

# Wyoming Basin & Water Supply Outlook Report

## May 1, 2023

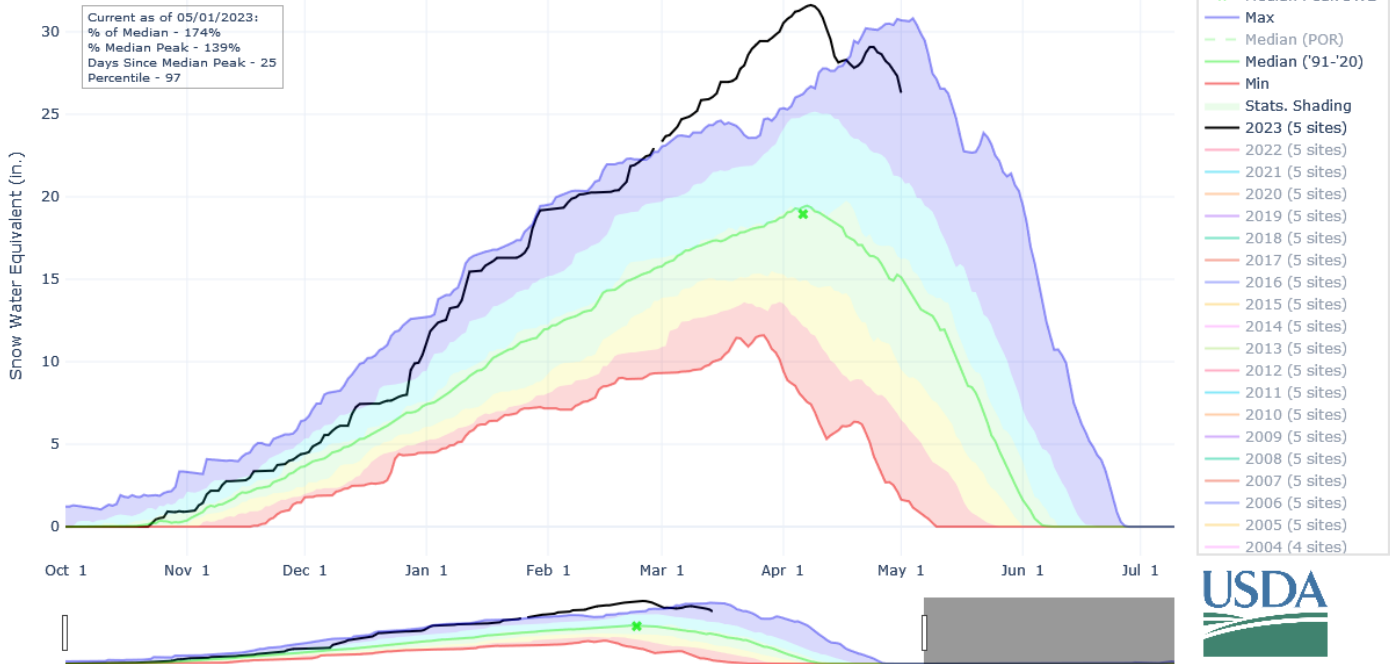
**Natural  
 Resources  
 Conservation  
 Service**

### SNOW WATER EQUIVALENT IN LITTLE SNAKE

Reset Range

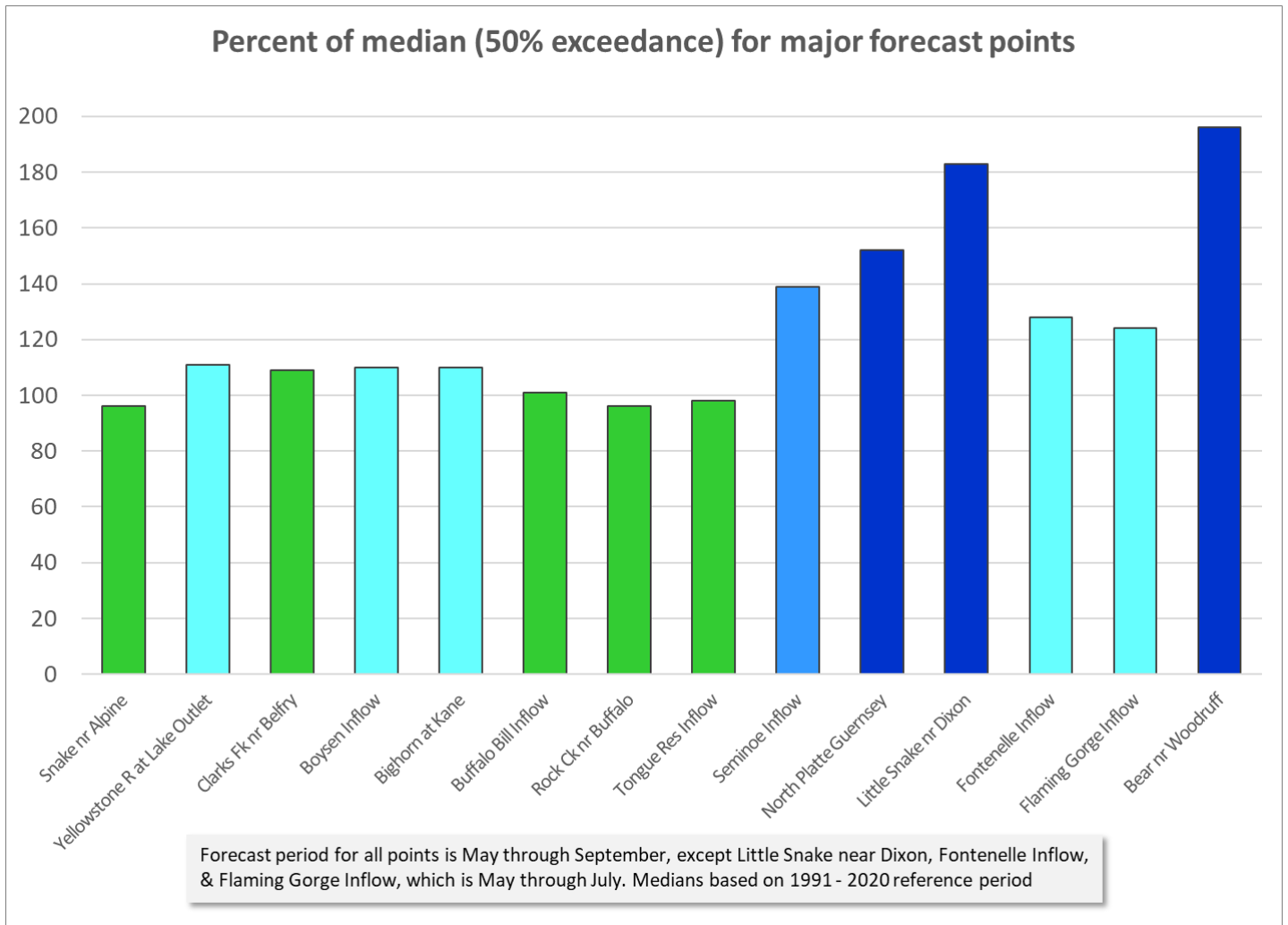
Link to data: [CSV](#) / [JSON](#)

Station List



Little Snake River Basin Snow Water Equivalent Graph, 5/1/2023

## Forecasted stream flows for May 1<sup>st</sup>, 2023



All, except three, of the above major forecast points have a 50% exceedance probability of being above median stream flow volume. Two of the forecast points should exceed 180% of median flow volume. Three of the major forecast points could exceed 150% of median stream flow volumes.

# Basin Outlook Reports

## And

### Federal - State - Private Cooperative Snow Surveys

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*For more information, contact:*

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#### *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

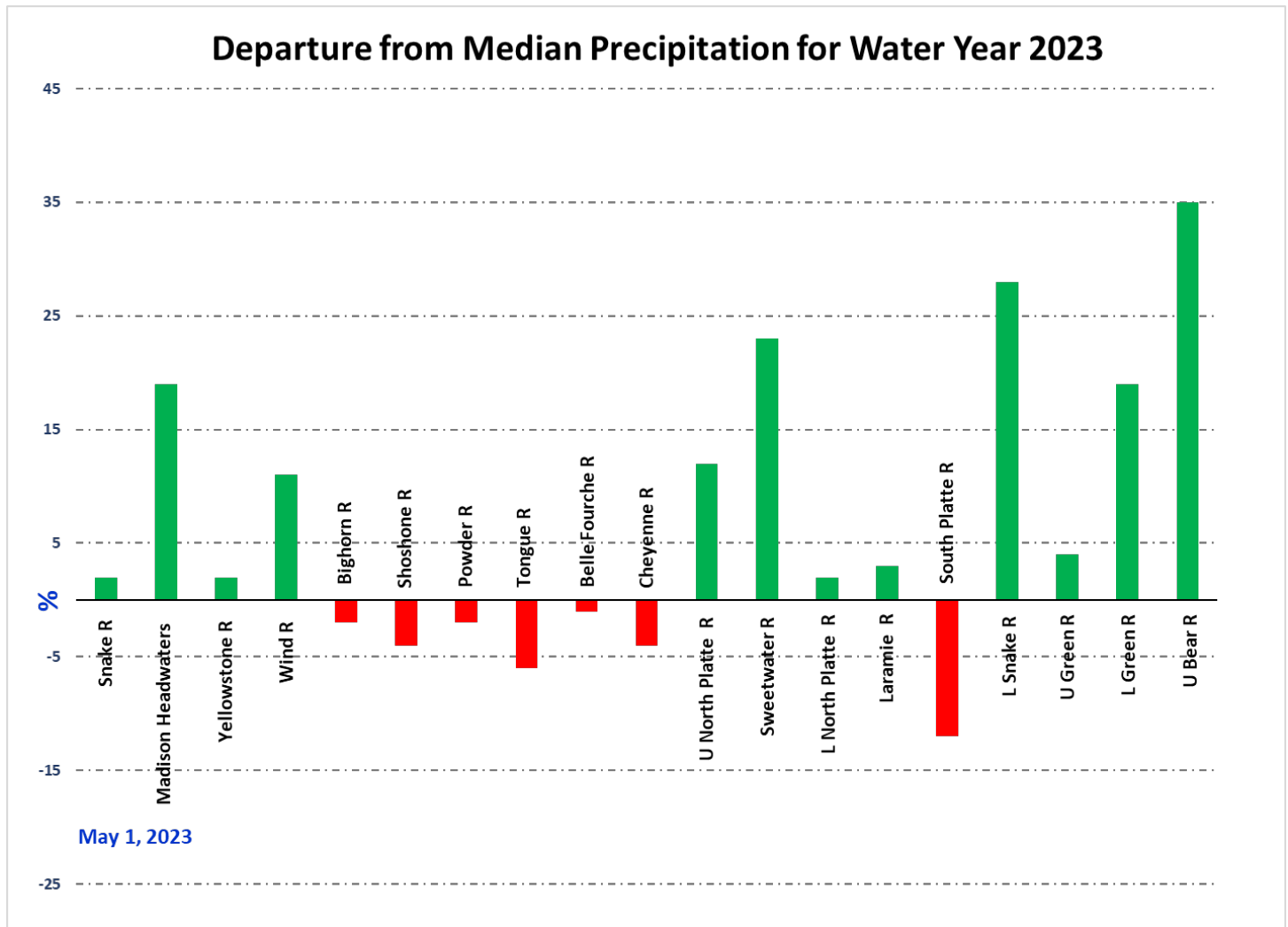
## Snowpack

Snow water equivalent (SWE) across Wyoming for May 1<sup>st</sup> was at 133% of median. SWE in the Cheyenne River Basin was the highest at 550% of median and lowest for the South Platte River Basin at 82% of median. *See the map on page 6 and the Appendix for further information.*

## Precipitation

The Sweetwater River Basin had the highest precipitation for the month at 148% of median. The Tongue River Basin had the lowest precipitation amount for the month at 52% of median. The following graph displays the precipitation in major river basins and their departure from median for the water year beginning October 1, 2022.

*See Appendix for further information.*



## Streams

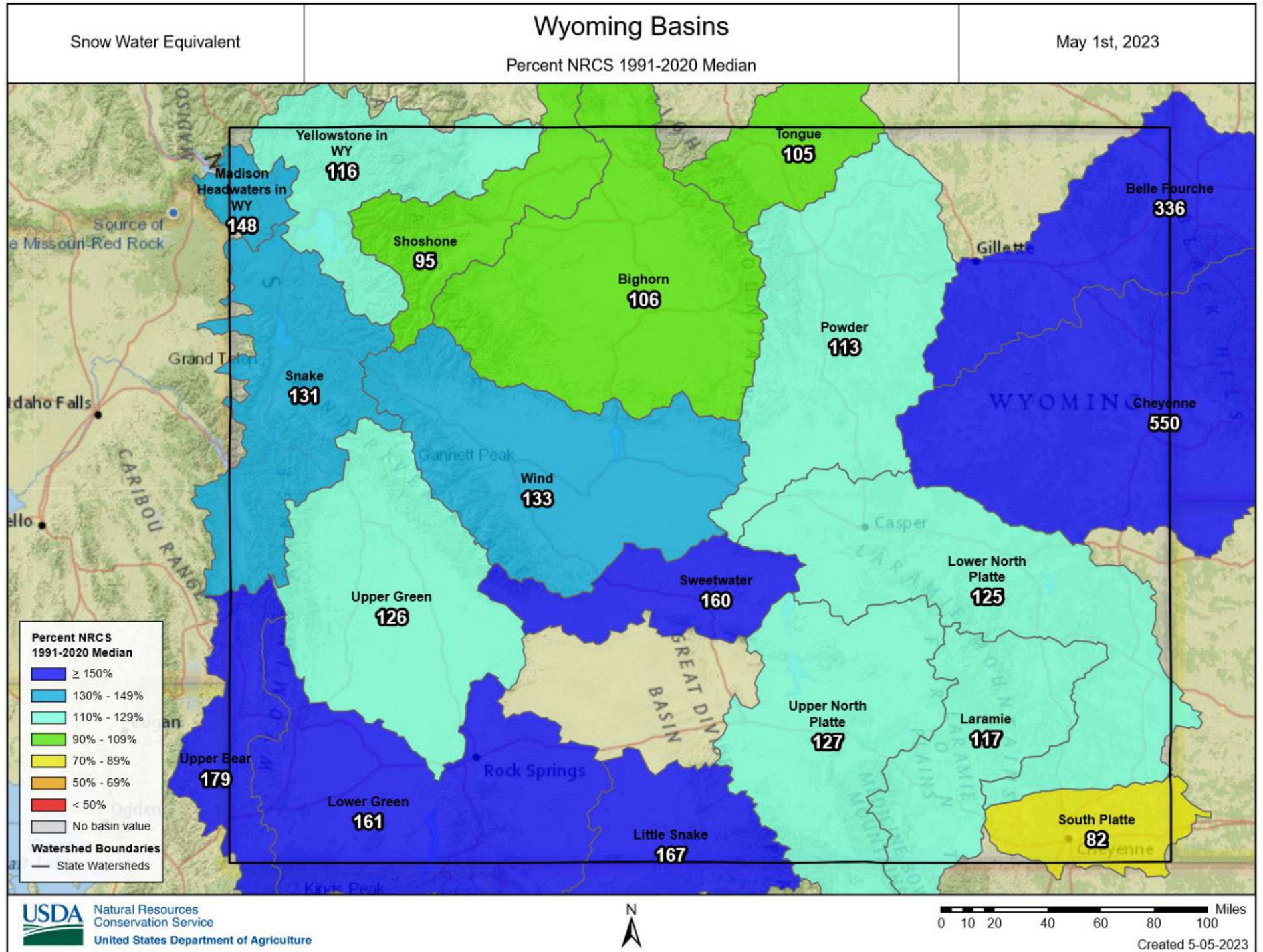
Forecast median streamflow yields for May thru September in Wyoming basins (except Green, Little Snake and Cheyenne) average 119%. Forecast median stream flow yields for May thru July in Green, Little Snake, and Cheyenne average 140%. The Snake River and Yellowstone River in Wyoming, basins should yield about 115% and 110% of median. Yields from the Wind and Bighorn River basins should be about 116% and 100% of median. Yields from the Shoshone River basin should be 96% of median. Yields from the Powder and Tongue River basins should be about 99% of median. Yield for the Cheyenne River basin should be about 93% of median. Yields for the Sweetwater, Upper North Platte, Lower North Platte, and Laramie Rivers of Wyoming should be about 183%, 141%, 152%, and 114% of median, respectively. Yields for the Little Snake and Green River should be 200% and 132%.

