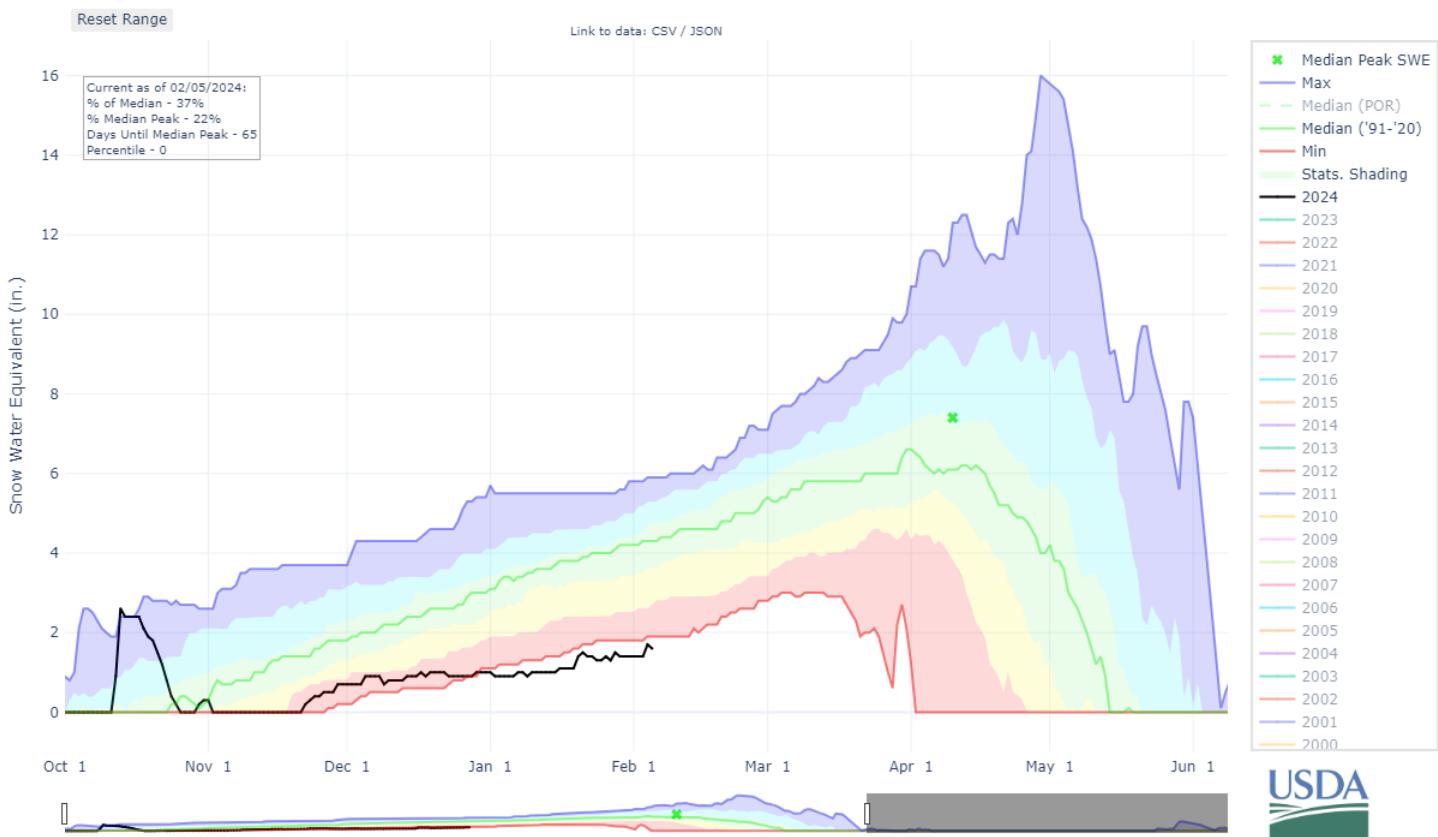


# Wyoming Basin & Water Supply Outlook Report

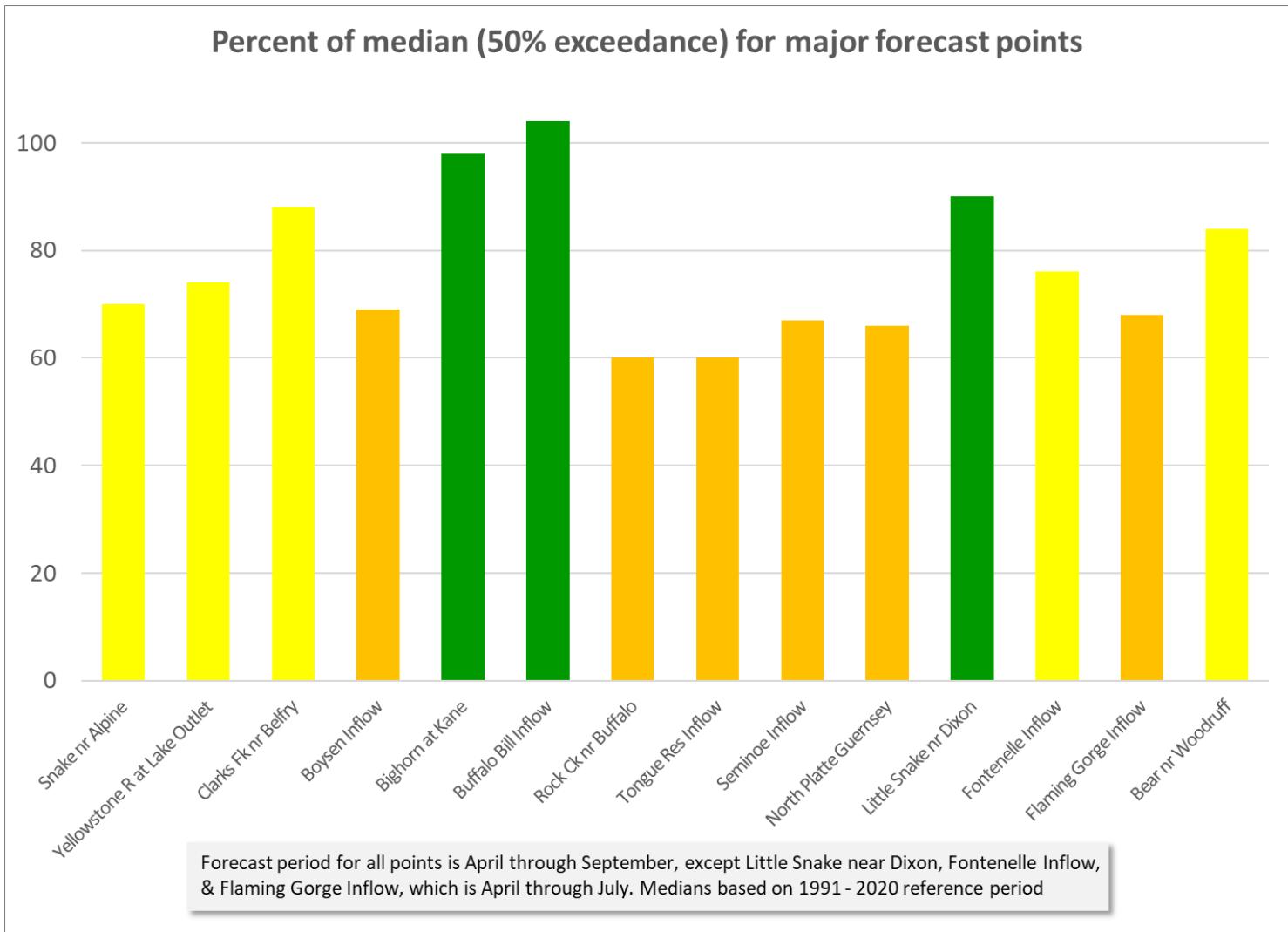
## February 1, 2024

**Natural  
Resources  
Conservation  
Service**



Hansen Sawmill, Tongue River Basin, Snow Water Equivalent Graph, 2/5/2024

## Forecasted stream flows for February 1<sup>st</sup>, 2024



Fifty percent exceedance probability for all major forecast points listed above is expected to be below 100% of normal except for Buffalo Bill Reservoir inflow. Buffalo Bill Reservoir inflow is expected to be 104% of normal. Fifty percent exceedance probability for nine major forecast points listed above, is expected to be below 80% of normal.

# **Basin Outlook Reports**

## **And**

## **Federal - State - Private Cooperative Snow Surveys**

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*For more information, contact:*

**Jeff Coyle**  
100 East "B" Street, Casper, WY 82601  
(307) 233-6768      [jeffrey.coyle@usda.gov](mailto:jeffrey.coyle@usda.gov)

### **How forecasts are made**

Most of the annual streamflow in the western United States originates as snowfall that has accumulated in the mountains during the winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Measurements of snow water equivalent at selected manual snow courses and automated SNOTEL sites, along with precipitation, antecedent streamflow, and indices of the El Niño / Southern Oscillation are used in computerized statistical and simulation models to prepare runoff forecasts. Unless otherwise specified, all forecasts are for flows that would occur naturally without any upstream influences.

Forecasts of any kind, of course, are not perfect. Streamflow forecast uncertainty arises from three primary sources: (1) uncertain knowledge of future weather conditions, (2) uncertainty in the forecasting procedure, and (3) errors in the data. The forecast, therefore, must be interpreted not as a single value but rather as a range of values with specific probabilities of occurrence. The middle of the range is expressed by the 50% exceedance probability forecast, for which there is a 50% chance that the actual flow will be above, and a 50% chance that the actual flow will be below, this value. To describe the expected range around this 50% value, four other forecasts are provided, two smaller values (90% and 70% exceedance probability) and two larger values (30%, and 10% exceedance probability). For example, there is a 90% chance that the actual flow will be more than the 90% exceedance probability forecast. The others can be interpreted similarly.

The wider the spread among these values, the more uncertain the forecast. As the season progresses, forecasts become more accurate, primarily because a greater portion of the future weather conditions become known; this is reflected by a narrowing of the range around the 50% exceedance probability forecast. Users should take this uncertainty into consideration when making operational decisions by selecting forecasts corresponding to the level of risk they are willing to assume about the amount of water to be expected. If users anticipate receiving a lesser supply of water, or if they wish to increase their chances of having an adequate supply of water for their operations, they may want to base their decisions on the 90% or 70% exceedance probability forecasts, or something in between. On the other hand, if users are concerned about receiving too much water (for example, threat of flooding), they may want to base their decisions on the 30% or 10% exceedance probability forecasts, or something in between. Regardless of the forecast value users choose for operations, they should be prepared to deal with either more or less water. (Users should remember that even if the 90% exceedance probability forecast is used, there is still a 10% chance of receiving less than this amount.) By using the exceedance probability information, users can easily determine the chances of receiving more or less water.

**Note:** The median is the official normal for snowpack (SWE), precipitation, reservoir storage, and streamflow calculations. Please refer to the **Appendix** of this report for more detailed information.

The U.S. Department of Agriculture (USDA) prohibits discrimination against its customers. If you believe you experienced discrimination when obtaining services from USDA, participating in a USDA program, or participating in a program that receives financial assistance from USDA, you may file a complaint with USDA. Information about how to file a discrimination complaint is available from the Office of the Assistant Secretary for Civil Rights. USDA prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex (including gender identity and expression), marital status, familial status, parental status, religion, sexual orientation, political beliefs, genetic information, reprisal, or because all or part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) To file a complaint of discrimination, complete, sign, and mail a program discrimination complaint form, available at any USDA office location or online at [www.ascr.usda.gov](http://www.ascr.usda.gov), or write to: USDA Office of the Assistant Secretary for Civil Rights 1400 Independence Avenue, SW. Washington, DC 20250-9410 Or call toll free at (866) 632-9992 (voice) to obtain additional information, the appropriate office or to request documents. Individuals who are deaf, hard of hearing, or have speech disabilities may contact USDA through the Federal Relay service at (800) 877-8339 or (800) 845-6136 (in Spanish). USDA is an equal opportunity provider, employer, and lender. Persons with disabilities who require alternative means for communication of program information (e.g., Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD).

# Wyoming Basin & Water Supply Outlook Report

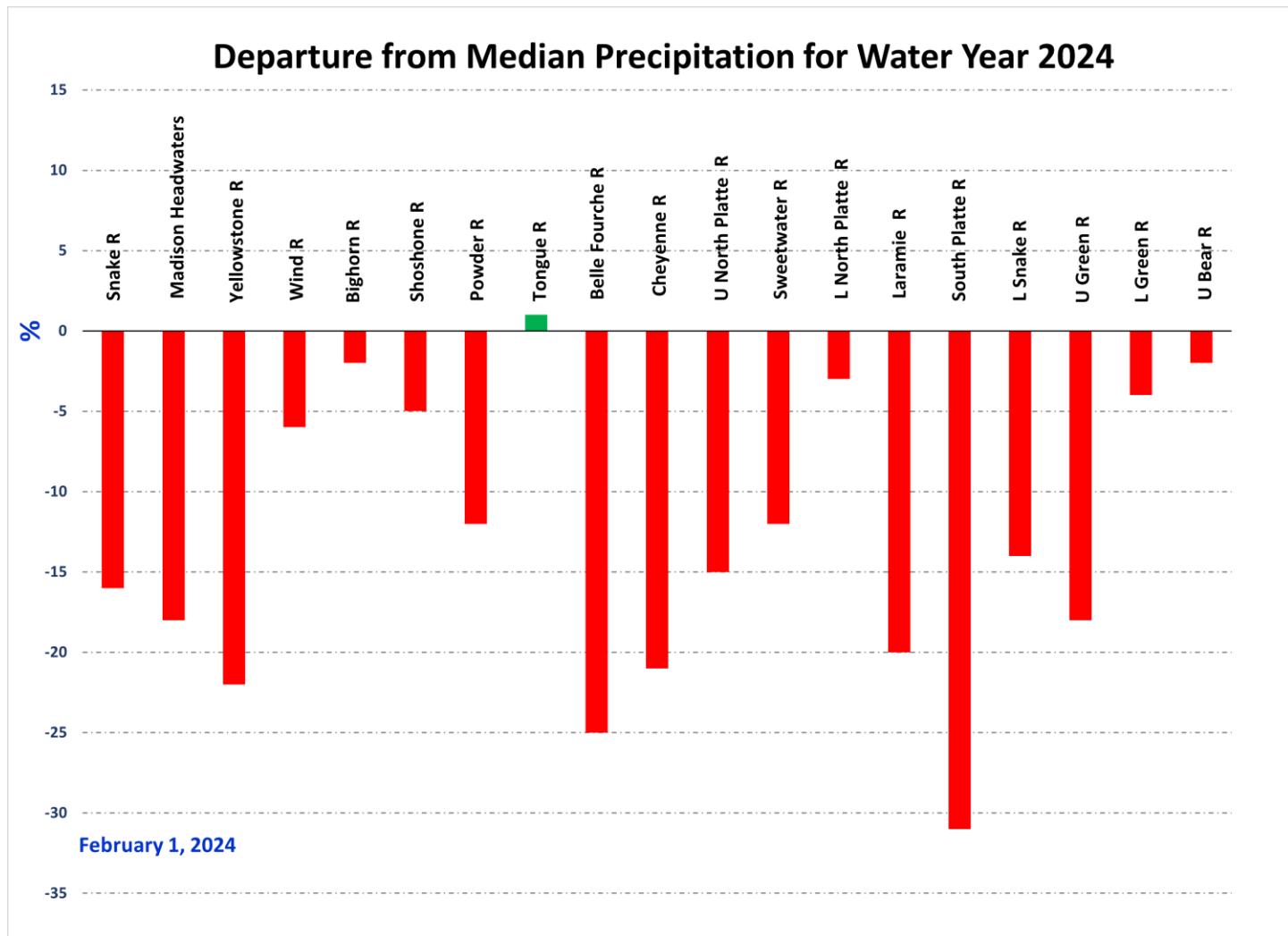
## Snowpack

Snow water equivalent (SWE) across Wyoming for February 1<sup>st</sup> was at 68% of median. SWE in the Upper Bear River Basin was the highest at 99% of median and lowest for the Cheyenne River Basin at 48% of median. On February 1<sup>st</sup>, 2024, the following basins were below the Minimum SWE recorded for the 1991 - 2020 interval: Yellowstone, Powder, Belle Fourche, Cheyenne, and Sweetwater River Basins are below the minimum SWE (recorded for the 1991 - 2020 interval) this water year. *See the map on page 6 and the Appendix for further information.*

## Precipitation

The Lower Green Basin had the highest precipitation for the month at 141% of median. The Cheyenne River Basin had the lowest precipitation amount for the month at 50% of median. The following graph displays the precipitation in major river basins and their departure from median for the water year beginning October 1<sup>st</sup>, 2023.

*See Appendix for further information.*



## Streams

Forecast median streamflow yields for April thru September in Wyoming basins (except Green, Little Snake and Cheyenne) average 80%. Forecast median stream flow yields for April thru July in Green, Little Snake, and Cheyenne average 81, 86%, and 66%. The Snake River and Yellowstone River in Wyoming, basins should yield about 77% and 81% of median. Yields from the Wind and Bighorn River basins should be about 89% and 94% of median. Yields from the Shoshone River basin should be 94% of median. Yields from the Powder and Tongue River basins should be about 62% and 72% of median. Yield for the Cheyenne River basin should be about 88% of median. Yields for the Sweetwater, Upper North Platte, Lower North Platte, and Laramie Rivers of Wyoming should be about 88%, 76%, 74%, and 76% of median, respectively.

