



United States
Department of
Agriculture

Wyoming Basin & Water Supply Outlook Report

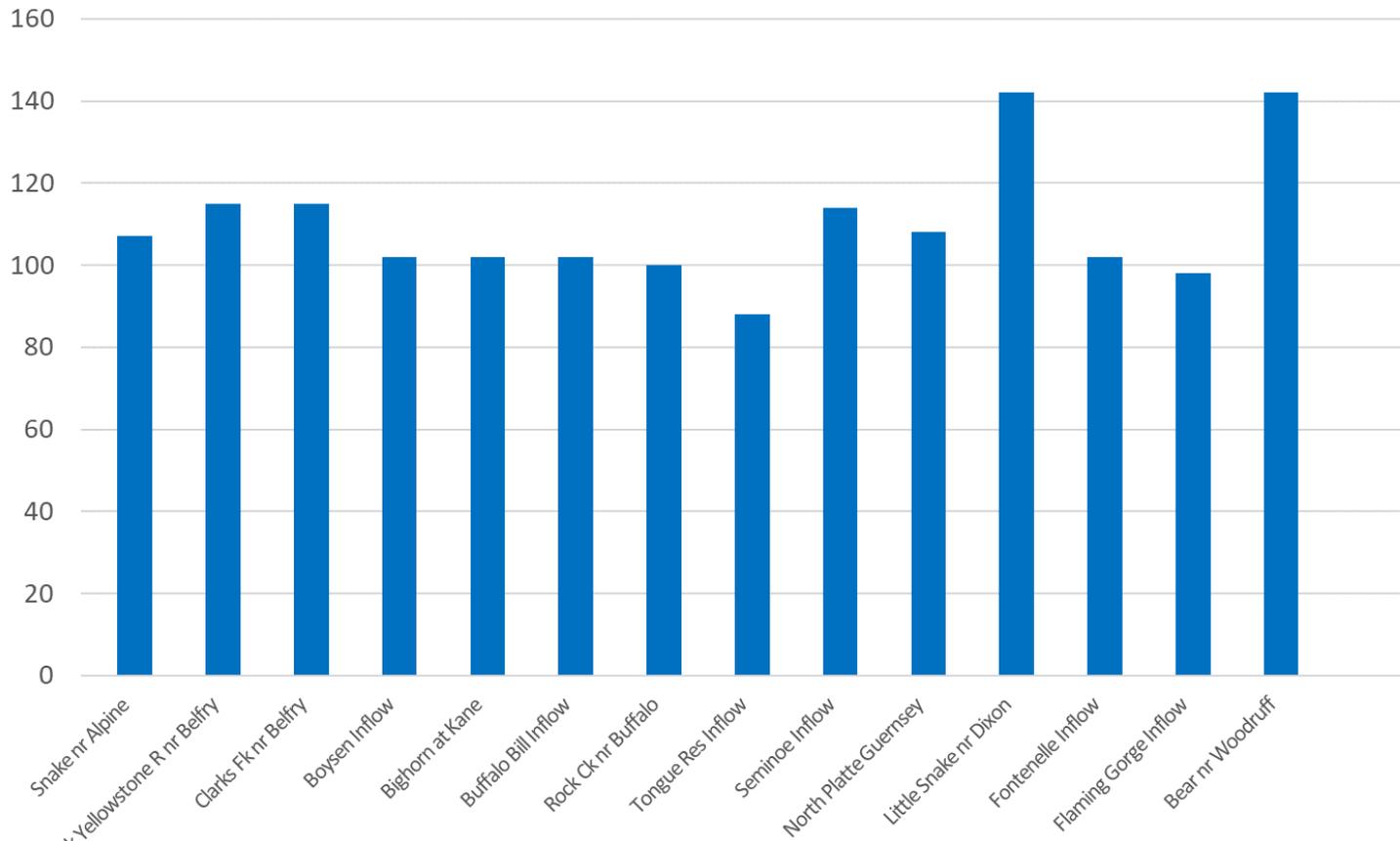
January 1, 2023

**Natural
Resources
Conservation
Service**



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

Percent of median (50% exceedance) for major forecast points



Forecast period for all points is April through September, except Little Snake near Dixon, Fontenelle Inflow, & Flaming Gorge Inflow, which is April through July. Medians based on 1991 - 2020 reference period