## Reservoirs

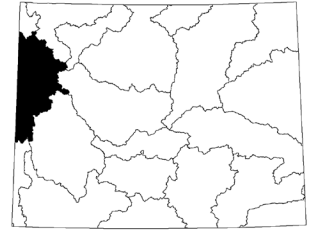
Reservoir storage was 85% of median across the entire state. Reservoirs in the Snake River basin are much below median at 38%. Reservoirs in the Wind River basin are near median at 92%. Reservoirs on the Bighorn are 100% of median. The Buffalo Bill Reservoir on the Shoshone is near median at 102%. Reservoirs in the Belle Fourche and Cheyenne River basins are below median at 93% and 80% respectively. Reservoirs on the Upper and Lower North Platte River are below median at 75% and 89% respectively. Reservoirs on the Upper Green River are at 90% of median. Reservoirs on the Lower Green River are below median at 83%. Reservoirs in the Little Snake, Upper Bear, and Laramie Basins are 68%, 80%, and 75% of median. *See below for further information.*

### Wyoming Reservoir Levels

Reservoir Storage Summary For the End of April 2023									
	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Alcova	180.4	180.3	179.9	184.3	98%	98%	98%	100%	100%
Angostura	76.6	89.0	110.8	122.1	63%	73%	91%	69%	80%
Belle Fourche	160.6	144.7	160.0	178.4	90%	81%	90%	100%	90%
Big Sandy	13.3	10.5	23.5	38.3	35%	27%	61%	57%	45%
Bighorn Lake	775.9	775.4	777.4	1356.0	57%	57%	57%	100%	100%
Boysen	464.8	575.7	507.4	596.0	78%	97%	85%	92%	113%
Buffalo Bill	405.2	375.4	395.7	646.6	63%	58%	61%	102%	95%
Bull Lake	77.9	88.3	83.9	151.8	51%	58%	55%	93%	105%
Deerfield	15.0	15.1	15.1	15.2	98%	100%	99%	99%	100%
Flaming Gorge Res.	2589.4	2937.8	3114.0	3749.0	69%	78%	83%	83%	94%
Fontenelle	126.3	152.0	131.4	344.8	37%	44%	38%	96%	116%
Glendo	358.4	427.9	431.3	506.4	71%	84%	85%	83%	99%
Grassy Lake	12.0	11.2	13.6	15.2	79%	73%	89%	88%	82%
Guernsey	27.8	5.3	26.6	45.6	61%	12%	58%	105%	20%
High Savery Res.	10.2	8.5	15.0	22.4	46%	38%	67%	68%	57%
Jackson Lake	220.4	184.7	600.7	847.0	26%	22%	71%	37%	31%
Keyhole	127.9	131.4	149.0	193.8	66%	68%	77%	86%	88%
Meeks Cabin Res.	14.1	16.6	15.6	32.5	43%	51%	48%	90%	106%
Pactola	52.4	54.7	54.9	55.0	95%	99%	100%	95%	100%
Pathfinder	419.3	653.2	603.0	1016.5	41%	64%	59%	70%	108%
Pilot Butte	24.7	22.0	27.2	31.6	78%	70%	86%	91%	81%
Seminole	457.4	327.6	565.6	1016.7	45%	32%	56%	81%	58%
Stateline Reservoir	7.5	7.2	6.5	12.0	62%	60%	54%	115%	111%
Viva Naughton Res	16.8	33.5	32.8	42.4	40%	79%	77%	51%	102%
Wheatland #2	44.8	52.7	59.7	98.9	45%	53%	60%	75%	88%
Woodruff Creek	3.2	4.0	4.0	4.0	79%	100%	100%	79%	100%



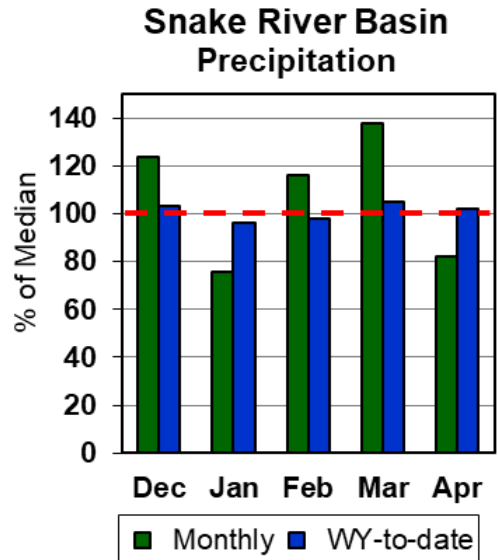
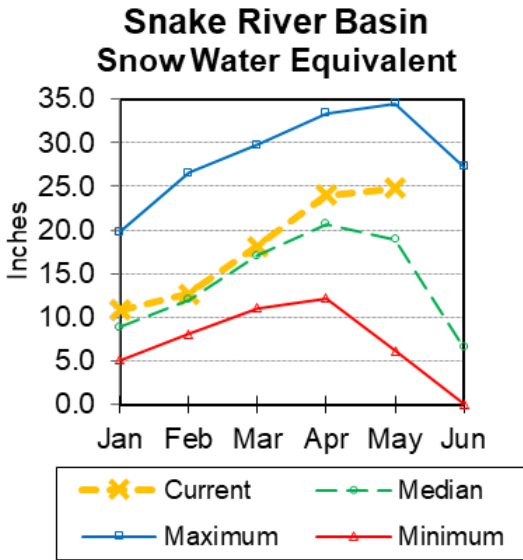
# Snake River Basin



## Snow

The overall Snake River basin SWE (portion above Palisades dam) is 131% of median. SWE in the Snake River Basin above Jackson Lake is 122% of median. Pacific Creek basin SWE is 117% of median. Buffalo Fork SWE is 93% of median. Gros Ventre River basin SWE is 101% of median. SWE in the Hoback River drainage is 120% of median. SWE in the Greys River drainage is 128% of median. Salt River Basin SWE is 199% 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 82% of median. Water-year-to-date precipitation is 102% of median.

## Reservoirs

Current reservoir storage is 38% of median for the two storage reservoirs in the basin.

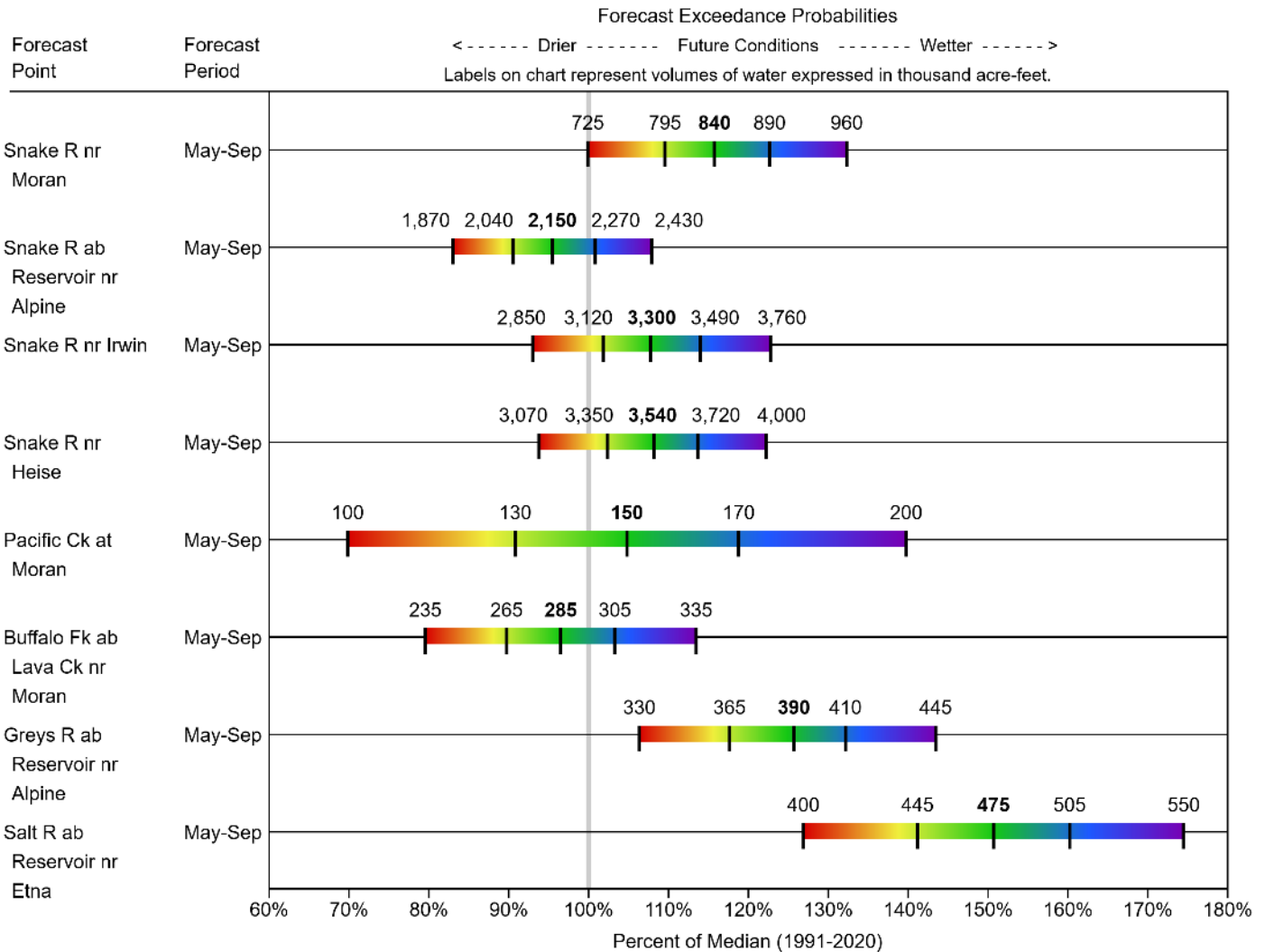
	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Jackson Lake	220.4	184.7	600.7	847.0	26%	22%	71%	37%	31%
Grassy Lake	12.0	11.2	13.6	15.2	79%	73%	89%	88%	82%
<b>Basin Index</b>					<b>27%</b>	<b>23%</b>	<b>71%</b>	<b>38%</b>	<b>32%</b>
# of reservoirs					2	2	2	2	2

## Streamflow

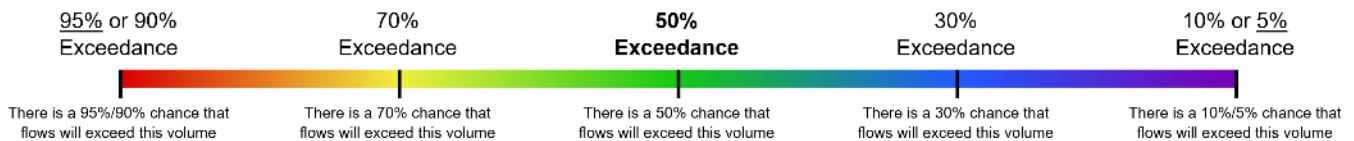
The 50% exceedance forecasts for May through September are above median for this basin. The Snake near Moran yield should be 116% of median. Snake River above reservoir near Alpine will yield about 96%. Pacific Creek near Moran yield will be around 105%. Buffalo Fork above Lava near Moran will be around 97% of median. Greys River above reservoir near Alpine should yield about 126%. Salt River near Etna yield will be about 151%.

See the following graph for further information.

**SNAKE RIVER BASIN**  
**Water Supply Forecasts**  
**May 1, 2023**



**Legend**



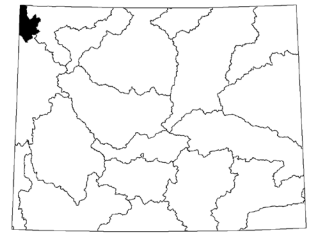
When selected, the following historic streamflow values and statistics will be shown.

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

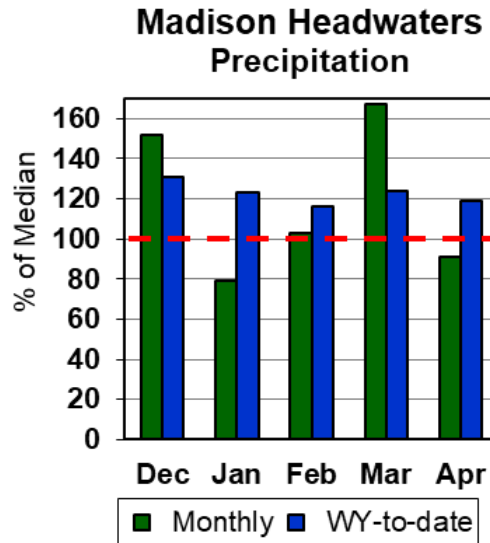
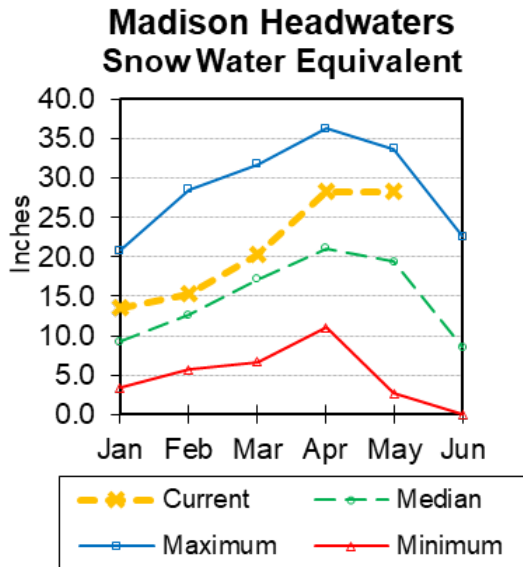


# Madison Headwaters in Wyoming



## Snow

SWE is 146% 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 91% of median. Water-year-to-date precipitation is at 119% of median.

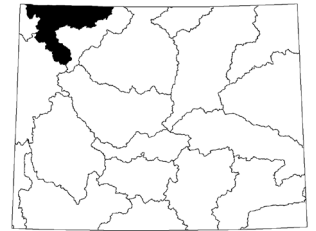
## Reservoirs

No reservoir data.

## Streamflow

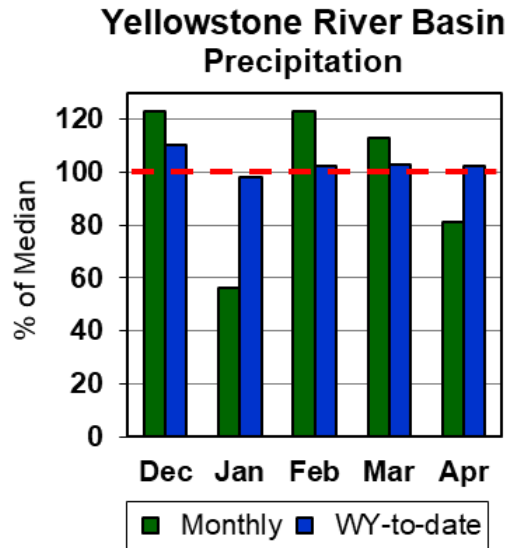
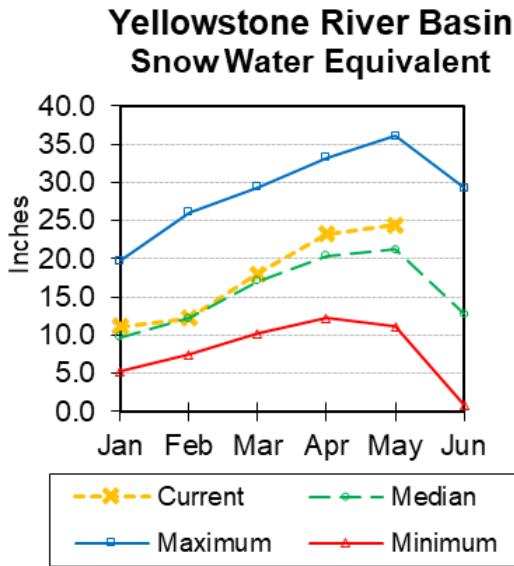
There are no streamflow forecast points for the basin.

# Yellowstone River Basin



## Snow

SWE in the Yellowstone River Basin is 115% of median. SWE in the Clarks Fork Drainage of the Yellowstone River basin in Wyoming is 106% 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 81% of median. Water-year-to-date precipitation is 102% of median.

## Reservoirs

No reservoir data.

