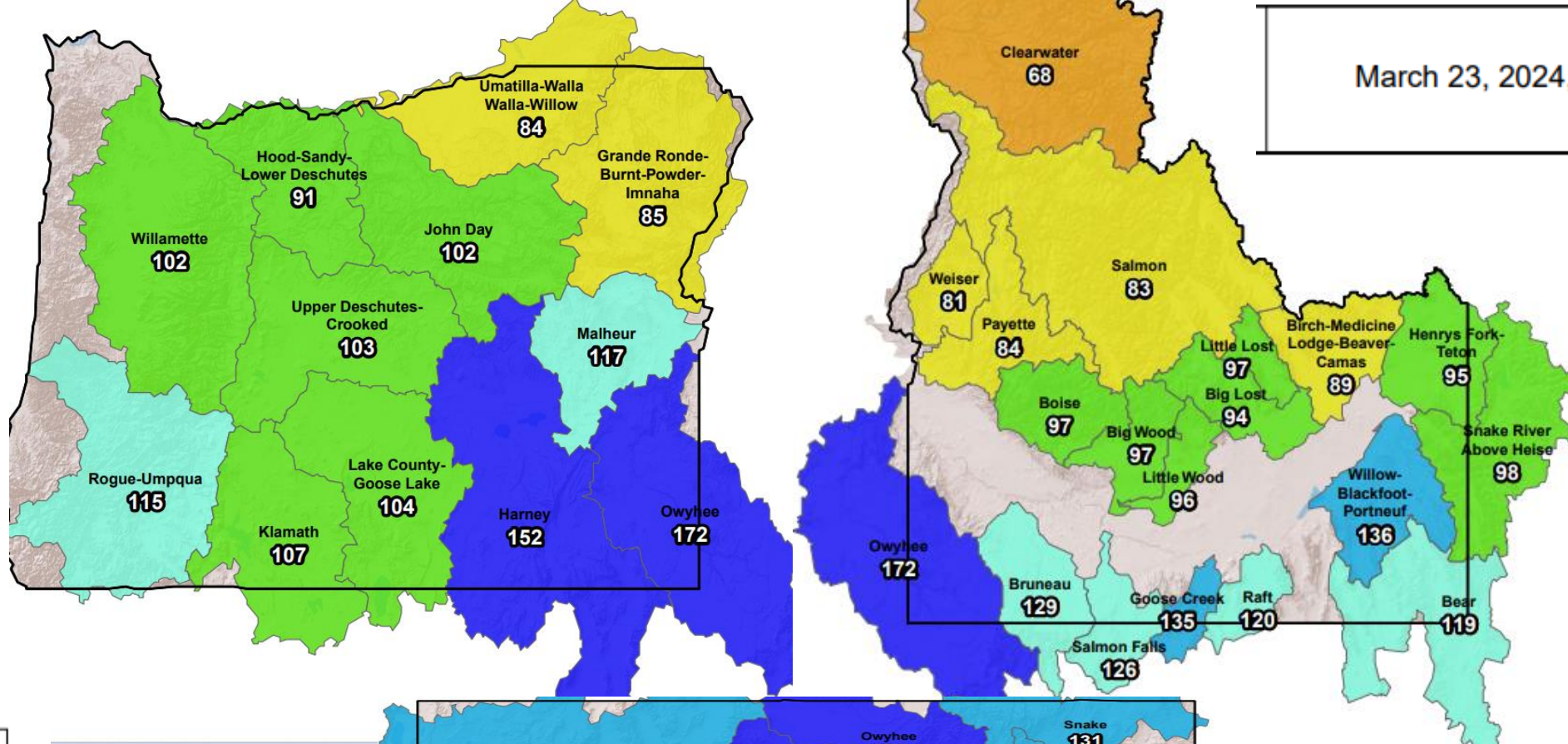
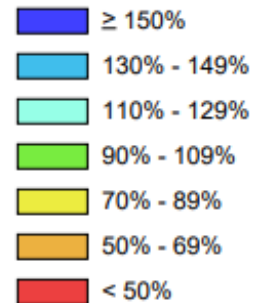


March 23, 2024, end of day



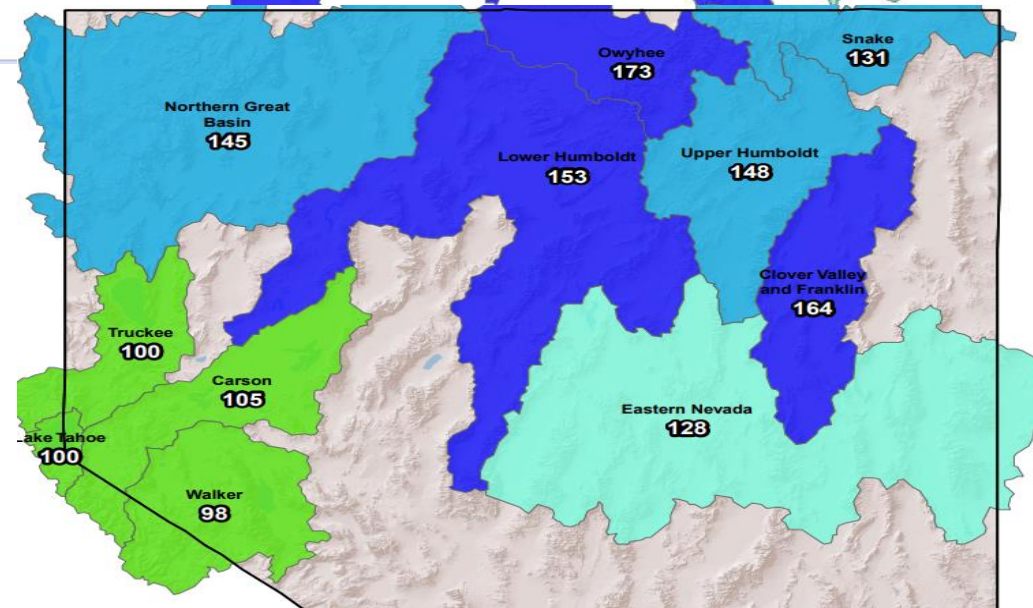
Percent NRCS  
1991-2020 Median



No basin value

Watershed Boundaries

State Watersheds



The Owyhee  
snow is 175%  
of 1991-2020  
Median

# SNOW WATER EQUIVALENT IN OWYHEE

Reset Range

Current as of 03/24/2024:  
% of Median - 172%  
% Median Peak - 136%  
Days Since Median Peak - 6  
Percentile - 91

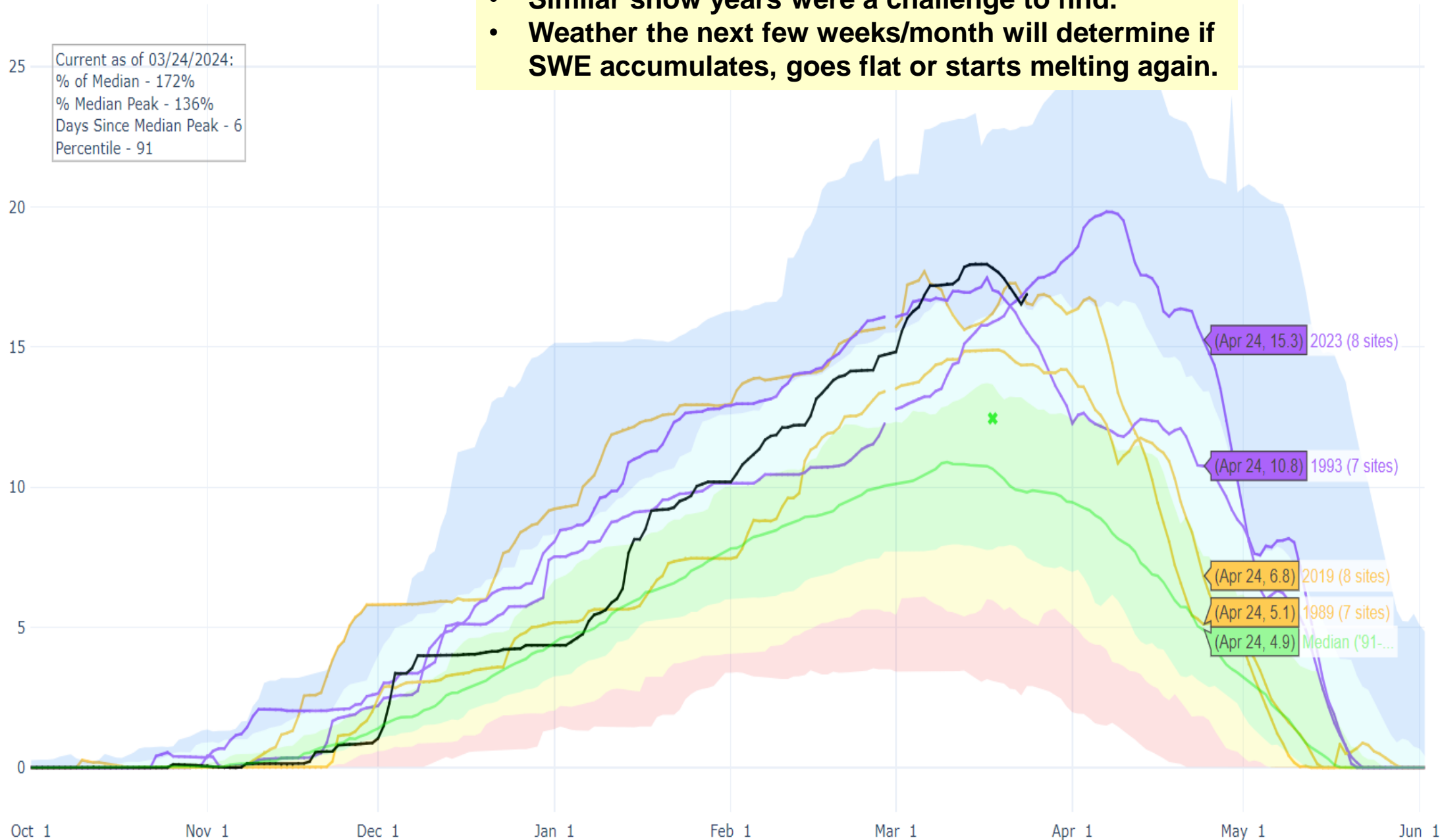
## Owyhee Basin snow index based on 7 or 8 sites.