Basin Outlook Reports

And

Federal - State - Private Cooperative Snow Surveys

For more information, contact:

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(307) 233-6768 jeff.goats@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

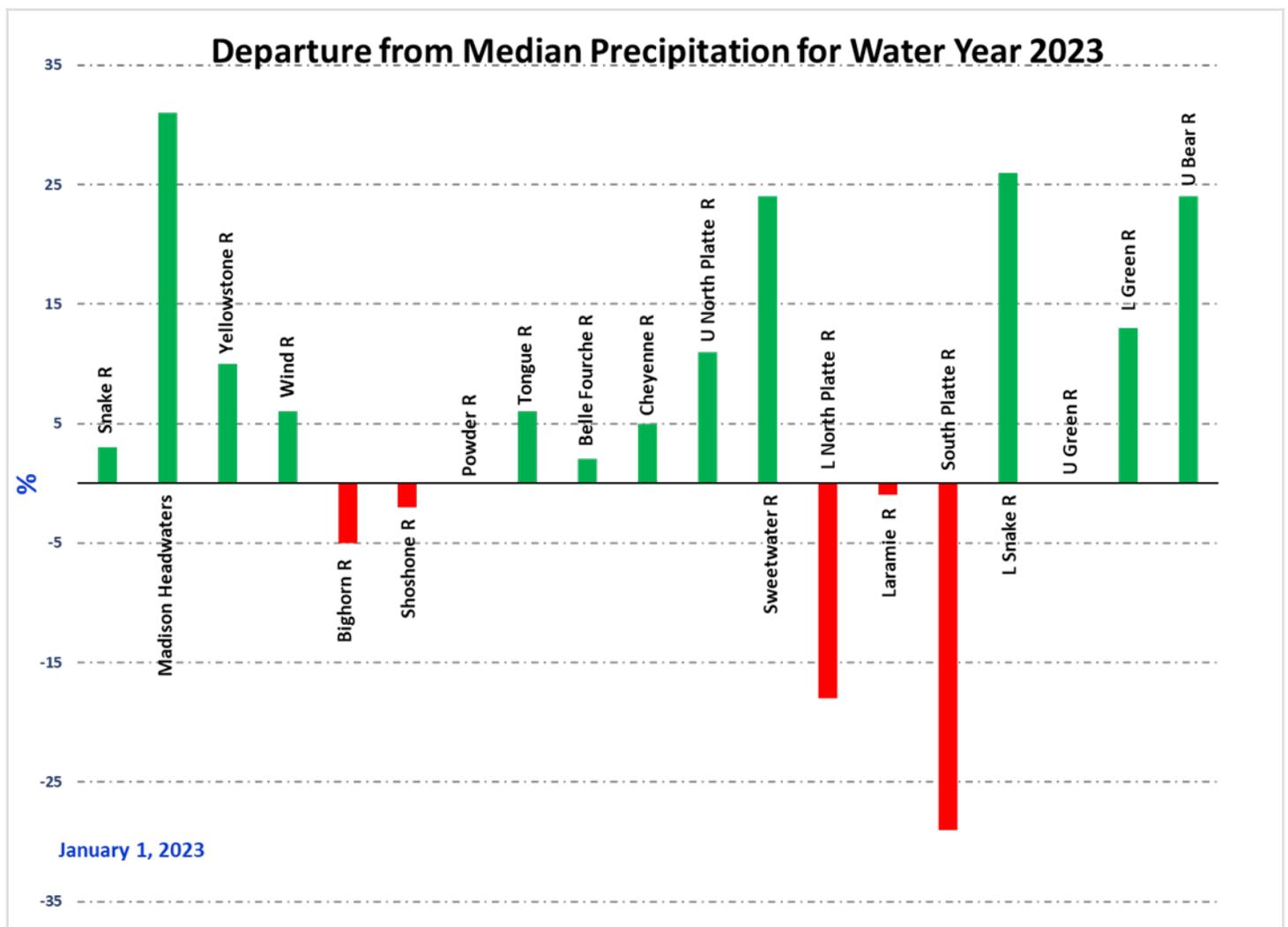
Snowpack

Snow water equivalent (SWE) across Wyoming for January 1st was at 120% of median. SWE in the Sweetwater River Basin was the highest at 164% of median and lowest for the South Platte River Basin at 45% 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 187% of median. The South Platte River Basin had the lowest precipitation amount at 100% 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 April thru September in Wyoming basins (except Green, Little Snake and Cheyenne) average 108%. Forecast median stream flow yields for April thru July in Green, Little Snake, and Cheyenne average 109%. The Snake River and Yellowstone River in Wyoming, basins should yield about 111% and 115% of median. Yields from the Wind and Bighorn River basins should be about 108% and 100% of median. Yields from the Shoshone River basin should be 100% of median. Yields from the Powder and Tongue River basins should be about 90% and 