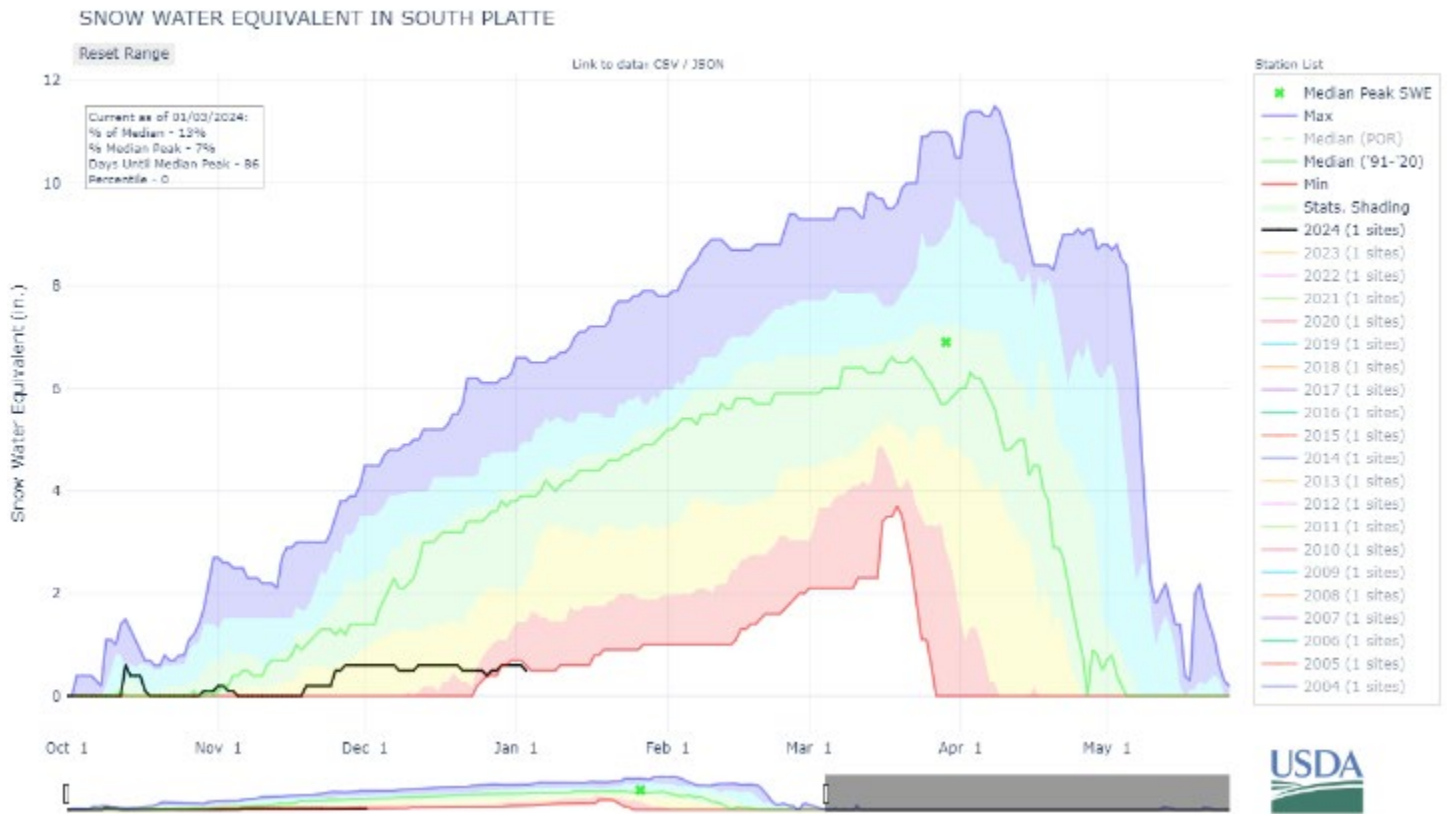


# Wyoming Basin & Water Supply Outlook Report

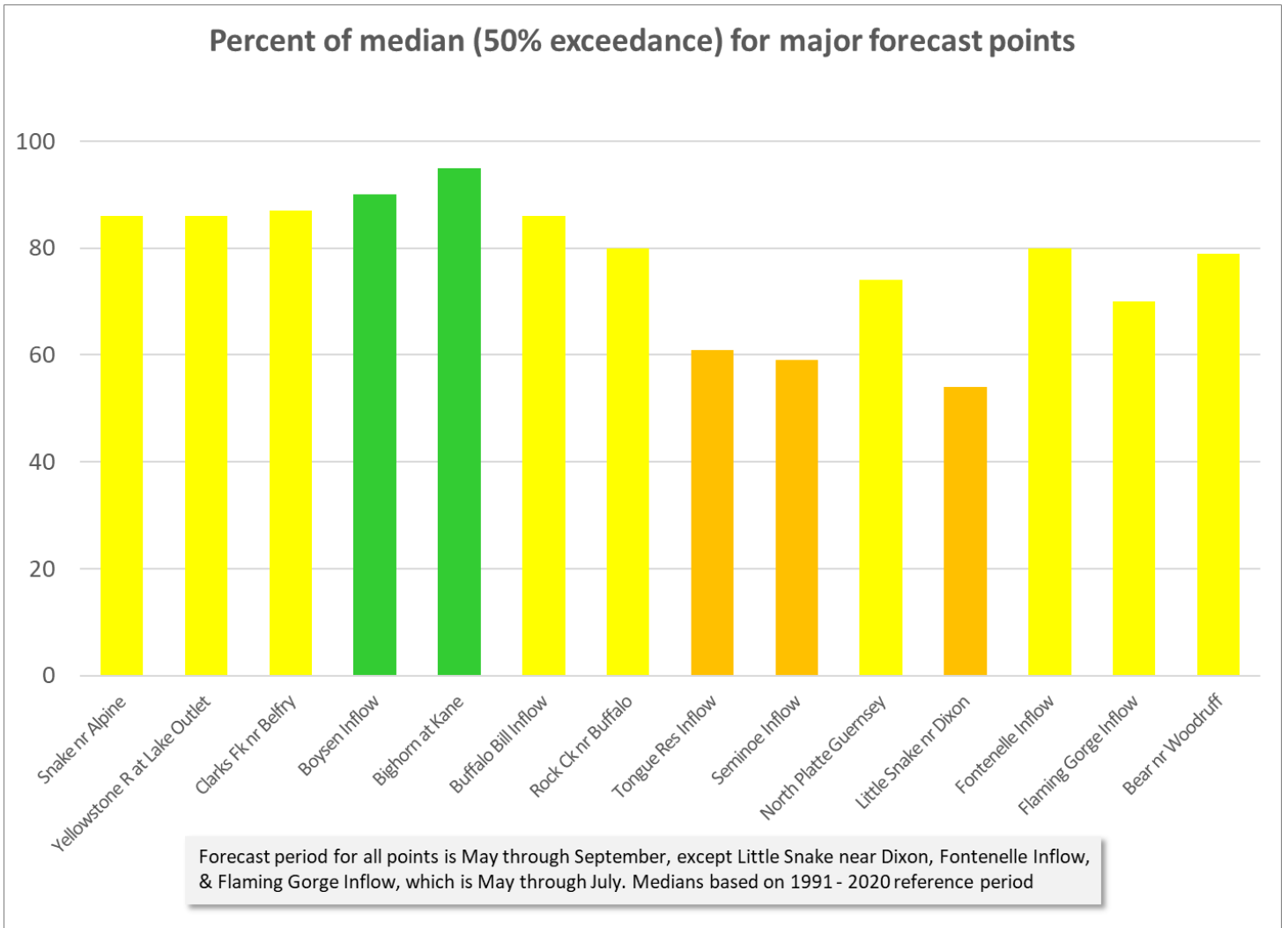
## January 1, 2024

**Natural  
Resources  
Conservation  
Service**



South Platte Snake River Basin Snow Water Equivalent Graph, 1/3/2024

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



Fifty percent exceedance probability for all major forecast points listed above is expected to be below 100% 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.

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# Wyoming Basin & Water Supply Outlook Report

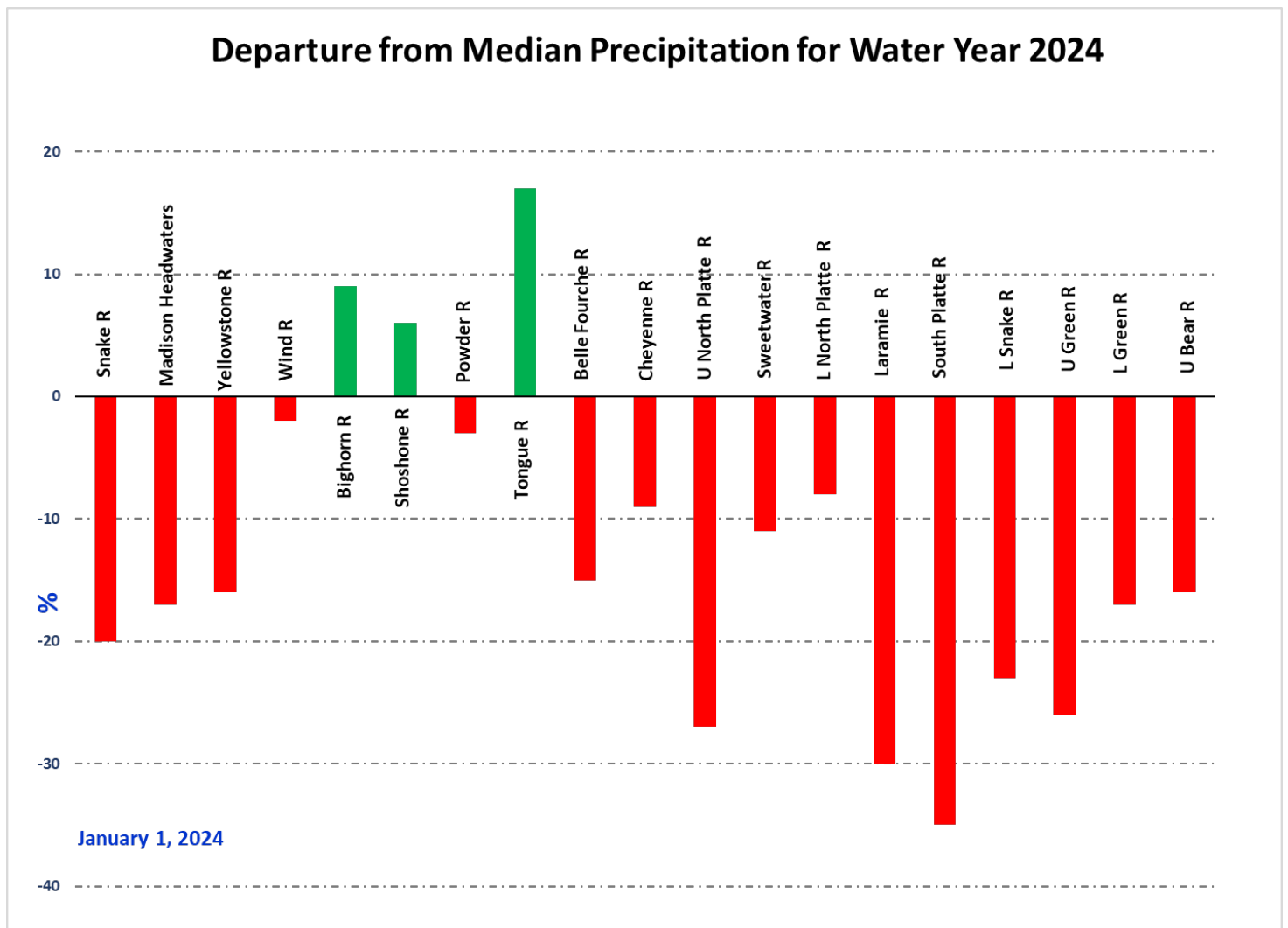
## Snowpack

Snow water equivalent (SWE) across Wyoming for January 1<sup>st</sup> was at 65% of median. SWE in the Wind River Basin was the highest at 83% of median and lowest for the South Platte River Basin at 16% of median. On January 1<sup>st</sup>, 2024, the following basins were below the Minimum SWE recorded for the 1991 - 2020 interval: Lower Green, Upper North Platte, Powder, South Platte. The Cheyenne and Belle Fourche River Basins have been 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 Cheyenne River Basin had the highest precipitation for the month at 100% of median. The Tongue River Basin had the lowest precipitation amount for the month at 30% 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 82%. Forecast median stream flow yields for April thru July in Green, Little Snake, and Cheyenne average 82, 71%, and 88%. The Snake River and Yellowstone River in Wyoming, basins should yield about 80% and 87% of median. Yields from the Wind and Bighorn River basins should be about 97% and 98% of median. Yields from the Shoshone River basin should be 85% of median. Yields from the Powder and Tongue River basins should be about 76 and 80% 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%, 71%, 71%, and 71% of median, respectively.

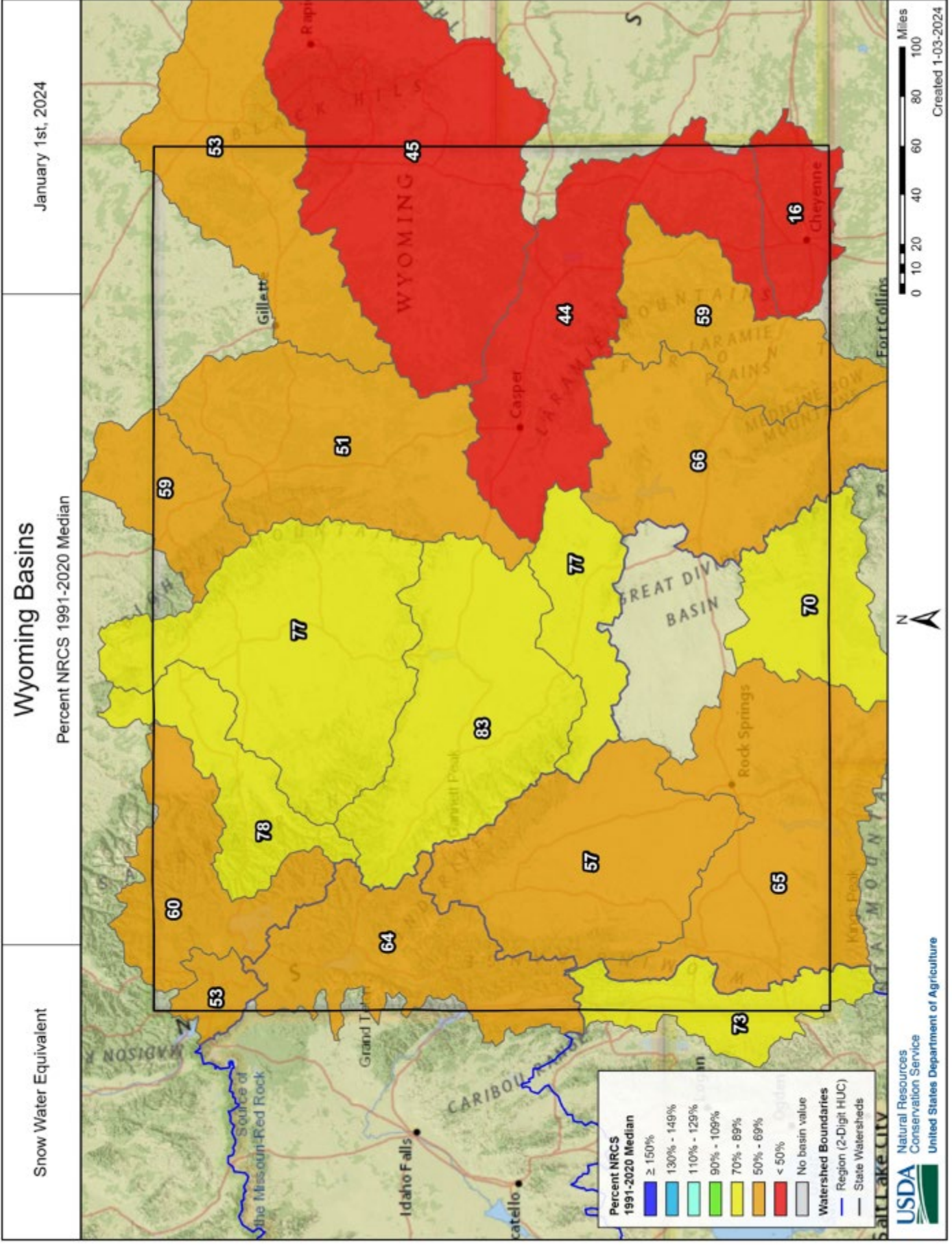
## Reservoirs

Reservoir storage was 105% of median across the entire state. Reservoirs in the Snake River basin are near median at 95%. Reservoirs in the Wind River basin are near median at 105%. Reservoirs on the Bighorn are 102% of median. The Buffalo Bill Reservoir on the Shoshone is near median at 106%. Reservoirs in the Belle Fourche and Cheyenne River basins are below median at 110% and 105% respectively. Reservoirs on the Upper and Lower North Platte River are below median at 116% and 104% respectively. Reservoirs on the Upper Green River are at 114% of median. Reservoirs on the Lower Green River are below median at 102%. Reservoir in the Upper Bear Laramie Basins are 142%. *See below for further information.*