## Reservoirs

Reservoir storage was 104% of median across the entire state. Reservoirs in the Snake River basin are near median at 96%. Reservoirs in the Wind River basin are near median at 105%. Reservoirs on the Bighorn are 100% of median. The Buffalo Bill Reservoir on the Shoshone is near median at 107%. Reservoirs in the Belle Fourche and Cheyenne River basins are near median at 106% and 103% respectively. Reservoirs on the Upper and Lower North Platte River are above median at 116% and 103% respectively. Reservoirs on the Upper Green River are at 111% of median. Reservoirs on the Lower Green River are near median at 101%.

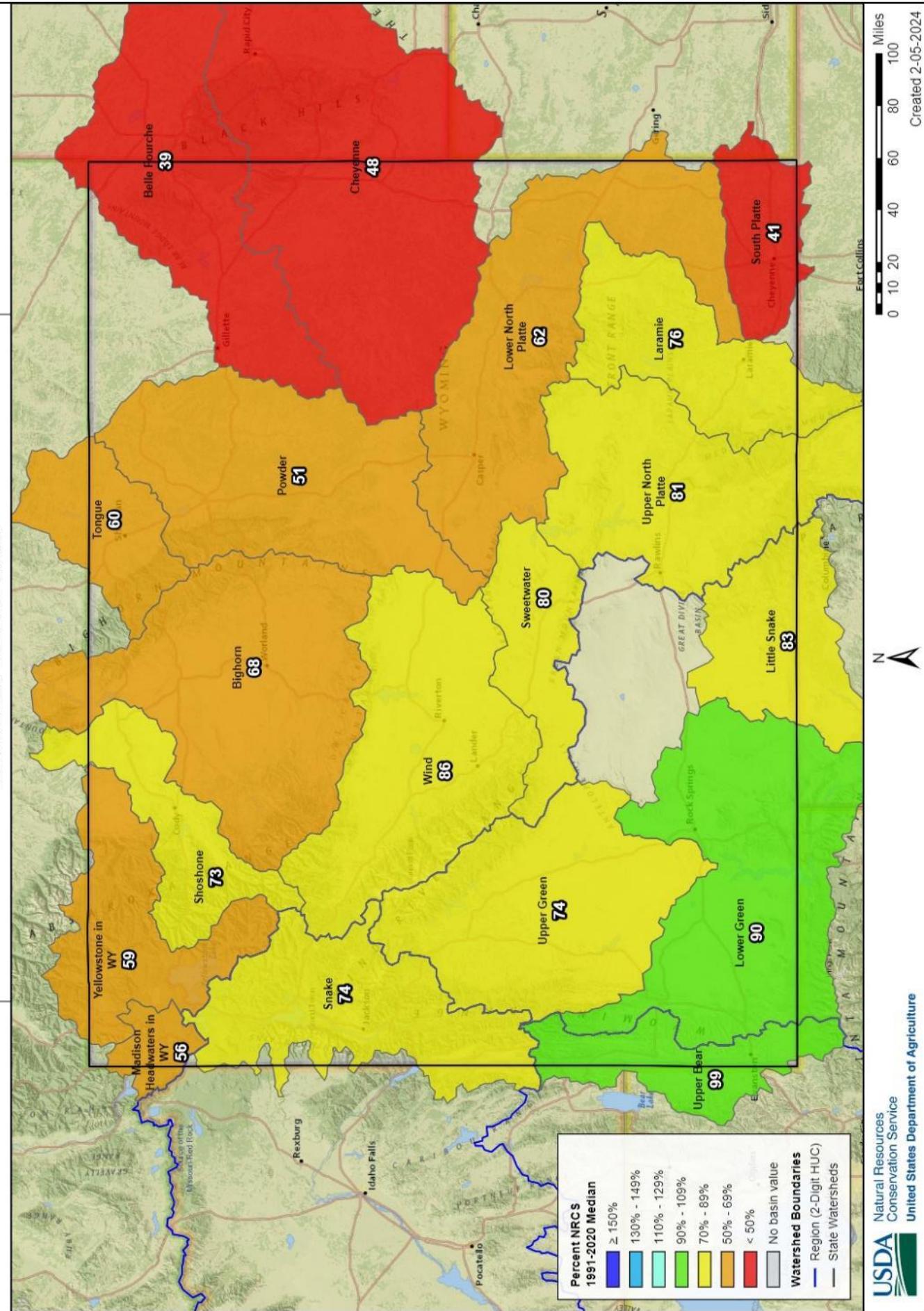
Reservoir Storage Summary For the End of January 2024									
	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Alcova	157.4	157.6	156.4	184.3	85%	86%	85%	101%	101%
Angostura	99.1	63.3	93.3	122.1	81%	52%	76%	106%	68%
Belle Fourche	135.6	123.9	132.1	178.4	76%	69%	74%	103%	94%
Big Sandy	39.0	7.5	18.2	38.3	102%	20%	48%	214%	41%
Bighorn Lake	852.6	817.5	854.2	1356.0	63%	60%	63%	100%	96%
Boysen	590.1	560.6	551.9	596.0	99%	94%	93%	107%	102%
Buffalo Bill	476.9	465.2	446.7	646.6	74%	72%	69%	107%	104%
Bull Lake	71.2	73.8	80.9	151.8	47%	49%	53%	88%	91%
Deerfield	14.6	14.6	14.8	15.2	96%	96%	97%	99%	99%
Flaming Gorge Res	3132.2	2496.9	3111.0	3749.0	84%	67%	83%	101%	80%
Fontenelle	163.9	166.8	165.4	344.8	48%	48%	48%	99%	101%
Glendo	294.5	257.5	281.5	506.4	58%	51%	56%	105%	91%
Grassy Lake	12.8	11.2	12.7	15.2	84%	74%	84%	101%	88%
Guernsey	14.9	13.7	13.9	45.6	33%	30%	30%	108%	98%
High Savery Res	13.9	6.9	11.6	22.4	62%	31%	52%	120%	59%
Jackson Lake	598.1	178.0	620.4	847.0	71%	21%	73%	96%	29%
Keyhole	128.8	117.9	117.2	193.8	66%	61%	60%	110%	101%
Meeks Cabin Res	17.2	9.2	9.8	32.5	53%	28%	30%	175%	94%
Pactola	51.8	50.1	52.4	55.0	94%	91%	95%	99%	96%
Pathfinder	705.9	350.3	565.6	1016.5	69%	34%	56%	125%	62%
Pilot Butte	24.7	24.6	25.2	31.6	78%	78%	80%	98%	98%
Seminoe	638.3	446.9	595.8	1016.7	63%	44%	59%	107%	75%
Stateline Res	8.0	6.1	5.7	12.0	67%	50%	48%	140%	106%
Tongue River Res	47.9	47.9	43.0	79.1	61%	61%	54%	111%	111%
Viva Naughton Res	34.7	30.7	30.2	42.4	82%	72%	71%	115%	102%
Wheatland #2	51.0	NA	46.0	98.9	52%	NA	47%	111%	NA
Woodruff Creek	2.0	2.2	2.2	4.0	49%	55%	55%	90%	100%
Woodruff Narrows Res	48.8	13.5	36.0	57.3	85%	24%	63%	136%	37%

## Snow Water Equivalent

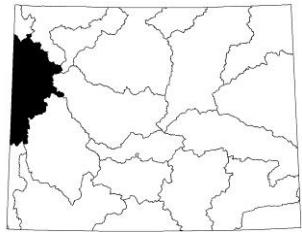
## Wyoming Basins

Percent NRCS 1991-2020 Median

February 1st, 2024



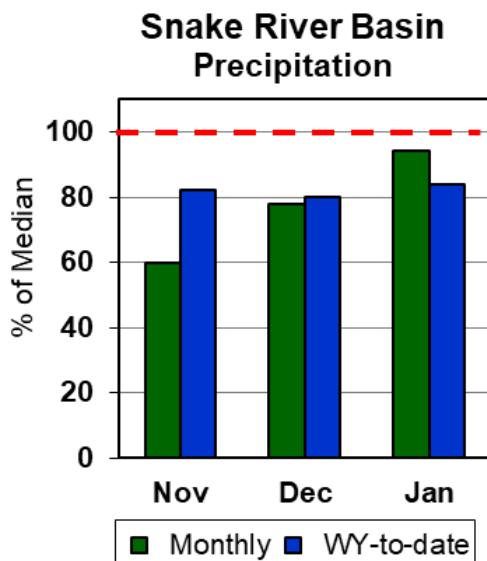
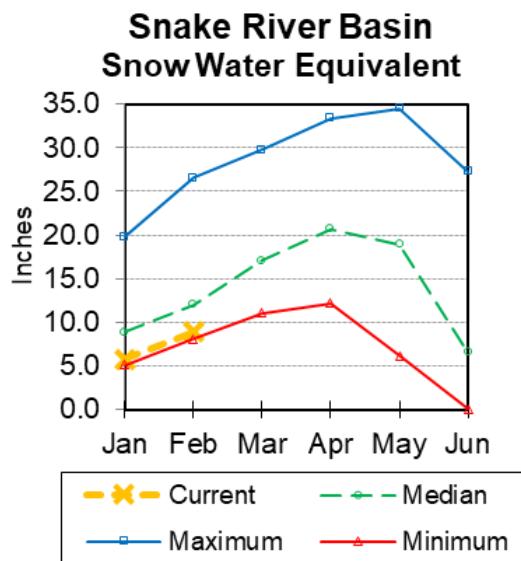
## Snake River Basin



### Snow

The overall Snake River basin SWE (portion above Palisades dam) is 74% of median. SWE in the Snake River Basin above Jackson Lake is 68% of median. Pacific Creek basin SWE is 63% of median. Buffalo Fork SWE is 62% of median. Gros Ventre River basin SWE is 64% of median. SWE in the Hoback River drainage is 69% of median. SWE in the Greys River drainage is 86% of median. Salt River Basin SWE is 98% of median.

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



### Precipitation

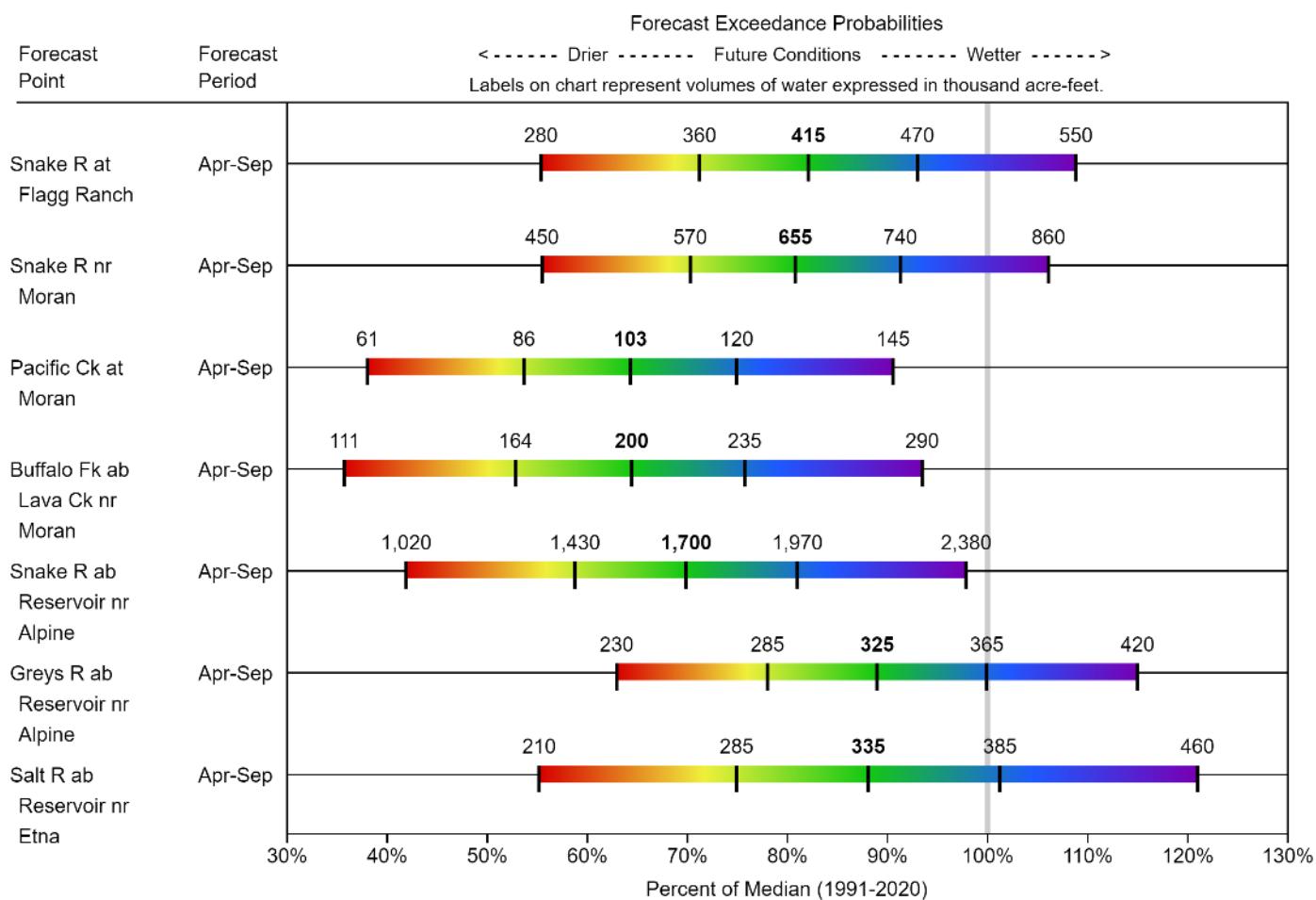
Last month's precipitation for the Snake River Basin was 94% of median. Water-year-to-date precipitation is 84% of median.

### Reservoirs

Current reservoir storage is 96% 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	12.8	11.2	12.7	15.2	84%	74%	84%	101%	88%
Jackson Lake	598.1	178.0	620.4	847.0	71%	21%	73%	96%	29%

**SNAKE**  
**Water Supply Forecasts**  
**February 1, 2024**



**Legend**

95% or 90% Exceedance	70% Exceedance	50% Exceedance	30% Exceedance	10% or 5% Exceedance
-----------------------	----------------	----------------	----------------	----------------------

There is a 95%/90% chance that flows will exceed this volume      There is a 70% chance that flows will exceed this volume      There is a 50% chance that flows will exceed this volume      There is a 30% chance that flows will exceed this volume      There is a 10%/5% chance that flows will exceed this volume

When selected, the following historic streamflow values and statistics will be shown.

| *Period of Record Minimum Streamflow KAF (Year)*

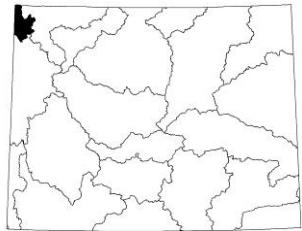
| *1991-2020 Normal Streamflow KAF*

| *Observed Streamflow KAF*

| *Period of Record Maximum Streamflow KAF (Year)*

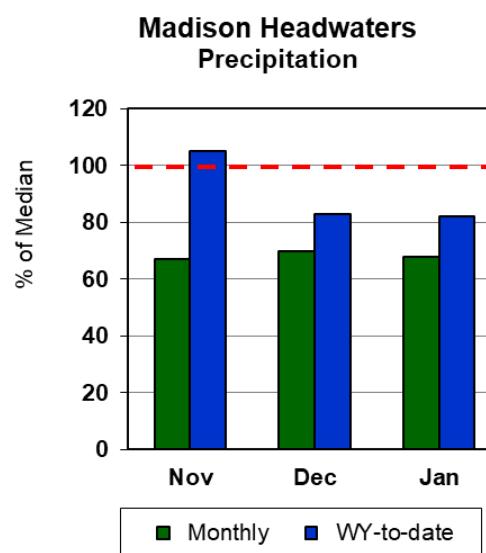
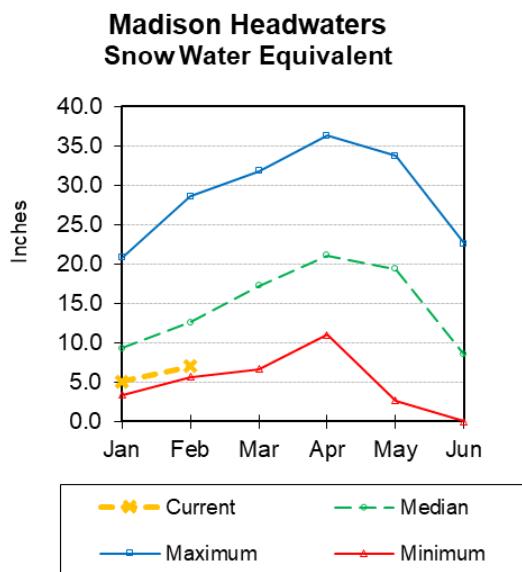
Some forecasts may be for volumes that are regulated or influenced by diversions and water management.