104% of median. Yield for the Cheyenne River basin should be about 91% of median. Yields for the Sweetwater, Upper North Platte, Lower North Platte, and Laramie Rivers of Wyoming should be about 139%, 119%, 108%, and 113% of median, respectively. Yields for the Little Snake and Green River should be 139% and 102%.

Reservoirs

Reservoir storage was 81% of median across the entire state. Reservoirs in the Snake River basin are much below median at 28%. Reservoirs in the Wind River basin are near median at 99%. Reservoirs on the Big Horn are slightly below median at 94%. The Buffalo Bill Reservoir on the Shoshone is near median at 102%. The Tongue River Reservoir is at 104% of median. Reservoirs in the Belle Fourche and Cheyenne River basins are near and below median at 96% and 80% respectively. Reservoirs on the Upper and Lower North Platte River are below median and near median at 68% and 95% respectively. Reservoirs on the Upper Green River are slightly below median at 93%. Reservoirs on the Lower Green River are below median at 81%. *See below for further information.*

Wyoming Reservoir Levels

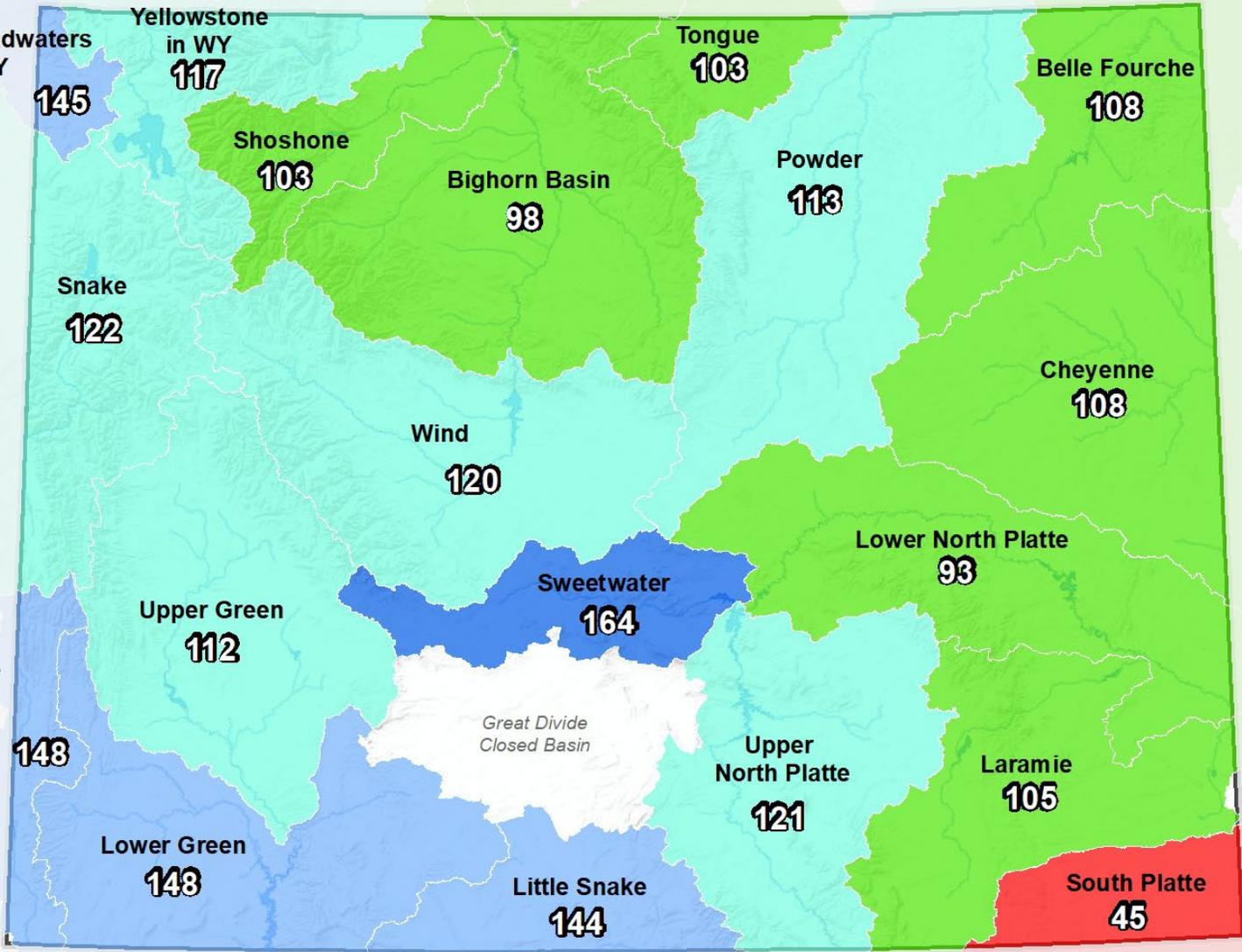
Reservoir Storage Summary For The End of December 2022

