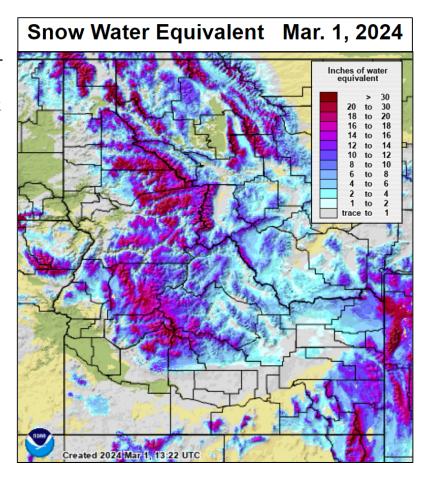
# **Idaho Spring Flood and Water Resources Outlook**

#### **Spring Flood Potential**

The risk for spring flooding due to snowmelt is normal to above normal for most of southern Idaho. Areas south of the Snake River Plain where snowpack is well above normal have the greatest risk of spring flooding, including the Portneuf, Blackfoot and Bear River basins. The spring flood risk for the Boise River Basin, Wood River and Lost River Basins, Henry's Fork, and Teton Basins is near normal. Elsewhere across the central mountains and northern Idaho the spring flood risk is generally low, especially across the Clearwater, Palouse, and Northern Panhandle Region where snowpack is well below normal and substantial water year precipitation and soil moisture deficits reside.



Idaho's snowpack as a whole typically continues building through March and peaks in early April, leaving several weeks ahead of us for additional snow accumulation and potential changes to the spring flood risk.

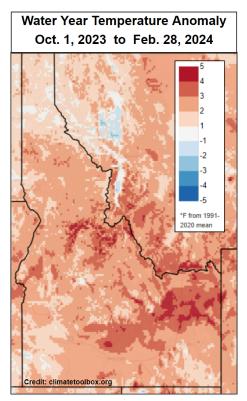
The primary factors in the development of spring flooding are the occurrence of persistent above normal temperatures, and rain on snow precipitation events. Even if mainstem rivers do not reach flood stage, smaller creeks and streams can still overflow their banks. Under the right scenario, spring flooding is possible even for areas that have low snowpack. Additionally, wildfire burn scars can have a significant impact on local flood potential during spring snowmelt.

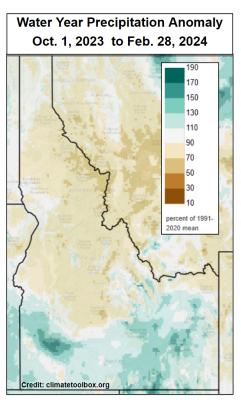
#### **Temperature and Precipitation**

Normal to above normal temperatures dominated the first three months of the 2024 Water Year, especially in December where temperature anomalies were 3 to 6 degrees above normal. A cold arctic outbreak in early January brought a period of well below normal temperatures to the state resulting in January temperature anomalies being slightly below normal across northern Idaho and only slightly above normal across central and southern Idaho. February temperatures have generally been 1 to 3 degrees above normal across the state.

October precipitation was well above normal across most of the Snake River Plain and basins along the Utah and Nevada border. Meanwhile, northern and central Idaho experienced below to well below normal precipitation in October with much of northern Idaho receiving less than 50 percent of normal. This pattern of wet conditions across the southern third of Idaho and progressively drier conditions across central and northern Idaho generally persisted through the water year to date, although northern Idaho has seen improved precipitation during the month of

February.

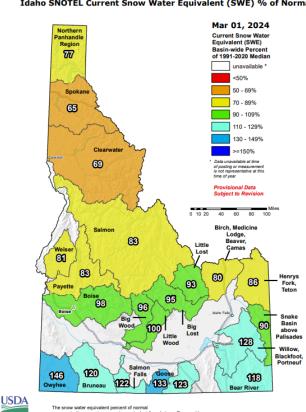




Idaho SNOTEL Current Snow Water Equivalent (SWE) % of Normal

## **Snowpack**

Southside Snake River Basins along the Utah and Nevada border are holding the highest snowpack percentages as of March 1, ranging from 120 to 146 percent of median. Percentages decrease to the north, ranging from 80 to 100 percent of median across the central mountains and Snake River headwaters region. Snowpack percentages are only around 65 to 77 percent of median across the northern third of the state with some SNOTEL locations in the Clearwater. Coeur d'Alene, and St. Joe Basins sitting near record lows. Idaho snowpack as a whole typically builds through March and peaks in early April.