## Madison Headwaters in Wyoming



### Snow

SWE is 56% of median in the Madison Headwaters in Wyoming drainage. *See Appendix at the end of this report for a detailed listing of snow course information.*



### Precipitation

Last month precipitation in the Madison Headwaters drainage was 68% of median. Water-year-to-date precipitation is at 82% of median.

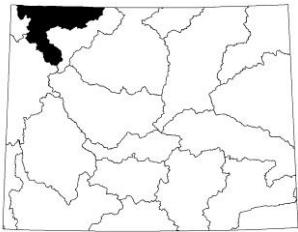
### Reservoirs

No reservoir data.

### Streamflow

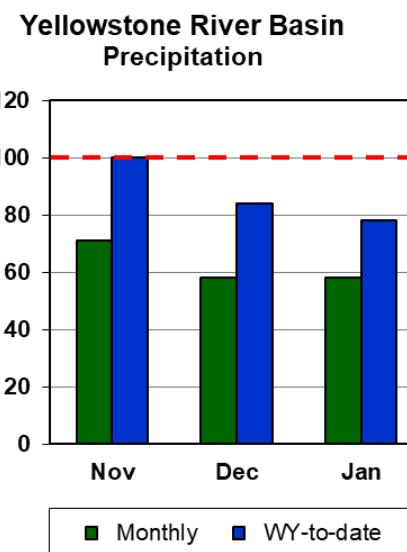
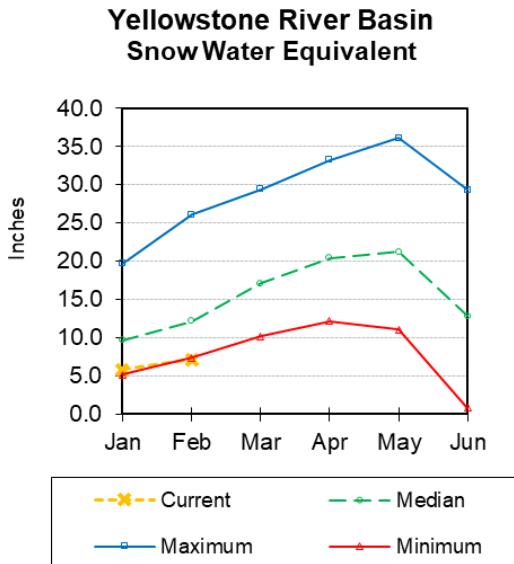
There are no streamflow forecast points for the basin.

## Yellowstone River Basin



### Snow

SWE in the Yellowstone River Basin is 59% of median. SWE in the Clarks Fork Drainage of the Yellowstone River basin in Wyoming is 59% of median. *See Appendix at the end of this report for a detailed listing of snow course information.*



### Precipitation

Last month's precipitation in the Yellowstone River Basin was 58% of median. Water-year-to-date precipitation is 78% of median.

### Reservoirs

No reservoir data.

### Streamflow

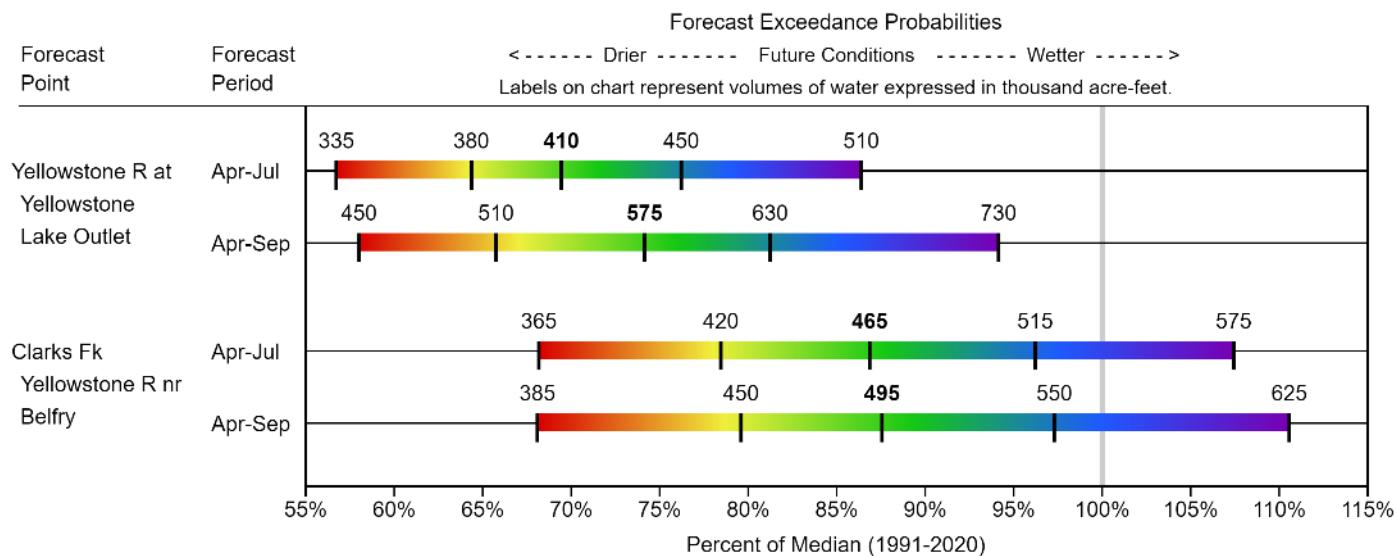
The 50% exceedance forecasts for April through September are below normal for the basin. Yellowstone at Lake Outlet will yield around 74% of median. Clarks Fork of the Yellowstone near Belfry will yield around 88%.

*See the following graph for detailed information.*

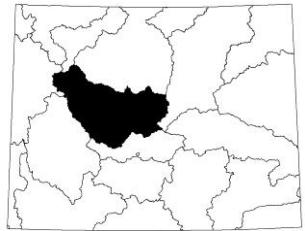
## YELLOWSTONE IN WY

### Water Supply Forecasts

February 1, 2024

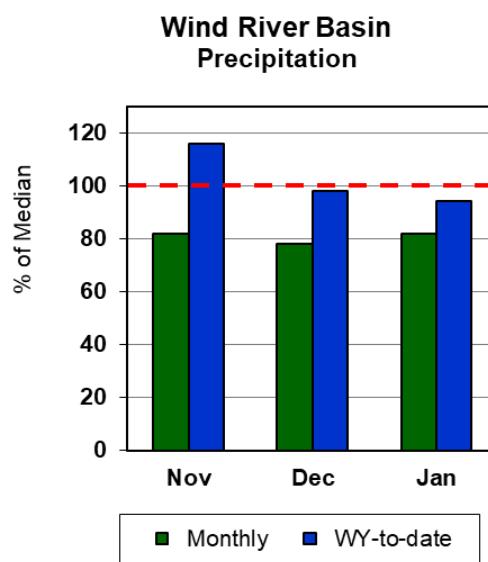
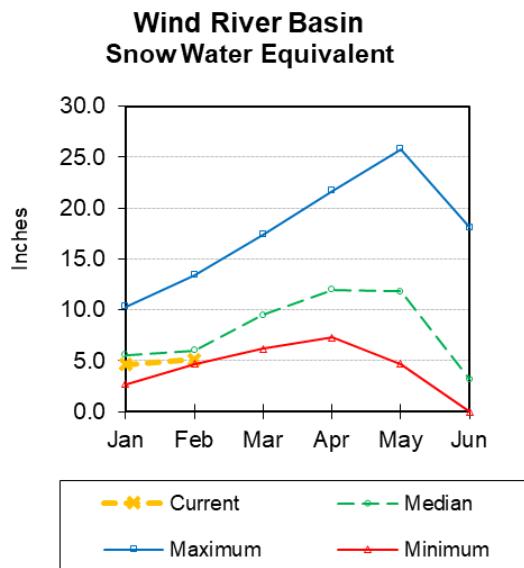


## Wind River Basin



### Snow

Wind River basin SWE (above Boysen Reservoir) is 86% of median. SWE in the Wind River above Dubois is 78% of median. Little Wind SWE is 100% of median, and Popo Agie drainage SWE is 90% of median. *See Appendix at the end of this report for a detailed listing of snow course information.*



### Precipitation

Last month's precipitation for the basin was 82% of median. Water year-to-date precipitation is 94% of median.

### Reservoirs

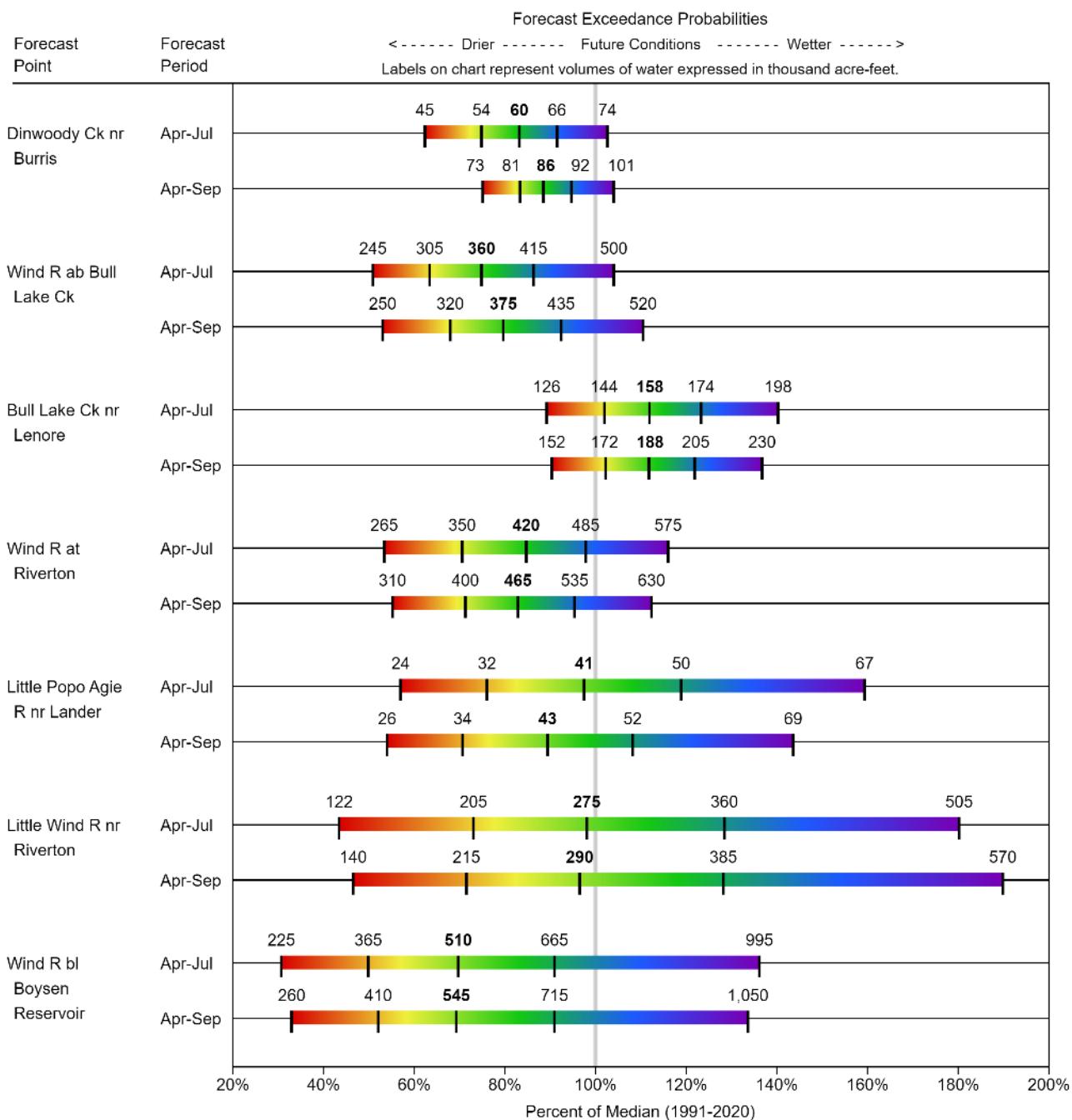
Current storage is 104% of median in the basin.

	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Pilot Butte	24.7	24.6	25.2	31.6	78%	78%	80%	98%	98%
Boysen	590.1	560.6	551.9	596.0	99%	94%	93%	107%	102%
Bull Lake	71.2	73.8	80.9	151.8	47%	49%	53%	88%	91%
<b>Basin Index</b>					88%	85%	84%	104%	100%
# of reservoirs					3	3	3	3	3

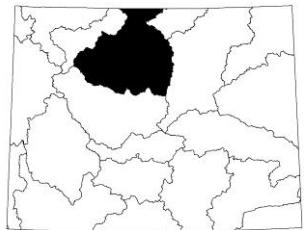
### Streamflow

The 50% exceedance forecasts for the April through September runoff period should yield about normal for the Wind River. The Wind River above Bull Lake Creek will yield about 80% of median. Little Popo Agie River near Lander should yield around 90% of median. Little Wind River near Riverton will yield around 97% of median. Boysen Reservoir inflow will yield about 69% of median. *See the following graph for detailed runoff volumes.*

**WIND**  
**Water Supply Forecasts**  
**February 1, 2024**

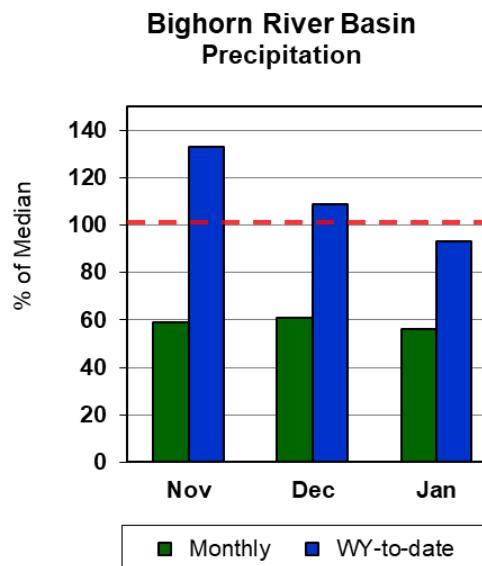
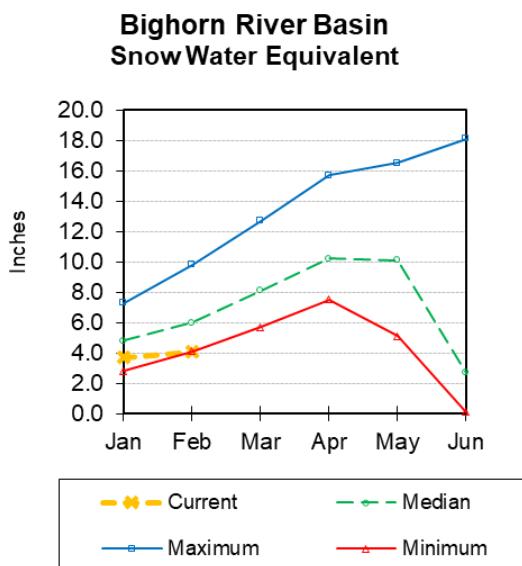


## Bighorn River Basin



### Snow

The Bighorn River Basin SWE (above Bighorn Reservoir) is 68% of median. The Greybull River SWE is at 129% of median. Shell Creek SWE is at 68% of median. *See Appendix at the end of this report for a detailed listing of snow course information.*



### Precipitation

Last month's precipitation was 56% of median. Year-to-date precipitation is 98% of median.

### Reservoirs

Current reservoir storage in the basin is 100% of median.