Basinwide Summary: January 1, 2023 (Medians based On 1991-2020 reference period)	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Alcova	157.5	157.3	156.5	184.3	85%	85%	85%	101%	101%
Angostura	60.9	76.9	90.8	122.1	50%	63%	74%	67%	85%
Belle Fourche	113.1	97.4	124.4	178.4	63%	55%	70%	91%	78%
Big Sandy	6.5	6.1	17.4	38.3	17%	16%	45%	37%	35%
Bighorn Lake	845.3	856.2	895.1	1356.0	62%	63%	66%	94%	96%
Boysen	576.5	592.5	569.8	596.0	97%	99%	96%	101%	104%
Buffalo Bill	463.3	388.8	452.6	646.6	72%	60%	70%	102%	86%
Bull Lake	72.2	87.3	81.6	151.8	48%	57%	54%	88%	107%
Deerfield	14.7	14.8	14.7	15.2	97%	98%	97%	100%	101%
Flaming Gorge Reservoir	2540.1	2899.9	3127.0	3749.0	68%	77%	83%	81%	93%
Fontenelle	193.7	203.0	198.5	344.8	56%	59%	58%	98%	102%
Glendo	221.9	249.8	243.4	506.4	44%	49%	48%	91%	103%
Grassy Lake	10.9	10.0	12.5	15.2	72%	66%	82%	87%	80%
Guernsey	11.2	0.0	11.5	45.6	25%	0%	25%	97%	0%
Jackson Lake	167.9	156.1	615.6	847.0	20%	18%	73%	27%	25%
Keyhole	117.4	127.8	116.7	193.8	61%	66%	60%	101%	110%
Meeks Cabin Reservoir	7.7	9.0	8.6	32.5	24%	28%	26%	90%	105%
Pactola	50.2	51.8	52.3	55.0	91%	94%	95%	96%	99%
Pathfinder	341.2	641.3	555.1	1016.5	34%	63%	55%	61%	116%
Pilot Butte	24.5	21.4	25.3	31.6	78%	68%	80%	97%	85%
Seminole	453.4	296.9	613.2	1016.7	45%	29%	60%	74%	48%
Stateline Reservoir	5.6	5.1	5.7	12.0	47%	43%	48%	98%	90%
Tongue River Res	46.3	42.5	44.7	79.1	59%	54%	57%	104%	95%
Viva Naughton Res	30.8	28.2	31.1	42.4	73%	66%	73%	99%	91%
Woodruff Creek	2.0	1.7	2.0	4.0	50%	44%	49%	102%	89%
Woodruff Narrows Reservoir	13.5	12.0	33.4	57.3	24%	21%	58%	40%	36%

