WY Conditions & Outlooks:

Precipitation, Temperatures, Drought, Floods, & Everything In-between

January 19, 2023

Presentation Outline

- **Current Conditions:** Overview
  - SWE
  - Streamflow
- **Outlooks:** Temperature & Precipitation
- **Resource of the Month**
  - Where to find snowpack information
- **Questions**

Current Conditions

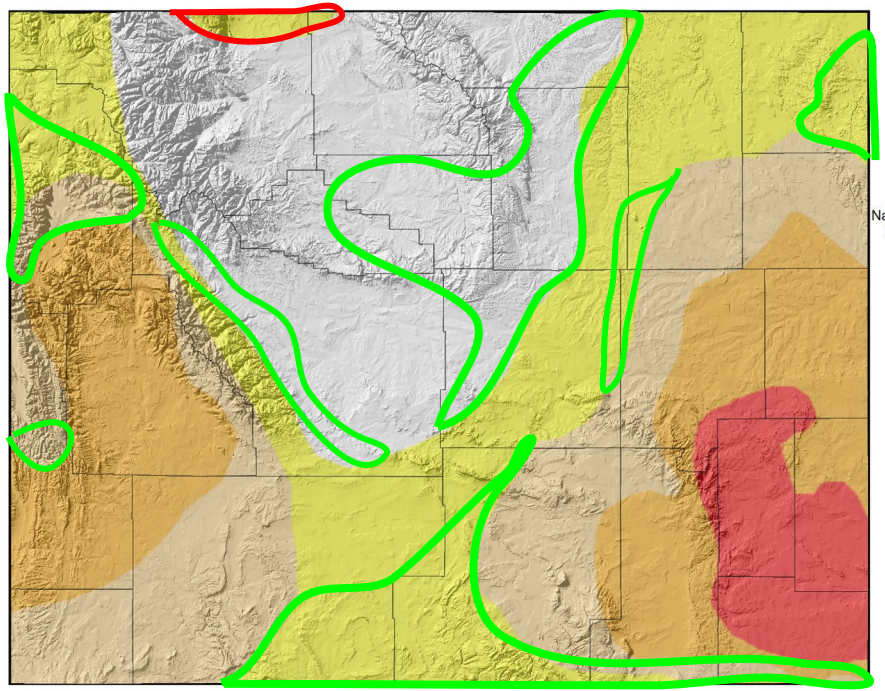
US Drought Monitor for January 17, 2023

(Released Thursday, January 19, 2023)

Valid 8 a.m. EDT

Drought Level	Percentile
None	>30
D0 (Abnormally Dry)	21 to 30
D1 (Moderate Drought)	11 to 20
D2 (Severe Drought)	6 to 10
D3 (Extreme Drought)	3 to 5
D4 (Exceptional Drought)	0 to 2

US Drought Monitor for 17 Jan 2023



Map Created by:
National Drought Mitigation Center
https://droughtmonitor.unl.edu

Map Layout Prepared by:
Wyoming State Climate Office
http://www.wrds.uwyo.edu

The U.S. Drought Monitor, is a weekly map of drought conditions produced jointly by the National Oceanic and Atmospheric Administration, the U.S. Department of Agriculture, and the National Drought Mitigation Center (NDMC) at the University of Nebraska-Lincoln. The U.S. Drought Monitor website is hosted and maintained by the NDMC. http://droughtmonitor.unl.edu

Map Layout Created 19 Jan 2023 http:/www.wrds.uwyo.edu

https://youtu.be/45MQ1GB-uTc

Improvements since the last webinar. Recent precipitation in the form of snow has resulted in some improvements across several areas of Wyoming. One small degradation in northeast Park County.

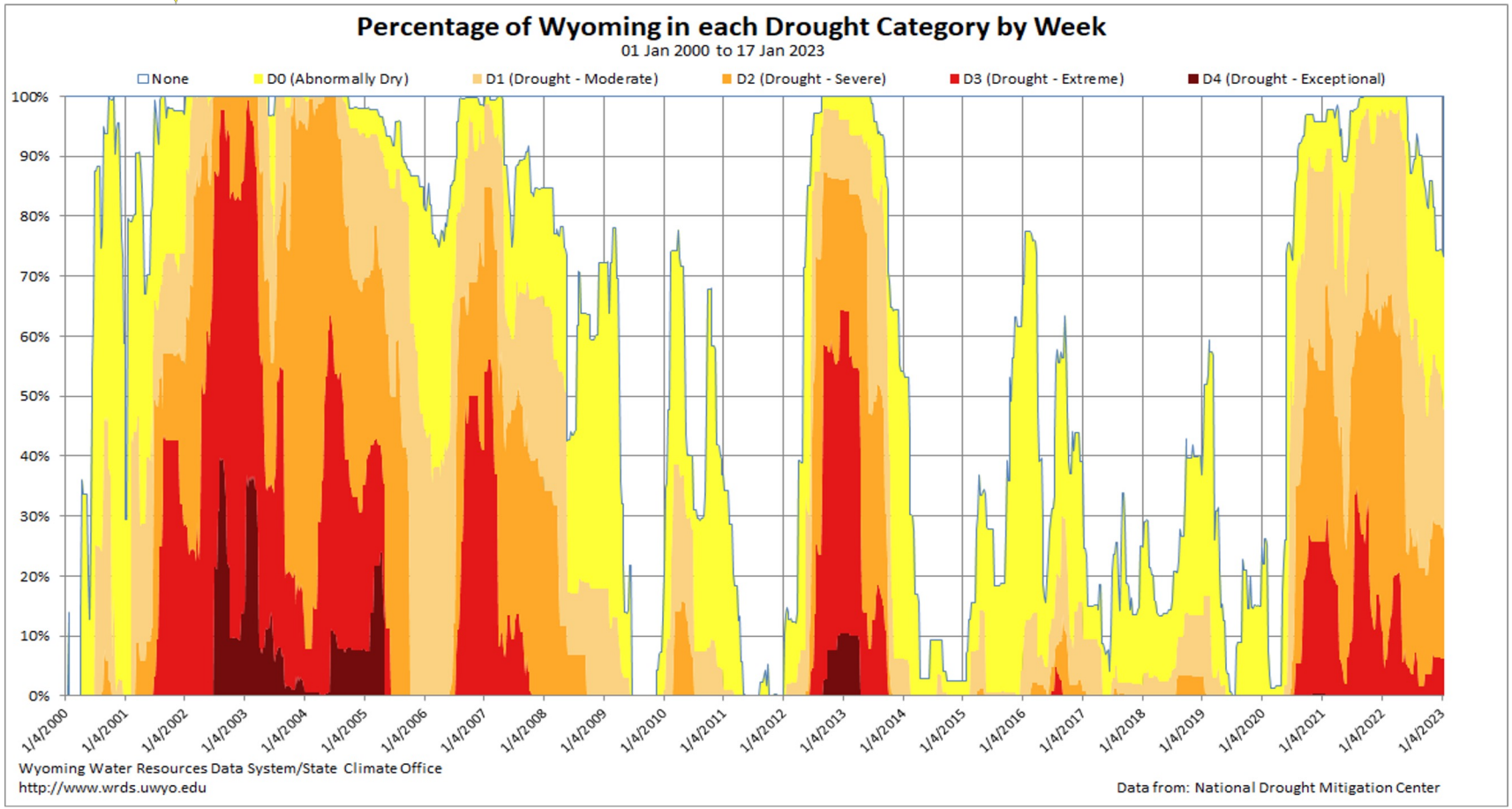
https://droughtmonitor.unl.edu

droughtmonitor.unl.edu

WRDS Water Resources Data System

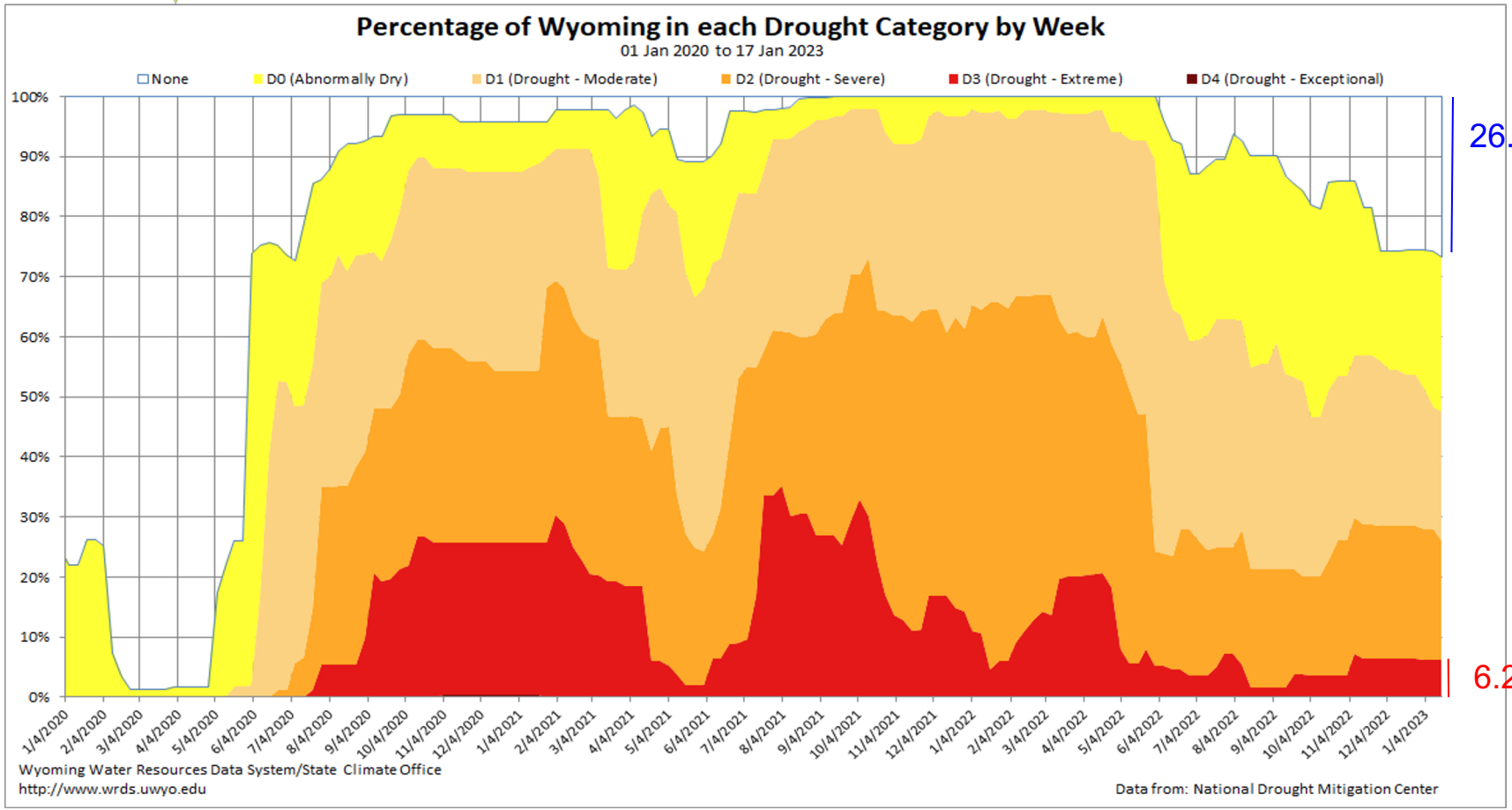
A decrease of 9.18% from the last Webinar

Wyoming Area Affected: 73.32% D0-D4 ; 47.63% D1-D4



http://www.wrds.uwyo.edu/drought/droughttimeline.html

WRDS
Water Resources Data System



http://www.wrds.uwyo.edu/drought/droughttimeline.html

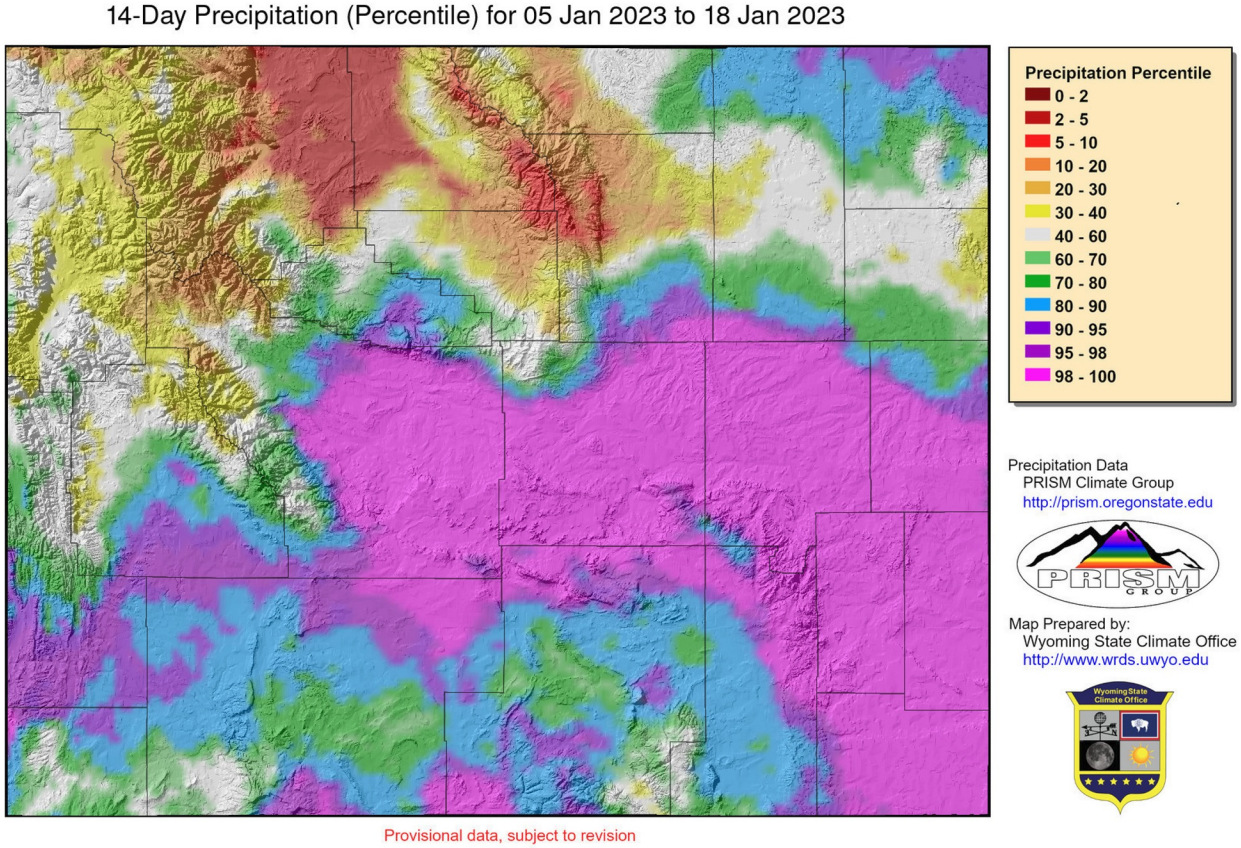
14-Day Precipitation Percentile (05 Jan 2023 to 18 Jan 2023)

Above Median:

- Much of Wyoming

Below Median (Areas of Concern):

- Bighorn Basin
- Bighorns
- Park/Teton Counties



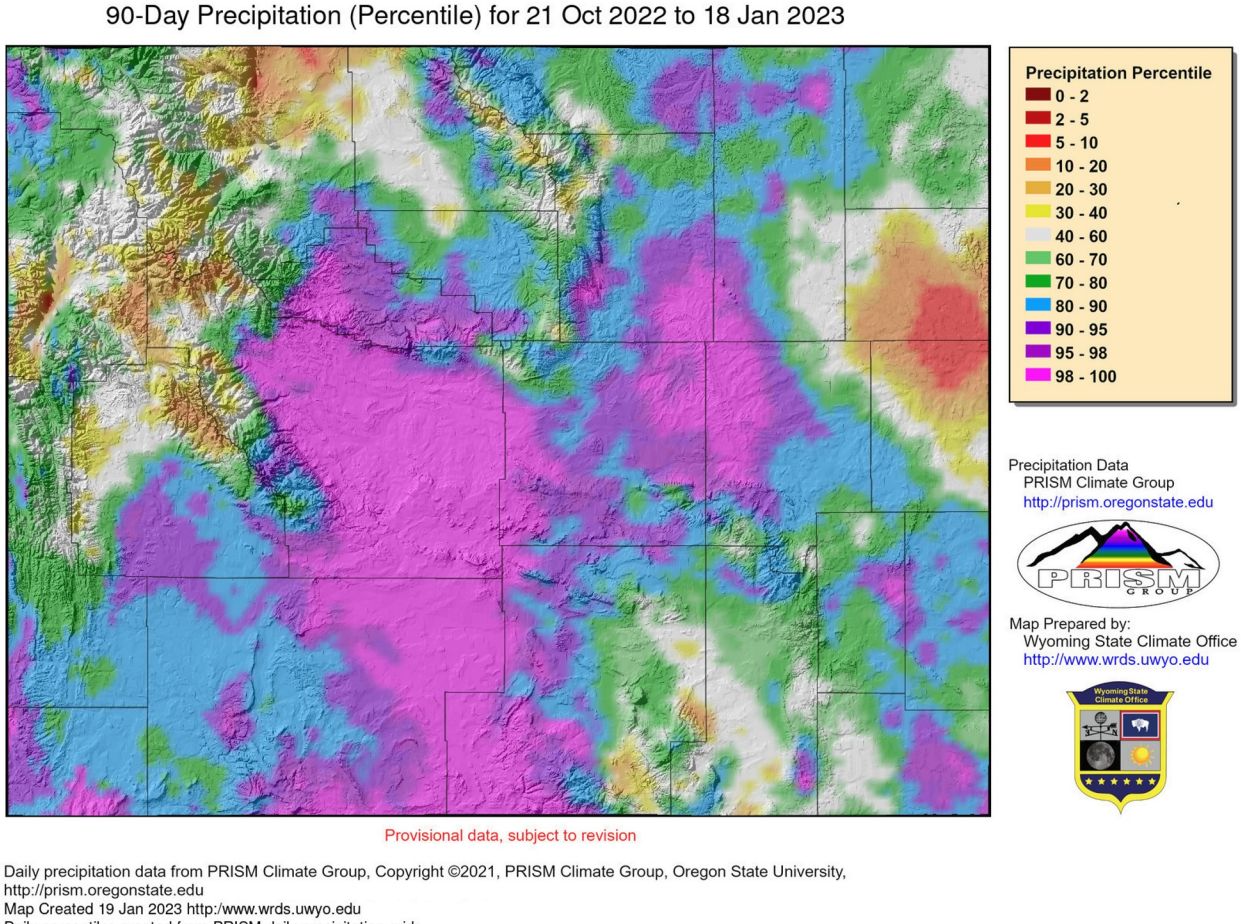
90-Day Precipitation Percentile (21 Oct 2022 to 18 Jan 2023)

Above Median:

- Much of Wyoming

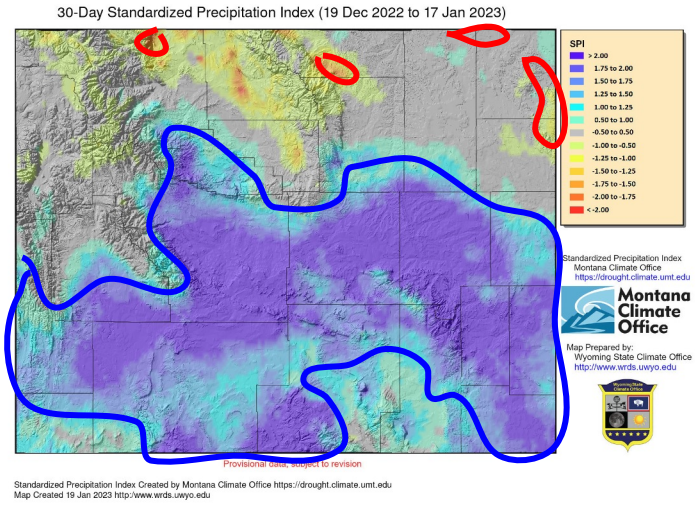
Below Median (Areas of Concern):

- Far northeast
- Northeastern Park County
- Northern Wind River Range
- Tetons
- Southern Park/NW Fremont Counties

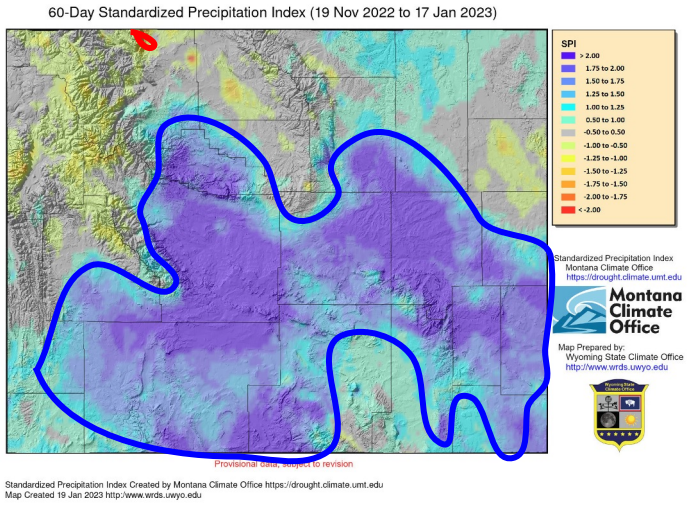


WRDS
Water Resources Data System

30-Day



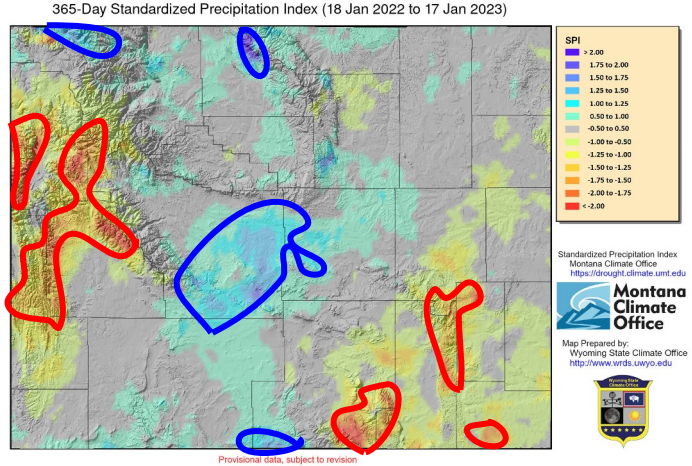
60-Day



Standardized Precipitation Index (SPI)

Short term: Much of southern ⅔ Wyoming
Long term: West and Southeast.

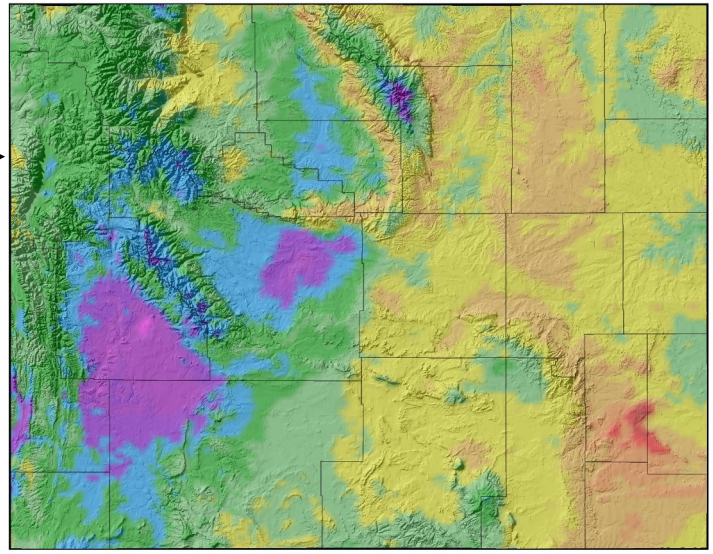
1-Year



https://drought.climate.umt.edu

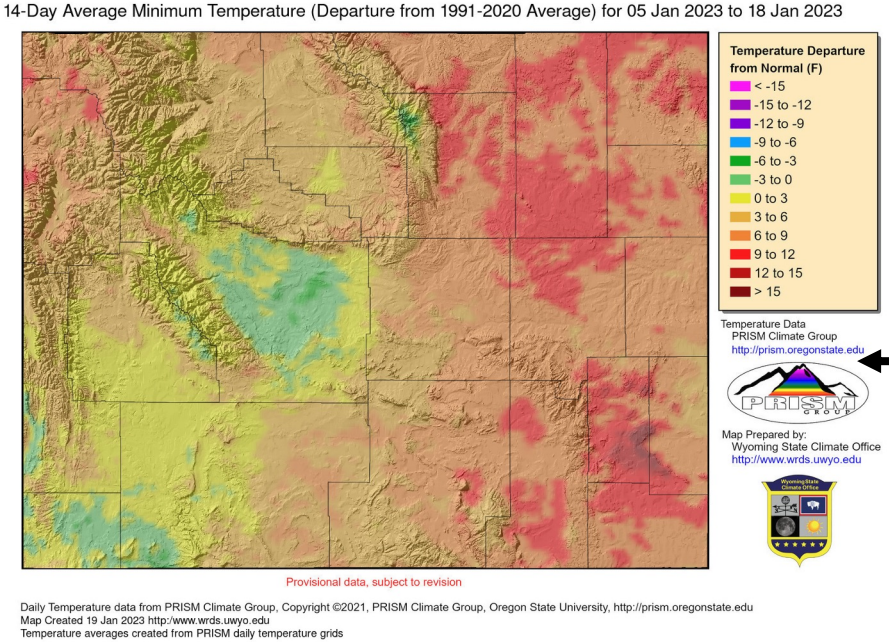
14-Day Average Minimum Temperature (05 Jan to 18 Jan)

- Fremont and Upper Green cold



14-Day *Departure from* Normal Average Minimum Temperature

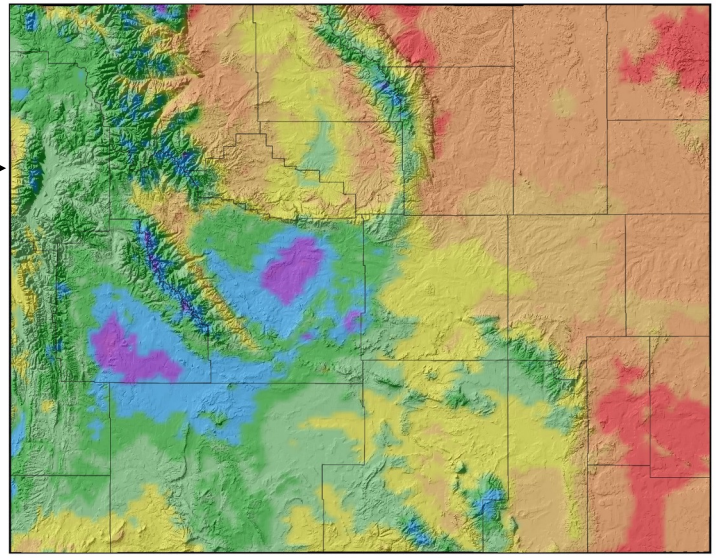
- Fremont and Southwest WY +/-3F of Average
- West generally 3F to 9F above average
- East 6F to 12F above average, isolated warmer spots (Platte County especially)

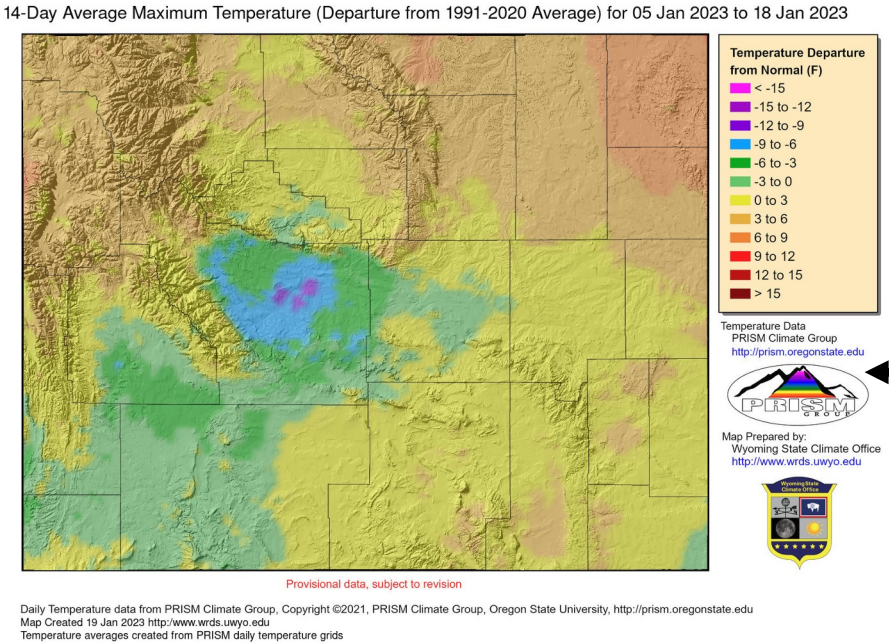


WRDS Water Resources Data System

14-Day Average Maximum Temperature (05 Jan to 18 Jan)

- 20s for highs in west (except Bighorn Basin)
- Generally 30s to low 40s for highs in east



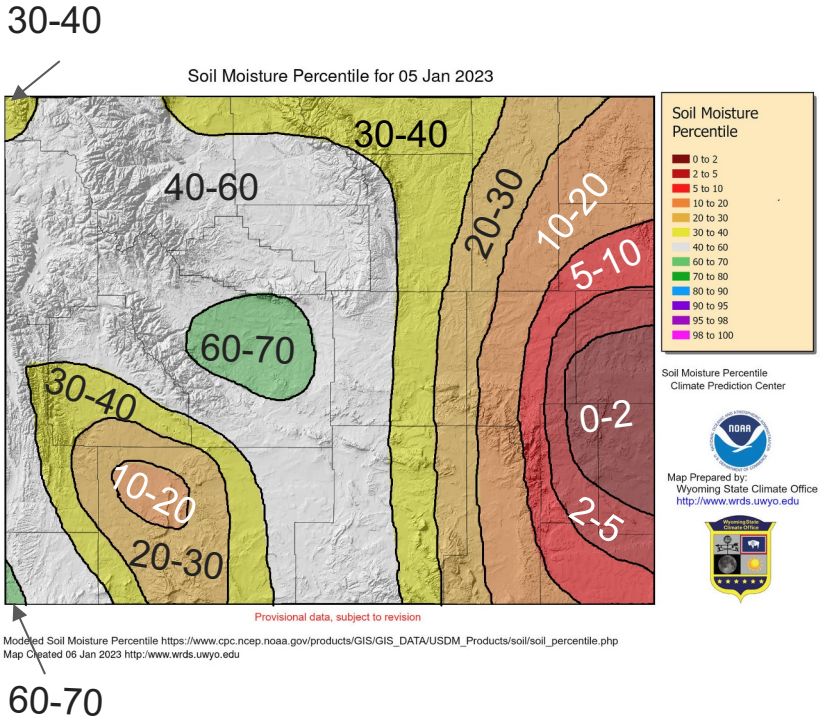


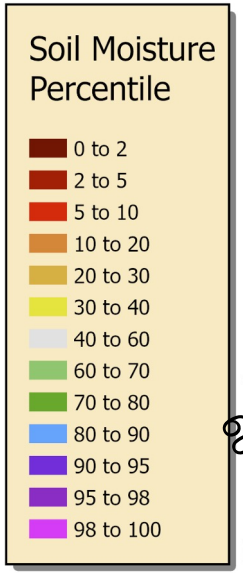
14- Day *Departure from* Normal Average Maximum Temperature

- Lower elevation Fremont County 3F to 9F below average
- North 3F to 6F above avg (6F to 9F Crook/Weston)
- Remainder within 3 degrees of average

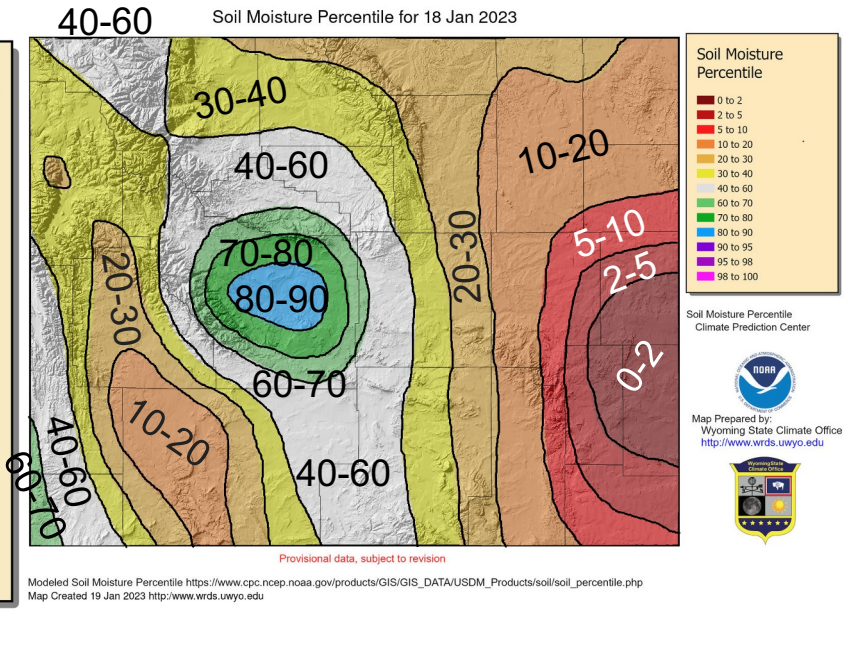
Soil Moisture Percentile

Two Weeks Ago





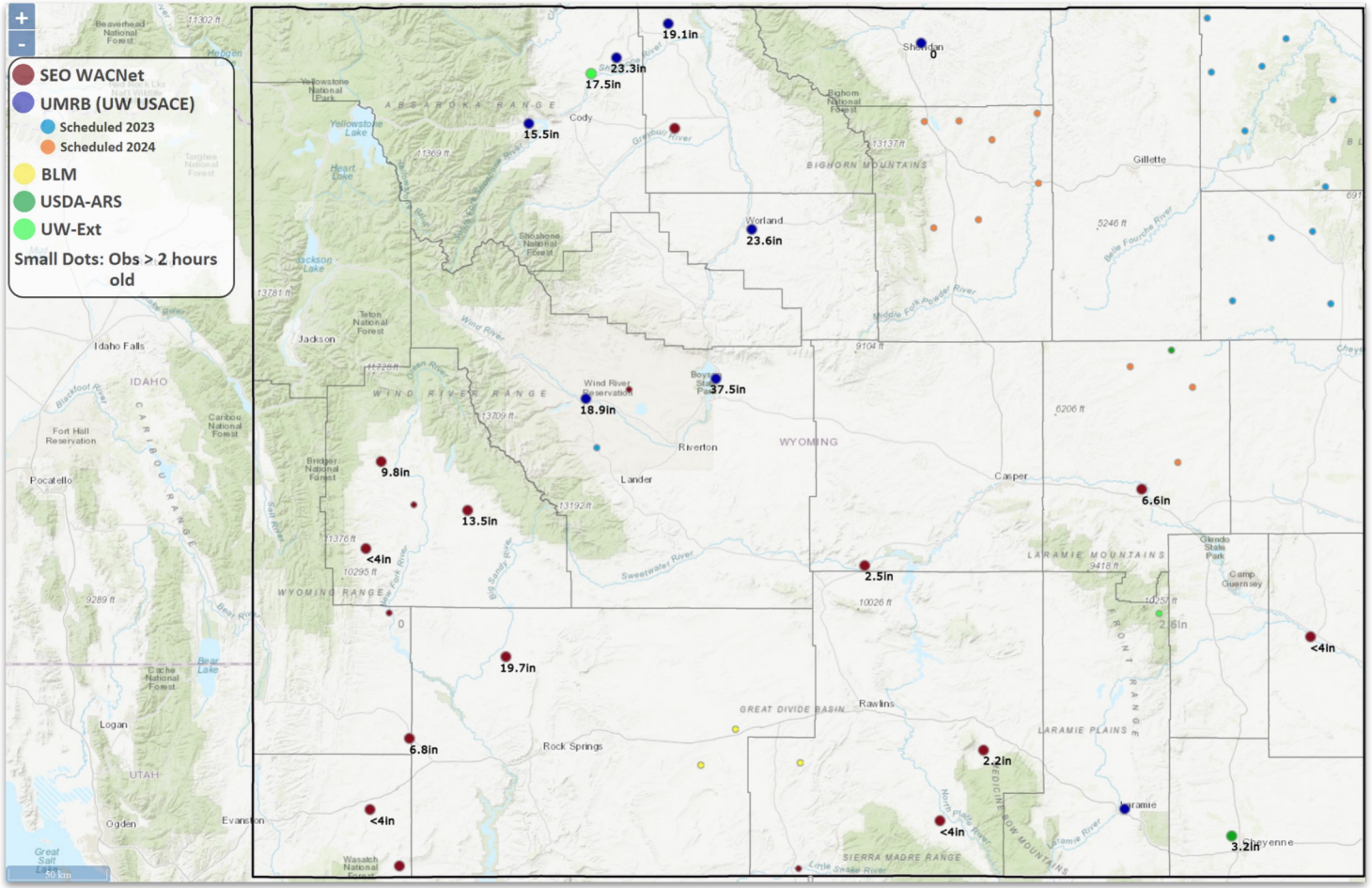
18 January 2023



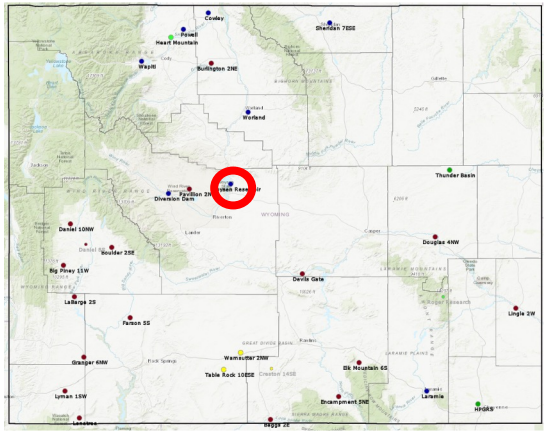
Improvement in central Wyoming and far southwest, but same or worsening elsewhere.