### Wyoming Reservoir Levels

Reservoir Storage Summary For the End of December 2023									
Upper Bear	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Alcova	157.3	157.5	156.5	184.3	85%	85%	85%	101%	101%
Angostura	99.3	60.9	90.8	122.1	81%	50%	74%	109%	67%
Belle Fourche	135.6	113.1	124.4	185.3	73%	61%	67%	109%	91%
Big Sandy	38.4	6.5	17.4	36.7	105%	18%	47%	221%	37%
Bighorn Lake	917.2	845.3	895.1	1011.0	91%	84%	89%	102%	94%
Boysen	615.0	576.5	569.8	741.6	83%	78%	77%	108%	101%
Buffalo Bill	478.5	463.3	452.6	644.1	74%	72%	70%	106%	102%
Bull Lake	71.6	72.2	81.6	152.4	47%	47%	54%	88%	88%
Deerfield	15.0	14.7	14.7	15.2	99%	97%	97%	102%	100%
Flaming Gorge Res.	3177.2	2540.1	3127.0	3749.0	85%	68%	83%	102%	81%
Fontenelle	207.9	193.7	198.5	334.0	62%	58%	59%	105%	98%
Glendo	258.0	221.9	243.4	492.0	52%	45%	49%	106%	91%
Grassy Lake	12.5	10.9	12.5	15.2	82%	72%	82%	100%	87%
Guernsey	12.2	11.2	11.5	45.6	27%	25%	25%	106%	97%
High Savery	13.6	6.8	11.6	22.4	61%	30%	52%	117%	59%
Jackson Lake	586.5	167.9	615.6	847.0	69%	20%	73%	95%	27%
Keyhole	128.8	117.4	116.7	193.8	66%	61%	60%	110%	101%
Meeks Cabin Res.	15.9	7.7	8.6	29.9	53%	26%	29%	184%	90%
Pactola	52.1	50.2	52.3	55.0	95%	91%	95%	100%	96%
Pathfinder	700.1	341.2	555.1	1070.0	65%	32%	52%	126%	61%
Pilot Butte	24.8	24.5	25.3	33.7	74%	73%	75%	98%	97%
Seminole	649.3	453.4	613.2	1017.2	64%	45%	60%	106%	74%
Stateline Reservoir	7.7	5.6	5.7	13.9	55%	40%	41%	135%	98%
Tongue River	49.1	46.3	43.0	79.1	62%	59%	54%	114%	59%
Viva Naughton Res.	35.0	30.8	31.1	42.4	83%	73%	73%	113%	99%
Wheatland #2	49.0	NA	45.8	98.9	50%	NA	46%	107%	NA
Woodruff Creek	2.0	2.0	2.0	4.0	49%	50%	49%	101%	102%
Woodruff Narrows Res.	48.2	13.5	33.4	57.3	84%	24%	58%	144%	40%





Snow Water Equivalent

# Wyoming Basins

Percent NRCS 1991-2020 Median

January 1st, 2024

**Percent NRCS 1991-2020 Median**

- ≥ 150%
- 130% - 149%
- 110% - 129%
- 90% - 109%
- 70% - 89%
- 50% - 69%
- < 50%
- No basin value

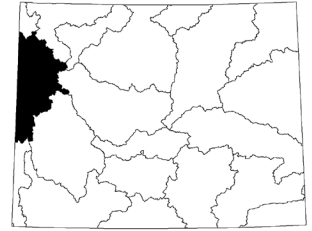
**Watershed Boundaries**

- Region (2-Digit HUC)
- State Watersheds



Created 1-03-2024

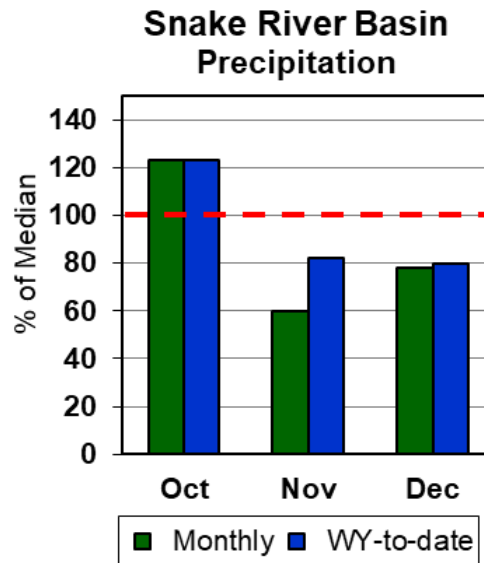
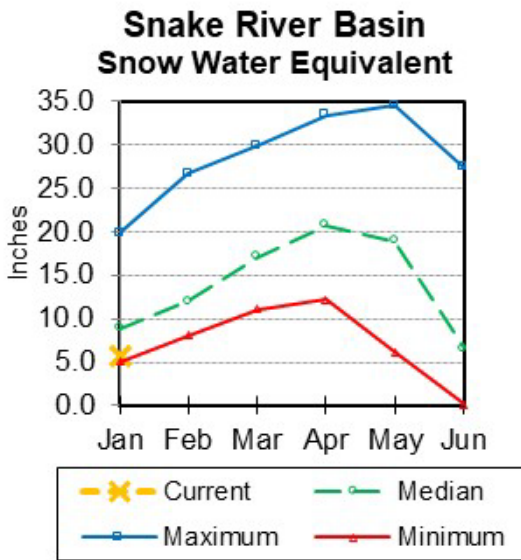
# Snake River Basin



## Snow

The overall Snake River basin SWE (portion above Palisades dam) is 64% of median. SWE in the Snake River Basin above Jackson Lake is 70% of median. Pacific Creek basin SWE is 59% of median. Buffalo Fork SWE is 61% of median. Gros Ventre River basin SWE is 53% of median. SWE in the Hoback River drainage is 52% of median. SWE in the Greys River drainage is 69% of median. Salt River Basin SWE is 72% 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 77% of median. Water-year-to-date precipitation is 80% of median.

## Reservoirs

Current reservoir storage is 95% of median for the two storage reservoirs in the basin.

Snake	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Grassy Lake	12.5	10.9	12.5	15.2	82%	72%	82%	100%	87%
Jackson Lake	586.5	167.9	615.6	847.0	69%	20%	73%	95%	27%
<b>Basin Index</b>					69%	21%	73%	95%	28%
# of reservoirs					2	2	2	2	2

## Streamflow

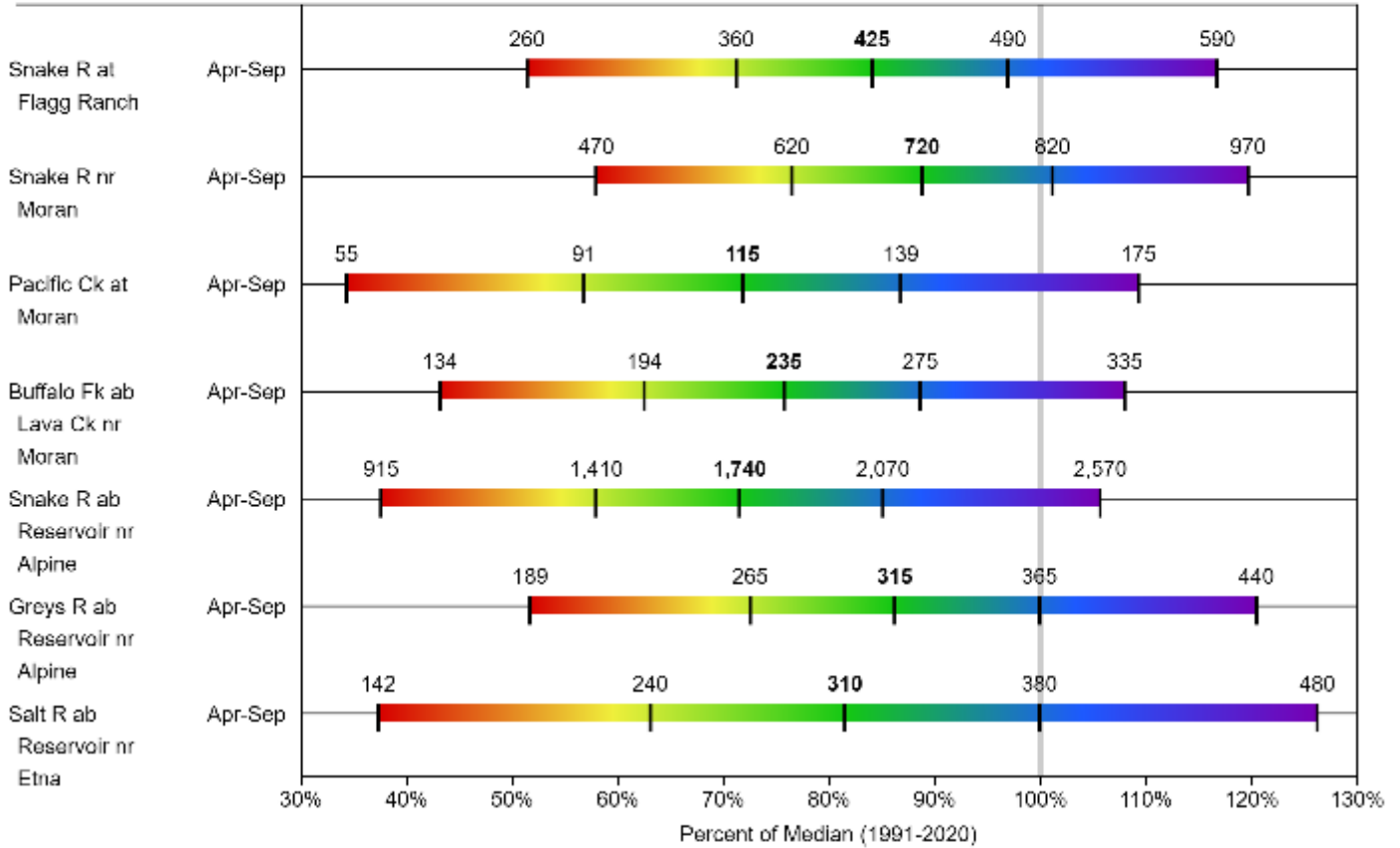
The 50% exceedance forecasts for April through September are below median for this basin. The Snake near Moran yield should be 89% of median. Snake River above reservoir near Alpine will yield about 72%. Pacific Creek near Moran yield will be around 72%. Buffalo Fork above Lava near Moran will be around 76% of median. Greys River above reservoir near Alpine should yield about 86%. Salt River near Etna yield will be about 82%.

*See the following graph for further information.*

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

Forecast Exceedance Probabilities

<----- Drier ----- Future Conditions ----- Wetter ----->  
 Labels on chart represent volumes of water expressed in thousand acre-feet.



**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

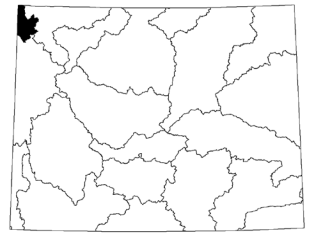
When selected, the following historic streamflow values and statistics will be shown.

<i>Period of Record Minimum Streamflow KAF (Year)</i>	<i>1991-2020 Normal Streamflow KAF</i>	<i>Observed Streamflow KAF</i>	<i>Period of Record Maximum Streamflow KAF (Year)</i>

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

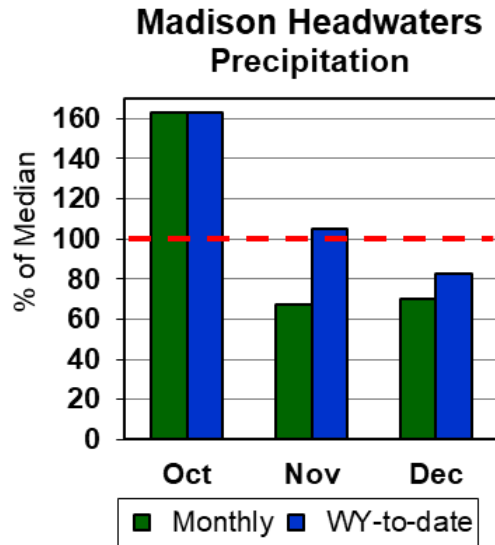
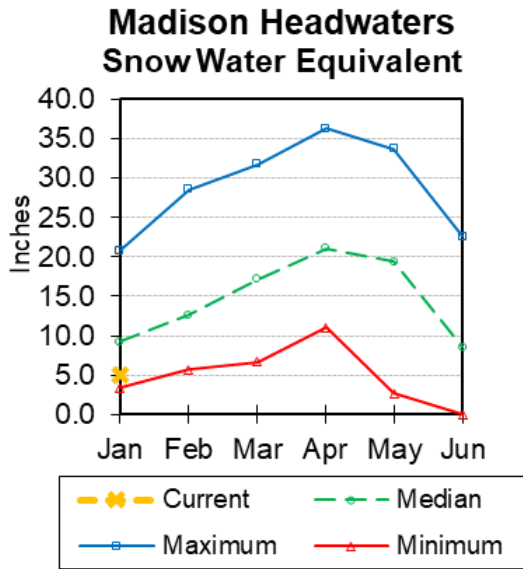


# Madison Headwaters in Wyoming



## Snow

SWE is 53% 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 66% of median. Water-year-to-date precipitation is at 83% of median.

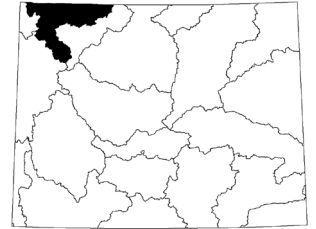
## Reservoirs

No reservoir data.

## Streamflow

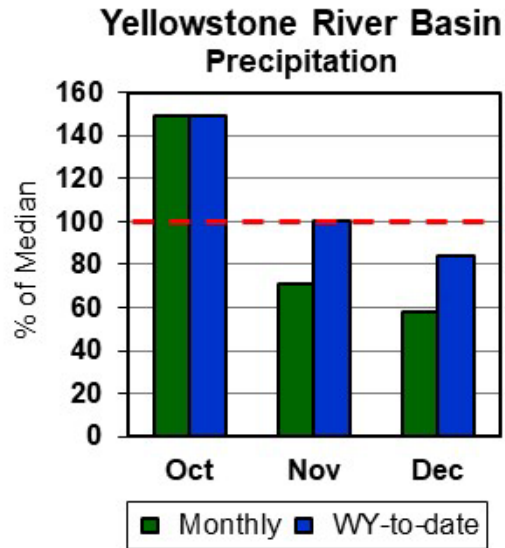
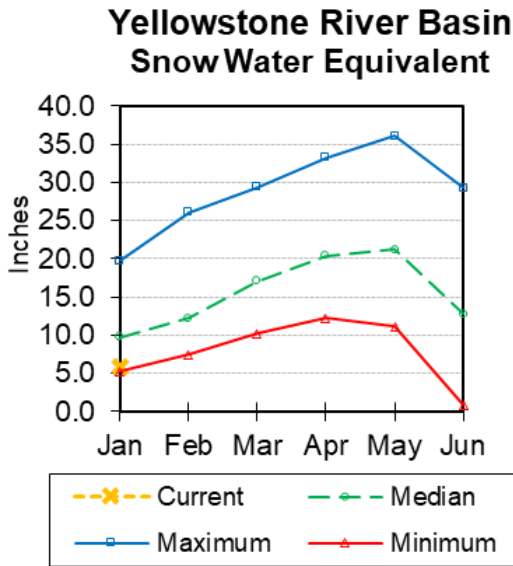
There are no streamflow forecast points for the basin.