Wyoming Basins Snow Water Equivalent (SWE) % of Median - Includes Manual Snow Course

Current SWE percent of median over 1991-2020 reference period

- <50%
- 50 - 69%
- 70 - 89%
- 90 - 109%
- 110 - 129%
- 130 - 149%
- 150+%



Date: 1/1/2023

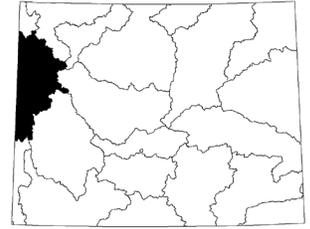
The snow water equivalent percent of median represents the current snow water equivalent found at selected SNOTEL sites and manual snow courses in or near the basin compared to the median value for those sites on this day. Data is based on the first reading of the day.



Provisional data, subject to revision.
* Data is suspect.

Prepared By:
USDA NRCS
Wyoming State Office
Snow Survey

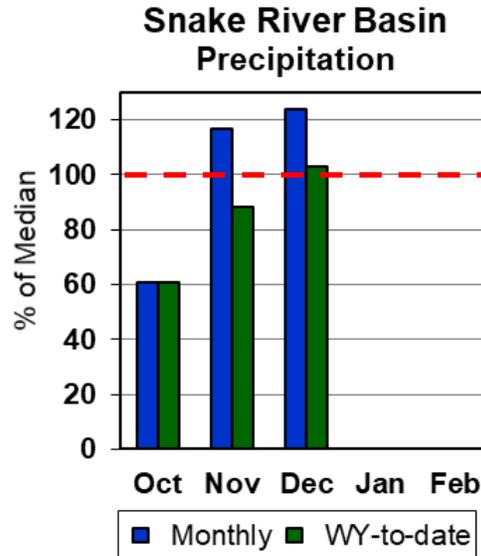
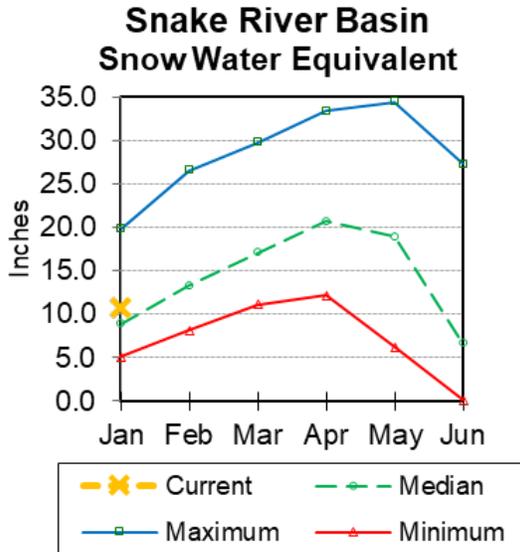
Snake River Basin



