

# Oregon Water Supply Outlook Report

May 1, 2024



**Brock Phillips, USBR Physical Scientist, treks over the end of a plowed road to survey Park H.Q. Snow Course in Crater Lake National Park. Snowpack at the site is 96% of median as of May 1st.**

*Photo taken by Matthew Kritzer, USBR Hydrological Technician (April 29, 2024)*

# Contents

|                                                            |           |
|------------------------------------------------------------|-----------|
| <b>Conditions Overview .....</b>                           | <b>3</b>  |
| <b>Owyhee Basin .....</b>                                  | <b>11</b> |
| <b>Malheur Basin.....</b>                                  | <b>13</b> |
| <b>Grande Ronde, Powder, Burnt and Imnaha Basins .....</b> | <b>15</b> |
| <b>Umatilla, Walla Walla, and Willow Basins .....</b>      | <b>17</b> |
| <b>John Day Basin .....</b>                                | <b>19</b> |
| <b>Upper Deschutes and Crooked Basins .....</b>            | <b>21</b> |
| <b>Hood, Sandy, and Lower Deschutes Basins .....</b>       | <b>23</b> |
| <b>Willamette Basin .....</b>                              | <b>25</b> |
| <b>Rogue and Umpqua Basins .....</b>                       | <b>28</b> |
| <b>Klamath Basin .....</b>                                 | <b>30</b> |
| <b>Lake County and Goose Lake .....</b>                    | <b>32</b> |
| <b>Harney Basin .....</b>                                  | <b>34</b> |
| <b>Resources.....</b>                                      | <b>36</b> |

## **Contact for Report**

Matt Warbritton  
Supervisory Hydrologist  
Portland Data Collection Office  
USDA NRCS Oregon Snow Survey and Water Supply Forecasting Program  
matt.warbritton@usda.gov

---

In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident. Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotope, American Sign Language, etc.) should contact the responsible Agency or USDA's TARGET Center at (202) 720-2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877-8339. Additionally, program information may be made available in languages other than English. USDA is an equal opportunity provider and employer.

# Conditions Overview

## Summary

April was a fairly dry month for many regions in the state, notably across much of southern Oregon and in central and north-central Oregon where month-to-date precipitation was mostly below to well-below normal. Snowpack across the state remains near normal as the snowmelt season is well underway.

Many SNOTEL stations, notably in the John Day and southeastern basins experienced a higher-than-normal rate of melting in April. In southeastern Oregon, snowpack is still near to above normal, which will sustain higher streamflows through May. Elsewhere, snowpack is near normal across much of the Cascades and generally below normal in northeastern Oregon.

Higher-than-normal rates of snowmelt in portions of eastern OR has led to slight degradations in water supply forecasts (WSFs) from April 1 due to earlier snowmelt-derived runoff. WSFs for the Upper Deschutes and Klamath Basin remains below normal. With the onset to snowmelt underway at all SNOTEL stations in Oregon, the rate of snowmelt—largely driven by temperature—and thus timing of snowmelt-derived runoff will significantly influence summer water supplies and drought conditions.

*\*Note that basin conditions outlined in this report include data from stations within the SNOTEL and SNOLITE network, and/or cooperator weather stations.*



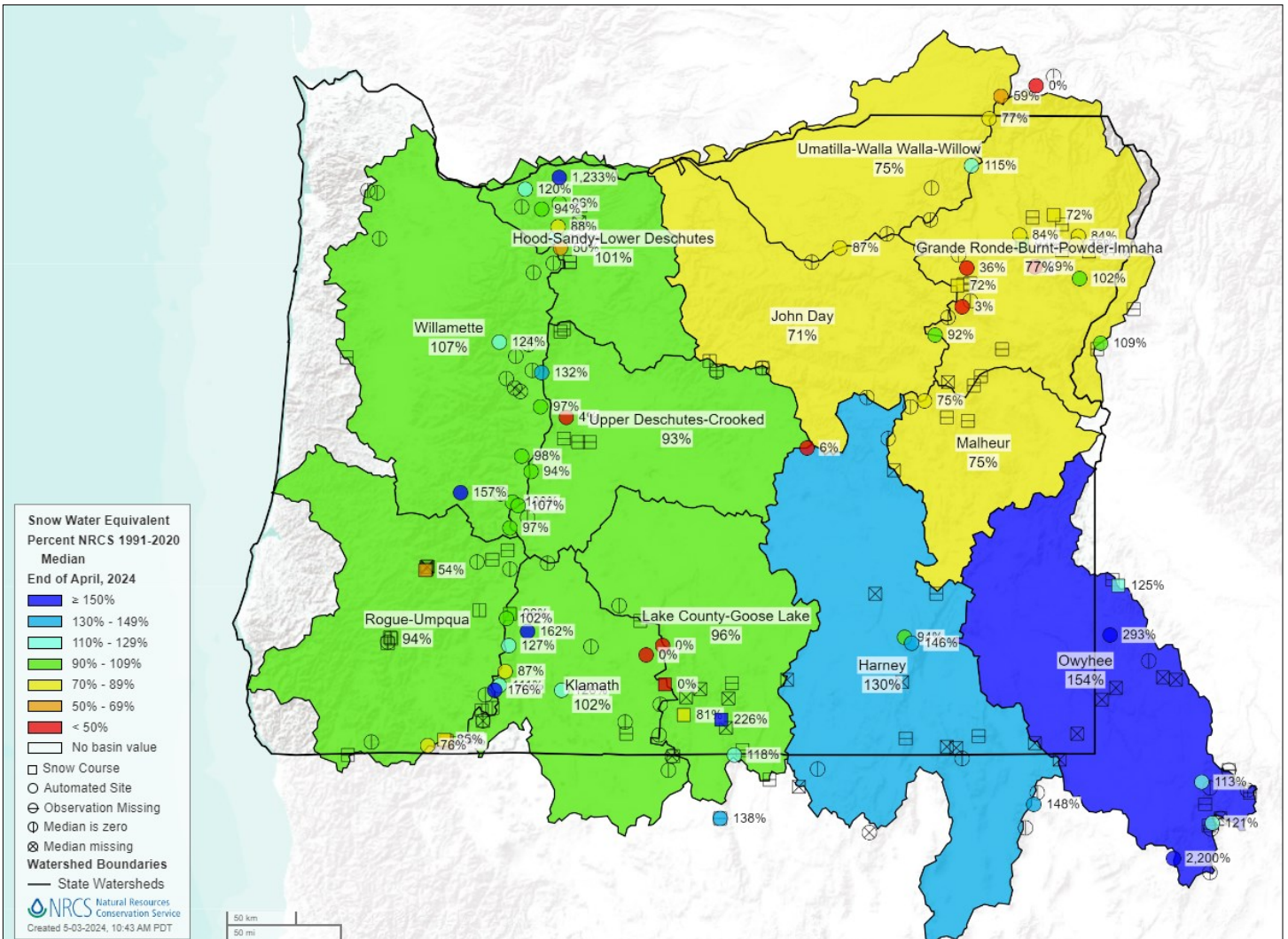
**A late-season storm provided some additional snow in the Elkhorn Mountains in late April. Snowpack at the Anthony Lake is 72% of median as of May 1st.**

*Photo taken by Luke Albert, Baker County (April 30, 2024)*

## Snowpack

As of May 1, statewide snowpack is 118% of median. The onset of snowmelt is underway at all SNOTEL stations in Oregon, with snowmelt in some cases occurring at a higher rate than normal. A cold storm starting end of April and lasting through the first few days in May has resulted in some late season snow accumulation, in addition to some rain-on-snow even at higher elevations in the mountains.

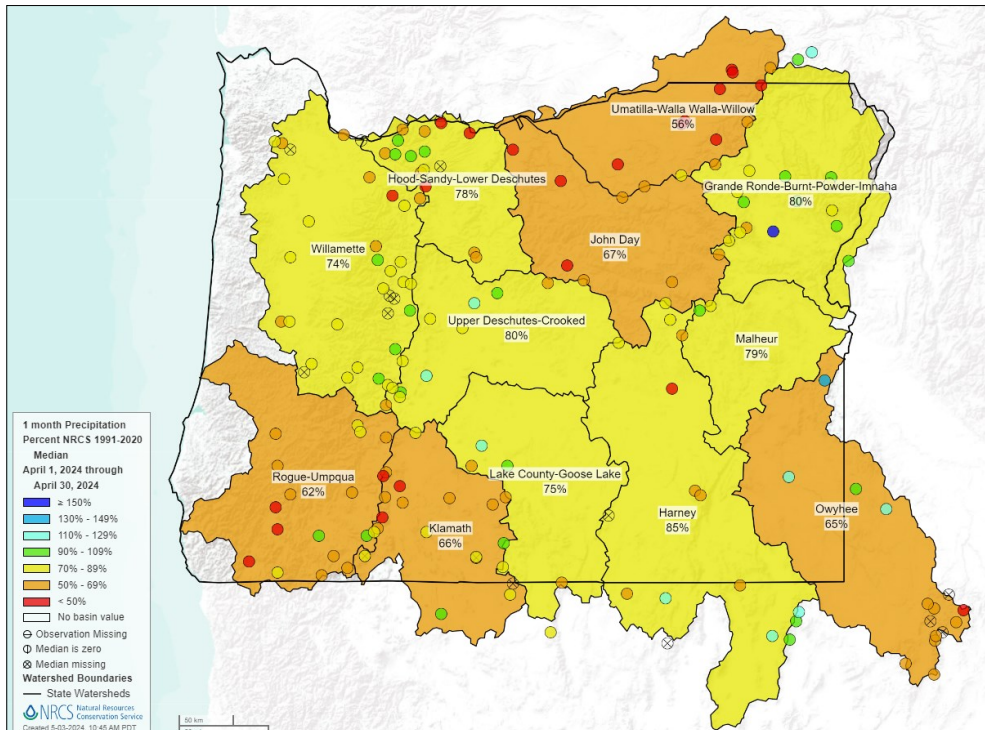
Across the Cascades, snowpack is generally near normal, with more above-normal snowpack in the southern Cascades. Snowpack as a percent of normal declined in portions of the Blue Mountains due to a higher rate of melt than normal through much of April. At 2 SNOTEL stations (Crazyman Flat and Summer Rim) in eastern Klamath Basin, snowpack melted out 2-4 weeks earlier than normal.



Basin snowpack (% of median) as of May 1

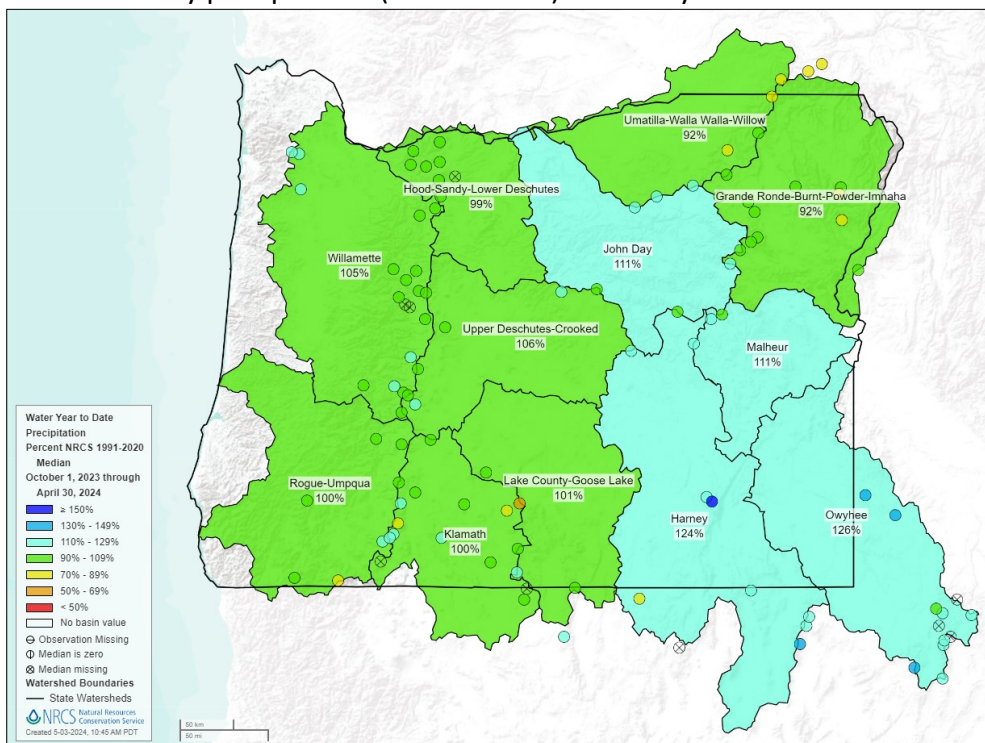
## Precipitation

April was generally a dry month across many parts of the state, notably in portions of northern and south-western Oregon. April precipitation was the [second lowest on record](#) at Annie Springs (out of 24 years) and Ochoco Meadows (out of 44 years) SNOTEL stations. Statewide, water year-to-date (WYTD) precipitation is 103%, a slight decline from 106% on April 1. WYTD precipitation is slightly below normal in parts of northeastern Oregon and more below normal near the headwaters of the Sycan River in Klamath Basin. In contrast, WYTD precipitation is above normal on Steens Mountain.



Monthly

Basin monthly precipitation (% of median) as of May 1



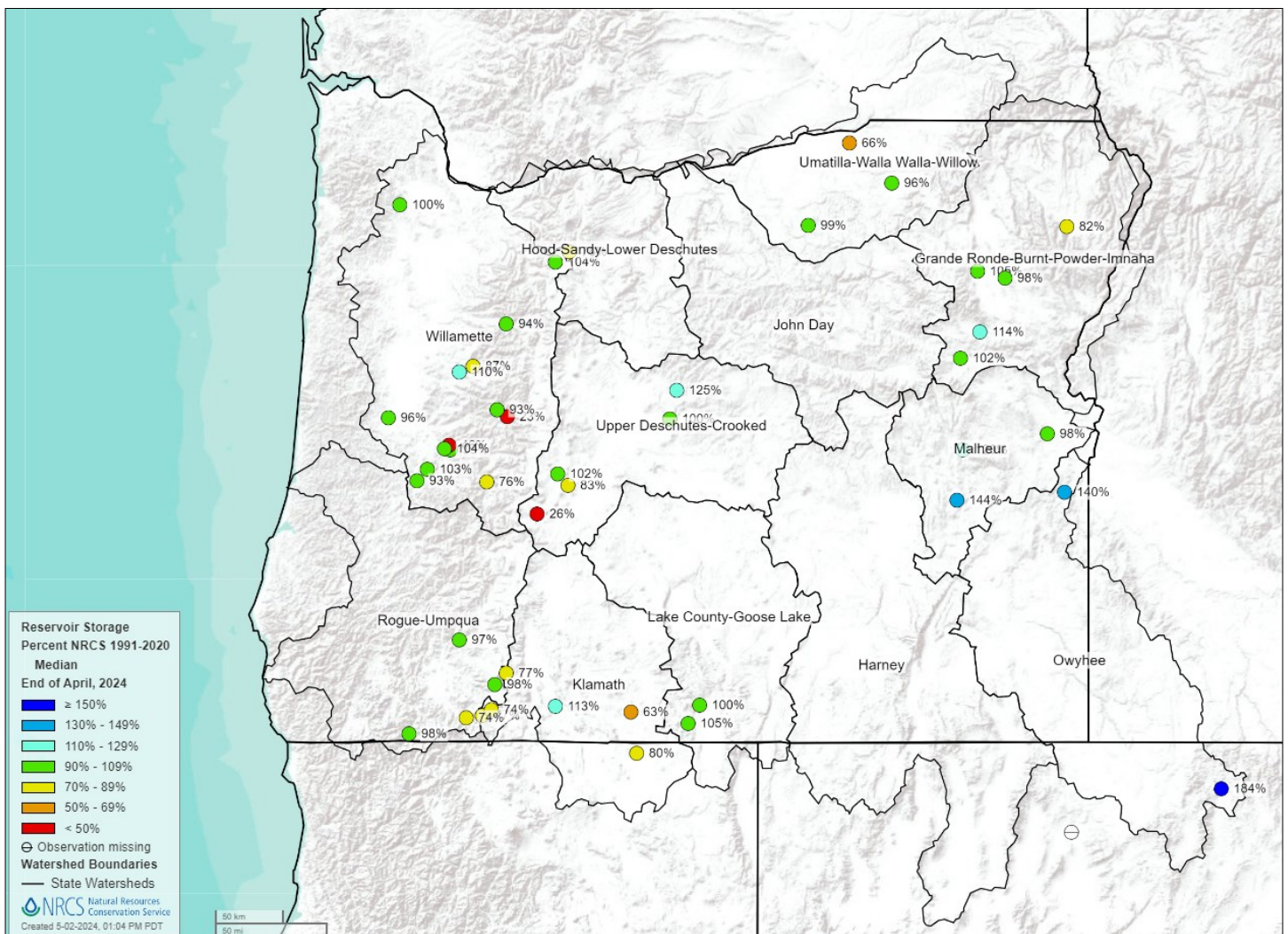
Water Year

Basin water-year precipitation (% of median) as of May 1

## Reservoirs

Volumetric storage for reservoirs across the state varies. In eastern and central Oregon, volumetric storage at reservoirs is mostly near to above normal, a result of mostly near to above normal snowpack in that region this winter. Reservoirs in southern Oregon are storing volumes that are below to near normal. In the Deschutes and Willamette basins, volumetric storage ranges from well-below to near normal.

Reservoir storage values aren't necessarily reflective of water supply conditions. Reservoir operators control for a variety of factors when choosing to store or release water, including flooding, irrigation, fisheries, and other water needs. These management needs may impact storage values for a reservoir.