# Yellowstone River Basin



## Snow

SWE in the Yellowstone River Basin is 60% of median. SWE in the Clarks Fork Drainage of the Yellowstone River basin in Wyoming is 61% 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 55% of median. Water-year-to-date precipitation is 83% of median.

## Reservoirs

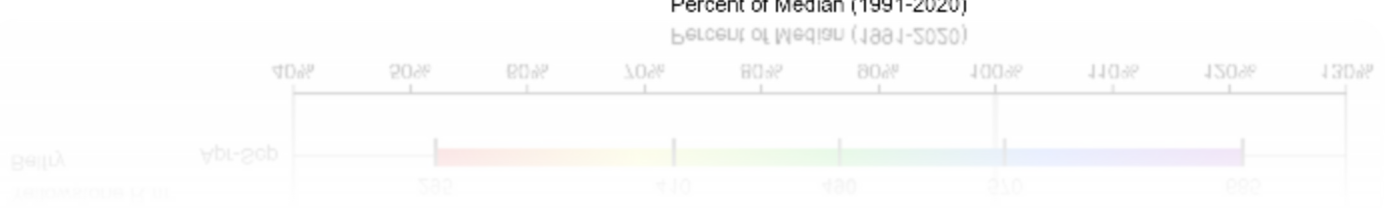
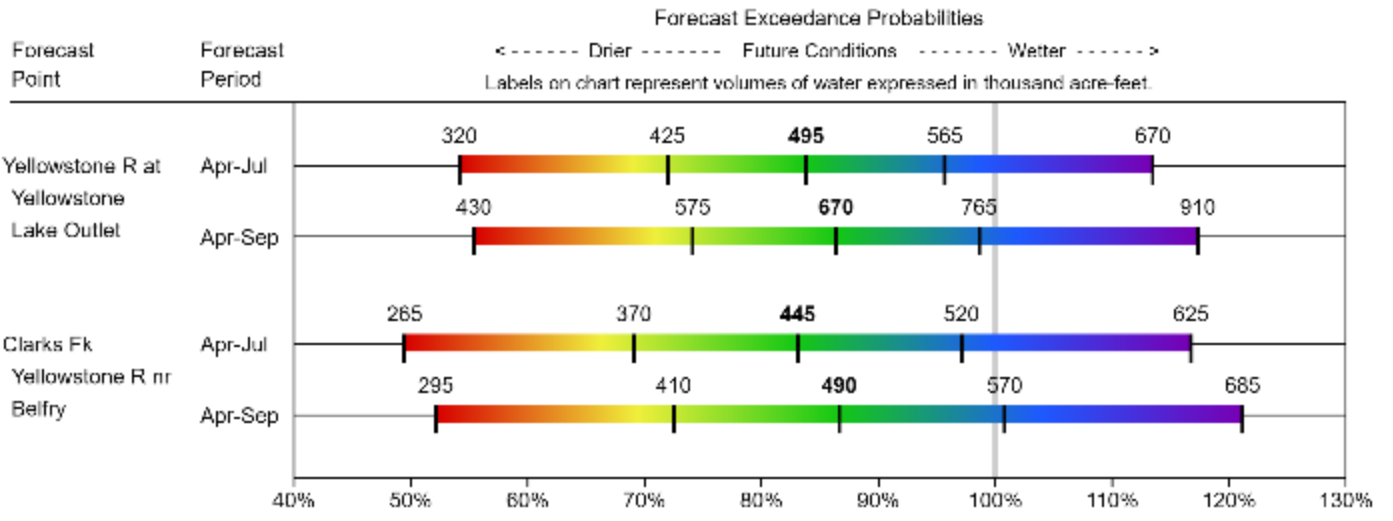
No reservoir data.

## Streamflow

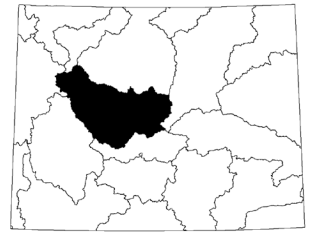
The 50% exceedance forecasts for April through September are below normal for the basin. Yellowstone at Lake Outlet will yield around 86% of median. Clarks Fork of the Yellowstone near Belfry will yield around 87%.

*See the following graph for detailed information.*

**YELLOWSTONE IN WY**  
**Water Supply Forecasts**  
**January 1, 2024**

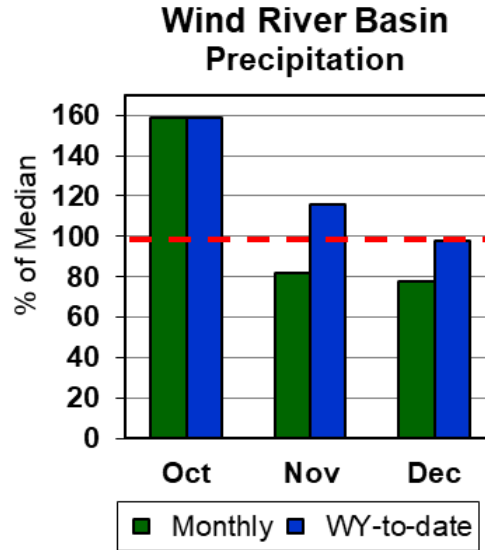
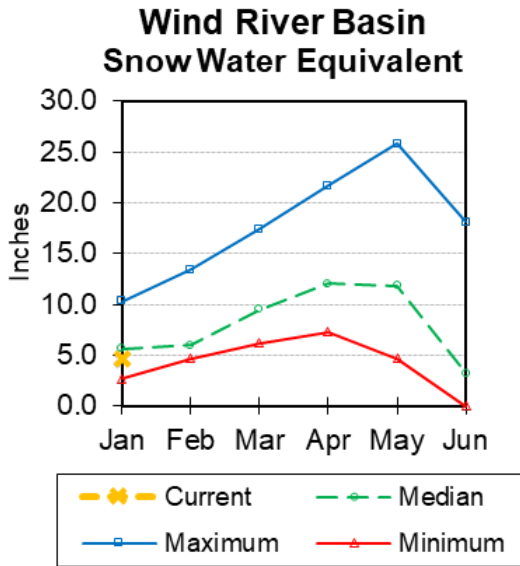


# Wind River Basin



## Snow

Wind River basin SWE (above Boysen Reservoir) is 83% of median. SWE in the Wind River above Dubois is 83% of median. Little Wind SWE is 106% of median, and Popo Agie drainage SWE is 88% 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 73% of median. Water year-to-date precipitation is 97% of median.

## Reservoirs

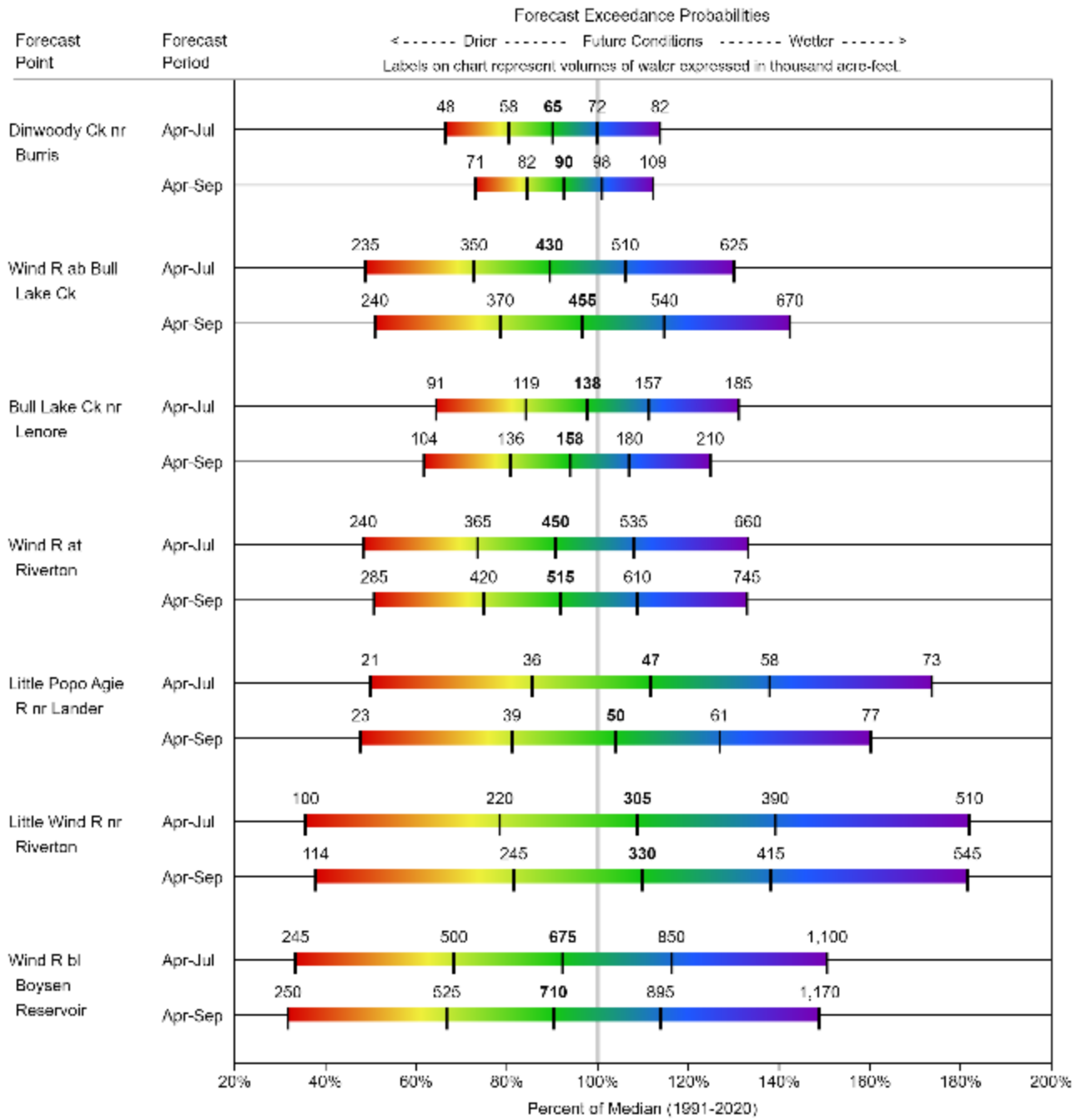
Current storage is 105% of median in the basin.

	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Pilot Butte	24.8	24.5	25.3	33.7	74%	73%	75%	98%	97%
Boysen	615.0	576.5	569.8	741.6	83%	78%	77%	108%	101%
Bull Lake	71.6	72.2	81.6	152.4	47%	47%	54%	88%	88%
<b>Basin Index</b>					91%	86%	87%	105%	99%
# of reservoirs					3	3	3	3	3

## Streamflow

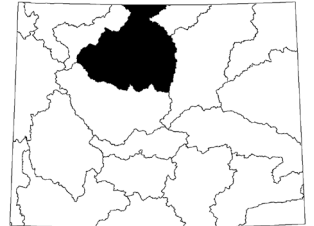
The 50% exceedance forecasts for the April through September runoff period should yield about normal for the Wind River. The Wind River above Bull Lake Creek will yield about 97% of median. Little Popo Agie River near Lander should yield around 104% of median. Little Wind River near Riverton will yield around 110% of median. Boysen Reservoir inflow will yield about 90% of median. *See the following graph for detailed runoff volumes.*

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



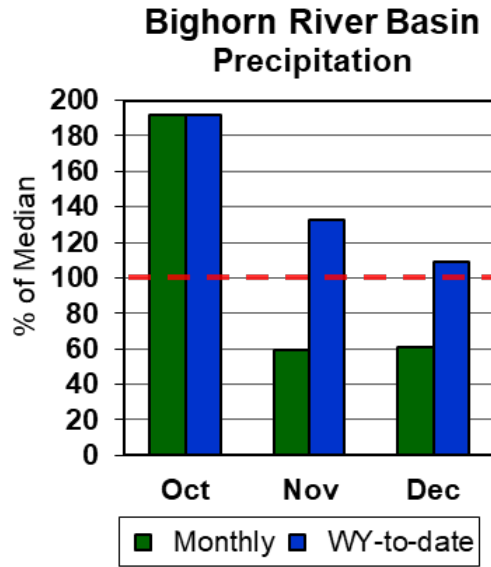
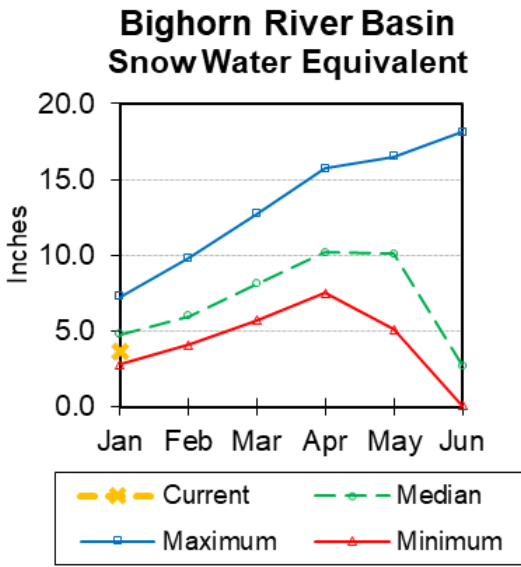


# Bighorn River Basin



## Snow

The Bighorn River Basin SWE (above Bighorn Reservoir) is 77% of median. The Greybull River SWE is at 137% of median. Shell Creek SWE is at 72% of median. *See Appendix at the end of this report for a detailed listing of snow course information.*



## Precipitation

Last month's precipitation was 57% of median. Year-to-date precipitation is 108% of median.

## Reservoirs

Current reservoir storage in the basin is 102% of median.

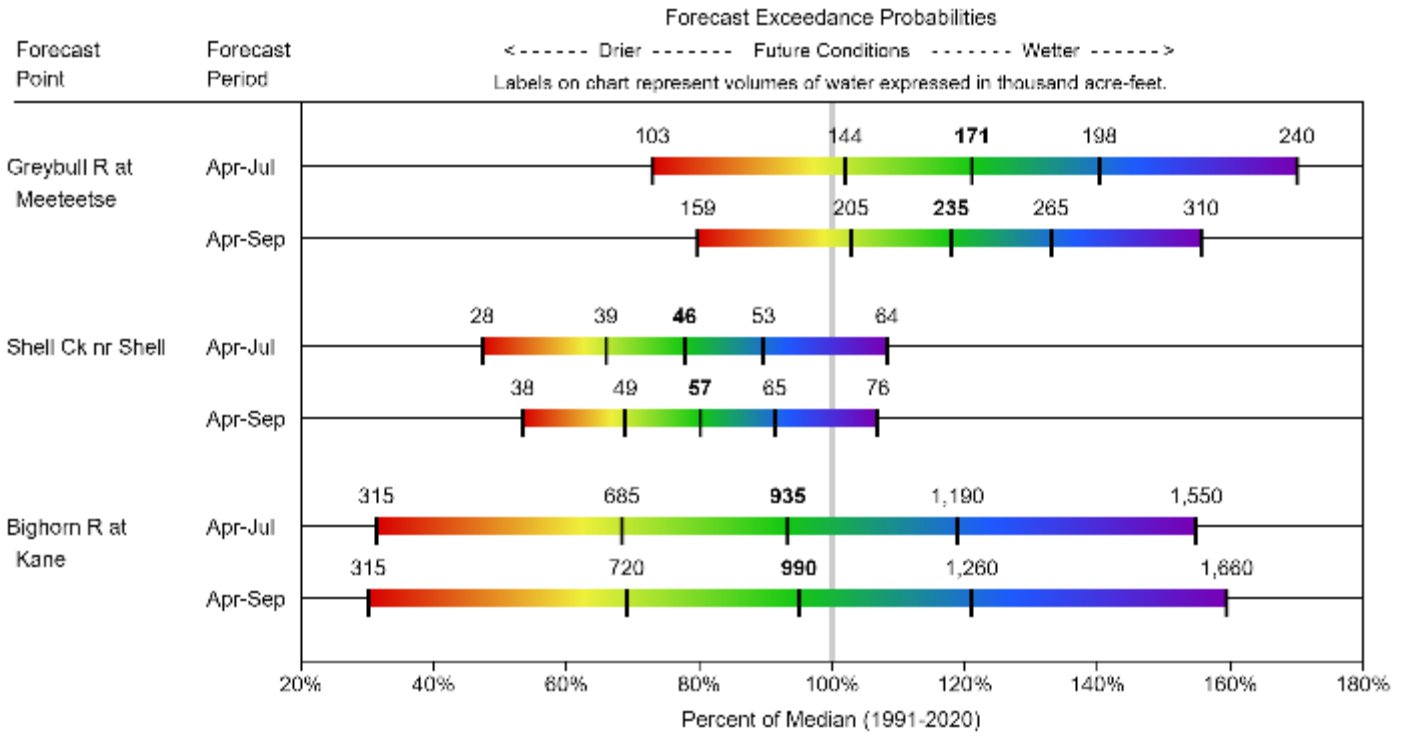
	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Bighorn Lake	917.2	845.3	895.1	1011	91%	84%	89%	102%	94%
<b>Basin Index</b>					68%	62%	66%	102%	94%
# of reservoirs					1	1	1	1	1

## Streamflow

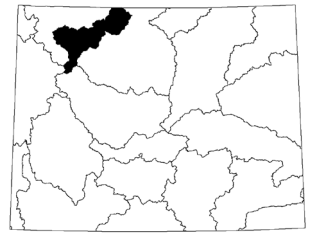
The 50% exceedance forecasts for the April through September runoffs are near normal. The Greybull River near Meeteetse should yield 103% of median. Shell Creek near Shell should yield around 80% of median. The Bighorn River at Kane should yield around 95% of median.

