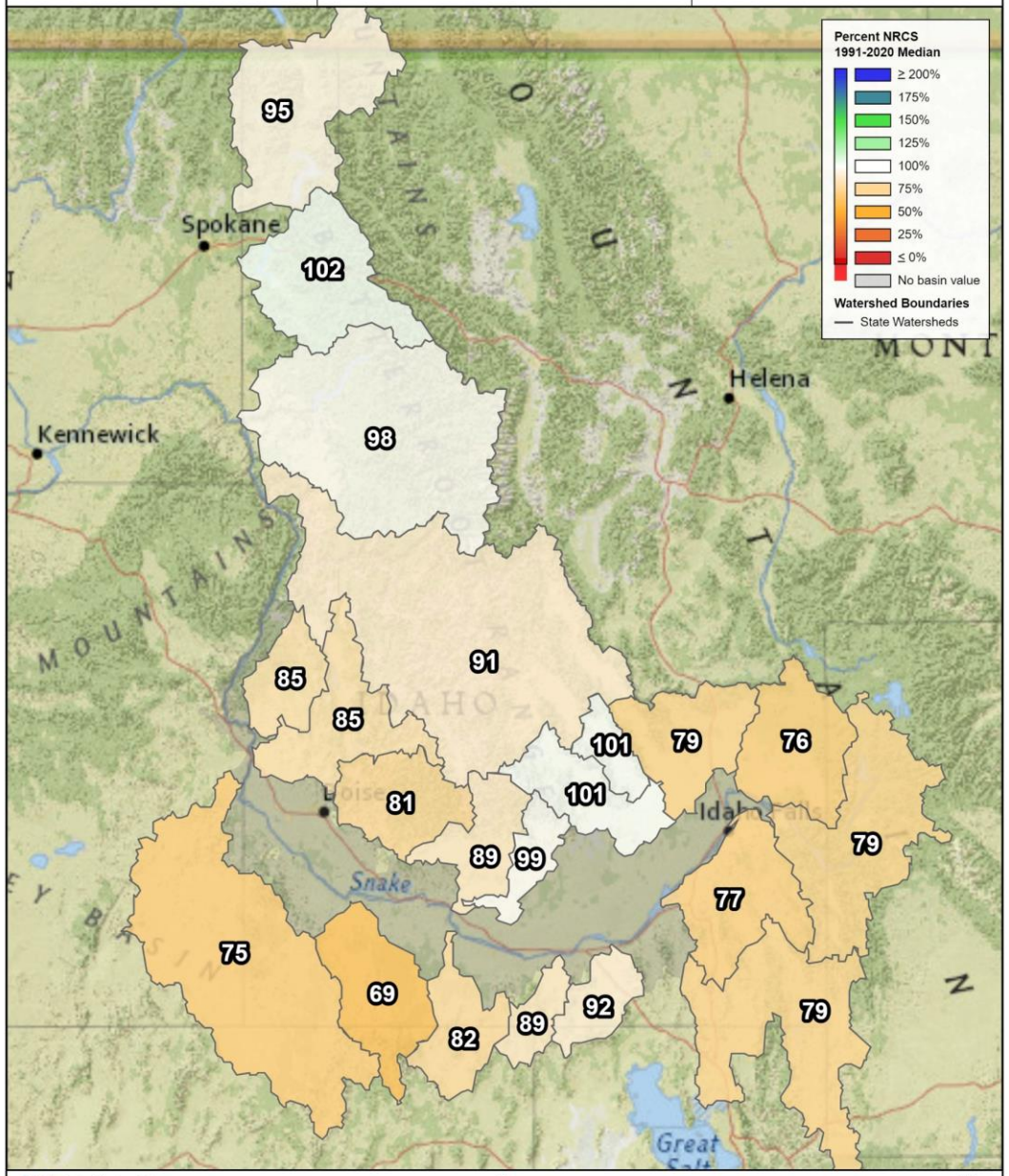
# Snowpack and Water Supply Outlook
# March 10, 2022

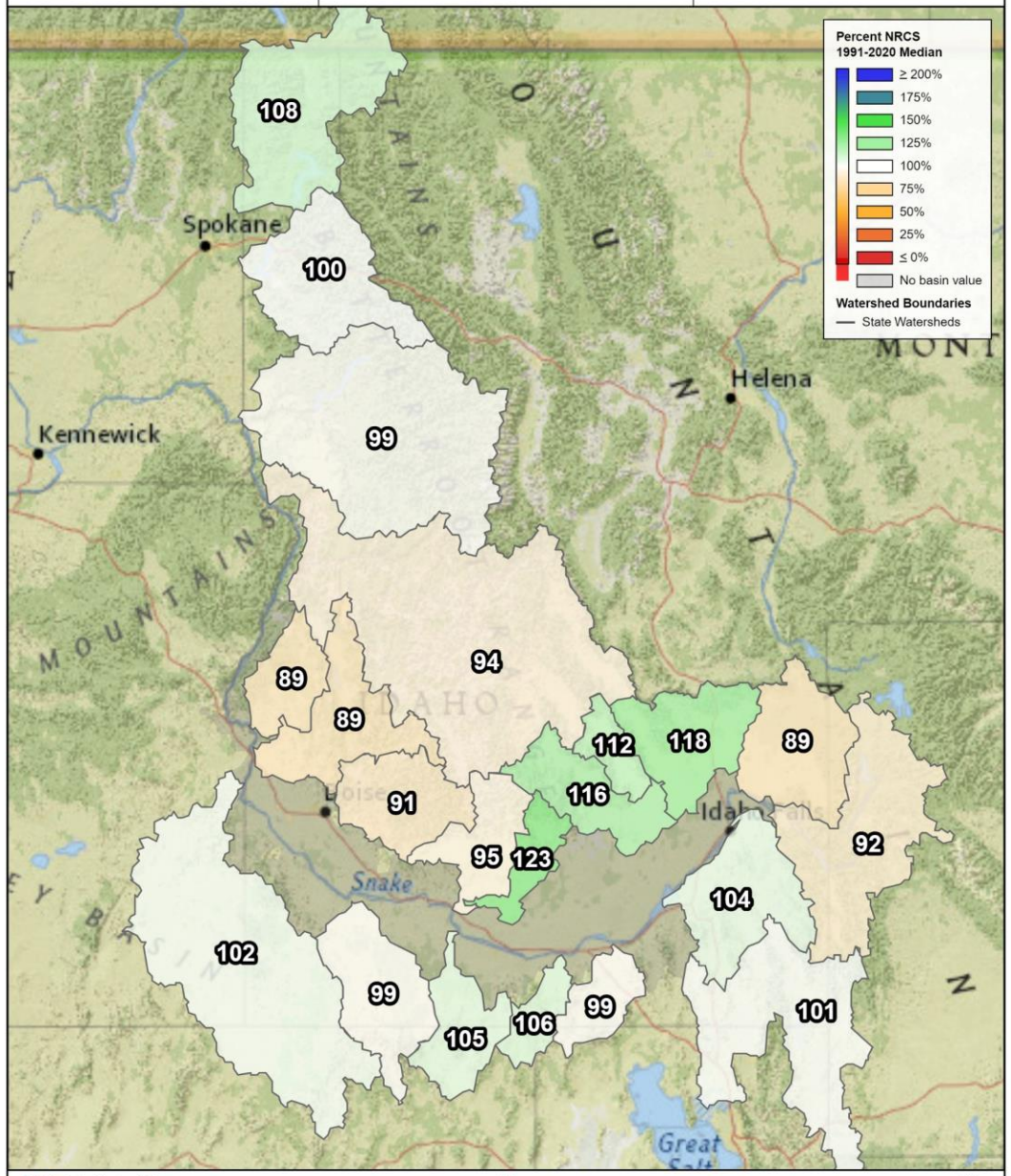
Presented by: Mark Robertson
NRCS Snow Survey

| Snow Water Equivalent | Percent NRCS 1991-2020 Median | March 1st, 2022 |
|---|---|---|