Reservoir storage (% of storage capacity) as of May 1

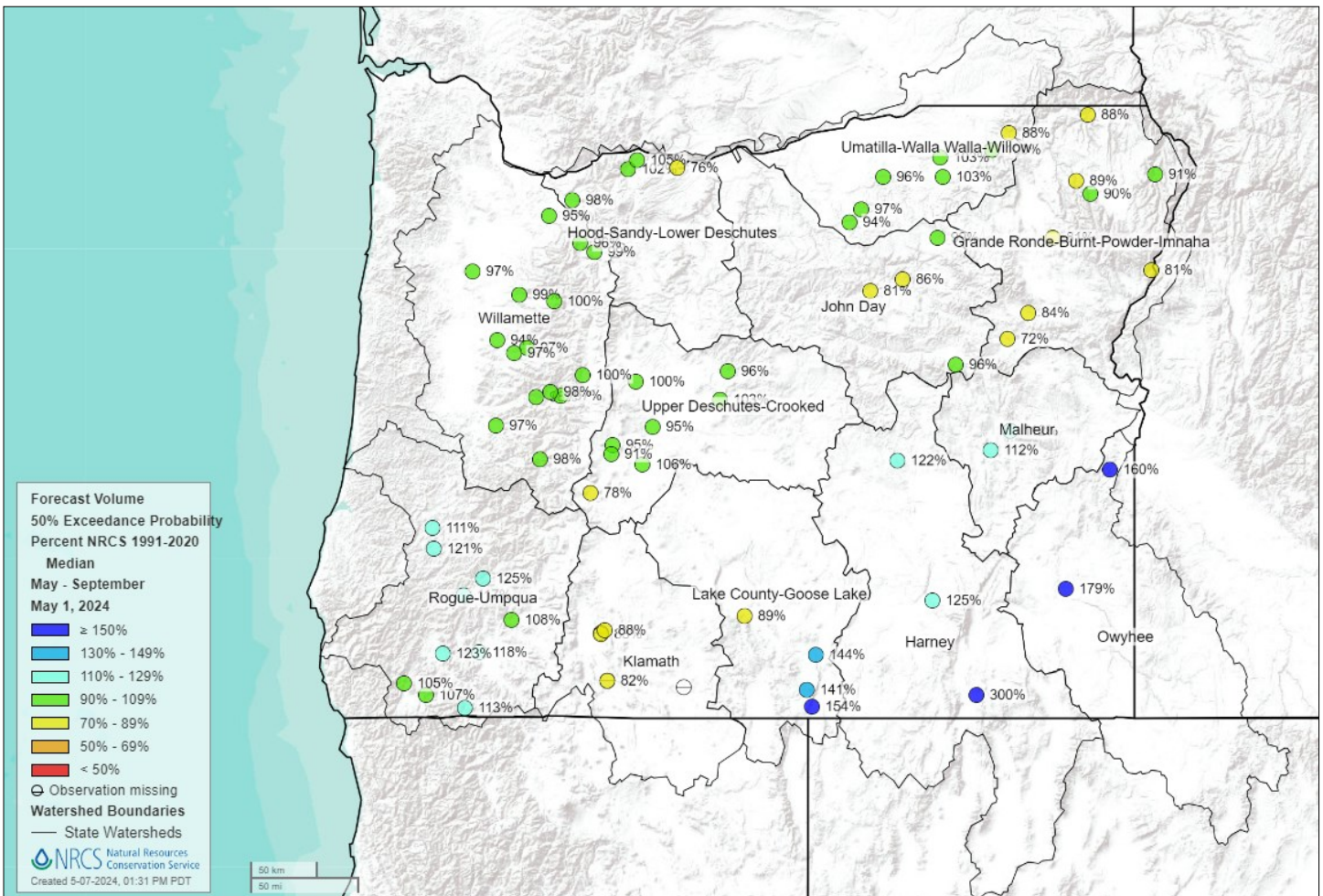
## Streamflow

Volumetric streamflow across Oregon varies. Flows in much of central Oregon and southern Oregon east of the Cascade crest are near to well-above normal. Streamflow across much of western Oregon and in the Umatilla and Walla Walla basins range from mostly below to well-below normal.

Water supply forecasts (WSF) for May 1<sup>st</sup> have remained little changed since April 1 across western Oregon. In central and eastern Oregon, some WSFs have degraded slightly, in part due to more rapid snowmelt thus earlier runoff in some basins in April. WSFs in southeastern Oregon, the Malheur Basin, and in the Warner Valley remain slightly to well-above normal.

Predictive skill for WSFs remains similar to April 1 skill as the normal timing for peak snow accumulation has passed and the onset to snowmelt is underway. However, in basins that are rain-dominated (ex., much of the western Cascades), skill may still be sufficiently low, meaning current conditions are a poor predictor of summer water supply. In this case, forecasts may or may not be more reflective of May-1 conditions. Forecast product-users should bear this and any model uncertainty (quantitatively captured by exceedance intervals) in mind when interpreting WSFs for decision making.

View the map for April observed streamflow [here](#).



Streamflow forecasts (% of normal) for the primary period as of May 1

## Drought

As of April 30, nearly 5% of Oregon is in moderate drought (D1). Drought is primarily distributed from central Deschutes County down to portions of Lake and Klamath counties. Abnormally dry conditions (D0) are distributed across parts of northwestern and northeastern Oregon and extending from Wasco and Sherman counties down to the California border.

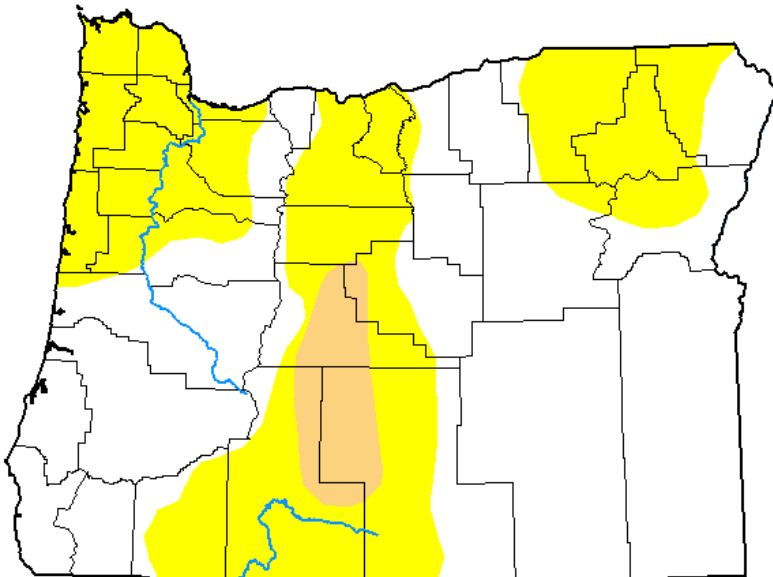
At the beginning of the water year, 54% of the state was in some drought category (D1-D3), and 27% of the state in severe to extreme drought.

### U.S. Drought Monitor Oregon

**April 30, 2024**  
(Released Thursday, May 2, 2024)  
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

|                                                    | None  | D0-D4 | D1-D4 | D2-D4 | D3-D4 | D4   |
|----------------------------------------------------|-------|-------|-------|-------|-------|------|
| <b>Current</b>                                     | 58.95 | 41.05 | 4.59  | 0.00  | 0.00  | 0.00 |
| <b>Last Week</b><br><i>04-23-2024</i>              | 58.95 | 41.05 | 4.59  | 0.00  | 0.00  | 0.00 |
| <b>3 Months Ago</b><br><i>01-30-2024</i>           | 67.66 | 32.34 | 16.39 | 0.00  | 0.00  | 0.00 |
| <b>Start of Calendar Year</b><br><i>01-02-2024</i> | 47.04 | 52.96 | 18.85 | 3.12  | 0.00  | 0.00 |
| <b>Start of Water Year</b><br><i>09-26-2023</i>    | 24.13 | 75.87 | 54.18 | 27.06 | 6.40  | 0.00 |
| <b>One Year Ago</b><br><i>05-02-2023</i>           | 23.62 | 76.38 | 56.30 | 22.29 | 5.78  | 0.00 |



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](https://droughtmonitor.unl.edu)

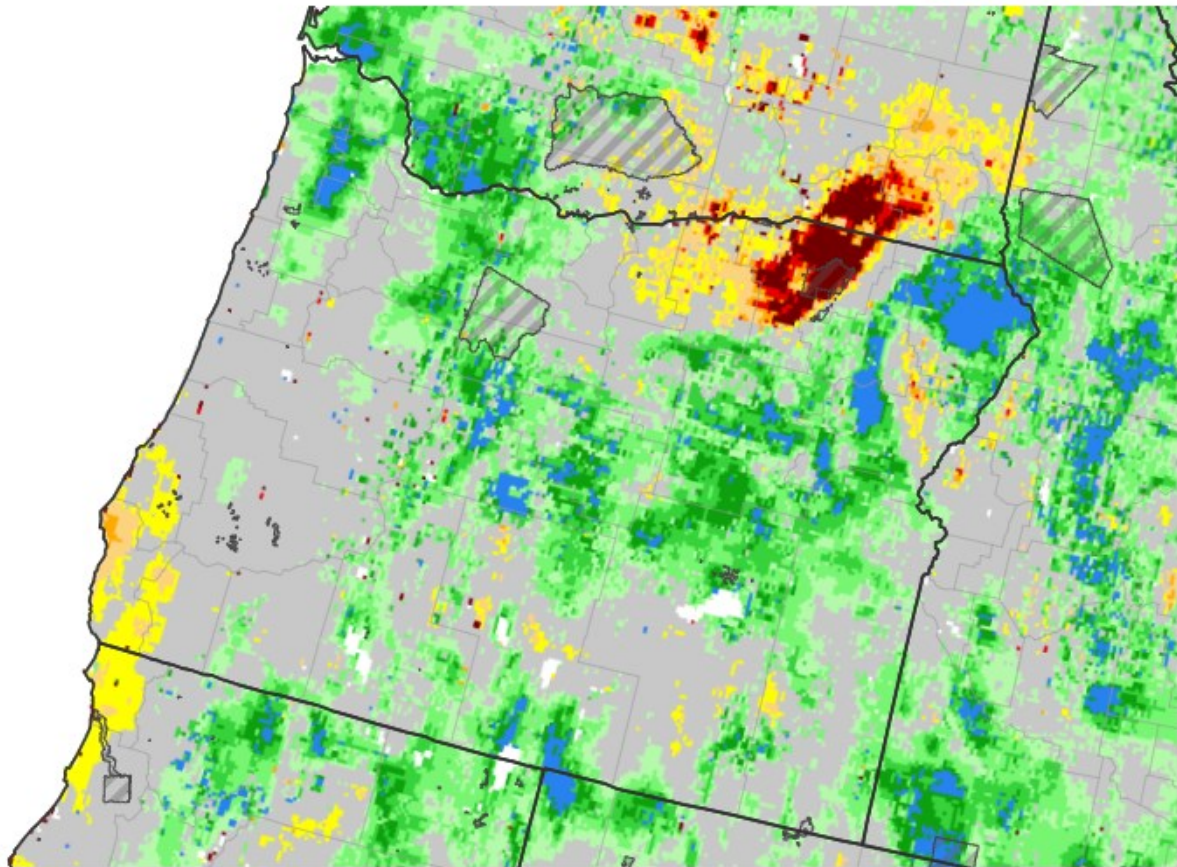


## Soils

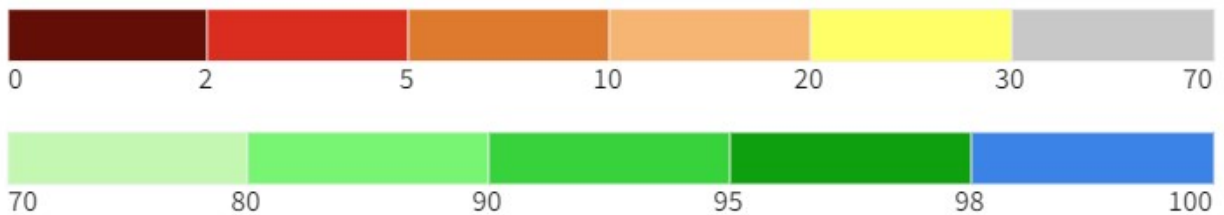
The NASA SPoRT-LiS product for soil moisture (0-100 cm depth) indicates drier soil moisture profiles in parts of the Umatilla and Walla Walla basins.

Soil moisture conditions are useful in assessing current drought and future drought potential. In addition, soil moisture is generally a good indicator in some regions of the potential efficiency of snowmelt runoff into streamflow in the spring. Drier soils tend to absorb more water from snowmelt than wetter soils, thus less melt is translated into streamflow (i.e. low efficiency).

### 0–100 cm Soil Moisture Percentile



#### 0–100 cm Soil Moisture Percentile



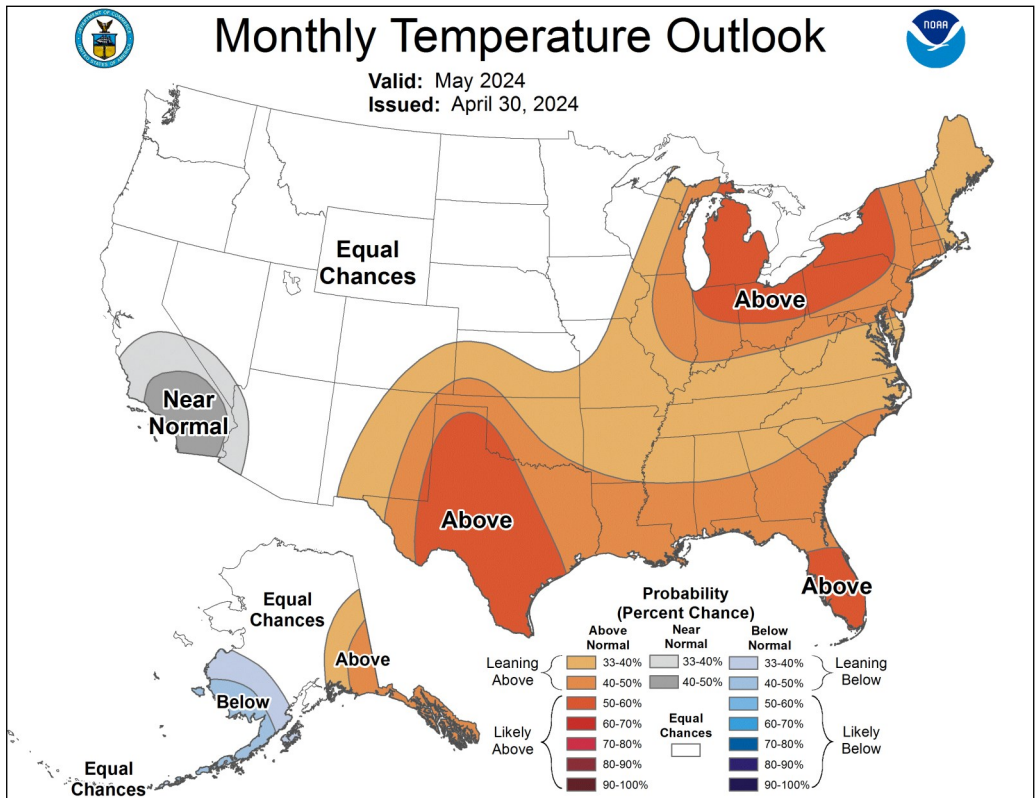
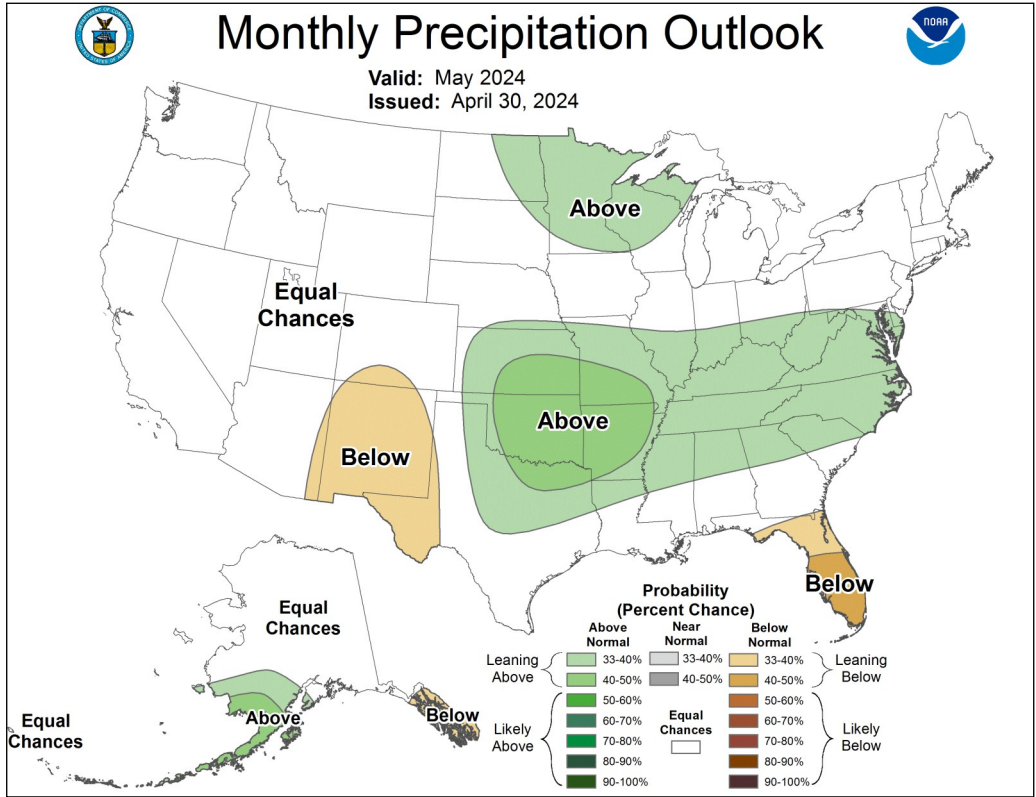
#### Tribal Nations

Tribal Nation Boundaries  
Source(s): NASA  
Data Valid: 05/02/24

**Drought.gov**

# 1-Month Outlook

The Climate Prediction Center 1-month climatic outlook calls for equal chances of above and below normal temperatures and precipitation.

