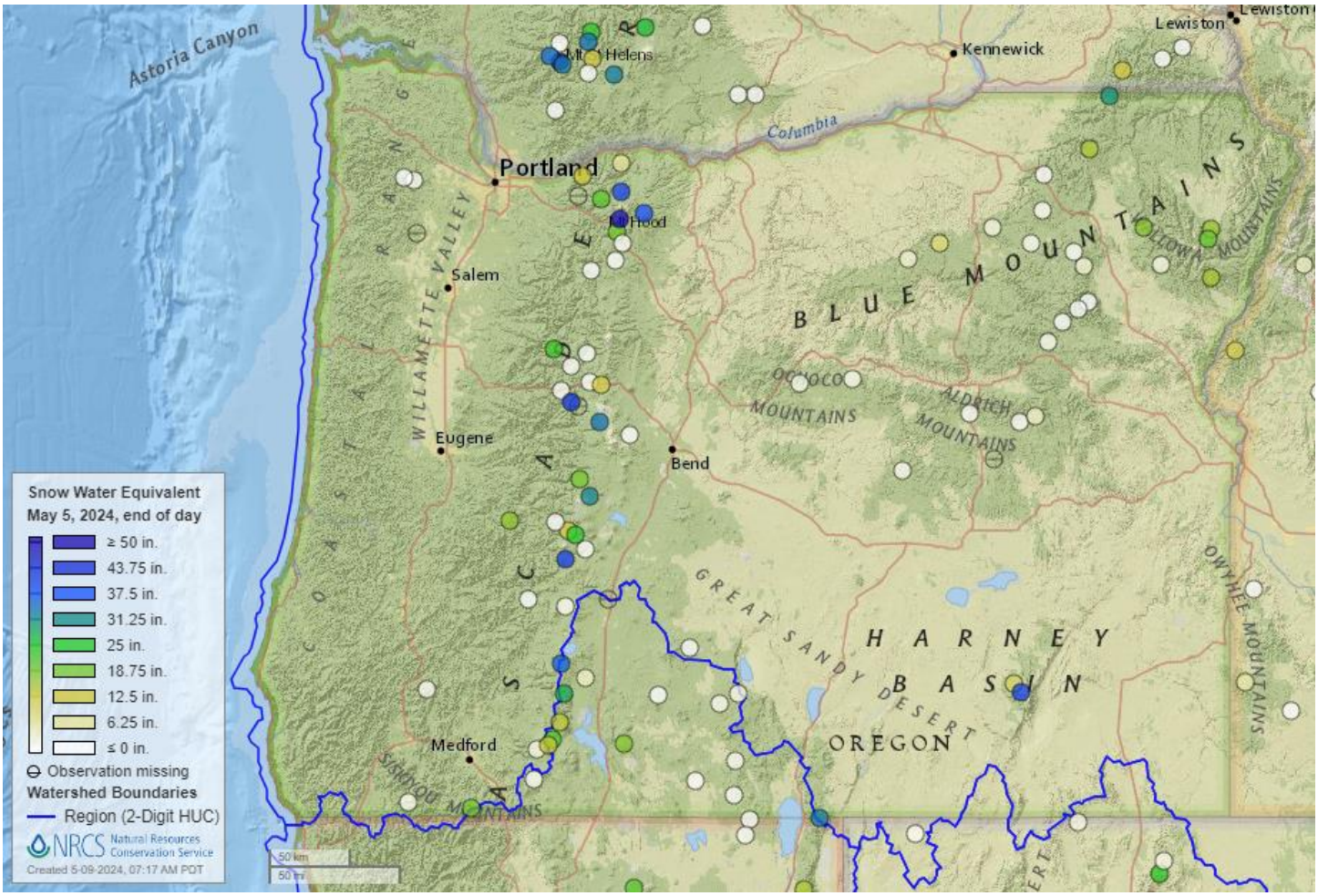
NOAA National Weather Service - California-Nevada River Forecast Center (Klamath basin)
www.cnrfc.noaa.gov/water_resources_update.php

Westwide Drought Tracker Precipitation & Temperature graphics
wrcc.dri.edu/wwdt/index.php?region=or

**SNOWPACK ACROSS OREGON**

As of May 5, mountain snowpack was above average for most of Oregon, with significant increases the past 2 weeks in mid and high elevation snow for much of the Cascades and Blue Mountains. Recent snowpack increases have come in the midst of the typical snowmelt season.

Snowmelt is likely to resume in earnest by May 9th and continue through mid May with a strong likelihood of above-average temperatures statewide. The NRCS map below shows snow water equivalent as of May 5th, with several low and mid elevation locations completely melted out (white dots).