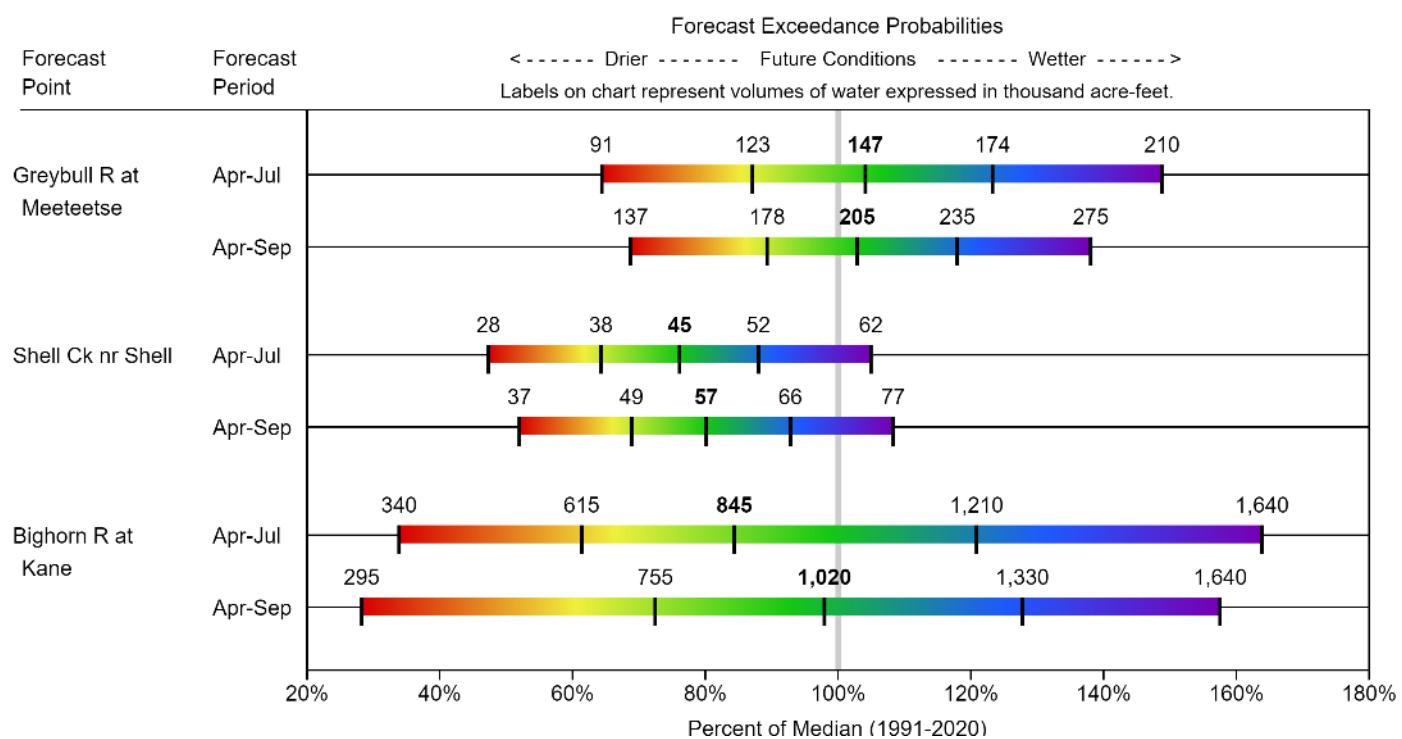
	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Bighorn Lake	852.6	817.5	854.2	1356.0	63%	60%	63%	100%	96%
<b>Basin Index</b>					63%	60%	63%	100%	96%
# of reservoirs					1	1	1	1	1

### Streamflow

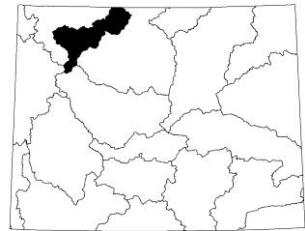
The 50% exceedance forecasts for the April through September runoffs are near normal. The Greybull River near Meeteetse should yield 103% of median. Shell Creek near Shell should yield around 80% of median. The Bighorn River at Kane should yield around 98% of median.

*See the following graph for detailed runoff volumes.*

**BIGHORN**  
**Water Supply Forecasts**  
**February 1, 2024**

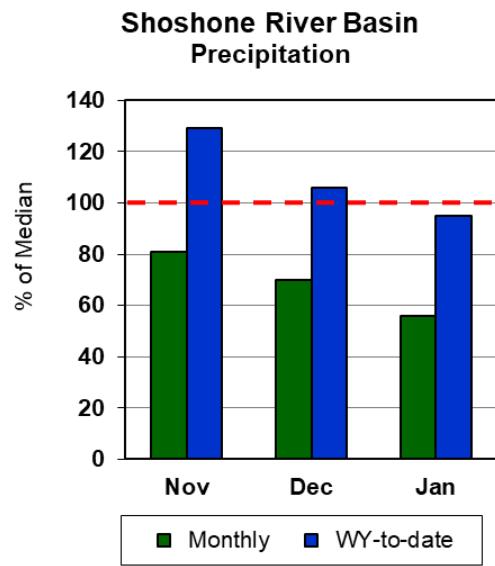
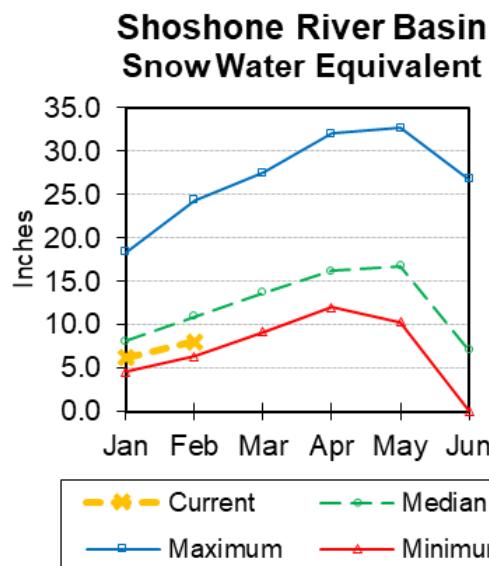


## Shoshone River Basin



### Snow

Snow Water Equivalent (SWE) is 73% of median in this basin. *See Appendix at the end of this report for a detailed listing of snow course information.*



### Precipitation

Precipitation for last month was 56% of median. The basin year-to-date precipitation is now 95% of median.

### Reservoirs

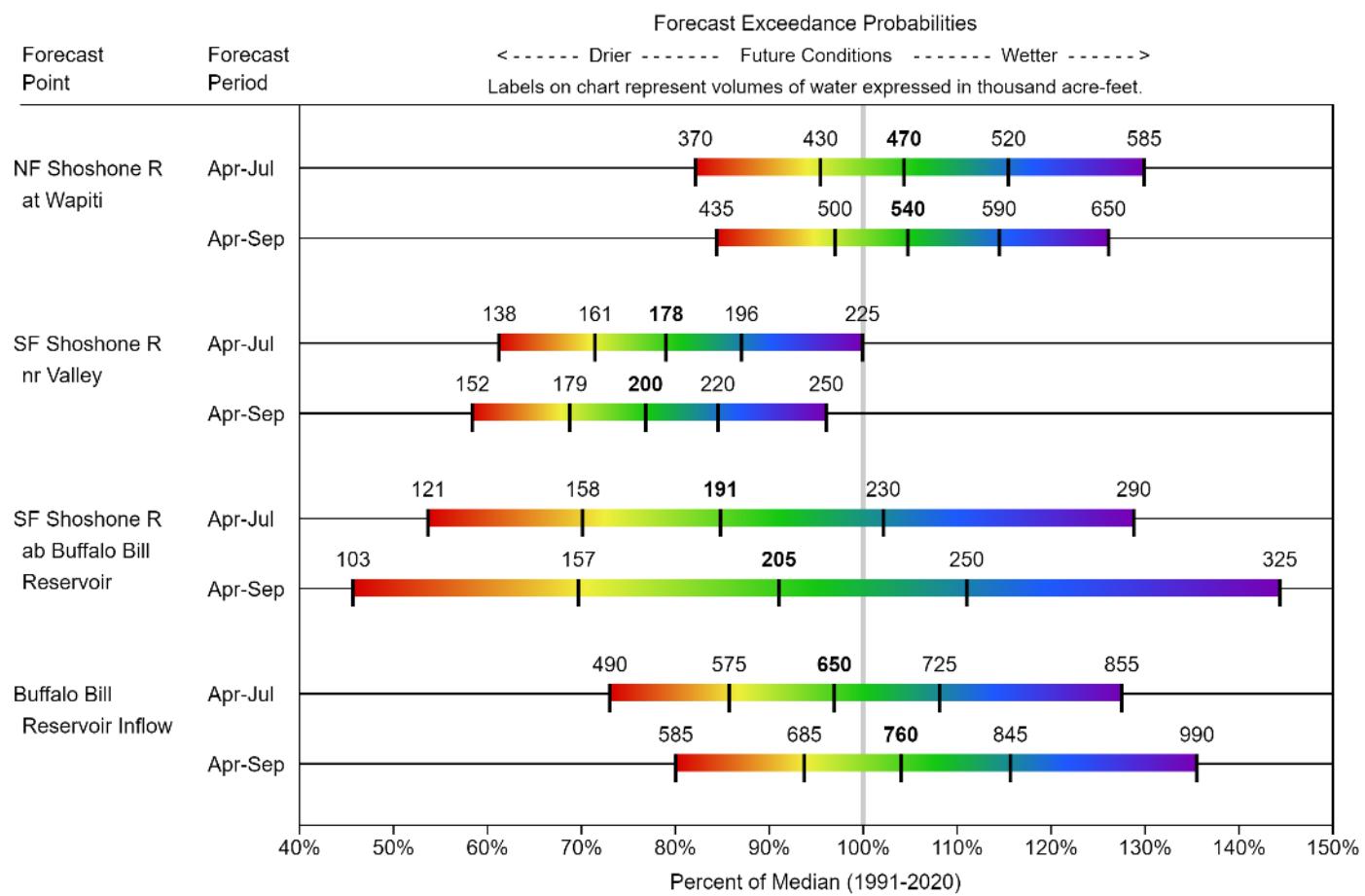
Current storage in Buffalo Bill Reservoir is about 107% of median.

Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
476.9	465.2	446.7	646.6	74%	72%	69%	107%	104%
<b>Basin Index</b>				74%	72%	69%	107%	104%
# of reservoirs				1	1	1	1	1

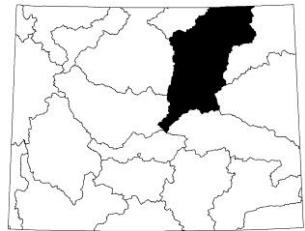
### Streamflow

The 50% exceedance forecasts for the April through September period are near normal for the basin. The North Fork Shoshone River at Wapiti should yield 105% of median. The South Fork of the Shoshone River near Valley should yield 77% of median. The Buffalo Bill Reservoir inflow should yield 104% of median. *See the following graph for detailed runoff volumes.*

**SHOSHONE**  
**Water Supply Forecasts**  
**February 1, 2024**

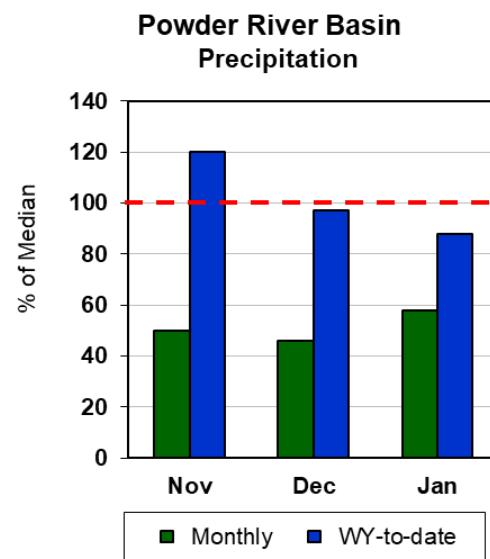
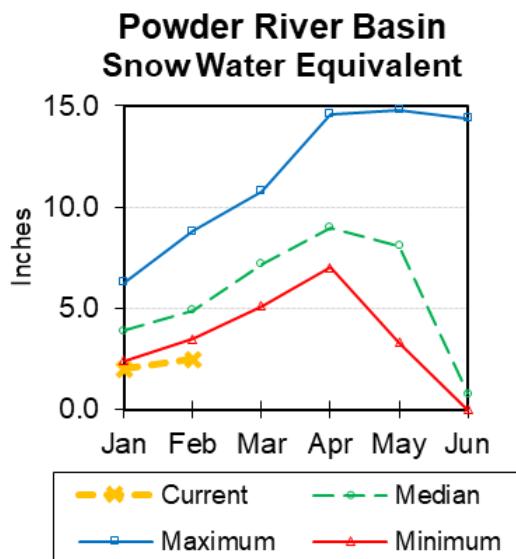


## Powder River Basin



### Snow

Powder River Basin SWE is at 51% of median. SWE in the Clear Creek drainage is 59% of median. *See appendix at the end of this report for a detailed listing of snow course information.*



### Precipitation

Last month's precipitation was 58% of median in the basin. Year-to-date precipitation is 88% of median.

### Reservoirs

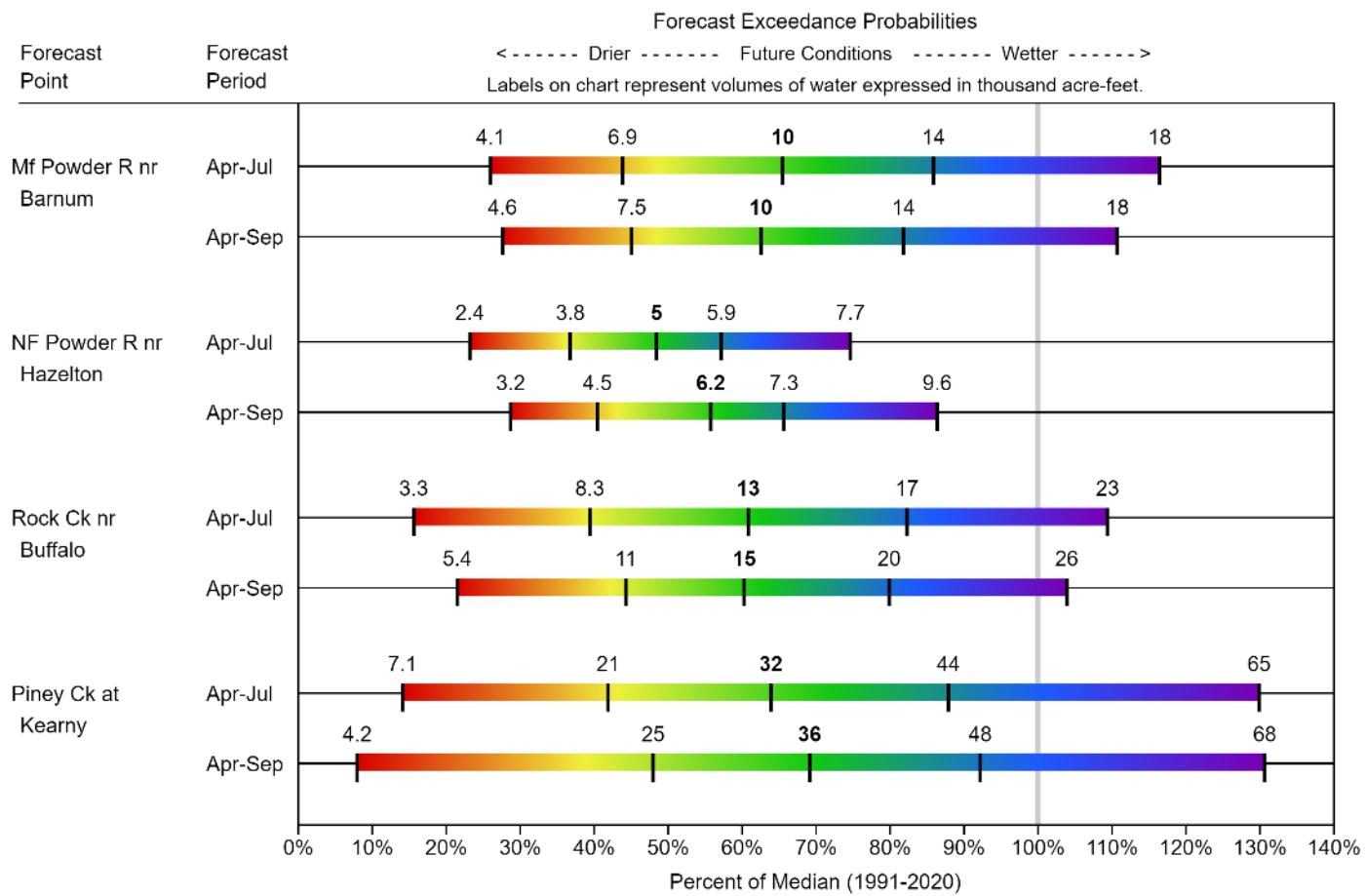
No reservoir data for this basin.

### Streamflow

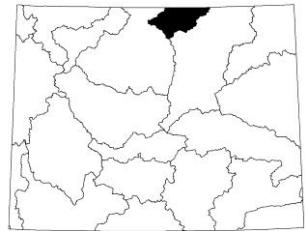
The 50% exceedance forecasts for the April through September period are below normal for the basin. The Middle Fork of the Powder River near Barnum should yield around 63% of median. The North Fork of the Powder River near Hazelton to yield around 56% of median.

*See the following graph for detailed runoff volumes.*

**POWDER**  
**Water Supply Forecasts**  
**February 1, 2024**

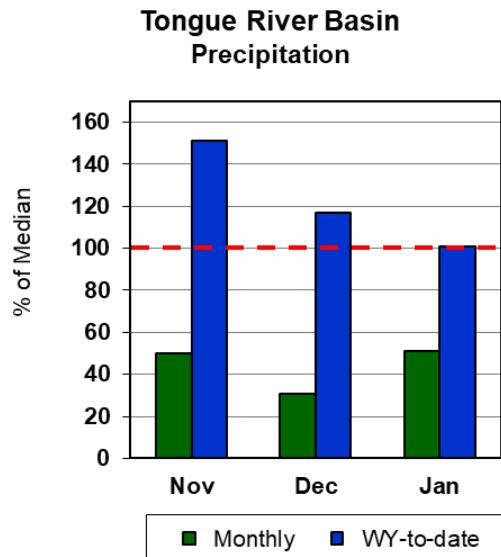
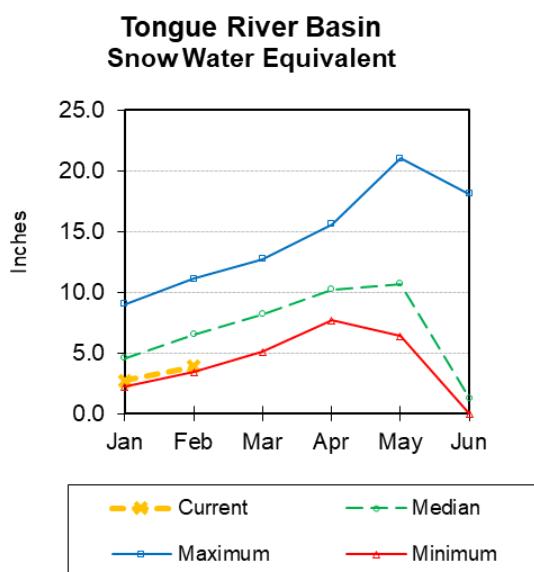


## Tongue River Basin



### Snow

Upper Tongue River drainage SWE is at 60% of median. *See Appendix at the end of this report for a detailed listing of snow course information.*



### Precipitation

Last month's precipitation was 51% of median. Year-to-date precipitation is 101% of median in the basin.