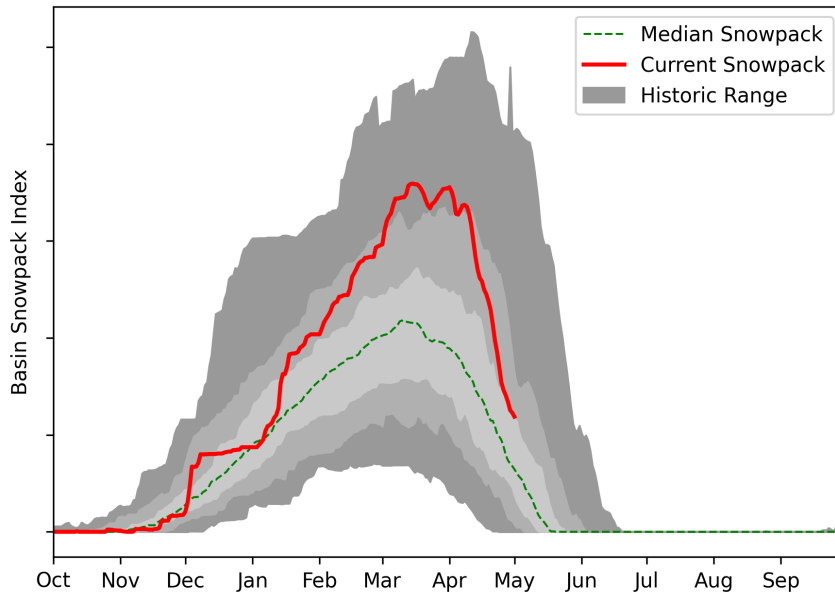


<https://www.cpc.ncep.noaa.gov/>

# Owyhee Basin Summary

## SNOWPACK

Owyhee Basin Snowpack

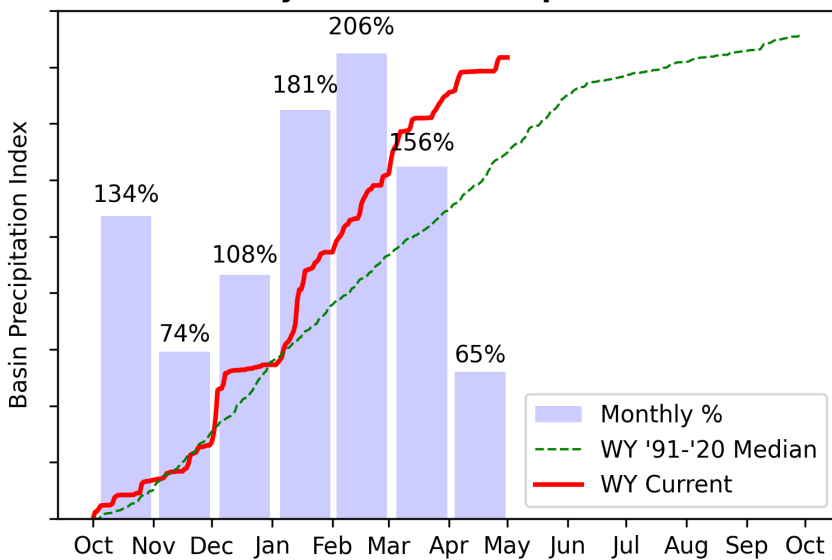


► View snowpack for individual sites by accessing the basin data report [here](#).

As of May 1, the basin snowpack is 154% of median. This is a decrease from April 1st, when the basin snowpack was 208% of median.

## PRECIPITATION

Owyhee Basin Precipitation



► View precipitation for individual sites by accessing the basin data report [here](#).

April precipitation is below normal at 65% of median. Precipitation since the beginning of the water year (October 1 - May 1) is 126% of median.

## RESERVOIR STORAGE

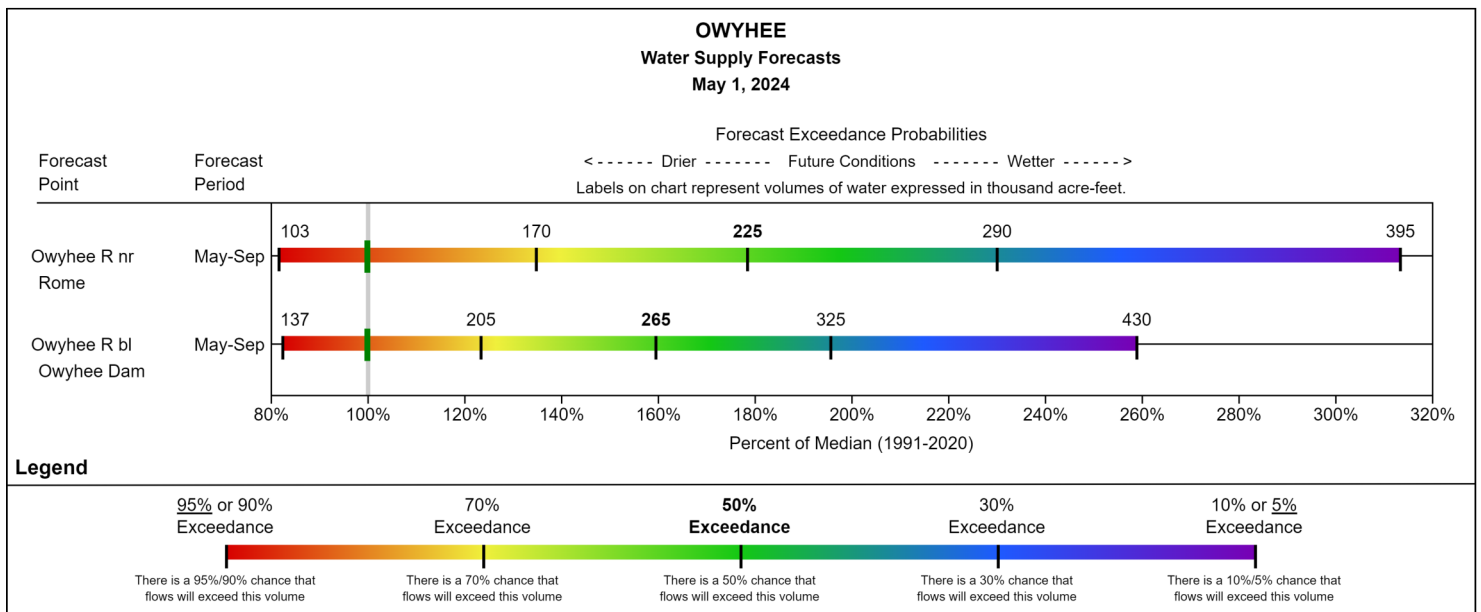
Reservoir storage across the basin is above normal. As of May 1, storage at Lake Owyhee Reservoir is 140% of median and Wild Horse Reservoir is 184% of median.

| Owyhee               | Current (KAF) | Last Year (KAF) | Median (KAF) | Capacity (KAF) | Current % Capacity | Last Year % Capacity | Median % Capacity | Current % Median | Last Year % Median |
|----------------------|---------------|-----------------|--------------|----------------|--------------------|----------------------|-------------------|------------------|--------------------|
| Wild Horse Reservoir | 75.7          | 50.4            | 41.1         | 71.5           | 106%               | 71%                  | 57%               | 184%             | 123%               |
| Lake Owyhee          | 705.7         | 486.1           | 502.4        | 715.0          | 99%                | 68%                  | 70%               | 140%             | 97%                |
| <b>Basin Index</b>   |               |                 |              |                | <b>99%</b>         | <b>68%</b>           | <b>69%</b>        | <b>144%</b>      | <b>99%</b>         |
| # of reservoirs      |               |                 |              |                | 2                  | 2                    | 2                 | 2                | 2                  |

## STREAMFLOW FORECAST

The streamflow forecasts for the primary period in the basin are above normal and range from 160% to 179% of median.

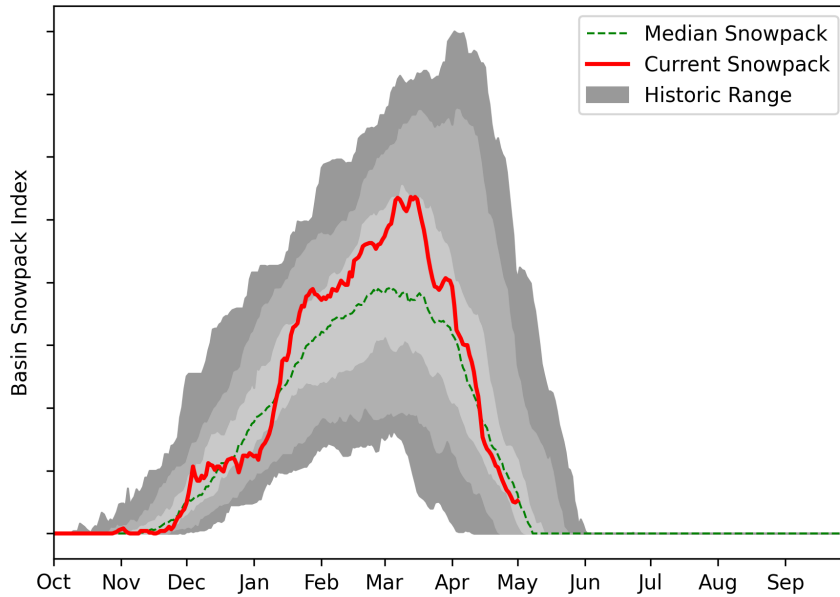
For data in tabular format and to view other forecasts please view the basin data reports [here](#).



# Malheur Basin Summary

## SNOWPACK

Malheur Basin Snowpack

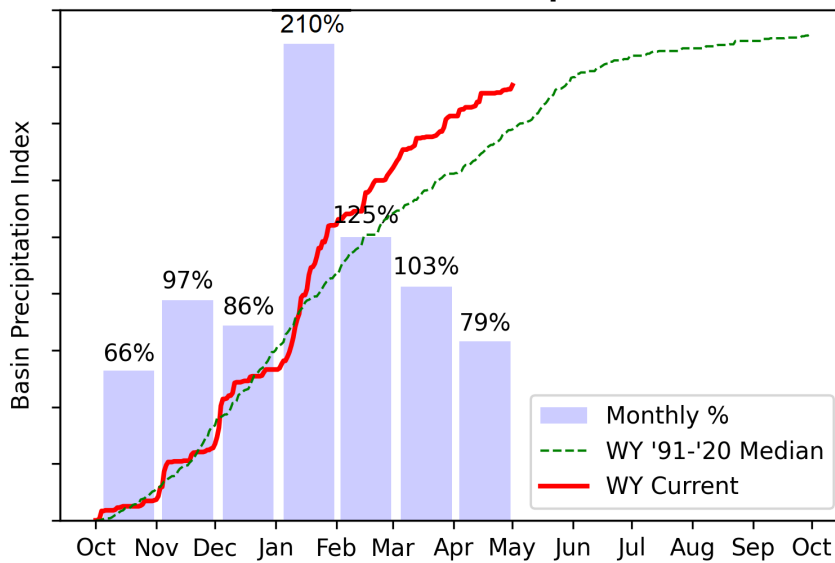


► View snowpack for individual sites by accessing the basin data report [here](#).

As of May 1, the basin snowpack is 75% of median. On April 1 the basin snowpack was 128% of median.

## PRECIPITATION

Malheur Basin Precipitation



► View precipitation for individual sites by accessing the basin data report [here](#).

April precipitation is below normal at 79% of median. Precipitation since the beginning of the water year (October 1 - May 1) is 111% of median.

## RESERVOIR STORAGE

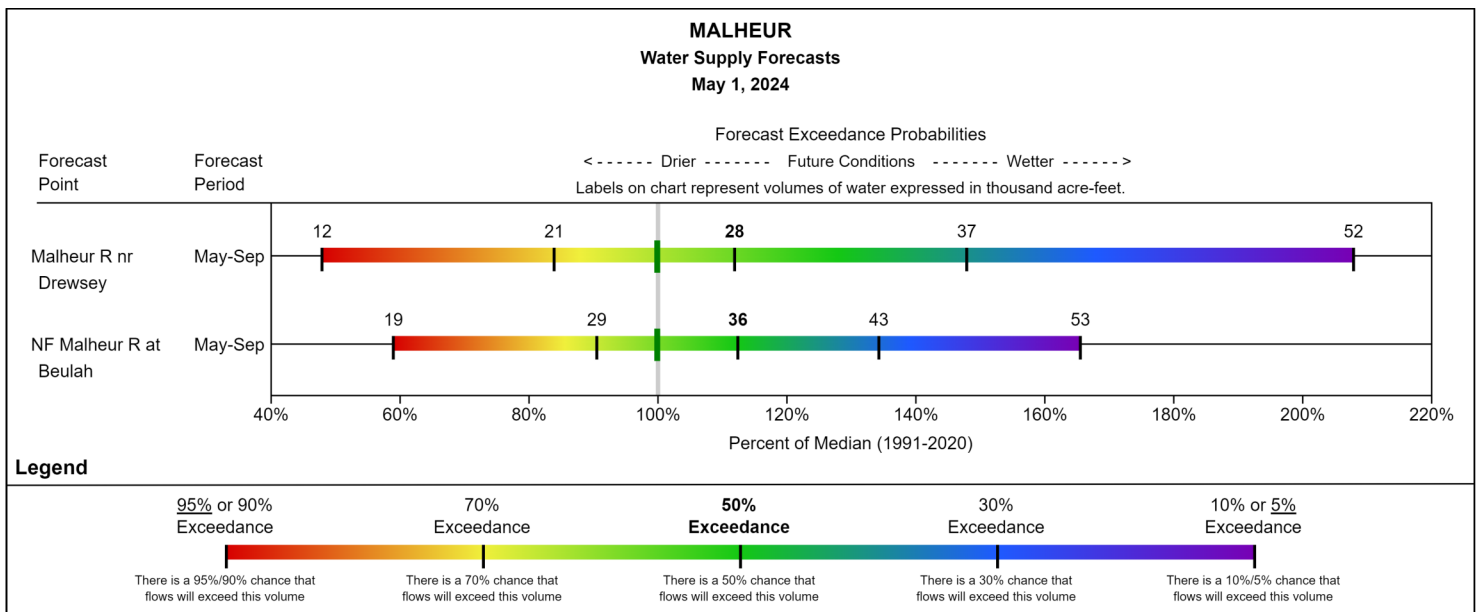
As of May 1, storage ranges from 98% at Bully Creek Reservoir to 144% of median at Warm Springs Reservoir.

| Malheur                               | Current (KAF) | Last Year (KAF) | Median (KAF) | Capacity (KAF) | Current % Capacity | Last Year % Capacity | Median % Capacity | Current % Median | Last Year % Median |
|---------------------------------------|---------------|-----------------|--------------|----------------|--------------------|----------------------|-------------------|------------------|--------------------|
| Bully Creek                           | 23.2          | 21.0            | 23.6         | 23.7           | 98%                | 89%                  | 100%              | 98%              | 89%                |
| Beulah                                | 58.8          | 46.1            | 48.9         | 59.2           | 99%                | 78%                  | 83%               | 120%             | 94%                |
| Warm Springs                          | 169.1         | 114.8           | 117.1        | 169.6          | 100%               | 68%                  | 69%               | 144%             | 98%                |
| <b>Basin Index</b><br># of reservoirs |               |                 |              |                | <b>99%</b>         | <b>72%</b>           | <b>75%</b>        | <b>132%</b>      | <b>96%</b>         |
|                                       |               |                 |              |                | 3                  | 3                    | 3                 | 3                | 3                  |

## STREAMFLOW FORECAST

The May through September streamflow forecasts in the basin are above normal, with forecast ranging from 112% to 113% of median.

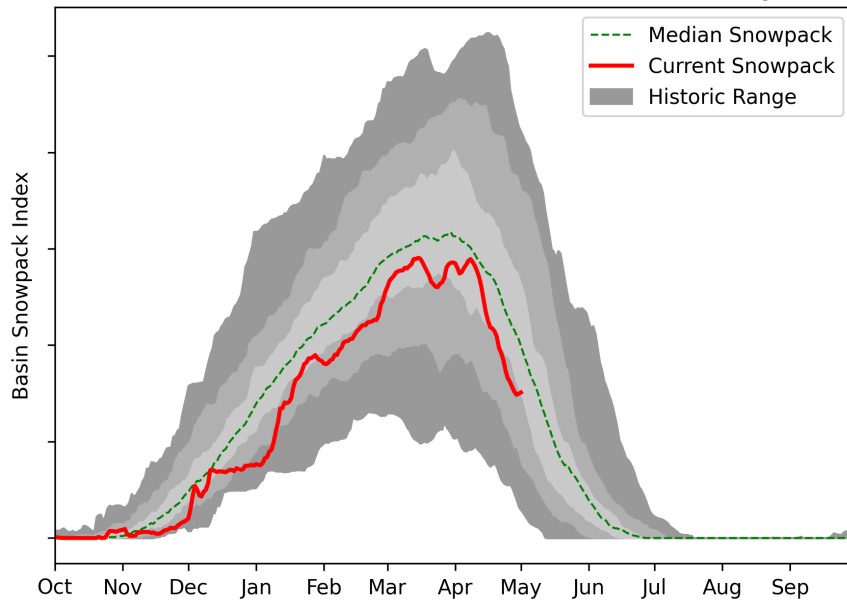
For data in tabular format and to view other forecasts please view the basin data reports [here](#).