#### **Reservoirs**

The majority of reservoirs across southern Idaho and eastern Oregon are holding above average storage. Weather patterns, irrigation demand, and flood risk management will drive reservoir operations over the next several months. Wet spring weather or extended periods of above normal temperatures resulting in rapid snowmelt and large reservoir inflows could result in significant

fluctuations in reservoir discharge and downstream river

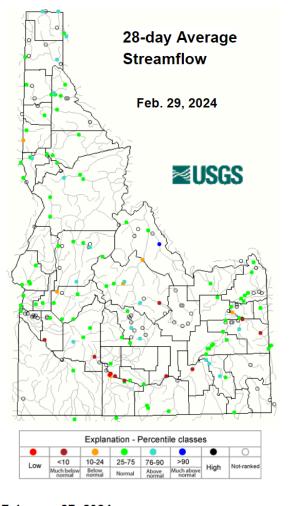
levels.

#### **Observed Streamflow**

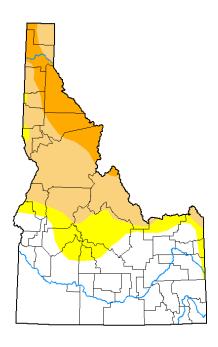
Observed runoff volumes for the water year as a whole have generally been below normal across northern Idaho and mostly near normal or above normal for the southern half of the state. USGS streamflow averages for the month of February have been normal to above normal with the exception of some lower flows on the mainstem Snake River in southern Idaho.

#### **Drought**

Long and short-term precipitation deficits along with above normal temperatures have allowed varying degrees of drought to persist across the northern half of the state. Temperature and precipitation patterns for the remainder of winter and this spring will determine whether or not drought conditions improve or deteriorate.



U.S. Drought Monitor



February 27, 2024 (Released Thursday, Feb. 29, 2024) Valid 7 a.m. EST

Valid 7 a.m. EST  Drought Conditions (Percent Area)						
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Сиптепт	50.84	49.16	36.30	10.81	0.00	0.00
Last Week 02-20-2024	50.84	49.16	36.30	10.81	0.00	0.00
3 Month s Ago 11-28-2023	76.37	23.63	16.85	11.28	0.00	0.00
Start of Calendar Year 01-02-2024	55.32	44.68	18.73	5.13	0.00	0.00
Start of Water Year 09-26-2023	74.49	25.51	20.13	11.45	0.04	0.00
One Year Ago 02-28-2023	2.32	97.68	79.48	12.06	0.00	0.00
Intensity:  None  D2 Severe Drought  D0 Abnormally Dry  D3 Extreme Drought  D4 Exceptional Droug  The Drought Monitor focuses on broad-scale conditions.  Local conditions may vary. For more information on the						ought
<i>Drought Monitor,</i> <u>Author:</u> Richard Heim NCEI/NOAA	go to ht	tps://dro	oughtmo	nitor.uni	l.edu/Ab	out.asp
<u>USDA</u>	NDM	e a	(¥		NUR	