- Similar snow years were a challenge to find.
- Weather the next few weeks/month will determine if SWE accumulates, goes flat or starts melting again.

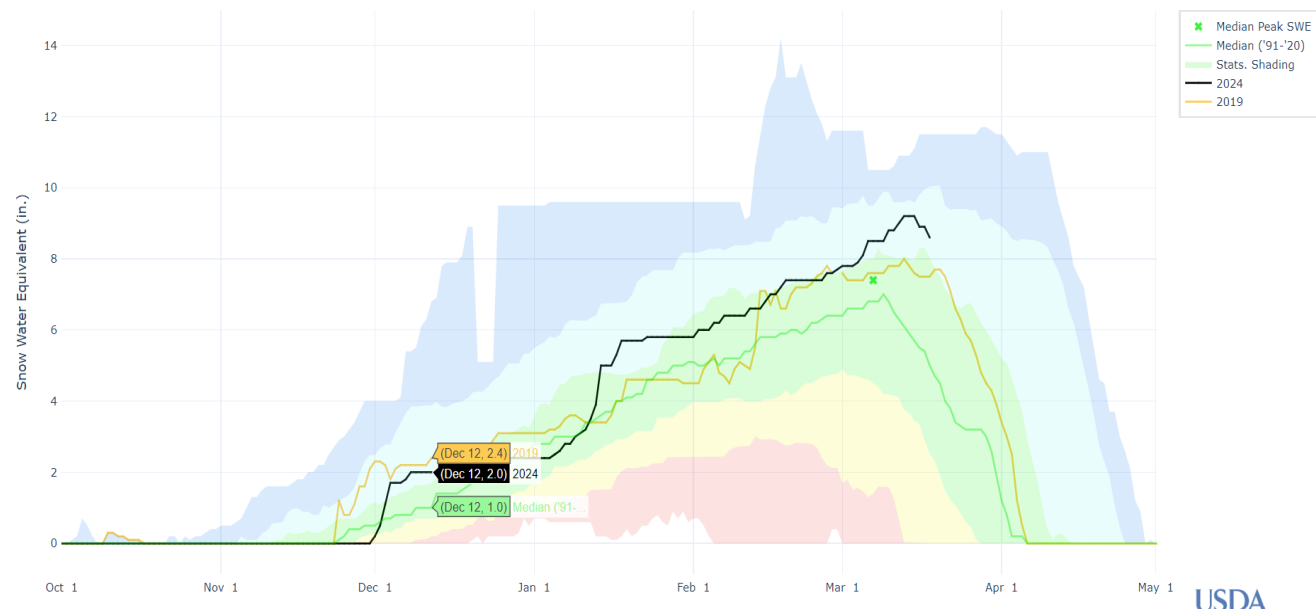
Station List

- \* Median Peak SWE
- Median ('91-'20)
- Stats. Shading
- 2024 (8 sites)
- 2023 (8 sites)
- 2019 (8 sites)
- 1993 (7 sites)
- 1989 (7 sites)

Snow Water Equivalent (in.)



MUD FLAT, ID (654) SNOW WATER EQUIVALENT

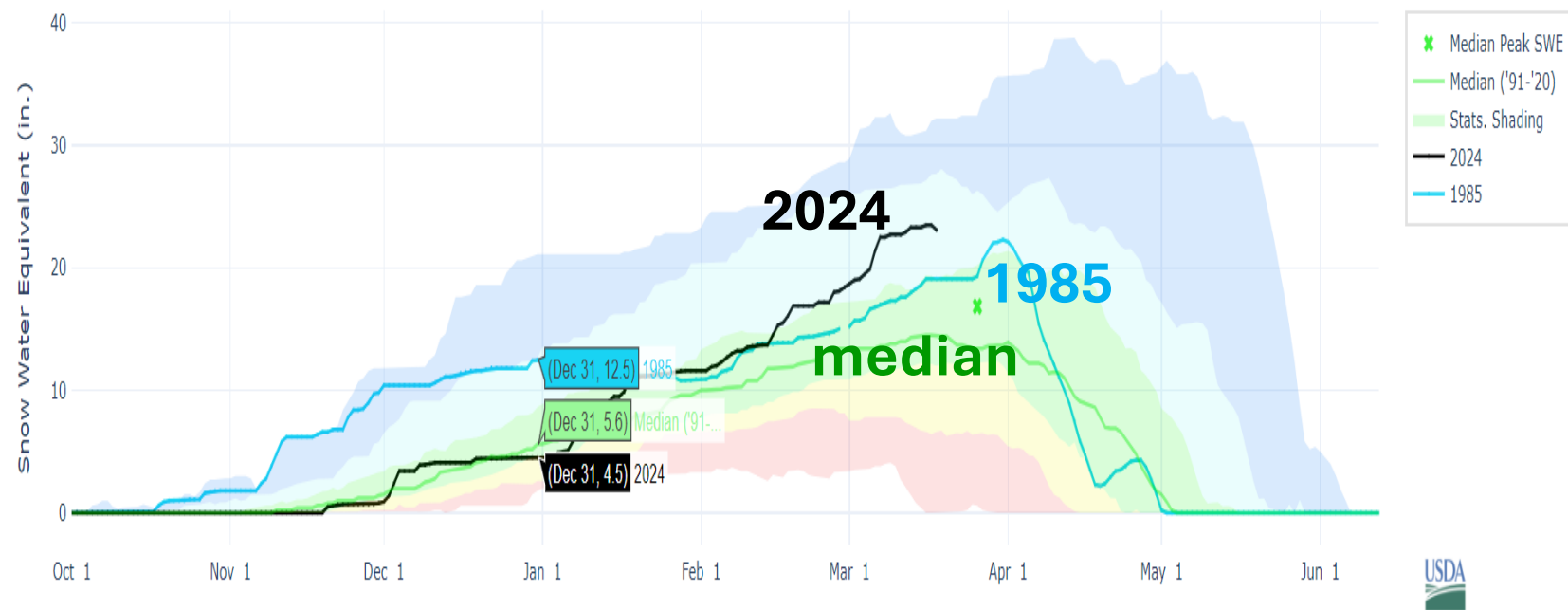


## From March 7, 2024 talk: Snow2Flow Summary based on Kara Ferguson analysis

Owyhee River snowmelt peak occurs when:

- Mud Flat is ~15% melted (canopy changed) and / or
- South Mnt is ~30% melted (BETTER to USE)

SOUTH MTN., ID (774) SNOW WATER EQUIVALENT



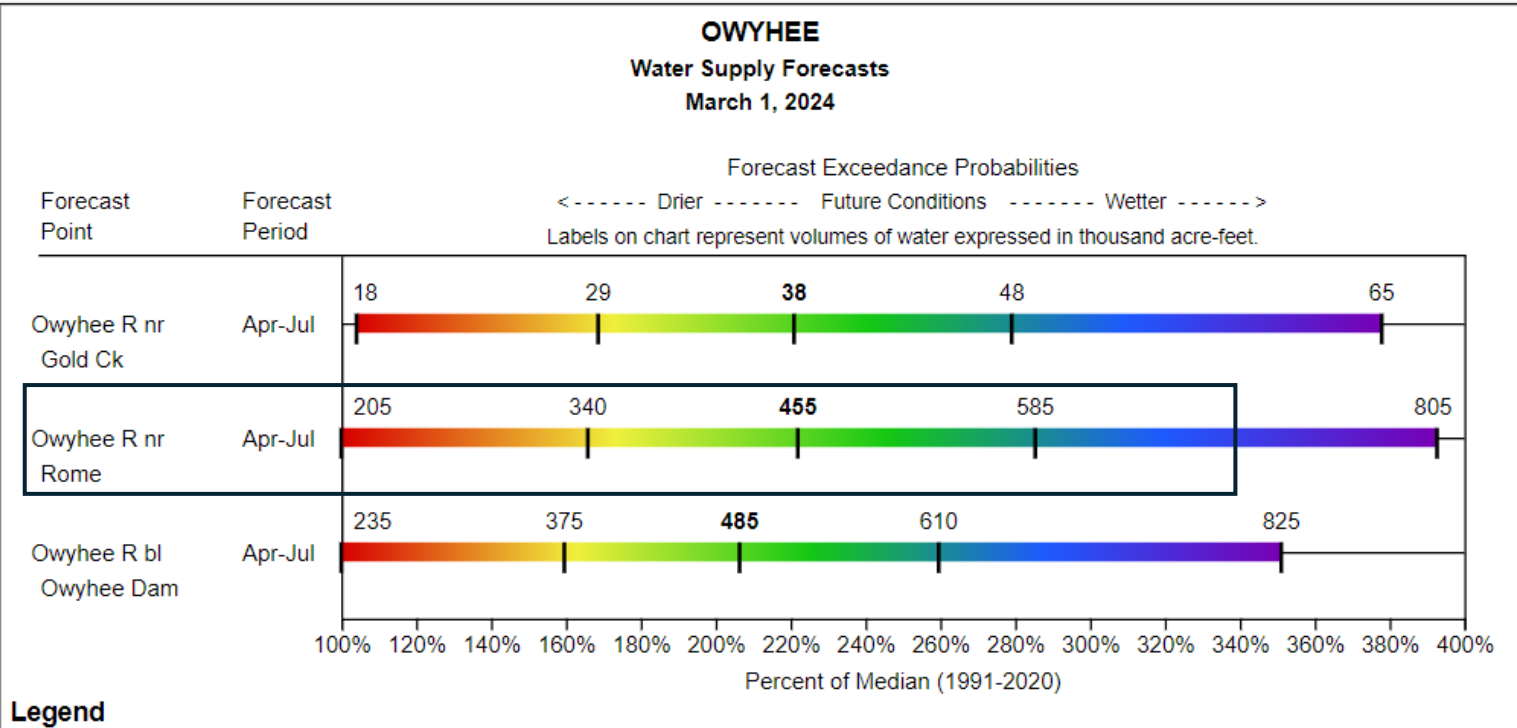
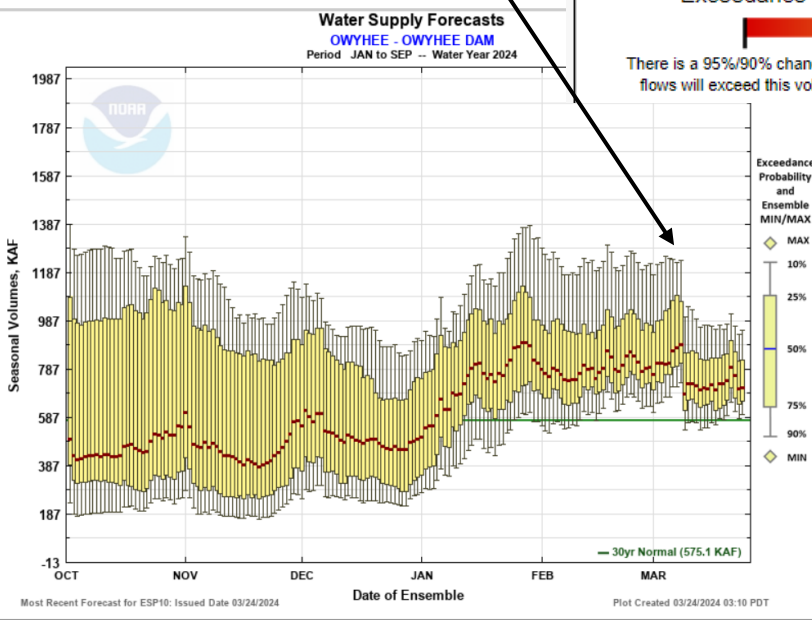