Snow

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

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



Precipitation

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

Reservoirs

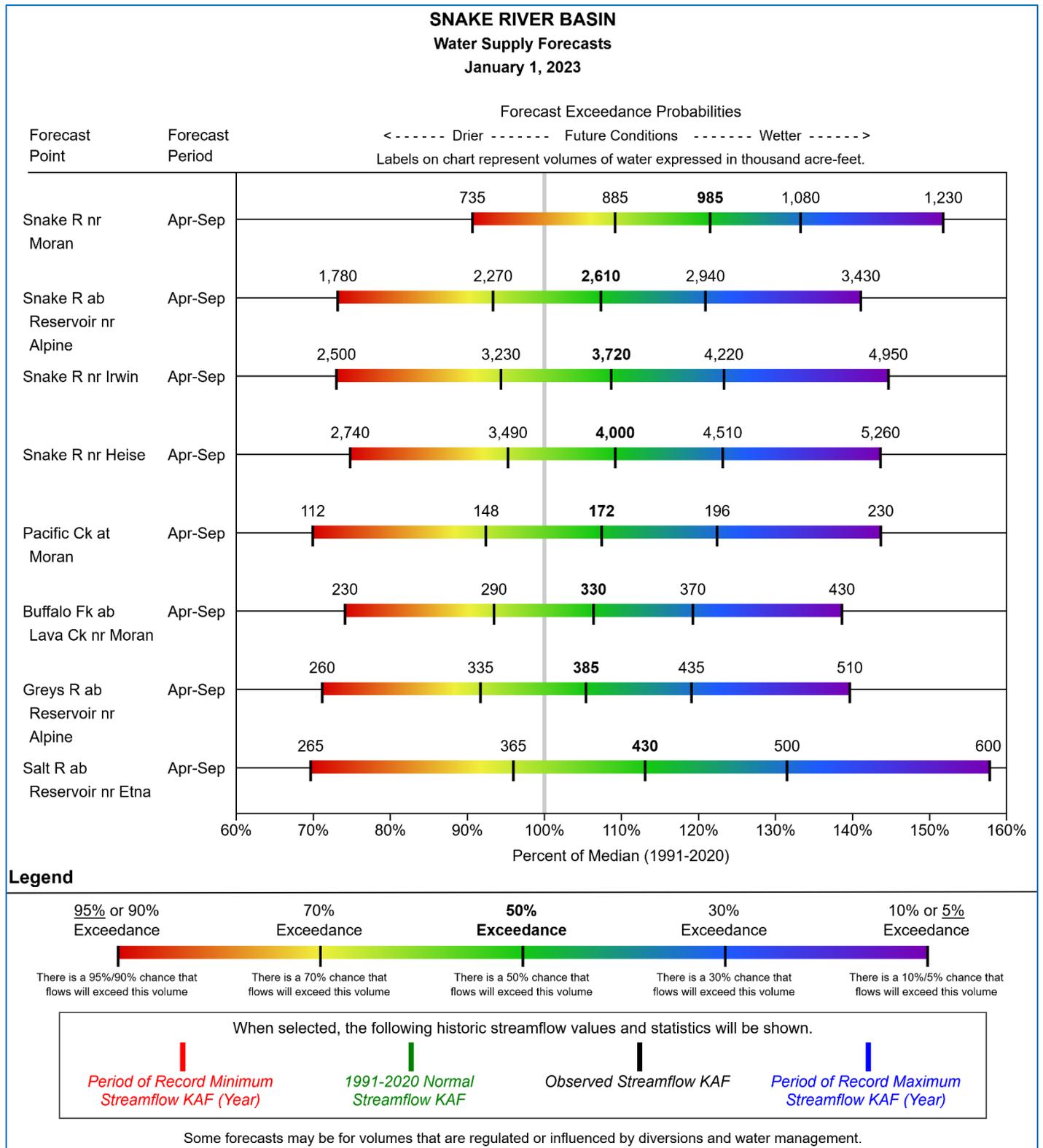
Current reservoir storage is 28% of median for the two storage reservoirs in the basin.

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

Streamflow

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

See the following graph for further information.