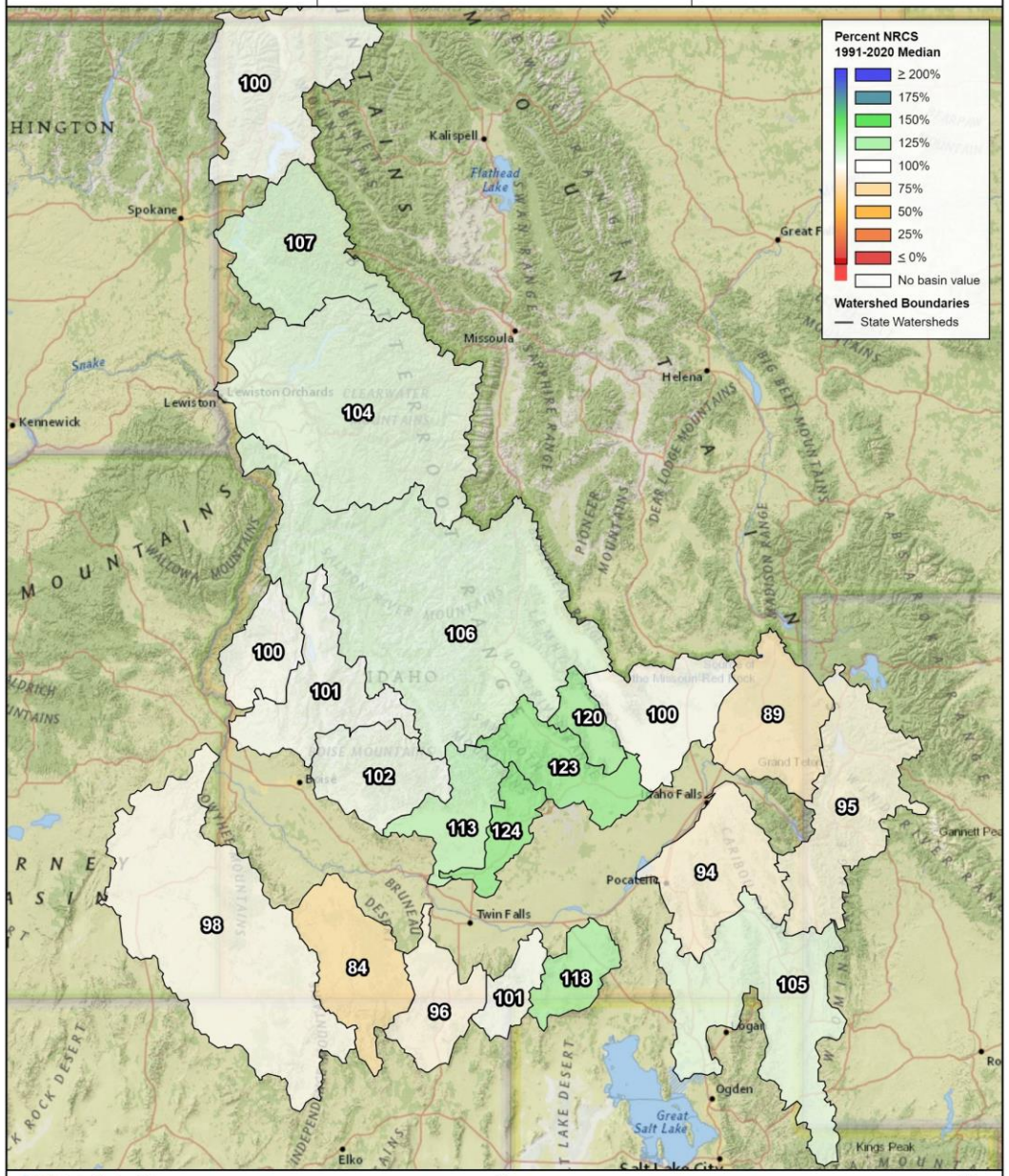



March 1 Conditions

| Water Year to Date Precipitation | Percent NRCS 1991-2020 Median | October 1, 2021 - February 28, 2022 |
|---|---|---|

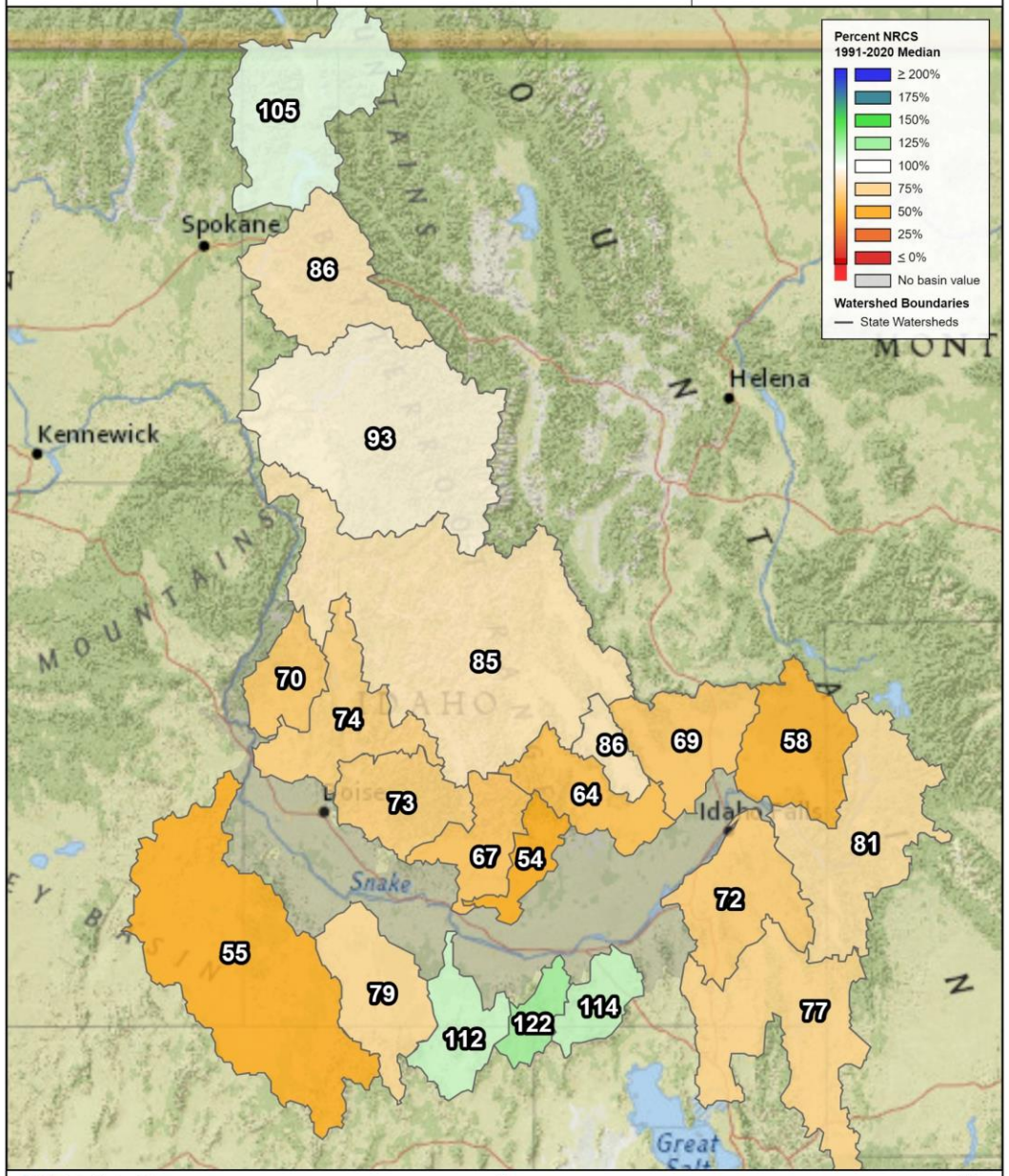


| Snow Water Equivalent | Percent NRCS 1991-2020 Median | February 1st, 2022 |
|---|---|---|