Unfortunately, there is no daily Owyhee River nr Rome streamflow forecast that I could find. If you have one, please share...

Mar 24 - NWS Owy Dam Apr-Jul forecast is 124% of avg, 382 KAF with a range of 273 to 612 KAF. They must have updated some of the data layers as a major drop in forecast occurred March 8.

OWYHEE - OWYHEE DAM (OWYO3) Forecasts for Water Year 2024					
Official Water Supply					
ESP with 10 Days QPF Ensemble: 2024-03-24 Issued: 2024-03-24					
Forecast Period	Forecasts Are in KAF				30 Year Average (1991-2020)
	90 %	50 %	% Average	10 %	
APR-SEP	307	417	124	655	336
APR-JUL	273	382	124	612	307
JAN-SEP	601	710	123	948	575
JAN-JUL	567	676	124	905	547
OCT-SEP	656	766	120	1004	641
Experimental Water Supply					
HEFS with 15 days EQPF Ensemble: 2024-03-24 Issued: 2024-03-24					
APR-SEP	304	439	131	678	336
APR-JUL	274	406	132	634	307
JAN-SEP	588	744	129	979	575
JAN-JUL	558	712	130	935	547
OCT-SEP	644	800	125	1034	641
Reference					
ESP with 0 Days QPF Ensemble: 2024-03-24 Issued: 2024-03-24					
APR-SEP	288	436	130	696	336
APR-JUL	259	401	130	652	307
JAN-SEP	567	725	126	997	575
JAN-JUL	538	694	127	953	547
OCT-SEP	622	781	122	1052	641

Move the mouse over the desired "Forecast Period" to display a graph.



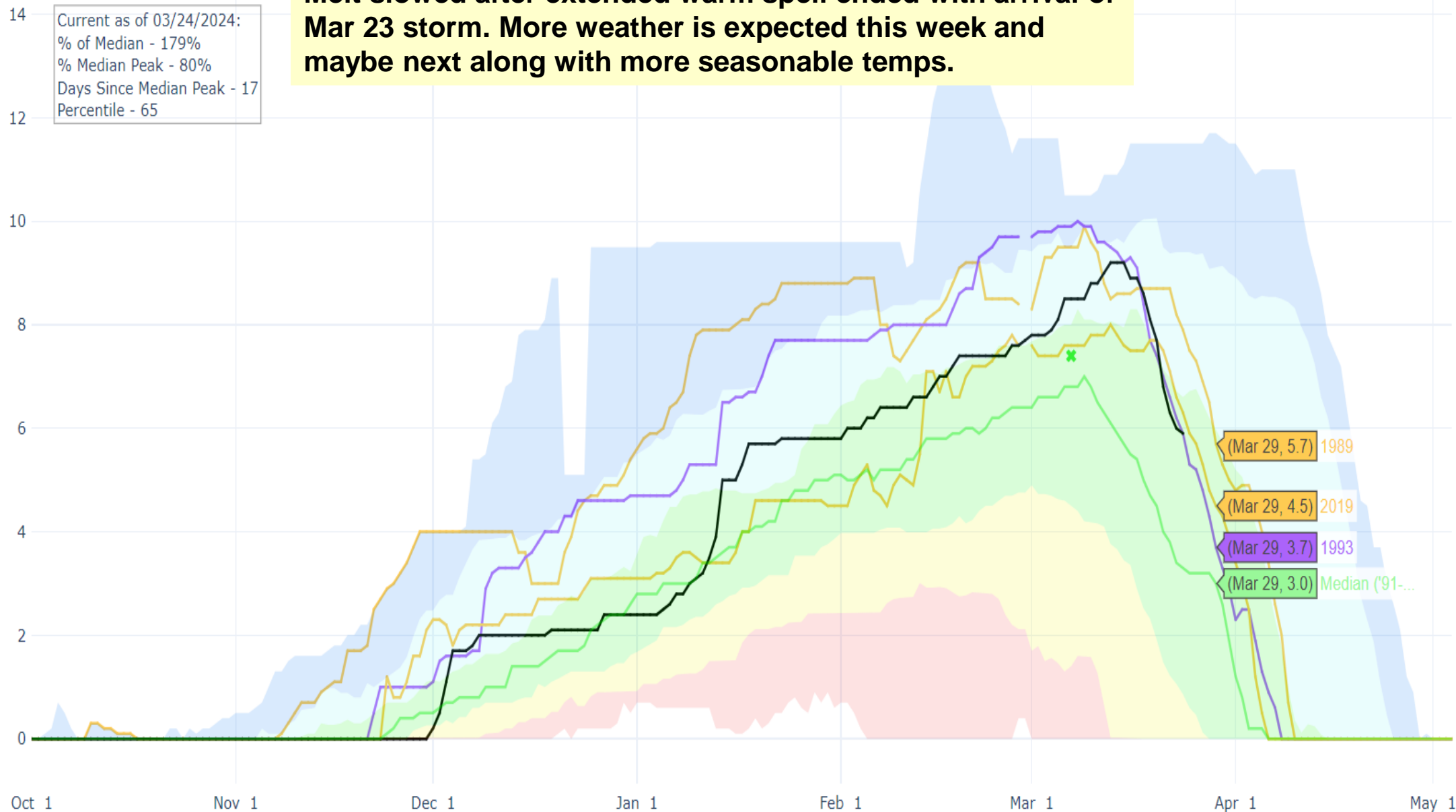
Mar 1 – NRCS Owy R nr Rome Apr-Jul forecast was 163% of avg, 455 KAF with a range of 340 to 585 KAF. With near normal March precip so far, lets assume these volumes are still valid.

**Mud Flat, elevation 5730 ft, Mud Flat lost 1/3 of its SWE. Melt slowed after extended warm spell ended with arrival of Mar 23 storm. More weather is expected this week and maybe next along with more seasonable temps.**

Current as of 03/24/2024:  
% of Median - 179%  
% Median Peak - 80%  
Days Since Median Peak - 17  
Percentile - 65

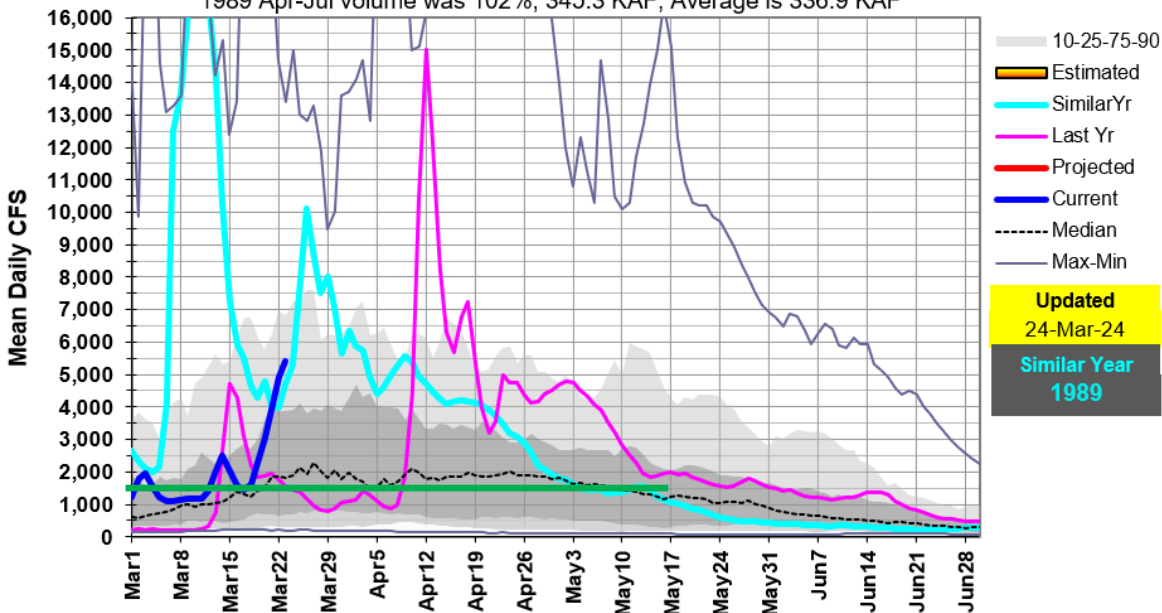
✱ Median Peak SWE  
— Median ('91-'20)  
Stats. Shading  
— 2024  
— 2019  
— 1993  
— 1989

Snow Water Equivalent (in.)