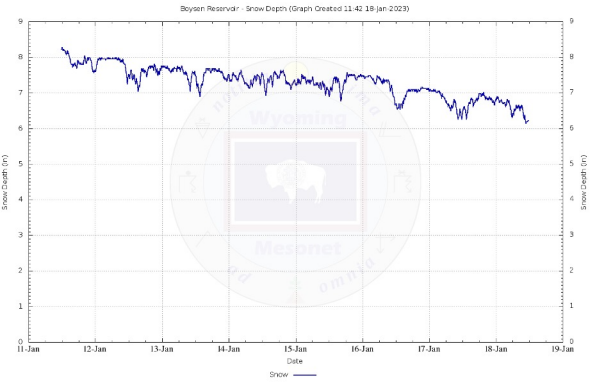
http://www.wrds.uwyo.edu/Soil/Current_SoilMoisture_Ptile.html

Frost Depths (08:10 - 19 Jan 2023)



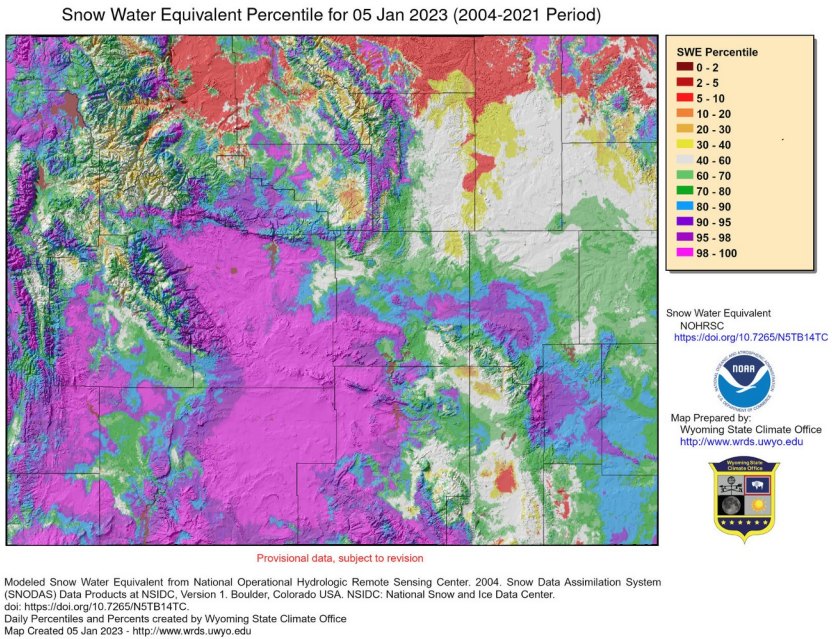
The view from Boysen Reservoir Station (11:45 - 18 Jan 2023)

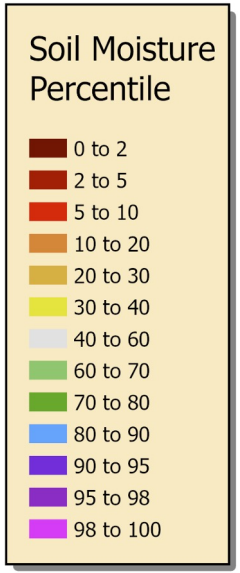




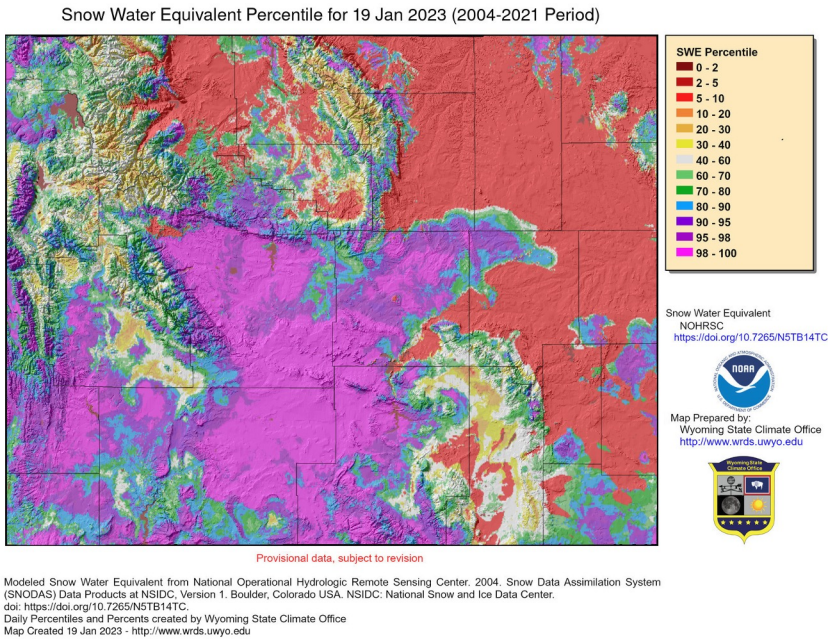
Snow

Two Weeks Ago





January 19, 2023



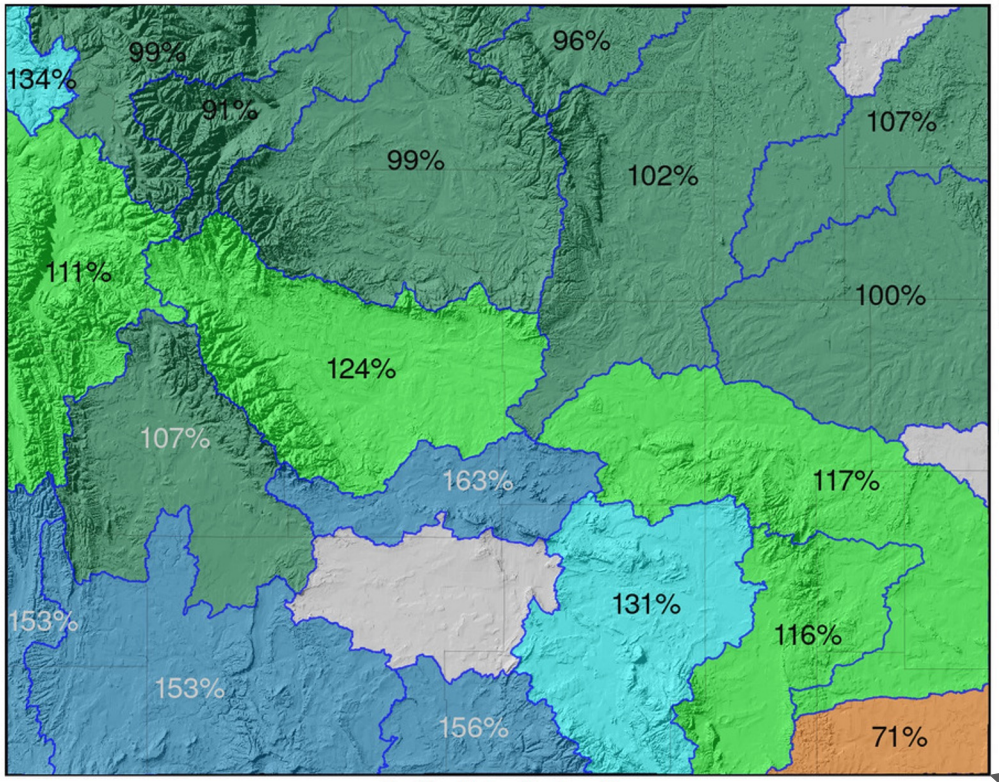
Losses in the east.

http://www.wrds.uwyo.edu/Soil/Current_SoilMoisture_Ptile.html

Snow Water Equivalent by Basin (19 Jan 2023)

http://www.wrds.uwyo.edu/wrds/nrcs/snowmap/snowmap.html

Snow Water Equivalent Percent of Median (1991-2020) for 19 Jan 2023



SWE Percent of 1991-2020 Median

- No Data
- 0% to 24%
- 25% to 49%
- 50% to 74%
- 75% to 89%
- 90% to 109%
- 110% to 124%
- 125% to 149%
- 150% to 174%
- 175% to 199%
- >=200%

Snow Water Equivalent Data
NRCS
https://www.nrcs.usda.gov

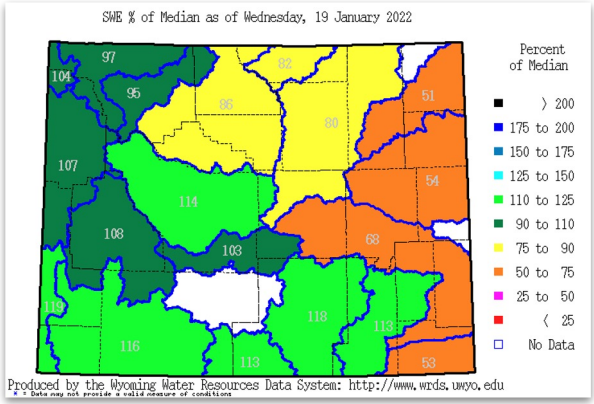
Map Prepared by:
Wyoming State Climate Office
http://www.wrds.uwyo.edu

Provisional data, subject to revision

Basin Snow Water Equivalent Data from Natural Resources Conservation Service Water and Climate Center https://www.nrcs.usda.gov
Map created by Wyoming State Climate Office 19 Jan 2023

* Percentages denoted by an asterisk represent data that may not provide a valid measure of conditions. This is most usually seen near the end of the snow season where normal values may be very low or the melt out curve is so steep that a slight variation in days may result in abnormally high or low percentages.

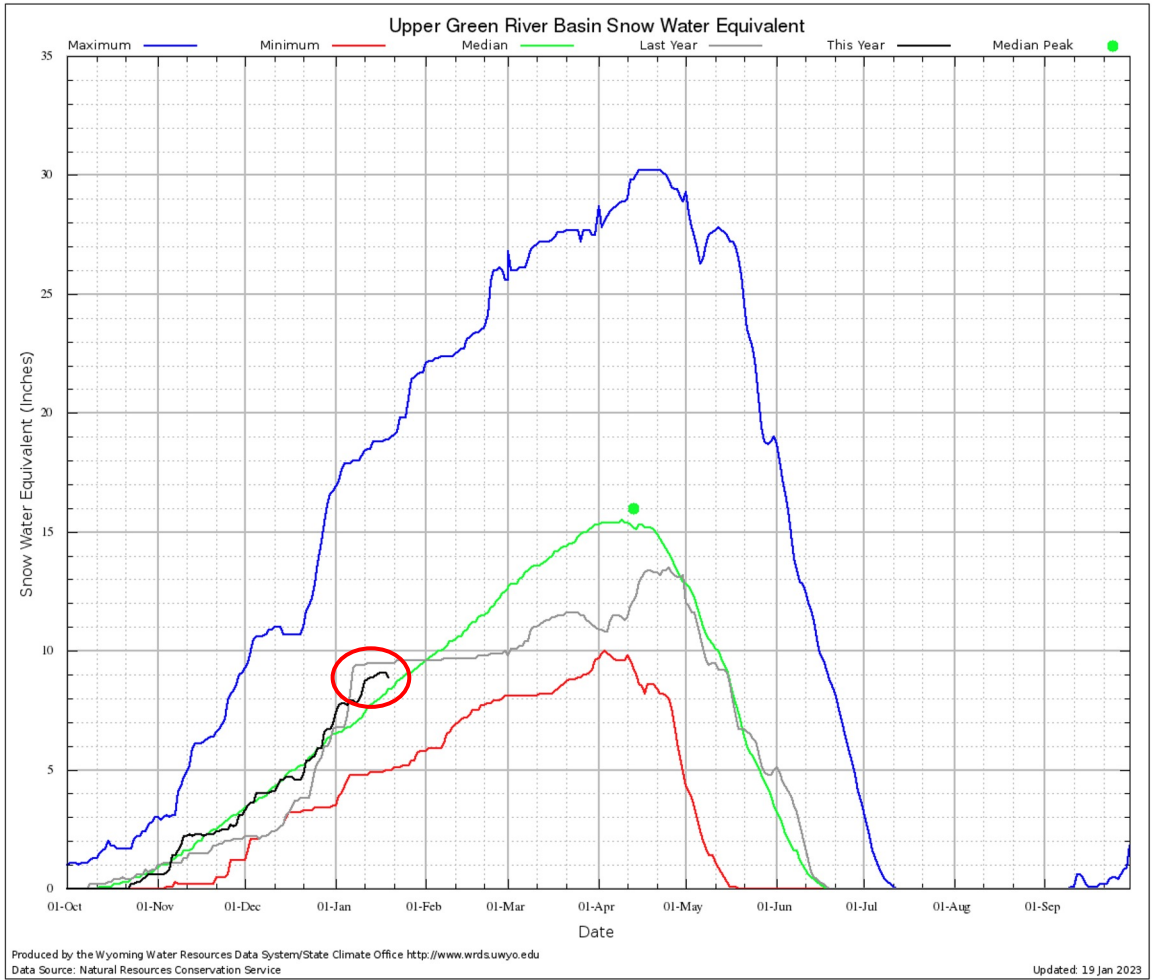
Basin snowpack building with all but five basins above median.



South Platte in WY...below, but: 1.75” increase in last two days at the SnoTels. CoCoRaHS stations in Laramie County received 4-9 inches of snow, ranging between 0.30” and 0.80” of water equivalent.

Snow Water Equivalent by Basin (19 Jan 2023)

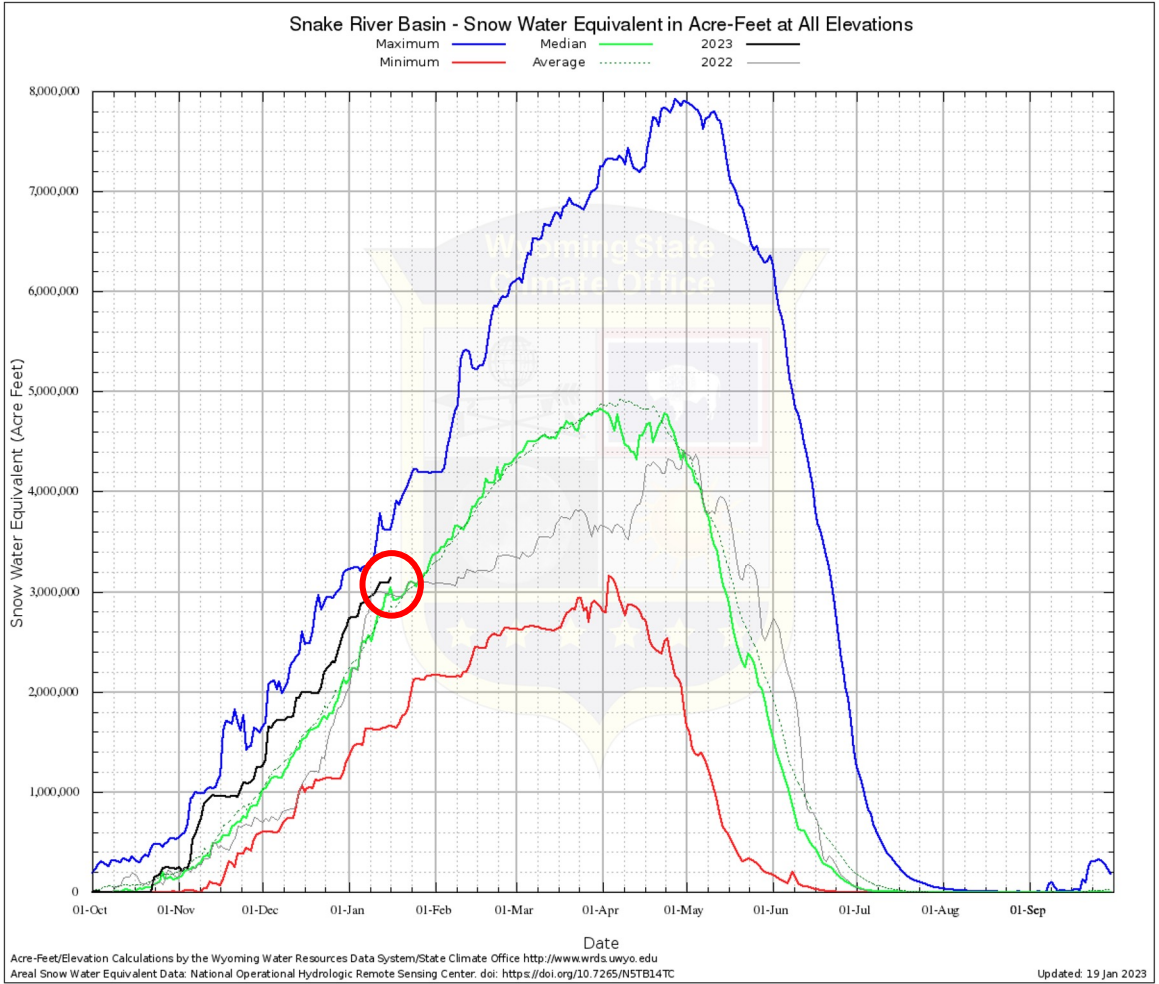
Upper Green River Basin Maximum, Minimum, and Median snowpack throughout the year with last year's and this year's trace.



http://www.wrds.uwyo.edu/Snow/BasinPeakSWE.html

Snow Water Volume by Basin (19 Jan 2023)

Snake River Basin Maximum, Minimum, Median, and Average snowpack volume through the year with this year's trace.