## Streamflow

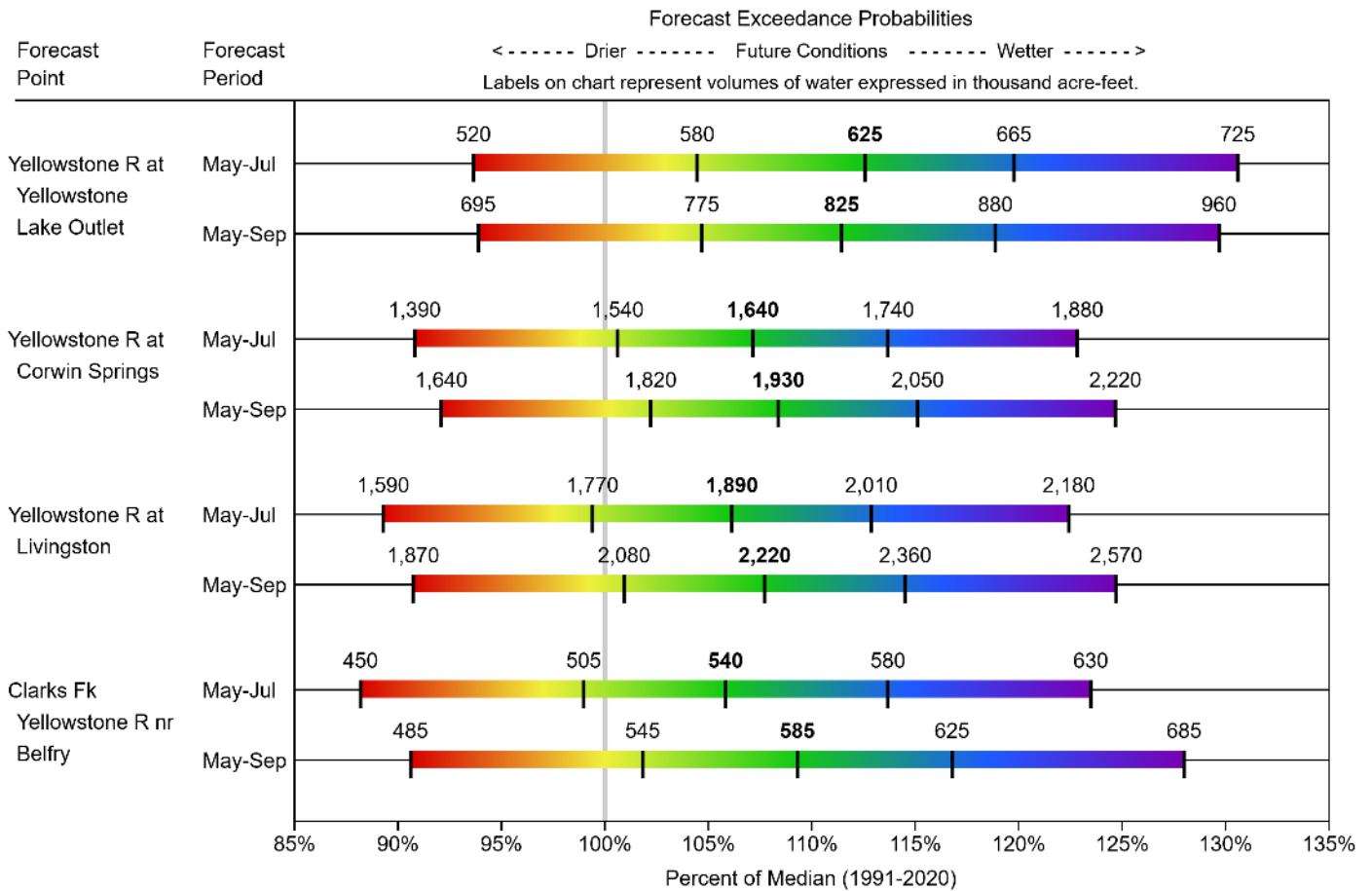
The 50% exceedance forecasts for May through September are above normal for the basin. Yellowstone at Lake Outlet will yield around 111% of median. Clarks Fork of the Yellowstone near Belfry will yield around 109%.

*See the following graph for detailed information.*

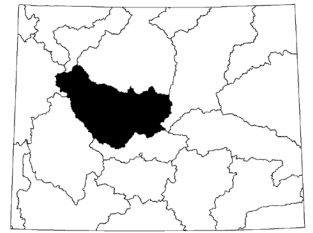
## YELLOWSTONE RIVER BASIN

### Water Supply Forecasts

#### May 1, 2023

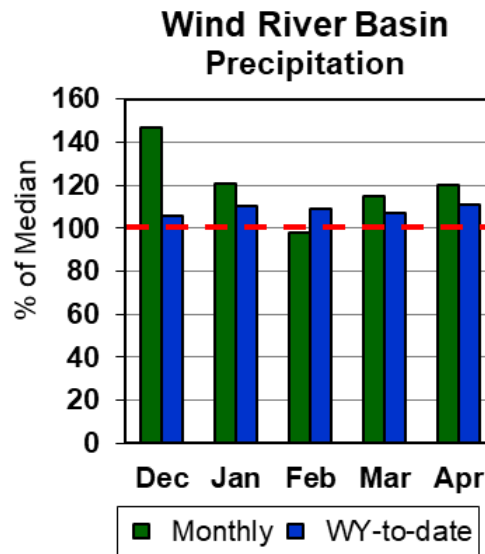
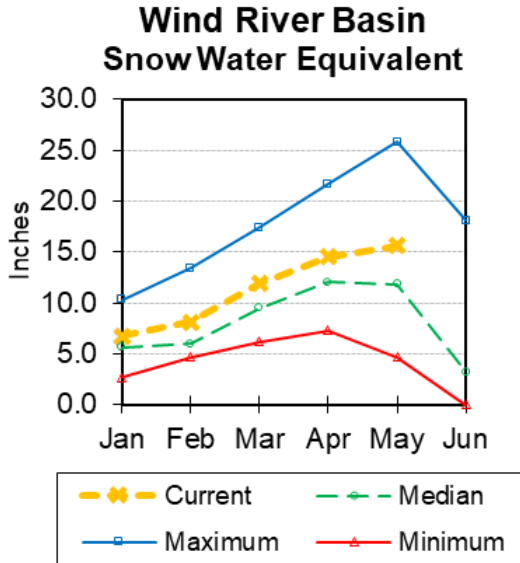


# Wind River Basin



## Snow

Wind River basin SWE (above Boysen Reservoir) is 132% of median. SWE in the Wind River above Dubois is 106% of median. Little Wind SWE is 110% of median, and Popo Agie drainage SWE is 152% 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 120% of median. Water year-to-date precipitation is 111% of median.

## Reservoirs

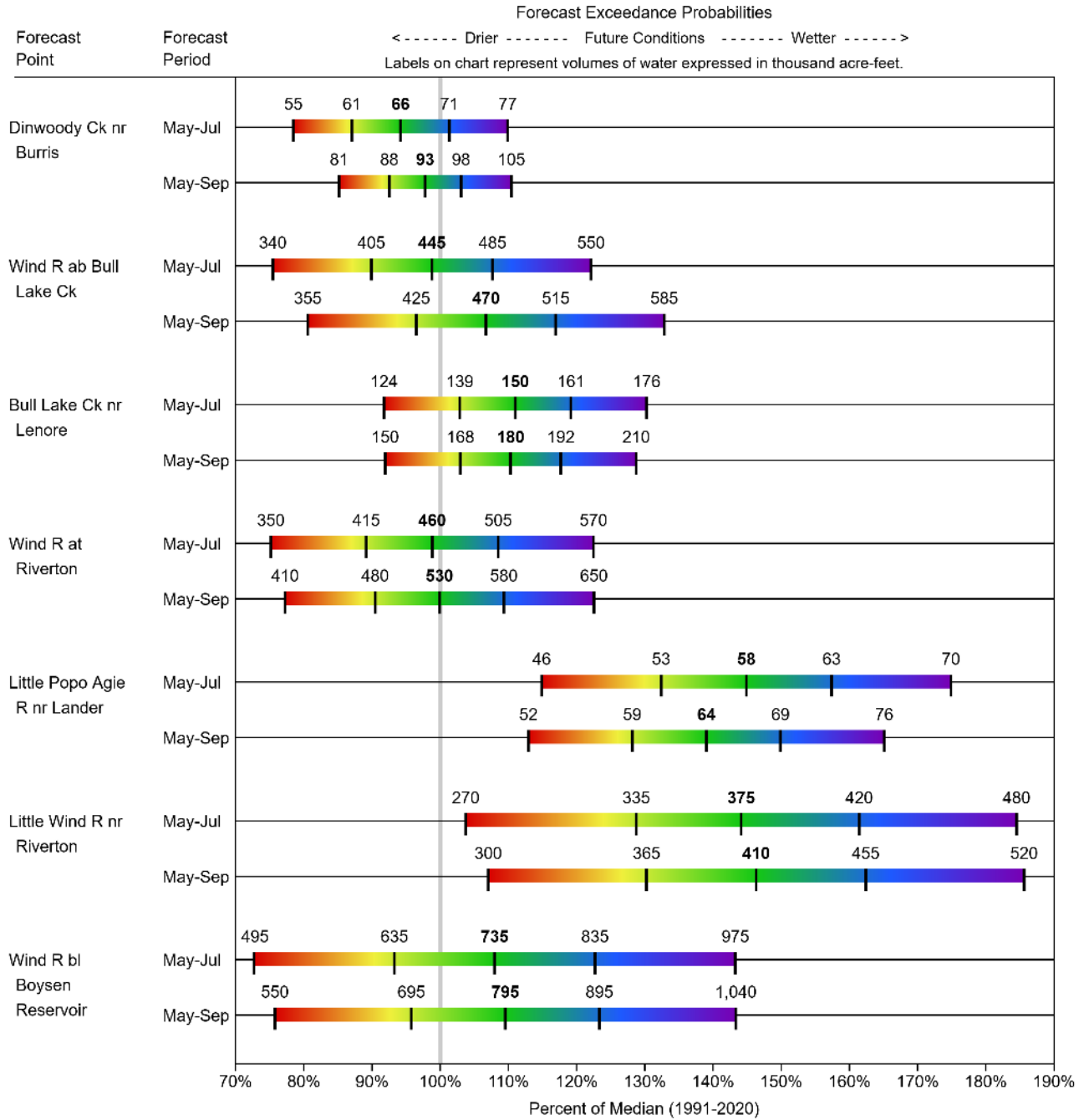
Current storage is 92% of median in the basin.

	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	22.0	27.2	31.6	78%	70%	86%	91%	81%
Boysen	464.8	575.7	507.4	596.0	78%	97%	85%	92%	113%
Bull Lake	77.9	88.3	83.9	151.8	51%	58%	55%	93%	105%
<b>Basin Index</b>					<b>73%</b>	<b>88%</b>	<b>79%</b>	<b>92%</b>	<b>111%</b>
# of reservoirs					3	3	3	3	3

## Streamflow

The 50% exceedance forecasts for the May through September runoff period should yield above normal for the Wind River. The Wind River above Bull Lake Creek will yield about 107% of median. Little Popo Agie River near Lander should yield around 139% of median. Little Wind River near Riverton will yield around 146% of median. Boysen Reservoir inflow will yield about 110% of median. *See the following graph for detailed runoff volumes.*

**WIND RIVER BASIN**  
**Water Supply Forecasts**  
**May 1, 2023**

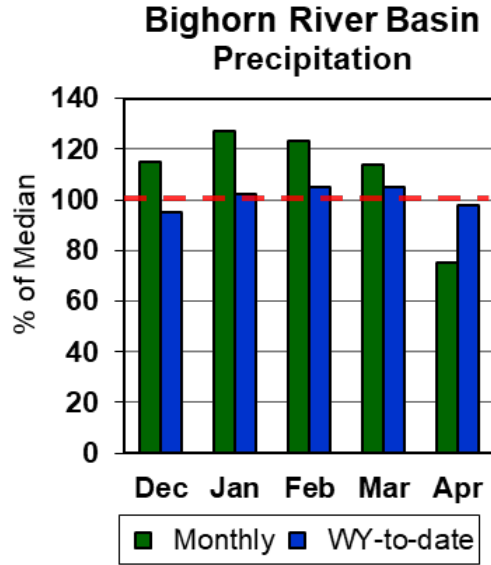
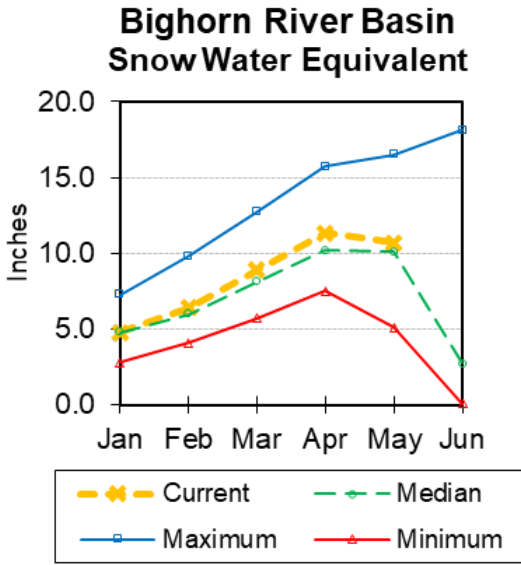


# Bighorn River Basin



## Snow

The Bighorn River Basin SWE (above Bighorn Reservoir) is 106% of median. The Greybull River SWE is at 110% of median. Shell Creek SWE is at 108% of median. *See Appendix at the end of this report for a detailed listing of snow course information.*



## Precipitation

Last month's precipitation was 75% of median. Year-to-date precipitation is 98% of median.

## Reservoirs

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

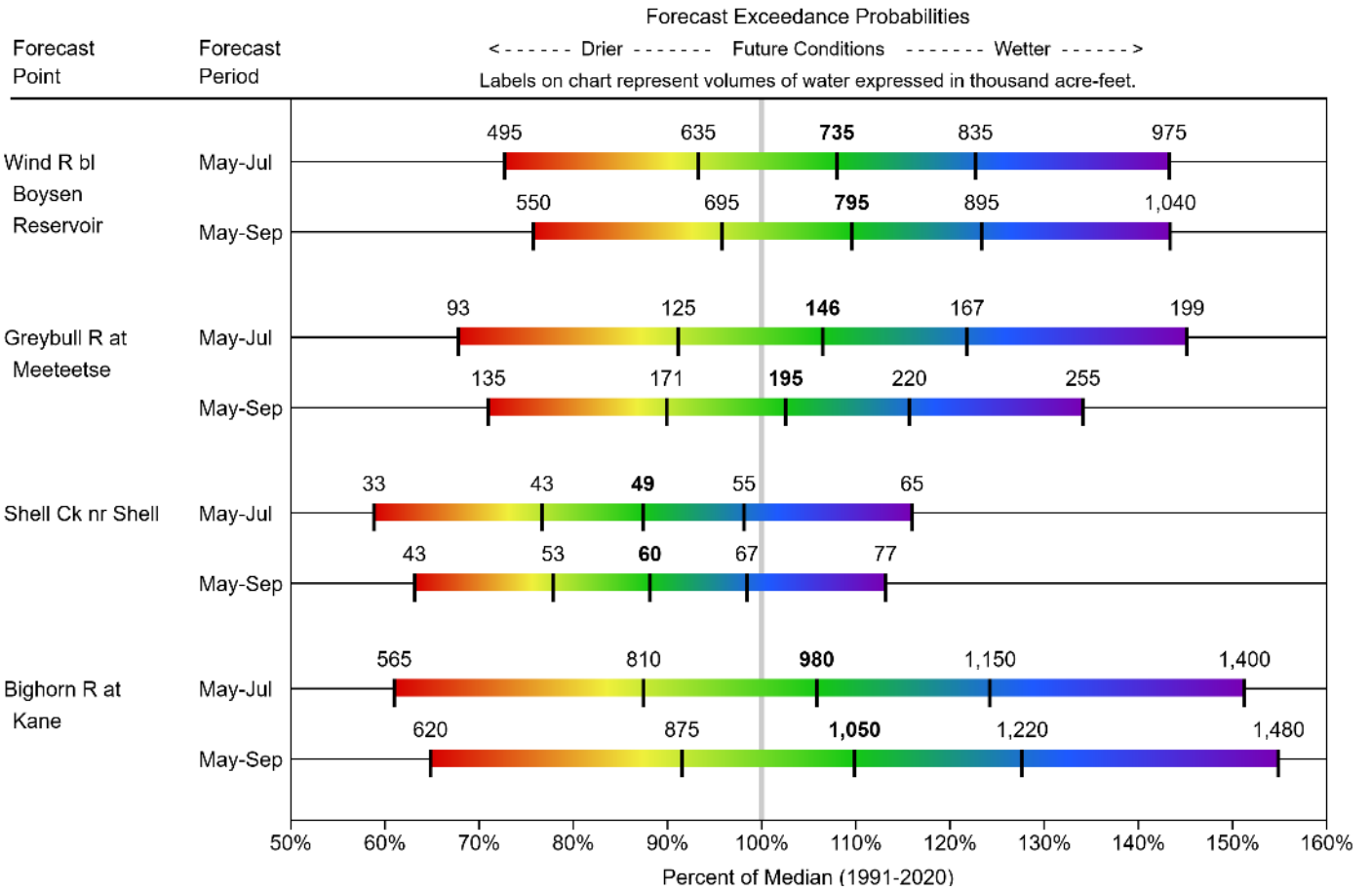
	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Bighorn Lake	775.9	775.4	777.4	1356.0	57%	57%	57%	100%	100%
<b>Basin Index</b>					<b>57%</b>	<b>57%</b>	<b>57%</b>	<b>100%</b>	<b>100%</b>
# of reservoirs					1	1	1	1	1

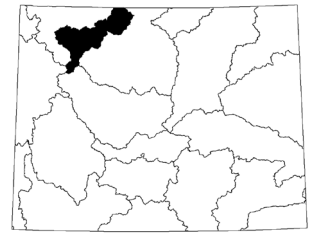
## Streamflow

The 50% exceedance forecasts for the May through September runoffs are near normal. The Greybull River near Meeteetse should yield 103% of median. Shell Creek near Shell should yield around 88% of median. The Bighorn River at Kane should yield around 110% of median.