Additional snowpack information:

NOAA National Weather Service - Northwest River Forecast Center
www.nwrfc.noaa.gov/snow/

USDA Natural Resources Conservation Service
nwcc-apps.sc.egov.usda.gov/imap/

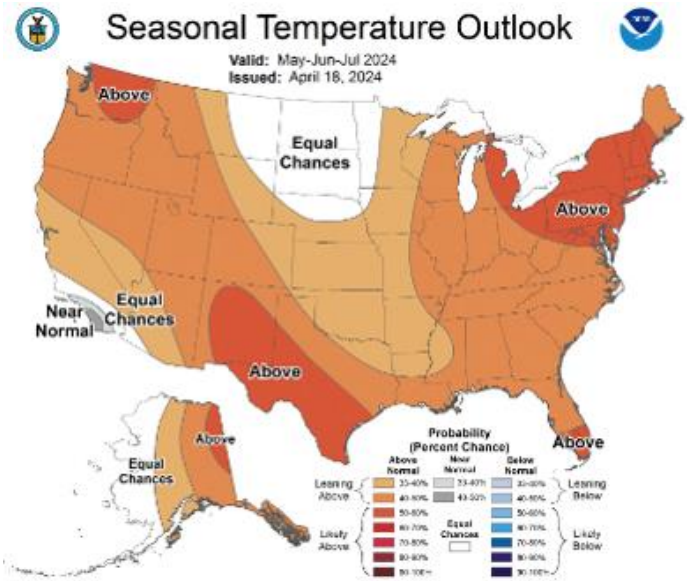
**PRECIPITATION AND TEMPERATURE OUTLOOK**

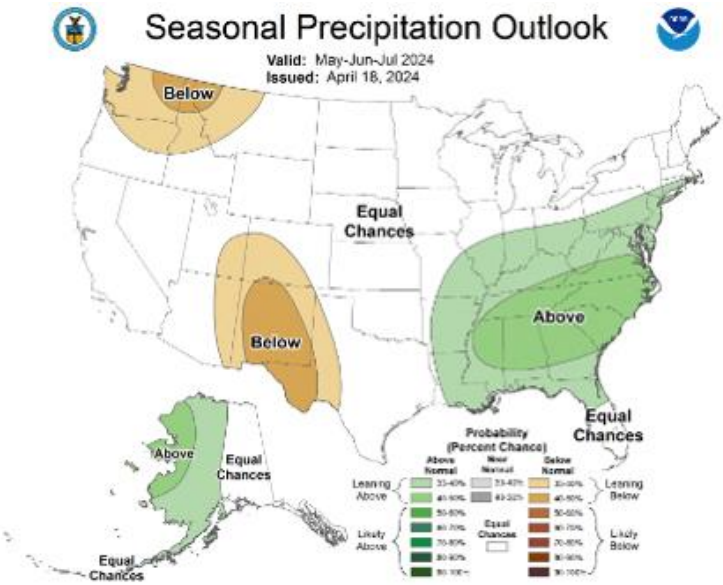
The Climate Prediction Center produces monthly and seasonal outlooks, in which there is a weighing of the odds of near normal, above normal, or below normal temperatures and precipitation.

ENSO conditions have transitioned from El Niño to neutral and are likely to transition to La Niña by autumn 2024. ENSO conditions have a minimal impact on summer conditions but will likely have a major influence on the upcoming fall and winter.

The outlook for May through July is for an enhanced likelihood of above-average temperatures statewide. The precipitation outlook also indicates a slightly-enhanced likelihood for below-average precipitation for northeast Oregon, with equal chances of near, above, or below average elsewhere. The outlook for the likelihood of above-average temperatures and below-average precipitation continues through the summer.

Visit [www.cpc.ncep.noaa.gov](www.cpc.ncep.noaa.gov) for more about seasonal outlooks.




**RESERVOIRS**

Reservoir storage for most irrigation reservoirs across the state is generally above average, with the exception of southwest Oregon, where reservoir storage ranges from 45 to 75 percent of capacity. Most reservoirs in central and eastern Oregon have filled to capacity. Flood control reservoirs in western Oregon are dependent on spring precipitation and snowmelt and are in the process of refilling as of early May, most running a little below operating rule curves.

Owyhee Reservoir, located in southeast Oregon, is the largest irrigation project in the state. It has observed storage of about 711,000 acre-feet, an increase of about 50,000 acre-feet from a month ago. This is 99 percent of capacity and 133 percent of average for this time of year.

Reservoir data is provided by the Natural Resources Conservation Service, the Bureau of Reclamation, and the US Army Corps of Engineers.