### 13181000: Owyhee R near Rome, OR

1989 Apr-Jul volume was 102%, 345.3 KAF, Average is 336.9 KAF



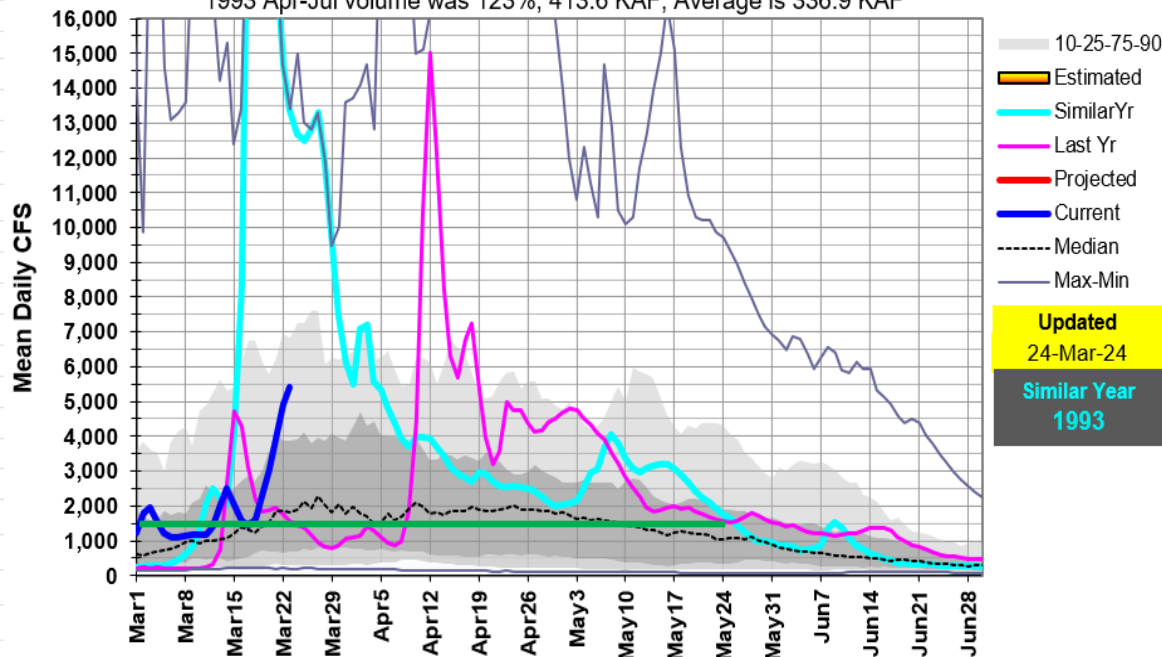
**Runoff for similar SWE years as Mud Flat.**

**Based on these 3 years that had Apr-Jul runoff volumes of 345, 413 and 527 KAF, flows remained above 1500 cfs into mid-May even ignoring the wet late May bonus event in [2019 below](#).**