*See the following graph for detailed runoff volumes.*

**BIGHORN RIVER BASIN**  
**Water Supply Forecasts**  
**May 1, 2023**



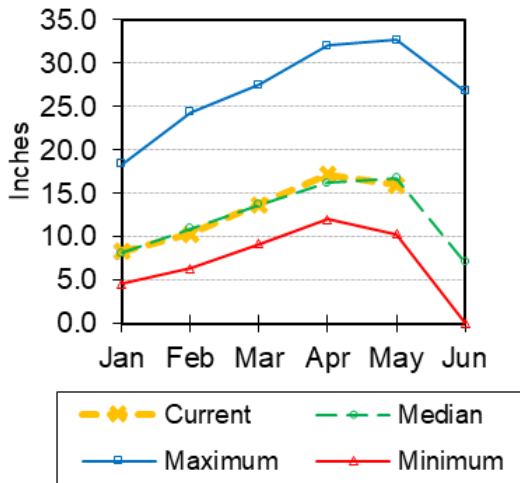


# Shoshone River Basin

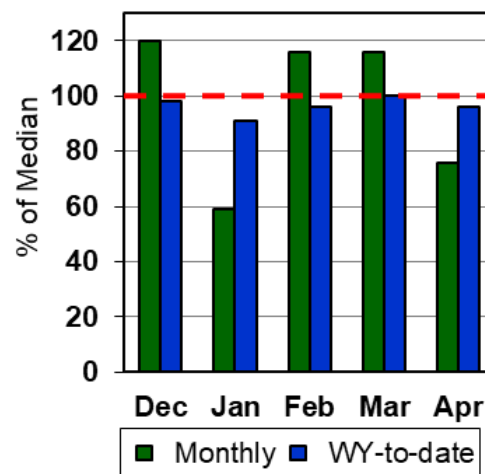
## Snow

Snow Water Equivalent (SWE) is 95% of median in this basin. *See Appendix at the end of this report for a detailed listing of snow course information.*

**Shoshone River Basin  
Snow Water Equivalent**



**Shoshone River Basin  
Precipitation**



## Precipitation

Precipitation for last month was 76% of median. The basin year-to-date precipitation is now 96% of median.

## Reservoirs

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

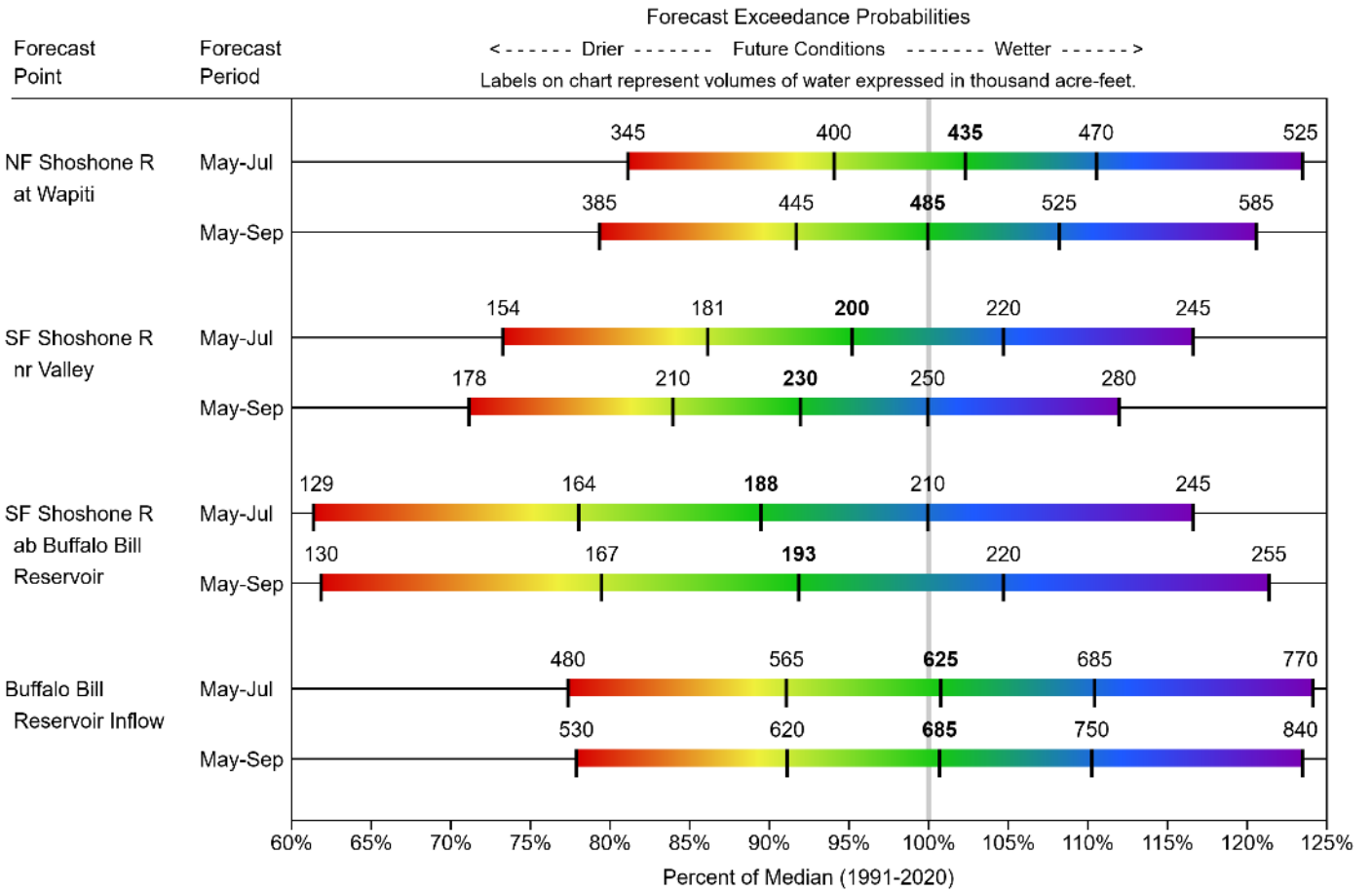
	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Buffalo Bill	405.2	375.4	395.7	646.6	63%	58%	61%	102%	95%
<b>Basin Index</b>					<b>63%</b>	<b>58%</b>	<b>61%</b>	<b>102%</b>	<b>95%</b>
# of reservoirs					1	1	1	1	1

## Streamflow

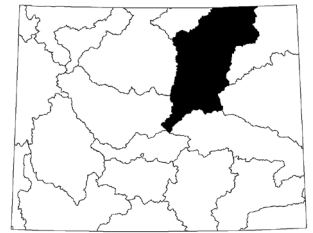
The 50% exceedance forecasts for the May through September period are near normal for the basin. The North Fork Shoshone River at Wapiti should yield 100% of median. The South Fork of the Shoshone River near Valley should yield 92% of median. The Buffalo Bill Reservoir inflow should yield 101% of median. *See the following graph for detailed runoff volumes.*



## SHOSHONE RIVER BASIN Water Supply Forecasts May 1, 2023

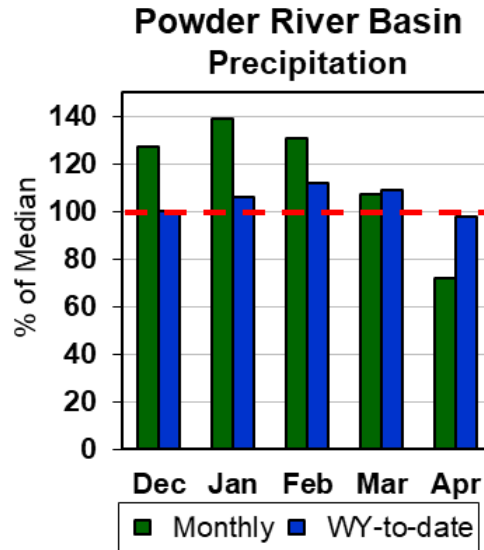
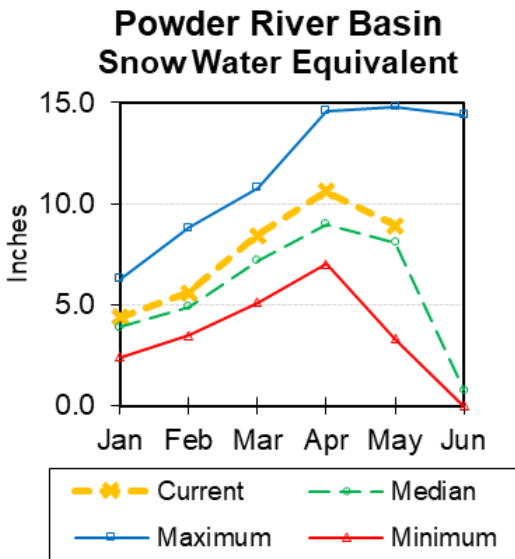


# Powder River Basin



## Snow

Powder River Basin SWE is at 110% of median. SWE in the Clear Creek drainage is 120% of median. *See appendix at the end of this report for a detailed listing of snow course information.*



## Precipitation

Last month's precipitation was 72% of median in the basin. Year-to-date precipitation is 98% of median.

## Reservoirs

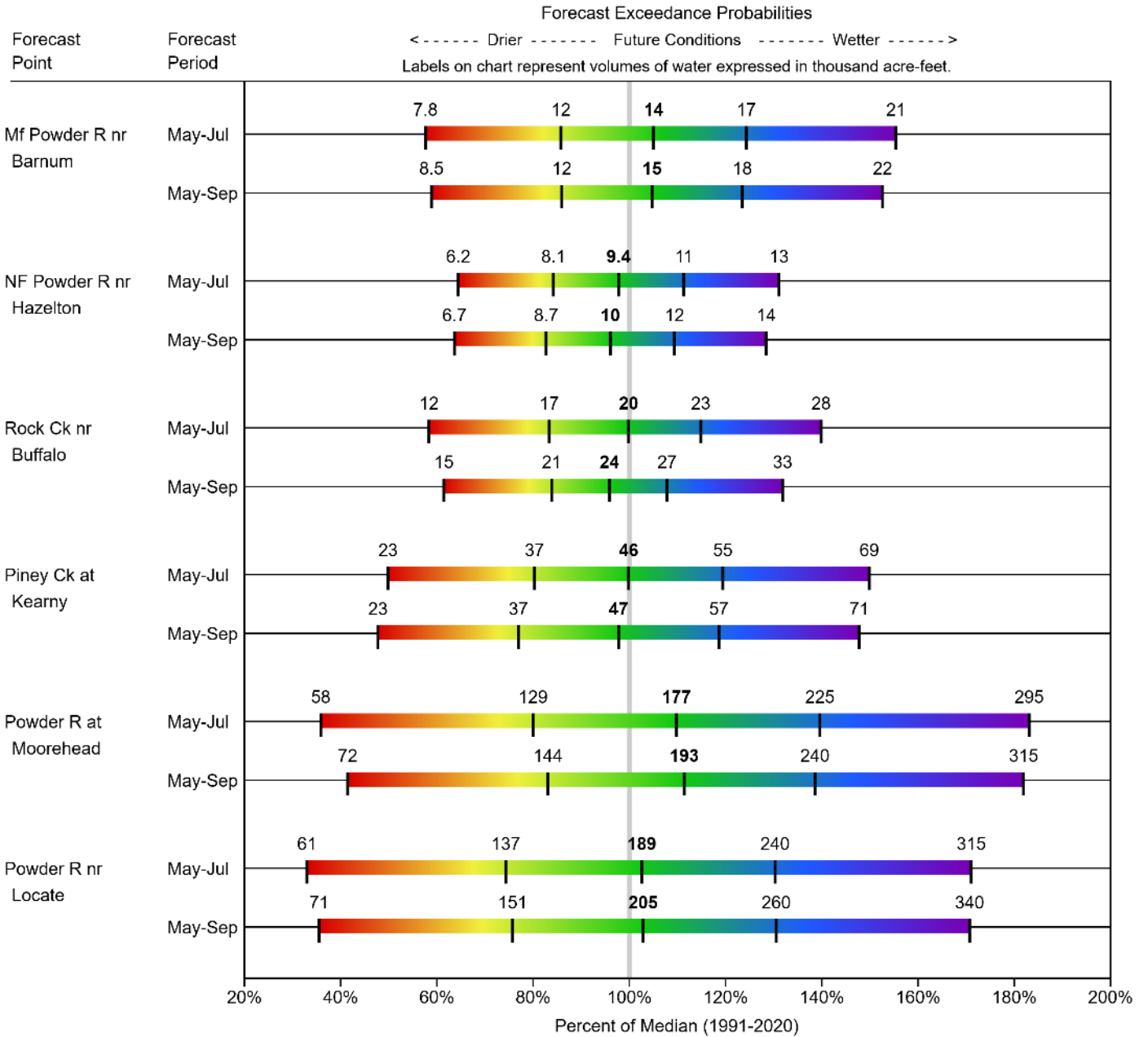
No reservoir data for this basin.

## Streamflow

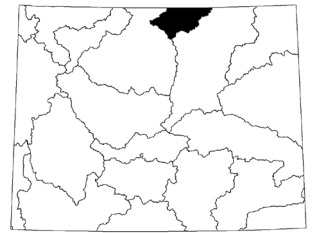
The 50% exceedance forecasts for the May through September period are near normal for the basin. The Middle Fork of the Powder River near Barnum should yield around 105% of median. The North Fork of the Powder River near Hazelton to yield around 96% of median.

*See the following graph for detailed runoff volumes.*

**POWDER RIVER BASIN**  
**Water Supply Forecasts**  
**May 1, 2023**

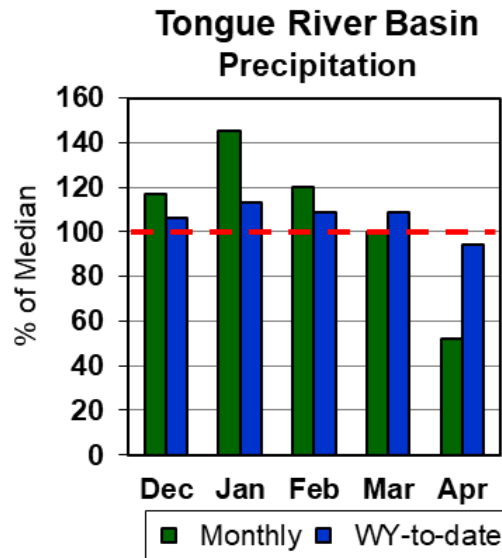
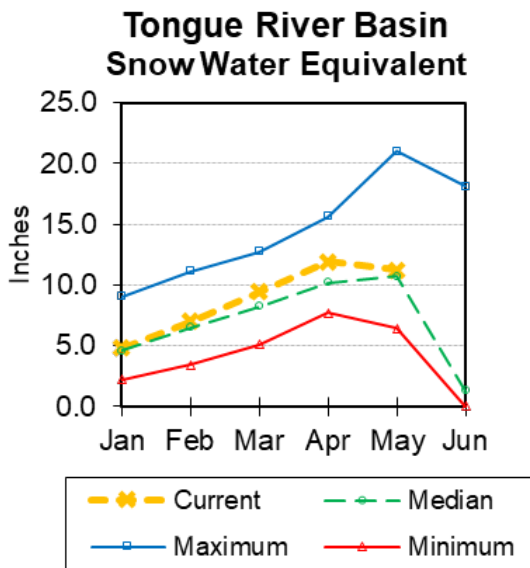


# Tongue River Basin



## Snow

Upper Tongue River drainage SWE is at 105% of median. *See Appendix at the end of this report for a detailed listing of snow course information.*



## Precipitation

Last month's precipitation was 52% of median. Year-to-date precipitation is 94% of median in the basin.