# February 1 Conditions

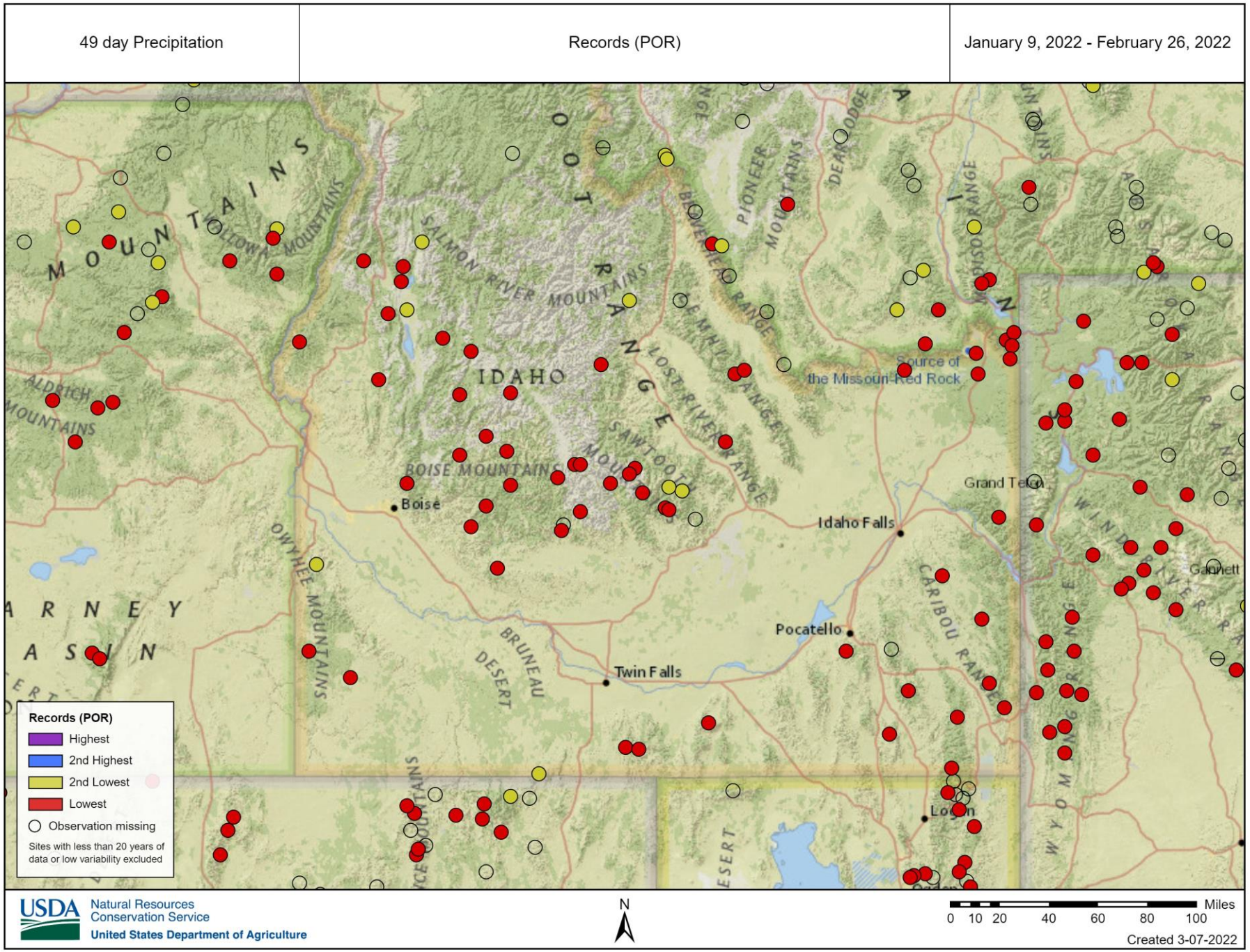
| 1 month Precipitation | Percent NRCS 1991-2020 Median | January 1, 2022 - January 31, 2022 |
|---|---|---|