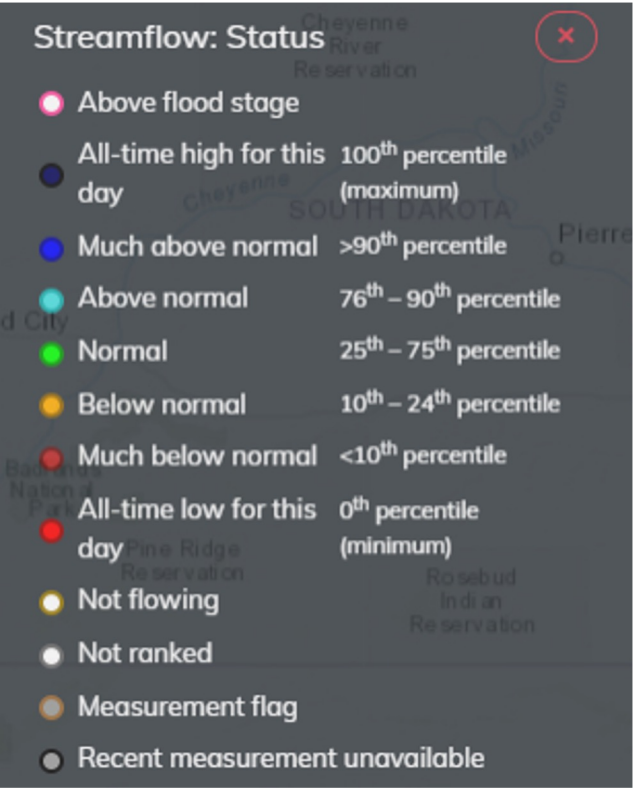
http://www.wrds.uwyo.edu/Snow/SWEVolume/SWEVolume.html

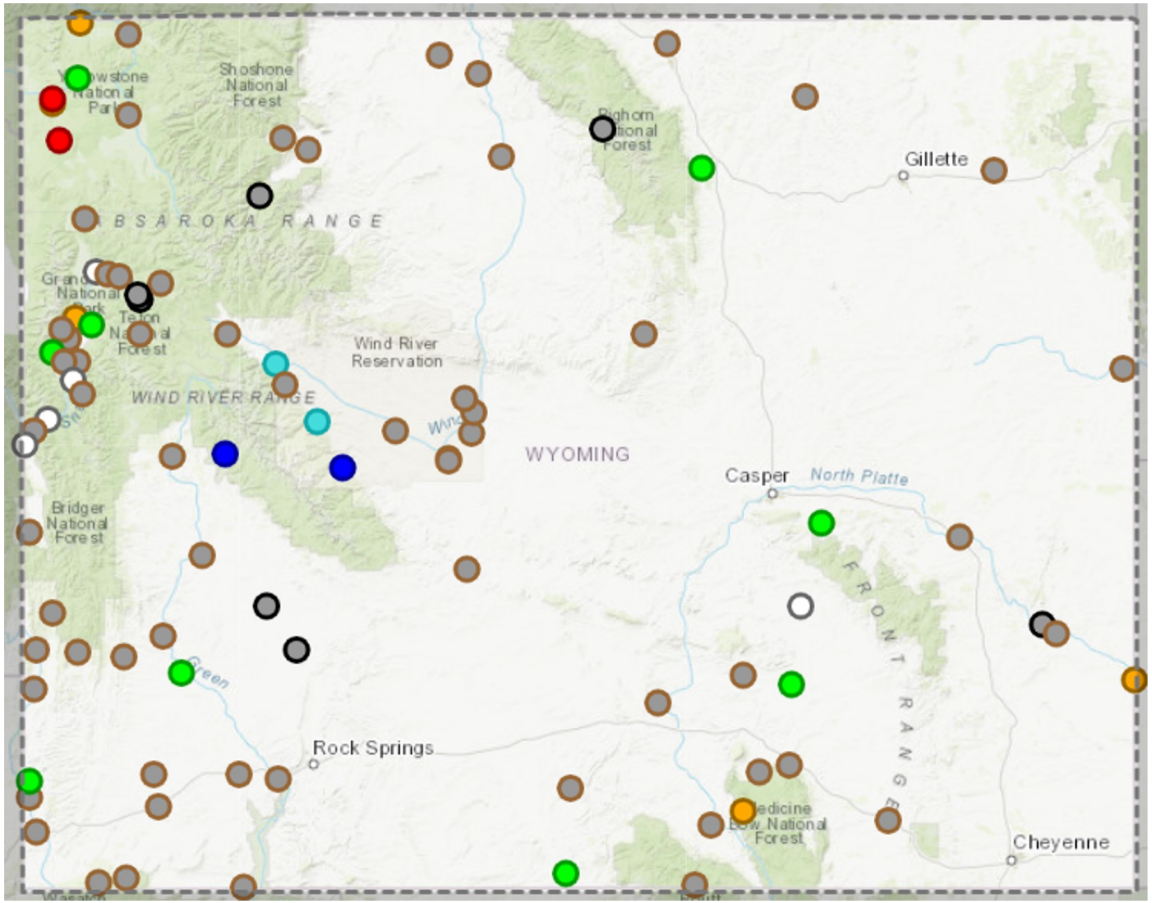
Basin Snowpack Comparison (2023 vs 2022 & Median)
As of 18 Jan 2023

Basin	2023 compared to Median	2023 compared to Last Year
Belle Fourche	Above	Above
Bighorn	Above	Above
Cheyenne	Above	Above
Laramie	At	Below
Little Snake	Above	Above
Lower Green	Above	Above
Lower North Platte	Above	Above
Snake	Above	Above
South Platte	Above	Above
Sweetwater	Above	Above
Tongue	Above	Above
Upper Bear	Below	Above
Upper Green	Above	Below
Upper North Platte	Above	Above

Current Streamflow Conditions (Jan 19, 2023)

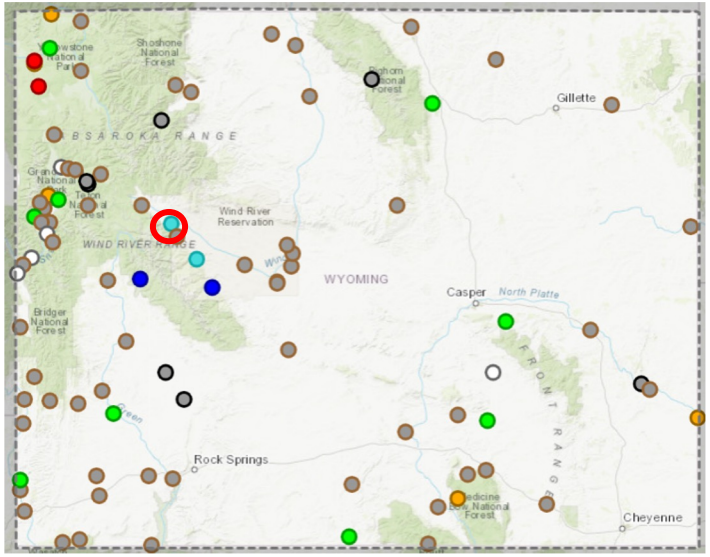
Streamflow Status





https://dashboard.waterdata.usgs.gov/

Select WY Streamflows

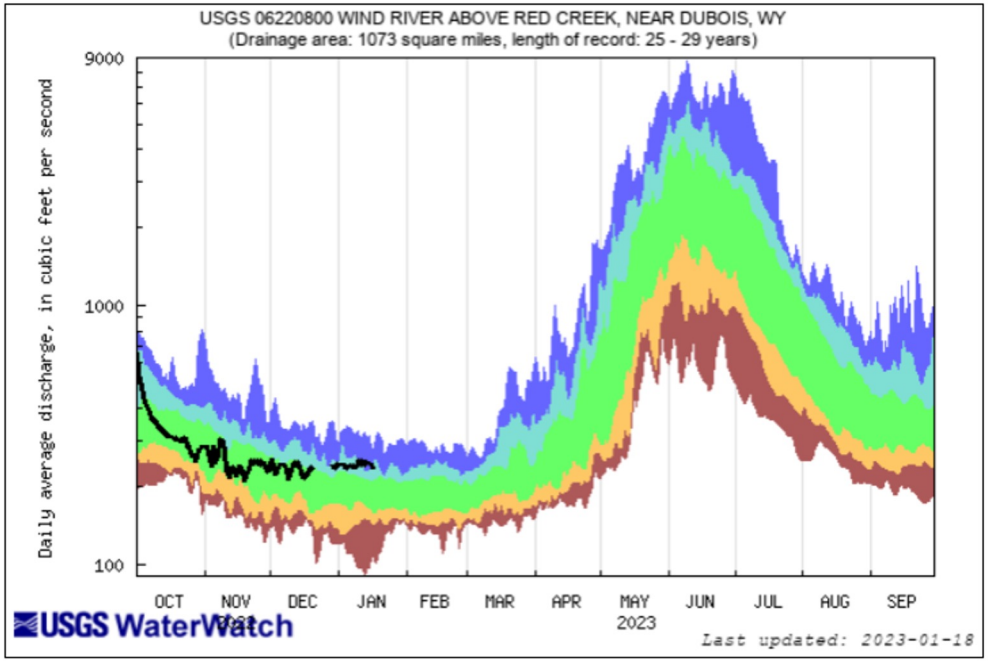


https://dashboard.waterdata.usgs.gov/

https://waterdata.usgs.gov/

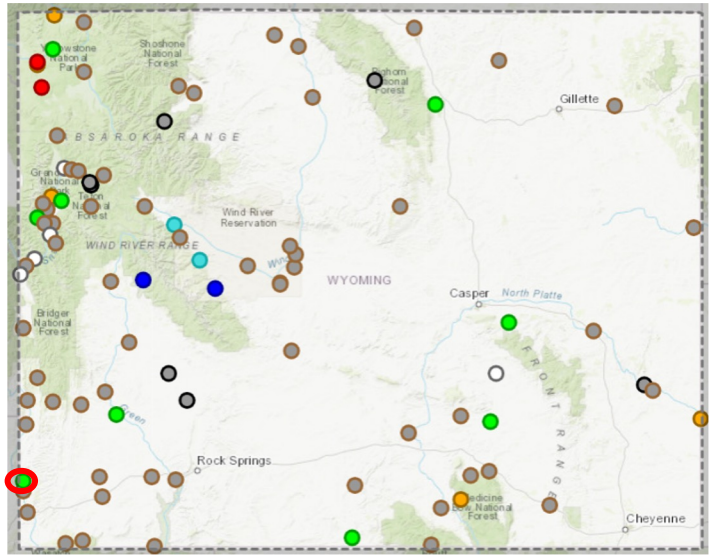
Wind River above Red Creek near Dubois, WY

Last updated Jan 19, 2023



Explanation - Percentile classes							
lowest-10th percentile	5	10-24	25-75	76-90	95	90th percentile -highest	Flow
Much below Normal		Below normal	Normal	Above normal	Much above normal		

Select WY Streamflows

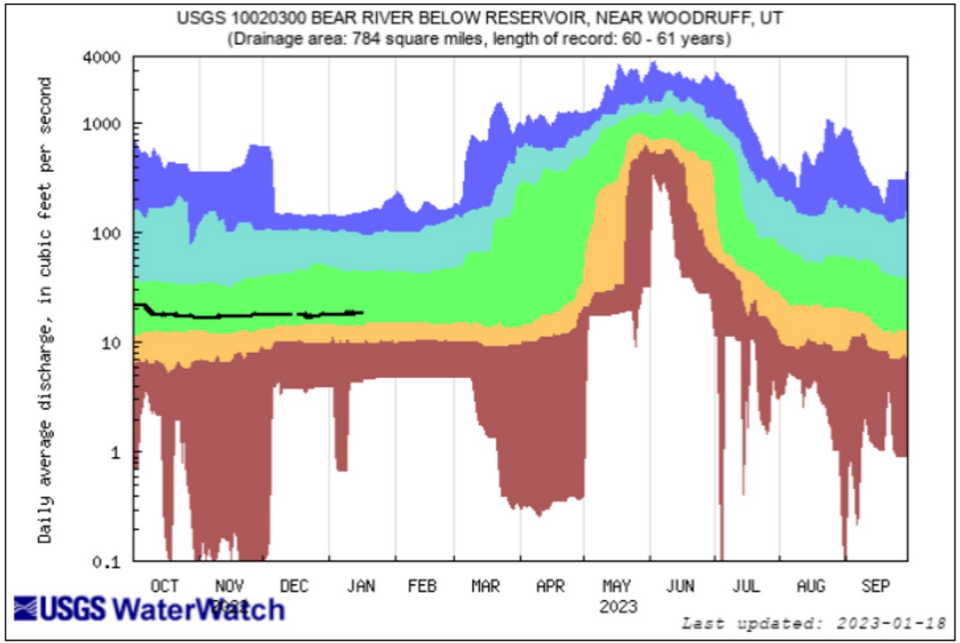


https://dashboard.waterdata.usgs.gov/

https://waterdata.usgs.gov/

Bear River Below Reservoir nr Woodruff, WY

Last updated Jan 19, 2023



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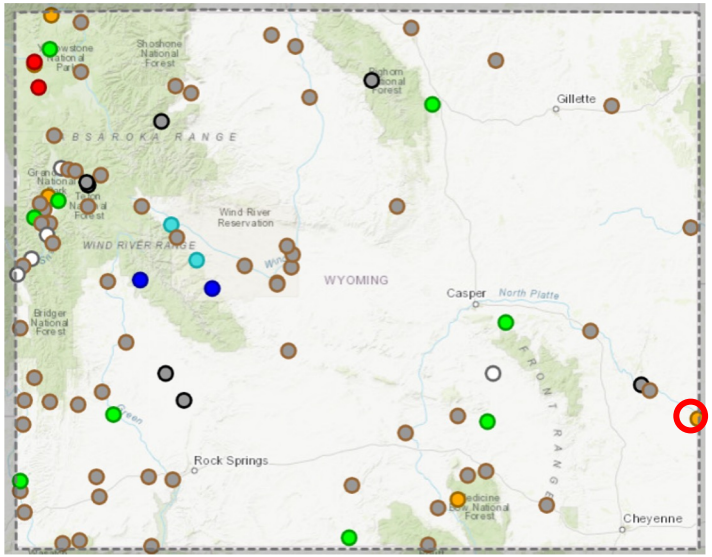
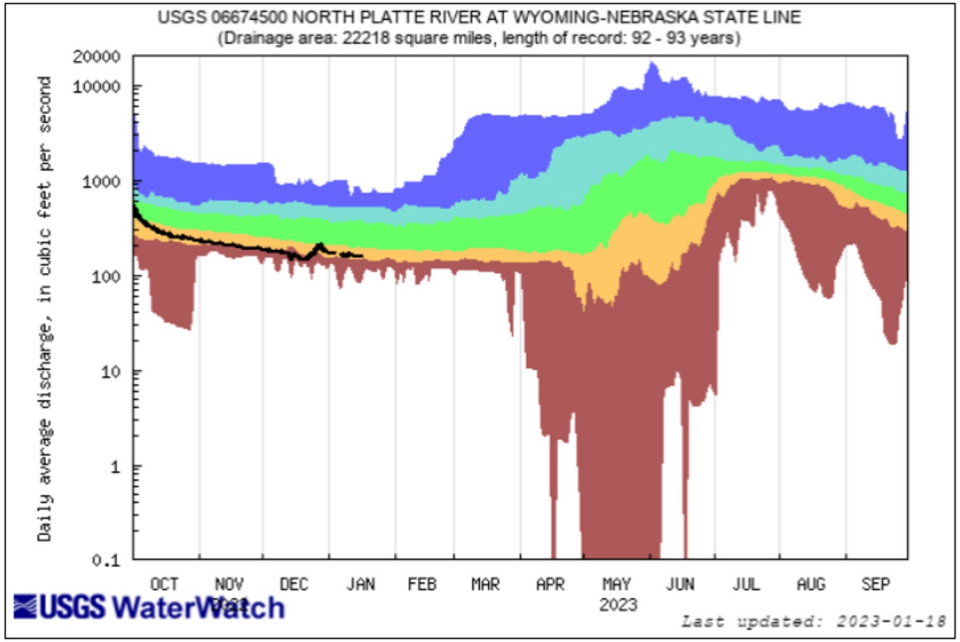


https://dashboard.waterdata.usgs.gov/

https://waterdata.usgs.gov/

North Platte River at WY-NE State Line

Last updated Jan 19, 2023



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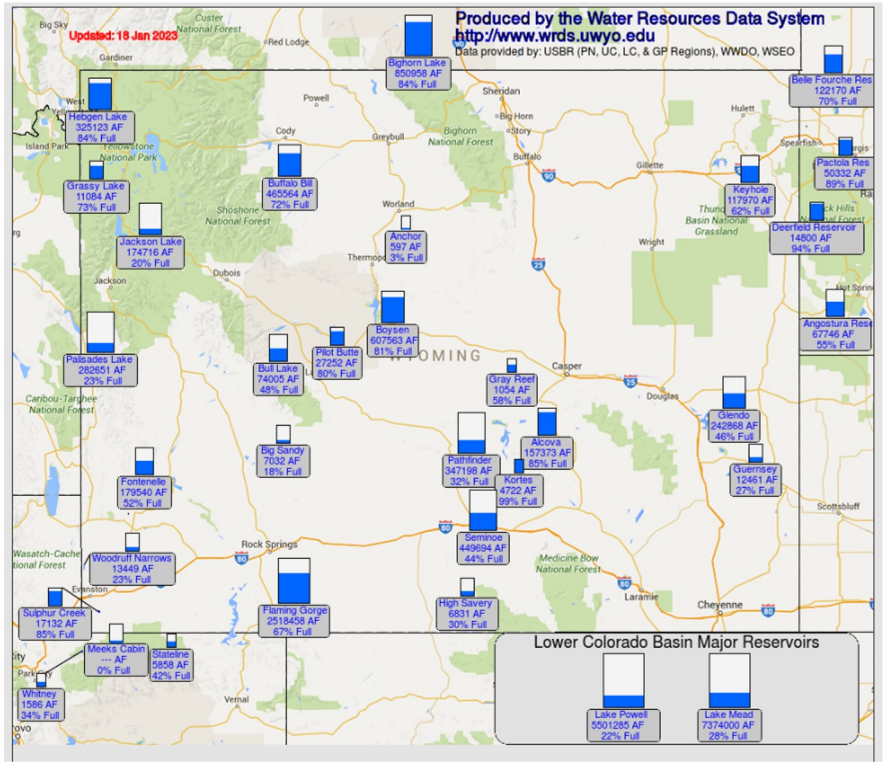
WY Reservoirs (Jan 19, 2023)

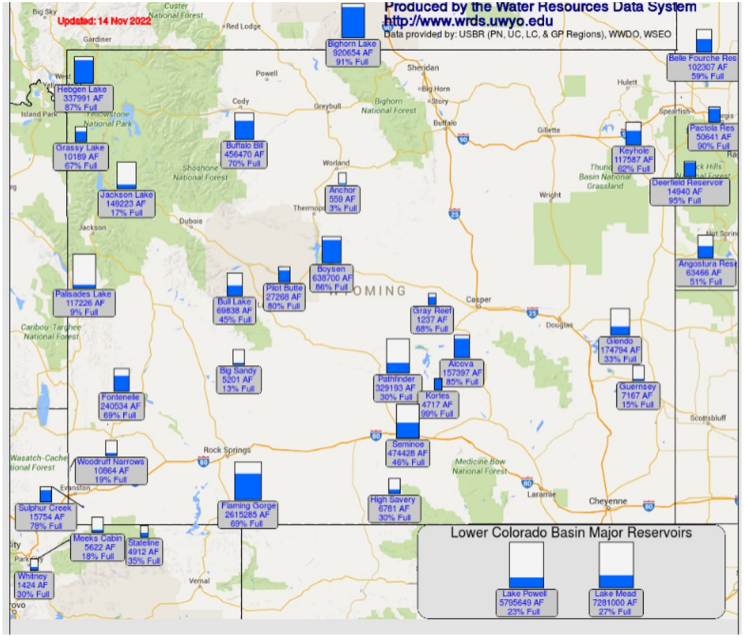
Jan 19, 2023



http://www.wrds.uwyo.edu/surface_water/teacups.html

- Minor changes in contents smaller reservoirs
- Bigger changes in large reservoirs