# Grande Ronde, Burnt, Powder, Imnaha Basin Summary

## SNOWPACK

Grande Ronde-Burnt-Powder-Imnaha Basin Snowpack

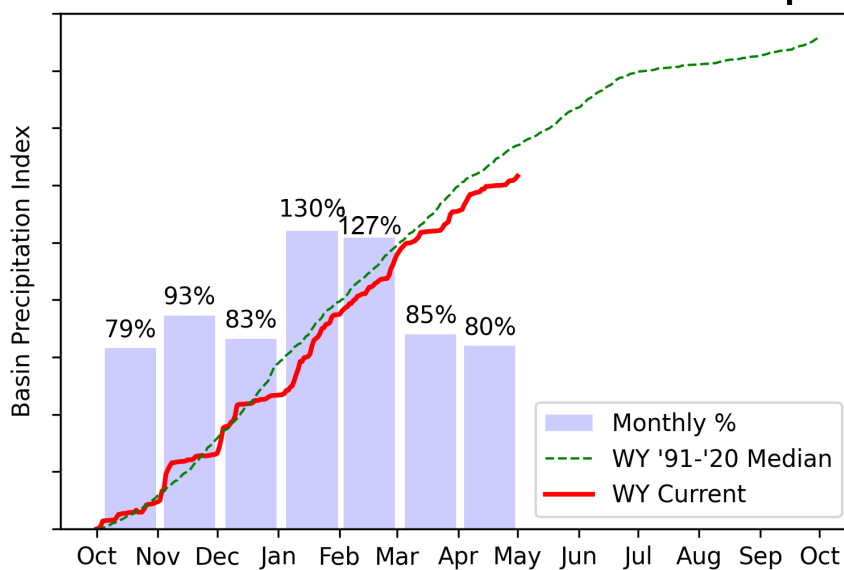


► View snowpack for individual sites by accessing the basin data report [here](#).

As of May 1, the basin snowpack is 77% of median. Last month on April 1 the basin snowpack was at 89% of median.

## PRECIPITATION

Grande Ronde-Burnt-Powder-Imnaha Basin Precipitation



► View precipitation for individual sites by accessing the basin data report [here](#).

April precipitation is below normal at 80% of median. Precipitation since the beginning of the water year (October 1 - May 1) is 92% of median.

## RESERVOIR STORAGE

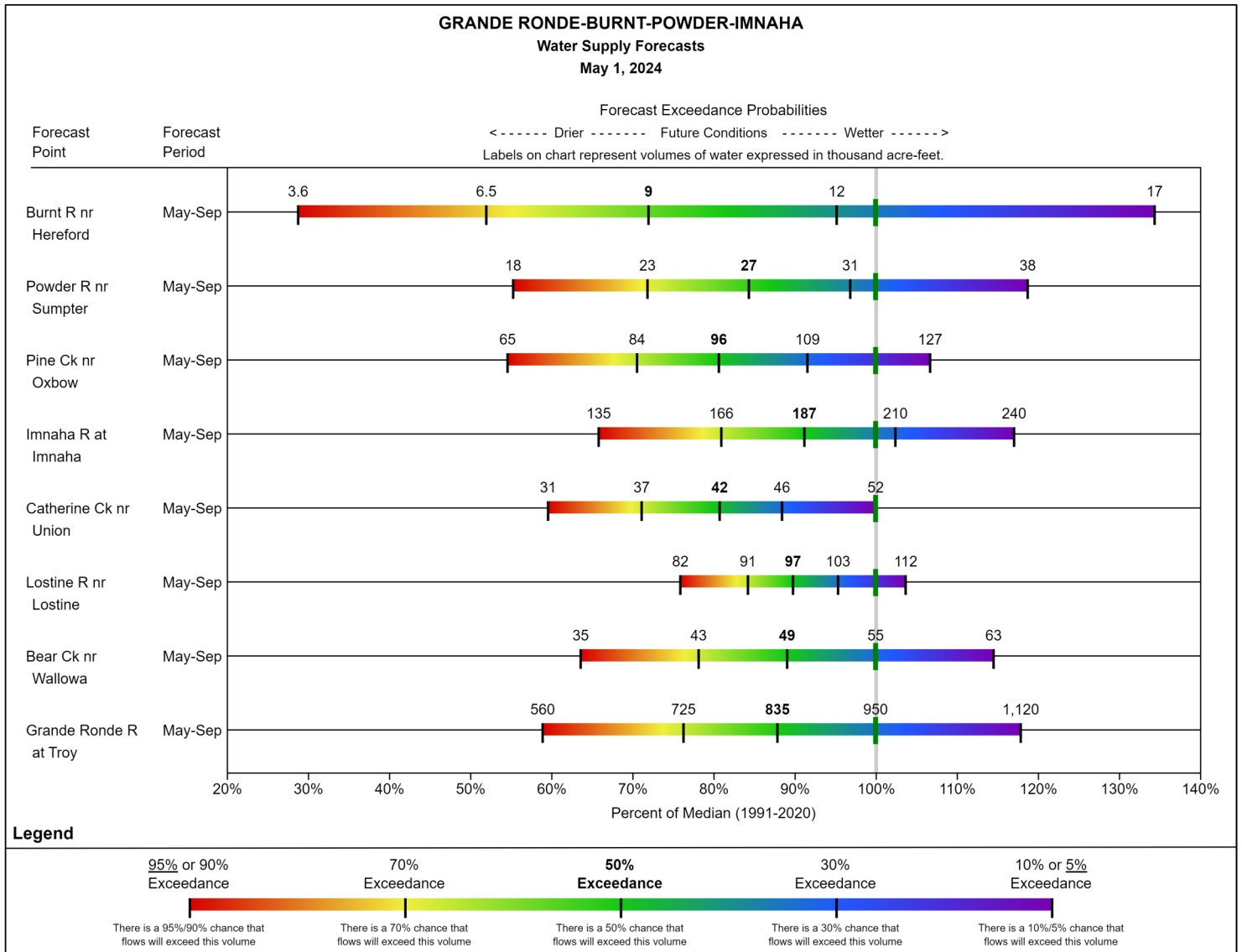
As of May 1, storage at major reservoirs in the basin ranges from 82% of median at Wallowa Lake to 114% of median at Phillips Lake.

| Grande Ronde-Burnt-Powder-Imnaha | Current (KAF) | Last Year (KAF) | Median (KAF) | Capacity (KAF) | Current % Capacity | Last Year % Capacity | Median % Capacity | Current % Median | Last Year % Median |
|----------------------------------|---------------|-----------------|--------------|----------------|--------------------|----------------------|-------------------|------------------|--------------------|
| Thief Valley                     | 13.5          | 13.4            | 13.7         | 13.3           | 101%               | 101%                 | 103%              | 98%              | 98%                |
| Wallowa Lake                     | 17.3          | 17.1            | 21.0         | 37.5           | 46%                | 46%                  | 56%               | 82%              | 82%                |
| Unity                            | 24.9          | 24.7            | 24.4         | 25.5           | 98%                | 97%                  | 96%               | 102%             | 101%               |
| Phillips Lake                    | 51.2          | 17.7            | 45.0         | 73.5           | 70%                | 24%                  | 61%               | 114%             | 39%                |
| Brownlee Reservoir               | 1271.1        | 1193.8          | 1148.0       | 1420.0         | 90%                | 84%                  | 81%               | 111%             | 104%               |
| Wolf Creek                       | 10.3          | 5.6             | 9.8          | 11.1           | 92%                | 50%                  | 88%               | 105%             | 57%                |
| <b>Basin Index</b>               |               |                 |              |                | <b>88%</b>         | <b>80%</b>           | <b>80%</b>        | <b>110%</b>      | <b>101%</b>        |
| # of reservoirs                  |               |                 |              |                | 6                  | 6                    | 6                 | 6                | 6                  |

## STREAMFLOW FORECAST

The May through September streamflow forecasts in the basin range from 72% to 91% of median.

For data in tabular format and to view other forecasts please view the basin data reports [here](#).

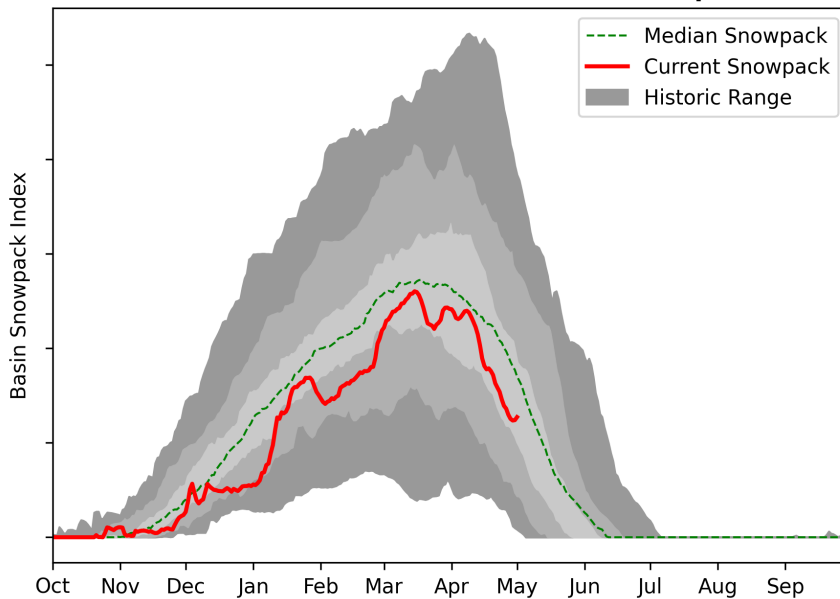




# Umatilla, Walla Walla, Willow Basin Summary

## SNOWPACK

**Umatilla-Walla Walla-Willow Basin Snowpack**

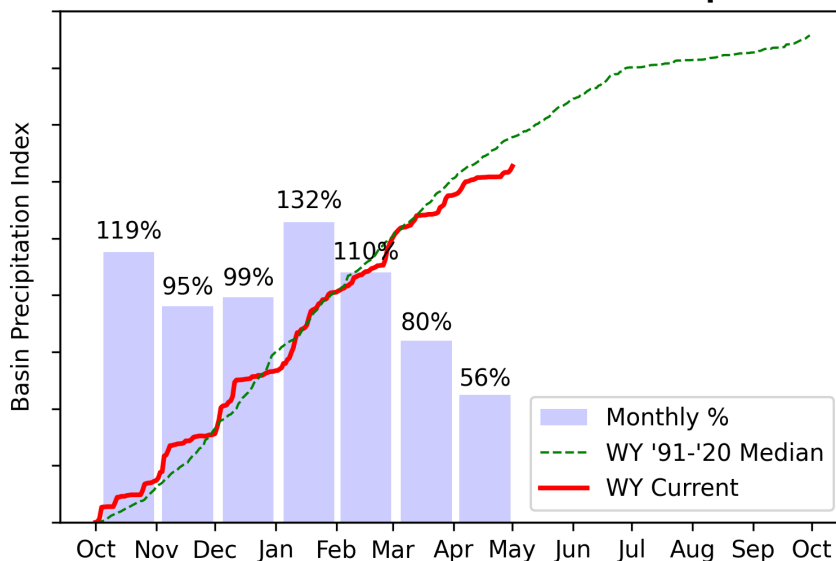


► View snowpack for individual sites by accessing the basin data report [here](#).

As of May 1, the basin snowpack is 75% of median. Last month on April 1 the basin snowpack was 92% of median.

## PRECIPITATION

**Umatilla-Walla Walla-Willow Basin Precipitation**



► View precipitation for individual sites by accessing the basin data report [here](#).

April precipitation is below normal at 56% of median. Precipitation since the beginning of the water year (October 1 - April 1) is 92% of median.

## RESERVOIR STORAGE

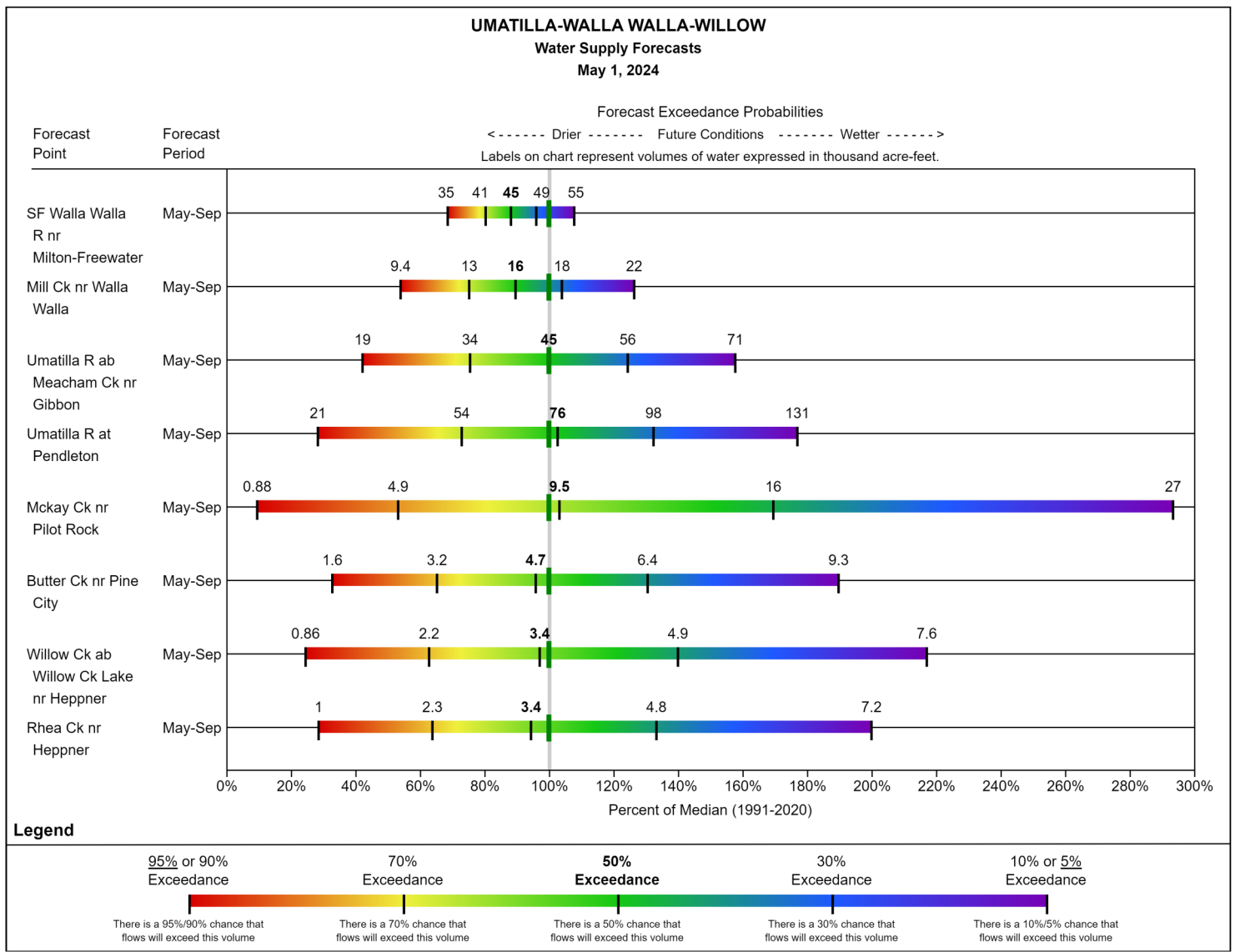
As of May 1, storage at major reservoirs in the basin ranges from 66% of median at Cold Springs Reservoir to 99% at Willow Creek Reservoir.

| Umatilla-Walla Walla-Willow | Current (KAF) | Last Year (KAF) | Median (KAF) | Capacity (KAF) | Current % Capacity | Last Year % Capacity | Median % Capacity | Current % Median | Last Year % Median |
|-----------------------------|---------------|-----------------|--------------|----------------|--------------------|----------------------|-------------------|------------------|--------------------|
| Willow Creek                | 6.0           | 6.3             | 6.1          | 9.8            | 62%                | 65%                  | 62%               | 99%              | 104%               |
| Mckay                       | 62.0          | 61.9            | 64.5         | 71.5           | 87%                | 86%                  | 90%               | 96%              | 96%                |
| Cold Springs                | 21.4          | 19.9            | 32.5         | 38.6           | 55%                | 51%                  | 84%               | 66%              | 61%                |
| <b>Basin Index</b>          |               |                 |              |                | <b>75%</b>         | <b>73%</b>           | <b>86%</b>        | <b>87%</b>       | <b>85%</b>         |
| # of reservoirs             |               |                 |              |                | 3                  | 3                    | 3                 | 3                | 3                  |

## STREAMFLOW FORECAST

The May through September streamflow forecasts in the basin range from 88% to 103% of median.

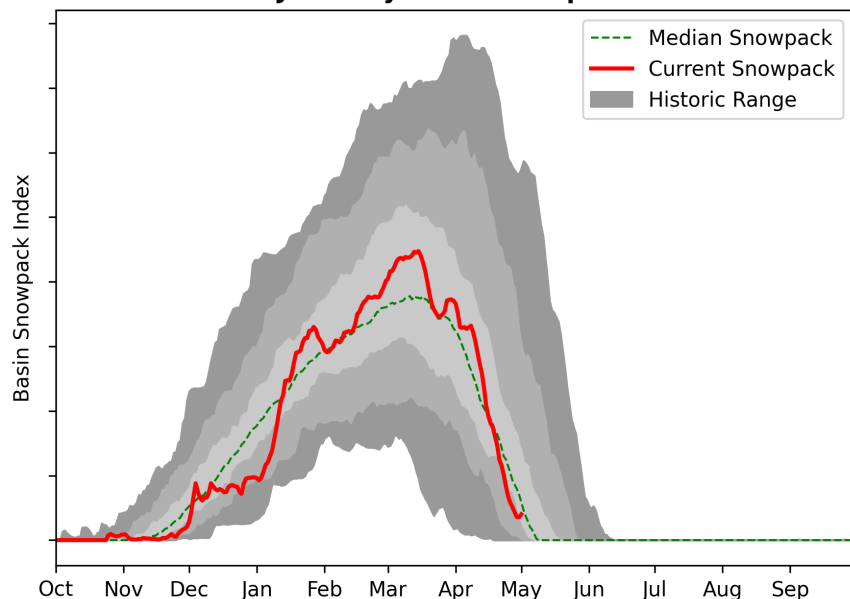
For data in tabular format and to view other forecasts please view the basin data reports [here](#).