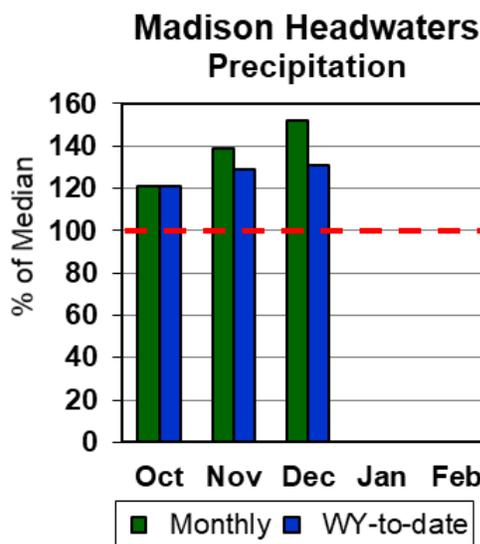
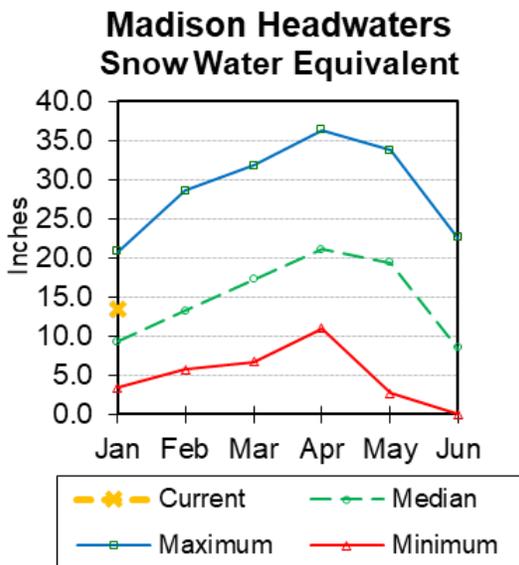


Madison Headwaters in Wyoming



Snow

SWE is 145% 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 152% of median. Water-year-to-date precipitation is at 131% of median.

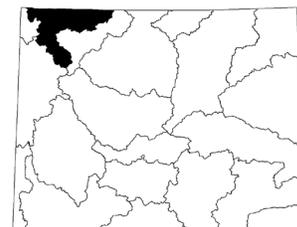
Reservoirs

No reservoir data.

Streamflow

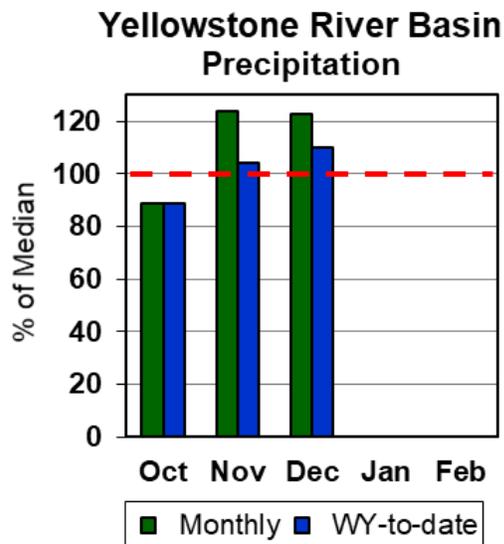
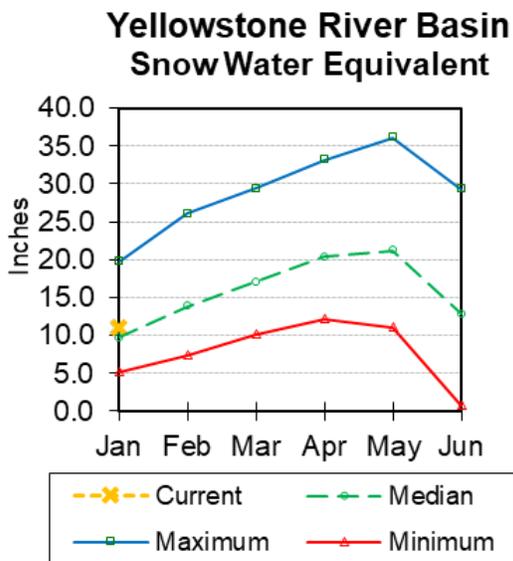
There are no streamflow forecast points for the basin.

Yellowstone River Basin



Snow

SWE in the Yellowstone River Basin is 117% of median. SWE in the Clarks Fork Drainage of the Yellowstone River basin in Wyoming is 109% 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 123% of median. Water-year-to-date precipitation is 110% of median.

Reservoirs

No reservoir data.

Streamflow

The 50% exceedance forecasts for April through September at Clarks Fork of the Yellowstone near Belfry will be 115% of median.

See the following graph for detailed information.