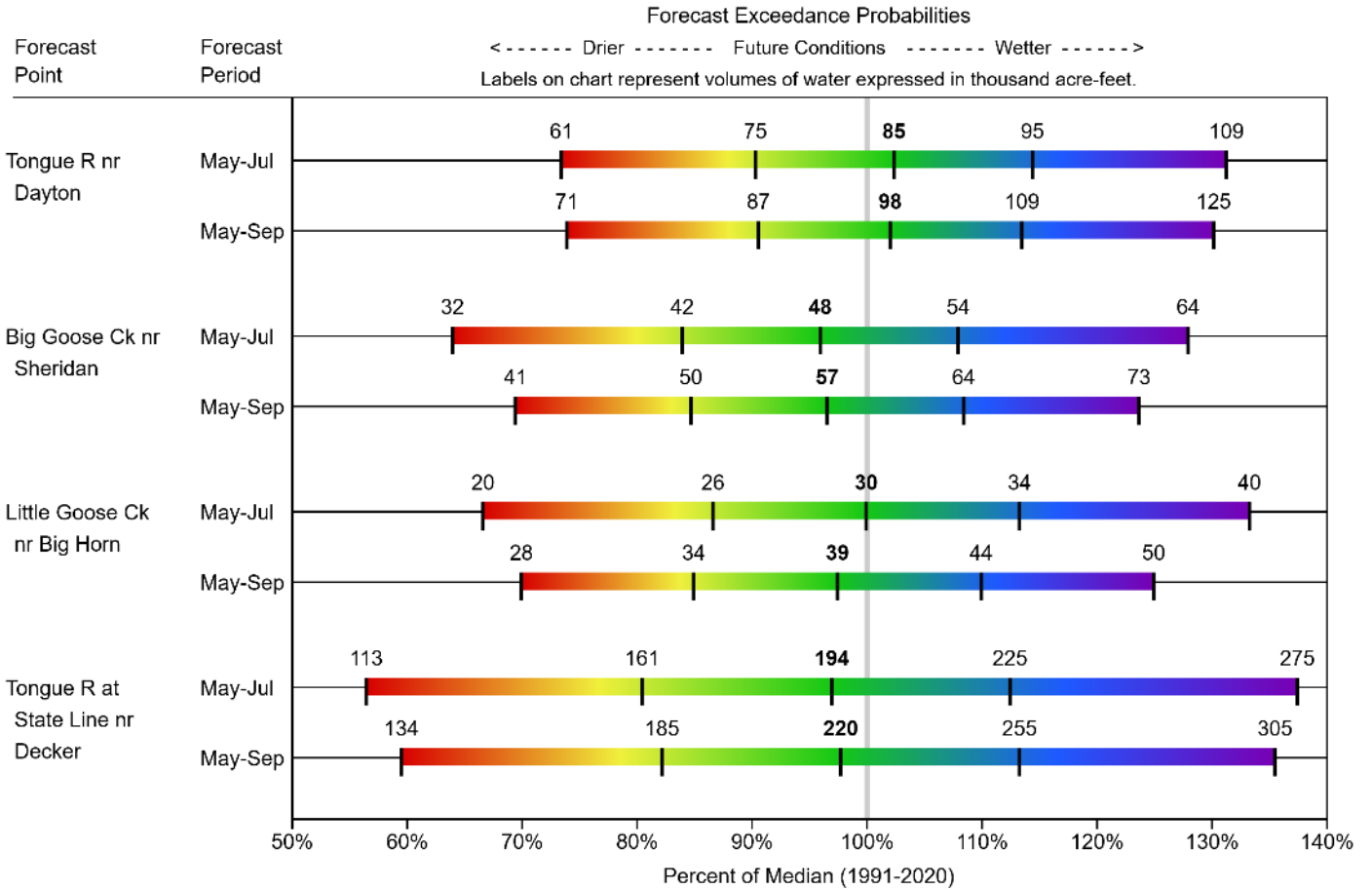
## Reservoirs

No reservoir data for this basin.

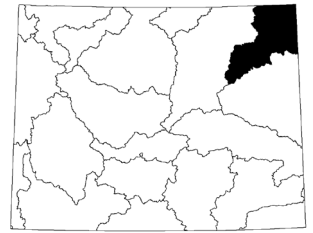
## Streamflow

The 50% exceedance forecasts for the May through September period are near normal for the basin. The yield for Tongue River near Dayton is forecasted to be 102% of median. Big Goose Creek near Sheridan should yield around 97%. Little Goose Creek near Bighorn should yield 98% of median. The Tongue River Reservoir Inflow should yield 98% of median. *See below for detailed runoff volumes.*

**TONGUE RIVER BASIN**  
**Water Supply Forecasts**  
**May 1, 2023**

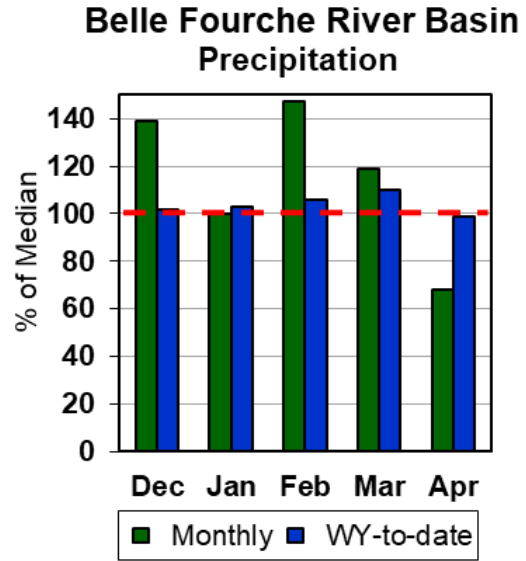
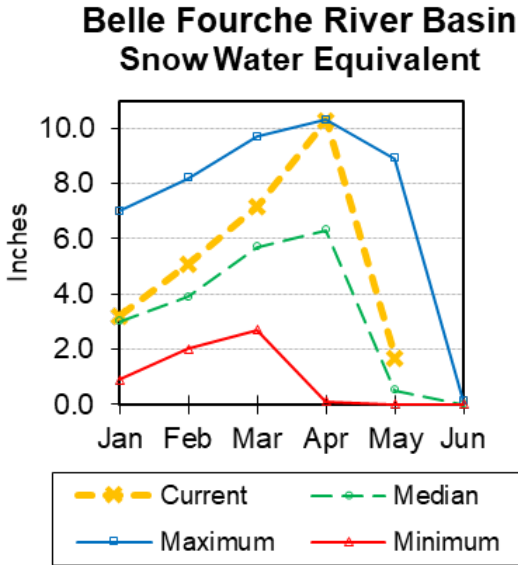


# Belle Fourche River Basin



## Snow

Currently the Belle Fourche River Basin SWE is at 338% of median. *See Appendix at the end of this report for a detailed listing of snow course information.*



## Precipitation

Precipitation for last month was 68% of median in the Belle Fourche basin. Year-to-date precipitation is 99% of median.

## Reservoirs

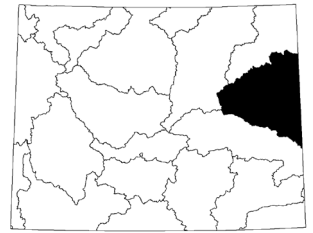
Combined storage for the 2 reservoirs in the basin is at 93% of median.

	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Keyhole	127.9	131.4	149.0	193.8	66%	68%	77%	86%	88%
Belle Fourche	160.6	144.7	160.0	178.4	90%	81%	90%	100%	90%
<b>Basin Index</b>					<b>78%</b>	<b>74%</b>	<b>83%</b>	<b>93%</b>	<b>89%</b>
# of reservoirs					2	2	2	2	2

## Streamflow

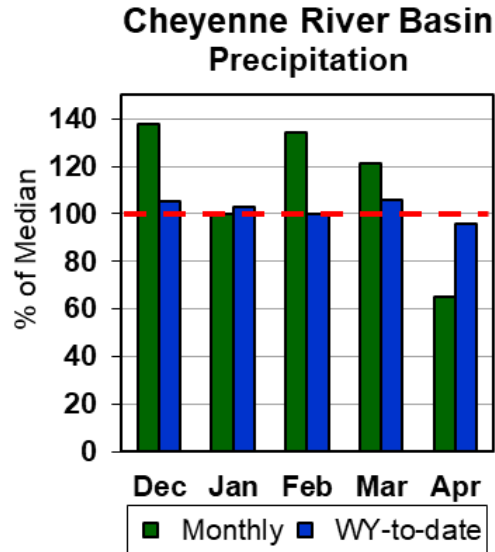
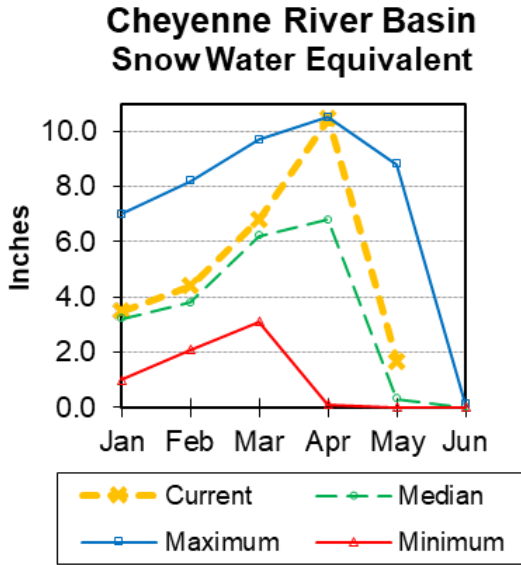
There are no streamflow forecast points for the basin.

# Cheyenne River Basin



## Snow

Currently SWE for sites in the Cheyenne River Basin are at 550% of median. *See Appendix at the end of this report for a detailed listing.*



## Precipitation

Precipitation for last month was 65% of median. Year-to-date precipitation is 96% of median.

## Reservoirs

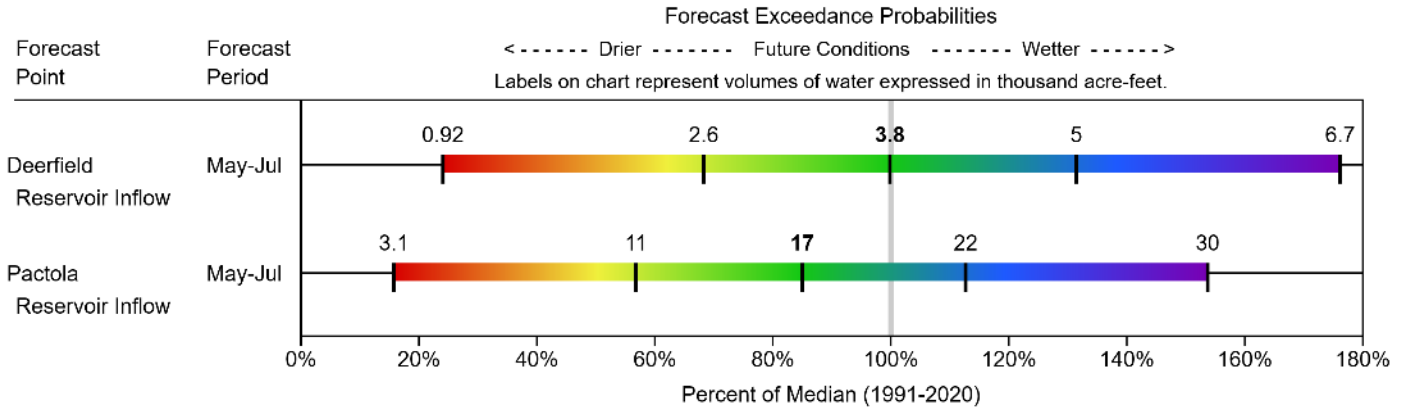
Combined storage for the 3 reservoirs in the basin is at 80% of median.

	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Pactola	52.4	54.7	54.9	55.0	95%	99%	100%	95%	100%
Deerfield	15.0	15.1	15.1	15.2	98%	100%	99%	99%	100%
Angostura	76.6	89.0	110.8	122.1	63%	73%	91%	69%	80%
<b>Basin Index</b>					<b>75%</b>	<b>83%</b>	<b>94%</b>	<b>80%</b>	<b>88%</b>
# of reservoirs					3	3	3	3	3

## Streamflow

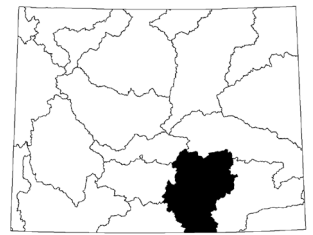
The 50% exceedance forecasts for the May through July period are slightly below normal. The Deerfield Reservoir Inflow yield is forecasted at 100% of median. Pactola Reservoir Inflow yield should be 85% of median. *See the following graph for detailed runoff volumes.*

**CHEYENNE RIVER BASIN**  
**Water Supply Forecasts**  
**May 1, 2023**





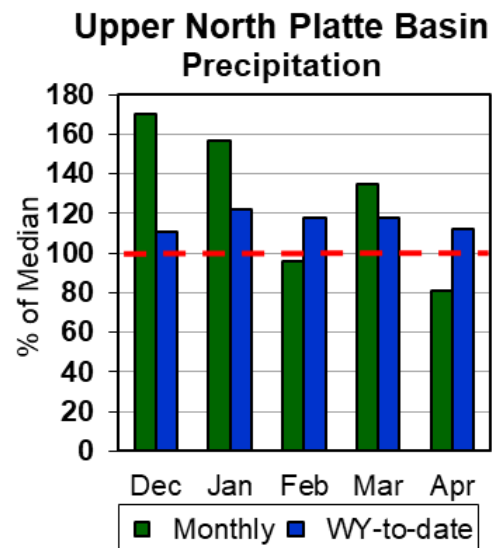
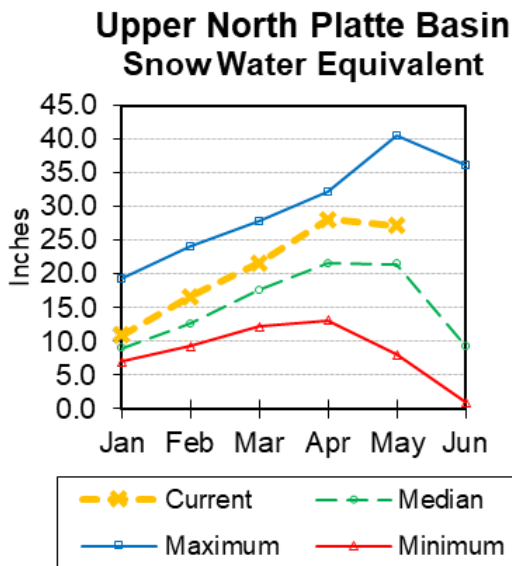
# Upper North Platte River Basin



## Snow

The Upper North Platte River basin SWE is 127% of median. North Platte above Northgate SWE is 127% of median. Encampment River SWE is 132% of median. Medicine Bow and Rock Creek SWE are 108% of median.

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



## Precipitation

Last month's precipitation was 81% of median. Total water-year-to-date precipitation is 112% of median.