# John Day Basin Summary

## SNOWPACK

John Day Basin Snowpack

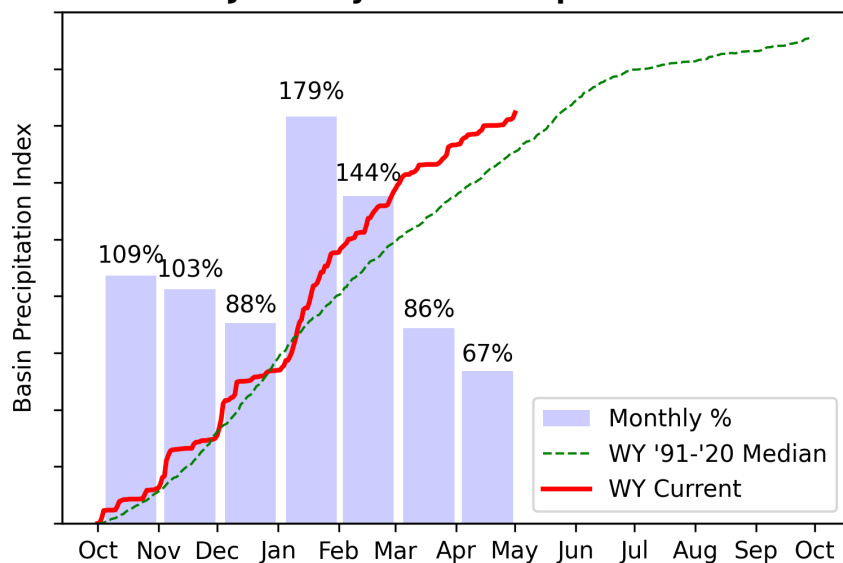


► View snowpack for individual sites by accessing the basin data report [here](#).

As of May 1, the basin snowpack is 71% of median. Last month on April 1 the basin snowpack was 106% of median.

## PRECIPITATION

John Day Basin Precipitation



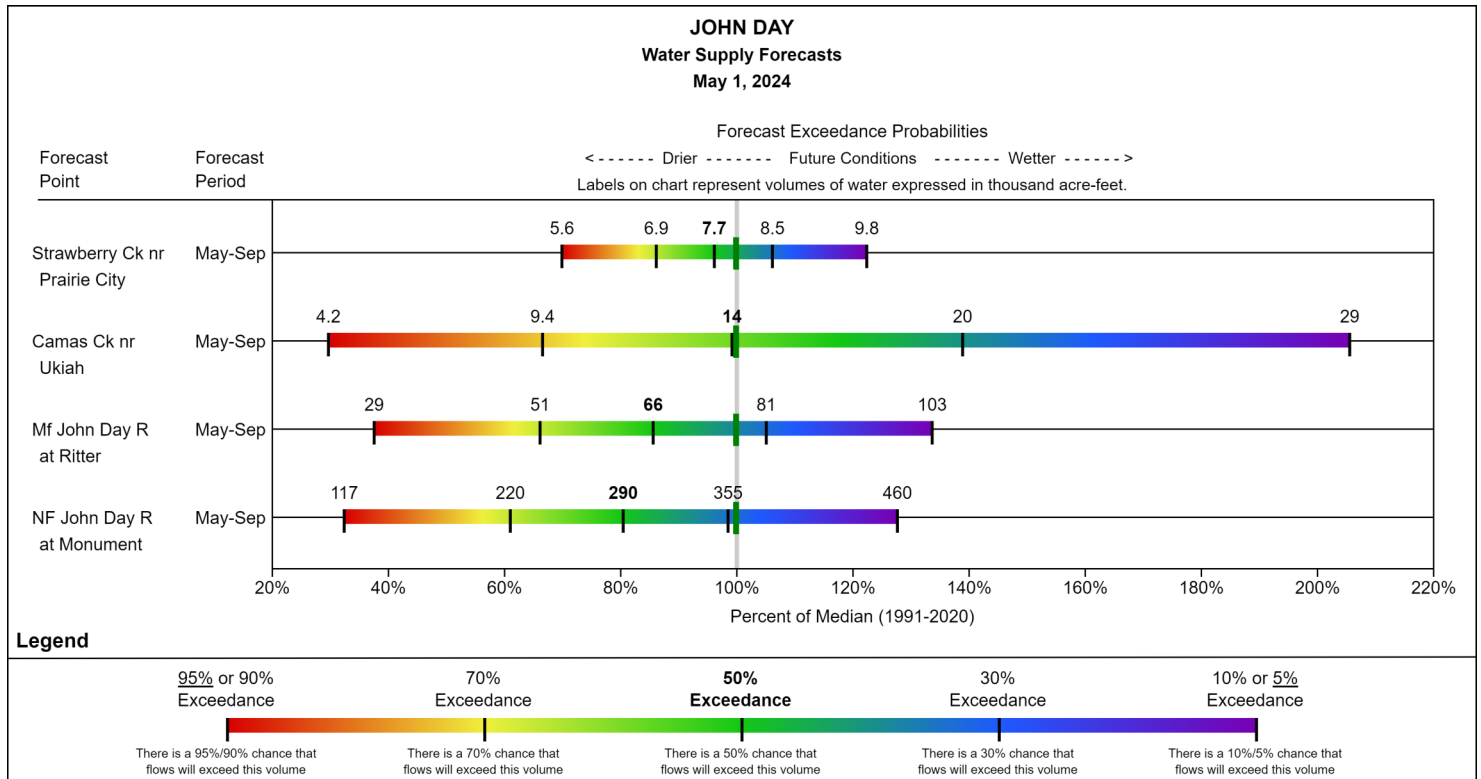
► View precipitation for individual sites by accessing the basin data report [here](#).

April precipitation is below normal at 67% of median. Precipitation since the beginning of the water year (October 1 - May 1) is 111% of median.

## STREAMFLOW FORECAST

The May through September streamflow forecasts in the basin are below normal, with forecast points ranging from 81% to 91% of median.

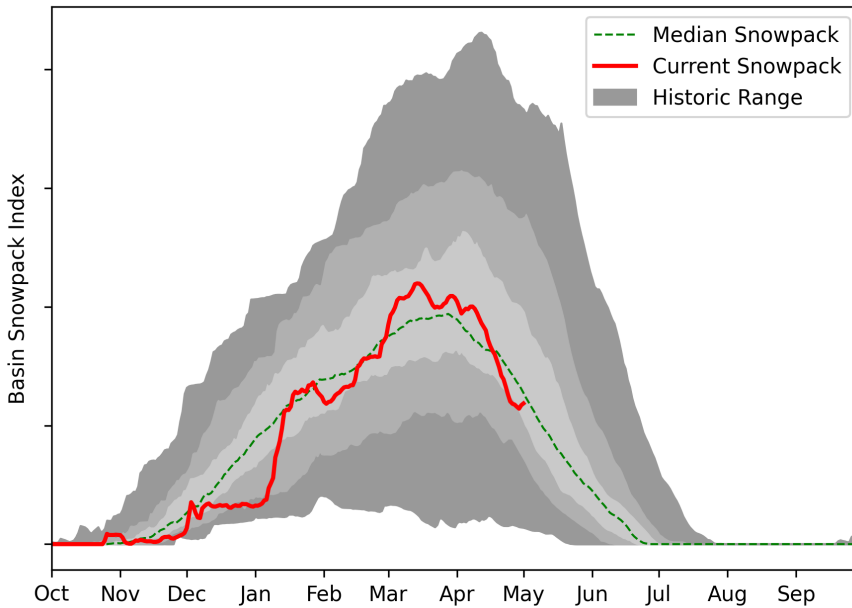
For data in tabular format and to view other forecasts please view the basin data reports [here](#).



# Upper Deschutes, Crooked Basin Summary

## SNOWPACK

Upper Deschutes-Crooked Basin Snowpack

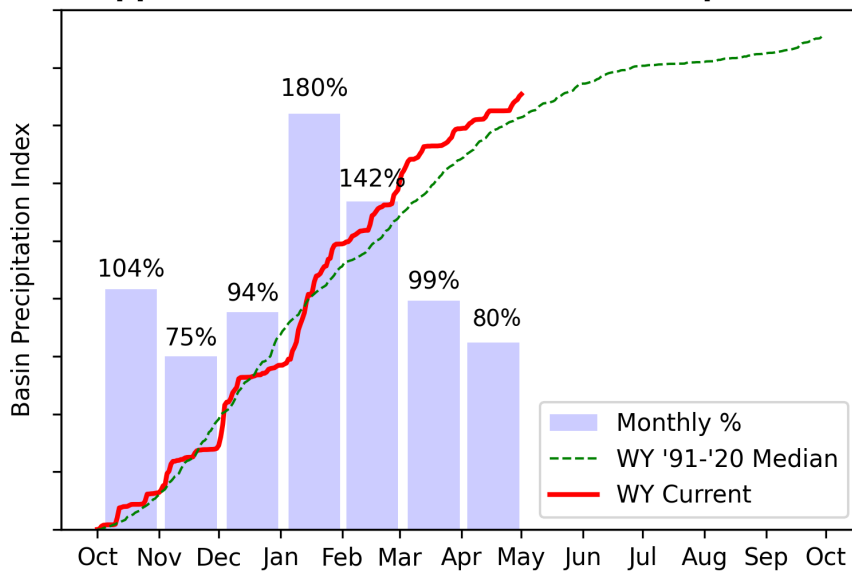


► View snowpack for individual sites by accessing the basin data report [here](#).

As of May 1, the basin snowpack is 93% of median. Last month on April 1 the basin snowpack was 102% of median.

## PRECIPITATION

Upper Deschutes-Crooked Basin Precipitation



► View precipitation for individual sites by accessing the basin data report [here](#).

April precipitation is below normal as 80% of median. Precipitation since the beginning of the water year (October 1 - May 1) is 106% of median.

## RESERVOIR STORAGE

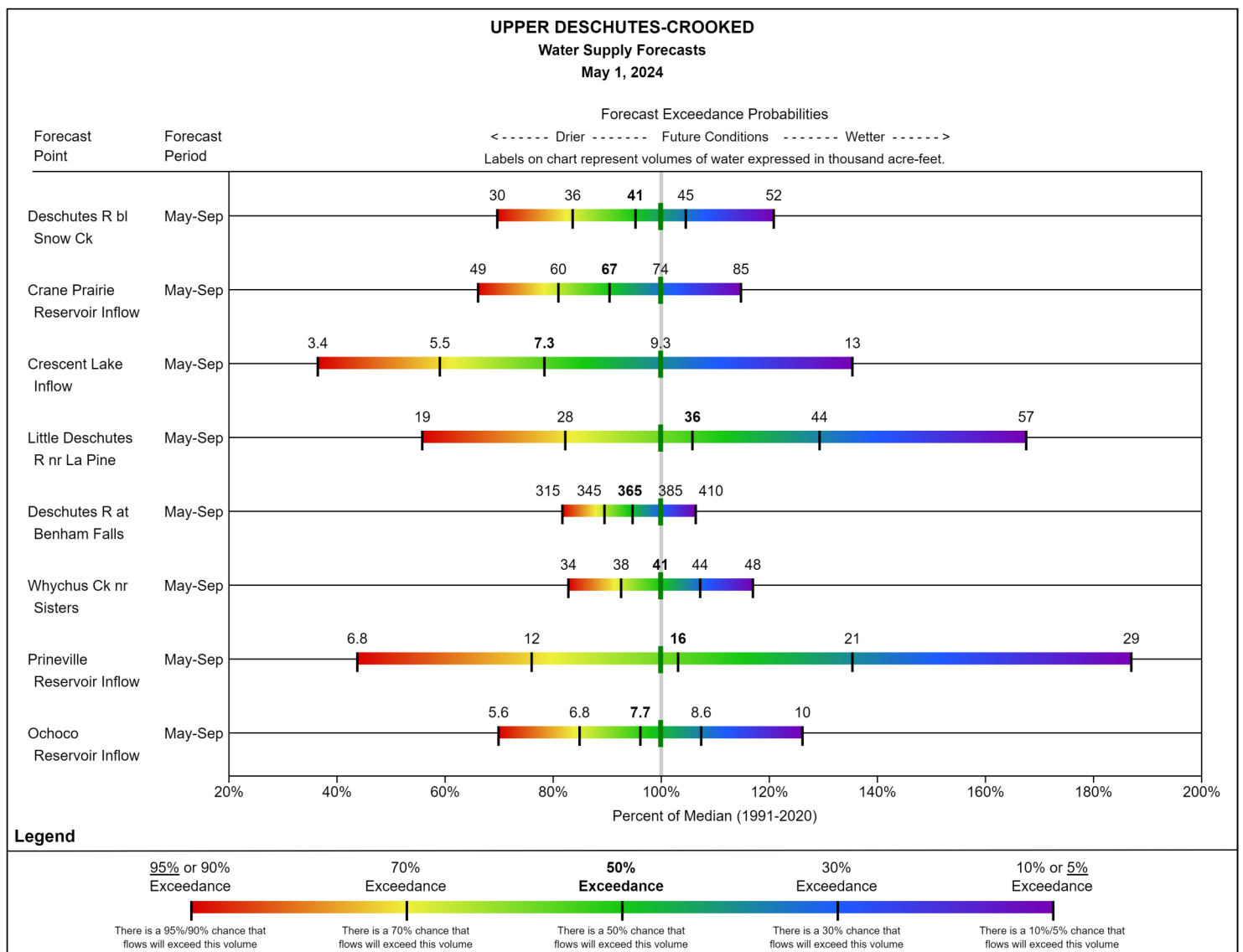
As of May 1, storage at major reservoirs in the basin ranges from 26% of median at Crescent Lake to 125% of median at Ochoco Reservoir.

| Upper Deschutes-Crooked | Current (KAF) | Last Year (KAF) | Median (KAF) | Capacity (KAF) | Current % Capacity | Last Year % Capacity | Median % Capacity | Current % Median | Last Year % Median |
|-------------------------|---------------|-----------------|--------------|----------------|--------------------|----------------------|-------------------|------------------|--------------------|
| Crescent Lake           | 15.6          | 9.4             | 59.7         | 86.9           | 18%                | 11%                  | 69%               | 26%              | 16%                |
| Ochoco                  | 43.3          | 19.2            | 34.7         | 44.2           | 98%                | 43%                  | 78%               | 125%             | 55%                |
| Prineville              | 148.5         | 118.8           | 148.0        | 148.6          | 100%               | 80%                  | 100%              | 100%             | 80%                |
| Crane Prairie           | 48.7          | 47.2            | 47.7         | 55.3           | 88%                | 85%                  | 86%               | 102%             | 99%                |
| Wickiup                 | 151.9         | 127.0           | 183.6        | 200.0          | 76%                | 63%                  | 92%               | 83%              | 69%                |
| <b>Basin Index</b>      |               |                 |              |                | <b>76%</b>         | <b>60%</b>           | <b>89%</b>        | <b>86%</b>       | <b>68%</b>         |
| # of reservoirs         |               |                 |              |                | 5                  | 5                    | 5                 | 5                | 5                  |

## STREAMFLOW FORECAST

The May through September streamflow forecasts in the basin range from 78% to 106% of median.

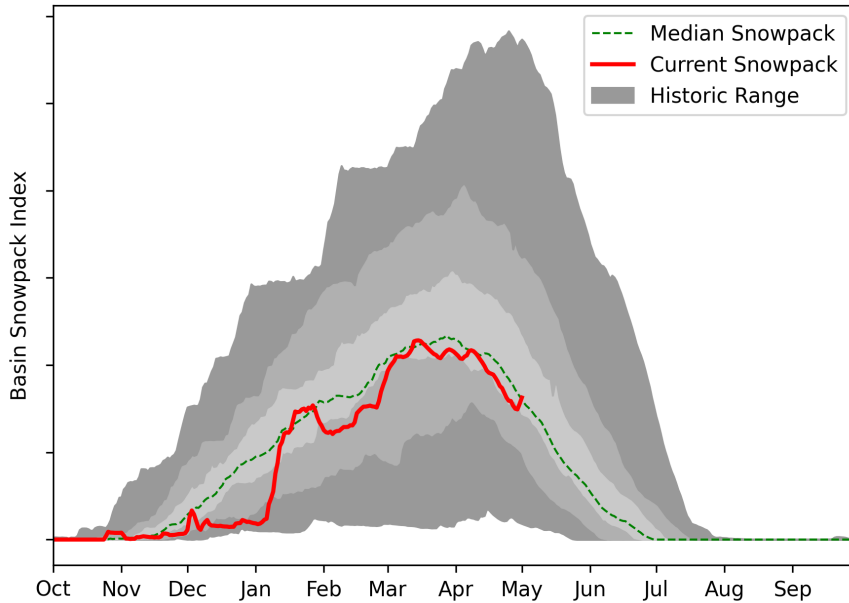
For data in tabular format and to view other forecasts please view the basin data reports [here](#).