**NRCS volume forecast was for 455 KAF.**

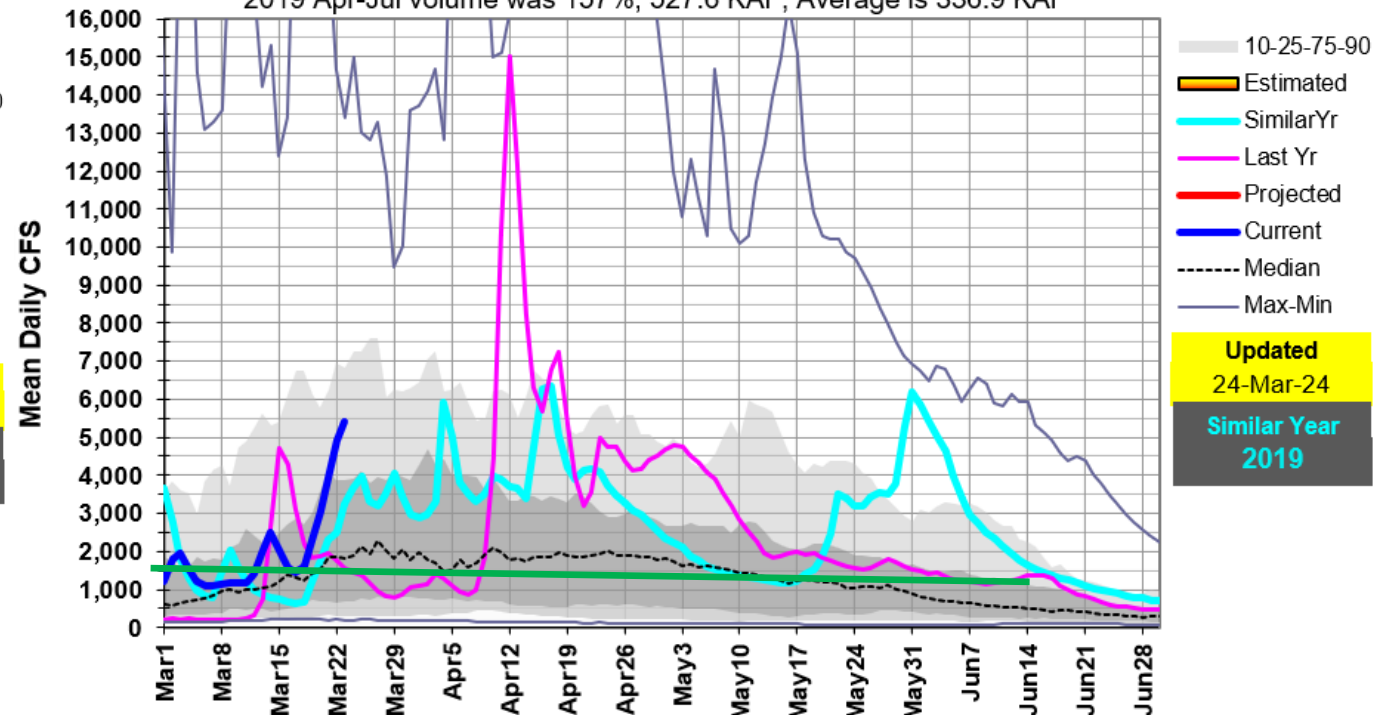
### 13181000: Owyhee R near Rome, OR

1993 Apr-Jul volume was 123%, 413.6 KAF, Average is 336.9 KAF



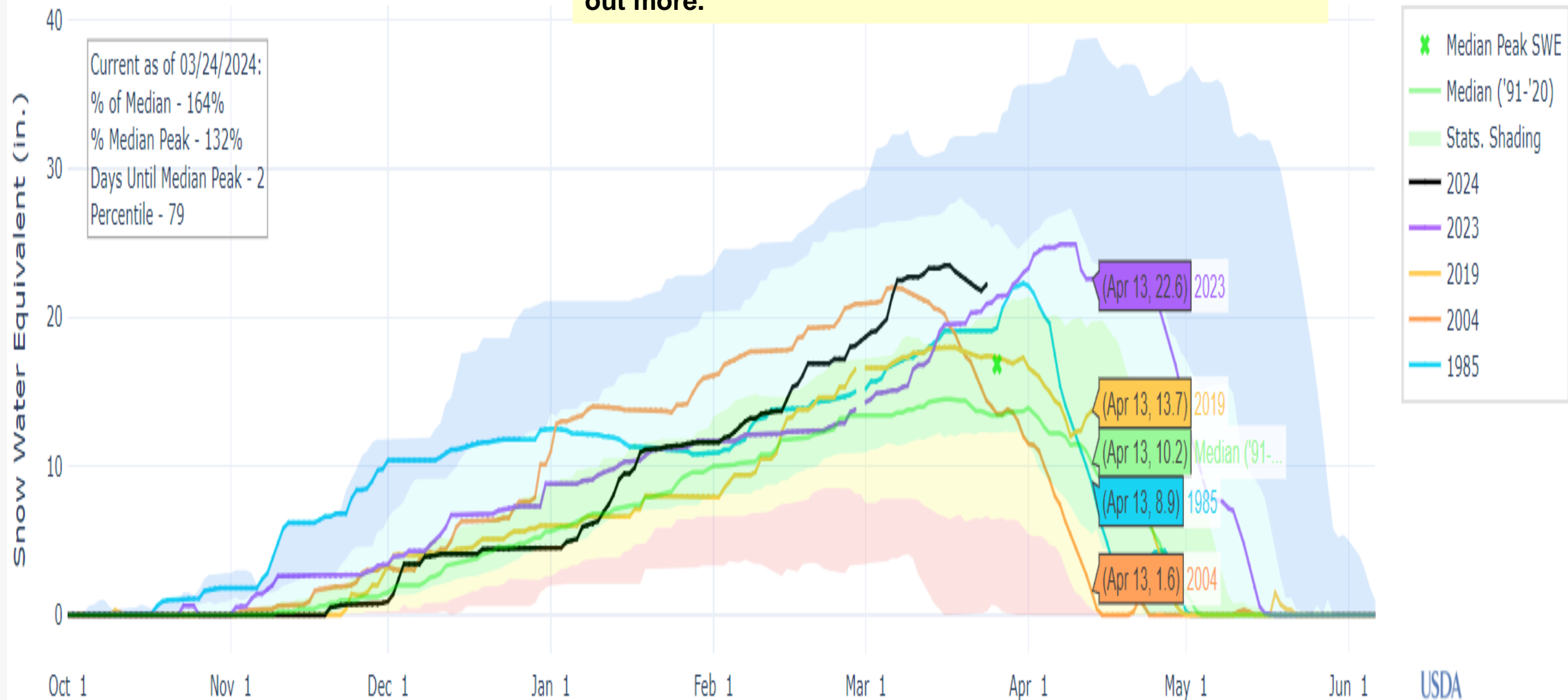
### 13181000: Owyhee R near Rome, OR

2019 Apr-Jul volume was 157%, 527.6 KAF, Average is 336.9 KAF



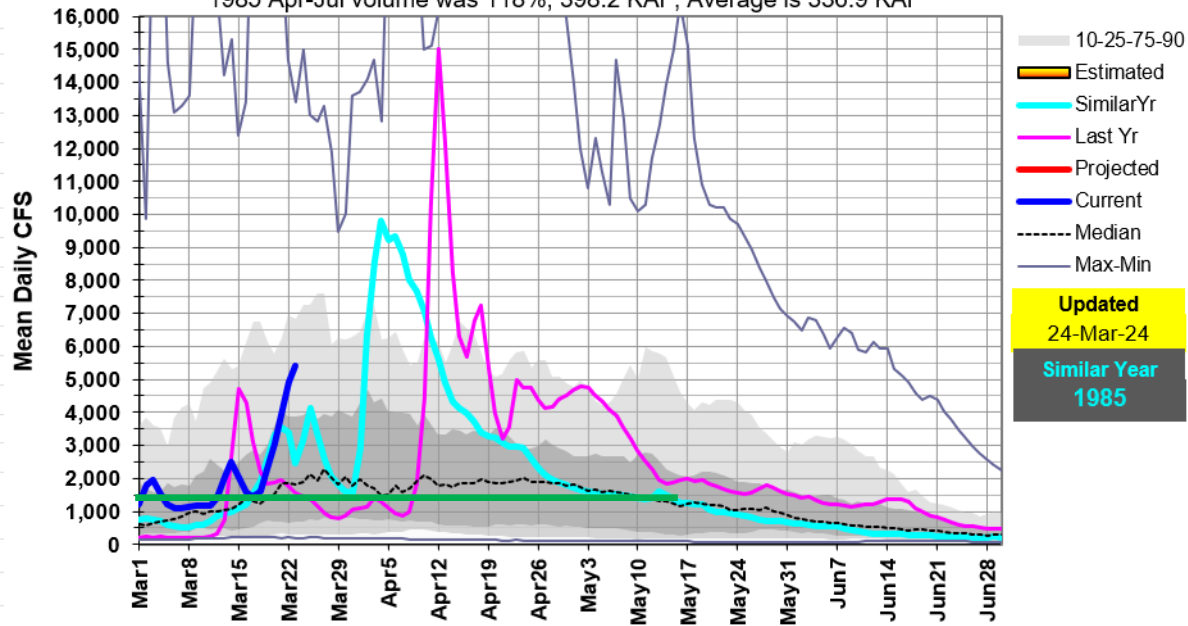
# SOUTH MTN., ID (774) SNOW WATER EQUIVALENT

South Mnt., elevation 6400 ft, lost a bit of SWE after warm spell and gained a tad with return of storm and freezing temps Mar 23. More weather expected this week and along with more seasonable temps that may delay, or push melt out more.



### 13181000: Owyhee R near Rome, OR

1985 Apr-Jul volume was 118%, 398.2 KAF, Average is 336.9 KAF



Runoff for similar SWE years as South Mnt..

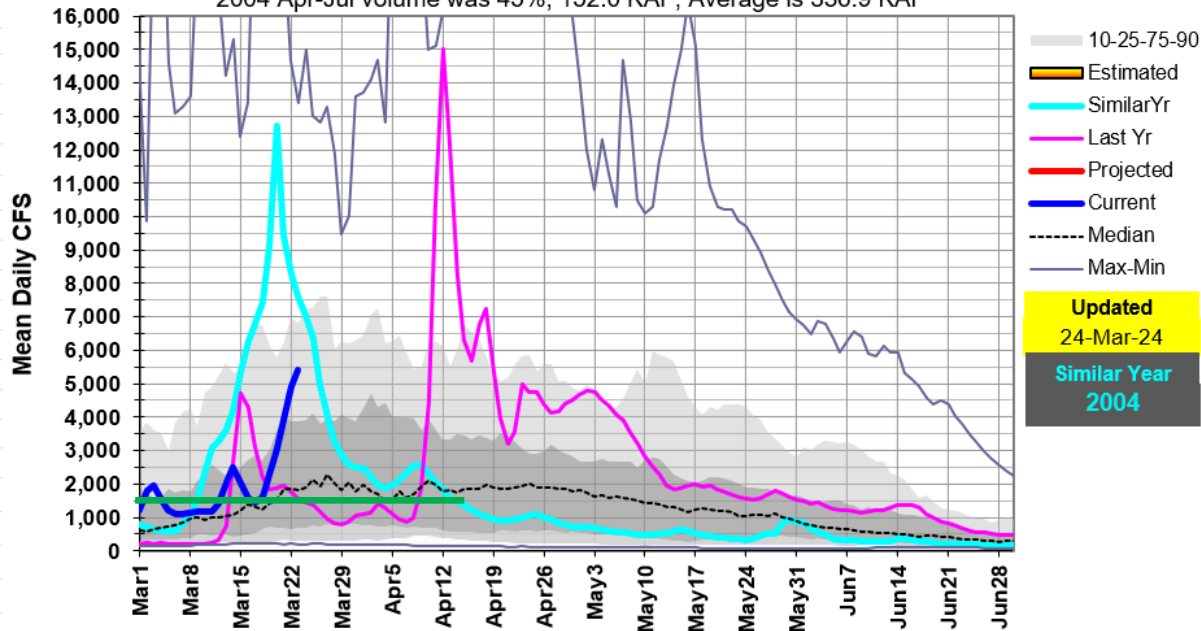
Based on these 3 years that had Apr-Jul runoff volumes of 152, 249 and 398 KAF, flows dipped below 1500 cfs in mid or late April.

NRCS forecast volume was for 455 KAF.

Examples show high variability in this high desert river.

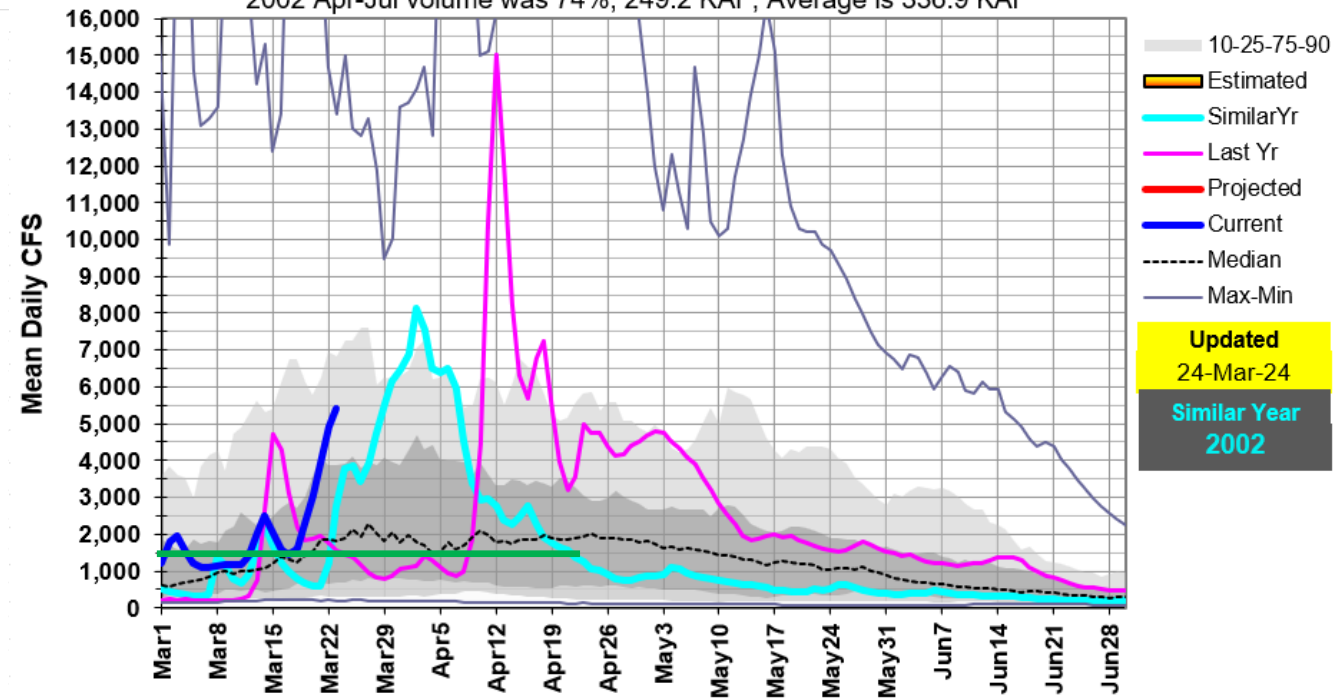
### 13181000: Owyhee R near Rome, OR

2004 Apr-Jul volume was 45%, 152.0 KAF, Average is 336.9 KAF



### 13181000: Owyhee R near Rome, OR

2002 Apr-Jul volume was 74%, 249.2 KAF, Average is 336.9 KAF





# PRECIPITATION ACCUMULATION IN OWYHEE

Looking to see if total precip and/or spring precip made a difference in these similar snow years, nothing really stands out.