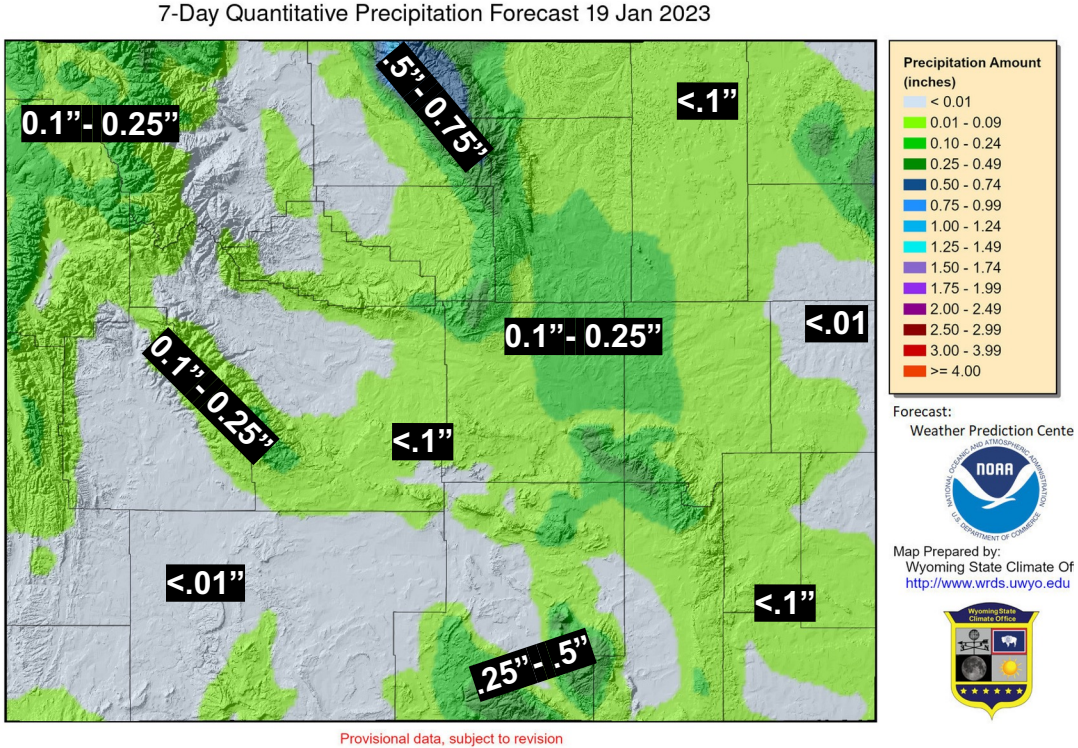
Nov 17, 2022



Forecasts & Outlooks

7-Day Total Precipitation Forecast

January 19 - 25



The Quantitative Precipitation Forecast shows the liquid amount of forecasted precipitation over the next 7 days
The Forecast is created by the National Weather Service Weather Prediction Center
Department of Commerce, National Oceanic and Atmospheric Administration, National Weather Service, National Centers for Environmental Prediction, and Weather Prediction Center - https://www.wpc.ncep.noaa.gov
Map Layout Created 19 Jan 2023 http:/www.wrds.uwyo.edu

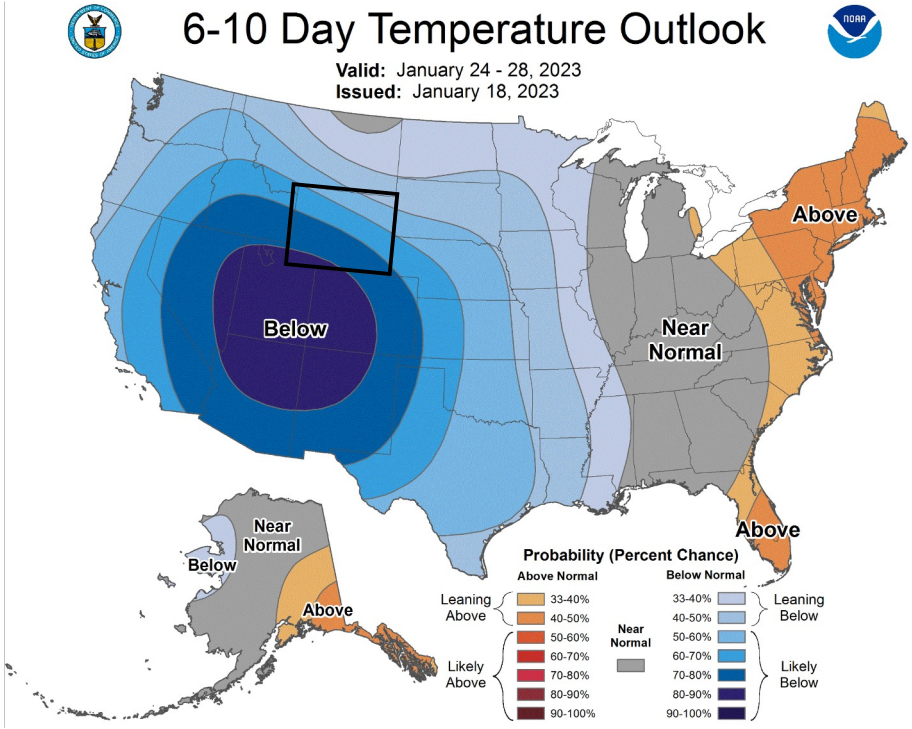
- Light mountain snow tonight into Friday
- Most of the forecast precipitation for the next 7 days falling with a cold front Sunday into Monday
- Periods of light mountain snow could continue for much of next week

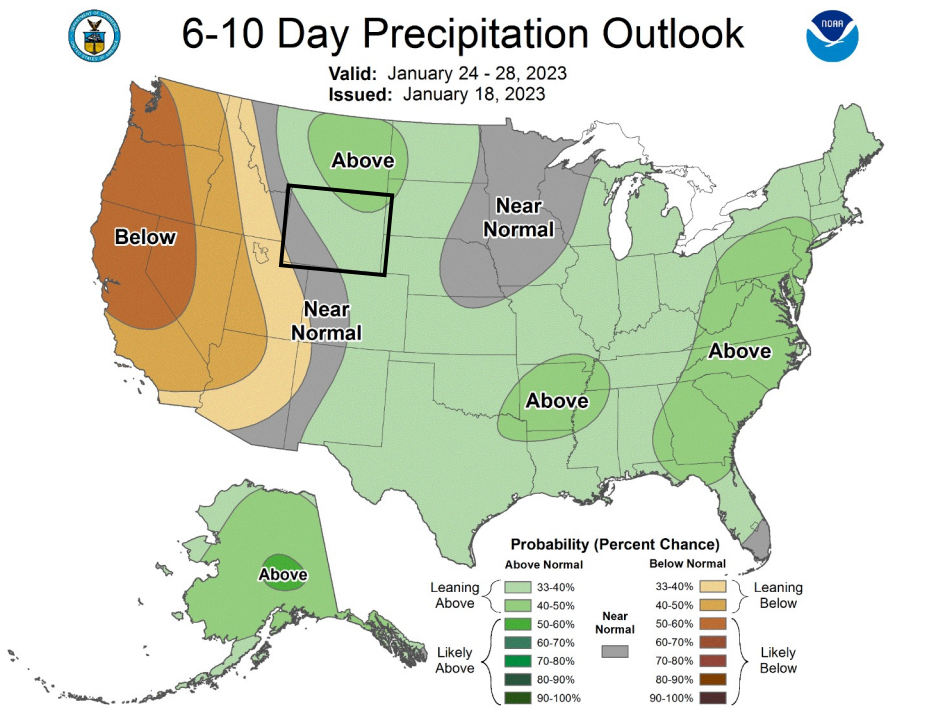
https://bit.ly/7_dayQPForecast

6-10 Day Temp & Precip Outlook

https://bit.ly/CPC6_10Day

January 24 - 28





Strong signal for below normal temperatures, especially across southern Wyoming

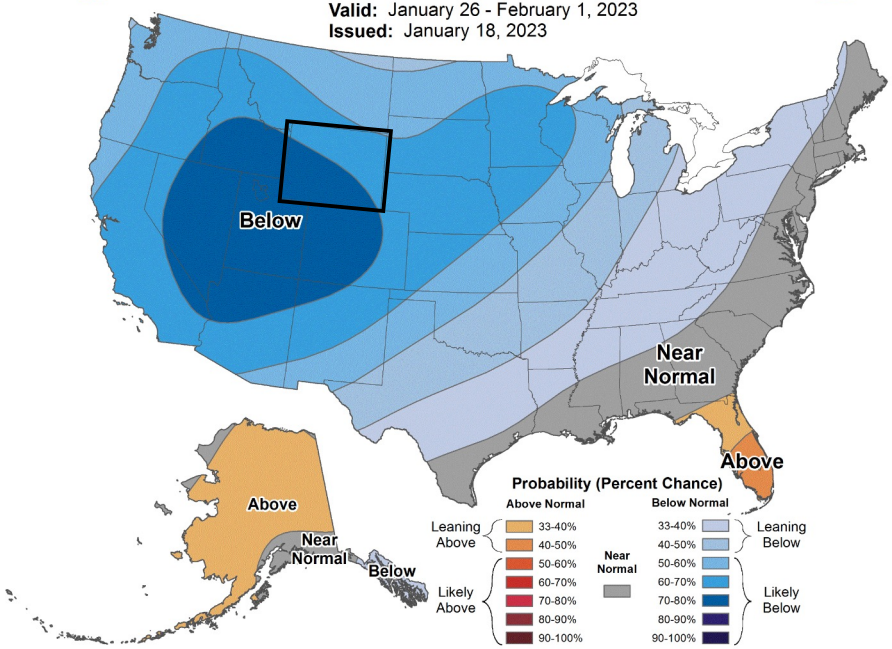
Slight lean toward above normal precip for NE WY, mainly Black Hills and Bighorns

8-14 Day Temp & Precip Outlook

https://bit.ly/CPC8_14Day

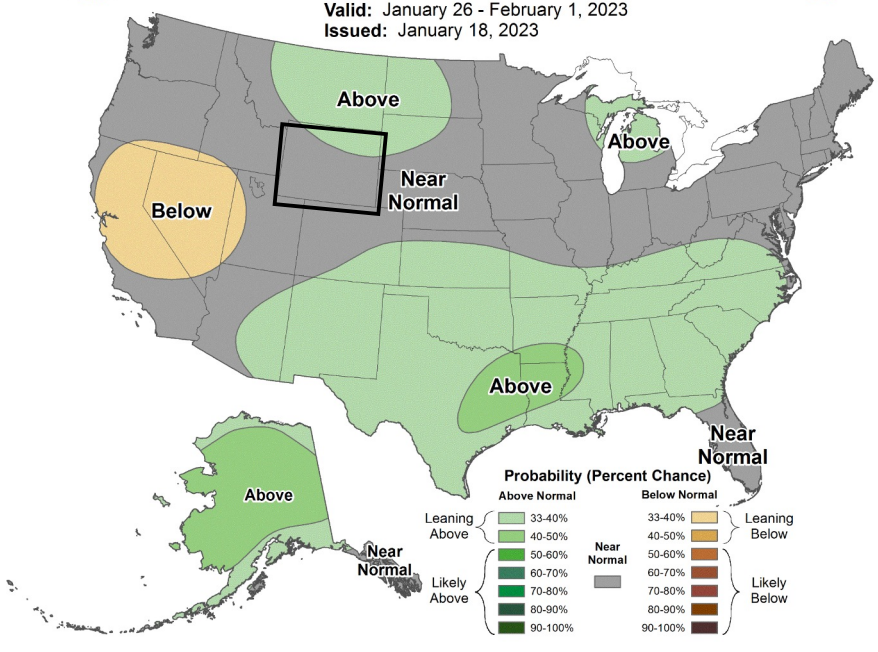
January 26 - February 1

8-14 Day Temperature Outlook



Likely colder than normal to continue for all of WY

8-14 Day Precipitation Outlook

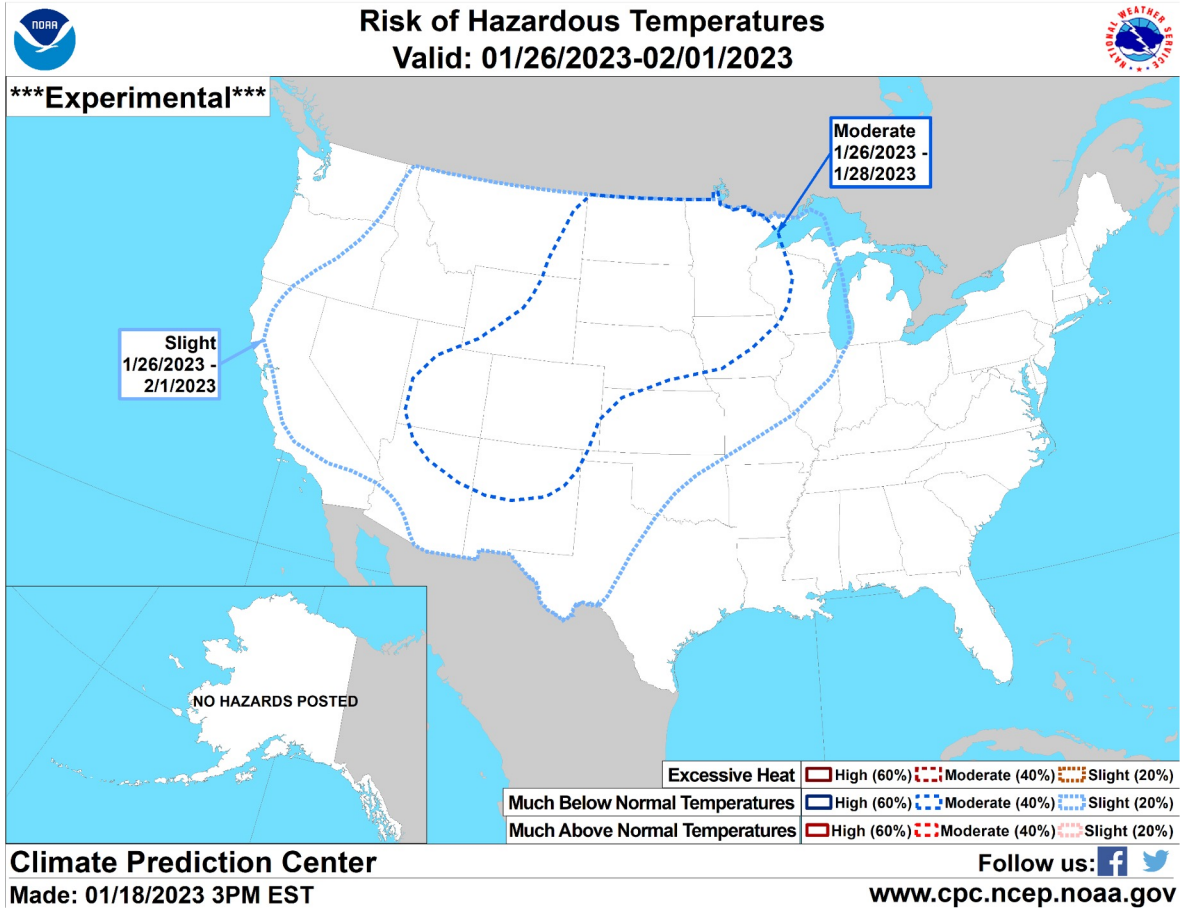


Near normal as best forecast for most of state, slightest lean toward above normal for NE WY

NWS Climate Prediction Center

8-14 Long Range Hazard Outlook

CPC Link: https://bit.ly/3zFP82z



A couple arctic air masses forecast to move from Canada southward through the Great Plains

Portions of eastern Wyoming may see much below normal temps to end January

Seasonal Weather Outlook Lingo

Understanding "Above Normal Chances" for "Below Normal

Weighted Coin Flip

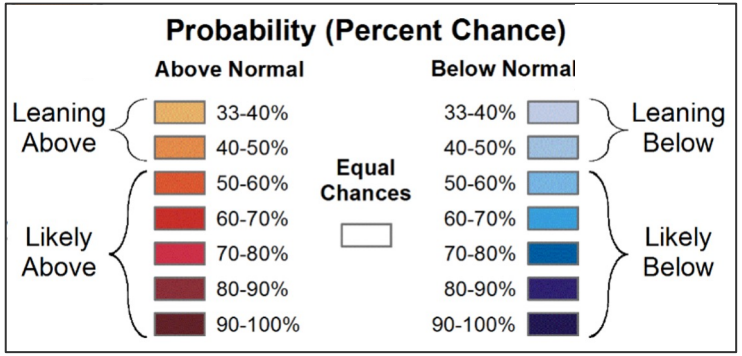
Default Outcome:

50% of the time: *Heads*
50% of the time: *Tails*
} "Equal Chances"

Outcome if we know additional info:
e.g. Coin weighted towards Tails

40% : *Heads*
60% : *Tails*
} "Leaning Tails"

Long-Term Weather Outlook



Default Outcome:

33% : Above Normal
33% : Near-Normal
33% : Below Normal
} "Equal Chances" = Near climatological averages are the most likely

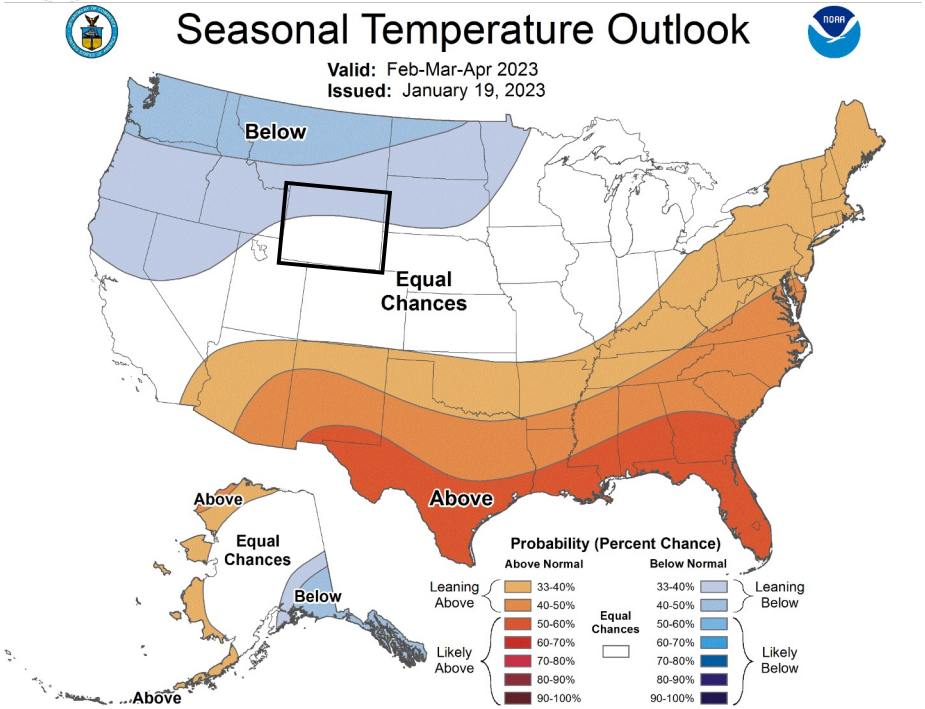
Outcome if we know additional info:
e.g. "La Nina" currently occurring