# Hood, Sandy, Lower Deschutes Basin Summary

## SNOWPACK

**Hood-Sandy-Lower Deschutes Basin Snowpack**

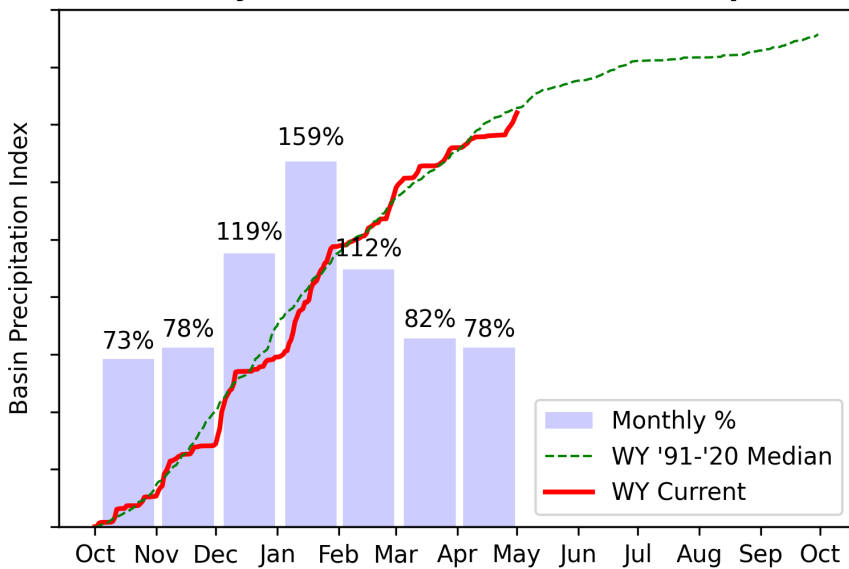


► View snowpack for individual sites by accessing the basin data report [here](#).

As of May 1, the basin snowpack is 101% of median. Last month on April 1 the basin snowpack was 91% of median.

## PRECIPITATION

**Hood-Sandy-Lower Deschutes Basin Precipitation**



► View precipitation for individual sites by accessing the basin data report [here](#).

April precipitation is below normal at 78% of median. Precipitation since the beginning of the water year (October 1 - May 1) is 99% of median.

## RESERVOIR STORAGE

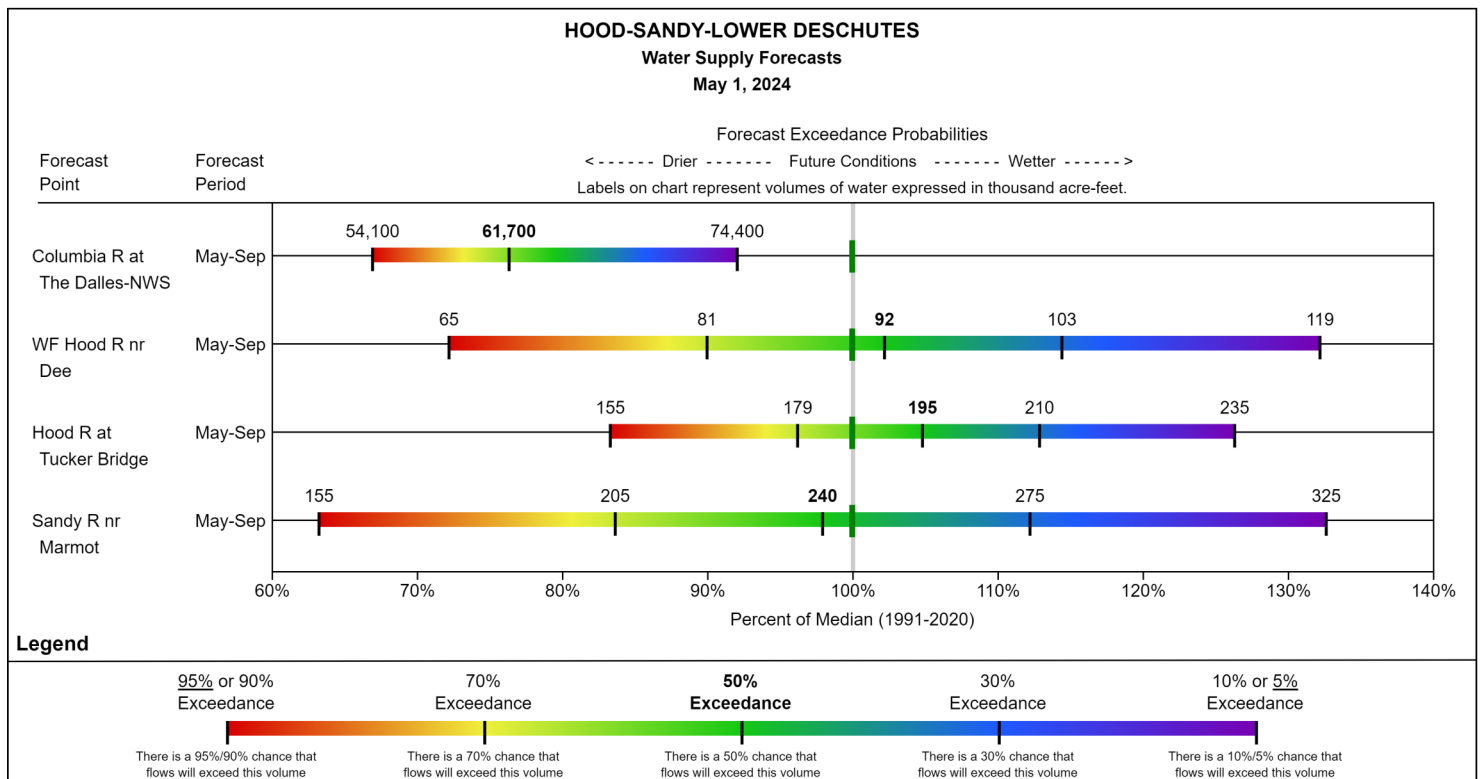
As of May 1, volumetric storage for Clear Lake is below normal at 78% of median.

| Hood-Sandy-Lower Deschutes |  | Current (KAF) | Last Year (KAF) | Median (KAF) | Capacity (KAF) | Current % Capacity | Last Year % Capacity | Median % Capacity | Current % Median | Last Year % Median |
|----------------------------|--|---------------|-----------------|--------------|----------------|--------------------|----------------------|-------------------|------------------|--------------------|
| Clear Lake                 |  | 4.0           | 2.7             | 5.1          | 13.1           | 30%                | 21%                  | 39%               | 78%              | 53%                |
| <b>Basin Index</b>         |  |               |                 |              |                | <b>30%</b>         | <b>21%</b>           | <b>39%</b>        | <b>78%</b>       | <b>53%</b>         |
| # of reservoirs            |  |               |                 |              |                | 1                  | 1                    | 1                 | 1                | 1                  |

## STREAMFLOW FORECAST

The May through September streamflow forecasts in the basin range from 76% to 105% of median.

For data in tabular format and to view other forecasts please view the basin data reports [here](#).

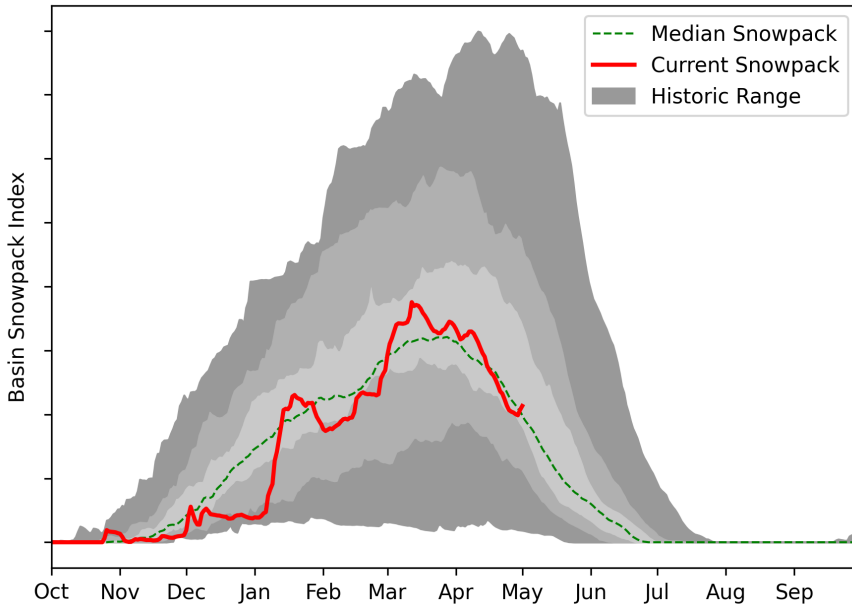




# Willamette Basin Summary

## SNOWPACK

**Willamette Basin Snowpack**

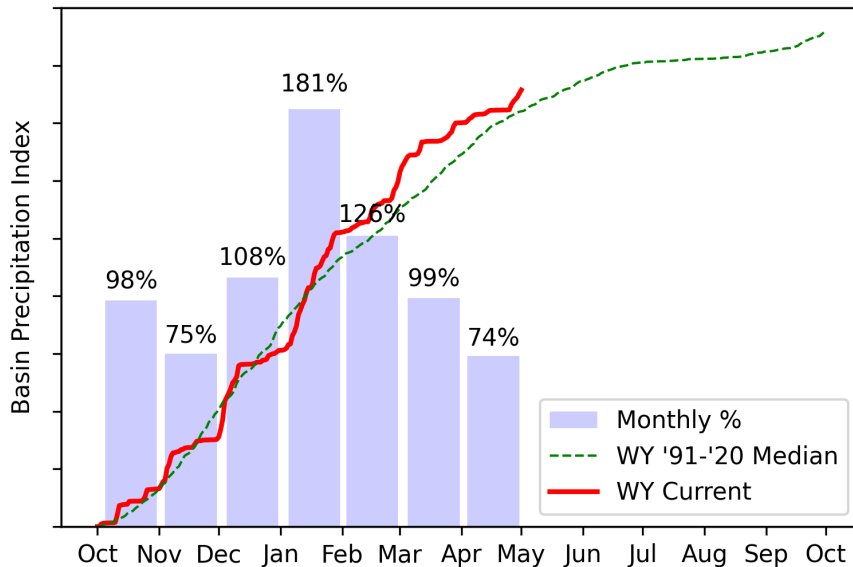


► View snowpack for individual sites by accessing the basin data report [here](#).

As of May 1, the basin snowpack is 107% of median. Last month on April 1 the basin snowpack was 107% of median.

## PRECIPITATION

**Willamette Basin Precipitation**



► View precipitation for individual sites by accessing the basin data report [here](#).

April precipitation is below normal at 74% of median. Precipitation since the beginning of the water year (October 1 - May 1) is 105% of median.

## RESERVOIR STORAGE

As of May 1, storage at major reservoirs in the basin ranges from 23% of median at Cougar Reservoir to 110% of median at Foster Reservoir.

| Willamette         | Current<br>(KAF) | Last Year<br>(KAF) | Median<br>(KAF) | Capacity<br>(KAF) | Current %<br>Capacity | Last Year %<br>Capacity | Median %<br>Capacity | Current %<br>Median | Last Year %<br>Median |
|--------------------|------------------|--------------------|-----------------|-------------------|-----------------------|-------------------------|----------------------|---------------------|-----------------------|
| Fern Ridge         | 92.6             | 95.8               | 96.0            | 97.3              | 95%                   | 98%                     | 99%                  | 96%                 | 100%                  |
| Cottage Grove      | 25.4             | 27.0               | 27.2            | 31.8              | 80%                   | 85%                     | 86%                  | 93%                 | 99%                   |
| Henry Hagg Lake    | 53.3             | 52.5               | 53.3            | 53.3              | 100%                  | 98%                     | 100%                 | 100%                | 98%                   |
| Dorena             | 63.0             | 62.1               | 61.0            | 72.1              | 87%                   | 86%                     | 85%                  | 103%                | 102%                  |
| Lookout Point      | 347.2            | 308.2              | 386.2           | 433.2             | 80%                   | 71%                     | 89%                  | 90%                 | 80%                   |
| Cougar             | 37.1             | 56.8               | 158.7           | 174.9             | 21%                   | 32%                     | 91%                  | 23%                 | 36%                   |
| Foster             | 25.2             | 23.6               | 22.8            | 46.2              | 54%                   | 51%                     | 49%                  | 110%                | 104%                  |
| Hills Creek        | 192.7            | 140.1              | 254.5           | 279.2             | 69%                   | 50%                     | 91%                  | 76%                 | 55%                   |
| Detroit            | 393.7            | 357.8              | 420.7           | 426.8             | 92%                   | 84%                     | 99%                  | 94%                 | 85%                   |
| Timothy Lake       | 62.9             | 57.6               | 60.3            | 63.6              | 99%                   | 91%                     | 95%                  | 104%                | 96%                   |
| Blue River         | 71.3             | 79.8               | 76.4            | 82.3              | 87%                   | 97%                     | 93%                  | 93%                 | 105%                  |
| Fall Creek         | 49.6             | 10.4               | 108.2           | 116.0             | 43%                   | 9%                      | 93%                  | 46%                 | 10%                   |
| Green Peter        | 339.9            | 386.3              | 389.4           | 402.8             | 84%                   | 96%                     | 97%                  | 87%                 | 99%                   |
| Dexter             | 26.3             | 26.4               | 25.4            |                   |                       |                         |                      | 104%                | 104%                  |
| <b>Basin Index</b> |                  |                    |                 |                   | <b>77%</b>            | <b>73%</b>              | <b>93%</b>           | <b>83%</b>          | <b>79%</b>            |
| # of reservoirs    |                  |                    |                 |                   | 13                    | 13                      | 13                   | 14                  | 14                    |

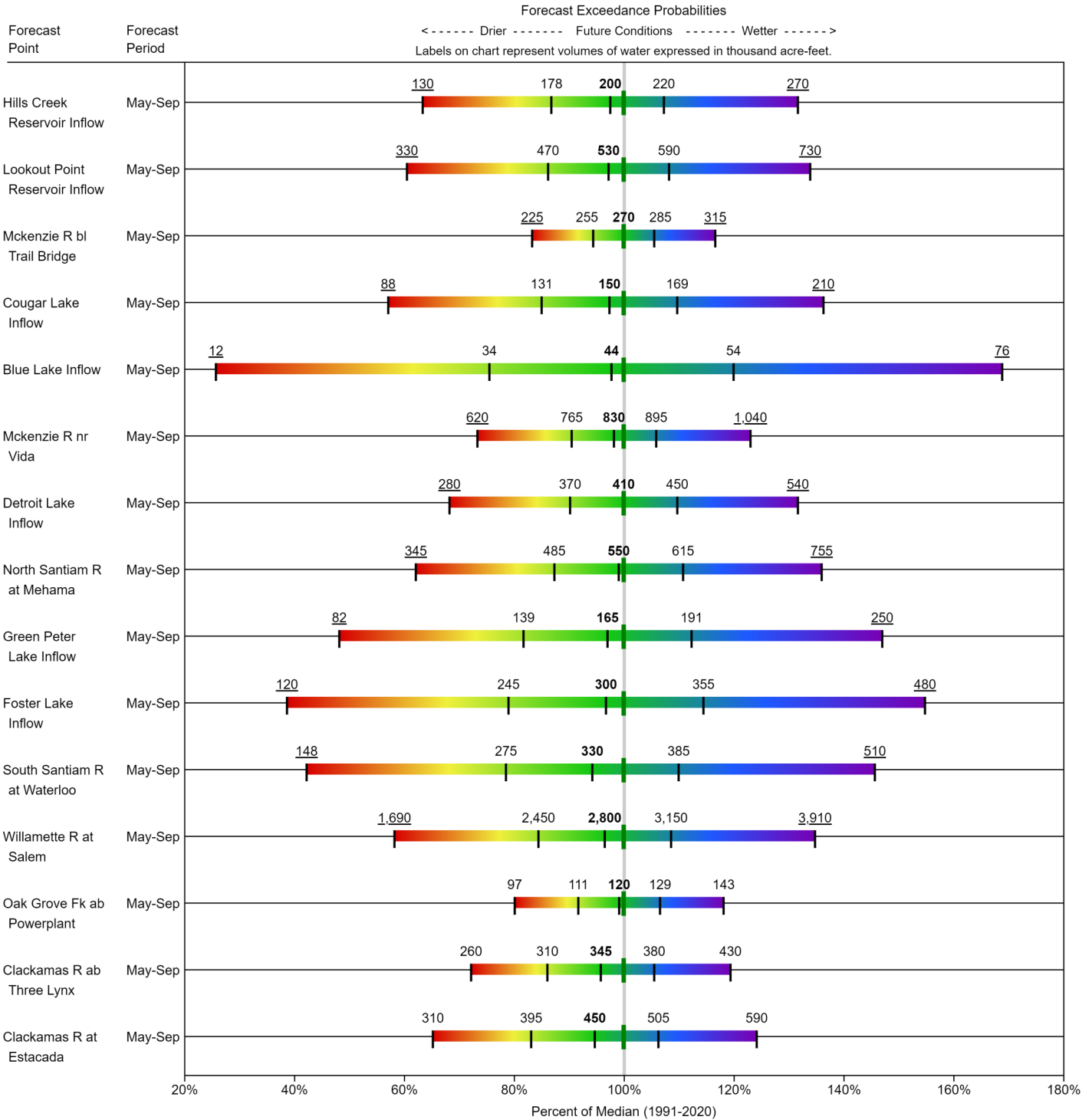
## STREAMFLOW FORECAST

The May through September streamflow forecasts in the basin range from 94% to 100% of median.

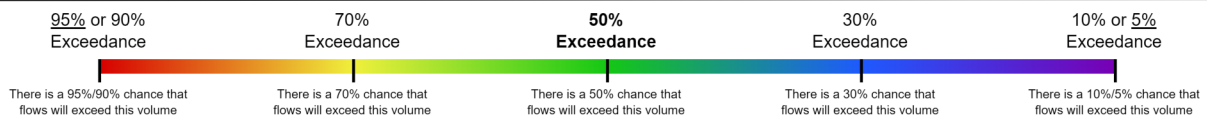
For data in tabular format and to view other forecasts please view the basin data reports [here](#).