**2019** and **1993** had nearly the same precip as this year, **2024**.

Current as of 03/24/2024:  
% of Median - 136%  
% of WY Median - 83%  
Days Until End of WY - 190  
Percentile - 79

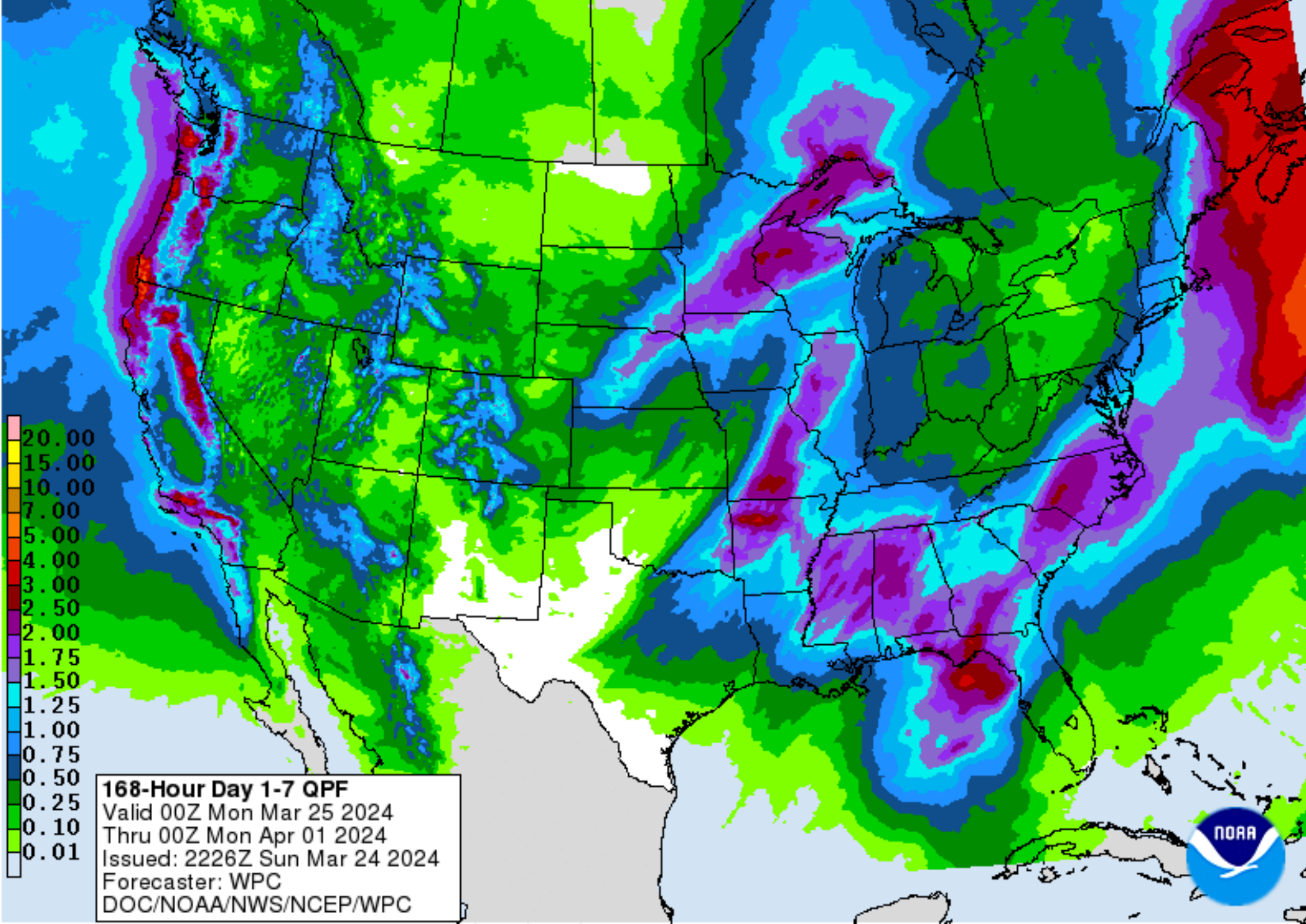
Precipitation Accumulation (in.)

40  
35  
30  
25  
20  
15  
10  
5  
0

Oct 1 Nov 1 Dec 1 Jan 1 Feb 1 Mar 1 Apr 1 May 1 Jun 1 Jul 1

- Median ('91-'20)
- Stats. Shading
- 2024 (9 sites)
- 2019 (9 sites)
- 2004 (8 sites)
- 2002 (8 sites)
- 1993 (8 sites)
- 1989 (8 sites)
- 1985 (8 sites)

(Jun 6, 28.9) 2019 (9 sites)  
(Jun 6, 28.3) 1993 (8 sites)  
(Jun 6, 25.6) 1989 (8 sites)  
(Jun 6, 22.5) 2004 (8 sites)  
(Jun 6, 22.0) Median ('91-'20)  
(Jun 6, 20.7) 2002 (8 sites)  
(Jun 6, 20.1) 1985 (8 sites)



Future weather, precip & temp, will determine Owyhee's reaming runoff season.

7-day total precip Mar25-Apr1 doesn't show much falling.

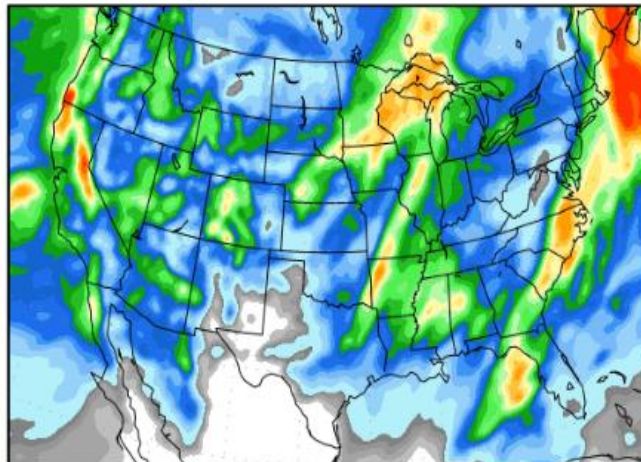
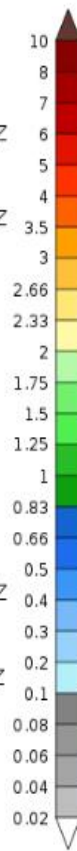
If persistence is the forecast, what you see is what you get until the weather pattern changes, then expect multiple flow peaks as temps rise and fall.



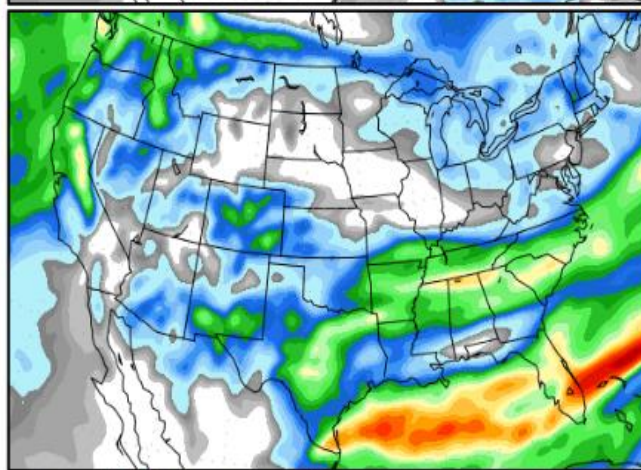
## Precipitation Forecasts

Precipitation (in)  
during the period:

Sun, 24 MAR 2024 at 12Z  
-to-  
Mon, 01 APR 2024 at 12Z

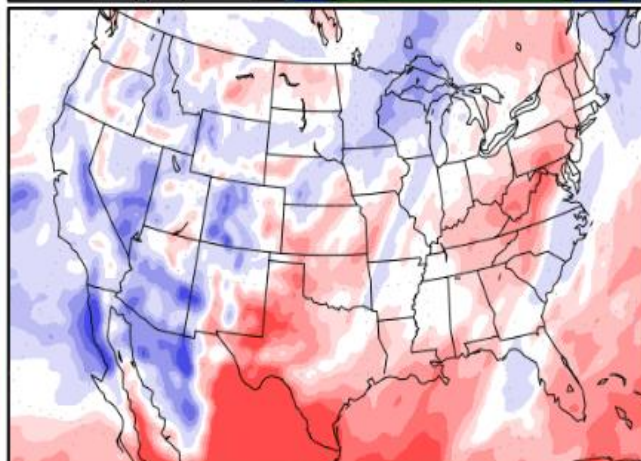
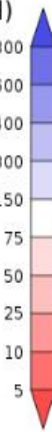


Mon, 01 APR 2024 at 12Z  
-to-  
Tue, 09 APR 2024 at 12Z



Precipitation (% of normal)  
during the first period:

Sun, 24 MAR 2024 at 12Z  
-to-  
Mon, 01 APR 2024 at 12Z



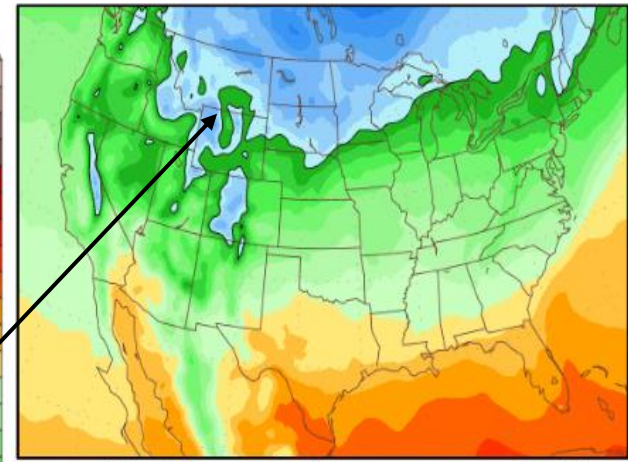
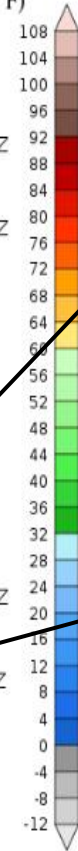
These 7-day precip & temp forecasts doesn't show much precip for the next 14 days but does show warming temps Apr 1-9 compared to week before.