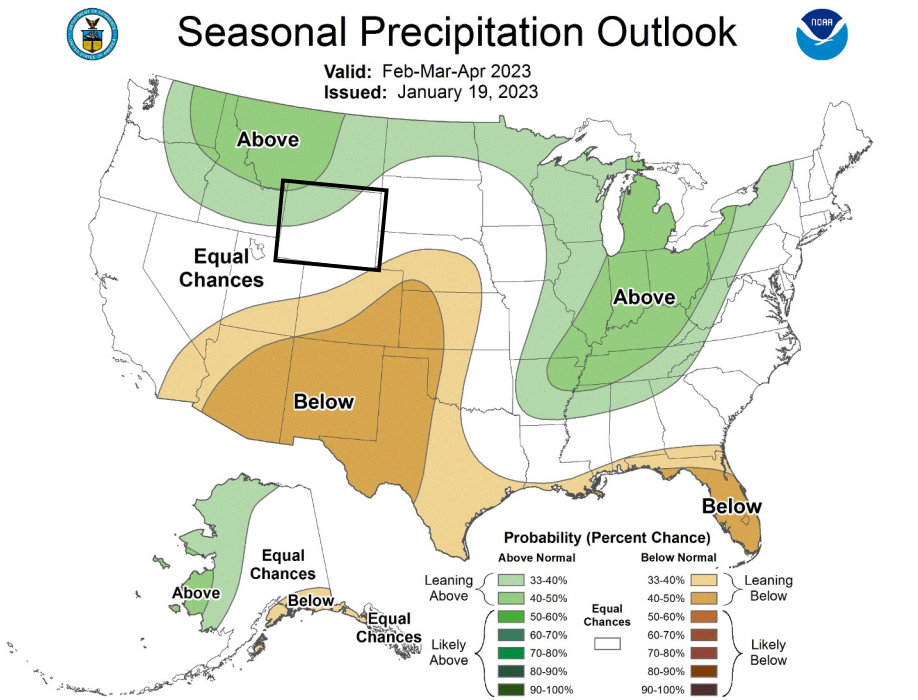
25% : Above Normal
30% : Near-Normal
45% : Below Normal
} "Leaning Below" = Colder than climatology is the better forecast

3-Month Temp & Precip Outlook

https://bit.ly/CPC_Seasonal

February-March-April 2023





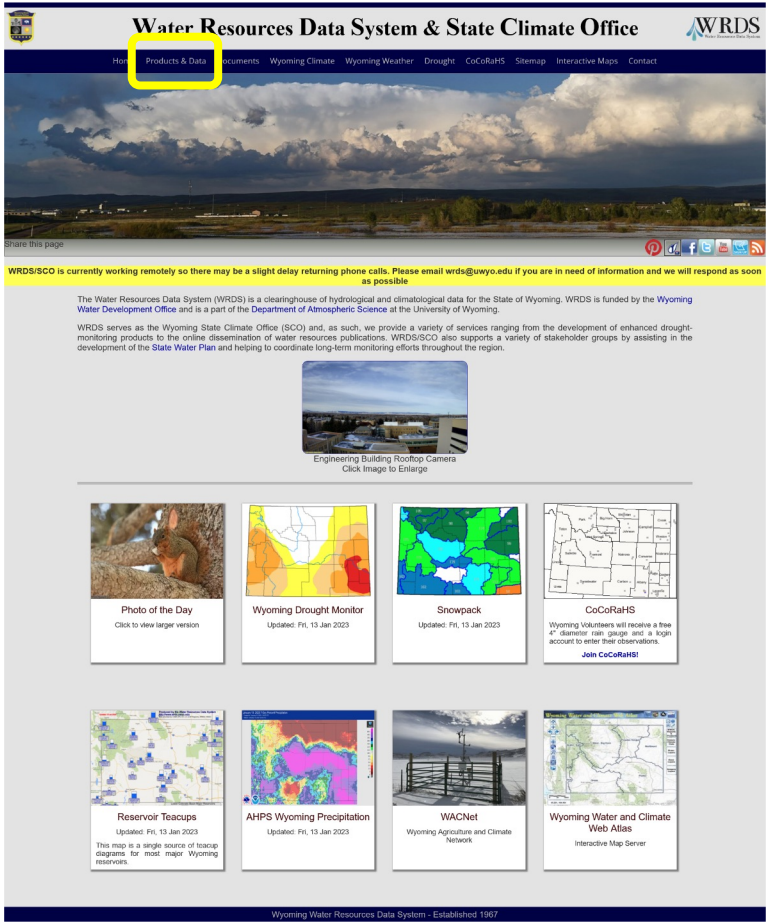
Equal chances for most of WY =
climatology is the best forecast

Resource of the Month …

Finding snowpack information

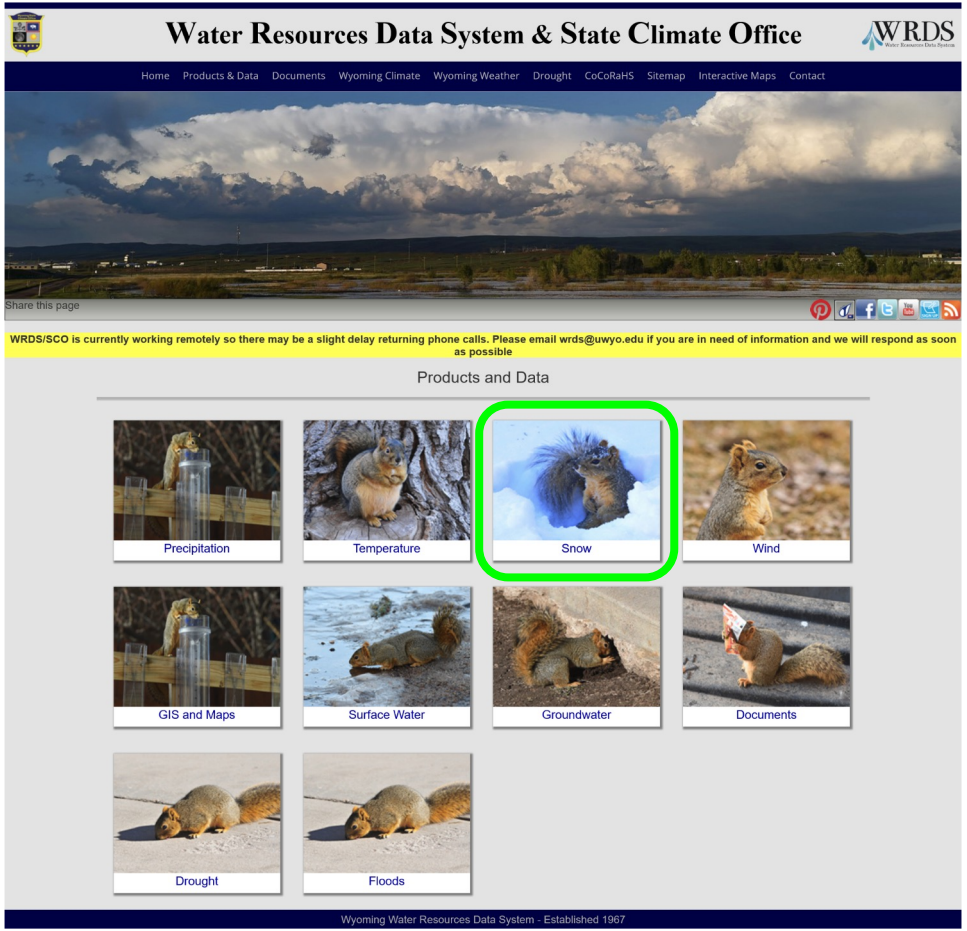
Finding Snowpack Information

www.wrds.uwyo.edu



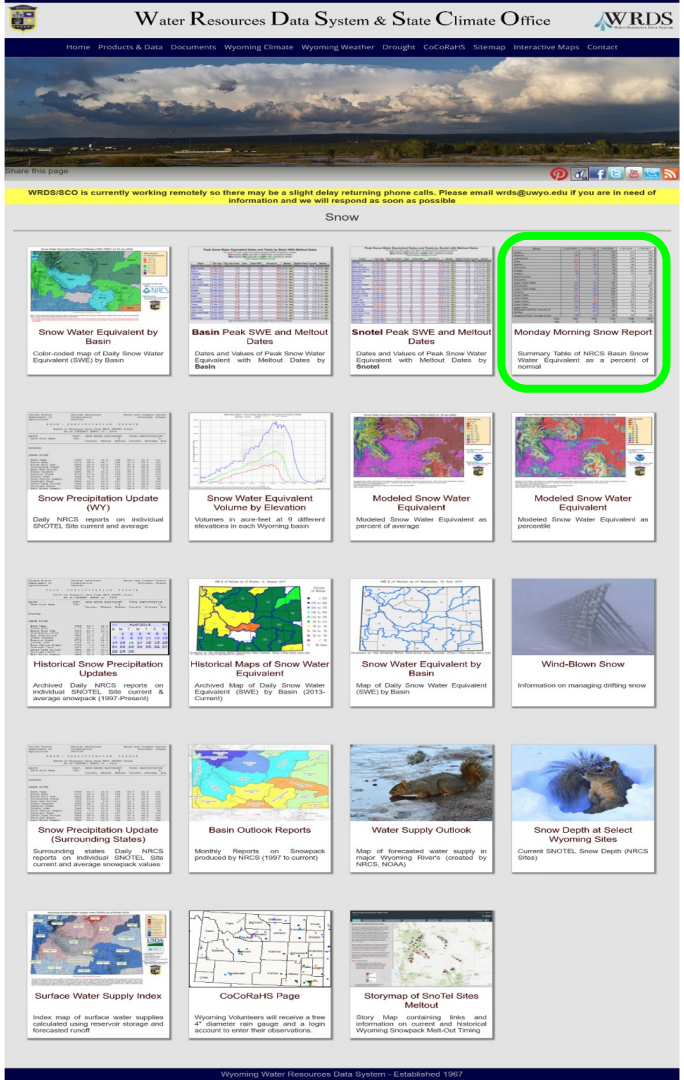
Finding Snowpack Information

www.wrds.uwyo.edu



WRDS
Water Resources Data System

www.wrds.uwyo.edu



Finding Snowpack Information

- Snow Water Equivalent (SWE) by Basin
- Basin Peak SWE and Meltout Dates
- Snotel Peak SWE and Meltout Dates
- Monday Morning Snow Report
- Snow Precipitation Update (WY)
- SWE Volume by Elevation
- Modeled Snow Water Equivalent (%/Ptile)
- Historical Snow Precipitation Updates
- Historical Maps of Snow Water Equivalent
- Snow Water Equivalent by Basin (Classic)
- Wind-Blown Snow (snow fence resource)
- Snow Precipitation Update (other States)
- Basin Outlook Reports
- Water Supply Outlook
- Snow Depth at Select Wyoming Sites
- Surface Water Supply Index
- CoCoRaHS (we collect snow data as well)
- Storymap of SnoTel Sites Meltout

Monday Morning Snow Report

Report #6 **Weekly Snow Report** **January 16, 2023**

Good day to all. This is the 6th Snow Report for Water Year 2023 (2022-2023 snow season). Currently the state's SNOTELs are reading 121% of median with a basin high of 175% and a basin low of 57%. Last year the state was at 110%, and at 81% in 2021. The map may differ slightly from the table depending upon how many stations were reporting at the time. This report and a map displaying basin SWE percentages of median for the state may be found at: http://www.wrds.uwyo.edu/wrds/nrcs/nrcs.html.

For information on the use of median vs. average go to http://www.wcc.nrcs.usda.gov/normals/median_average.htm

SNOW WATER EQUIVALENT AS PERCENT OF MEDIAN. The following table shows the percent of median for today, the 2 previous weeks, one year ago, and two years ago for Wyoming basins. Normal (median) is based on all reporting SNOTEL sites in the basin with calculated medians (newer SNOTEL sites do not have medians figured), but does not include manually measured snow courses. The statewide SNOTEL percent of median is a percent of median using all SNOTEL sites in Wyoming with calculated medians. The weighted state average is figured using the area of basins (square miles). The reference period for computing medians is the 30-year period 1991 through 2020.

Basin	1/16/2023	1/9/2023	1/2/2023	1/16/2022	1/16/2021
Snake	116	116	119	112	87
Madison	137	139	142	106	78
Yellowstone	104	108	109	101	97
Wind	128	124	127	118	74
Bighorn	96	98	100	88	73
Shoshone	96	98	101	100	89
Powder	107	110	114	83	74
Tongue	92	99	102	86	87
Belle Fourche	107	106	107	54	59
Cheyenne	101	103	108	56	65
Upper North Platte	132	123	125	124	74
Sweetwater	175	168	179	107	75
Lower North Platte	118	104	107	72	56
Laramie	112	111	119	117	66
South Platte	57	58	49	57	14
Little Snake	161	150	144	120	78
Upper Green	115	111	117	115	79
Lower Green	162	151	153	124	84
Upper Bear	160	151	155	126	74
Statewide SNOTEL Percent of Median	121	119	122	110	81
Weighted State Average (Area)	119	116	119	97	73
Minimum	57	58	49	54	14
Maximum	175	168	179	126	97

red = down blue = up green = same

* Basin SWE values, close to dates of first measurable snowfall and melt-out, can be irregular or erratic

For more info contact:

Jeff Goats jeff.goats@usda.gov (307) 233-6768

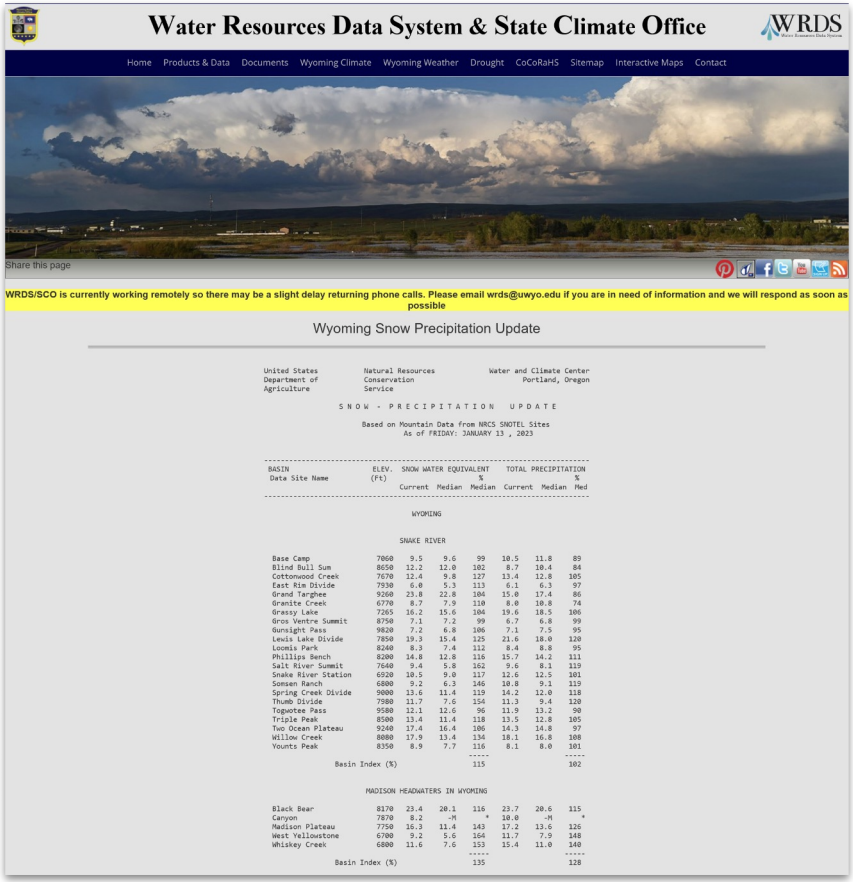
NRCS Snow Survey
100 East B St., Room 3001
Casper, WY 82601

Originally available via dial-up to the SCS (later NRCS) Centralized Forecasting System mainframe.

Shows basin total snow water equivalent each Monday, in terms of a percent of median.

http://www.wrds.uwyo.edu/wrds/nrcs/snowrept/snowrept.html

Snow Precipitation Update



Water Resources Data System & State Climate Office

Home | Products & Data | Documents | Wyoming Climate | Wyoming Weather | Drought | CoCoRaHS | Sitemap | Interactive Maps | Contact

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WRDS/SCO is currently working remotely so there may be a slight delay returning phone calls. Please email wrds@uwyo.edu if you are in need of information and we will respond as soon as possible

Wyoming Snow Precipitation Update

United States Department of Agriculture | Natural Resources Conservation Service | Water and Climate Center Portland, Oregon

S N O W - P R E C I P I T A T I O N U P D A T E

Based on Mountain Data from NRCS SNOTEL Sites
As of FRIDAY: JANUARY 13 , 2023

BASIN Data Site Name	ELEV. (Ft)	SNOW WATER EQUIVALENT Current	Median	% Median	TOTAL PRECIPITATION Current	Median	% Med
WYOMING							
SNAKE RIVER							
Base Camp	7060	9.5	9.6	99	10.5	11.8	89
Blind Bull Sum	8650	12.2	12.0	102	8.7	10.4	84
Cottonwood Creek	7670	12.4	9.8	127	13.4	12.8	105
East Rim Divide	7930	6.0	5.3	113	6.1	6.3	97
Grand Targhee	9260	23.8	22.8	104	15.0	17.4	86
Granite Creek	6770	8.7	7.9	110	8.0	10.8	74
Grassy Lake	7265	16.2	15.6	104	19.6	18.5	106
Gros Ventre Summit	8750	7.1	7.2	99	6.7	6.8	99
Gunsight Pass	9820	7.2	6.8	106	7.1	7.5	95
Lewis Lake Divide	7850	19.3	15.4	125	21.6	18.0	120
Loomis Park	8240	8.3	7.4	112	8.4	8.8	95
Phillips Bench	8200	14.8	12.8	116	15.7	14.2	111
Salt River Summit	7640	9.4	5.8	162	9.6	8.1	119
Snake River Station	6920	10.5	9.0	117	12.6	12.5	101
Somsen Ranch	6800	9.2	6.3	146	10.8	9.1	119
Spring Creek Divide	9000	13.6	11.4	119	14.2	12.0	118
Thumb Divide	7980	11.7	7.6	154	11.3	9.4	120
Togwotee Pass	9580	12.1	12.6	96	11.9	13.2	90
Triple Peak	8500	13.4	11.4	118	13.5	12.8	105
Two Ocean Plateau	9240	17.4	16.4	106	14.3	14.8	97
Willow Creek	8080	17.9	13.4	134	18.1	16.8	108
Younts Peak	8350	8.9	7.7	116	8.1	8.0	101
Basin Index (%)				115			102
MADISON HEADWATERS IN WYOMING							
Black Bear	8170	23.4	20.1	116	23.7	20.6	115
Canyon	7870	8.2	-M	*	10.0	-M	*
Madison Plateau	7750	16.3	11.4	143	17.2	13.6	126
West Yellowstone	6700	9.2	5.6	164	11.7	7.9	148
Whiskey Creek	6800	11.6	7.6	153	15.4	11.0	140
Basin Index (%)				135			128

Originally available via dial-up to the SCS (later NRCS) Centralized Forecasting System mainframe.