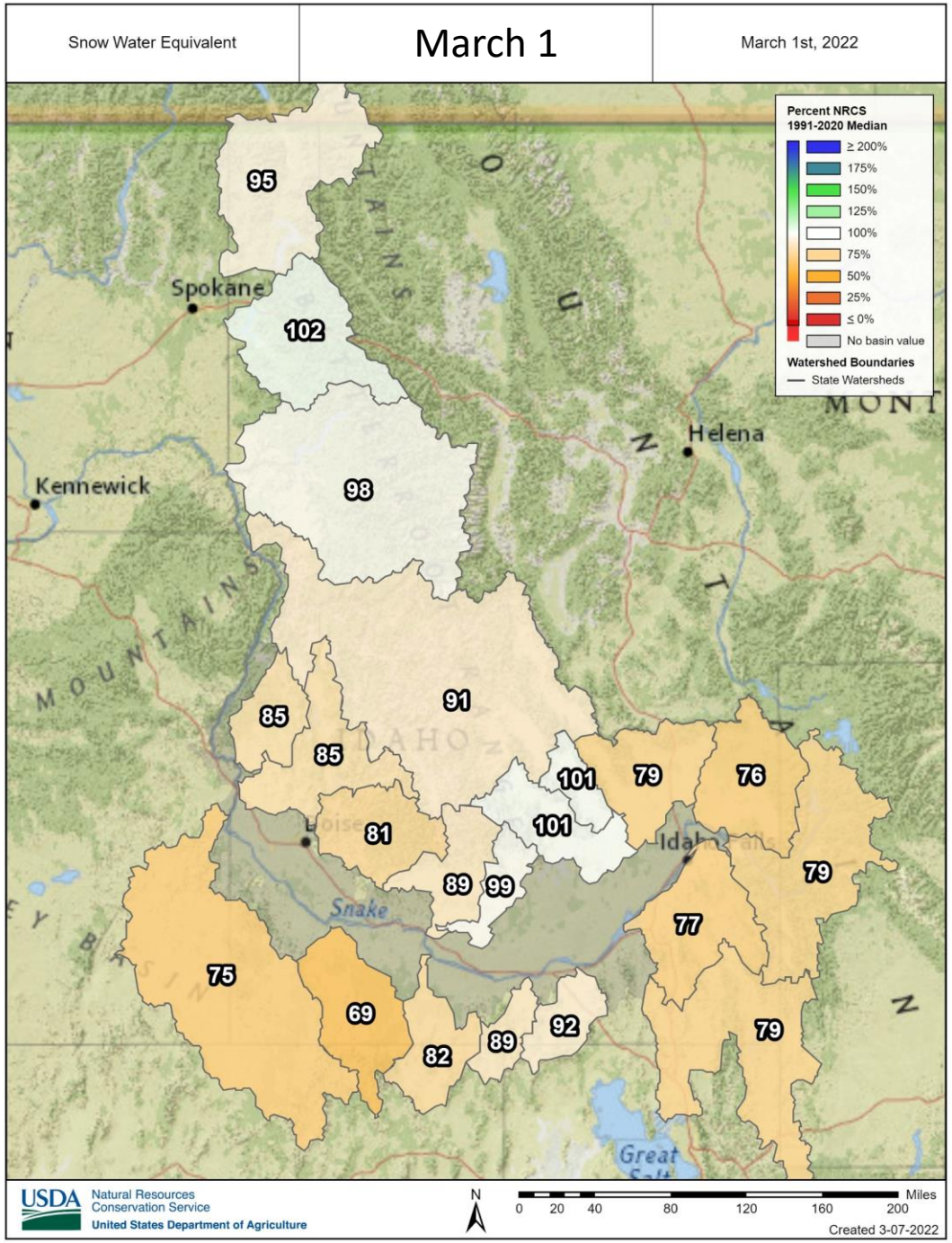


# Record Dry Mid-Winter

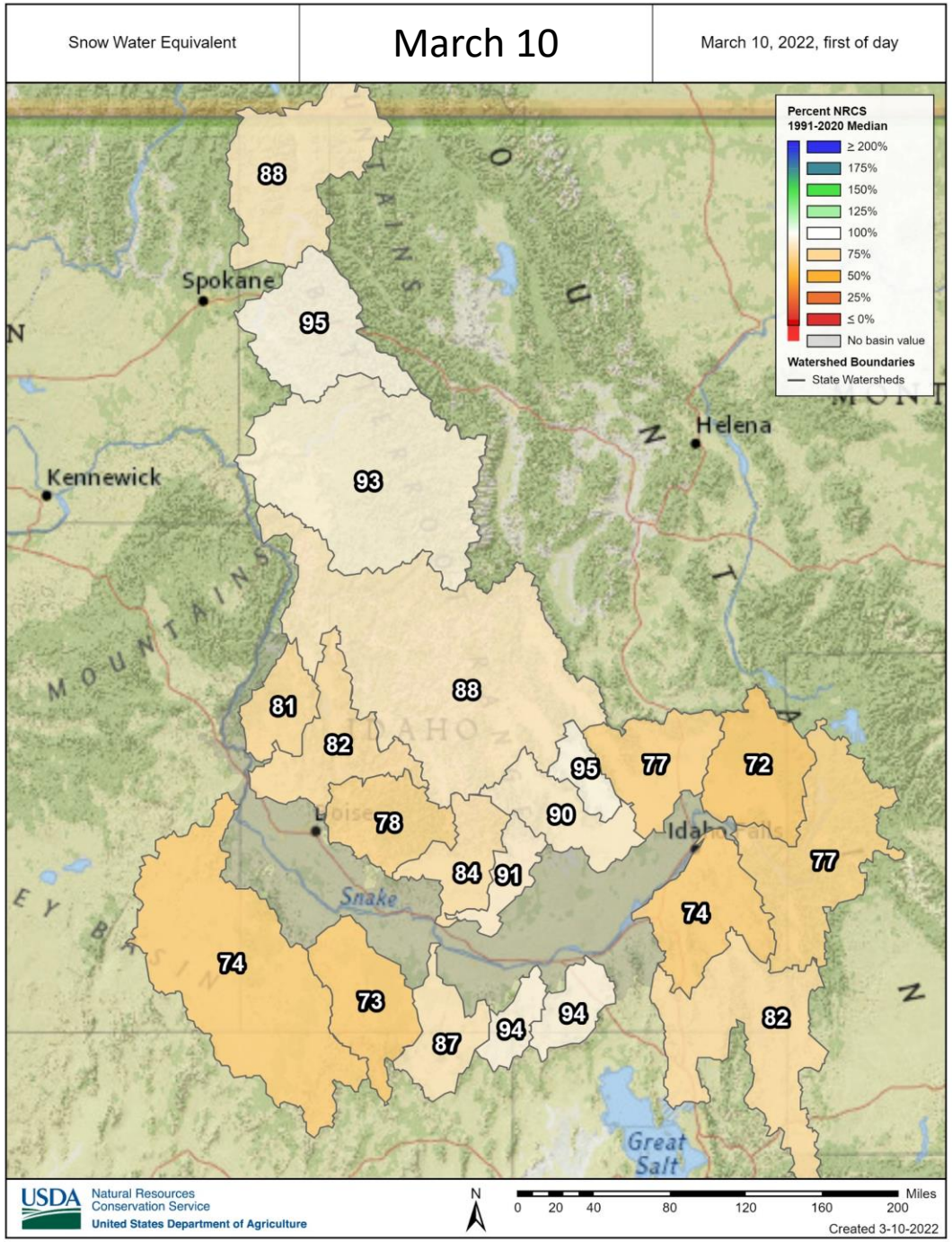
## South of Clearwater

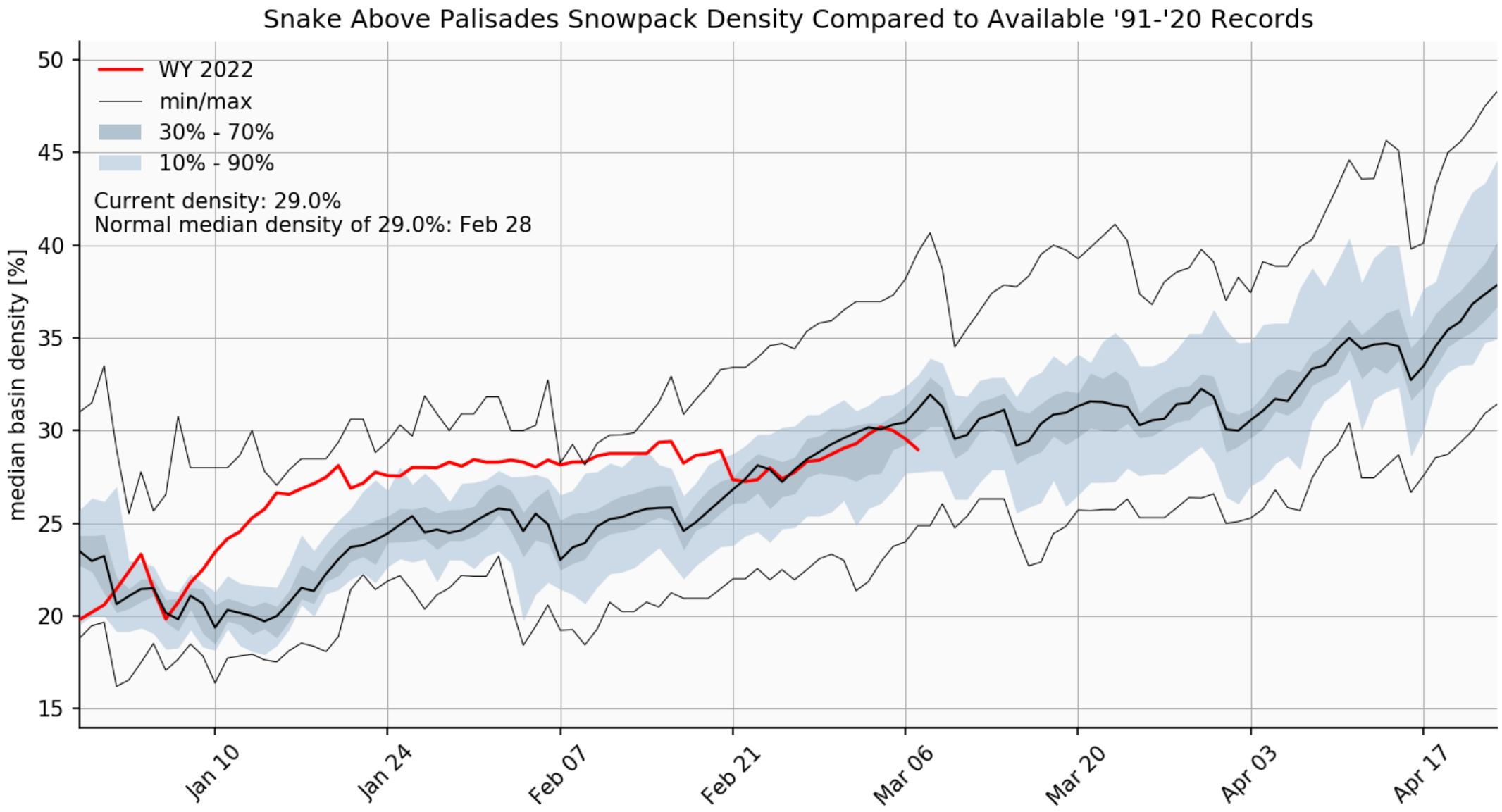
- Most SNOTEL sites south of the Clearwater set period of record low precipitation records from Jan 9 – Feb 26





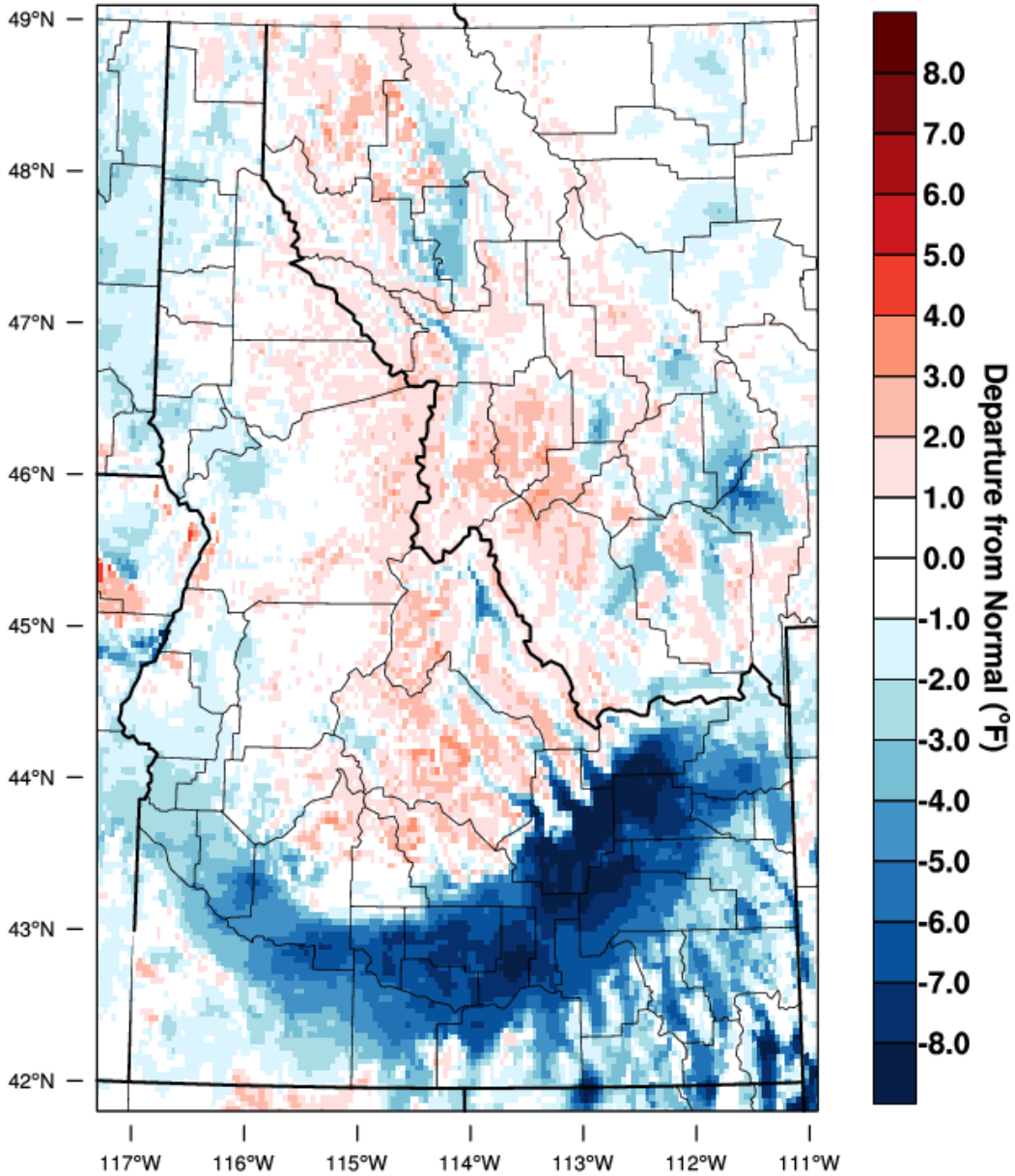

March 1
vs
Current
Snowpack




Snake Above Palisades Snowpack Density Compared to Available '91-'20 Records
WY 2022
min/max
30% - 70%
10% - 90%
Current density: 29.0%
Normal median density of 29.0%: Feb 28
median basin density [%]
50
45
40
35
30
25
20
15
Jan 10
Jan 24
Feb 07
Feb 21
Mar 06
Mar 20
Apr 03
Apr 17