# Willamette Basin

## WILLAMETTE Water Supply Forecasts May 1, 2024



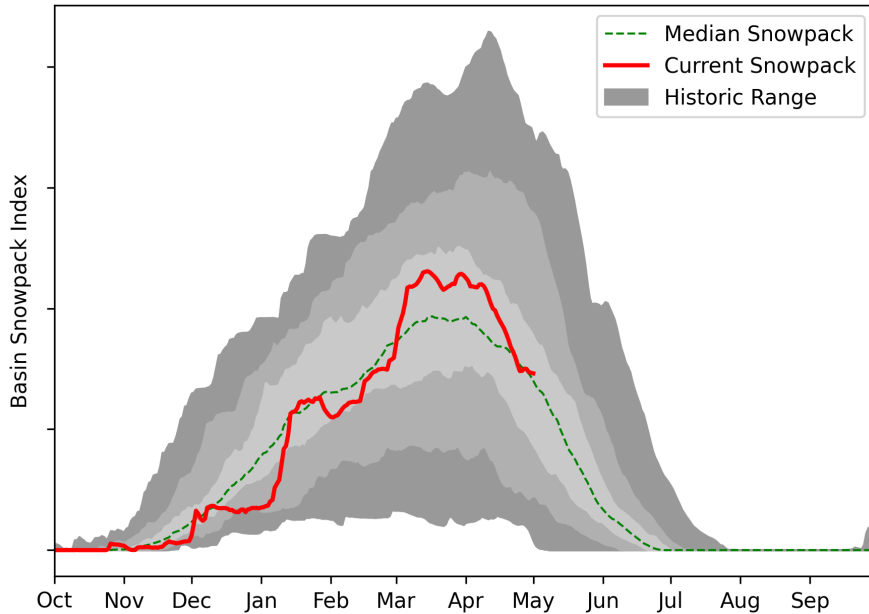
### Legend



# Rogue, Umpqua Basin Summary

## SNOWPACK

Rogue-Umpqua Basin Snowpack

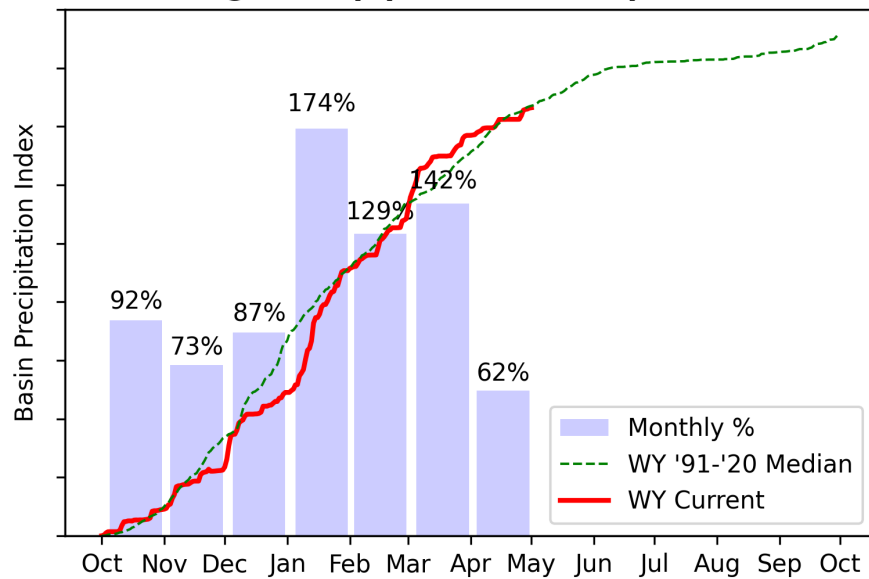


► View snowpack for individual sites by accessing the basin data report [here](#).

As of May 1, the basin snowpack is 94% of median. Last month on April 1 the basin snowpack was 111% of median.

## PRECIPITATION

Rogue-Umpqua Basin Precipitation



► View precipitation for individual sites by accessing the basin data report [here](#).

April precipitation is below normal at 62% of median. Precipitation since the beginning of the water year (October 1 - May 1) is 100% of median.

## RESERVOIR STORAGE

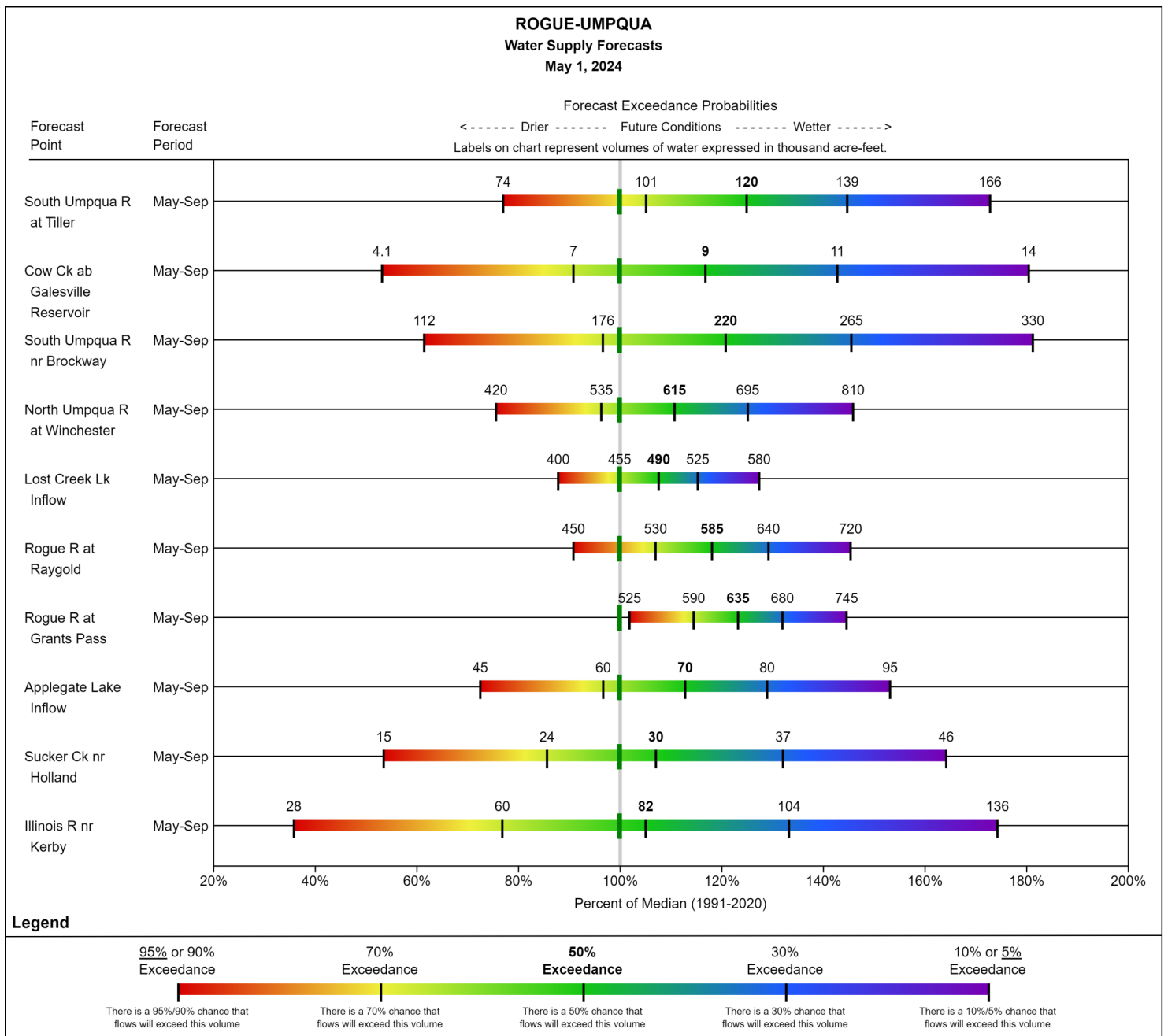
As of May 1, storage at major reservoirs in the basin ranges from 74% of median at Emigrant Lake to 98% of median at Applegate Reservoir and Fish Lake Reservoir.

| Rogue-Umpqua       | Current (KAF) | Last Year (KAF) | Median (KAF) | Capacity (KAF) | Current % Capacity | Last Year % Capacity | Median % Capacity | Current % Median | Last Year % Median |
|--------------------|---------------|-----------------|--------------|----------------|--------------------|----------------------|-------------------|------------------|--------------------|
| Fish Lake          | 5.0           | 3.7             | 5.1          | 7.9            | 63%                | 47%                  | 65%               | 98%              | 73%                |
| Emigrant Lake      | 27.9          | 25.3            | 37.7         | 39.0           | 72%                | 65%                  | 97%               | 74%              | 67%                |
| Applegate          | 64.6          | 67.9            | 66.0         | 75.2           | 86%                | 90%                  | 88%               | 98%              | 103%               |
| Lost Creek         | 294.4         | 264.5           | 303.1        | 315.0          | 93%                | 84%                  | 96%               | 97%              | 87%                |
| <b>Basin Index</b> |               |                 |              |                | <b>90%</b>         | <b>83%</b>           | <b>94%</b>        | <b>95%</b>       | <b>88%</b>         |
| # of reservoirs    |               |                 |              |                | 4                  | 4                    | 4                 | 4                | 4                  |

## STREAMFLOW FORECAST

The May through September streamflow forecasts in the basin range from 105% to 125% of median.

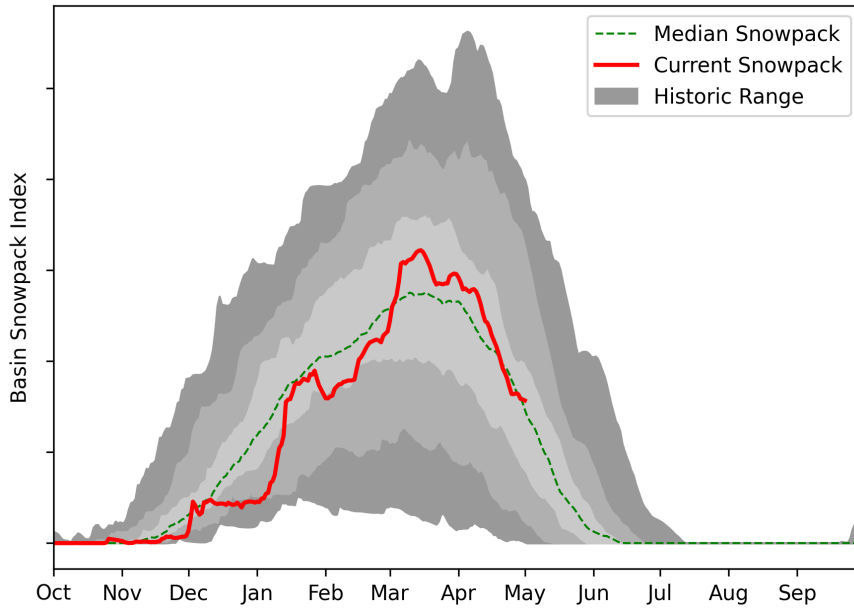
For data in tabular format and to view other forecasts please view the basin data reports [here](#).



# Klamath Basin Summary

## SNOWPACK

**Klamath Basin Snowpack**

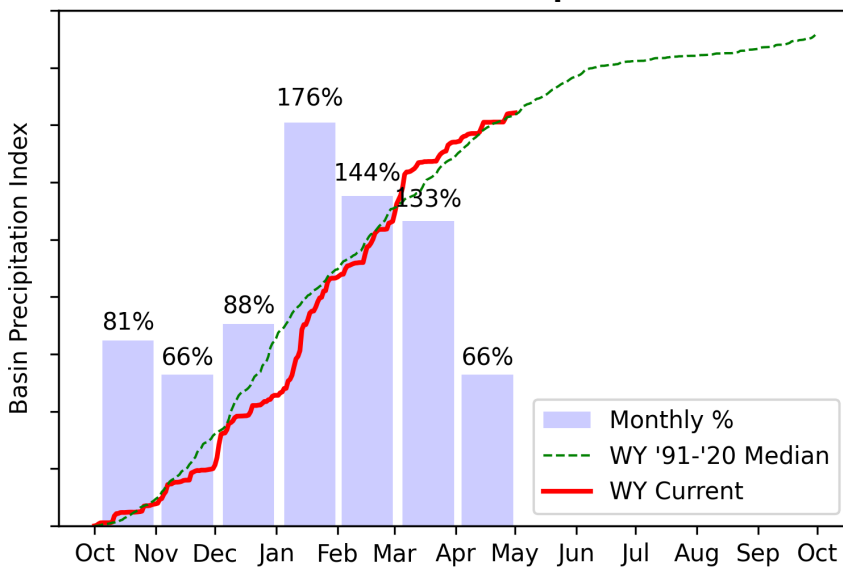


► View snowpack for individual sites by accessing the basin data report [here](#).

As of May 1, the basin snowpack is 102% of median. Last month on April 1 the basin snowpack was 109% of median.

## PRECIPITATION

**Klamath Basin Precipitation**



► View precipitation for individual sites by accessing the basin data report [here](#).

April precipitation is below normal at 66% of median. Precipitation since the beginning of the water year (October 1 - May 1) is 100% of median.

## RESERVOIR STORAGE

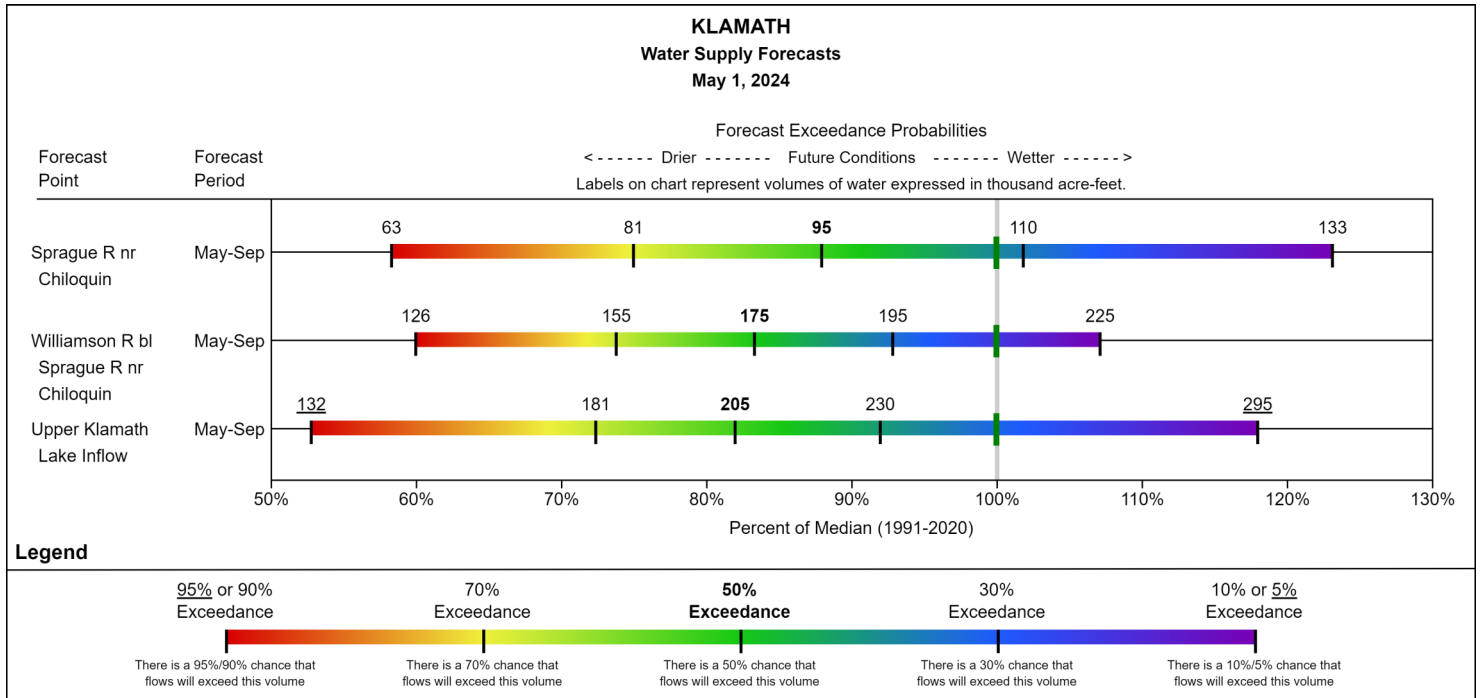
As of May 1, storage at major reservoirs in the basin ranges from 63% of median at Gerber Reservoir to 113% of median at Upper Klamath Lake.

| Klamath            | Current (KAF) | Last Year (KAF) | Median (KAF) | Capacity (KAF) | Current % Capacity | Last Year % Capacity | Median % Capacity | Current % Median | Last Year % Median |
|--------------------|---------------|-----------------|--------------|----------------|--------------------|----------------------|-------------------|------------------|--------------------|
| Howard Prairie     | 31.1          | 21.9            | 42.2         | 62.1           | 50%                | 35%                  | 68%               | 74%              | 52%                |
| Fourmile Lake      | 6.6           | 5.5             | 8.5          | 15.6           | 42%                | 35%                  | 54%               | 77%              | 64%                |
| Upper Klamath Lake | 528.1         | 479.2           | 466.3        | 523.7          | 101%               | 91%                  | 89%               | 113%             | 103%               |
| Clear Lake         | 139.9         | 128.9           | 174.3        | 513.3          | 27%                | 25%                  | 34%               | 80%              | 74%                |
| Hyatt Prairie      | 9.7           | 6.2             | 12.5         | 16.2           | 60%                | 38%                  | 77%               | 77%              | 49%                |
| Gerber             | 41.5          | 47.4            | 66.3         | 94.3           | 44%                | 50%                  | 70%               | 63%              | 71%                |
| <b>Basin Index</b> |               |                 |              |                | <b>62%</b>         | <b>56%</b>           | <b>63%</b>        | <b>98%</b>       | <b>89%</b>         |
| # of reservoirs    |               |                 |              |                | 6                  | 6                    | 6                 | 6                | 6                  |

## STREAMFLOW FORECAST

The streamflow forecasts for the primary period in the basin range from 82% to 88% of median.