Shows basin averages as well as individual sites. Snow Water Equivalent AND Precipitation.

http://www.wrds.uwyo.edu/wrds/nrcs/snowprec/snowprec.html

Basin Snowpack Maps

Wyoming – NRCS

Report #5 **Weekly Snow Report** **January 9, 2023**

Good day to all. This is the 5th Snow Report for Water Year 2023 (2022-2023 snow season). Currently the state's SNOTELs are reading 119% of median with a basin high of 168% and a basin low of 58%. Last year the state was at 119%, and at 85% in 2021. The map may differ slightly from the table depending upon how many stations were reporting at the time. This report and a map displaying basin SWE percentages of median for the state may be found at: http://www.wrds.uwyo.edu/wrds/nrcs/nrcs.html.

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Basin	1/9/2023	1/2/2023	12/26/2022	1/9/2022	1/9/2021
Snake	116	119	112	125	93
Madison	139	142	136	120	82
Yellowstone	108	109	113	111	100
Wind	124	127	113	122	72
Bighorn	98	100	105	90	71
Shoshone	98	101	101	108	90
Powder	110	114	126	84	70
Tongue	99	102	115	86	87
Belle Fourche	106	107	135	51	60
Cheyenne	103	108	130	55	68
Upper North Platte	123	125	102	133	80
Sweetwater	168	179	137	110	77
Lower North Platte	104	107	84	71	55
Laramie	111	119	95	124	69
South Platte	58	49	49	65	12
Little Snake	150	144	116	131	85
Upper Green	111	117	100	128	84
Lower Green	151	153	133	134	86
Upper Bear	151	155	120	141	80
Statewide SNOTEL Percent of Median	119	122	111	119	85
Weighted State Average (Area)	116	119	112	103	74
Minimum	58	49	49	51	12
Maximum	168	179	137	141	100

red = down blue = up green = same

* Basin SWE values, close to dates of first measurable snowfall and melt-out, can be irregular or erratic

For more info contact:

Jeff Goats jeff.goats@usda.gov (307) 233-6768

NRCS Snow Survey
100 East B St., Room 3001
Casper, WY 82601

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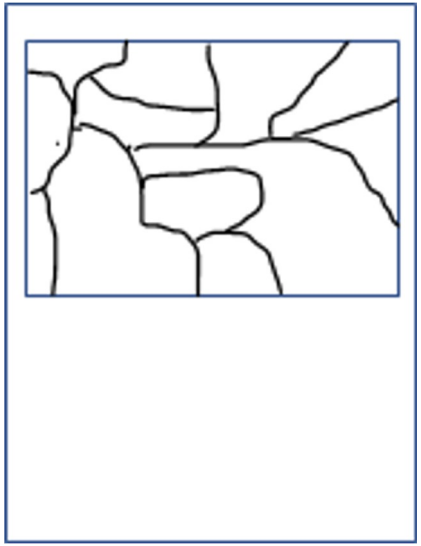

Piece of paper with photocopy of state of Wyoming on it

Basin Snowpack Maps

Wyoming – NRCS

Report #5 **Weekly Snow Report** **January 9, 2023**

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Madison	139	142	136	120	82
Yellowstone	108	109	113	111	100
Wind	124	127	113	122	72
Bighorn	98	100	105	90	71
Shoshone	98	101	101	108	90
Powder	110	114	126	84	70
Tongue	99	102	115	86	87
Belle Fourche	106	107	135	51	60
Cheyenne	103	108	130	55	68
Upper North Platte	123	125	102	133	80
Sweetwater	168	179	137	110	77
Lower North Platte	104	107	84	71	55
Laramie	111	119	95	124	69
South Platte	58	49	49	65	12
Little Snake	150	144	116	131	85
Upper Green	111	117	100	128	84
Lower Green	151	153	133	134	86
Upper Bear	151	155	120	141	80
Statewide SNOTEL Percent of Median	119	122	111	119	85
Weighted State Average (Area)	116	119	112	103	74
Minimum	58	49	49	51	12
Maximum	168	179	137	141	100

red = down blue = up green = same

* Basin SWE values, close to dates of first measurable snowfall and melt-out, can be irregular or erratic

For more info contact:

Jeff Goats jeff.goats@usda.gov (307) 233-6768

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Casper, WY 82601

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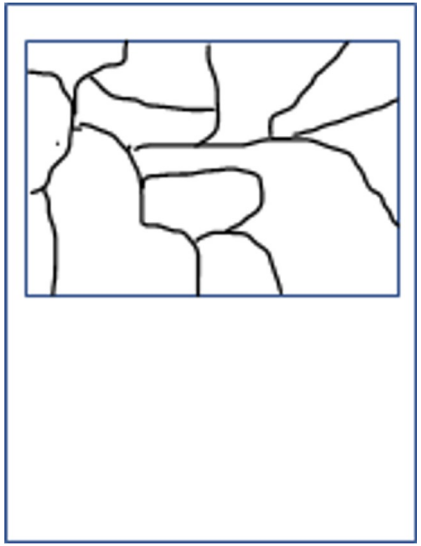

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collections.museumvictoria.com.au

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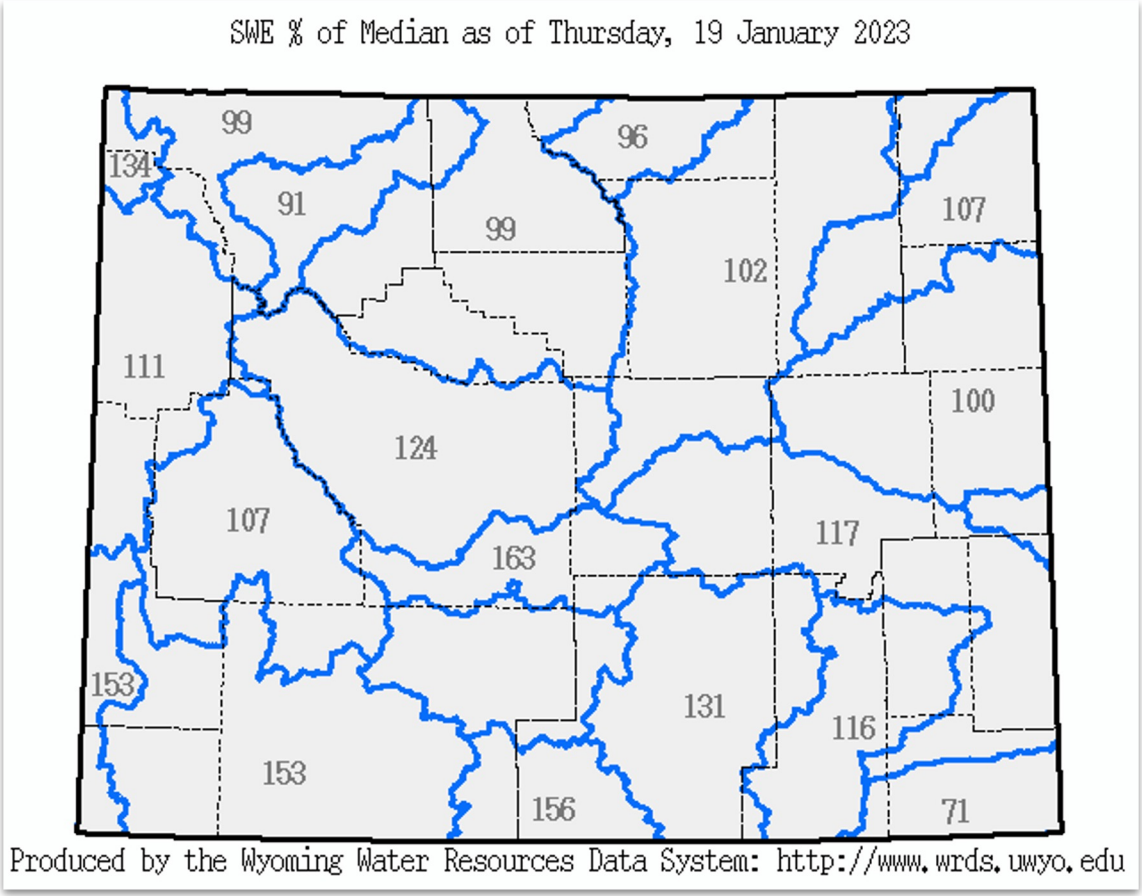
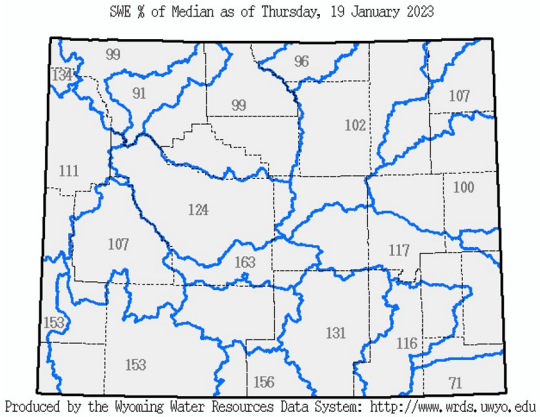
Piece of paper with photocopy of state of Wyoming on it

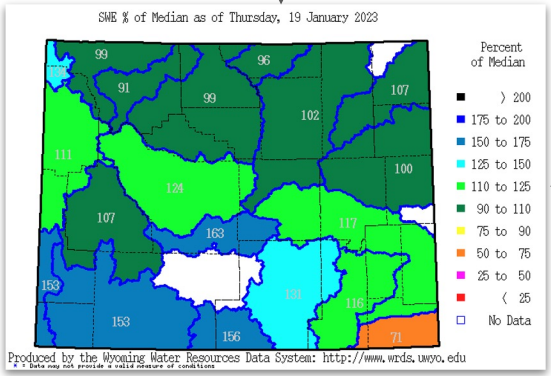
Basin Snowpack Maps

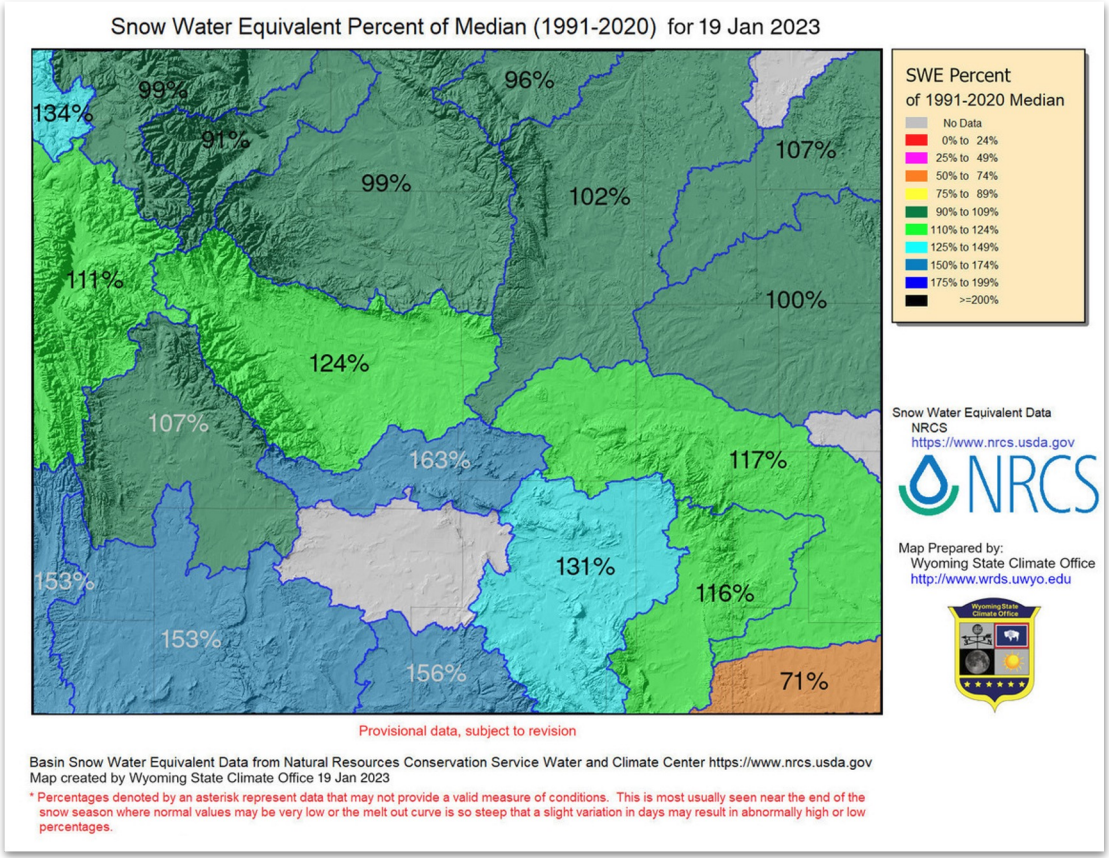


http://www.wrds.uwyo.edu/wrds/nrcs/basinswe/basinswe.html

Basin Snowpack Maps







http://www.wrds.uwyo.edu/wrds/nrcs/snowmap/snowmap.html

Basin and Water Supply Outlook Reports

United States Department of Agriculture

Wyoming Basin & Water Supply Outlook Report

January 1, 2023

Natural Resources Conservation Service

Teton Range, Wyoming, November 14, 2022. Photo credit: Wyoming NRCS.

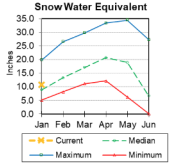
Snake River Basin

Snow

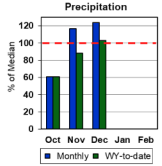
The overall Snake River basin SWE (portion above Palisades dam) is 122% of median. SWE in the Snake River Basin above Jackson Lake is 133% of median. Pacific Creek basin SWE is 120% of median. Buffalo Fork SWE is 108% of median. Gros Ventre River basin SWE is 102% of median. SWE in the Hoback River drainage is 113% of median. SWE in the Greys River drainage is 120% of median. Salt River Basin SWE is 136% of median.

See Appendix at the end of this report for a detailed listing of snow course information.

Snake River Basin
Snow Water Equivalent



Snake River Basin
Precipitation



Precipitation

Last month's precipitation for the Snake River Basin was 124% of median. Water-year-to-date precipitation is 103% of median.

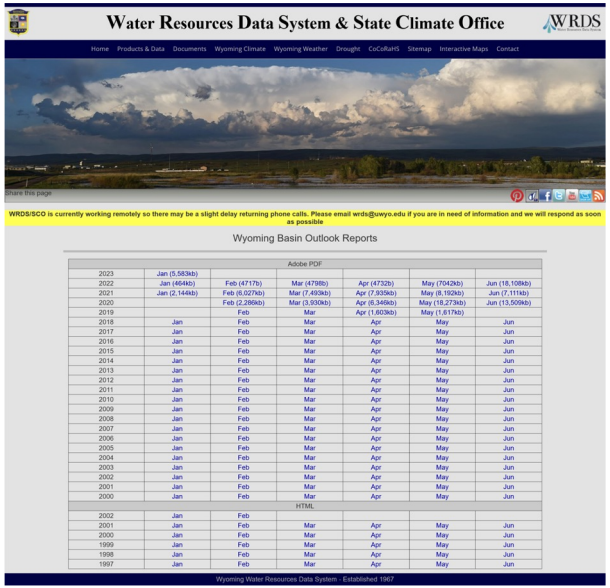
Reservoirs

Current reservoir storage is 28% of median for the two storage reservoirs in the basin.

	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Grassy Lake	10.9	10.0	12.5	15.2	72%	66%	82%	87%	80%
Jackson Lake	167.9	156.1	615.6	847.0	20%	18%	73%	27%	25%
Basin Index					**21%**	**19%**	**73%**	**28%**	**26%**
# of reservoirs					2	2	2	2	2

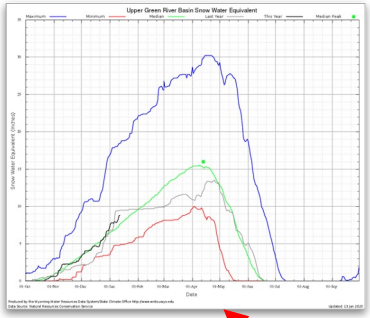
Streamflow

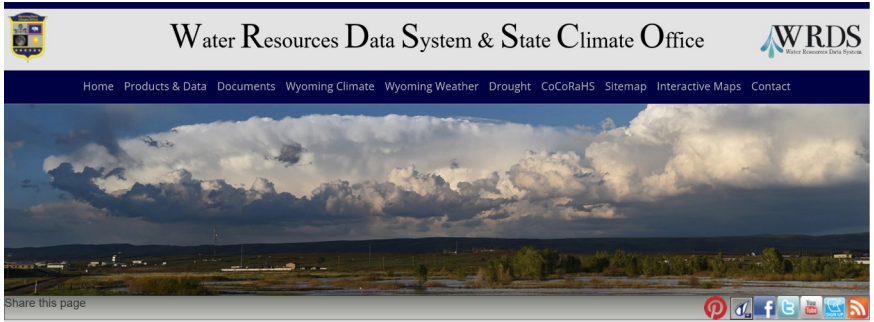
The 50% exceedance forecasts for April through September are near or above median for this basin. The Snake near Moran yield should be 122% of median. Snake River above reservoir near Alpine will yield about 107%. Pacific Creek near Moran yield will be around 108%. Buffalo Fork above Lava near Moran will be around 106% of median. Greys River above reservoir near Alpine should yield about 105%. Salt River near Etna yield will be about 113%.



http://www.wrds.uwyo.edu/wrds/nrcs/snowpack/snowmap.html

Snow Pack Peak, Current, and Meltout By Basin (also by individual SnoTel)





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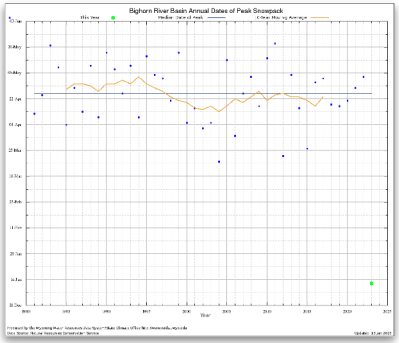
Peak Snow Water Equivalent Dates and Totals by Basin With Meltout Dates