*See the following graph for detailed runoff volumes.*

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

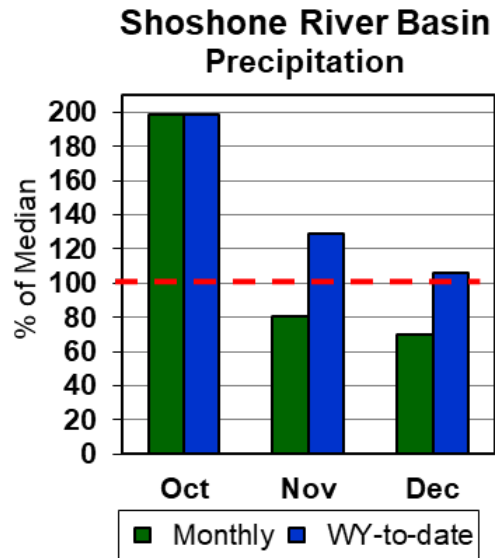
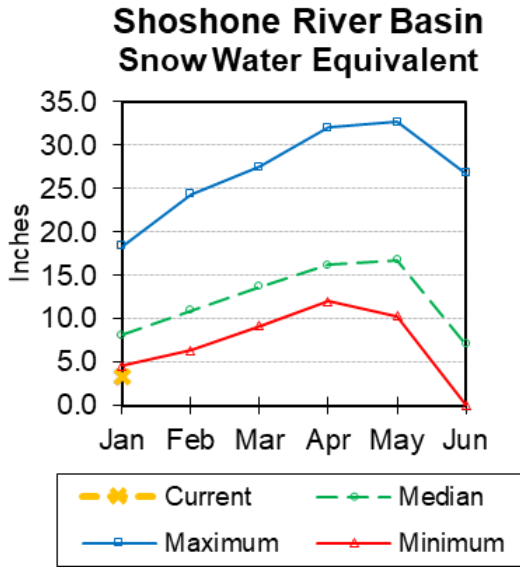


# Shoshone River Basin



## Snow

Snow Water Equivalent (SWE) is 77% 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 67% of median. The basin year-to-date precipitation is now 104% of median.

## Reservoirs

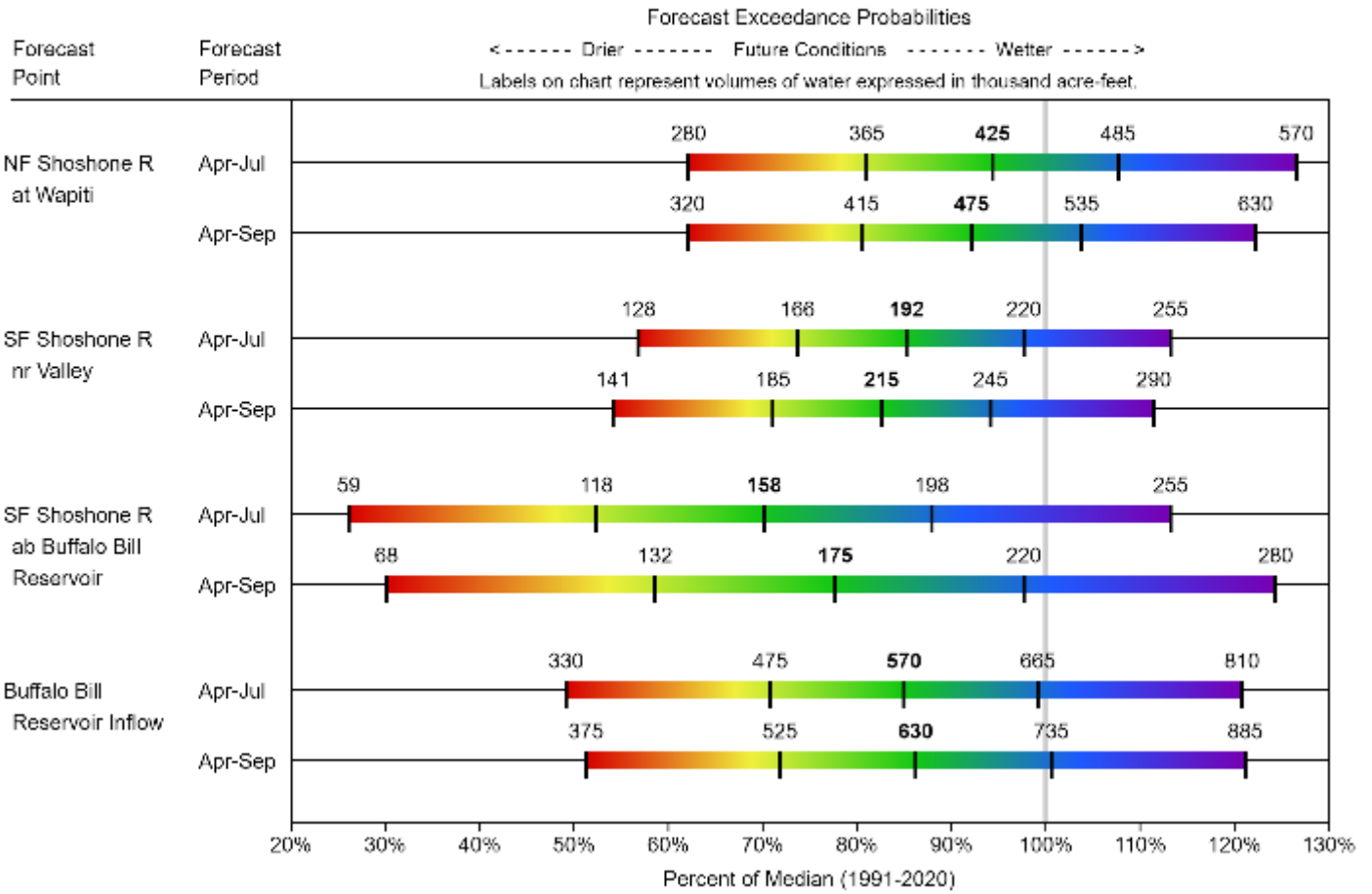
Current storage in Buffalo Bill Reservoir is about 102% of median.

	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Buffalo Bill	478.5	463.3	452.6	644.1	74%	72%	70%	106%	102%
<b>Basin Index</b>					74%	72%	70%	106%	102%
# of reservoirs					1	1	1	1	1

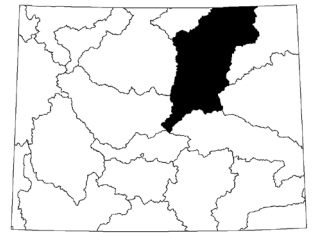
## Streamflow

The 50% exceedance forecasts for the April through September period are below normal for the basin. The North Fork Shoshone River at Wapiti should yield 92% of median. The South Fork of the Shoshone River near Valley should yield 83% of median. The Buffalo Bill Reservoir inflow should yield 86% of median. *See the following graph for detailed runoff volumes.*

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

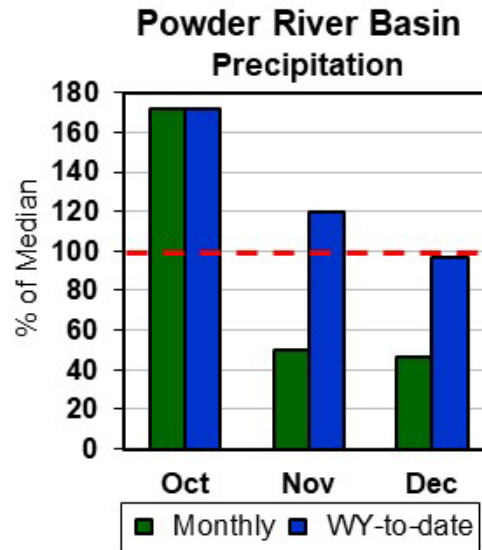
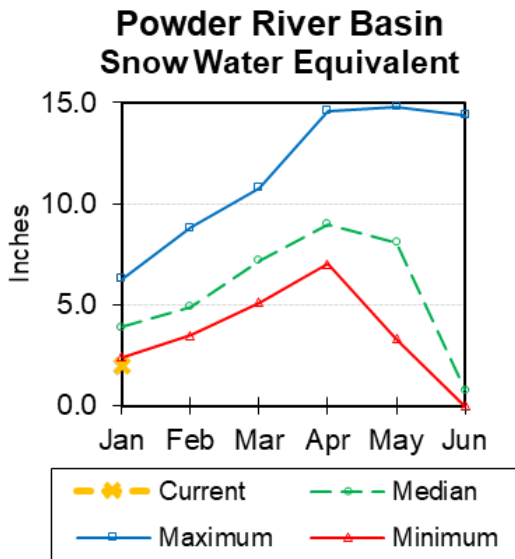


# Powder River Basin



## Snow

Powder River Basin SWE is at 51% of median. SWE in the Clear Creek drainage is 61% of median. *See appendix at the end of this report for a detailed listing of snow course information.*



## Precipitation

Last month's precipitation was 42% of median in the basin. Year-to-date precipitation is 96% of median.

## Reservoirs

No reservoir data for this basin.

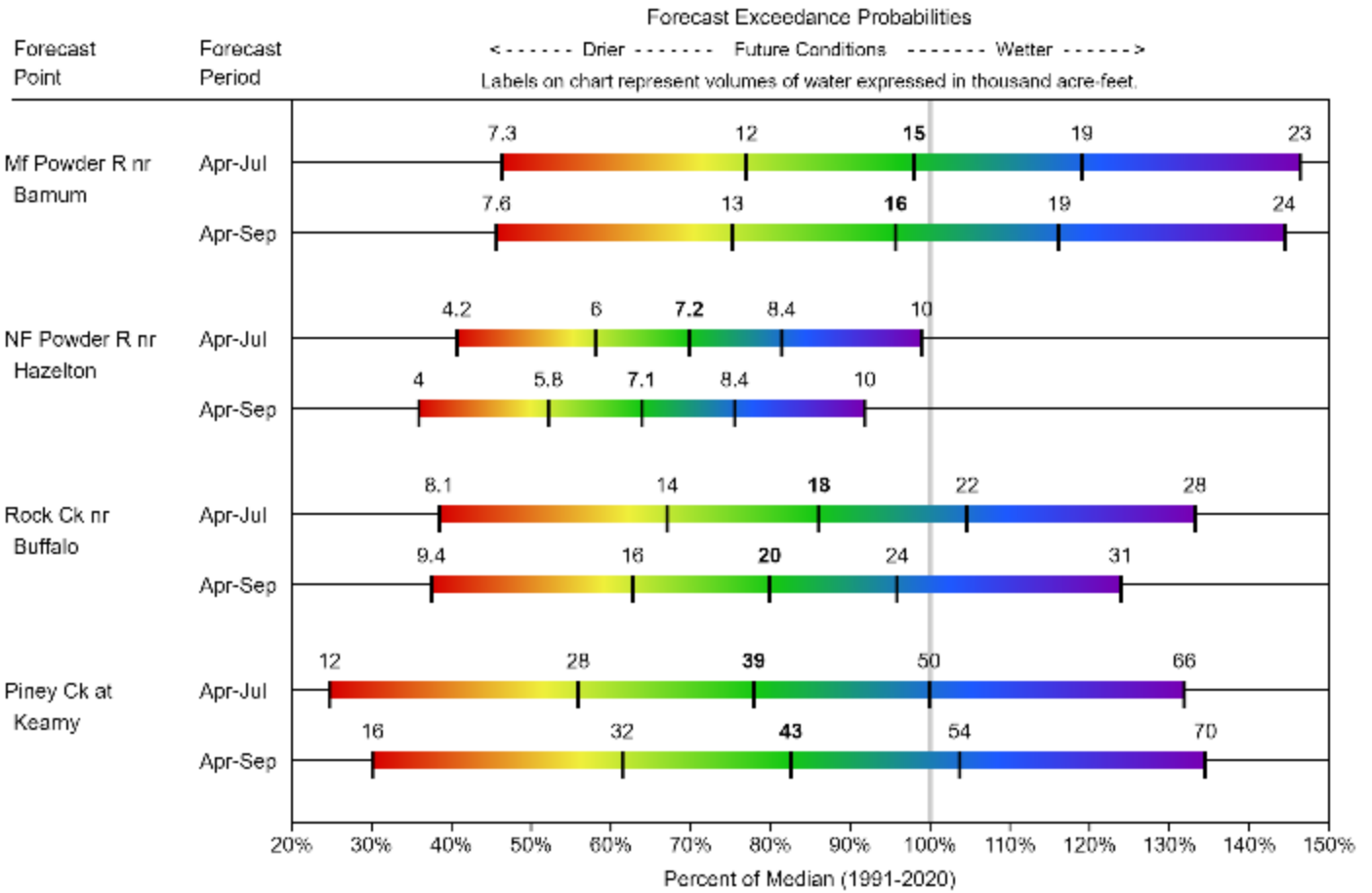
## Streamflow

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 96% of median. The North Fork of the Powder River near Hazelton to yield around 64% of median.

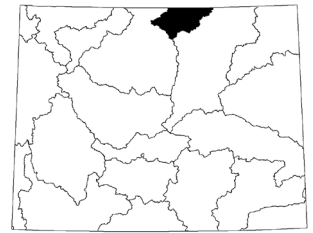
*See the following graph for detailed runoff volumes.*



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

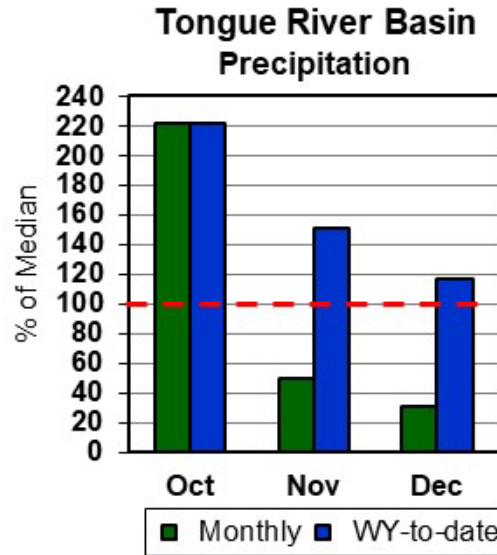
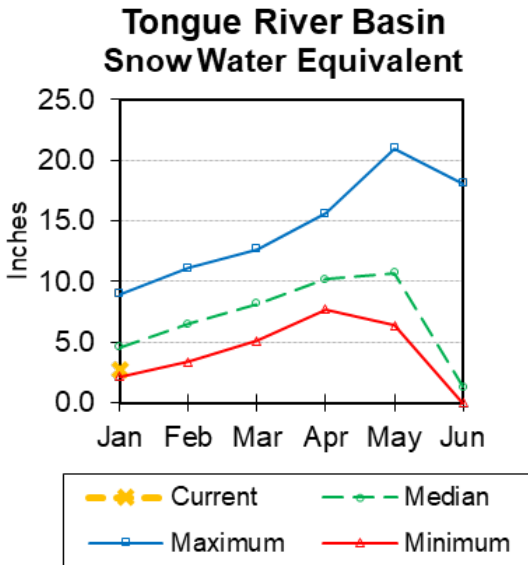


# Tongue River Basin



## Snow

Upper Tongue River drainage SWE is at 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 30% of median. Year-to-date precipitation is 115% of median in the basin.