## Reservoirs

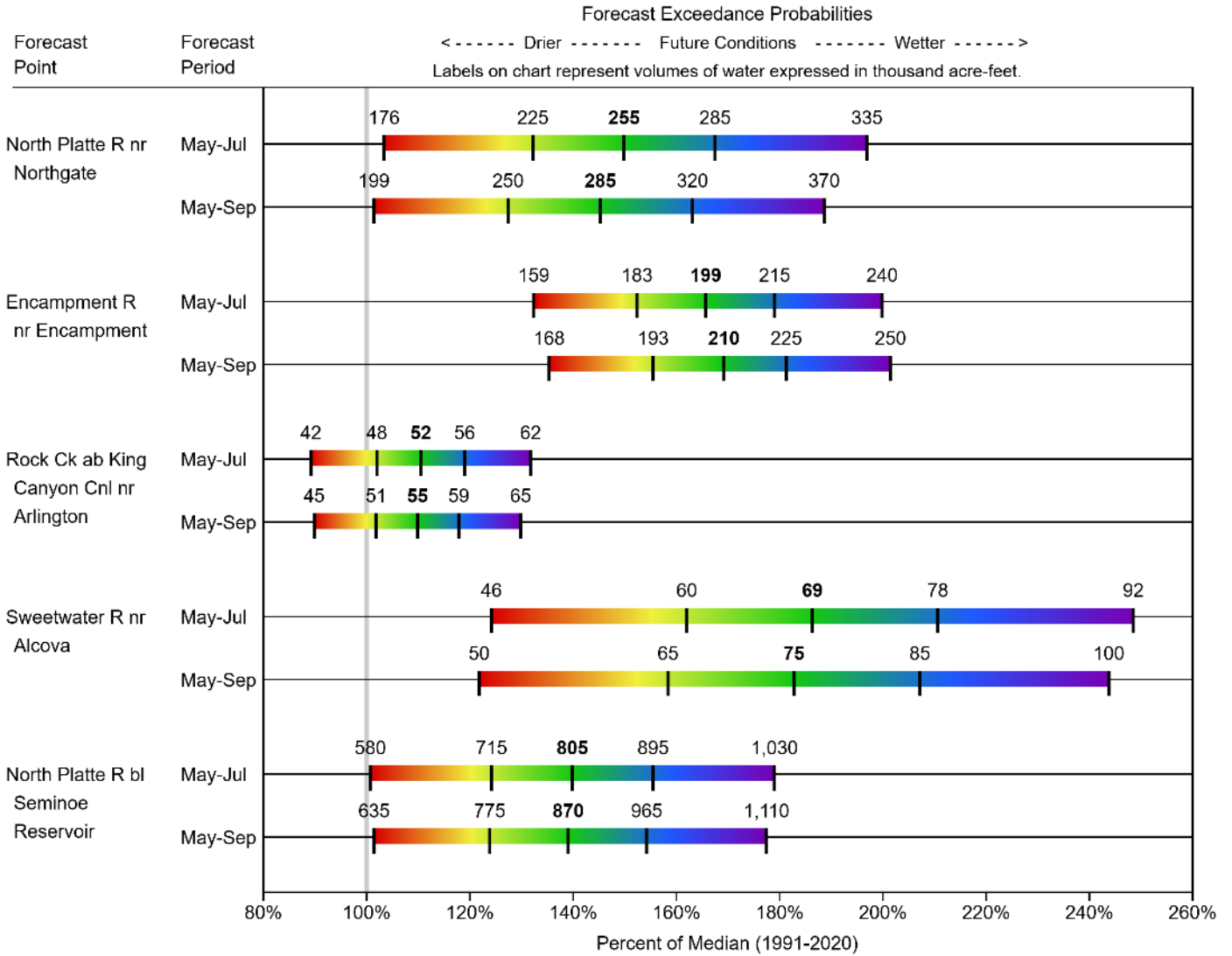
Combined storage for reservoirs in the Upper North Platte River Basin is at 75% of median.

	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Pathfinder	419.3	653.2	603.0	1016.5	41%	64%	59%	70%	108%
Seminole	457.4	327.6	565.6	1016.7	45%	32%	56%	81%	58%
<b>Basin Index</b>					<b>43%</b>	<b>48%</b>	<b>57%</b>	<b>75%</b>	<b>84%</b>
# of reservoirs					2	2	2	2	2

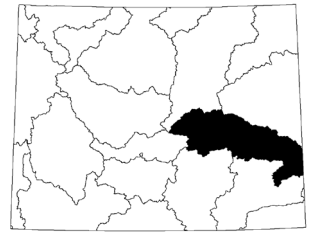
## Streamflow

The 50% exceedance forecasts for the May through September period are well above normal for the Upper North Platte River Basin. The yield for the North Platte River near Northgate will be around 145% of median. The Encampment River near Encampment yield will be about 169%. Rock Creek near Arlington yield will be around 110%. Seminole Reservoir inflow should be about 139% of median. *See the following page for more detailed information on projected runoff.*

**UPPER NORTH PLATTE RIVER BASIN**  
**Water Supply Forecasts**  
**May 1, 2023**

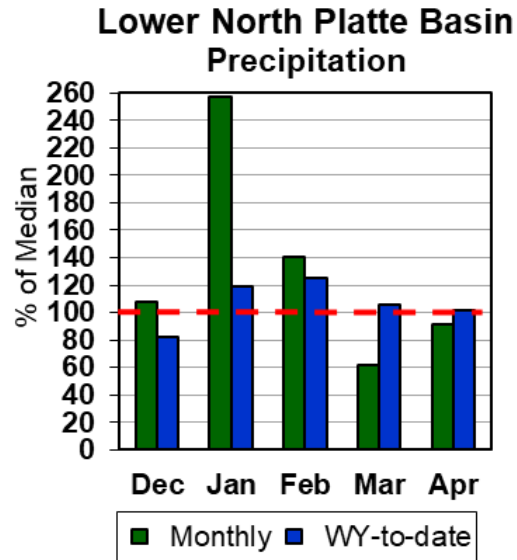
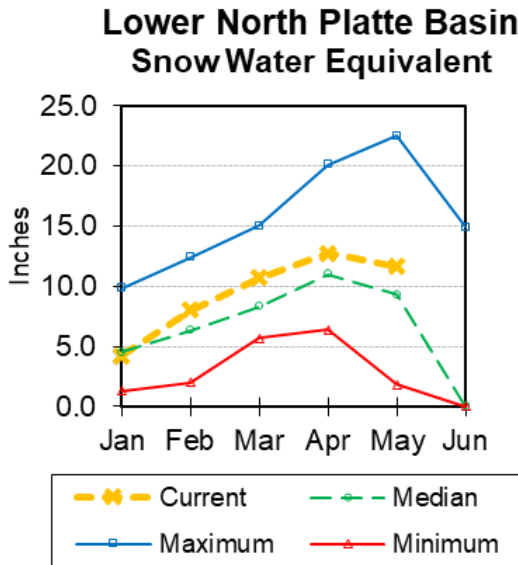


# Lower North Platte River Basin



## Snow

Currently, SWE in the Lower North Platte River Basin is 125% 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. The water year-to-date precipitation for the basin is currently 102% of median.

## Reservoirs

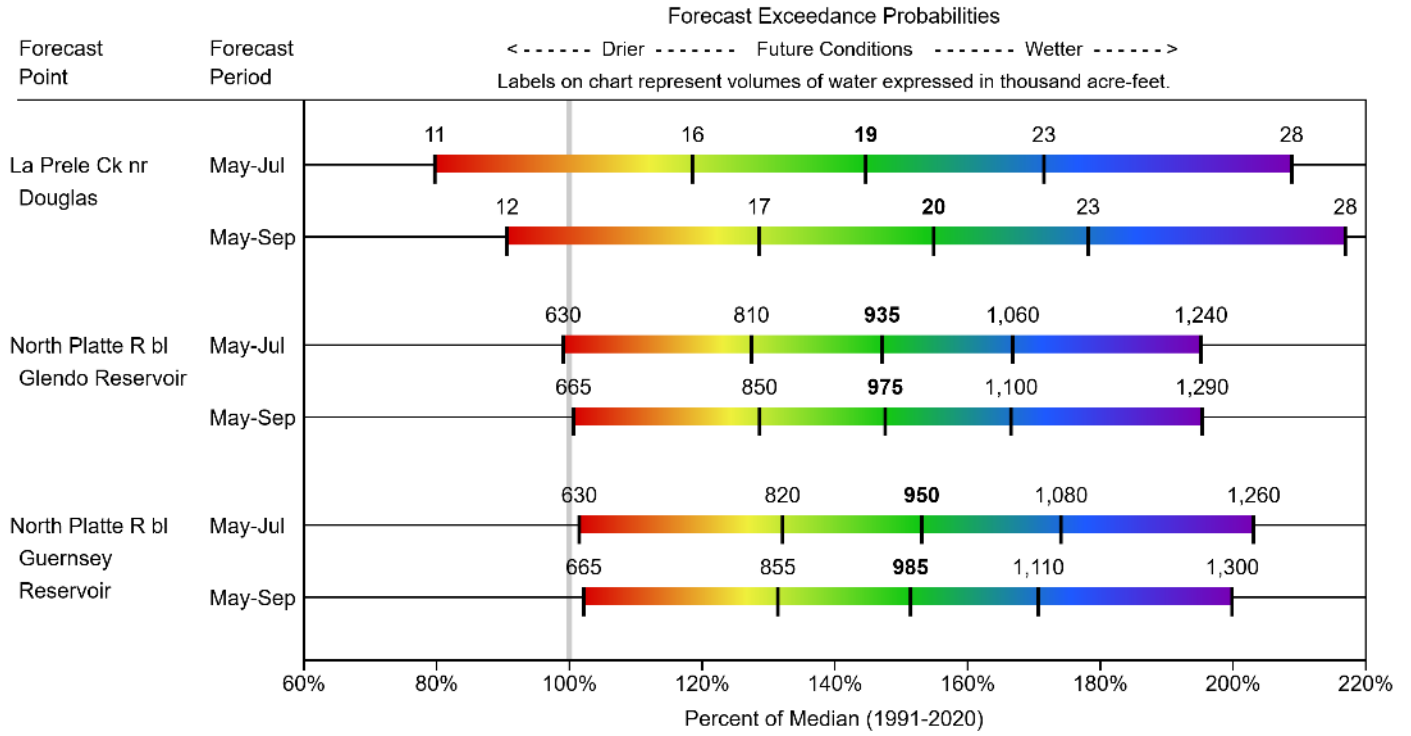
Combined storage for the 3 reservoirs in the basin is at 89% of median.

	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Alcova	180.4	180.3	179.9	184.3	98%	98%	98%	100%	100%
Glendo	358.4	427.9	431.3	506.4	71%	84%	85%	83%	99%
Guernsey	27.8	5.3	26.6	45.6	61%	12%	58%	105%	20%
<b>Basin Index</b>					<b>77%</b>	<b>83%</b>	<b>87%</b>	<b>89%</b>	<b>96%</b>
# of reservoirs					3	3	3	3	3

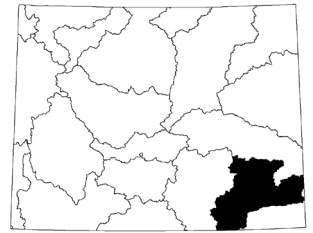
## Streamflow

The 50% exceedance forecasts for the May through September period should be well above normal. LaPrele Creek near Douglas is forecasted to yield 155% of median. North Platte River below Guernsey Reservoir should yield around 152% of median. *See the following for more detailed information on projected runoff.*

**LOWER NORTH PLATTE RIVER BASIN**  
**Water Supply Forecasts**  
**May 1, 2023**

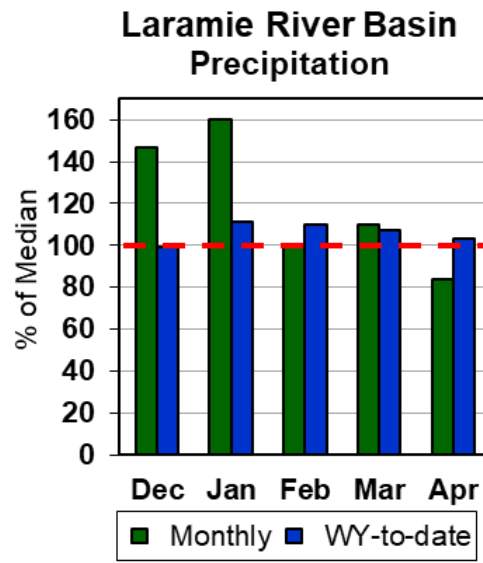
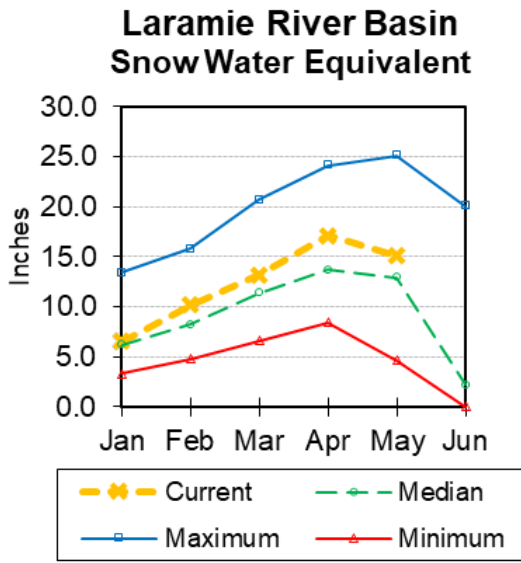


# Laramie River Basin



## Snow

SWE for the entire Laramie River Basin (above mouth entering North Platte) is 117% of median. SWE for the Laramie River above Laramie is 122% of median. SWE for the Little Laramie River is 107% 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 103% of median.

## Reservoirs

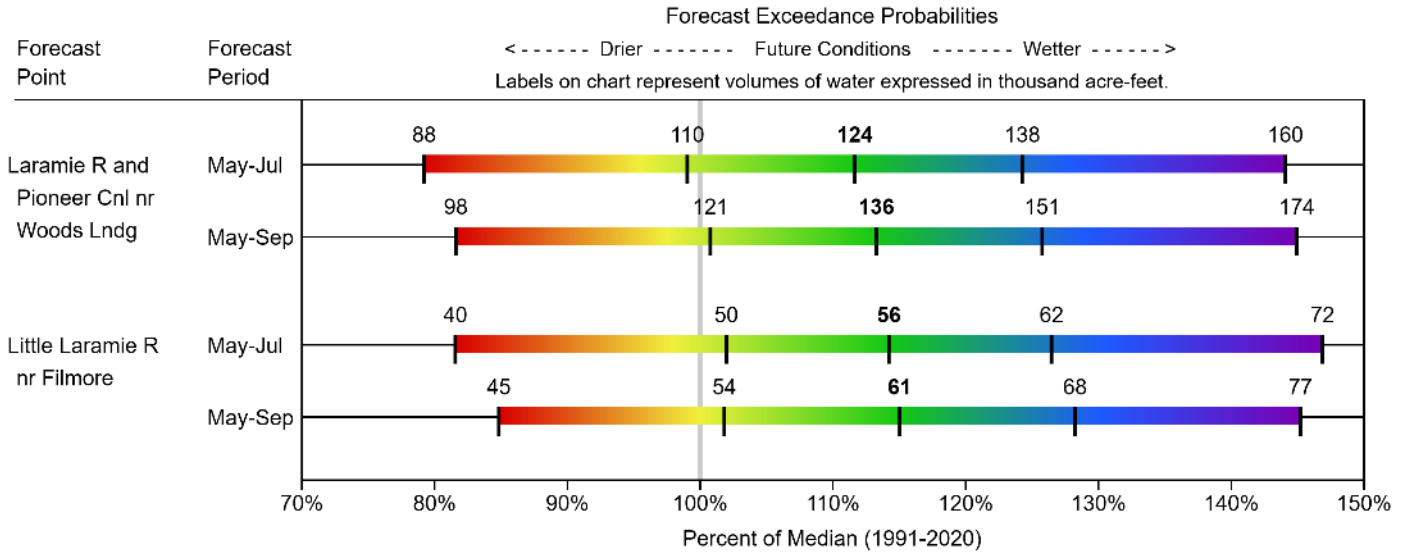
Reservoir storage in this basin is 75% of median.