### Reservoirs

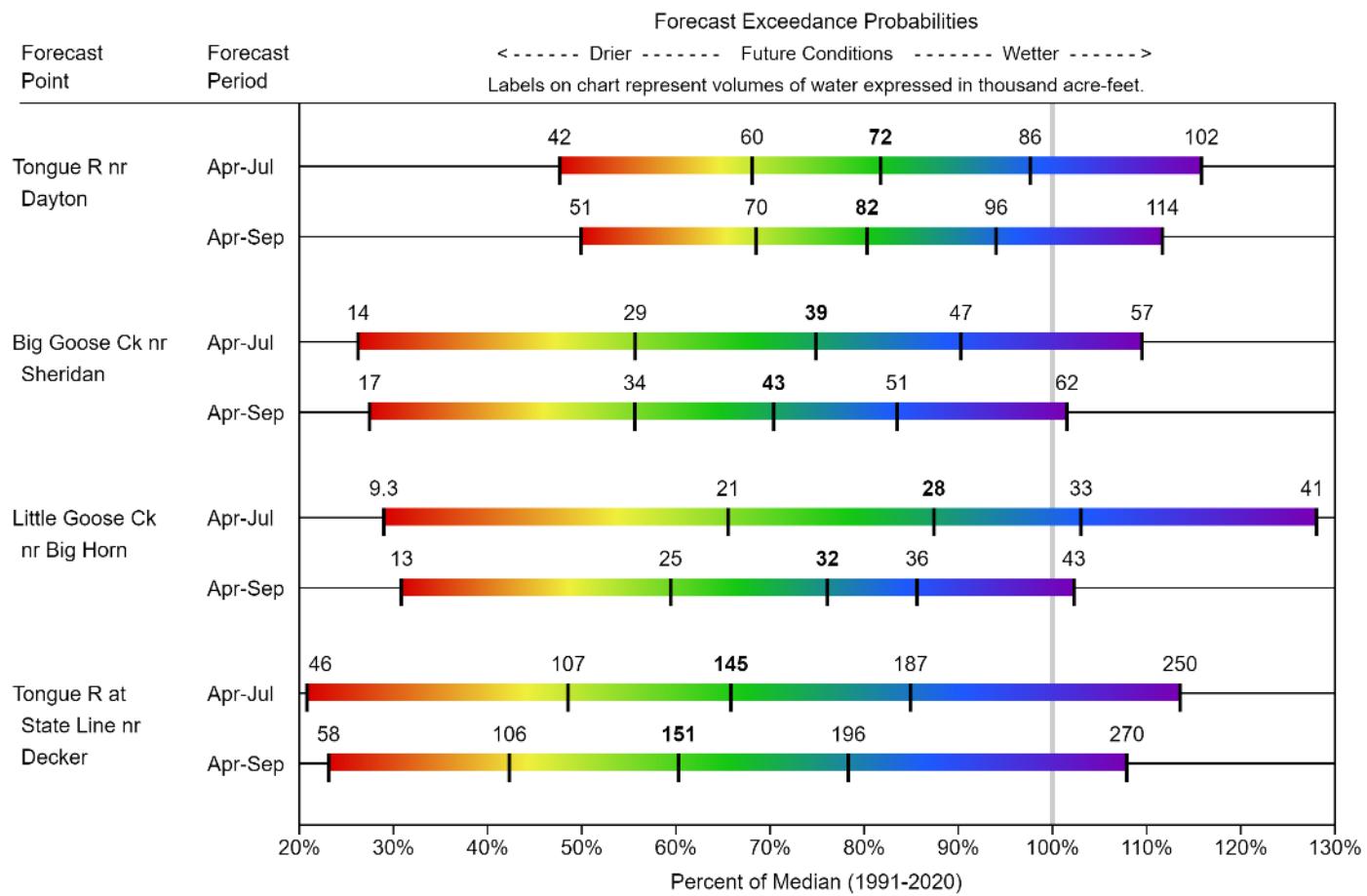
Current storage in Tongue River Reservoir is about 111% of median.

	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Tongue River Res	47.9	47.9	43.0	79.1	61%	61%	54%	111%	111%
<b>Basin Index</b>									
# of reservoirs					61%	61%	54%	111%	111%

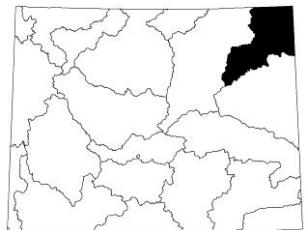
### Streamflow

The 50% exceedance forecasts for the April through September period are below normal for the basin. The yield for Tongue River near Dayton is forecasted to be 80% of median. Big Goose Creek near Sheridan should yield around 70%. Little Goose Creek near Bighorn should yield 76% of median. The Tongue River Reservoir Inflow should yield 60% of median. *See below for detailed runoff volumes.*

**TONGUE**  
**Water Supply Forecasts**  
**February 1, 2024**

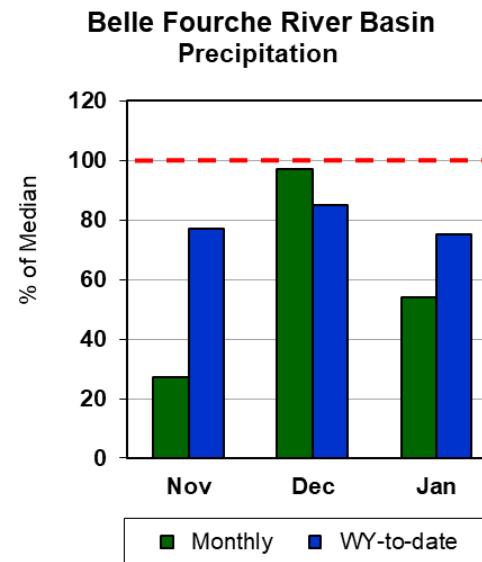
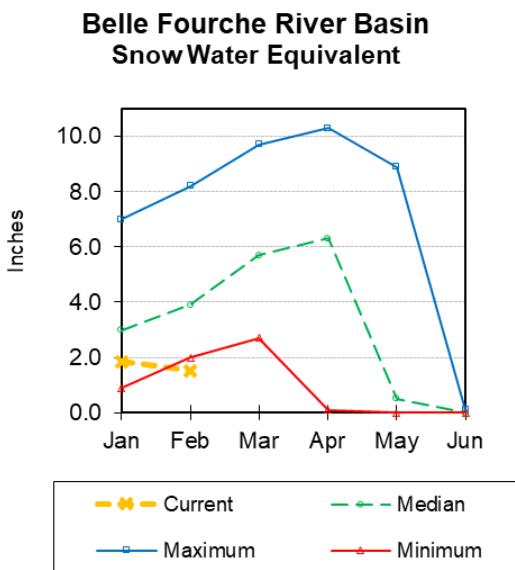


## Belle Fourche River Basin



### Snow

Currently the Belle Fourche River Basin SWE is at 39% of median. *See Appendix at the end of this report for a detailed listing of snow course information.*



### Precipitation

Precipitation for last month was 54% of median in the Belle Fourche basin. Year-to-date precipitation is 75% of median.

### Reservoirs

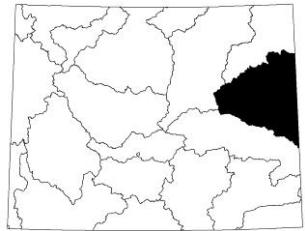
Combined storage for the 2 reservoirs in the basin is at 106% of median.

	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Belle Fourche	135.6	123.9	132.1	178.4	76%	69%	74%	103%	94%
Keyhole	128.8	117.9	117.2	193.8	66%	61%	60%	110%	101%
<b>Basin Index</b>					71%	65%	67%	106%	97%
# of reservoirs					2	2	2	2	2

### Streamflow

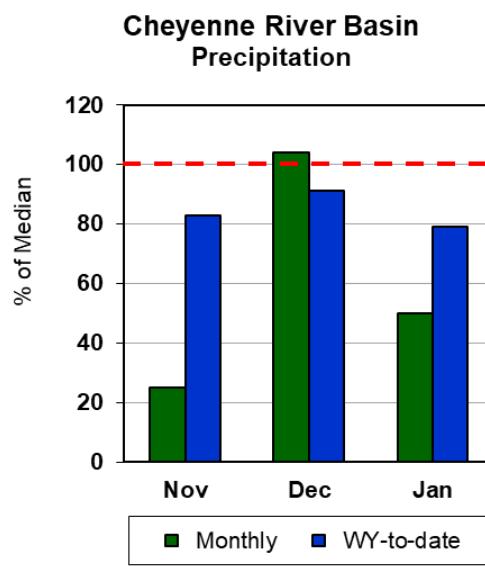
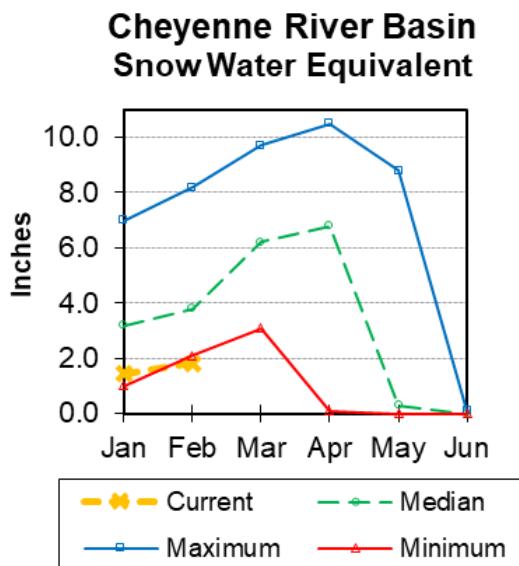
There are no streamflow forecast points for the basin.

## Cheyenne River Basin



### Snow

Currently SWE for sites in the Cheyenne River Basin are at 48% of median. *See Appendix at the end of this report for a detailed listing.*



### Precipitation

Precipitation for last month was 50% of median. Year-to-date precipitation is 79% of median.

### Reservoirs

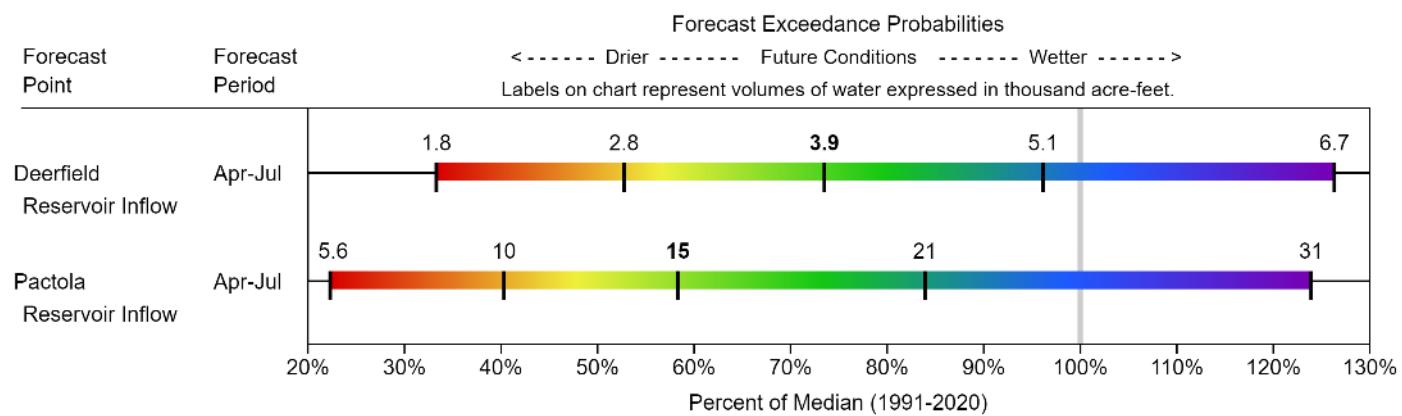
Combined storage for the 3 reservoirs in the basin is at 103% of median.

	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Deerfield	14.6	14.6	14.8	15.2	96%	96%	97%	99%	99%
Pactola	51.8	50.1	52.4	55.0	94%	91%	95%	99%	96%
Angostura	99.1	63.3	93.3	122.1	81%	52%	76%	106%	68%
<b>Basin Index</b>					86%	67%	83%	103%	80%
# of reservoirs					3	3	3	3	3

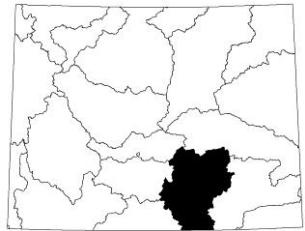
### Streamflow

The 50% exceedance forecasts for the April through July period are slightly below normal. The Deerfield Reservoir Inflow yield is forecasted at 74% of median. Pactola Reservoir Inflow yield should be 58% of median. *See the following graph for detailed runoff volumes.*

**CHEYENNE**  
**Water Supply Forecasts**  
**February 1, 2024**



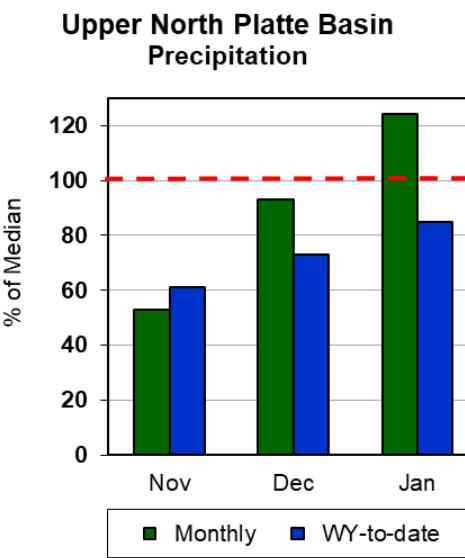
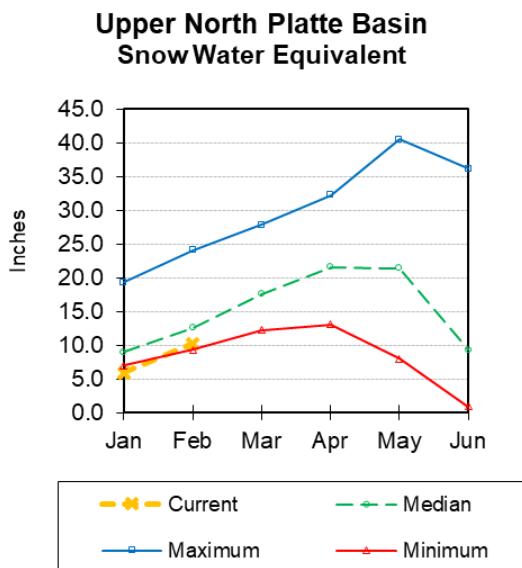
## Upper North Platte River Basin



### Snow

The Upper North Platte River basin SWE is 81% of median. North Platte above Northgate SWE is 89% of median. Encampment River SWE is 89% of median. Medicine Bow and Rock Creek SWE are 80% of median.

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



### Precipitation

Last month's precipitation was 124% of median. Total water-year-to-date precipitation is 85% of median.

### Reservoirs

Combined storage for reservoirs in the Upper North Platte River Basin is at 116% of median.