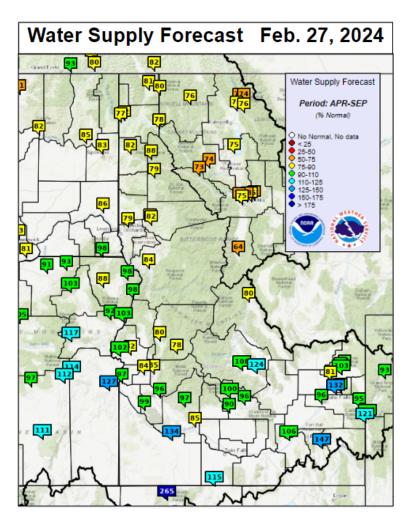
droughtmonitor.unl.edu

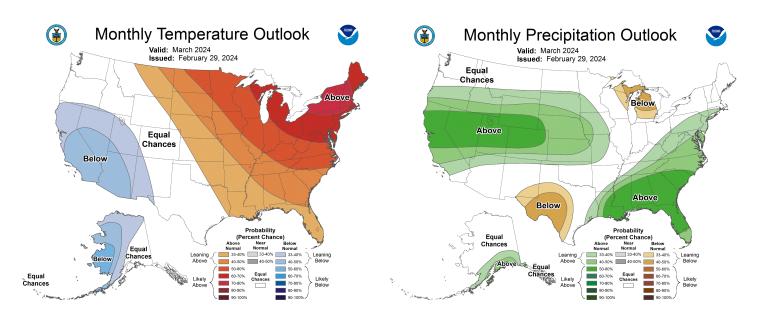
#### **Water Supply**

National Weather Service water supply forecasts for April through September 2024 call for near normal to well above normal runoff volumes across the southern third of Idaho. Meanwhile, forecasts for the central mountains including the Boise Basin, Wood and Lost River Basins, and Snake River headwaters region are generally forecast to be 90 to 105 percent of normal. For the rest of central Idaho and north across the Panhandle Region the water supply forecasts are about 75 to 85 percent of normal.

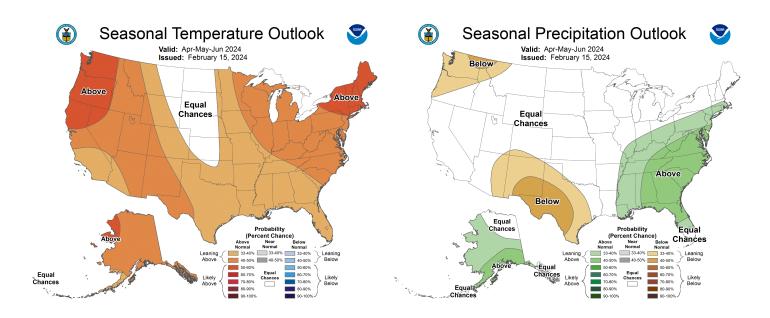
#### **Seasonal Outlook**

The outlook for the month of March indicates equal chances for either below normal, normal, or above normal temperatures. Meanwhile, above normal precipitation is favored for the southern half of Idaho with equal chances of either below normal, normal, or above normal precipitation across northern Idaho.





The outlook for April through June favors above normal temperatures across Idaho. Odds favor below normal precipitation for the Panhandle Region of Idaho during the period. Across southern Idaho there are equal chances for either below, above, or normal precipitation.



#### **On-line Resource**

## Water Supply Volume Forecasts...

National Weather Service-Northwest River Forecast Center <a href="www.nwrfc.noaa.gov/ws/">www.nwrfc.noaa.gov/ws/</a>

National Weather Service-Colorado Basin River Forecast Center www.cbrfc.noaa.gov/

## **Snowpack Information...**

National Weather Service-Northwest River Forecast Center <a href="https://www.nwrfc.noaa.gov/snow/">www.nwrfc.noaa.gov/snow/</a>

National Weather Service-National Operational Hydrologic Remote Sensing Center <a href="https://www.nohrsc.noaa.gov/">www.nohrsc.noaa.gov/</a>

USDA-Natural Resources Conservation Service <a href="https://www.nrcs.usda.gov/wps/portal/nrcs/main/id/snow/">www.nrcs.usda.gov/wps/portal/nrcs/main/id/snow/</a>

## Reservoir Storage...

Bureau of Reclamation Reservoir Storage <a href="https://www.usbr.gov/pn/hydromet/select.html">www.usbr.gov/pn/hydromet/select.html</a>

USDA-Natural Resources Conservation Service www.nrcs.usda.gov/wps/portal/nrcs/main/id/snow

## **Drought Information...**

U.S. Drought Portal <a href="https://www.drought.gov">www.drought.gov</a>

## Peak Flow Forecasts...

Northwest River Forecast Center www.nwrfc.noaa.gov/peak/

Colorado Basin River Forecast Center <a href="https://www.cbrfc.noaa.gov/rmap/peak/peaklist.php">www.cbrfc.noaa.gov/rmap/peak/peaklist.php</a>

## Temperature and Precipitation Outlook...

Climate Prediction Center <a href="https://www.cpc.ncep.noaa.gov/">www.cpc.ncep.noaa.gov/</a>