## Idaho - Mean Temperature

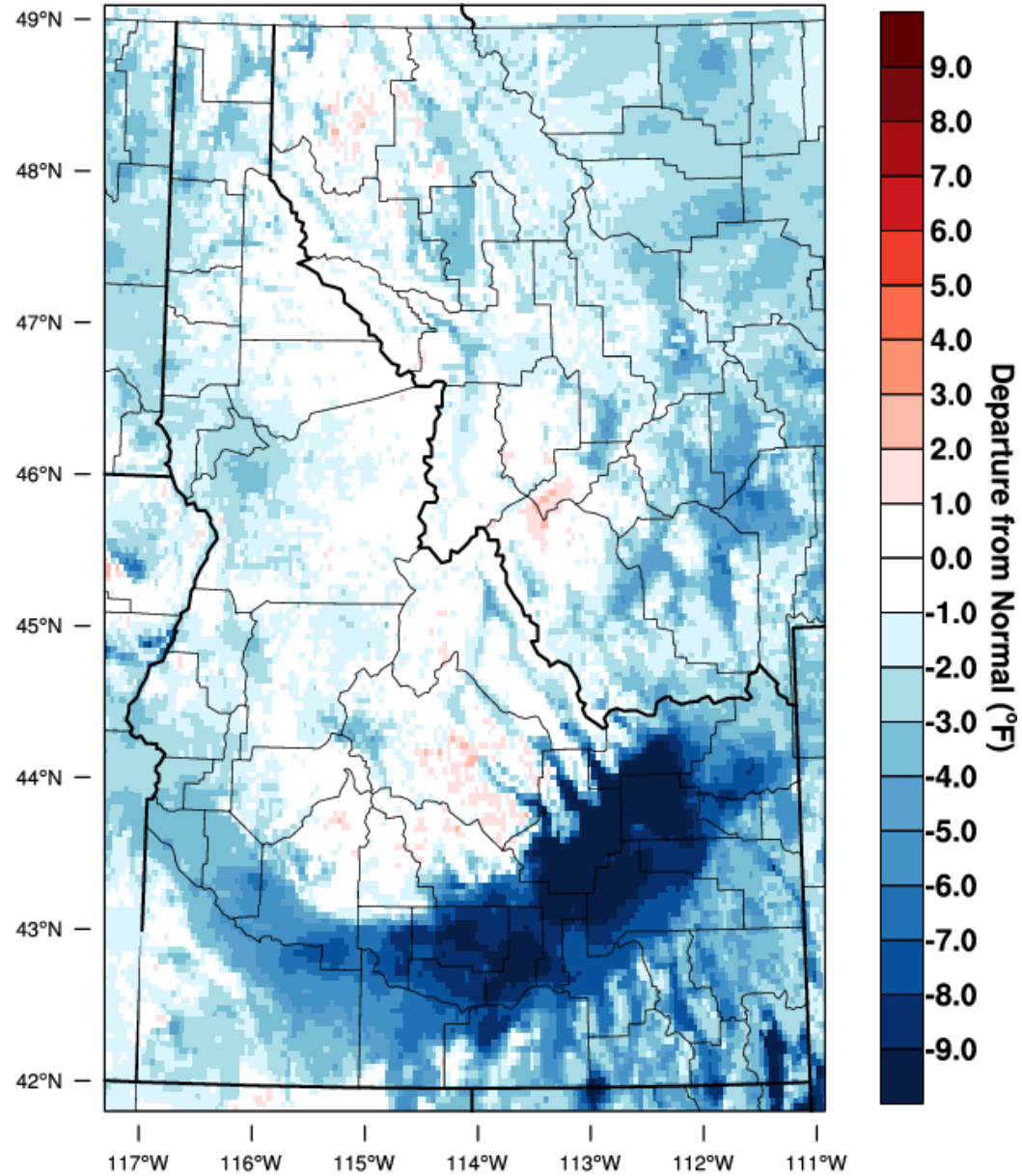
### January-February 2022 Departure from 1981-2010 Normal



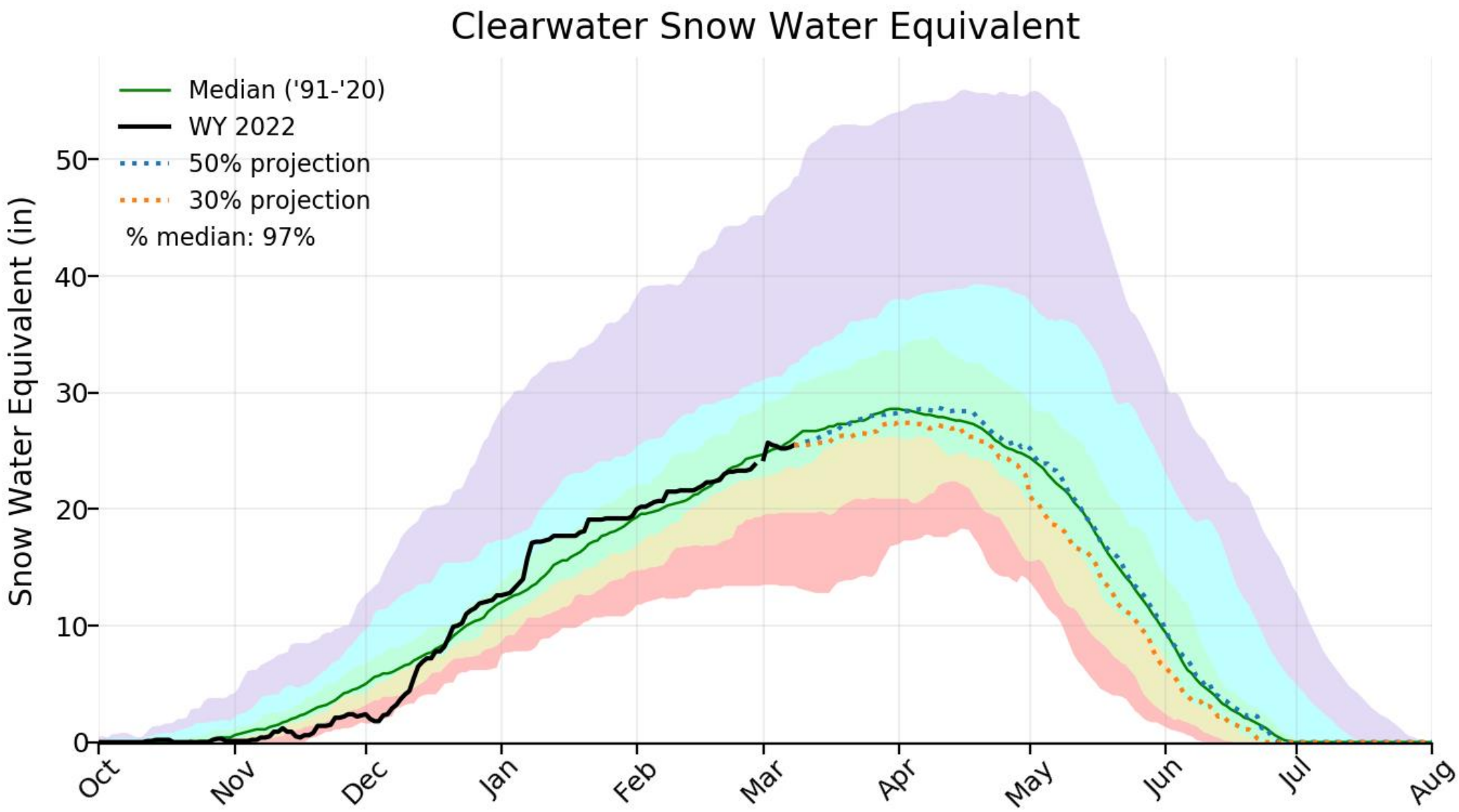

WestWide Drought Tracker, U Idaho/WRCC Data Source: PRISM (Prelim), created 5 MAR 2022