	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Wheatland #2	44.8	52.7	59.7	98.9	45%	53%	60%	75%	88%
<b>Basin Index</b>					<b>45%</b>	<b>53%</b>	<b>60%</b>	<b>75%</b>	<b>88%</b>
# of reservoirs					1	1	1	1	1

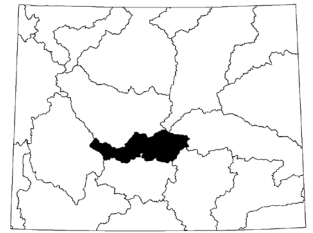
## Streamflow

The 50% exceedance forecasts for the May through September period at Laramie River near Woods Landing should yield around 113% of median. The Little Laramie near Filmore should produce about 115% of median. *See the following graph for detailed runoff volumes.*

**LARAMIE RIVER BASIN**  
**Water Supply Forecasts**  
**May 1, 2023**

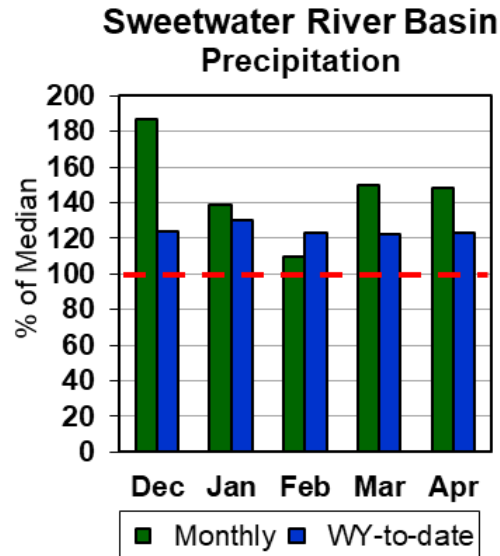
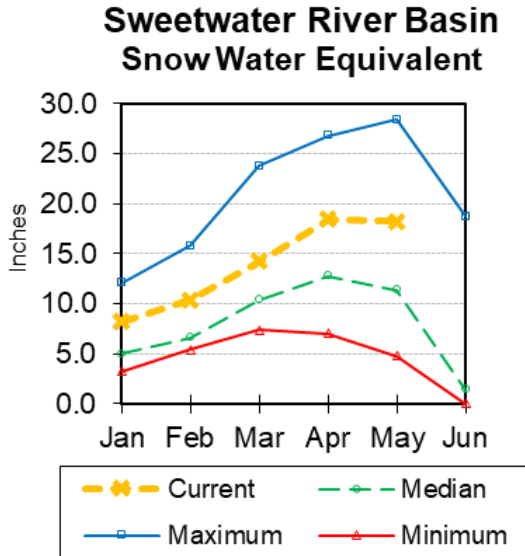


# Sweetwater River Basin



## Snow

Sweetwater River Basin SWE is at 160% of median. *See Appendix at the end of this report for a detailed listing of snow course information.*



## Precipitation

Last month's precipitation was 148% of median. The water year-to-date precipitation for the basin is currently 123% of median.

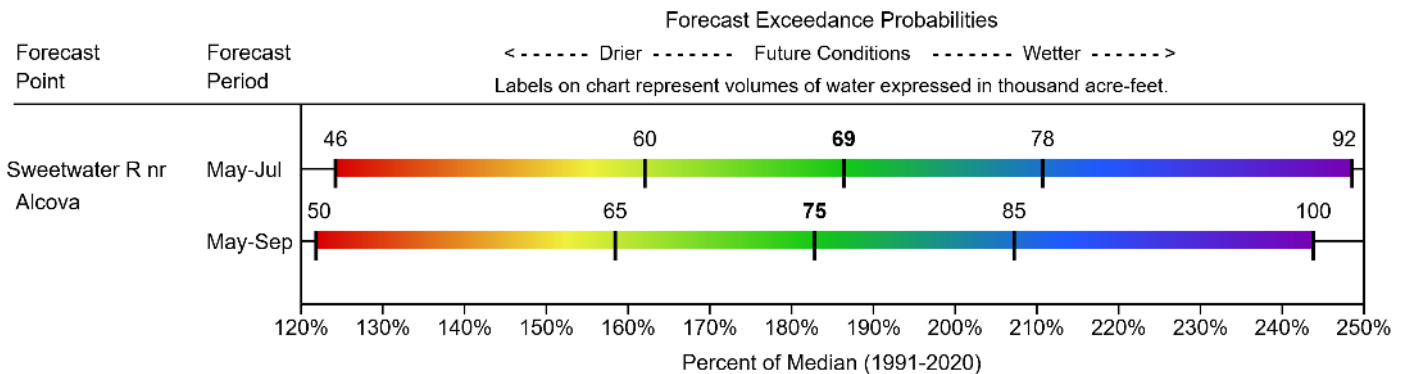
## Reservoirs

No reservoir data for the basin.

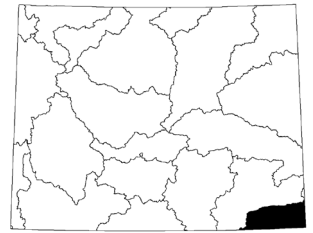
## Streamflow

The 50% exceedance forecasts for the May through September period in the Sweetwater Basin is well above normal. The Sweetwater River near Alcova will yield about 183% of median. *See below for detailed information on projected runoff.*

### SWEETWATER RIVER BASIN Water Supply Forecasts May 1, 2023

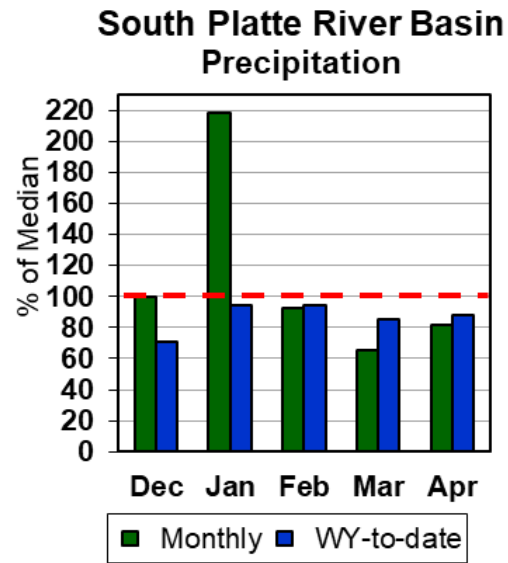
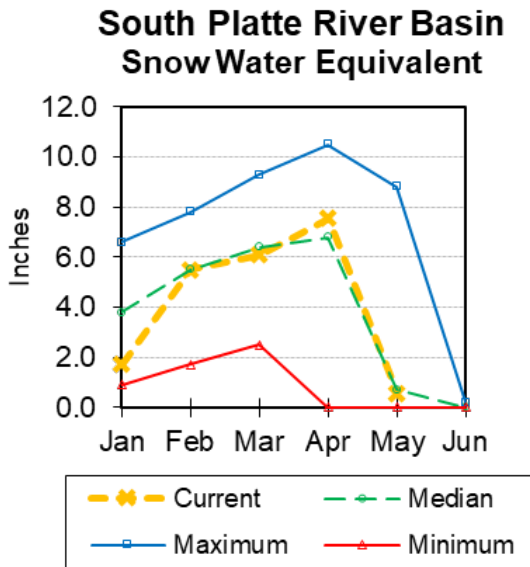


## South Platte River Basin (WY)



### Snow

The median SWE for sites in the South Platte River Basin is 82% of median. *See Appendix at the end of this report for a detailed listing of snow course information.*



### Precipitation

Last month's precipitation was 82% of median. The water year-to-date precipitation for the basin is currently 88% of median.

### Reservoirs

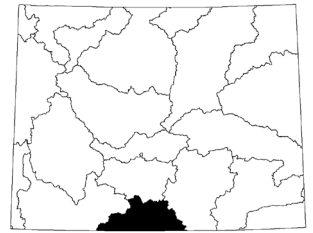
No reservoir data for the basin.

### Streamflow

There are no streamflow forecast points for the basin.

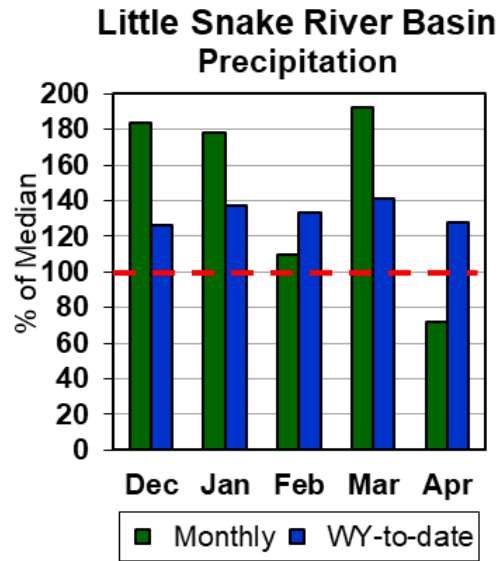
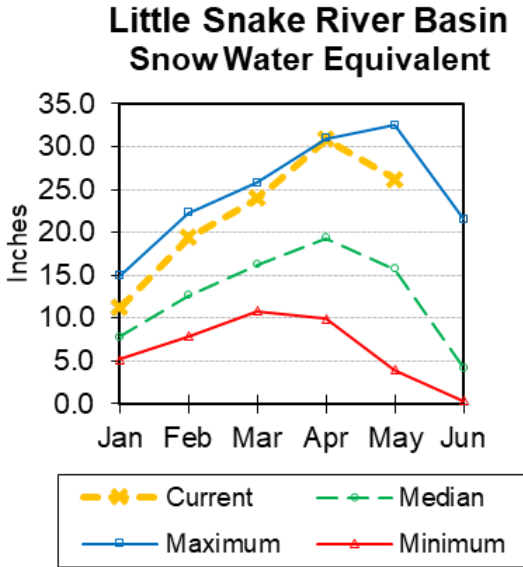


# Little Snake River Basin



## Snow

Little Snake River drainage SWE is 167% of median. See *Appendix at the end of this report for a detailed listing of snow course information.*



## Precipitation

Precipitation across the basin was 72% of median. The Little Snake River Basin water-year-to-date precipitation is currently 128% of median.

## Reservoirs

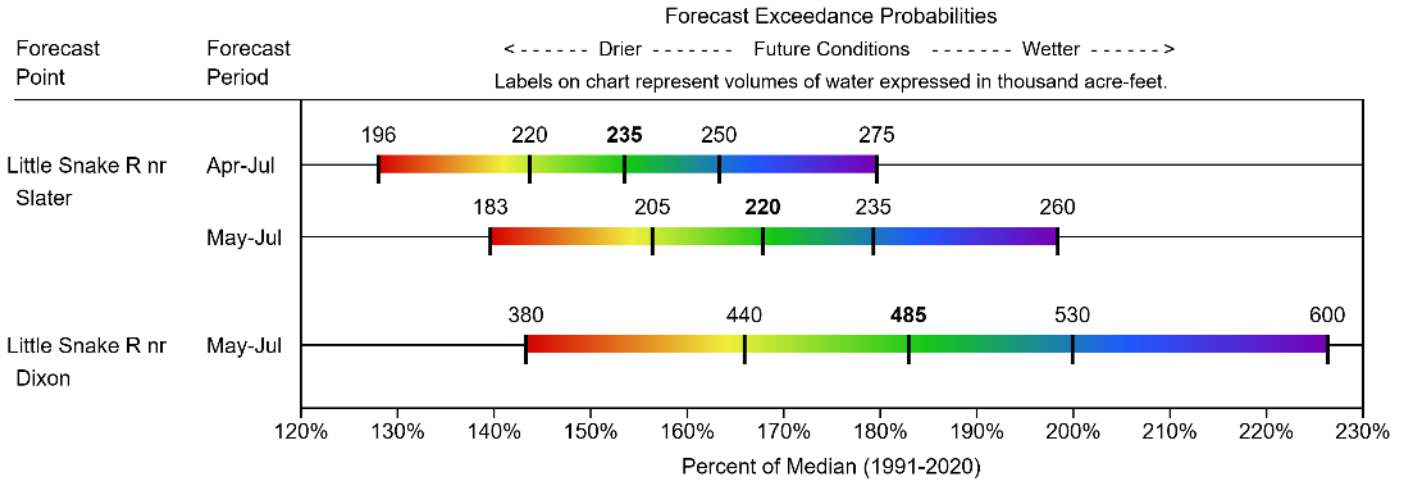
Reservoir storage in this basin is 68% of median.

	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
High Savery Res	10.2	8.5	15.0	22.4	46%	38%	67%	68%	57%
<b>Basin Index</b>					<b>46%</b>	<b>38%</b>	<b>67%</b>	<b>68%</b>	<b>57%</b>
# of reservoirs					1	1	1	1	1

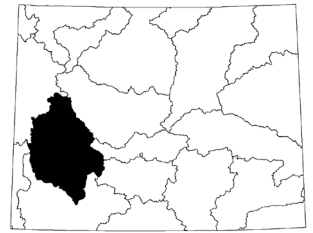
## Streamflow

The 50% exceedance forecasts for the May through July period will be well above normal. The Little Snake River near Slater is forecasted to yield around 168% of median. *See below for detailed information on projected runoff.*

**LITTLE SNAKE RIVER BASIN**  
**Water Supply Forecasts**  
**May 1, 2023**

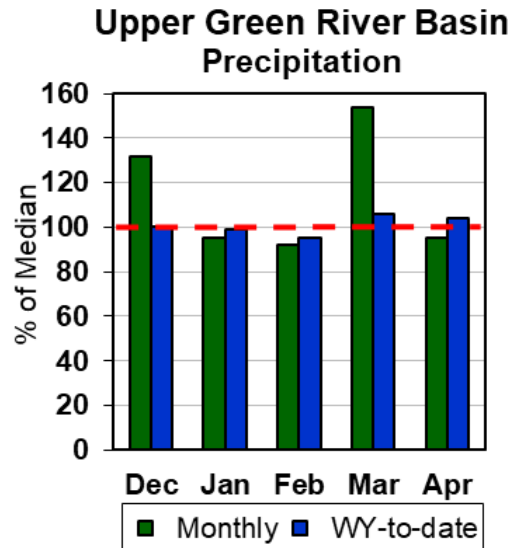
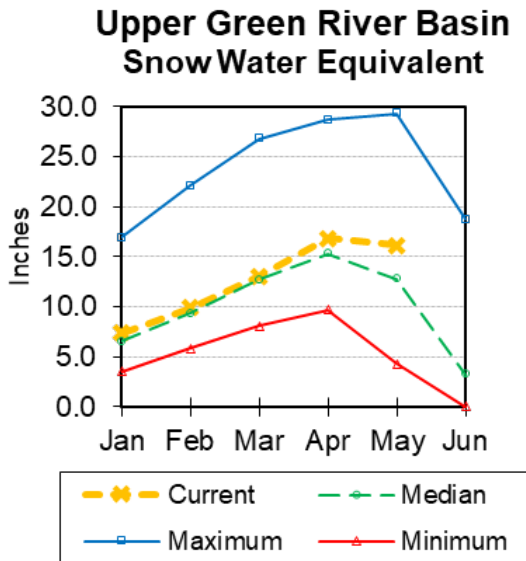


# Upper Green River Basin



## Snow

The Upper Green River Basin SWE (above Fontenelle Reservoir) is 126% of median. Green River Basin above Warren Bridge SWE is 120% of median. West Side of Upper Green River Basin SWE is 125% 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 95% of median last month. Water year-to-date precipitation is 104% of median.

## Reservoir

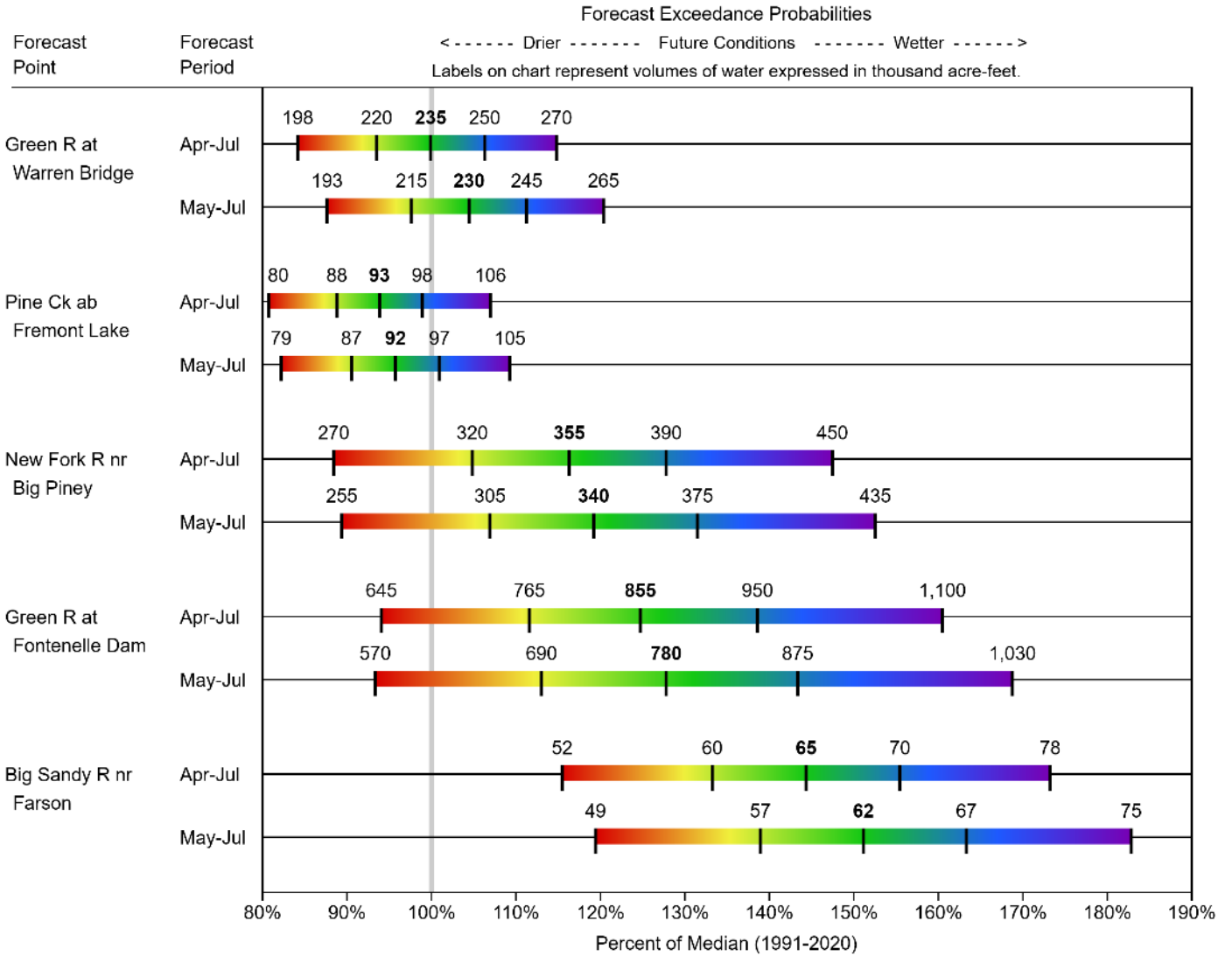
Combined water storage in the basin was at 90% of median for the 2 reservoirs.