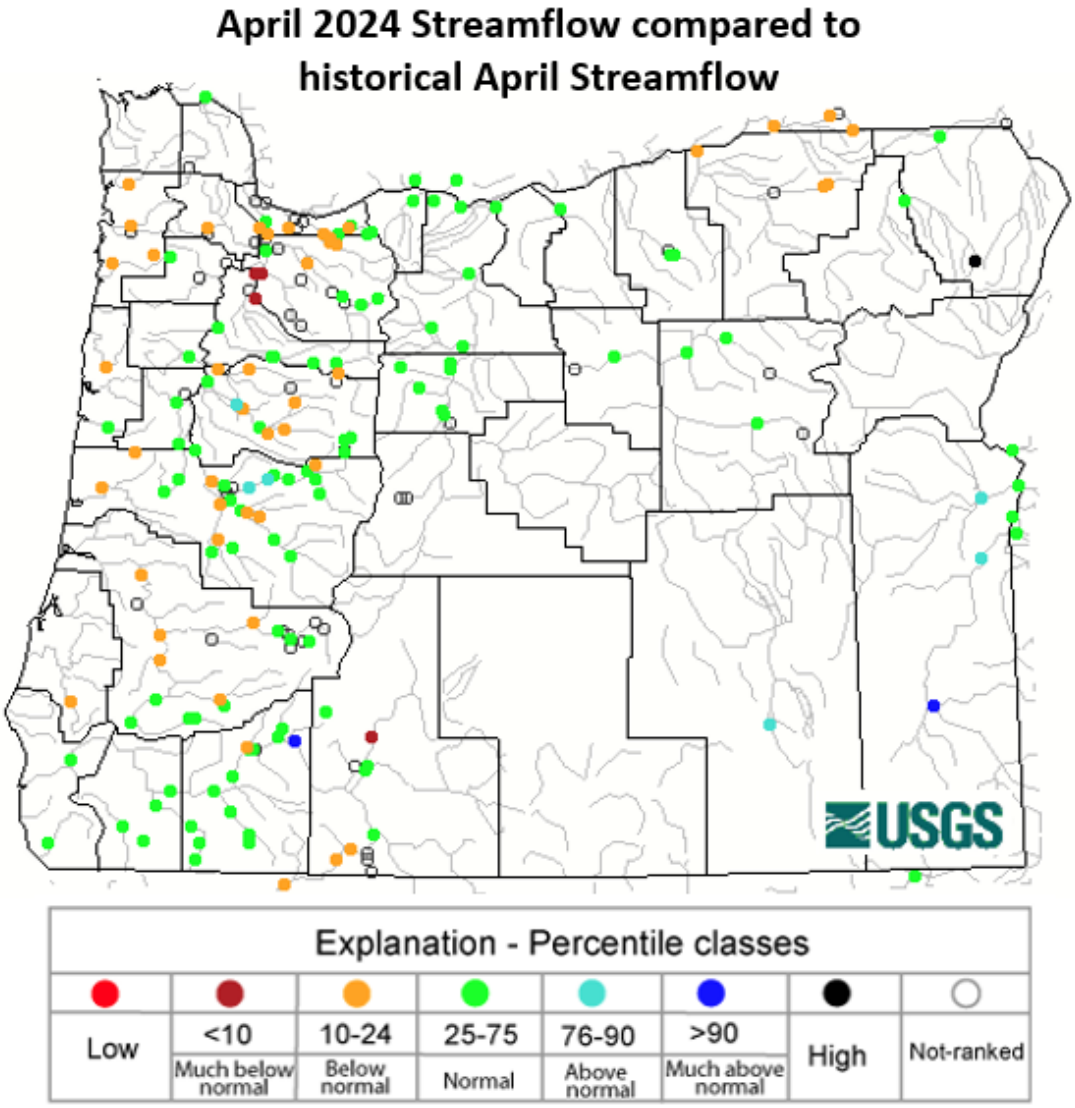
Additional reservoir information:
www.nwd-wc.usace.army.mil/nwp/teacup/willamette/
www.usbr.gov/pn/hydromet/select.html
www.wcc.nrcs.usda.gov/basin.html

**OBSERVED STREAMFLOW**

Observed runoff so far this water year has been above average for most watersheds statewide, particularly so for watersheds in central and southwest Oregon. The only areas with below-average runoff are interior southwest, south-central and far-northeast Oregon.

Runoff in April was generally near to below average in western Oregon, below average in far-northeast Oregon, and near average elsewhere. There are a few notable exceptions with much-above monthly streamflow, especially the Owyhee watershed in far-southeast Oregon.