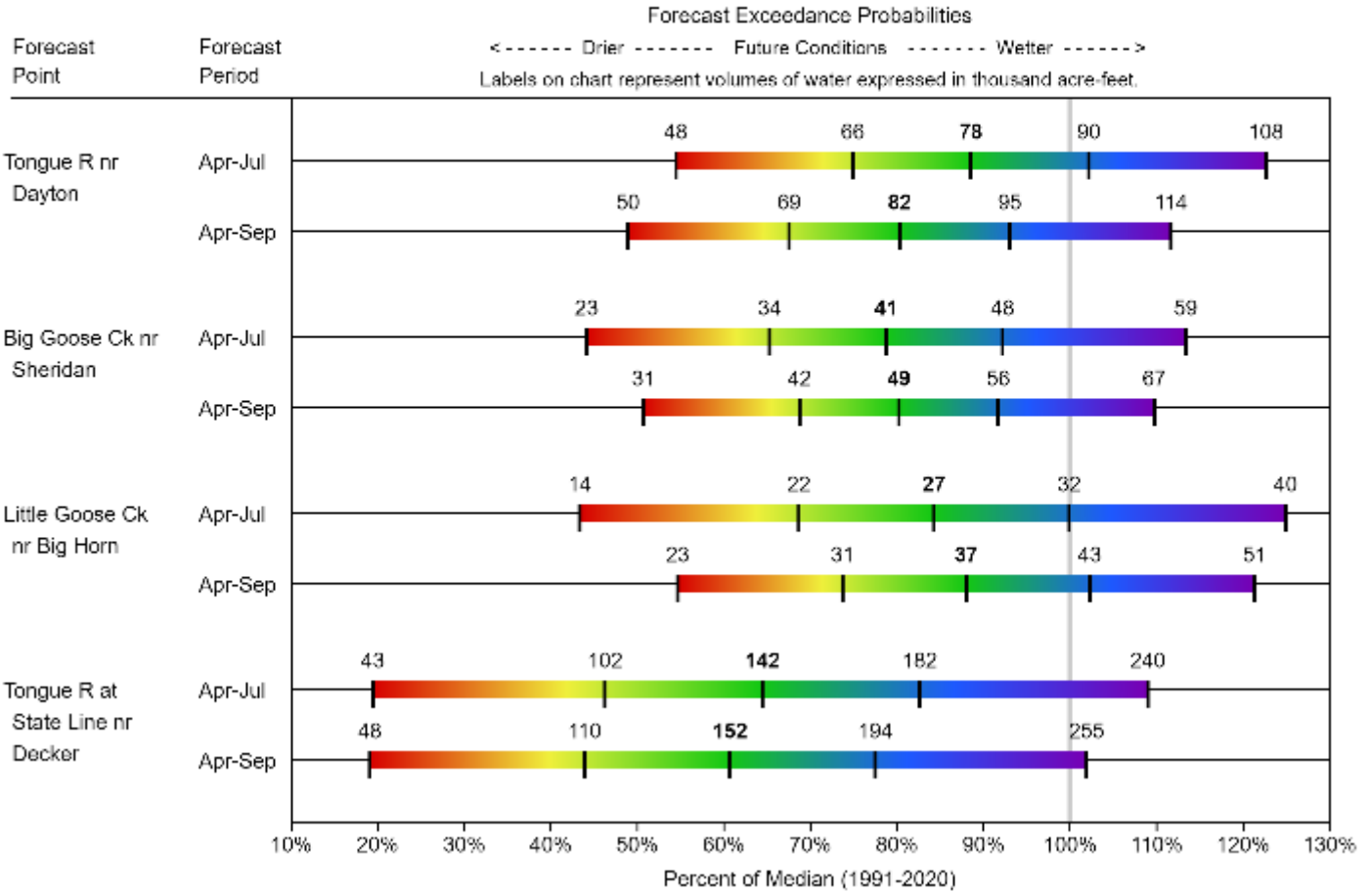
## Reservoirs

	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Tongue River	49.1	46.3	43.0	79.1	62%	59%	54%	114%	59%
<b>Basin Index</b>					62%	59%	54%	114%	59%
# of reservoirs					1	1	1	1	1

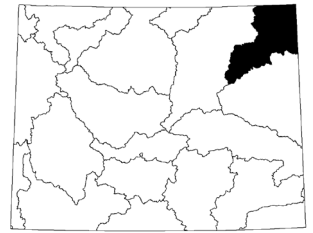
## Streamflow

The 50% exceedance forecasts for the May 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 80%. Little Goose Creek near Bighorn should yield 88% of median. The Tongue River Reservoir Inflow should yield 61% of median. *See below for detailed runoff volumes.*

## TONGUE Water Supply Forecasts January 1, 2024

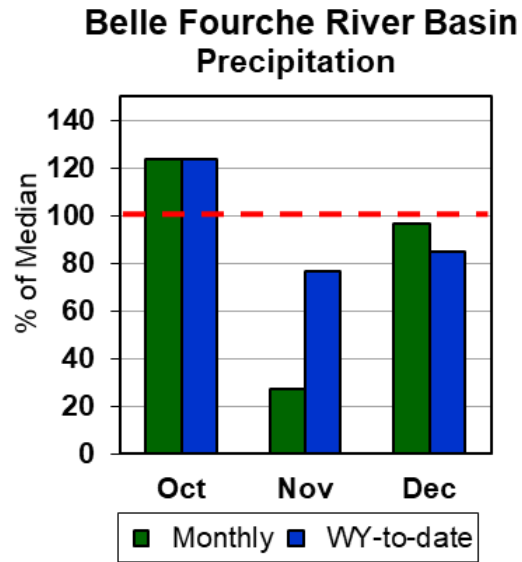
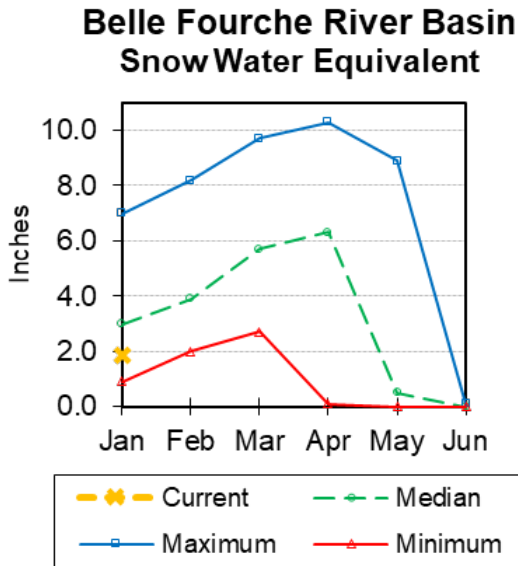


# Belle Fourche River Basin



## Snow

Currently the Belle Fourche River Basin SWE is at 62% of median. *See Appendix at the end of this report for a detailed listing of snow course information.*



## Precipitation

Precipitation for last month was 92% of median in the Belle Fourche basin. Year-to-date precipitation is 84% of median.

## Reservoirs

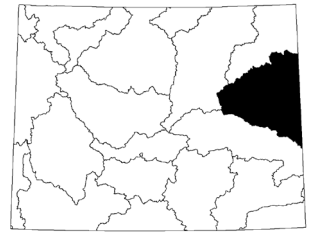
Combined storage for the 2 reservoirs in the basin is at 110% of median.

	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Keyhole	128.8	117.4	116.7	193.8	66%	61%	60%	110%	101%
Belle Fourche	135.6	113.1	124.4	185.3	73%	61%	67%	109%	91%
<b>Basin Index</b>					66%	61%	60%	110%	96%
# of reservoirs					2	2	2	2	2

## Streamflow

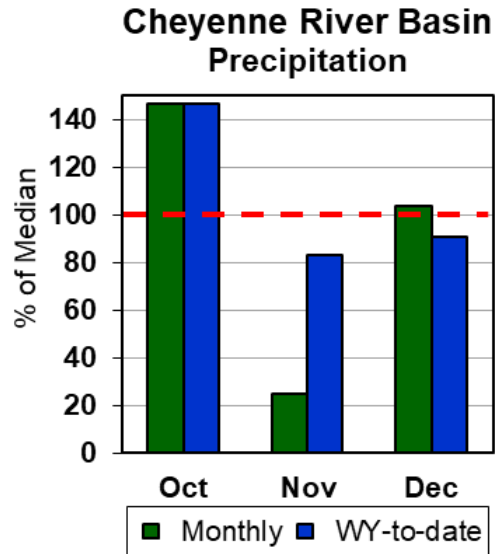
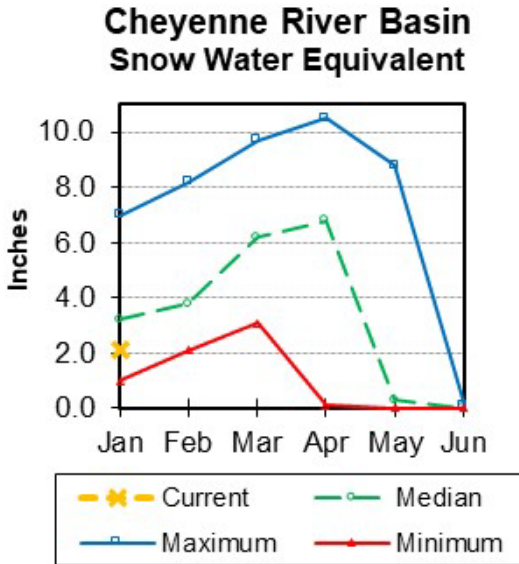
There are no streamflow forecast points for the basin.

# Cheyenne River Basin



## Snow

Currently SWE for sites in the Cheyenne River Basin are at 66% of median. *See Appendix at the end of this report for a detailed listing.*



## Precipitation

Precipitation for last month was 100% of median. Year-to-date precipitation is 90% of median.

## Reservoirs

Combined storage for the 3 reservoirs in the basin is at 105% of median.

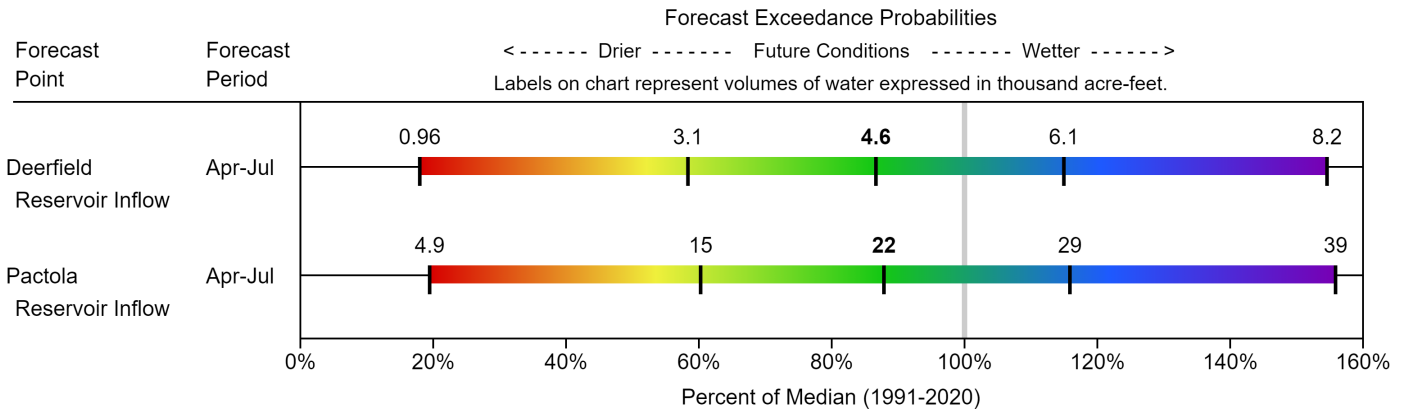
	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Angostura	99.3	60.9	90.8	122.1	81%	50%	74%	109%	67%
Deerfield	15.0	14.7	14.7	15.2	99%	97%	97%	102%	100%
Pactola	52.1	50.2	52.3	55.0	95%	91%	95%	100%	96%
<b>Basin Index</b>					87%	65%	82%	105%	80%
# of reservoirs					3	3	3	3	3

## Streamflow

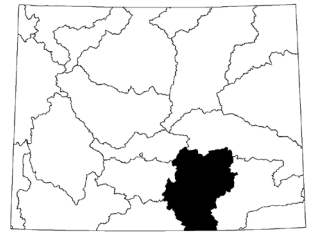
The 50% exceedance forecasts for the April through July period are slightly below normal. The Deerfield Reservoir Inflow yield is forecasted at 87% of median. Pactola Reservoir Inflow yield should be 88% of median. *See the following graph for detailed runoff volumes.*



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



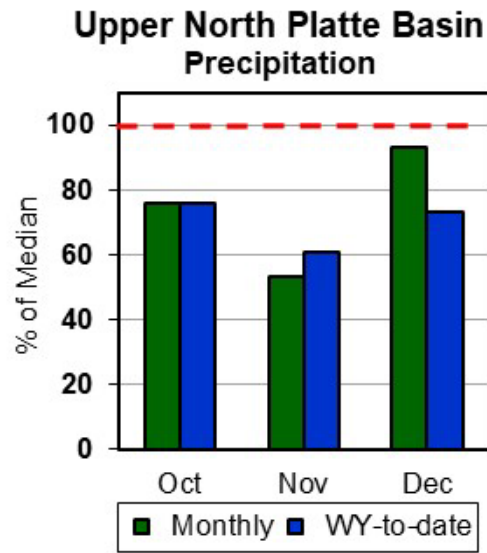
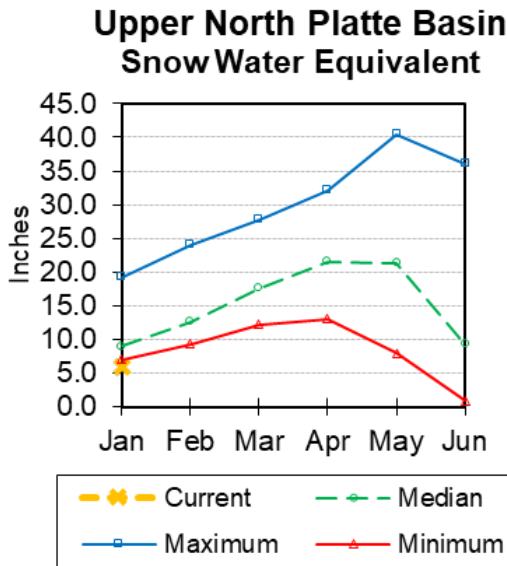
# Upper North Platte River Basin



## Snow

The Upper North Platte River basin SWE is 66% of median. North Platte above Northgate SWE is 71% of median. Encampment River SWE is 71% of median. Medicine Bow and Rock Creek SWE are 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 91% of median. Total water-year-to-date precipitation is 72% of median.