	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Seminoe	638.3	446.9	595.8	1016.7	63%	44%	59%	107%	75%
Pathfinder	705.9	350.3	565.6	1016.5	69%	34%	56%	125%	62%
<b>Basin Index</b>					66%	39%	57%	116%	69%
# of reservoirs					2	2	2	2	2

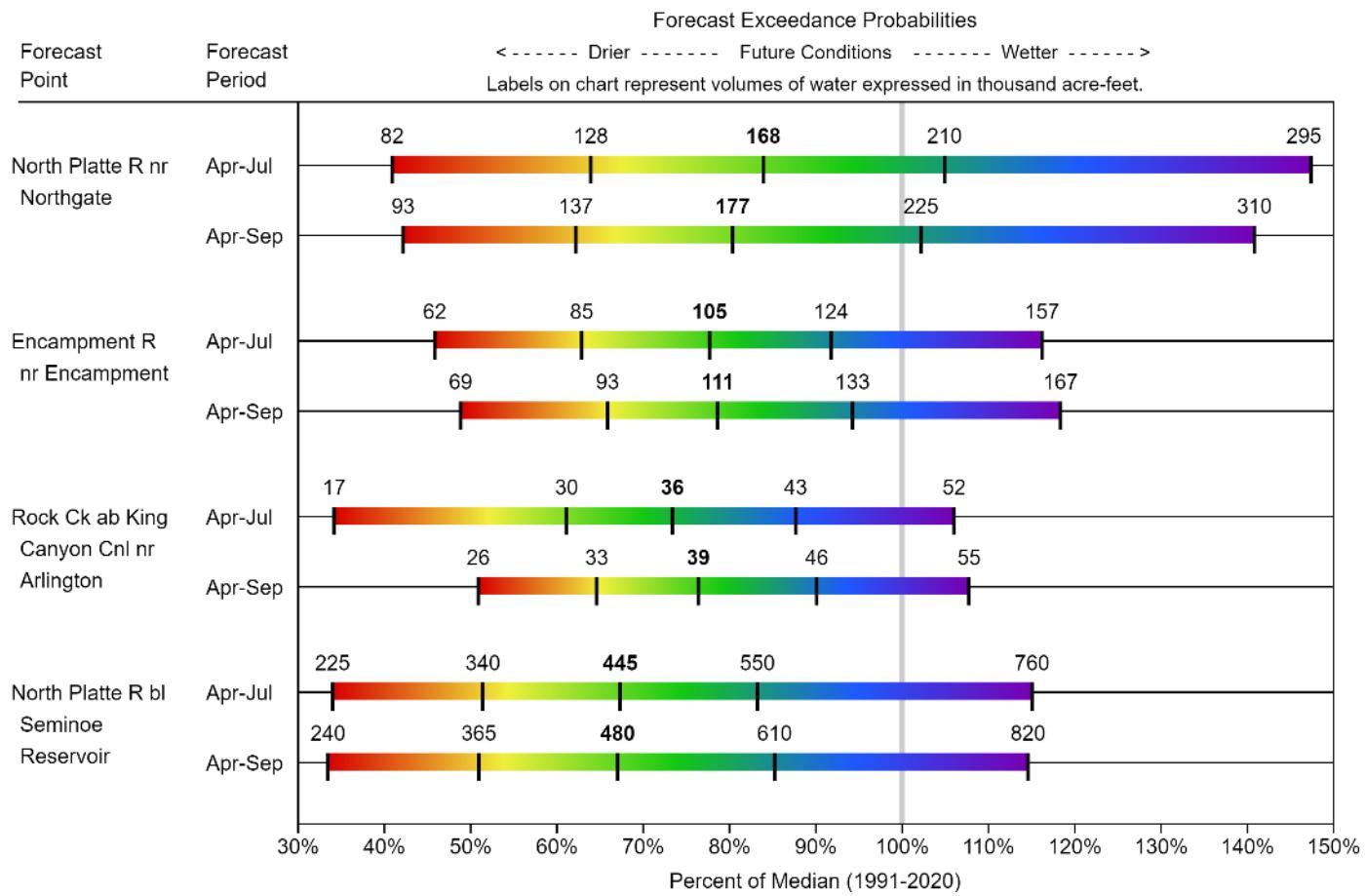
### Streamflow

The 50% exceedance forecasts for the April through September period are below normal for the Upper North Platte River Basin. The yield for the North Platte River near Northgate will be around 80% of median. The Encampment River near Encampment yield will be about 79%. Rock Creek near Arlington yield will be around 76%. Seminoe Reservoir inflow should be about 67% of median. *See the following page for more detailed information on projected runoff.*

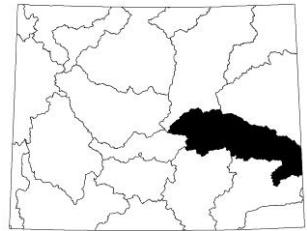
## UPPER NORTH PLATTE

### Water Supply Forecasts

February 1, 2024

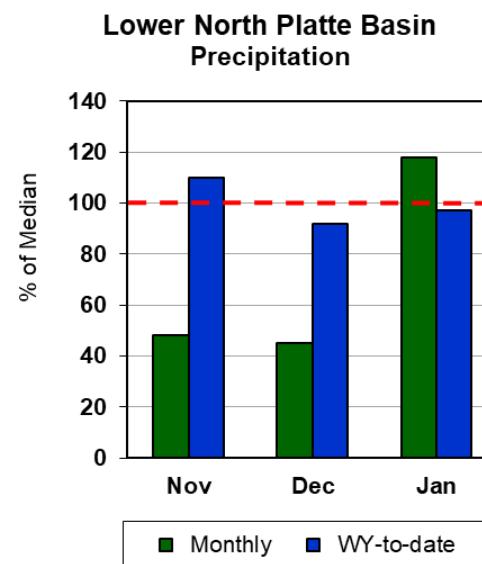
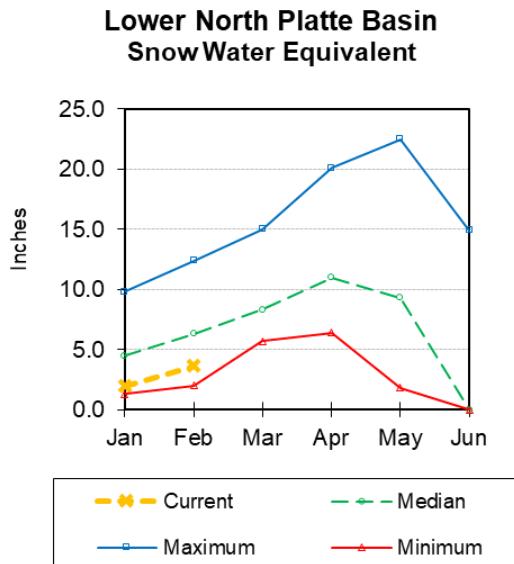


## Lower North Platte River Basin



### Snow

Currently, SWE in the Lower North Platte River Basin is 62% of median. *See Appendix at the end of this report for a detailed listing of snow course information.*



### Precipitation

Last month's precipitation was 118% of median. The water year-to-date precipitation for the basin is currently 97% of median.

### Reservoirs

Combined storage for the 3 reservoirs in the basin is at 103% of median.

	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Guernsey	14.9	13.7	13.9	45.6	33%	30%	30%	108%	98%
Glendo	294.5	257.5	281.5	506.4	58%	51%	56%	105%	91%
Alcova	157.4	157.6	156.4	184.3	85%	86%	85%	101%	101%
<b>Basin Index</b>					63%	58%	61%	103%	95%
# of reservoirs					3	3	3	3	3

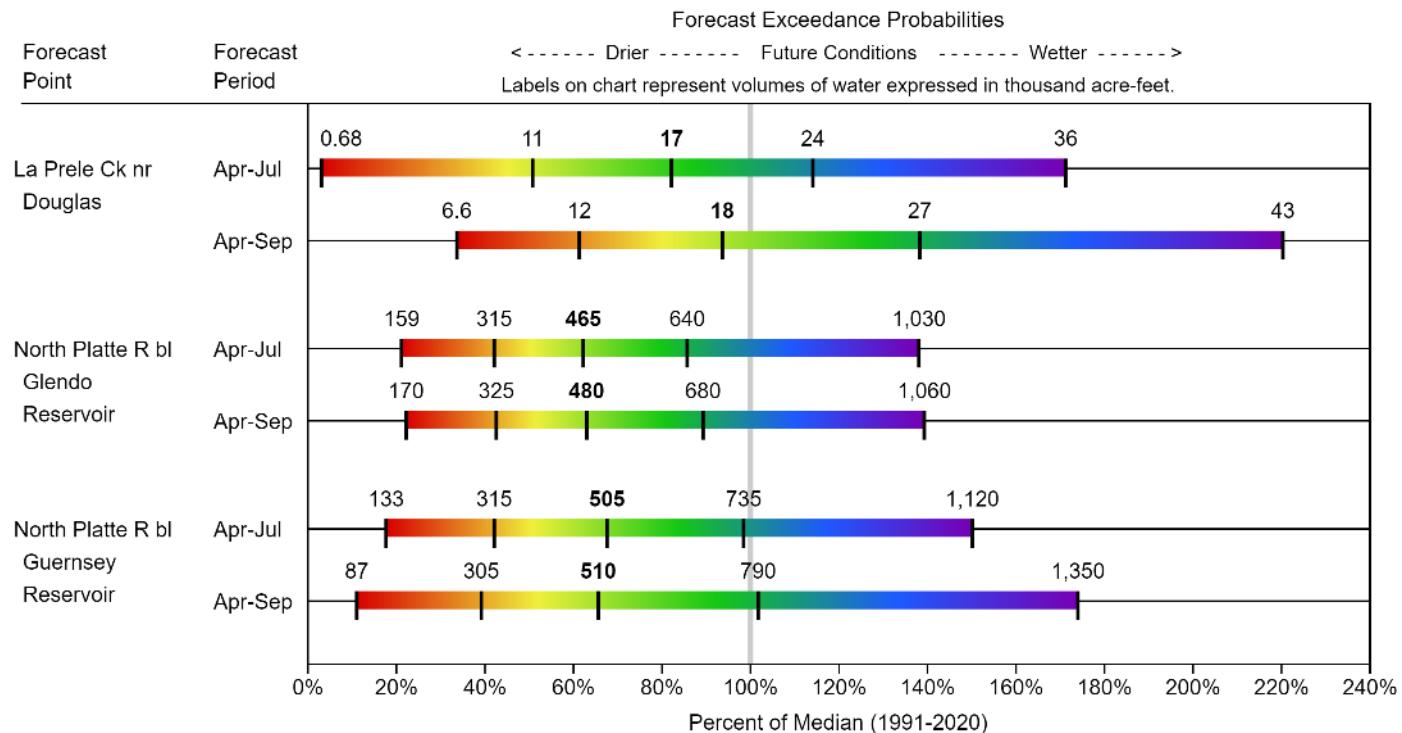
### Streamflow

The 50% exceedance forecasts for the April through September period are below normal. LaPrele Creek near Douglas is forecasted to yield 94% of median. North Platte River below Guernsey Reservoir should yield around 66% of median. *See the following for more detailed information on projected runoff.*

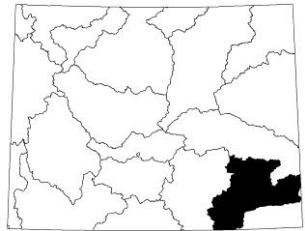
## LOWER NORTH PLATTE

### Water Supply Forecasts

February 1, 2024

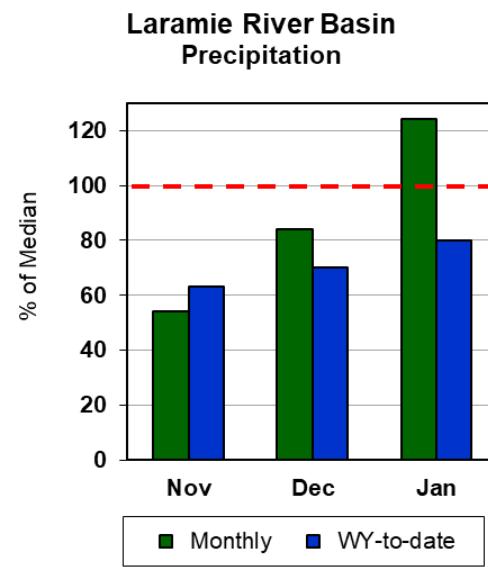
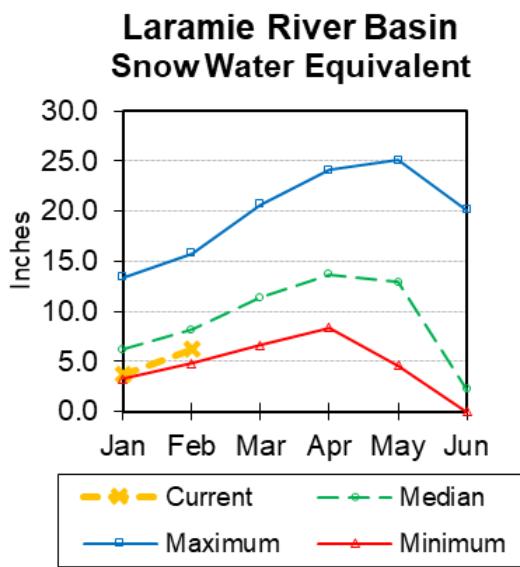


## Laramie River Basin



### Snow

SWE for the entire Laramie River Basin (above mouth entering North Platte) is 76% of median. SWE for the Laramie River above Laramie is 80% of median. SWE for the Little Laramie River is 80% of median. *See Appendix at the end of this report for a detailed listing of snow course information.*



### Precipitation

Last month's precipitation was 124% of median. The water year-to-date precipitation for the basin is currently 80% of median.

### Reservoirs

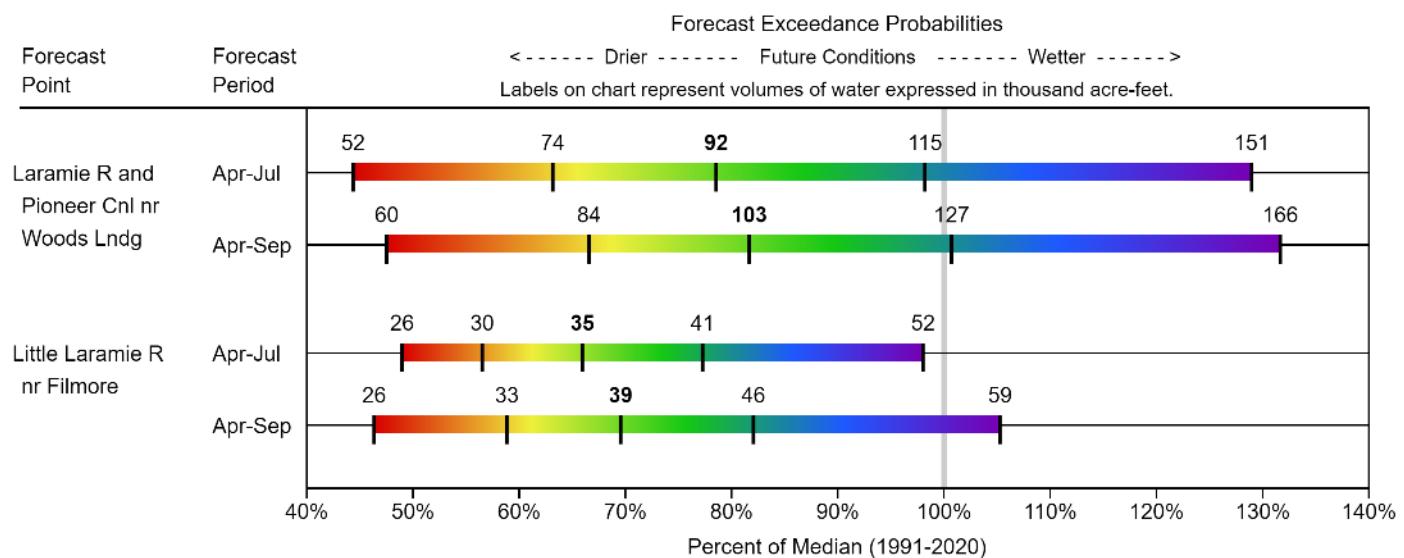
The storage for the reservoir in this basin is at 111% of median.

	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Wheatland #2	51.0	NA	46.0	98.9	52%	NA	47%	111%	NA
<b>Basin Index</b>					52%	NA	47%	111%	NA
# of reservoirs					1	1	1	1	1

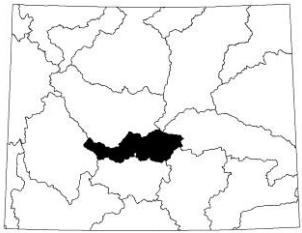
### Streamflow

The 50% exceedance forecasts for the April through September period are below normal. Laramie River near Woods Landing is forecasted to yield around 82% of median. The Little Laramie near Filmore should produce about 70% of median. *See the following graph for detailed runoff volumes.*

**LARAMIE**  
**Water Supply Forecasts**  
**February 1, 2024**

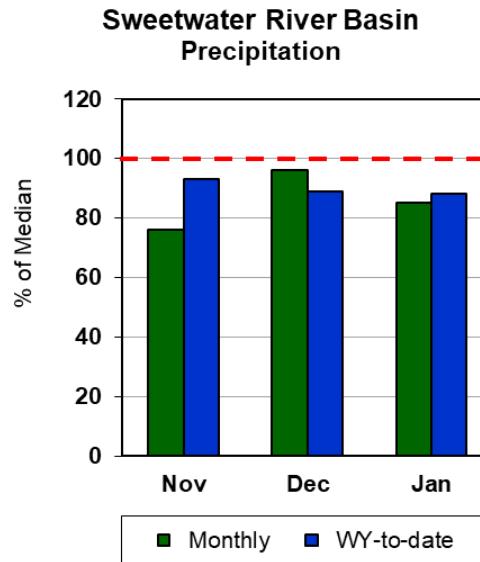
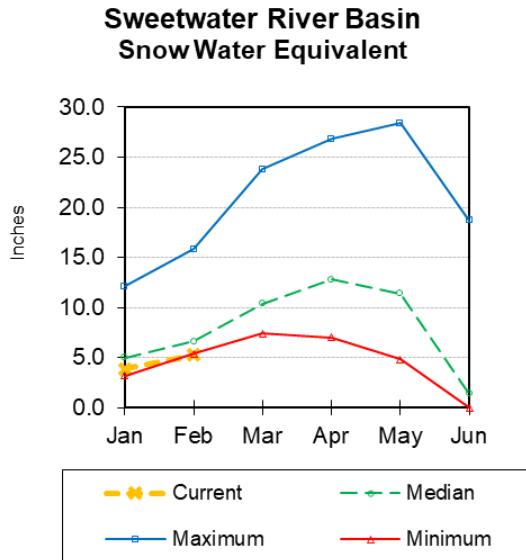


## Sweetwater River Basin



### Snow

Sweetwater River Basin SWE is at 80% of median. *See Appendix at the end of this report for a detailed listing of snow course information.*



### Precipitation

Last month's precipitation was 85% of median. The water year-to-date precipitation for the basin is currently 88% of median.