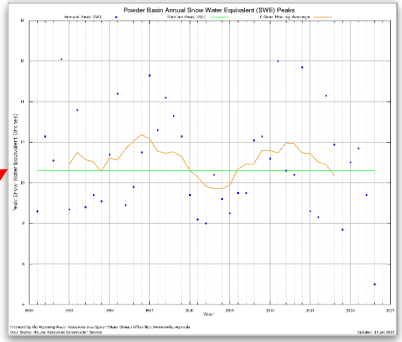
This year's "to-date" peak snow water equivalent (SWE) compared to median.
Red indicates **earlier** peak date or **lower** SWE compared to median
Blue indicates **later** peak date or **higher** SWE compared to median
Click Column Headers to Sort

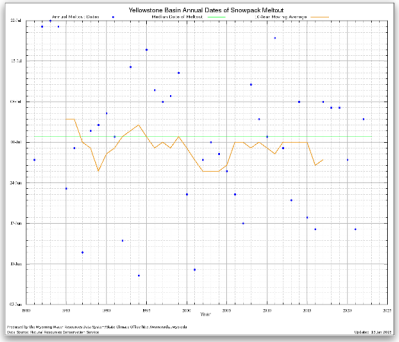
Basin Click to View Chart	This Year Peak Date	This Year Peak SWE (inches)	Days Early/Late	Peak SWE Dif (inches)	Percent of Median Peak SWE	Median Peak Date	Median Peak SWE (inches)	Current SWE	Median Meltout Date
Belle Fourche	19 Jan 2023	3.8	-72	-3.1	55%	02 Apr IMG	6.9 IMG	3.8	30 Apr IMG
Bighorn	18 Jan 2023	5.4	-96	-6.3	46%	25 Apr IMG	11.7 IMG	5.3	19 Jun IMG
Cheyenne	18 Jan 2023	4.0	-73	-3.5	53%	02 Apr IMG	7.5 IMG	3.9	30 Apr IMG
Laramie	19 Jan 2023	8.6	-89	-7.3	54%	19 Apr IMG	15.9 IMG	8.6	12 Jun IMG
Little Snake	19 Jan 2023	16.5	-76	-4.0	80%	06 Apr IMG	20.5 IMG	16.5	19 Jun IMG
Lower Green	18 Jan 2023	9.4	-80	-4.2	69%	09 Apr IMG	13.6 IMG	9.2	12 Jun IMG
Lower North Platte	19 Jan 2023	6.4	-85	-6.4	50%	15 Apr IMG	12.8 IMG	6.4	19 May IMG
Madison	19 Jan 2023	15.9	-85	-7.9	67%	15 Apr IMG	23.8 IMG	15.9	24 Jun IMG
Powder	18 Jan 2023	5.1	-88	-5.5	48%	17 Apr IMG	10.6 IMG	4.9	08 Jun IMG
Shoshone	17 Jan 2023	9.2	-96	-8.9	51%	24 Apr IMG	18.1 IMG	9.1	29 Jun IMG
Snake	19 Jan 2023	12.7	-82	-7.9	62%	12 Apr IMG	20.6 IMG	12.7	28 Jun IMG
South Platte	19 Jan 2023	3.2	-68	-4.0	44%	29 Mar IMG	7.2 IMG	3.2	26 Apr IMG
Sweetwater	18 Jan 2023	10.4	-89	-4.6	69%	18 Apr IMG	15.0 IMG	10.3	05 Jun IMG
Tongue	18 Jan 2023	5.1	-103	-8.3	38%	02 May IMG	13.4 IMG	4.9	09 Jun IMG
Upper Bear	18 Jan 2023	12.4	-83	-4.2	75%	12 Apr IMG	16.6 IMG	12.3	15 Jun IMG
Upper Green	18 Jan 2023	9.1	-84	-6.9	57%	13 Apr IMG	16.0 IMG	8.9	18 Jun IMG
Upper North Platte	19 Jan 2023	15.4	-86	-9.0	63%	16 Apr IMG	24.4 IMG	15.4	26 Jun IMG
Wind	19 Jan 2023	8.2	-92	-5.8	59%	22 Apr IMG	14.0 IMG	8.2	25 Jun IMG
Yellowstone	19 Jan 2023	12.2	-94	-9.0	58%	24 Apr IMG	21.2 IMG	12.2	02 Jul IMG

Data from Natural Resources Conservation Service SnoTel Network

Wyoming Water Resources Data System - Established 1967

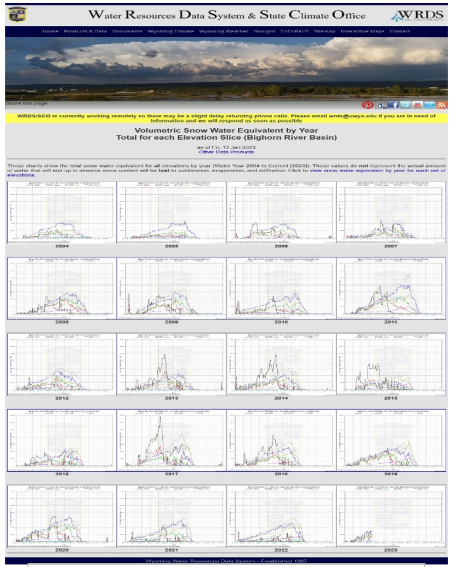


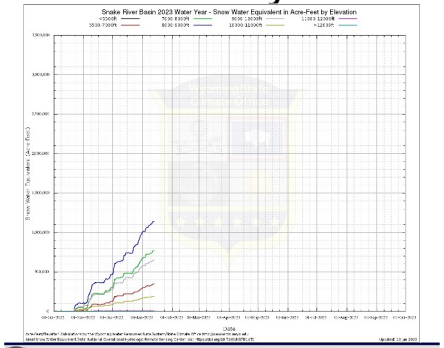


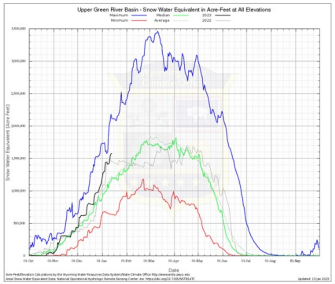


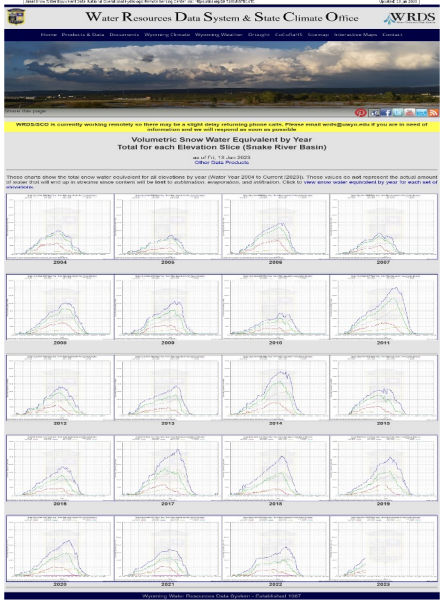
http://www.wrds.uwyo.edu/Snow/BasinPeakSWE.html

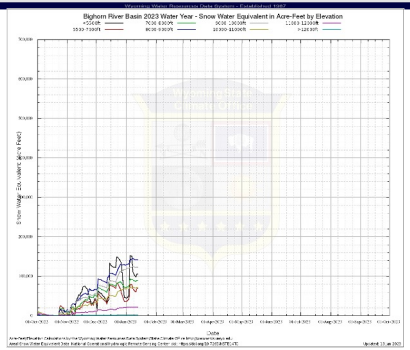
Snow Water Equivalent Volume by Basin

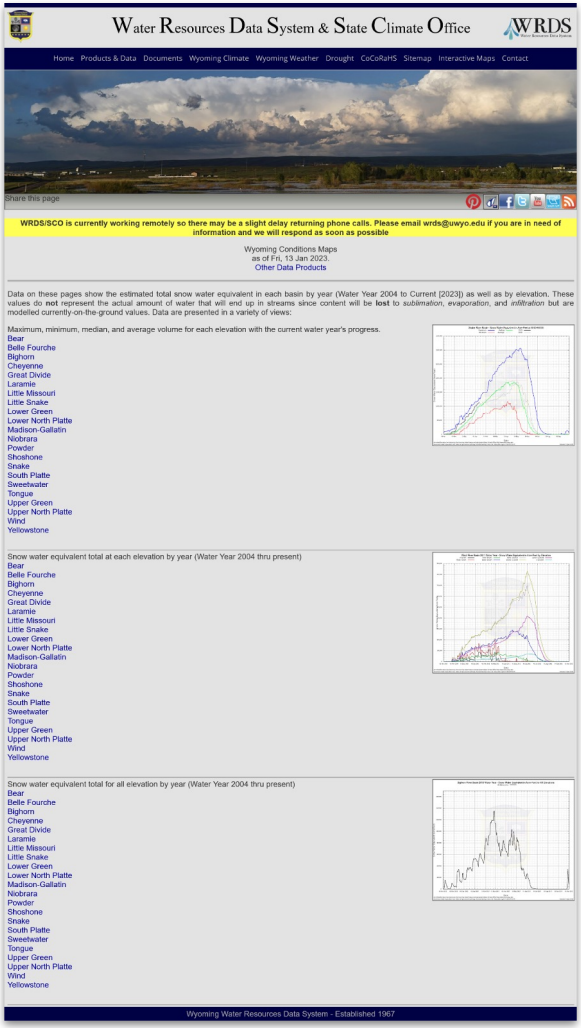






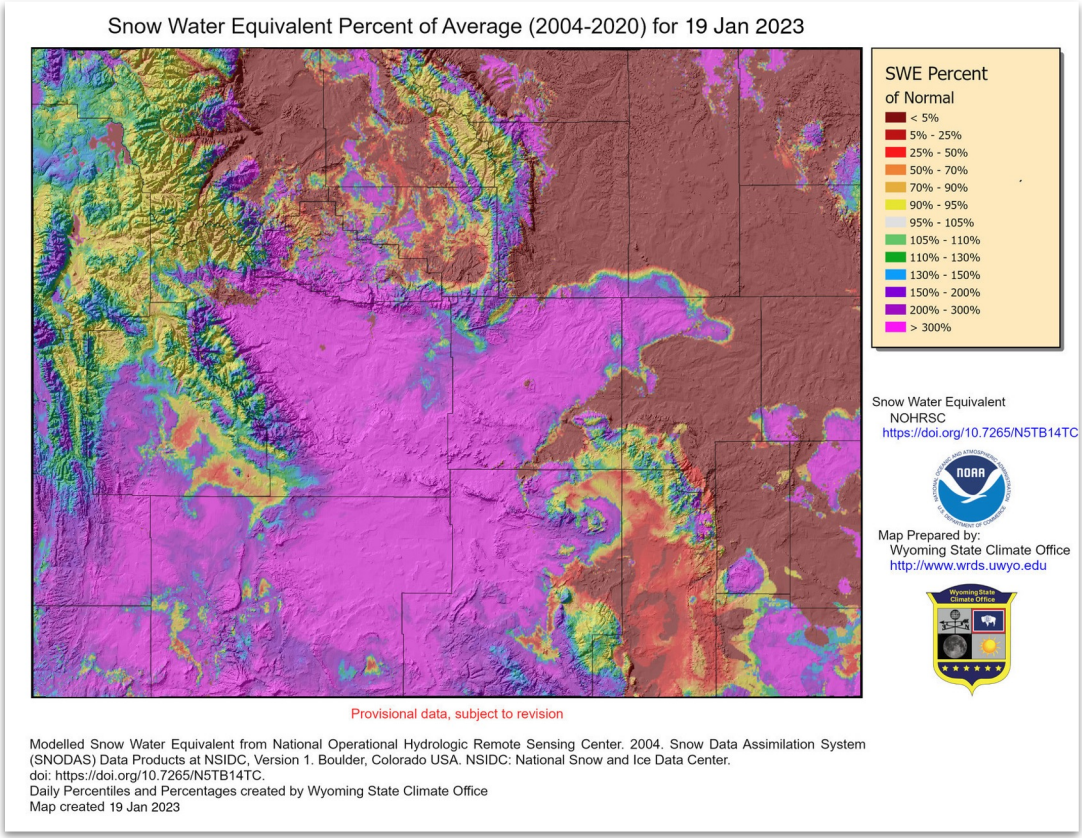






http://www.wrds.uwyo.edu/Snow/SWEVolume/SWEVolume.html

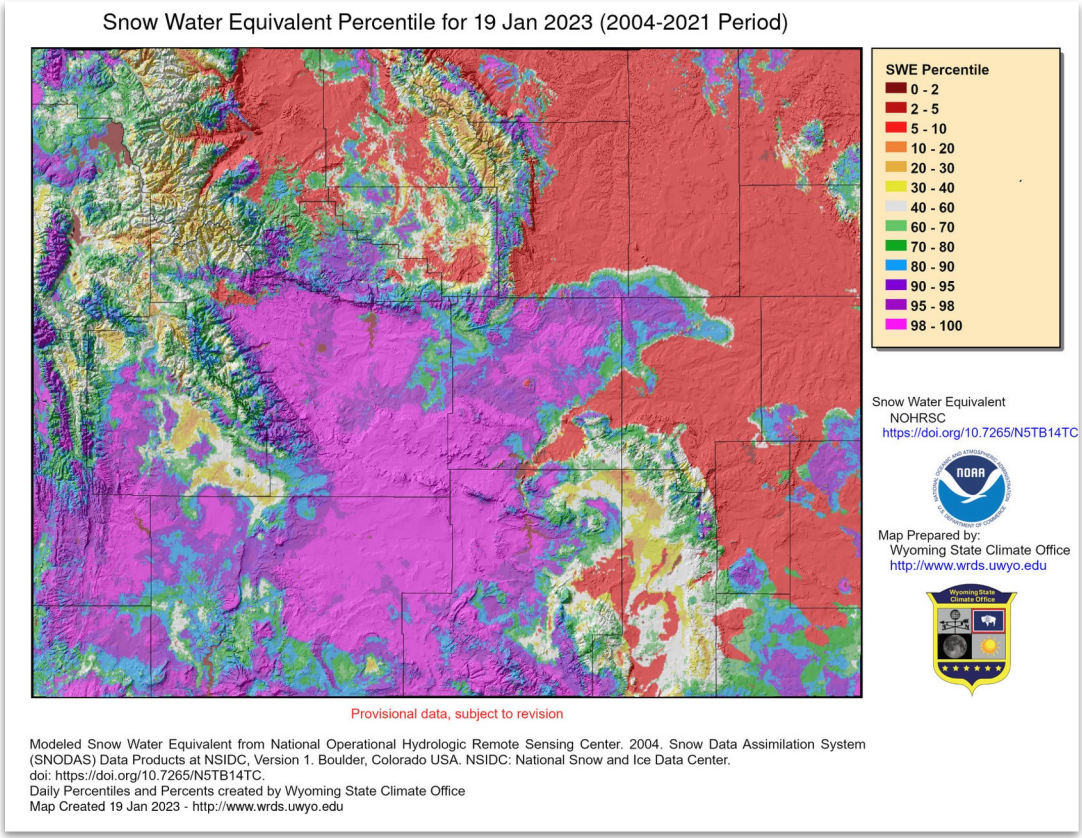
Modeled Snow Water Equivalent Percent of Average



Instead of one number for each basin, this shows modeled SWE as a percent of normal/average in a grid format.

http://www.wrds.uwyo.edu/Snow/SWE-Prcnt-Current.html

Modeled Snow Water Equivalent Percentile

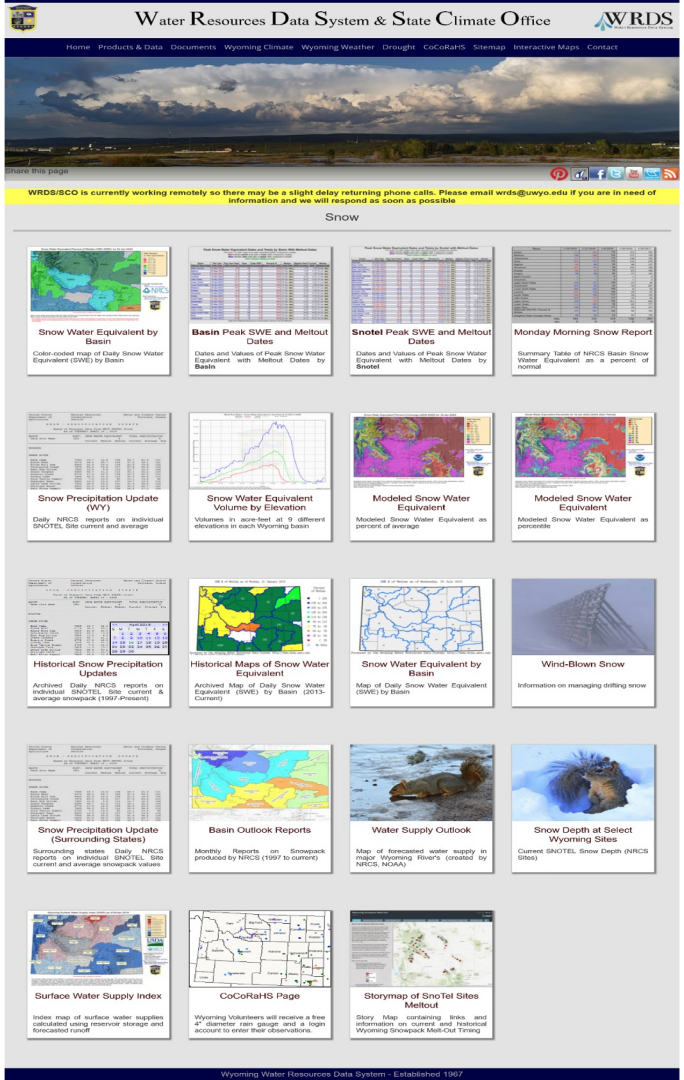


And as a percentile

http://www.wrds.uwyo.edu/Snow/SWE-Ptile-Current.html

WRDS
Water Resources Data System

www.wrds.uwyo.edu



Finding Snowpack Information

- Snow Water Equivalent (SWE) by Basin
- Basin Peak SWE and Meltout Dates
- Snotel Peak SWE and Meltout Dates
- Monday Morning Snow Report
- Snow Precipitation Update (WY)
- SWE Volume by Elevation
- Modeled Snow Water Equivalent (%/Ptile)
- Historical Snow Precipitation Updates
- Historical Maps of Snow Water Equivalent
- Snow Water Equivalent by Basin (Classic)
- Wind-Blown Snow (snow fence resource)
- Snow Precipitation Update (other States)
- Basin Outlook Reports
- Water Supply Outlook
- Snow Depth at Select Wyoming Sites
- Surface Water Supply Index
- CoCoRaHS (we collect snow data as well)
- Storymap of SnoTel Sites Meltout

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Get Involved!

Become a *CoCoRaHS volunteer* – learn more at:
https://www.cocorahs.org/

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Submit a *Condition Monitoring Observer Report* at:

The Wyoming Conditions Monitoring Team (WCMT) organized and hosted this webinar. The WCMT is a collaborative effort of state, federal, tribal, and university partners that monitor conditions & impacts throughout the state on a weekly basis – and communicate this information to the U.S. Drought Monitor among others.

Learn more at:
https://drought.wyo.gov

Thank you! Questions?
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