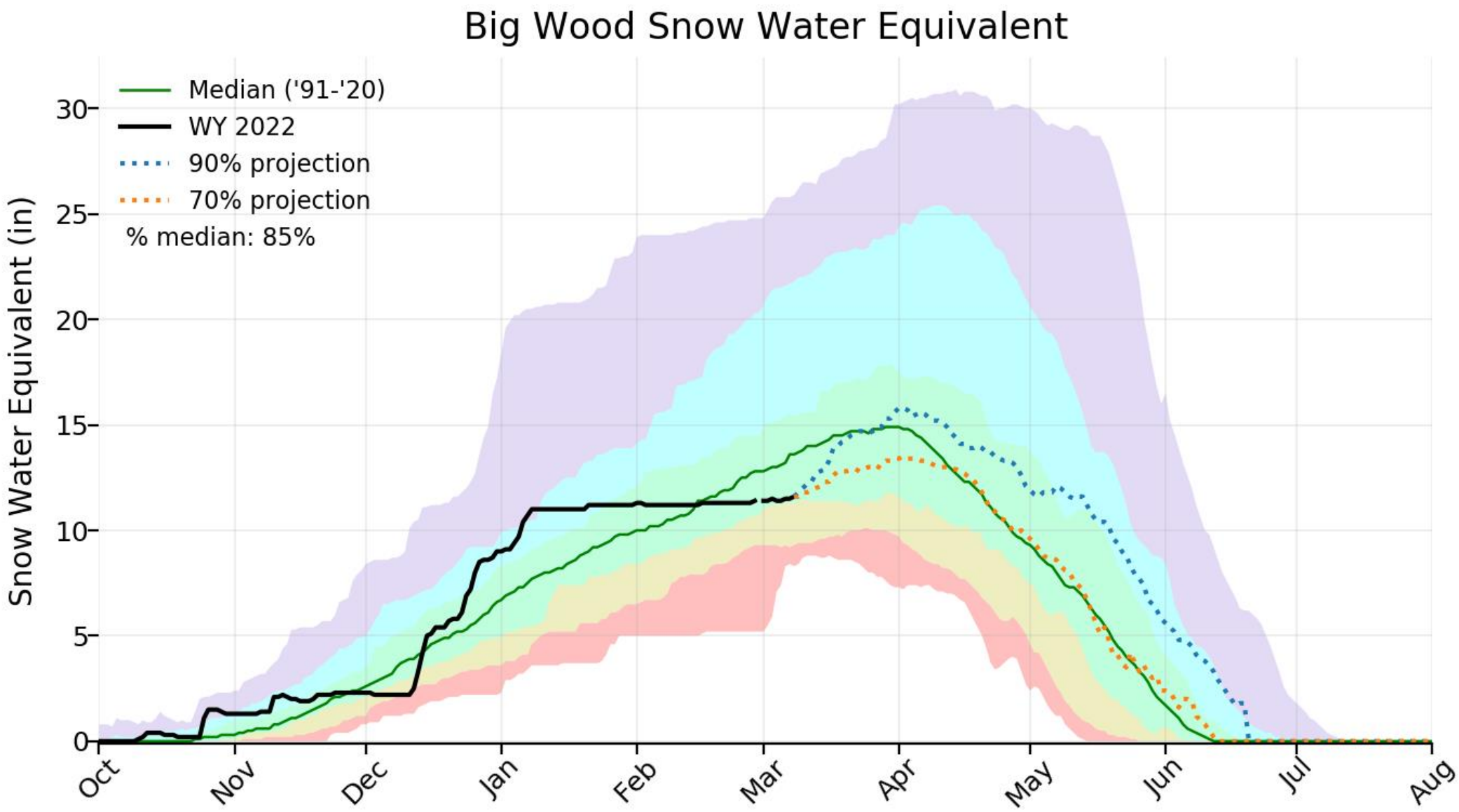
## Idaho - Mean Temperature

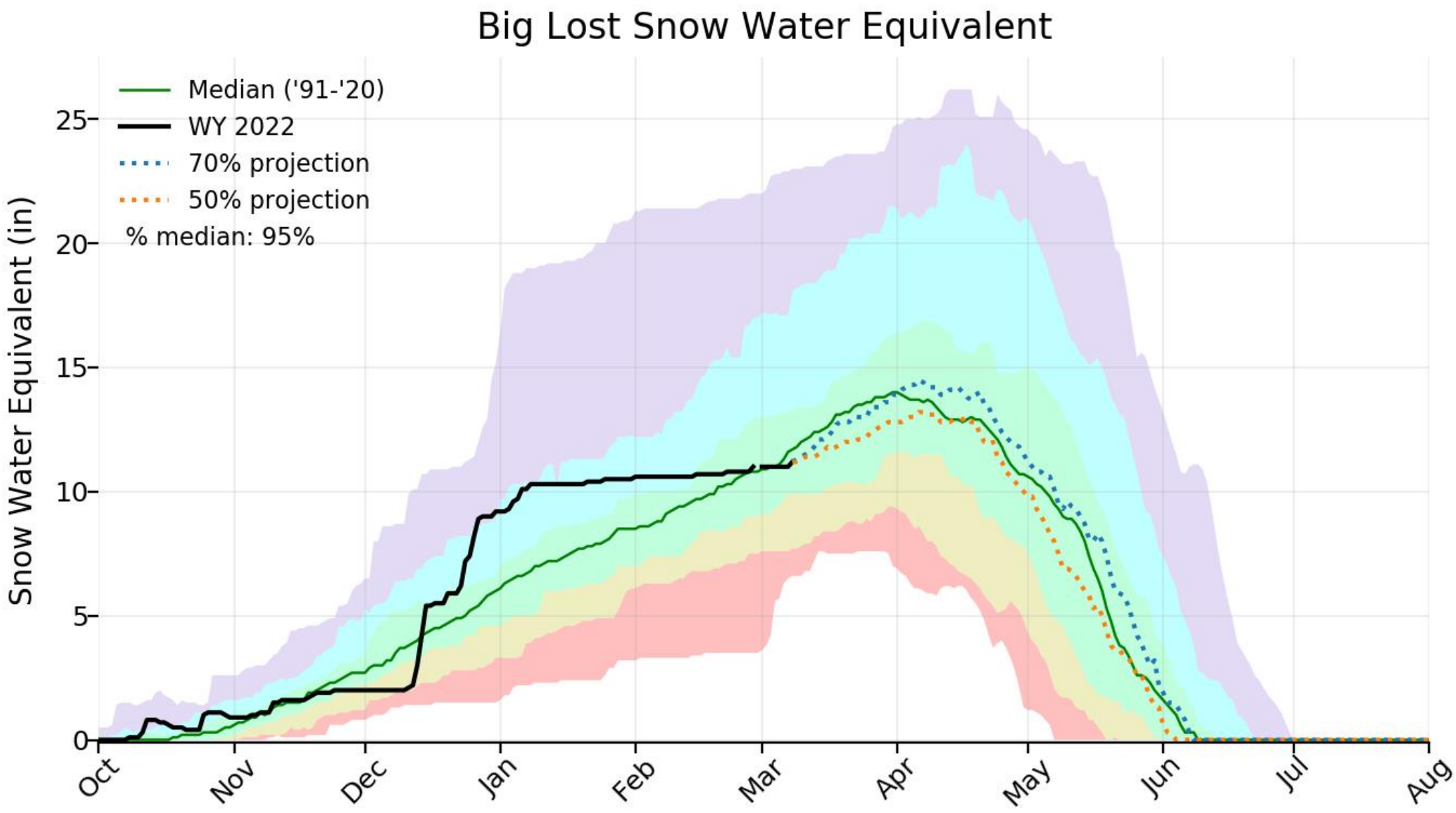
### February 2022 Departure from 1981-2010 Normal