## Reservoirs

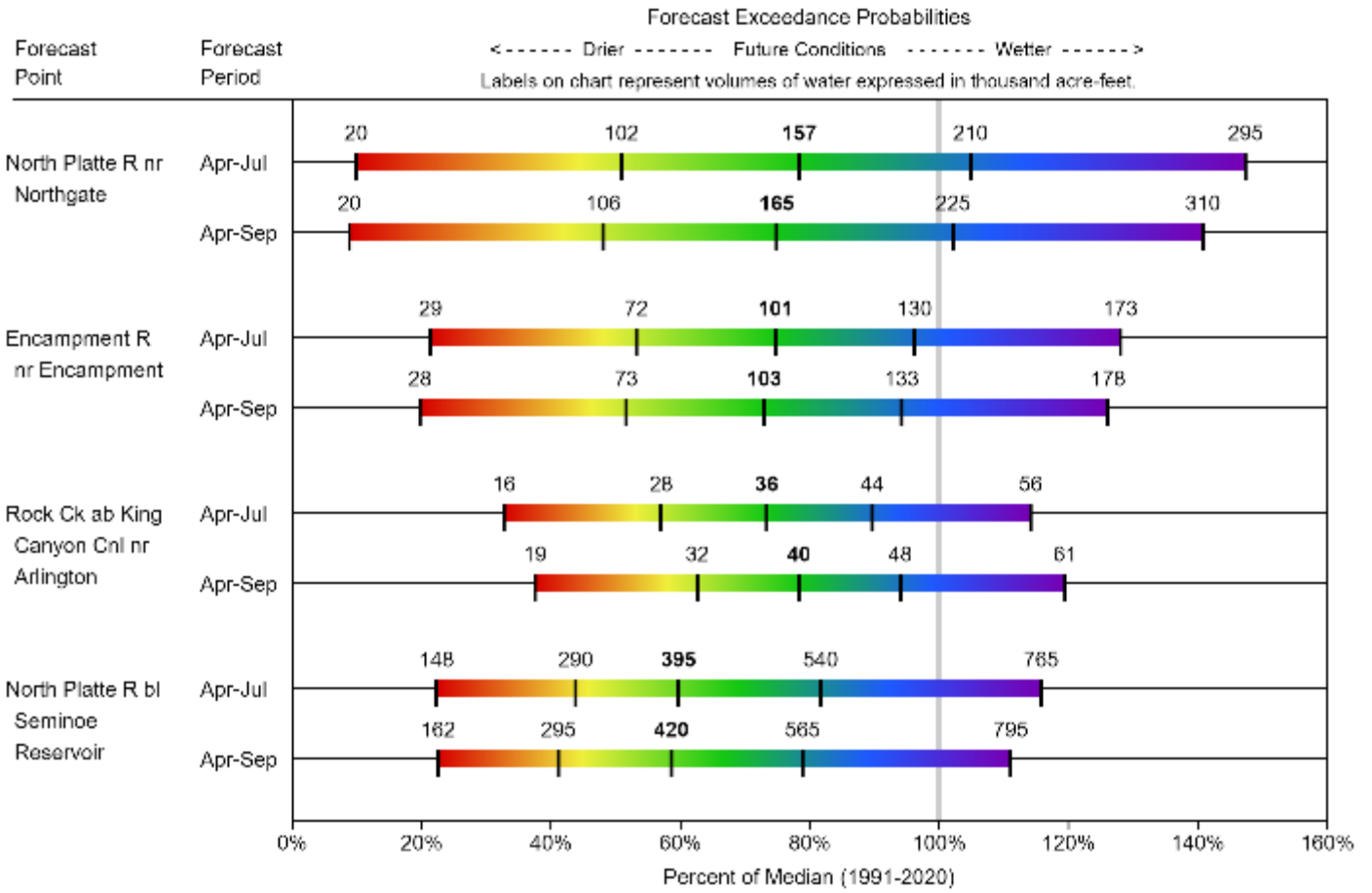
Combined storage for reservoirs in the Upper North Platte River Basin is at 16% of median.

	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Pathfinder	700.1	341.2	555.1	1070	65%	32%	52%	126%	61%
Seminole	649.3	453.4	613.2	1017.2	64%	45%	60%	106%	74%
<b>Basin Index</b>					<b>66%</b>	<b>39%</b>	<b>57%</b>	<b>116%</b>	<b>68%</b>
# of reservoirs					2	2	2	2	2

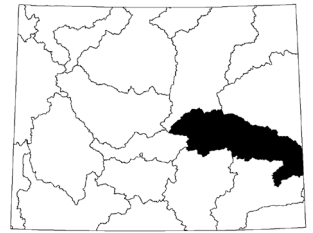
## Streamflow

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 75% of median. The Encampment River near Encampment yield will be about 73%. Rock Creek near Arlington yield will be around 78%. Seminole Reservoir inflow should be about 59% of median. *See the following page for more detailed information on projected runoff.*

**UPPER NORTH PLATTE**  
**Water Supply Forecasts**  
**January 1, 2024**

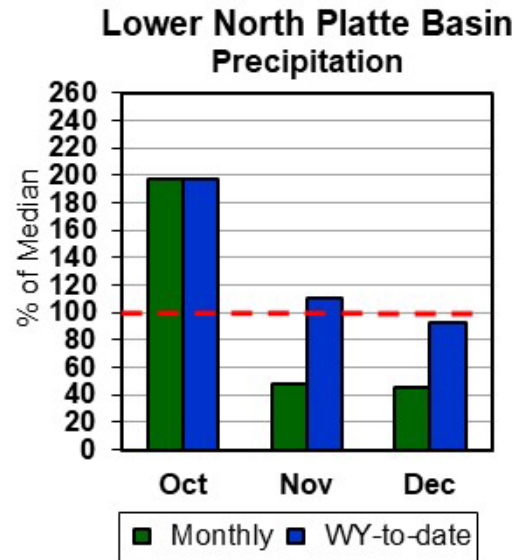
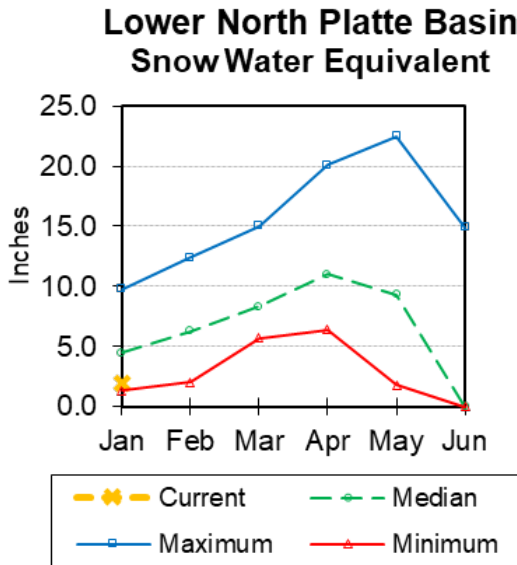


# Lower North Platte River Basin



## Snow

Currently, SWE in the Lower North Platte River Basin is 44% of median. *See Appendix at the end of this report for a detailed listing of snow course information.*



## Precipitation

Last month's precipitation was 44% of median. The water year-to-date precipitation for the basin is currently 92% of median.

## Reservoirs

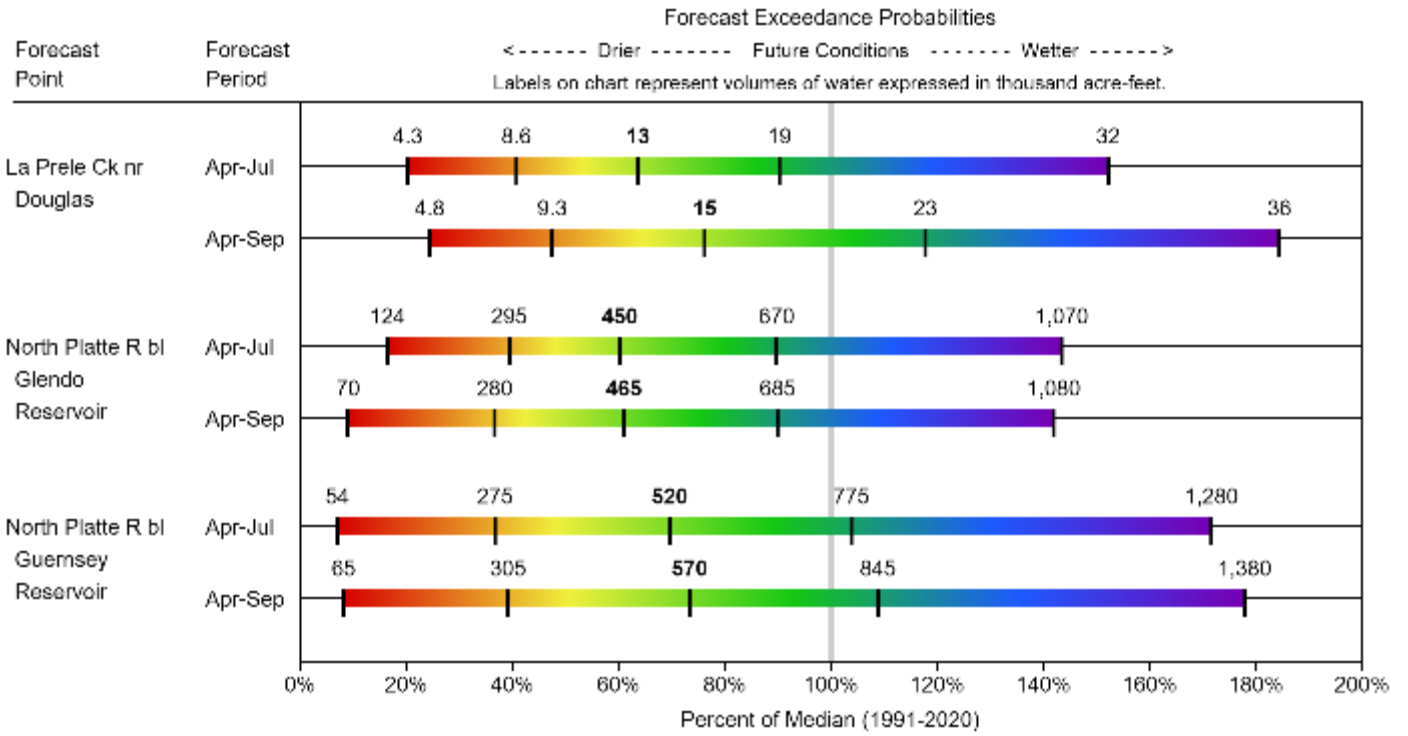
Combined storage for the 3 reservoirs in the basin is at 104% of median.

	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Glendo	258.0	221.9	243.4	492	52%	45%	49%	106%	91%
Alcova	157.3	157.5	156.5	184.3	85%	85%	85%	101%	101%
Guernsey	12.2	11.2	11.5	45.6	27%	25%	25%	106%	97%
<b>Basin Index</b>					<b>74%</b>	<b>73%</b>	<b>73%</b>	<b>104%</b>	<b>95%</b>
# of reservoirs					3	3	3	3	3

## Streamflow

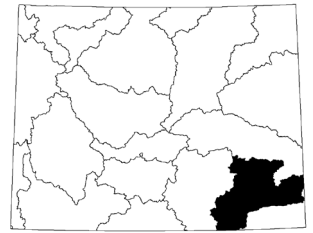
The 50% exceedance forecasts for the April through September period are below normal. LaPrele Creek near Douglas is forecasted to yield 76% of median. North Platte River below Guernsey Reservoir should yield around 74% of median. *See the following for more detailed information on projected runoff.*

**LOWER NORTH PLATTE**  
**Water Supply Forecasts**  
**January 1, 2024**



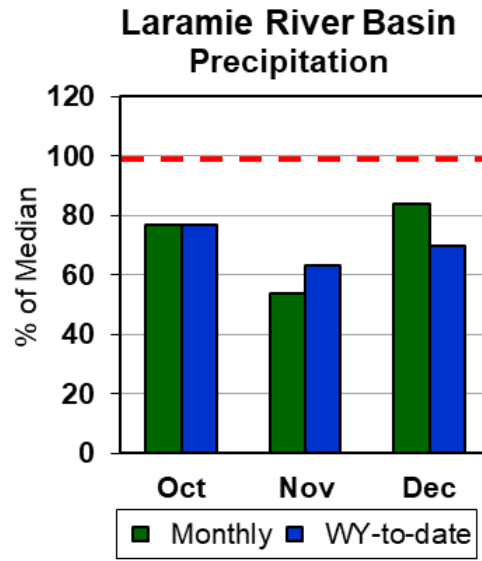
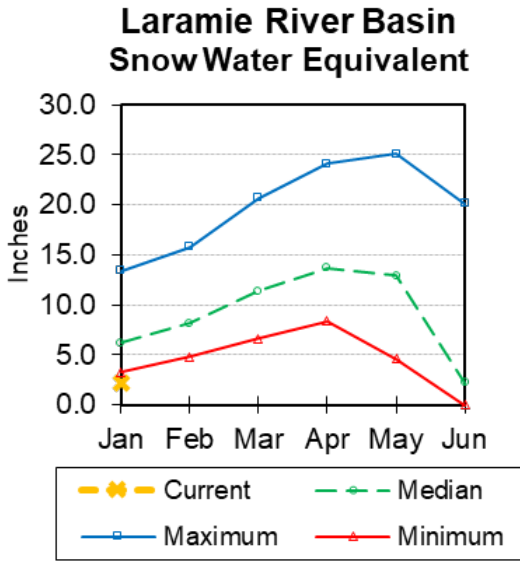


# Laramie River Basin



## Snow

SWE for the entire Laramie River Basin (above mouth entering North Platte) is 59% of median. SWE for the Laramie River above Laramie is 74% of median. SWE for the Little Laramie River is 52% of median. *See Appendix at the end of this report for a detailed listing of snow course information.*



## Precipitation

Last month's precipitation was 84% of median. The water year-to-date precipitation for the basin is currently 70% of median.

## Reservoirs

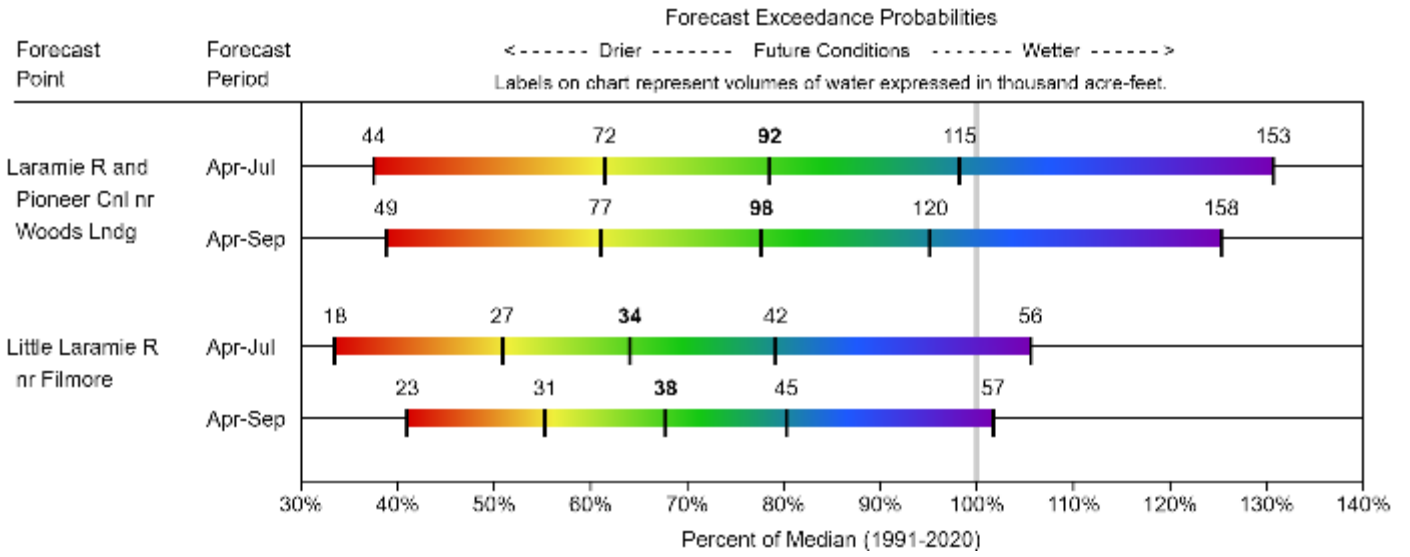
The storage for the reservoir in this basin is at 107% of median.