	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Fontenelle	126.3	152.0	131.4	344.8	37%	44%	38%	96%	116%
Big Sandy	13.3	10.5	23.5	38.3	35%	27%	61%	57%	45%
<b>Basin Index</b>					<b>36%</b>	<b>42%</b>	<b>40%</b>	<b>90%</b>	<b>105%</b>
# of reservoirs					2	2	2	2	2

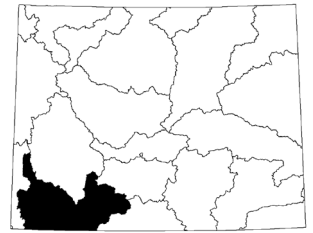
## Streamflow

The 50% exceedance forecasts for the May through July period will be above normal. The yield on the Green River at Warren Bridge is about 105% of median. New Fork River near Big Piney yield will be around 119% of median. Green River at Fontenelle Dam is estimated to be about 128% of median. *See the following for a more detailed forecast.*

**UPPER GREEN RIVER BASIN**  
**Water Supply Forecasts**  
**May 1, 2023**



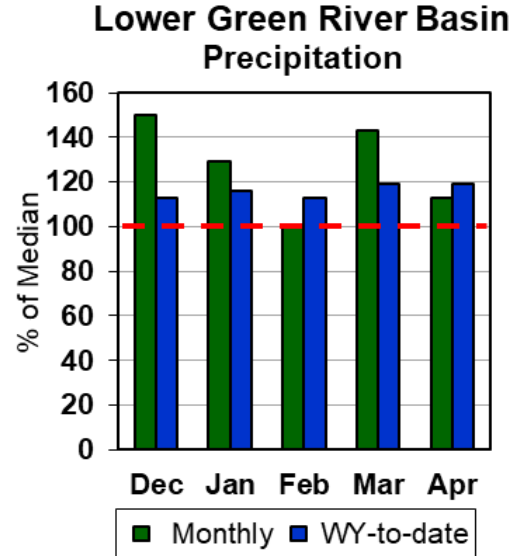
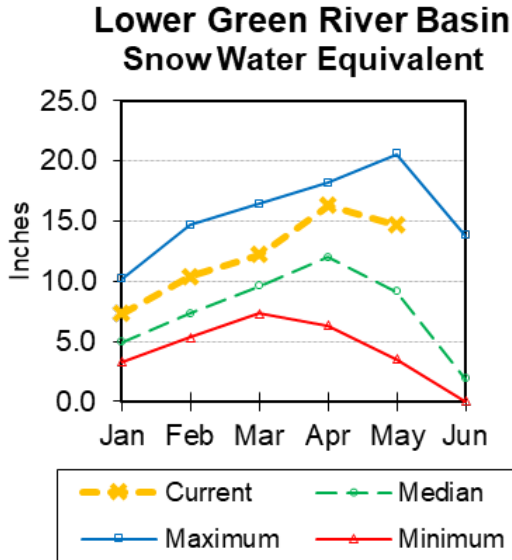
# Lower Green River Basin



## Snow

Lower Green River Basin SWE is at 161% of median. Hams Fork drainage SWE is 153% of median. Blacks Fork drainage SWE is 152% 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 113% of median. The basin year-to-date precipitation is currently 119% of median.

## Reservoirs

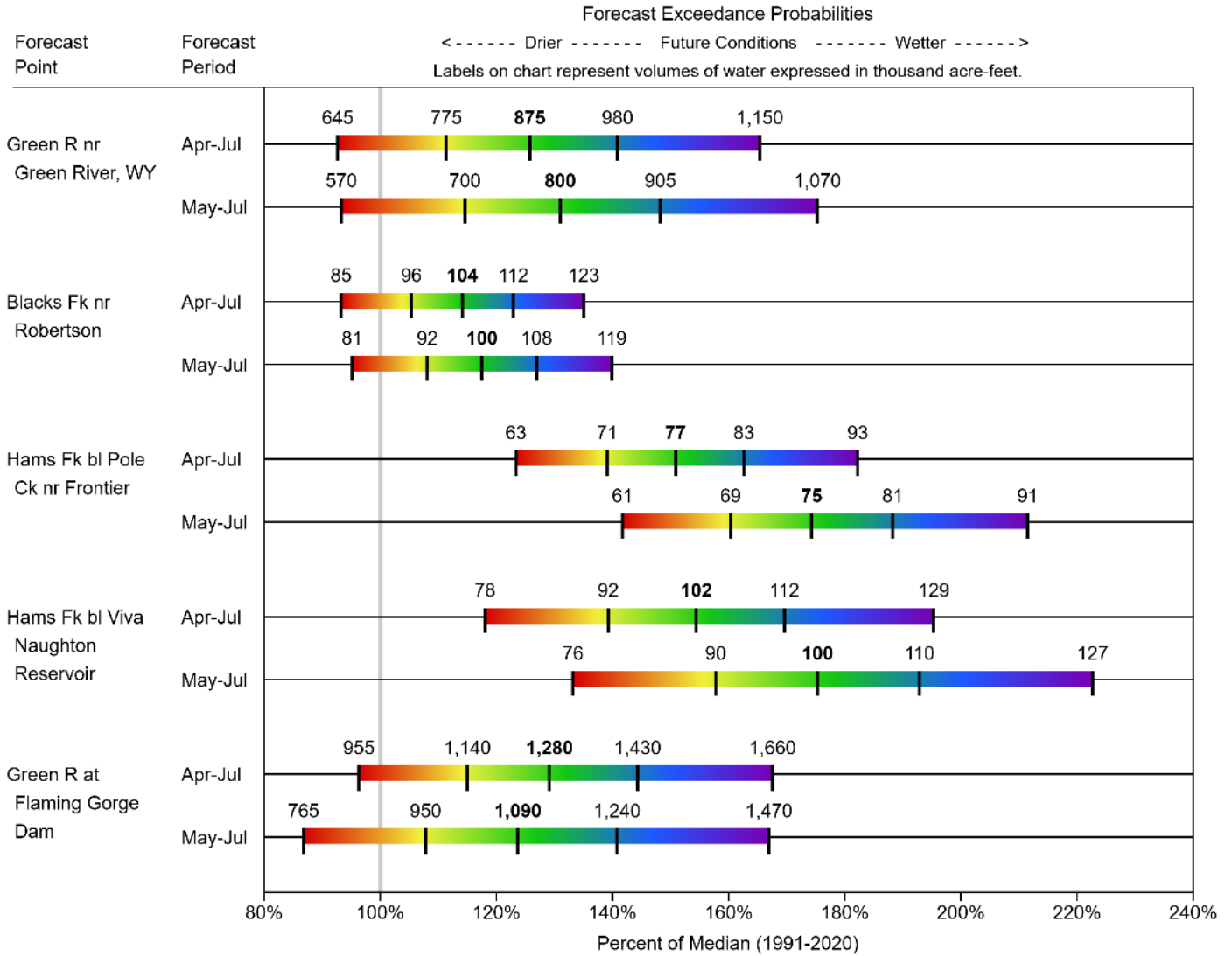
Combined storage for the 4 reservoirs in the basin was at 83% of median at the end of last month.

	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Stateline Reservoir	7.5	7.2	6.5	12.0	62%	60%	54%	115%	111%
Meeks Cabin Res	14.1	16.6	15.6	32.5	43%	51%	48%	90%	106%
Flaming Gorge Res	2589.4	2937.8	3114.0	3749.0	69%	78%	83%	83%	94%
Viva Naughton Res	16.8	33.5	32.8	42.4	40%	79%	77%	51%	102%
<b>Basin Index</b>					<b>69%</b>	<b>78%</b>	<b>83%</b>	<b>83%</b>	<b>95%</b>
# of reservoirs					4	4	4	4	4

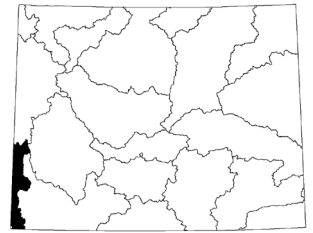
## Streamflow

The following are the 50% exceedance forecasts for the May through July period. The Green River near Green River will yield about 131% of median. The Flaming Gorge Reservoir inflow will be about 124% of median. *See the following page for more detailed information on projected runoff.*

**LOWER GREEN RIVER BASIN**  
**Water Supply Forecasts**  
**May 1, 2023**



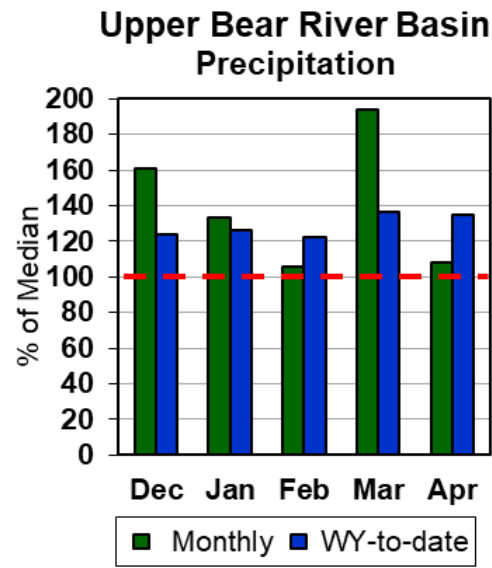
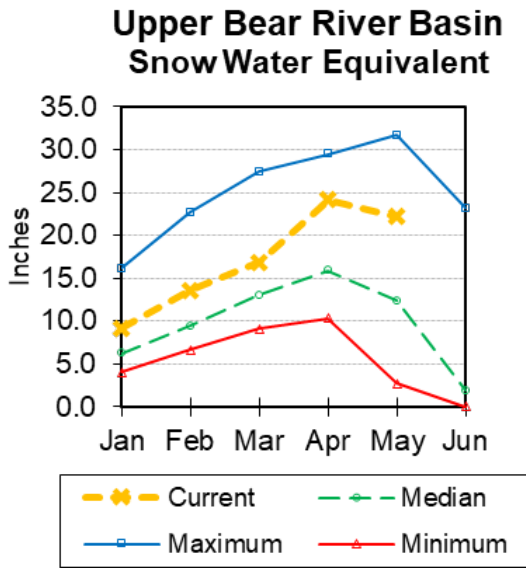
# Upper Bear River Basin



## Snow

SWE in the Upper Bear River Basin of Utah is 179% of median. SWE in the Wyoming portion of the Bear River drainage (Smiths and Thomas Forks) is 168% of median.

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



## Precipitation

Precipitation for last month was 108% of median in the basin. The year-to-date precipitation for the basin is 135% of median.

## Reservoirs

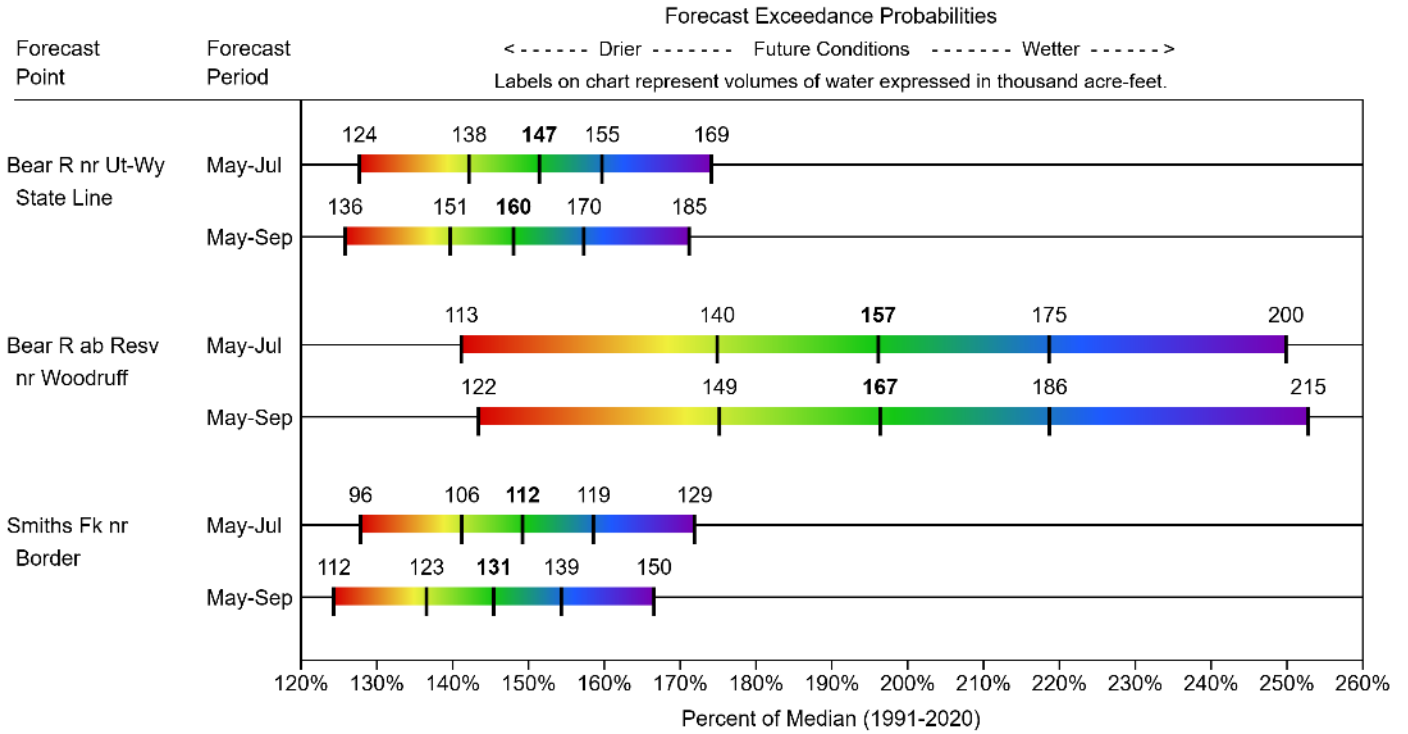
Combined reservoir storage in this basin is at 80% of median.

	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Woodruff Creek	3.2	4.0	4.0	4.0	79%	100%	100%	79%	100%
Woodruff Narrows Res	44.6	26.1	55.5	57.3	78%	46%	97%	80%	47%
<b>Basin Index</b>					<b>78%</b>	<b>49%</b>	<b>97%</b>	<b>80%</b>	<b>51%</b>
# of reservoirs					2	2	2	2	2

## Streamflow

The 50% exceedance forecasts for the May through September period are well above normal. The Bear River above Reservoir near Woodruff should yield around 196% of median. The Smiths Fork River near Border Jct. will yield around 146%. *See the following page for more detailed information on projected runoff.*

**UPPER BEAR RIVER BASIN**  
**Water Supply Forecasts**  
**May 1, 2023**





# 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**  
(see "Attachments" at left)

**Appendix - Precipitation Data**  
(see "Attachments" at left)

**Appendix - Streamflow Data**  
(see "Attachments" at left)

# Wyoming Basin Outlook Report

## Natural Resources Conservation Service

### Casper, Wyoming

**Issued by:**

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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