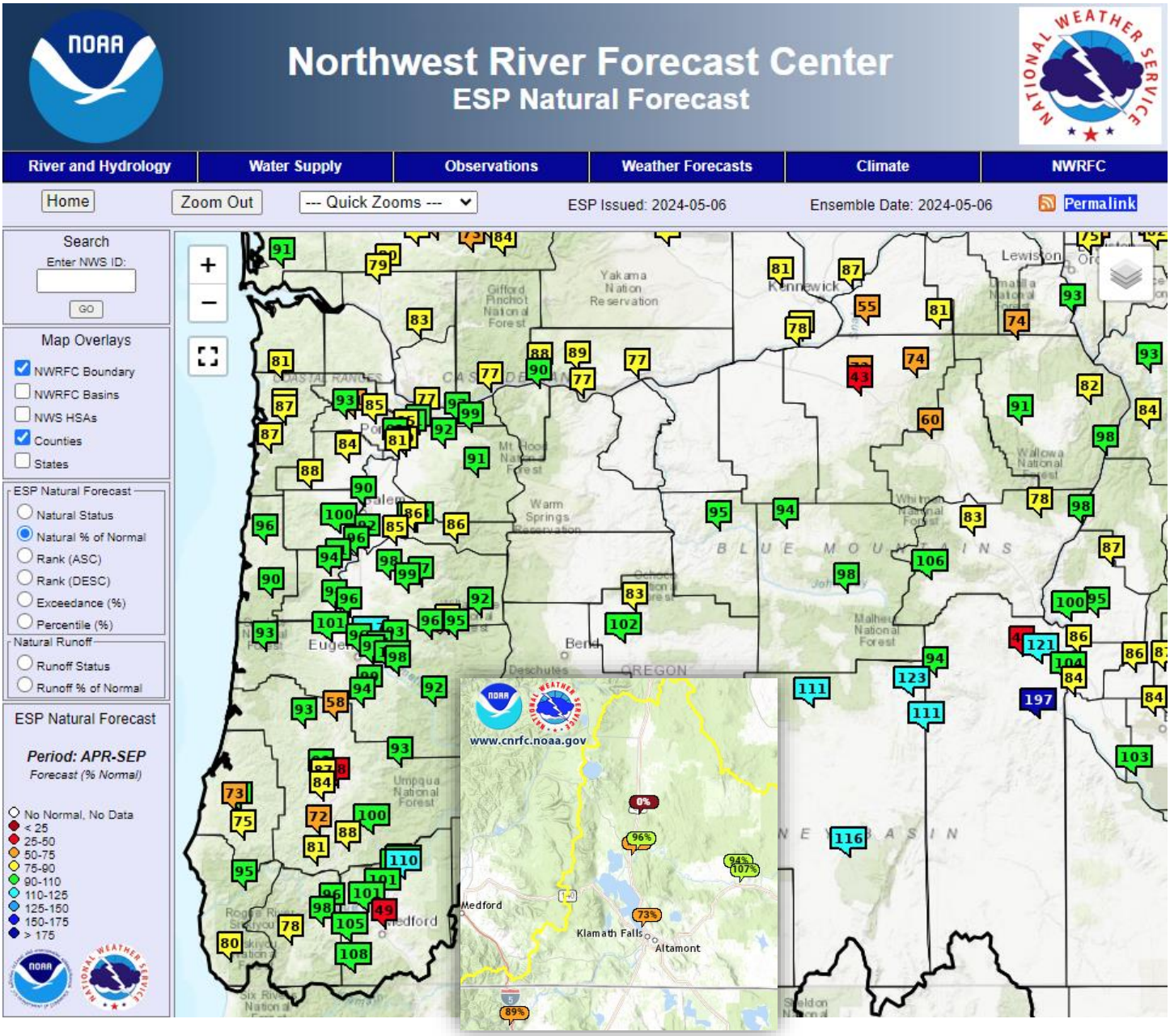
Visit waterwatch.usgs.gov for details on observed streamflow. Runoff data is available at www.nwrfc.noaa.gov/natural/index.html at water year and monthly time scales for several Oregon locations



**WATER SUPPLY SEASONAL FORECASTS**

Water supply forecasts for April-September runoff volume are near to above average for most of the state, except for below-average forecasts for some watersheds in southwest and northeast Oregon. The highest forecasts, relative to average, are in southeast Oregon.

The forecast for the Columbia River at The Dalles, which is a good index of conditions across the Columbia Basin, is 77 percent of average for April-September.




Details on basin-scale water supply forecasts:

NOAA NWS - Northwest River Forecast Center www.nwrfc.noaa.gov/ws/

NOAA NWS - California-Nevada RFC (Klamath basin) www.cnrfc.noaa.gov/water_resources_update.php

USDA Natural Resources Conservation Service www.wcc.nrcs.usda.gov/wsf/