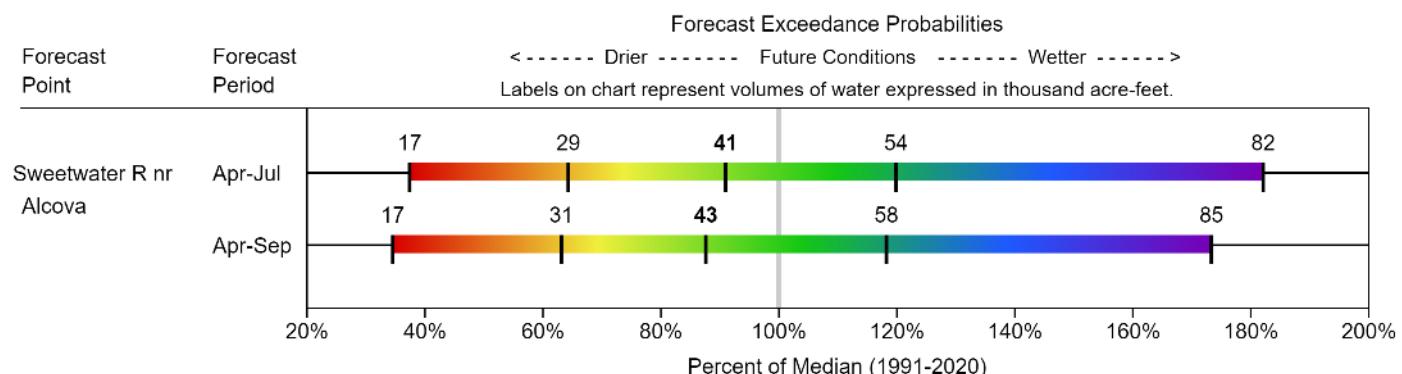
### Reservoirs

No reservoir data for the basin.

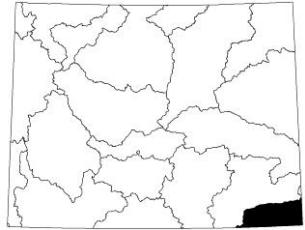
### Streamflow

The 50% exceedance forecasts for the April through September period in the Sweetwater Basin is slightly below normal. The Sweetwater River near Alcova will yield about 88% of median. *See below for detailed information on projected runoff.*

**SWEETWATER**  
**Water Supply Forecasts**  
**February 1, 2024**

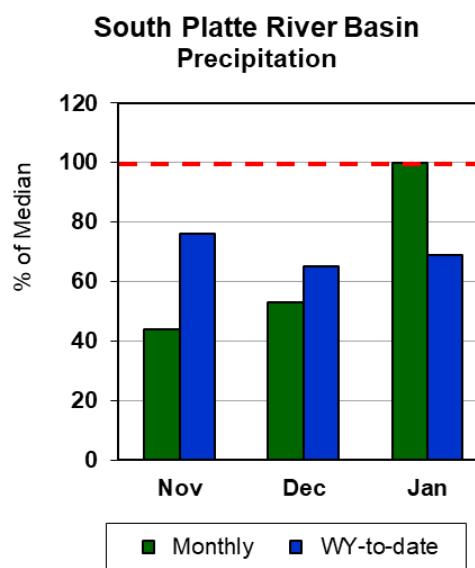
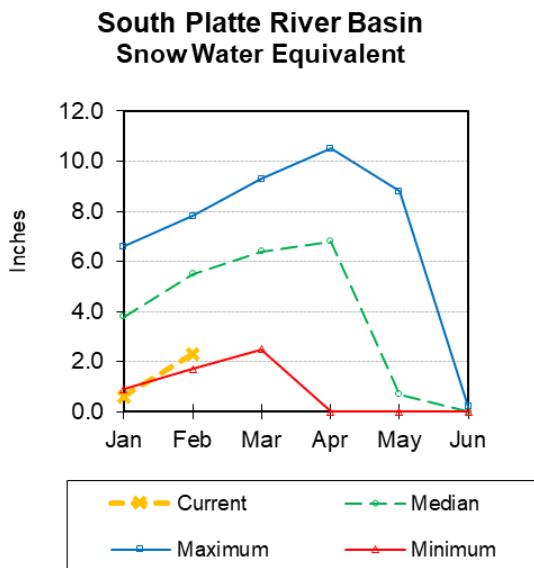


## South Platte River Basin (WY)



### Snow

The median SWE for sites in the South Platte River Basin is 41% of median. *See Appendix at the end of this report for a detailed listing of snow course information.*



### Precipitation

Last month's precipitation was 100% of median. The water year-to-date precipitation for the basin is currently 69% of median.

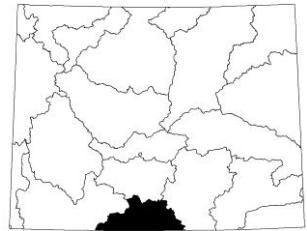
### Reservoirs

No reservoir data for the basin.

### Streamflow

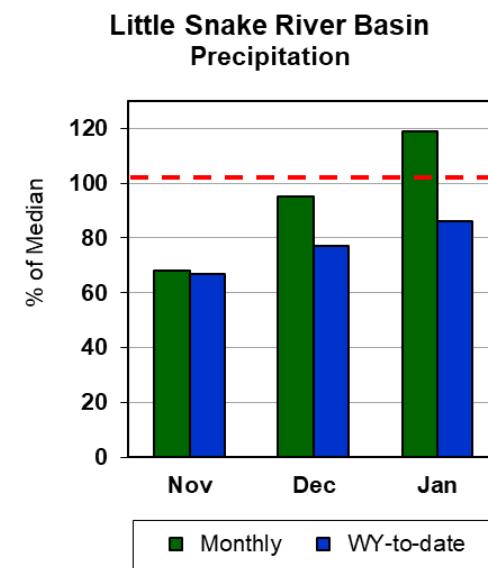
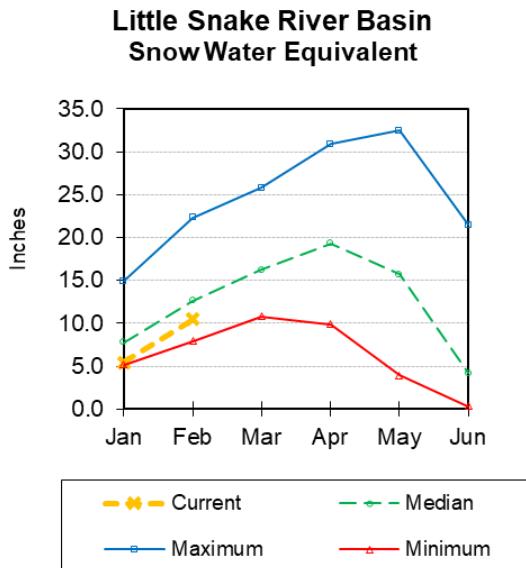
There are no streamflow forecast points for the basin.

## Little Snake River Basin



### Snow

Little Snake River drainage SWE is 83% of median. See *Appendix at the end of this report for a detailed listing of snow course information.*



### Precipitation

Precipitation across the basin was 119% of median. The Little Snake River Basin water-year-to-date precipitation is currently 86% of median.

### Reservoirs

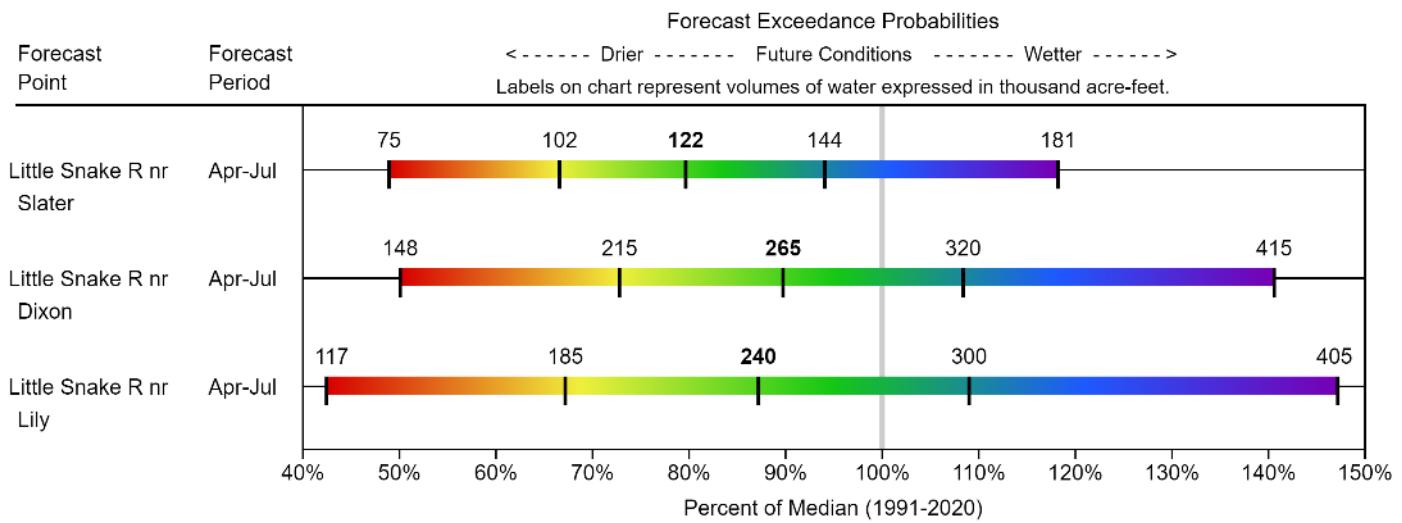
The storage for the reservoir in this basin is at 120% of median.

	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
High Savery Res	13.9	6.9	11.6	22.4	62%	31%	52%	120%	59%
<b>Basin Index</b>									
# of reservoirs					62%	31%	52%	120%	59%
					1	1	1	1	1

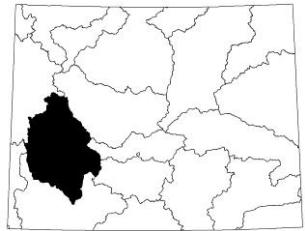
### Streamflow

The 50% exceedance forecasts for the April through July period is below normal. The Little Snake River near Slater is forecasted to yield around 80% of median. *See below for detailed information on projected runoff.*

**LITTLE SNAKE**  
**Water Supply Forecasts**  
**February 1, 2024**

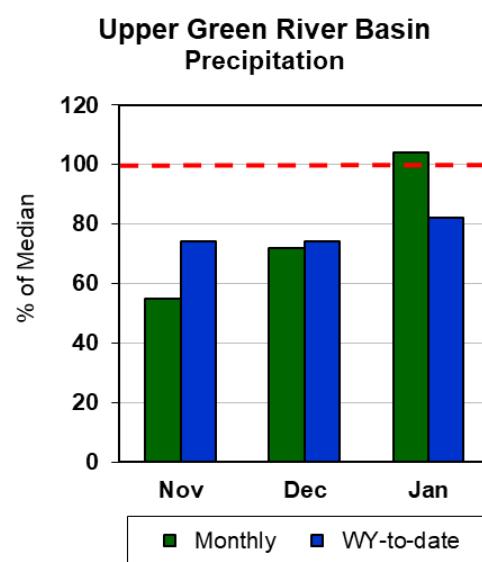
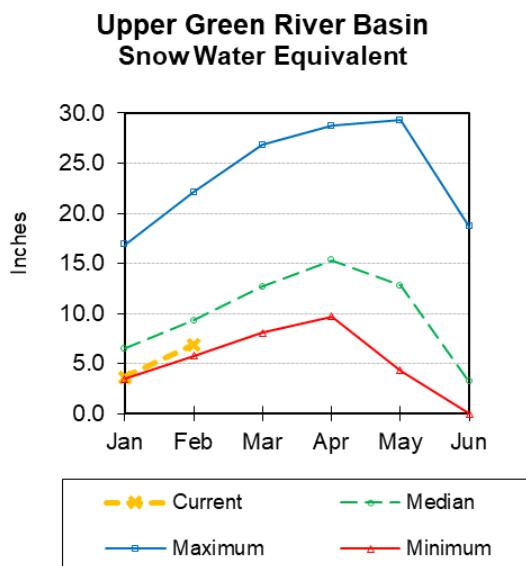


## Upper Green River Basin



### Snow

The Upper Green River Basin SWE (above Fontenelle Reservoir) is 74% of median. Green River Basin above Warren Bridge SWE is 66% of median. West Side of Upper Green River Basin SWE is 77% of median. *See Appendix at the end of this report for a detailed listing of snow course information.*



### Precipitation

Precipitation for sites in the basin was 104% of median last month. Water year-to-date precipitation is 82% of median.

### Reservoir

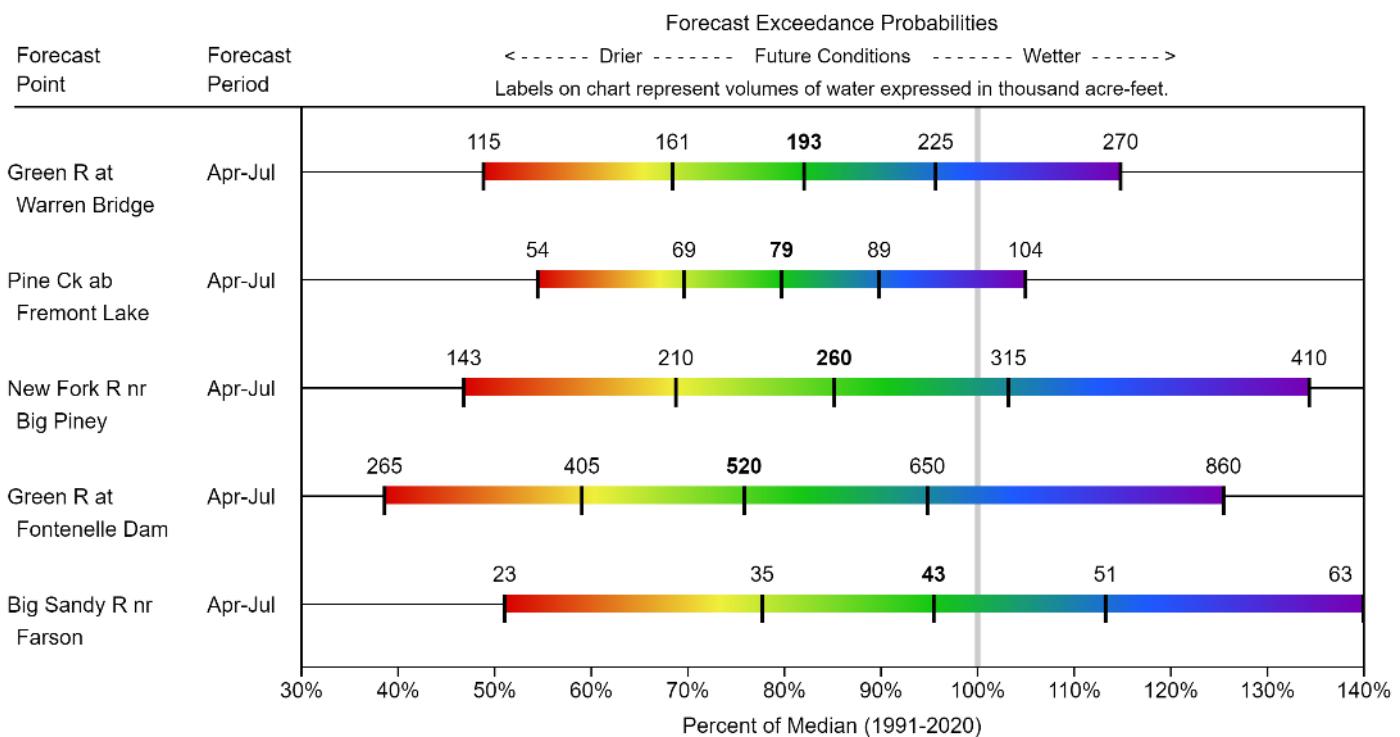
Combined water storage in the basin was at 111% of median for the 2 reservoirs.