	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Wheatland #2	49.0	NA	45.8	98.9	50%	NA	46%	107%	NA
<b>Basin Index</b>					50%	NA	46%	107%	NA
# of reservoirs					1	1	1	1	1

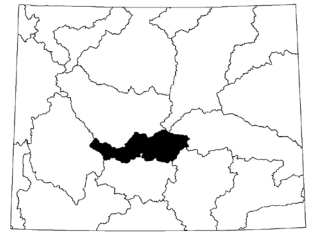
## Streamflow

The 50% exceedance forecasts for the April through September period are below normal. Laramie River near Woods Landing is forecasted to yield around 78% of median. The Little Laramie near Filmore should produce about 68% of median. *See the following graph for detailed runoff volumes.*

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

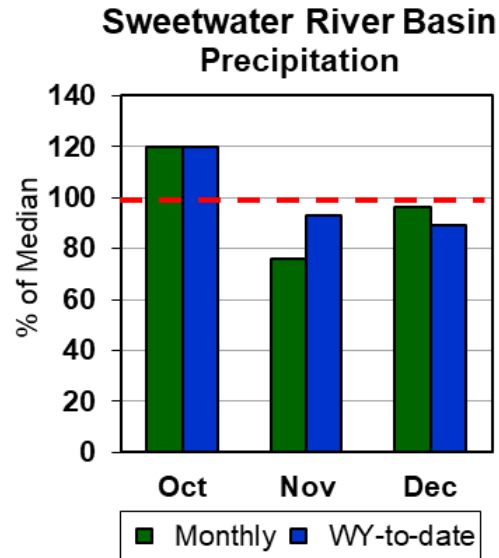
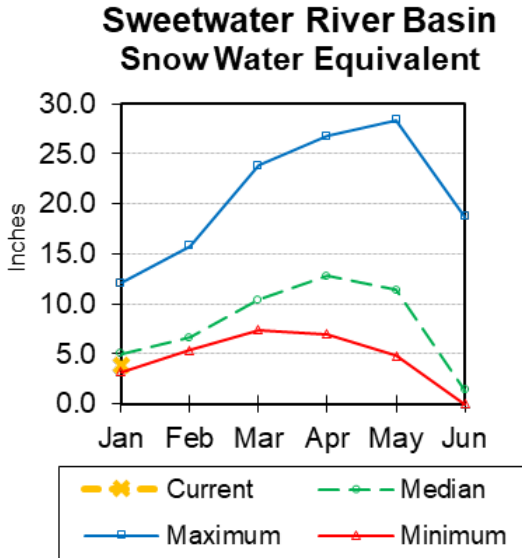


# Sweetwater River Basin



## Snow

Sweetwater River Basin SWE is at 77% of median. *See Appendix at the end of this report for a detailed listing of snow course information.*



## Precipitation

Last month's precipitation was 96% of median. The water year-to-date precipitation for the basin is currently 89% of median.

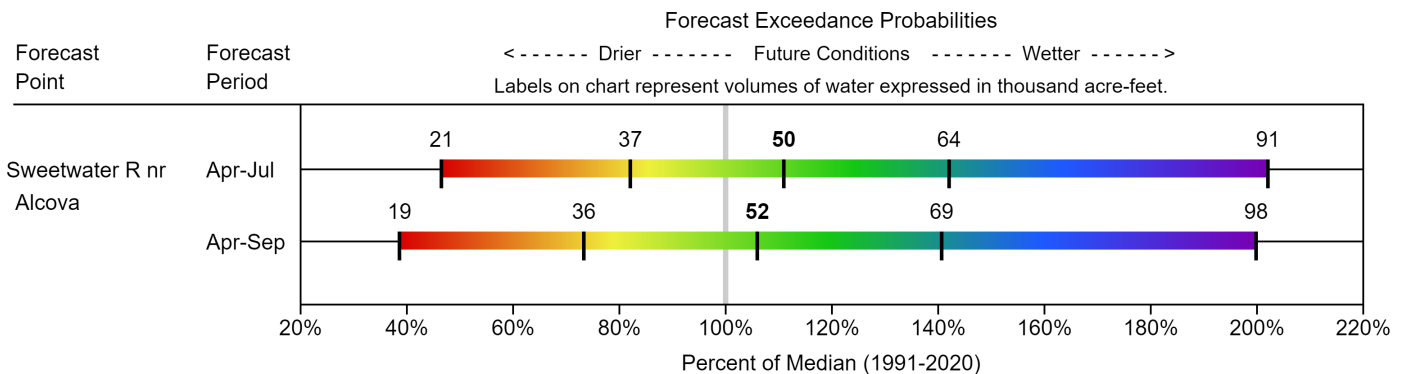
## Reservoirs

No reservoir data for the basin.

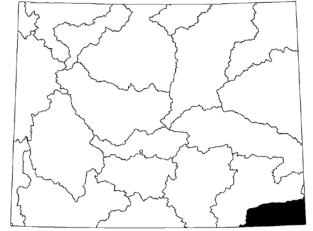
## Streamflow

The 50% exceedance forecasts for the April through September period in the Sweetwater Basin is slightly above normal. The Sweetwater River near Alcova will yield about 106% of median. *See below for detailed information on projected runoff.*

### SWEETWATER Water Supply Forecasts January 1, 2024

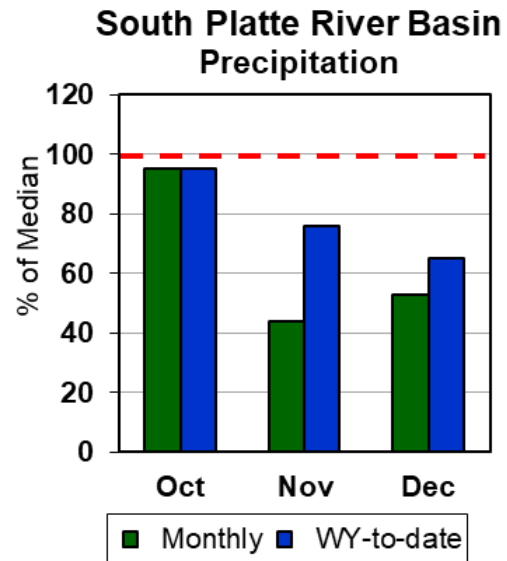
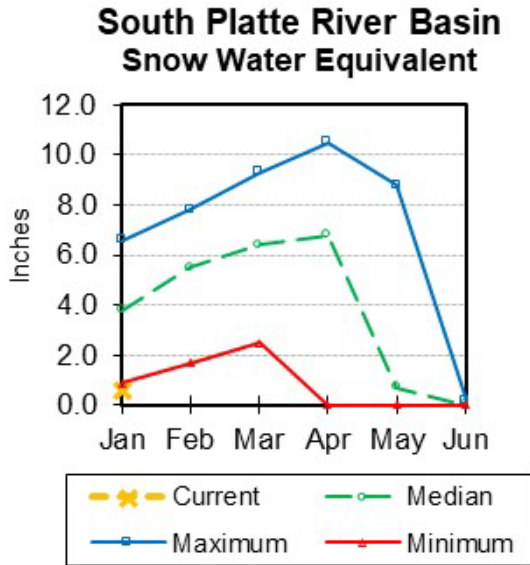


## South Platte River Basin (WY)



### Snow

The median SWE for sites in the South Platte River Basin is 16% of median. *See Appendix at the end of this report for a detailed listing of snow course information.*



### Precipitation

Last month's precipitation was 53% of median. The water year-to-date precipitation for the basin is currently 65% of median.

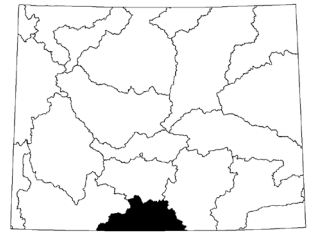
### Reservoirs

No reservoir data for the basin.

### Streamflow

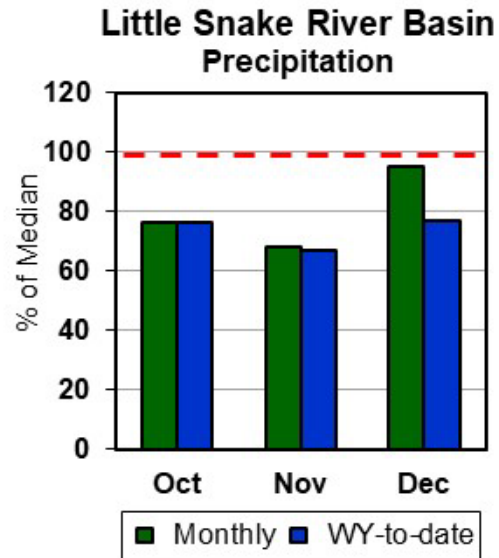
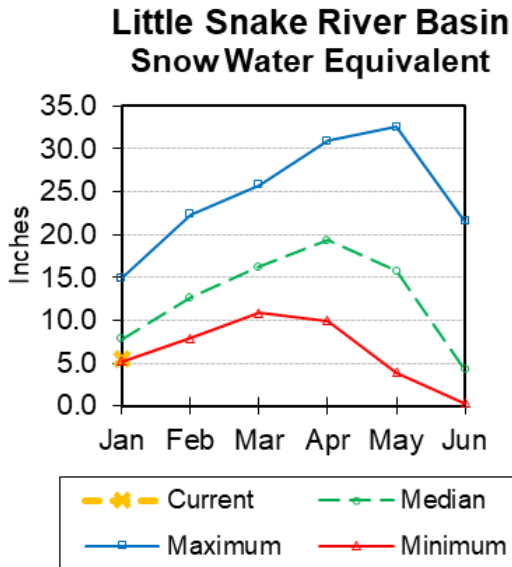
There are no streamflow forecast points for the basin.

# Little Snake River Basin



## Snow

Little Snake River drainage SWE is 70% of median. See *Appendix at the end of this report for a detailed listing of snow course information.*



## Precipitation

Precipitation across the basin was 90% of median. The Little Snake River Basin water-year-to-date precipitation is currently 76% of median.

## Reservoirs

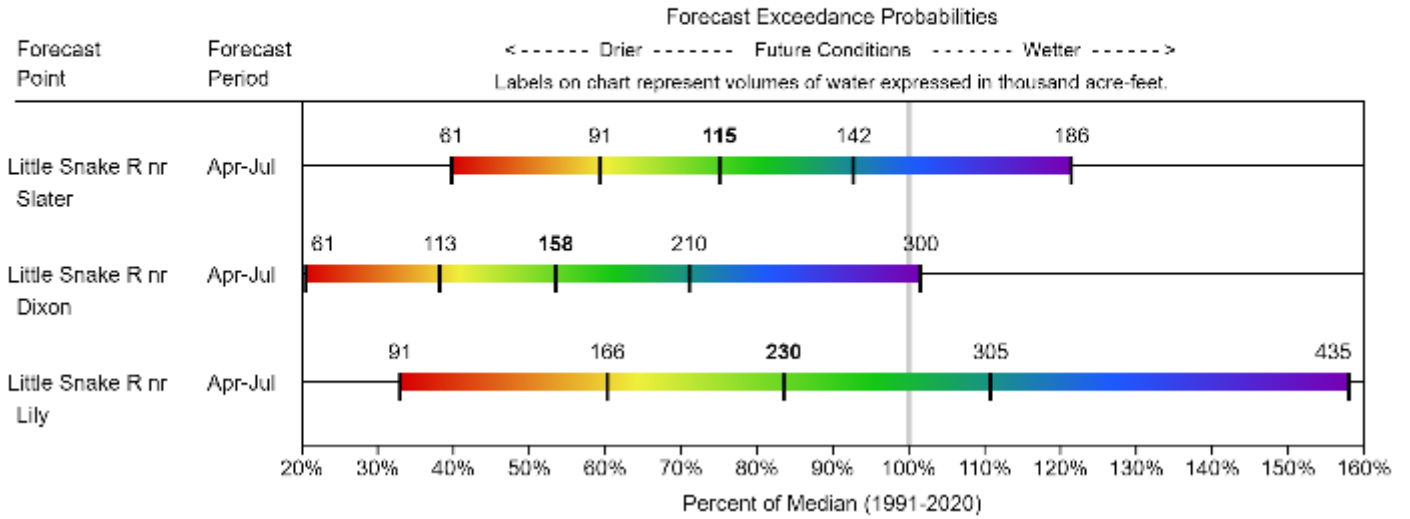
The storage for the reservoir in this basin is at 117% of median.

Little Snake	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
High Savery Reservoir	13.6	6.8	11.6	22.4	61%	30%	52%	117%	59%
<b>Basin Index</b>					61%	30%	52%	117%	59%
# of reservoirs					1	1	1	1	1

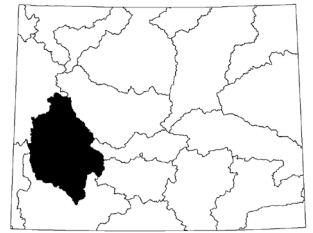
## Streamflow

The 50% exceedance forecasts for the April through July period is below normal. The Little Snake River near Slater is forecasted to yield around 75% of median. *See below for detailed information on projected runoff.*

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

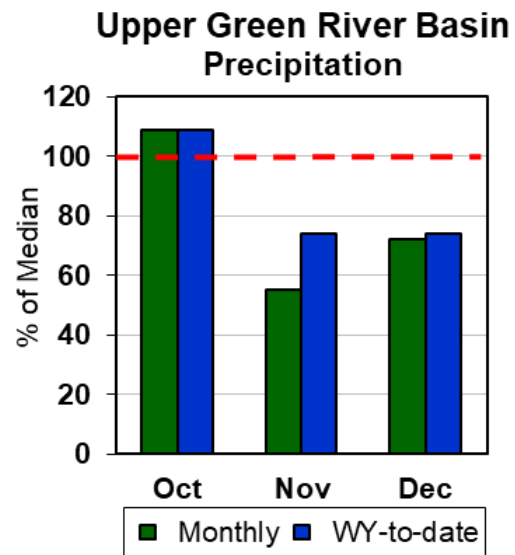
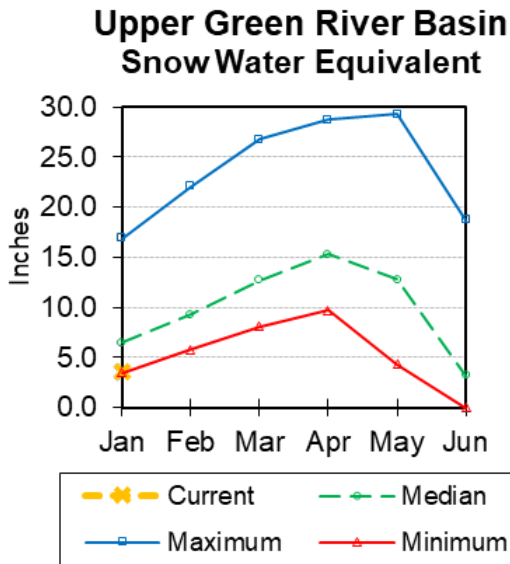


# Upper Green River Basin



## Snow

The Upper Green River Basin SWE (above Fontenelle Reservoir) is 57% of median. Green River Basin above Warren Bridge SWE is 50% of median. West Side of Upper Green River Basin SWE is 64% 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 73% of median last month. Water year-to-date precipitation is 74% of median.

## Reservoir

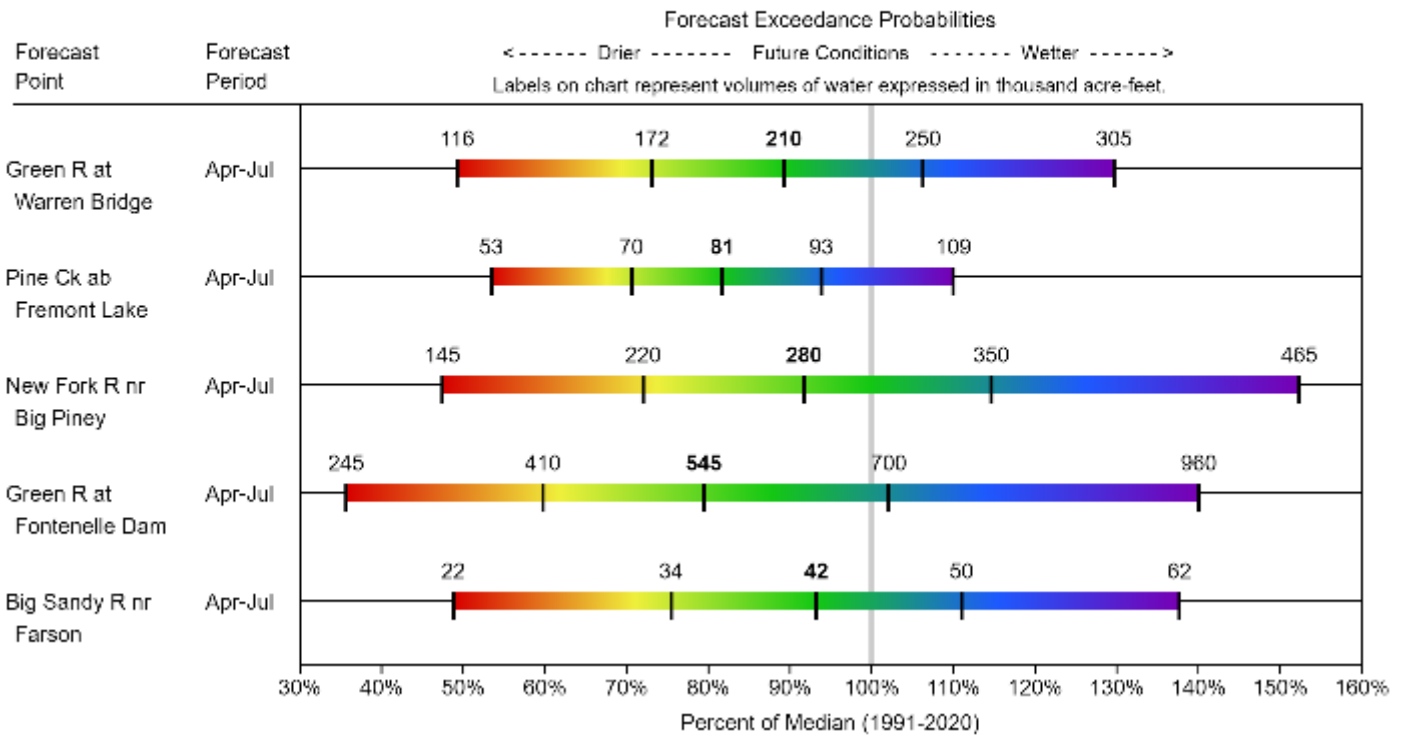
Combined water storage in the basin was at 114% of median for the 2 reservoirs.