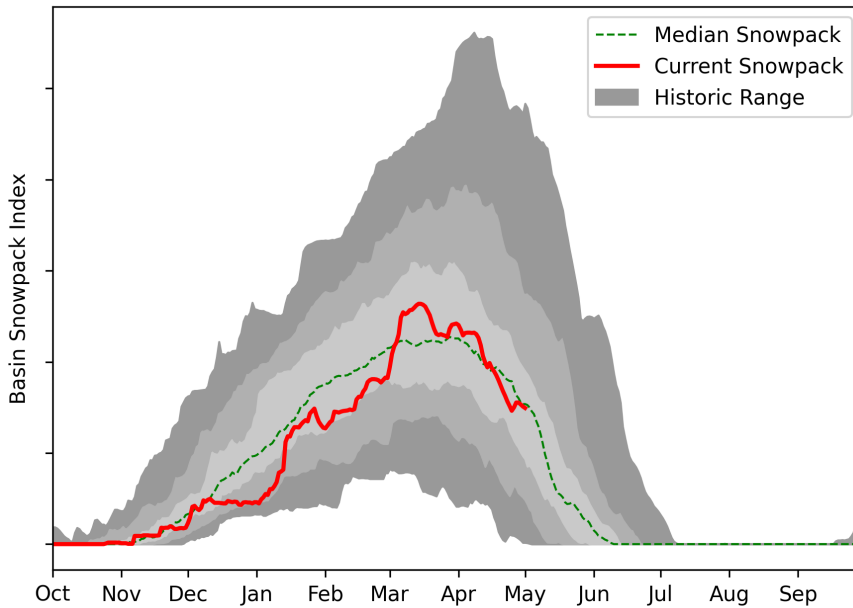
For data in tabular format and to view other forecasts please view the basin data reports [here](#).



# Lake County, Goose Lake Basin Summary

## SNOWPACK

Lake County-Goose Lake Basin Snowpack

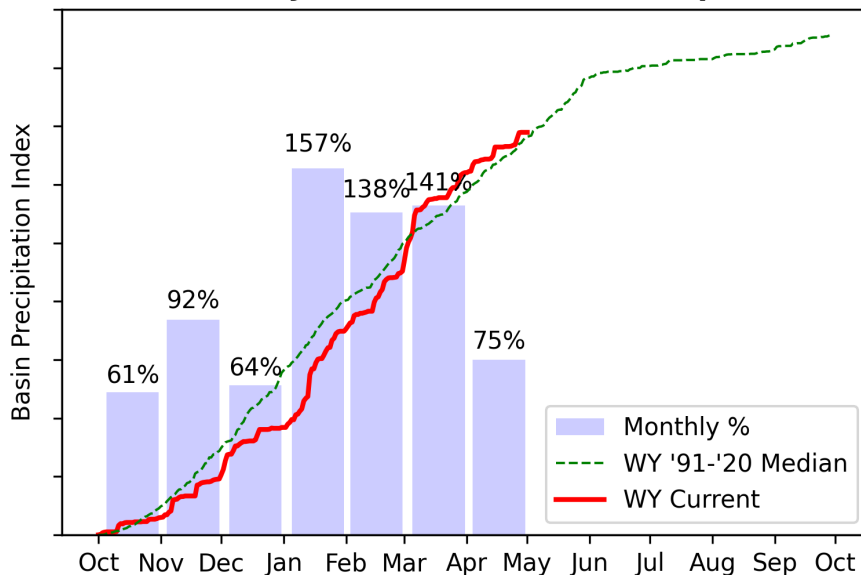


► View snowpack for individual sites by accessing the basin data report [here](#).

As of May 1, the basin snowpack is 96% of median. Last month on April 1 the basin snowpack was 136% of median.

## PRECIPITATION

Lake County-Goose Lake Basin Precipitation



► View precipitation for individual sites by accessing the basin data report [here](#).

April precipitation is below normal at 75% of median. Precipitation since the beginning of the water year (October 1 - May 1) is 101% of median.



## RESERVOIR STORAGE

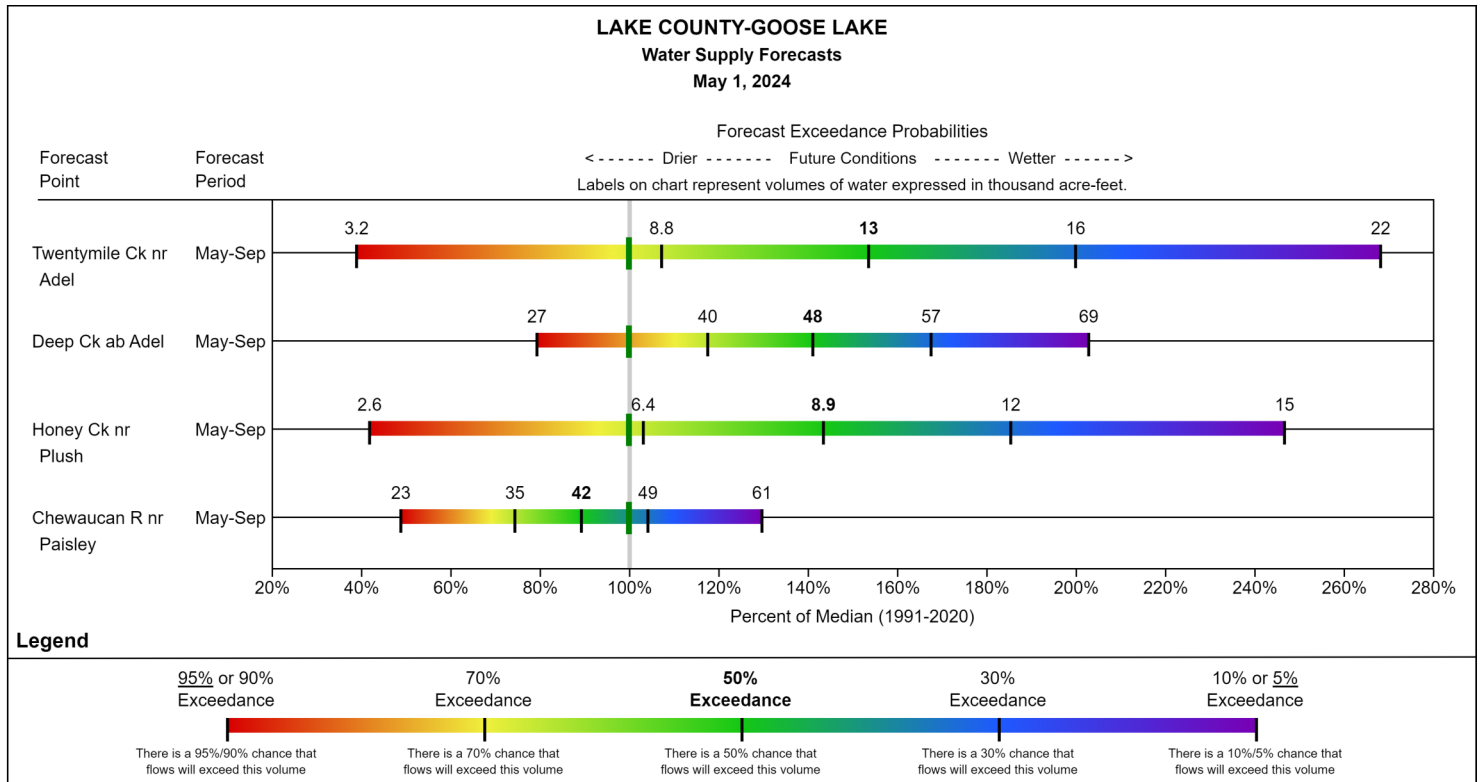
As of May 1, storage at major reservoirs in the basin range from 100% of median at Cottonwood Reservoir to 105% of median at Drews Reservoir.

| Lake County-Goose Lake |  | Current (KAF) | Last Year (KAF) | Median (KAF) | Capacity (KAF) | Current % Capacity | Last Year % Capacity | Median % Capacity | Current % Median | Last Year % Median |
|------------------------|--|---------------|-----------------|--------------|----------------|--------------------|----------------------|-------------------|------------------|--------------------|
| Cottonwood             |  | 8.8           | 9.2             | 8.8          | 9.3            | 95%                | 99%                  | 95%               | 100%             | 105%               |
| Drews                  |  | 51.1          | 43.5            | 48.8         | 63.5           | 80%                | 68%                  | 77%               | 105%             | 89%                |
| <b>Basin Index</b>     |  |               |                 |              |                | <b>82%</b>         | <b>72%</b>           | <b>79%</b>        | <b>104%</b>      | <b>91%</b>         |
| # of reservoirs        |  |               |                 |              |                | 2                  | 2                    | 2                 | 2                | 2                  |

## STREAMFLOW FORECAST

The May through September streamflow forecasts in the basin range from 89% to 154% of median.

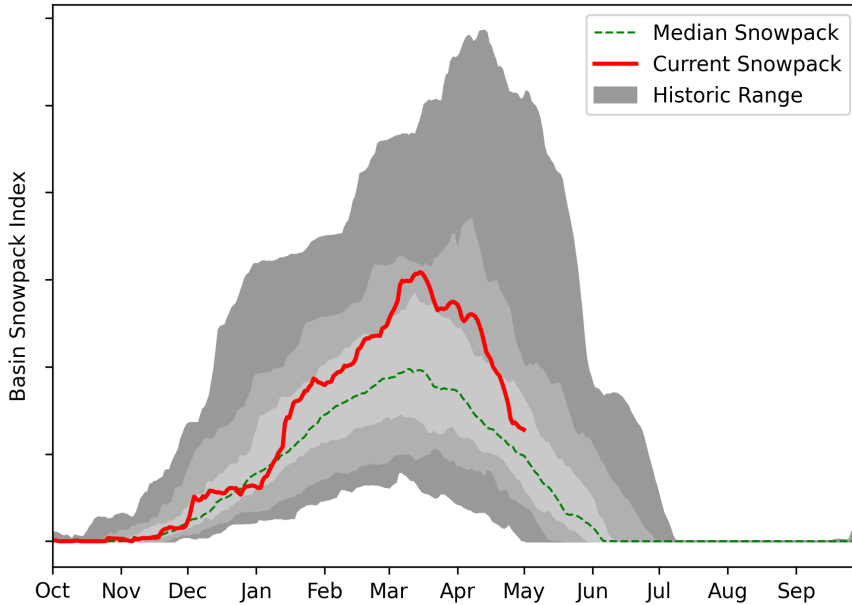
For data in tabular format and to view other forecasts please view the basin data reports [here](#).



# Harney Basin Summary

## SNOWPACK

Harney Basin Snowpack

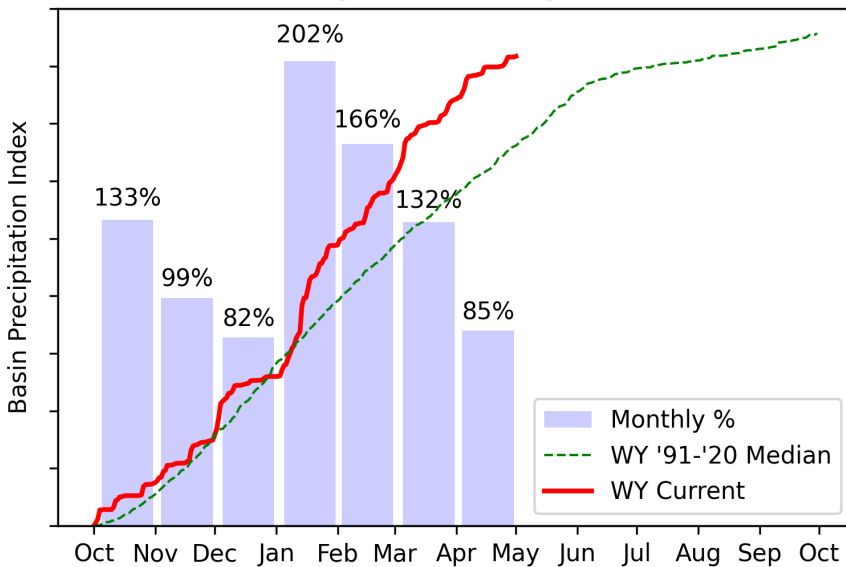


► View snowpack for individual sites by accessing the basin data report [here](#).

As of May 1, the basin snowpack is 130% of median. Last month on April 1 the basin snowpack was 170% of median.

## PRECIPITATION

Harney Basin Precipitation



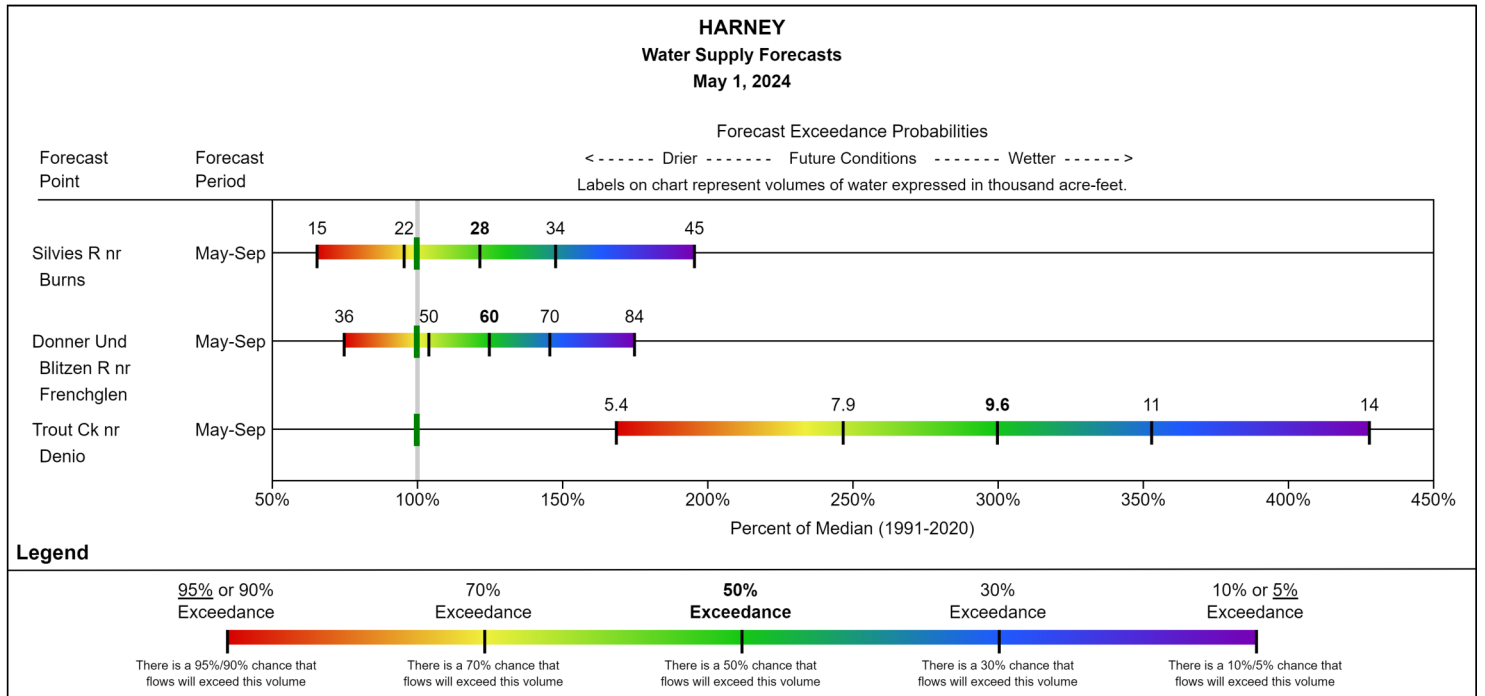
► View precipitation for individual sites by accessing the basin data report [here](#).

April precipitation is below normal at 85% of median. Precipitation since the beginning of the water year (October 1 - May 1) is 124% of median.

# STREAMFLOW FORECAST

The May through September streamflow forecasts in the basin range from 122% to 300% of median.

For data in tabular format and to view other forecasts please view the basin data reports [here](#).



## Additional Resources

[Development and Interpretation of Water Supply Forecasts](#)

[User Guide to Forecast Charts](#)

## Subscribe!

Subscribe [here](#) to receive the Water Supply Outlook Report.

---

*For more water supply and resource management information, contact:*

Matt Warbritton  
Supervisory Hydrologist  
Portland Data Collection Office  
USDA NRCS Oregon Snow Survey and Water Supply Forecasting Program  
matt.warbritton@usda.gov  
Phone: (503) 307-2829  
[NRCS Oregon Snow Survey Website](#)



This publication may be found online at:

[Oregon | Snow Survey and Water Supply Program | Natural Resources Conservation Service \(usda.gov\)](#)

*Issued by*

**Terry Cosby, Chief**  
**Natural Resources Conservation Service**  
**U.S. Department of Agriculture**

*Released by*

**David Rose, Acting State Conservationist**  
**Natural Resources Conservation Service**  
**Portland, OR**

USDA Natural Resources Conservation Service  
Oregon Snow Survey  
1201 NE Lloyd Suite 900  
Portland, OR 97232  
[NRCS Oregon Snow Survey Website](#)