Look Right

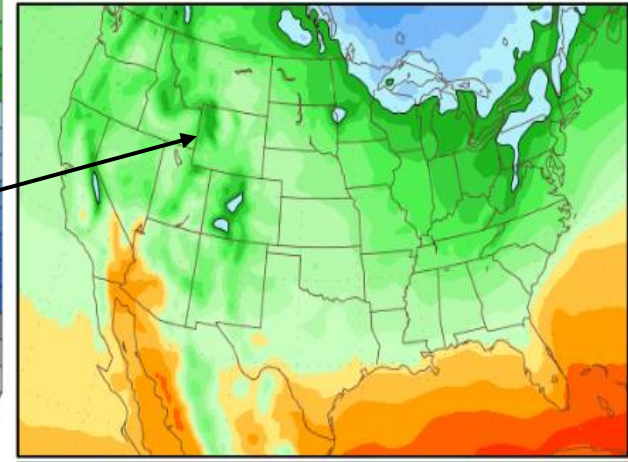
## Temperature Forecasts

Mean Surface Temperature (°F)  
during the period:

Sun, 24 MAR 2024 at 12Z  
-to-  
Mon, 01 APR 2024 at 12Z

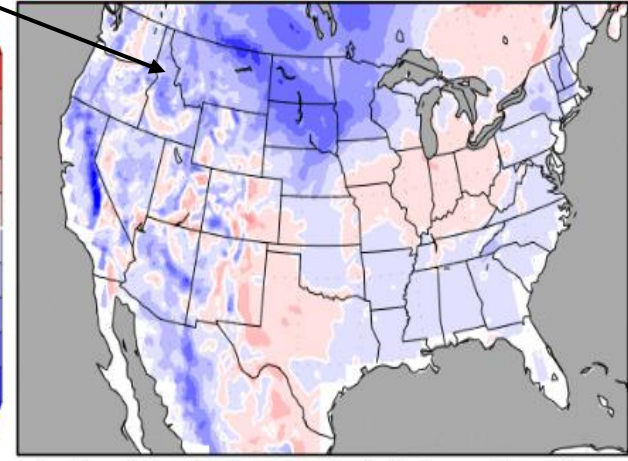


Mon, 01 APR 2024 at 12Z  
-to-  
Tue, 09 APR 2024 at 12Z

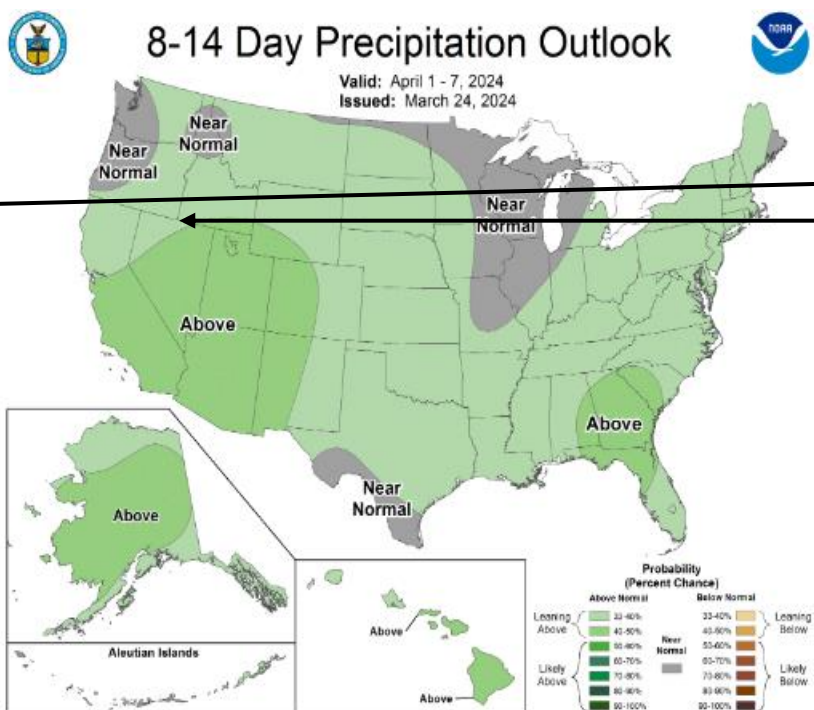
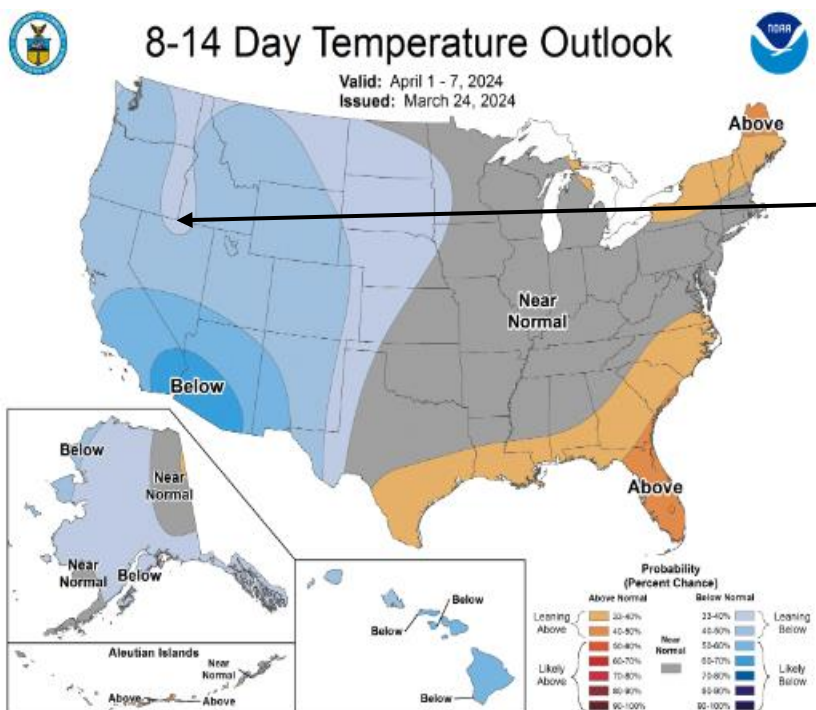
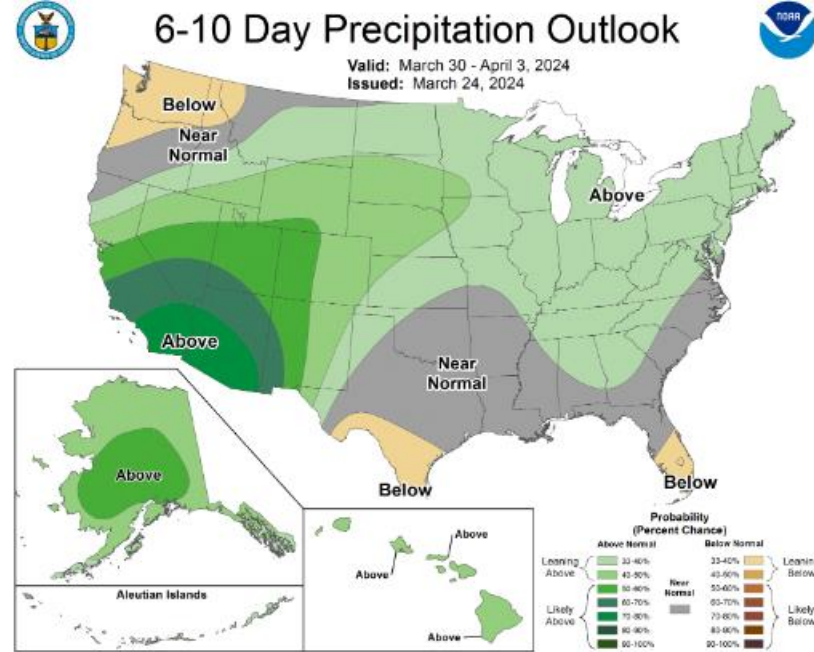
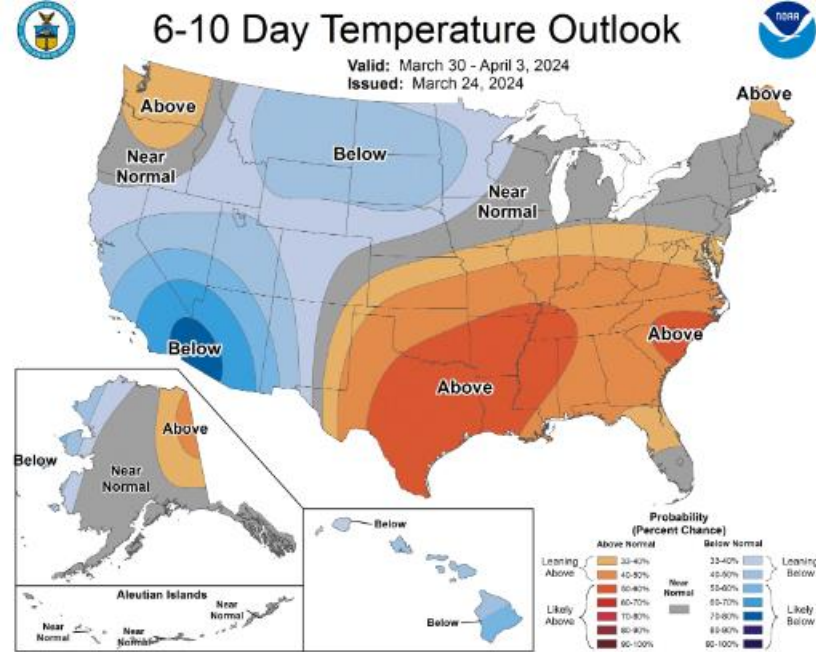


Temperature Anomaly  
during the first period:

Sun, 24 MAR 2024 at 12Z  
-to-  
Mon, 01 APR 2024 at 12Z







While NWS CPC 6-10 and 8-14 day Outlooks shows a little better chance for cooler & wetter conditions especially for Apr 1-7.