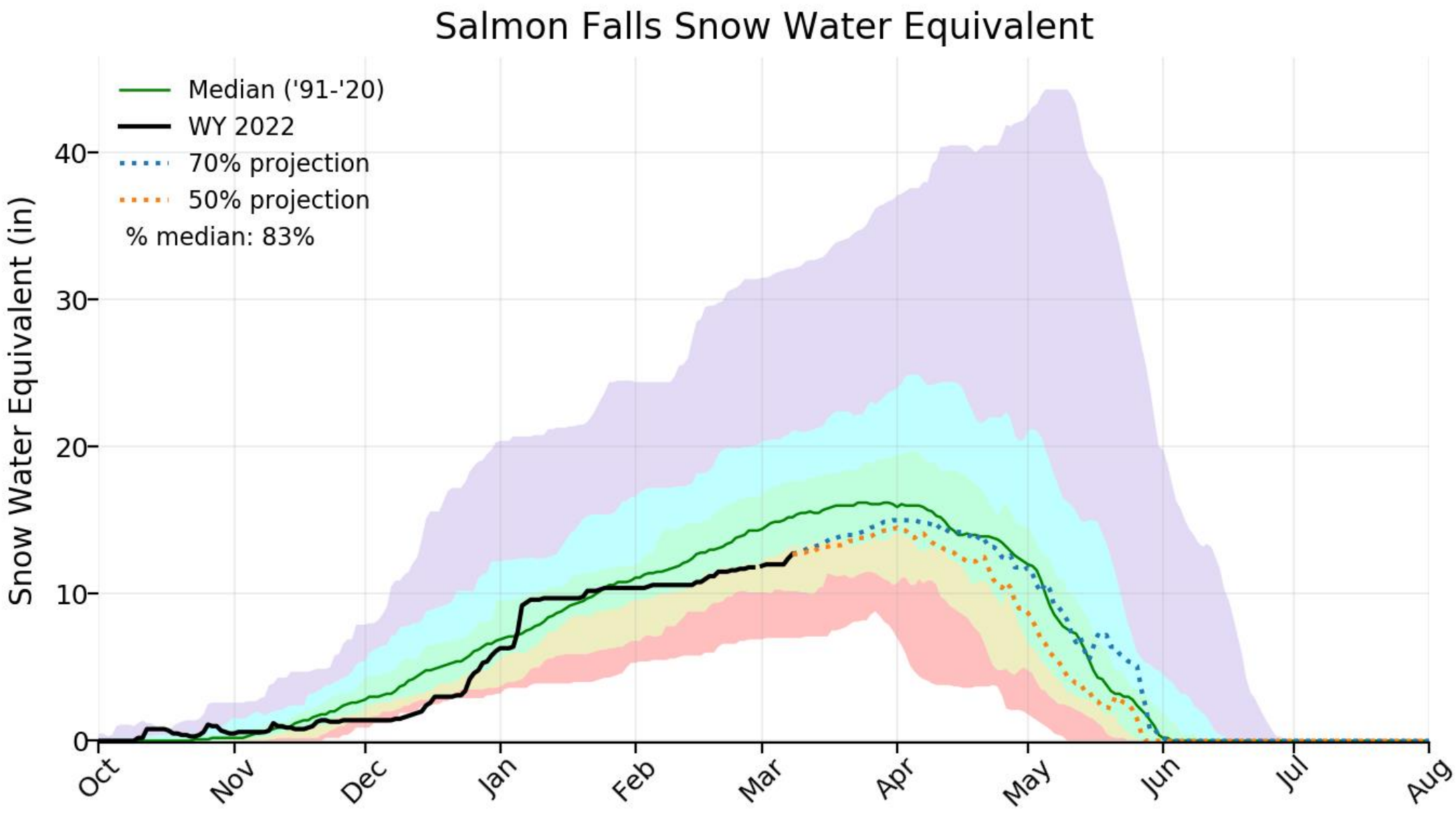


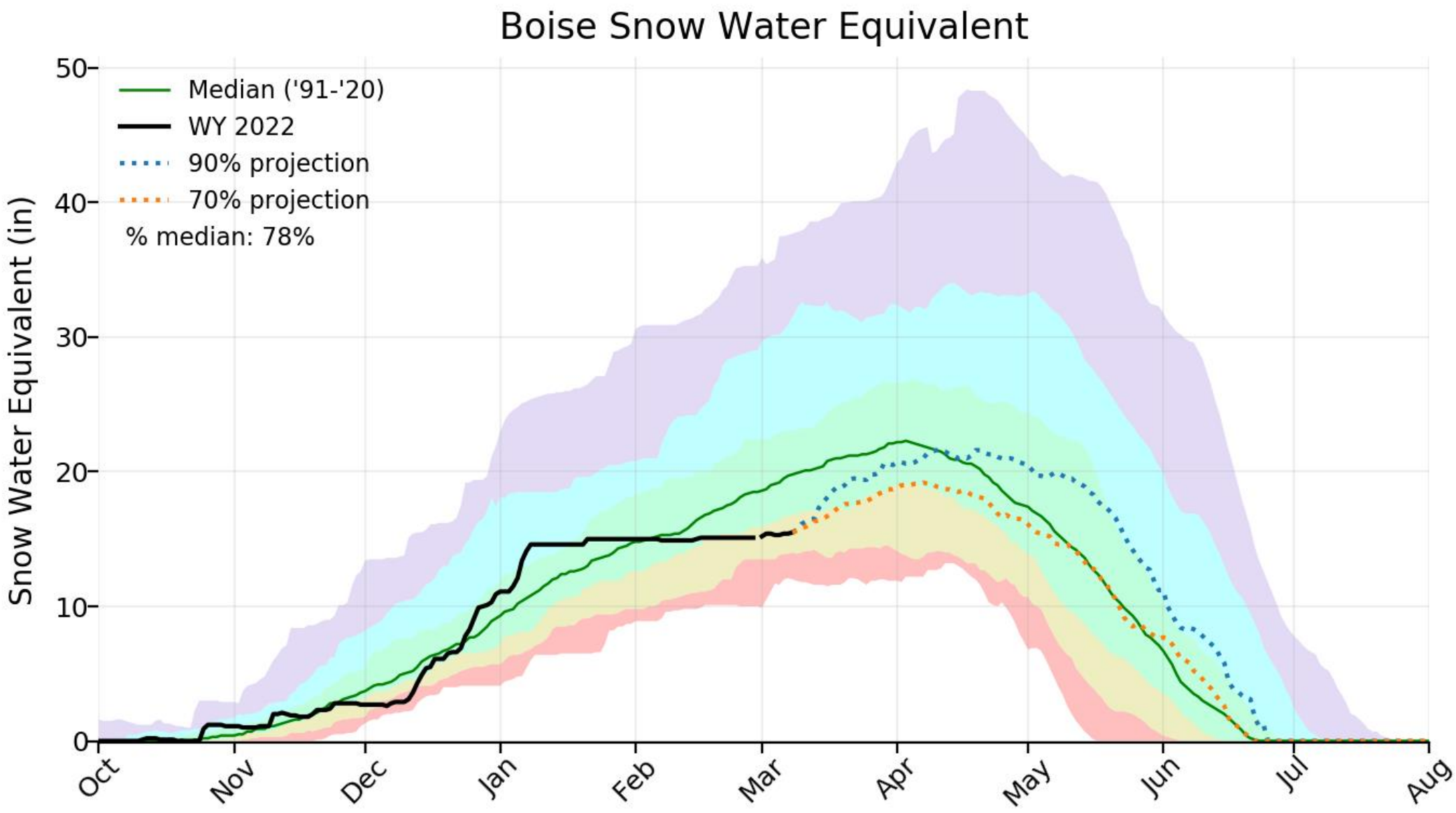

WestWide Drought Tracker, U Idaho/WRCC Data Source: PRISM (Prelim), created 5 MAR 2022

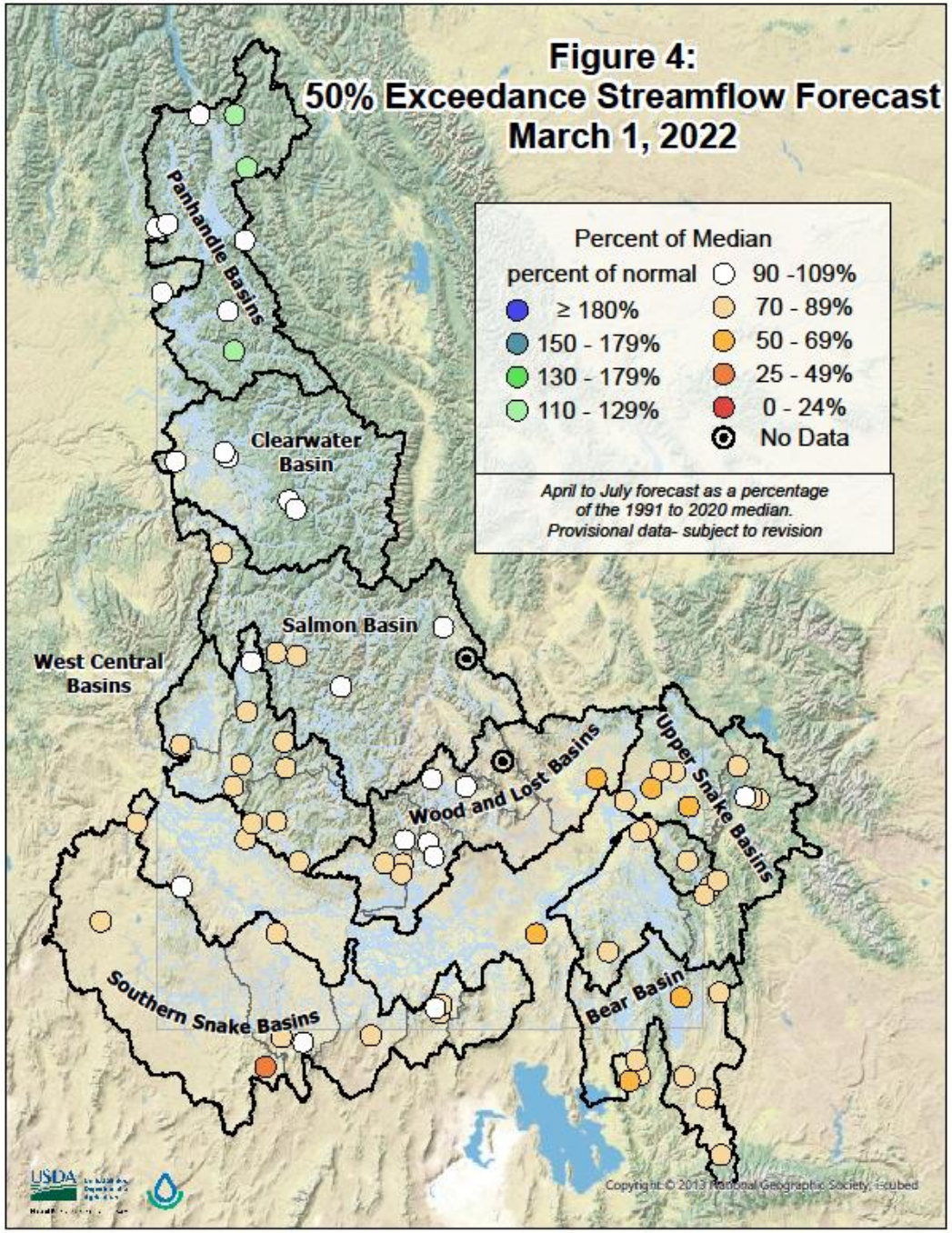

Clearwater Snow Water Equivalent
Median ('91-'20)
WY 2022
50% projection
30% projection
% median: 97%
Snow Water Equivalent (in)
0
10
20
30
40
50
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug


Big Wood Snow Water Equivalent
Median ('91-'20)
WY 2022
90% projection
70% projection
% median: 85%
Snow Water Equivalent (in)
0
5
10
15
20
25
30
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug


Big Lost Snow Water Equivalent
Median ('91-'20)
WY 2022
70% projection
50% projection
% median: 95%
Snow Water Equivalent (in)
0
5
10
15
20
25
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug


Salmon Falls Snow Water Equivalent
Median ('91-'20)
WY 2022
70% projection
50% projection
% median: 83%
Snow Water Equivalent (in)
0
10
20
30
40
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug

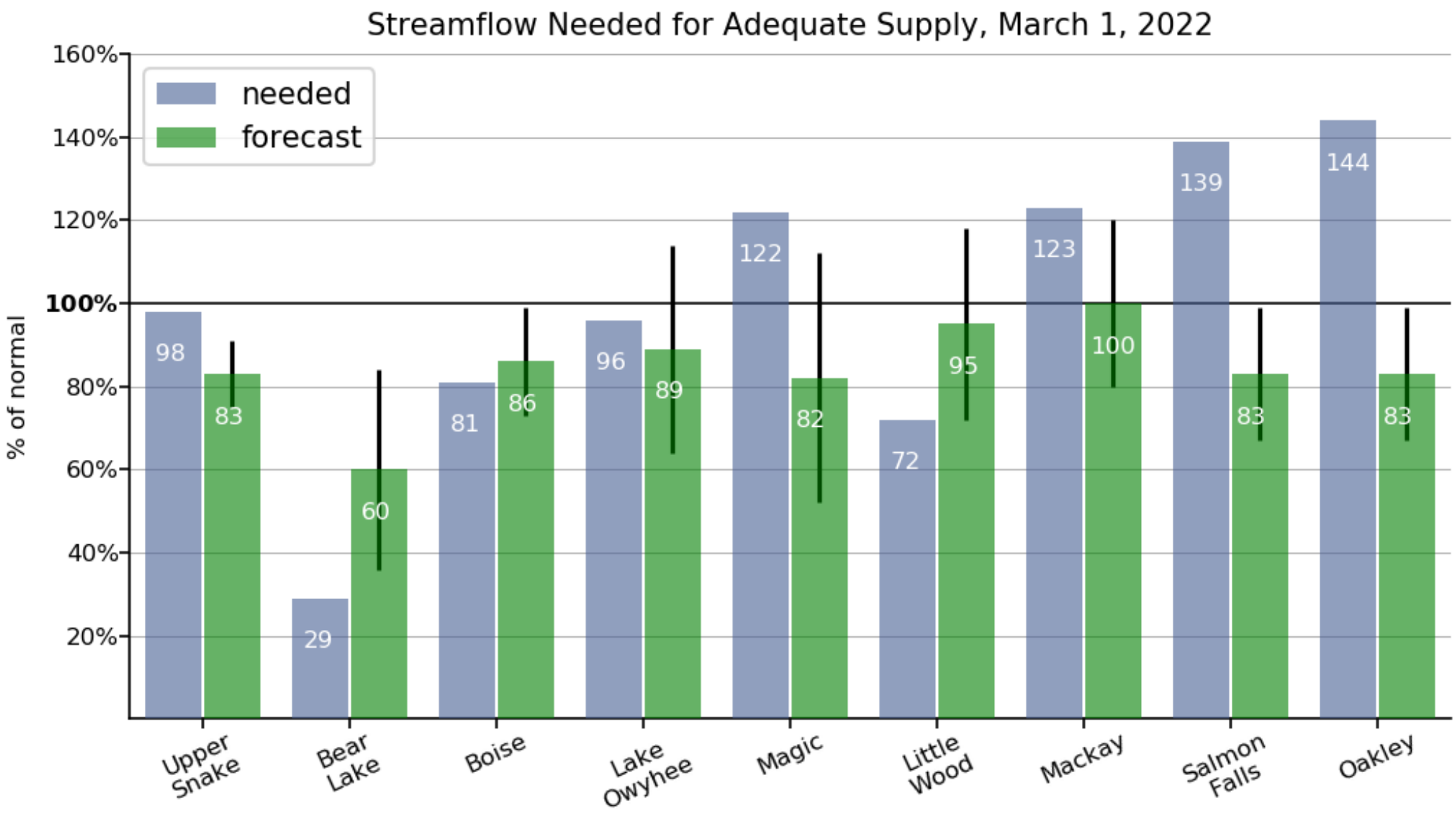

Boise Snow Water Equivalent
Median ('91-'20)
WY 2022
90% projection
70% projection
% median: 78%
Snow Water Equivalent (in)
0
10
20
30
40
50
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug




# Notable March 1 Median Streamflow Forecasts (April-July)

| | Median (%) | Average (%) | Volume (KAF) |
|---|---|---|---|
| Dworshak Inflow | 102 | 98 | 2410 |
| MF Salmon | 96 | 96 | 745 |
| Boise nr Boise | 85 | 78 | 965 |
| Big Wood bl Magic | 85 | 65 | 147 |
| Henrys Fork Rexburg | 75 | 69 | 905 |
| Snake R nr Heise | 83 | 79 | 2610 |
| Salmon Falls Ck | 83* | 70* | 53* |

*March – July forecast period


Streamflow Needed for Adequate Supply, March 1, 2022
needed
forecast
% of normal
160%
140%
120%
100%
80%
60%
40%
20%
98
83
29
60
81
86
96
89
122
82
72
95
123
100
139
83
144
83
Upper Snake
Bear Lake
Boise
Lake Owyhee
Magic
Little Wood
Mackay
Salmon Falls
Oakley

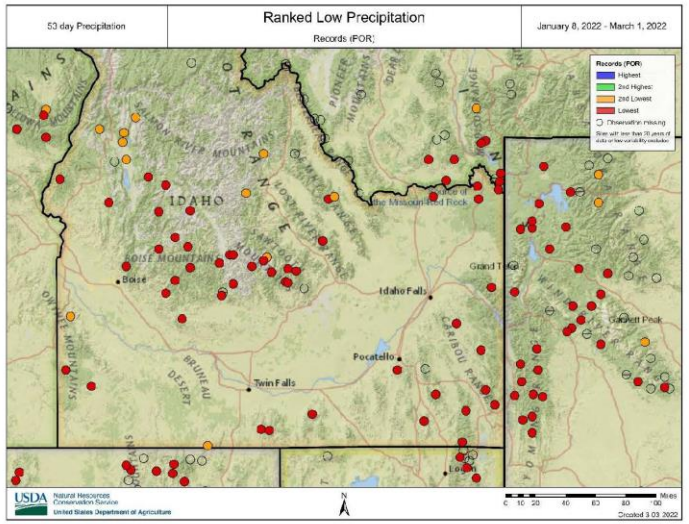
USDA

United States Department of Agriculture

*Natural Resources Conservation Service*

# Idaho Water Supply Outlook Report

## March 1, 2022




**Ranked (1st [red dot] and 2nd [orange dot]) Precipitation Low Records (SNOTEL) since January 8, 2022**

Last month, we highlighted what turned out to be the beginning of a prolonged dry spell. The above graphic displays the unusual nature of the dry spell, with many new SNOTEL records set for least precipitation between early January and March 1. In most instances, SNOTEL data goes back to the early 1980s, so many of these new records are from 40-plus years of observations, with the longest being 44 years.

On the bright side, the near-term weather forecast is calling for high elevation relief between now and about mid-month. As of this writing, an Arctic storm air mass couplet is building across Canada which is anticipated to bring much needed snowfall broadly across the West next week. Yet another Arctic air mass is forecast to hit the western U.S. near mid-month as well. As far as temperatures go, last month was on the cool side across the state, which was good, and the 10-day weather forecast calls for below normal temperatures. This is also beneficial to keep snow from melting early and receiving precipitation as snow versus as rainfall.

NRCS
Natural Resources Conservation Service

# Contact Information:


Idaho Snow Survey – NRCS

Mark Robertson

mark.robertson@usda.gov

208-387-5710