	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Big Sandy	39.1	7.5	18.2	38.3	102%	20%	48%	215%	41%
Fontenelle	163.9	166.8	165.4	344.8	48%	48%	48%	99%	101%
<b>Basin Index</b>					53%	45%	48%	111%	95%
# of reservoirs					2	2	2	2	2

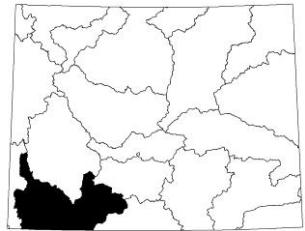
### Streamflow

The 50% exceedance forecasts for the April through July period will be below normal. The yield on the Green River at Warren Bridge is about 82% of median. New Fork River near Big Piney yield will be around 85% of median. Green River at Fontenelle Dam is estimated to be about 76% of median. *See the following for a more detailed forecast.*

**UPPER GREEN**  
**Water Supply Forecasts**  
**February 1, 2024**



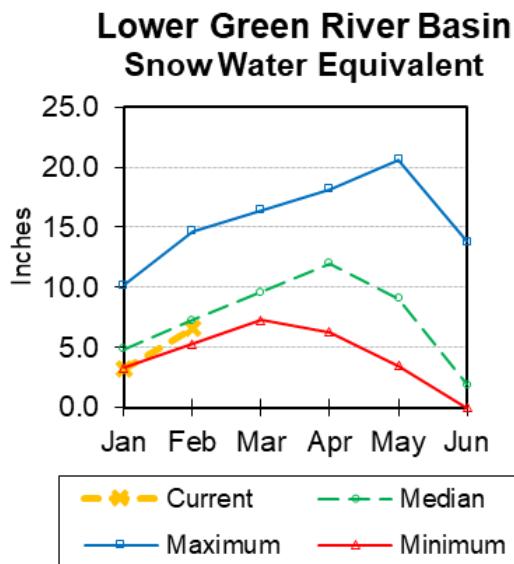
## Lower Green River Basin



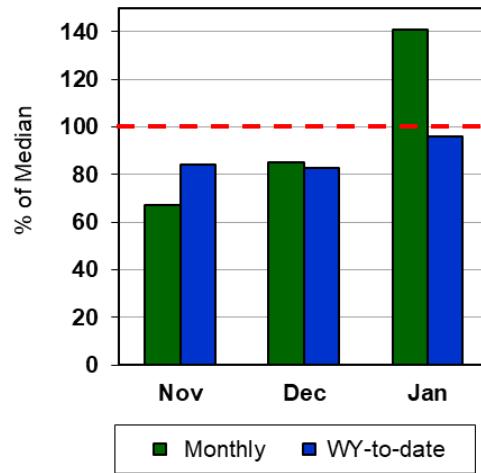
### Snow

Lower Green River Basin SWE is at 90% of median. Hams Fork drainage SWE is 85% of median. Blacks Fork drainage SWE is 96% of median.

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



### Lower Green River Basin Precipitation



### Precipitation

Precipitation for the basin last month was 143% of median. The basin year-to-date precipitation is currently 97% of median.

### Reservoirs

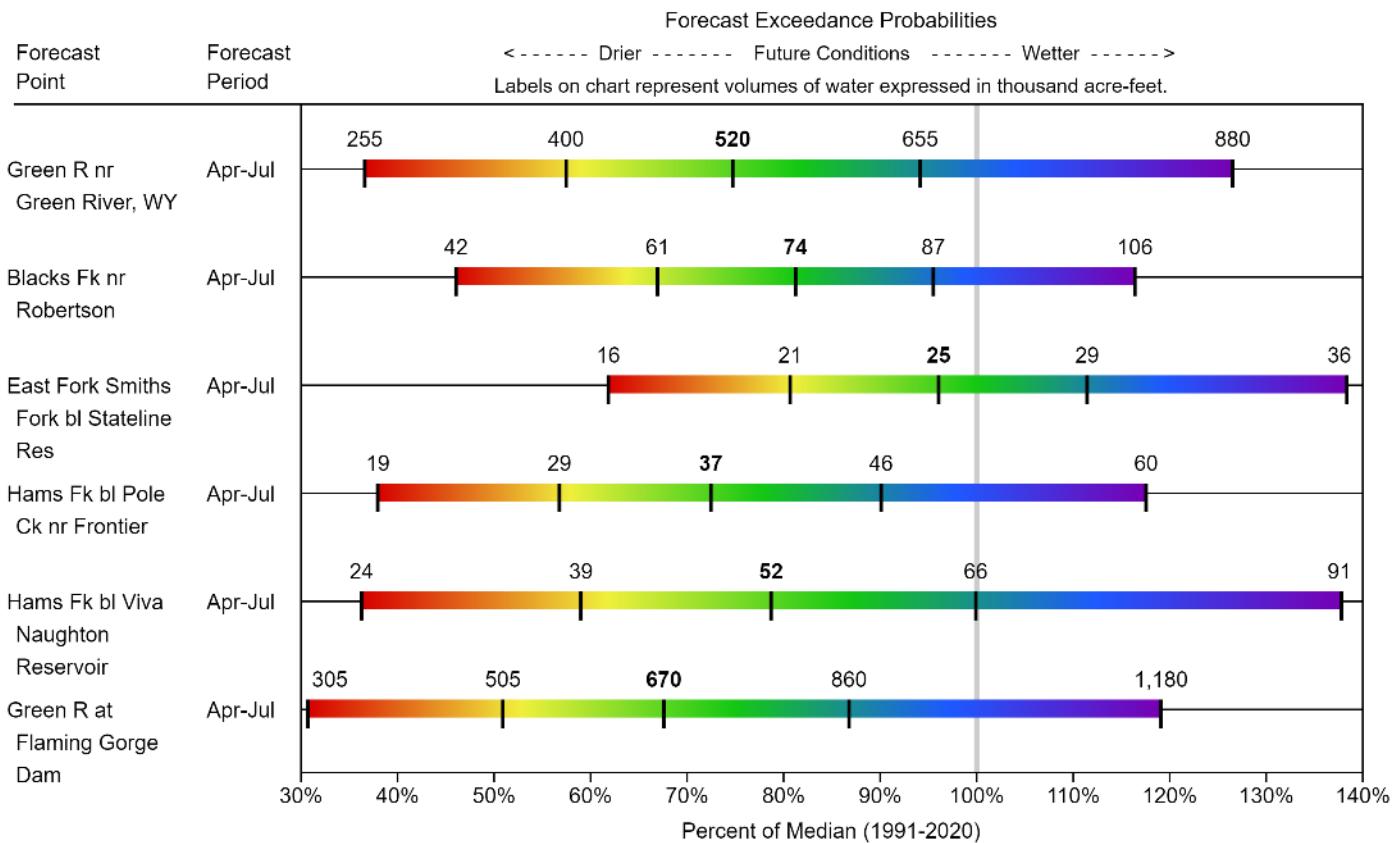
Combined storage for the 4 reservoirs in the basin was at 101% of median at the end of last month.

	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Viva Naughton Res	34.7	30.7	30.2	42.4	82%	72%	71%	115%	102%
Stateline Reservoir	8.0	6.1	5.7	12.0	67%	50%	48%	140%	106%
Flaming Gorge Res	3131.4	2496.9	3111.0	3749.0	84%	67%	83%	101%	80%
Meeks Cabin Res	17.2	9.2	9.8	32.5	53%	28%	30%	175%	94%
<b>Basin Index</b>					83%	66%	82%	101%	81%
# of reservoirs					4	4	4	4	4

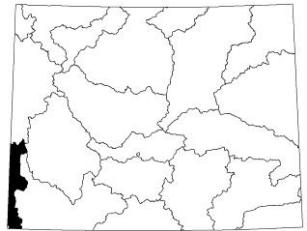
### Streamflow

The 50% exceedance forecasts for the April through July period in this basin is below normal. The Green River near Green River will yield about 75% of median. The Flaming Gorge Reservoir inflow will be about 68% of median. *See the following page for more detailed information on projected runoff.*

**LOWER GREEN**  
**Water Supply Forecasts**  
**February 1, 2024**



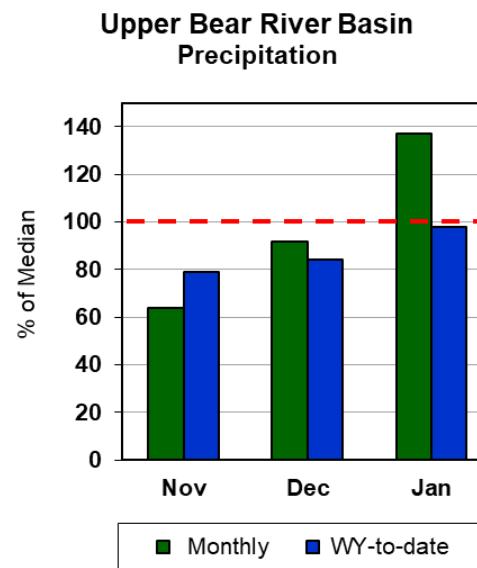
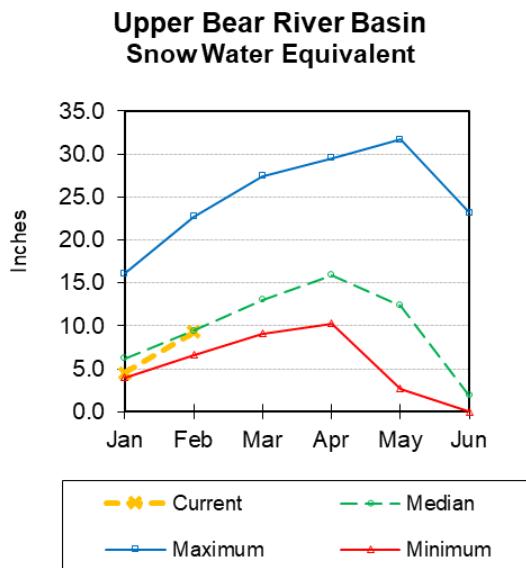
## Upper Bear River Basin



### Snow

SWE in the Upper Bear River Basin of Utah is 99% of median. SWE in the Wyoming portion of the Bear River drainage (Smiths and Thomas Forks) is 92% of median.

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



### Precipitation

Precipitation for last month was 137% of median in the basin. The year-to-date precipitation for the basin is 98% of median.

### Reservoirs

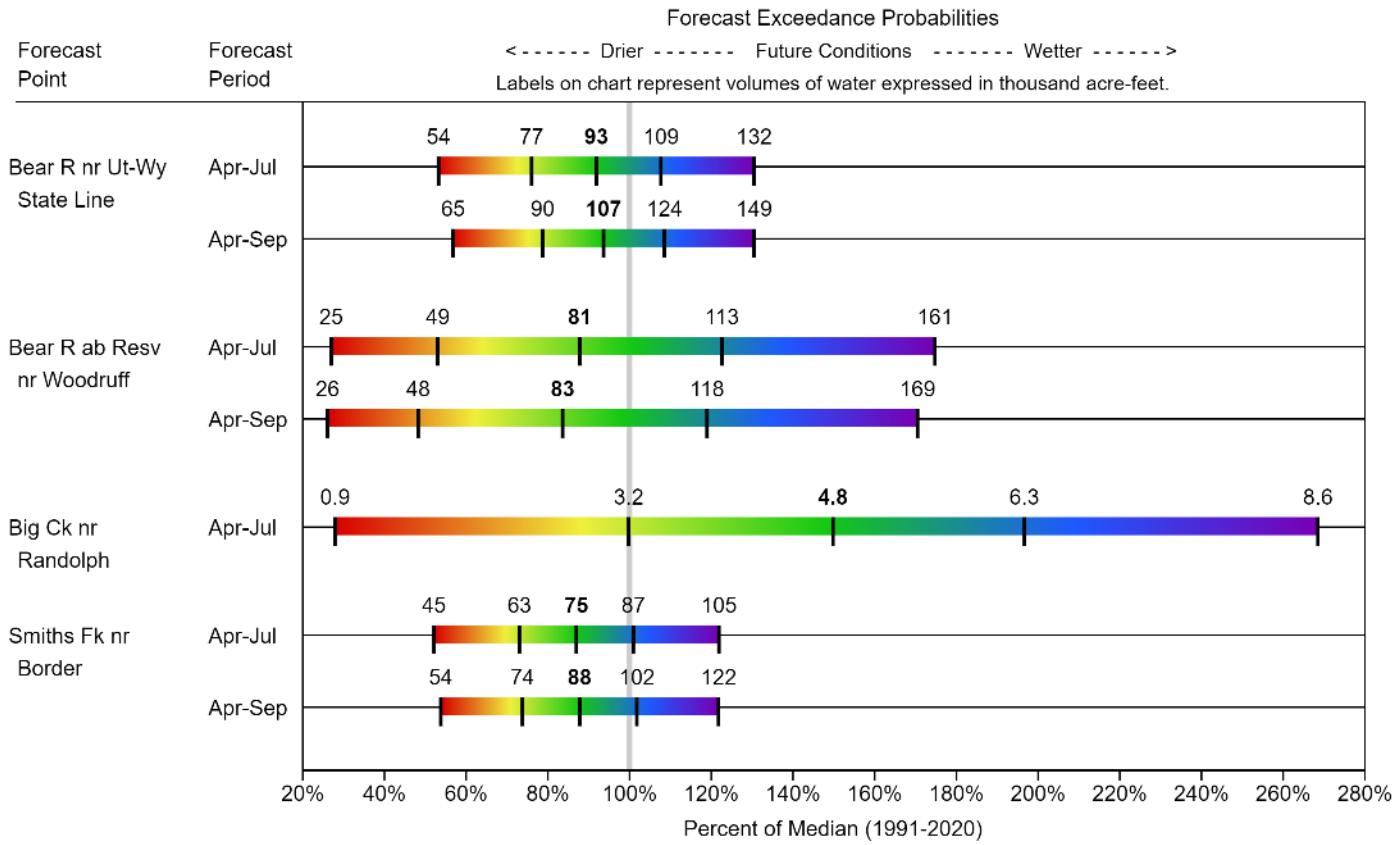
Combined reservoir storage in this basin is at 133% of median.

	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Woodruff Creek	2.0	2.2	2.2	4.0	49%	55%	55%	90%	100%
Woodruff Narrows Res	48.8	13.5	36.0	57.3	85%	24%	63%	136%	37%
<b>Basin Index</b>					83%	26%	62%	133%	41%
# of reservoirs					2	2	2	2	2

### Streamflow

The 50% exceedance forecasts for the April through September period are slightly below normal. The Bear River above Reservoir near Woodruff should yield around 84% of median. The Smiths Fork River near Border Jct. will yield around 88%. *See the following page for more detailed information on projected runoff.*

**UPPER BEAR**  
**Water Supply Forecasts**  
**February 1, 2024**



# Appendix

## MEDIAN INFORMATION

### **Transitioning from 1981 – 2010 Averages to 1991 – 2020 Medians**

Starting January 2022, the NRCS will use the 30-year **median** as the official normal for snowpack (SWE), precipitation, reservoir storage, and streamflow calculations. The National Water and Climate Center (NWCC) will continue to publish and distribute 30-year averages for alternate normal calculations.

The 30-yr reference period for median and normal calculations has also been recently updated from 1981-2010 to 1991-2020.

Please refer to this NWCC website or more information about the significant changes in data and forecast computations:

<https://www.nrcs.usda.gov/wps/portal/wcc/home/snowClimateMonitoring/30YearNormals/>

Topics include:

- **1991 – 2020 Median/Averages Overview**
- **Calculation Methods**
- **Differences Between 1991-2020 and Previous Normals**
- **Median vs. Average**
- **Retrieving 1991-2020 Normals**

For specific seasonal streamflow normal comparisons for NRCS forecasted stations, please refer to:

[https://www.wcc.nrcs.usda.gov/ftpref/support/srvo\\_norms\\_comps/](https://www.wcc.nrcs.usda.gov/ftpref/support/srvo_norms_comps/)

## LINKS (for more information/graphics)

### National Water Climate Center (NWCC)

➤ Interactive maps featuring current conditions of snow, precipitation, reservoir storages:

<https://www.nrcs.usda.gov/wps/portal/wcc/home/quicklinks/predefinedMaps/>

### Water Resources Data System and State Climate Office (WRDS)

➤ Clearinghouse of hydrological and climatological data for the State of Wyoming:

<http://www.wrds.uwyo.edu/>

### USGS WaterWatch

➤ Tools and products to monitor streamflow, runoff, drought, and floods:

<https://waterwatch.usgs.gov/index.php>

#### **Appendix - Snowpack Data**

**In Word double click the object below to view entire document**

#### **Appendix - Precipitation Data**

**In Word double click the object below to view entire document**

#### **Appendix - Streamflow Data**

**In Word double click the object below to view entire document**

# Wyoming Basin Outlook Report

## Natural Resources Conservation Service

### Casper, Wyoming

**Issued by:**

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**Released by:**

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State Conservationist  
N R C S  
Casper, Wyoming

#### **The Following Agencies and Organizations Cooperate with the Natural Resources Conservation Service with Snow Surveys and/or with Data:**

##### **FEDERAL:**

United States Department of the Interior (National Park Service)

United States Department of the Interior (Bureau of Reclamation)

United States Department of Agriculture (Forest Service)

United States Department of Commerce NOAA (National Weather Service)

##### **STATE:**

The Wyoming State Engineer's Office

The University of Wyoming

##### **LOCAL:**

The City of Cheyenne