Perhaps models on previous slide hasn't caught up to these early Apr Outlooks yet.

Look Left

Time will tell !  
Keep watching different weather outlooks to see what's on the horizon.



Late last night, the GFS models started showing what the Buoy pop saw a few days ago – potential for storms Apr 3 & 7. GFS runs were run twice for Total Snow and Rain to get a better picture of storm potential. We'll learn a lot about the reaming snow season and the start of Idaho's runoff season in the next few weeks.

Tropical Tidbits

Support TT

Current Storms

Aircraft Recon

Satellite Imagery

Forecast Models

Analysis Tools

About

GFS

Global

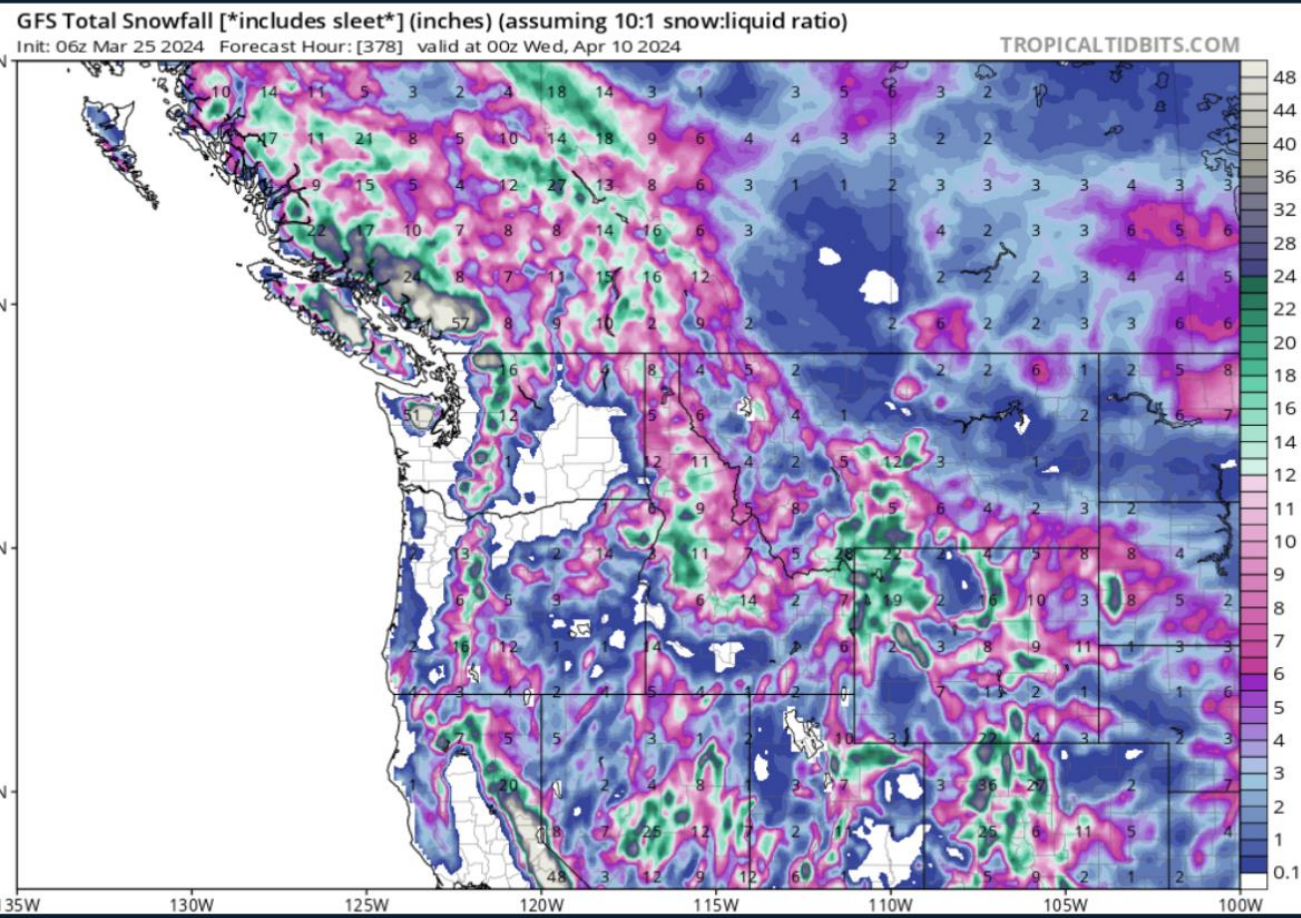
Ensemble

Hurricane

Mesoscale

Climate

RUN TIME: 06Z MAR 25



Tropical Tidbits

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Current Storms

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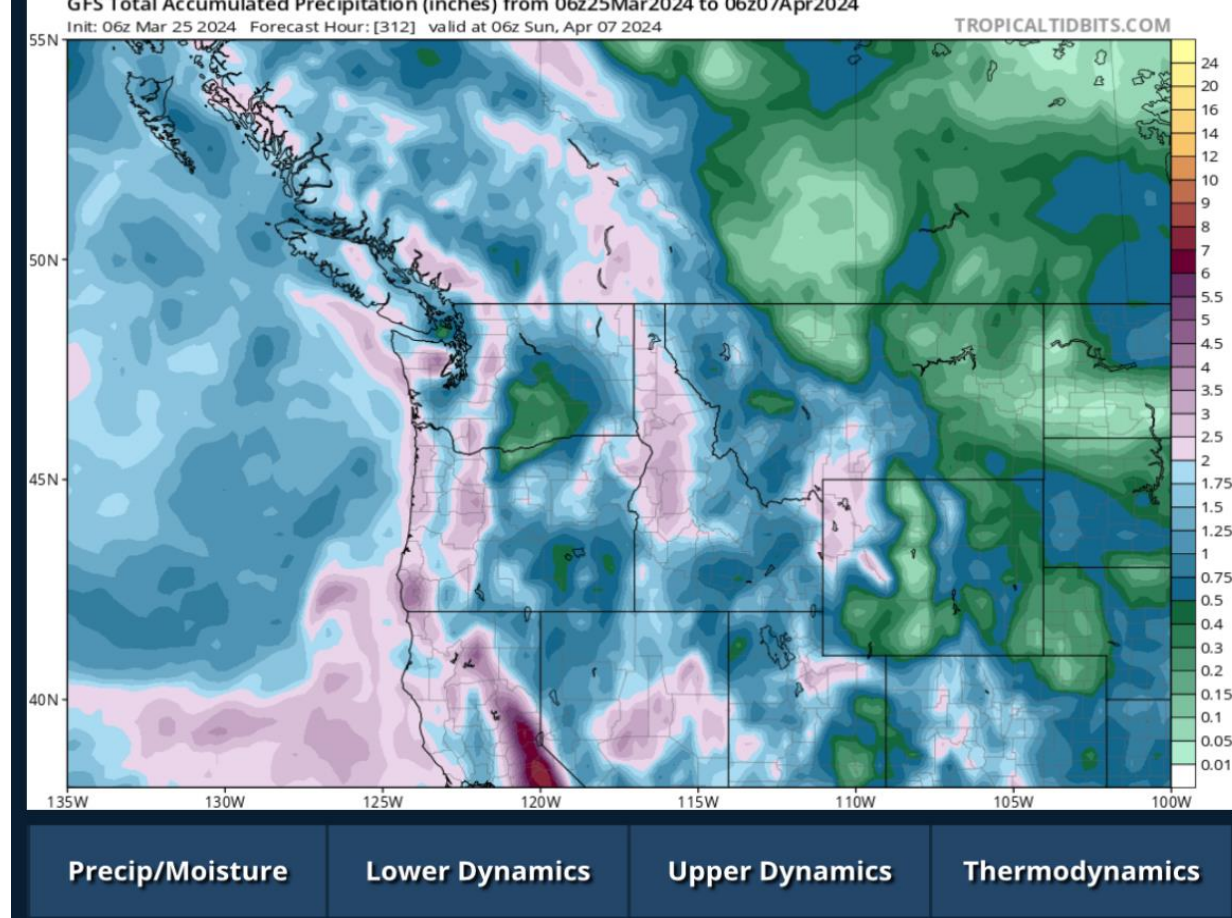
Ensemble

Hurricane

Mesoscale

Climate

RUN TIME: 06Z MAR 25



Owy is dropping slowly with cooler temps. We'll see what these storms bring to this partially melted out basin. Time will tell !