	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Big Sandy	38.4	6.5	17.4	38.3	100%	17%	45%	221%	37%
Fontenelle	207.9	193.7	198.5	344.8	60%	56%	58%	105%	98%
<b>Basin Index</b>	246.4	200.2	215.9	394.9	64%	52%	56%	114%	93%
# of reservoirs					2	2	2	2	2

## Streamflow

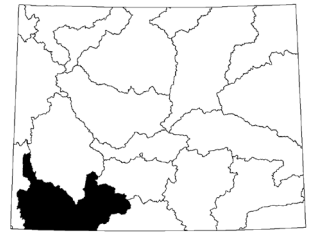
The 50% exceedance forecasts for the April through July period will be below normal. The yield on the Green River at Warren Bridge is about 89% of median. New Fork River near Big Piney yield will be around 92% of median. Green River at Fontenelle Dam is estimated to be about 80% of median. *See the following for a more detailed forecast.*

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





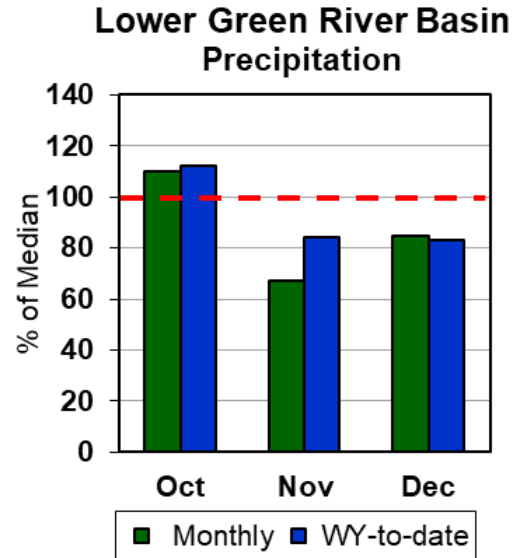
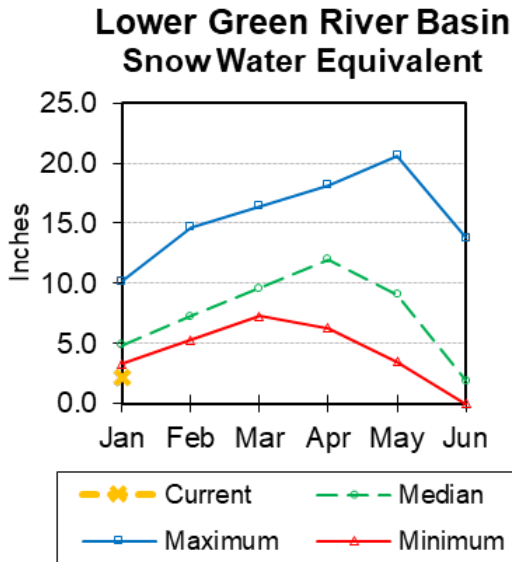
# Lower Green River Basin



## Snow

Lower Green River Basin SWE is at 65% of median. Hams Fork drainage SWE is 56% of median. Blacks Fork drainage SWE is 74% of median.

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



## Precipitation

Precipitation for the basin last month was 83% of median. The basin year-to-date precipitation is currently 83% of median.

## Reservoirs

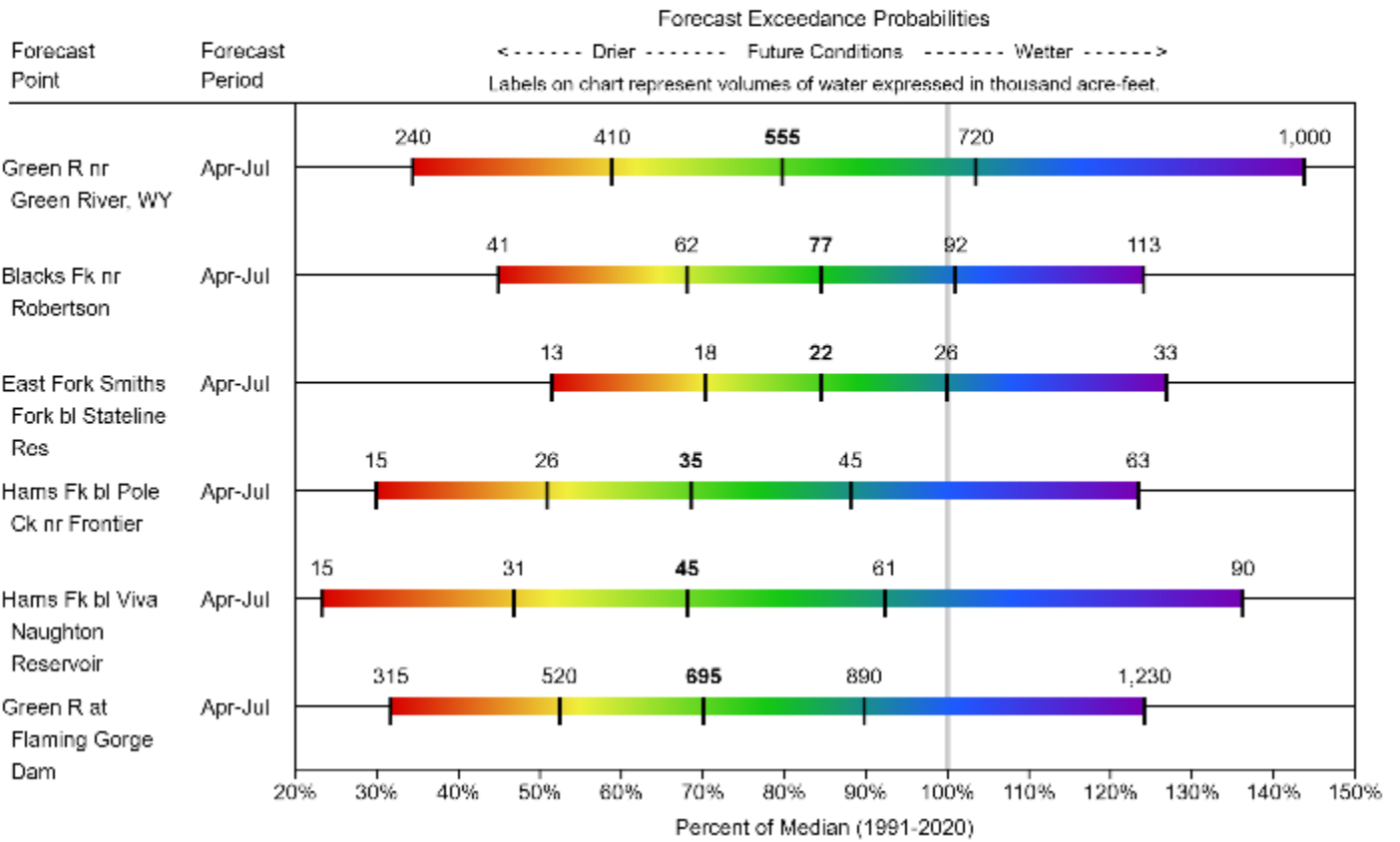
Combined storage for the 4 reservoirs in the basin was at 102% of median at the end of last month.

	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Stateline Res	7.7	5.6	5.7	12.0	64%	47%	48%	135%	98%
Flaming Gorge Res	3177.2	2540.1	3127.0	3749.0	85%	68%	83%	102%	81%
Viva Naughton Res	35.0	30.8	31.1	42.4	83%	73%	73%	113%	99%
Meeks Cabin Res	15.9	7.7	8.6	32.5	49%	24%	26%	184%	90%
<b>Basin Index</b>	<b>3235.7</b>	<b>2584.2</b>	<b>3172.4</b>	<b>3835.9</b>	<b>84%</b>	<b>67%</b>	<b>83%</b>	<b>102%</b>	<b>81%</b>
# of reservoirs					4	4	4	4	4

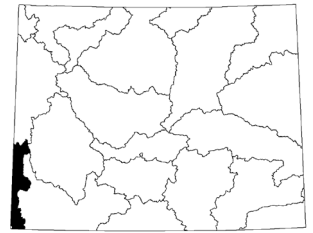
## Streamflow

The following are the 50% exceedance forecasts for the April through July period is below normal. The Green River near Green River will yield about 80% of median. The Flaming Gorge Reservoir inflow will be about 70% of median. *See the following page for more detailed information on projected runoff.*

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



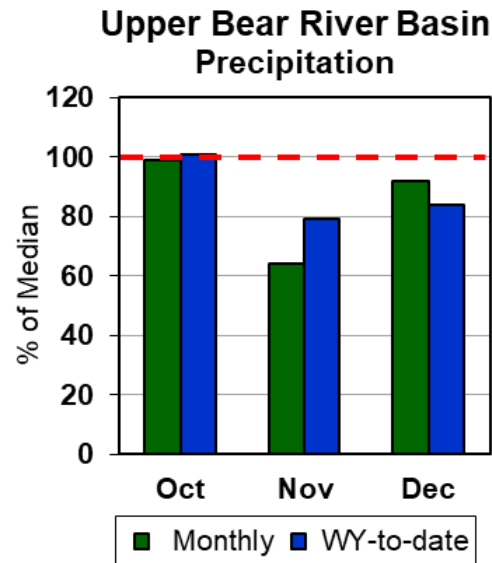
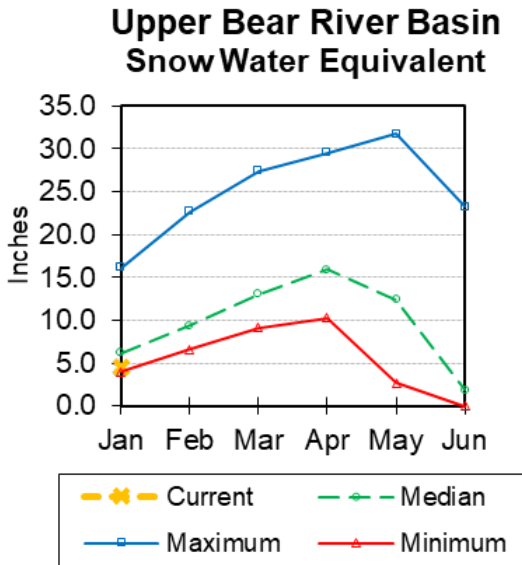
# Upper Bear River Basin



## Snow

SWE in the Upper Bear River Basin of Utah is 73% of median. SWE in the Wyoming portion of the Bear River drainage (Smiths and Thomas Forks) is 71% of median.

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



## Precipitation

Precipitation for last month was 90% of median in the basin. The year-to-date precipitation for the basin is 83% of median.

## Reservoirs

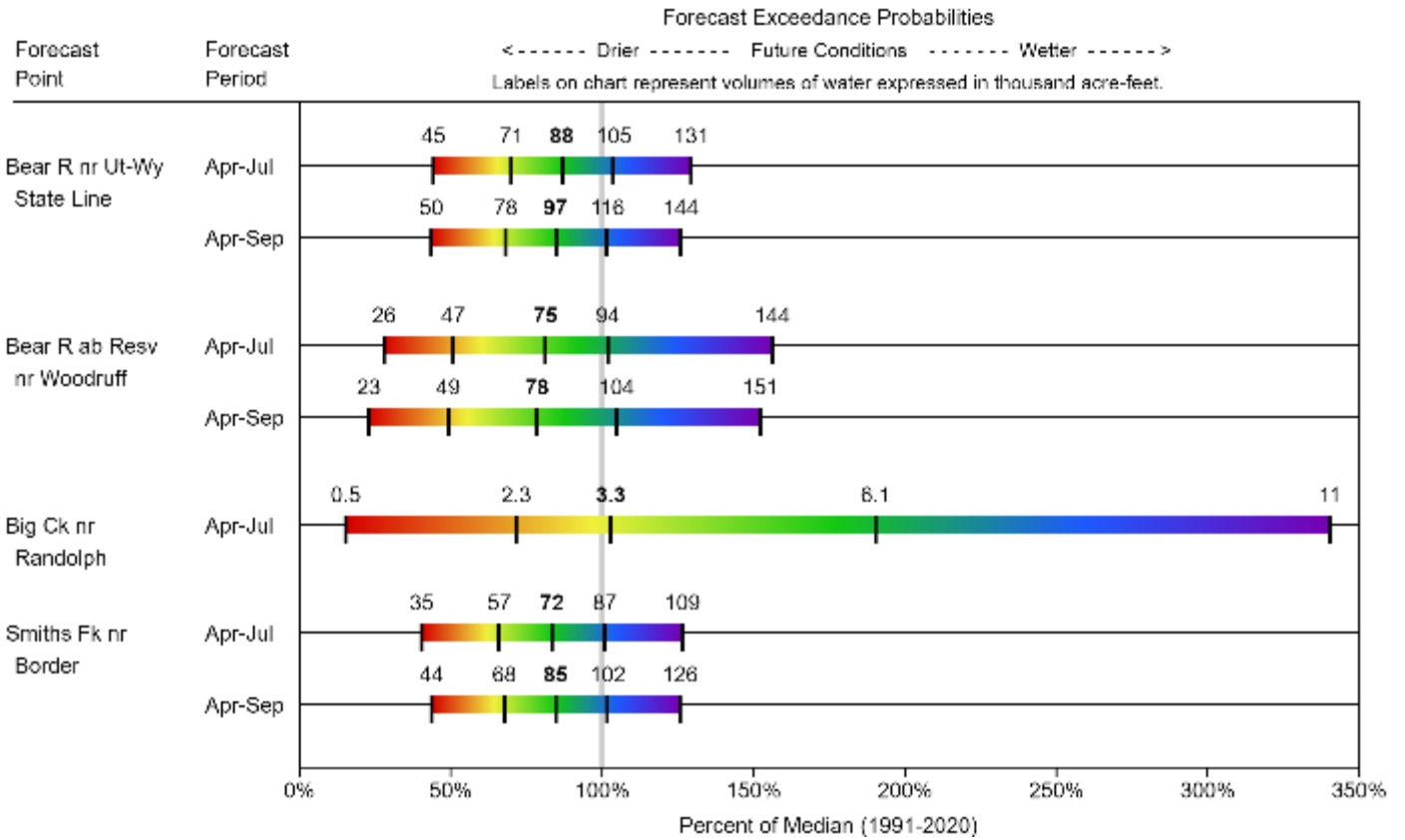
Combined reservoir storage in this basin is at 142% of median.

	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Woodruff Narrows Res	48.2	13.5	33.4	57.3	84%	24%	58%	144%	40%
Woodruff Creek	2.0	2.0	2.0	4.0	49%	50%	49%	101%	102%
<b>Basin Index</b>					82%	25%	58%	142%	44%
# of reservoirs					2	2	2	2	2

## Streamflow

The 50% exceedance forecasts for the April through September period are below normal. The Bear River above Reservoir near Woodruff should yield around 79% of median. The Smiths Fork River near Border Jct. will yield around 85%. *See the following page for more detailed information on projected runoff.*

**UPPER BEAR**  
**Water Supply Forecasts**  
**January 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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U.S.D.A.  
Natural Resources Conservation Service  
Washington D.C.

**Released by:**

Jackie Byam  
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