YELLOWSTONE RIVER BASIN

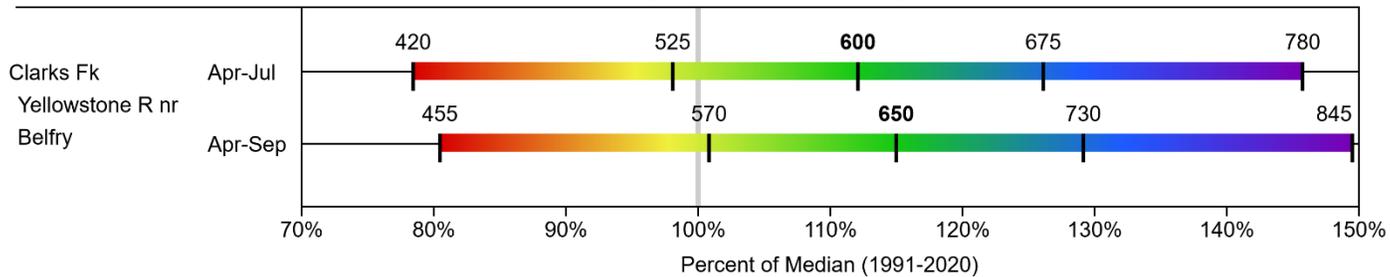
Water Supply Forecasts

January 1, 2023

Forecast Exceedance Probabilities

<----- Drier ----- Future Conditions ----- Wetter ----->

Labels on chart represent volumes of water expressed in thousand acre-feet.

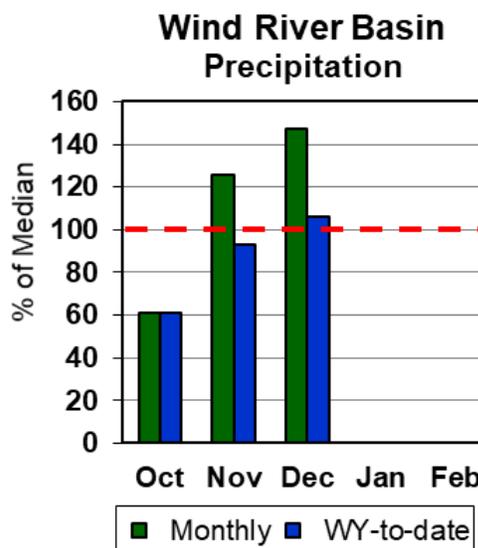
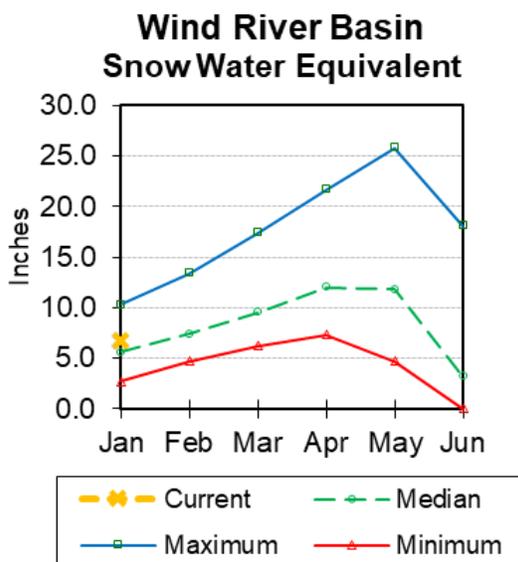


Wind River Basin



Snow

Wind River basin SWE (above Boysen Reservoir) is 120% of median. SWE in the Wind River above Dubois is 105% of median. Little Wind SWE is 127% of median, and Popo Agie drainage SWE is 144% of median. *See Appendix at the end of this report for a detailed listing of snow course information.*



Precipitation

December precipitation for the basin was 147% of median. Water year-to-date precipitation is 106% of median.

Reservoirs

Current storage is 99% 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	24.5	21.4	25.3	31.6	78%	68%	80%	97%	85%
Boysen	576.5	592.5	569.8	596.0	97%	99%	96%	101%	104%
Bull Lake	72.2	87.3	81.6	151.8	48%	57%	54%	88%	107%
Basin Index					86%	90%	87%	99%	104%
# of reservoirs					3	3	3	3	3

Streamflow

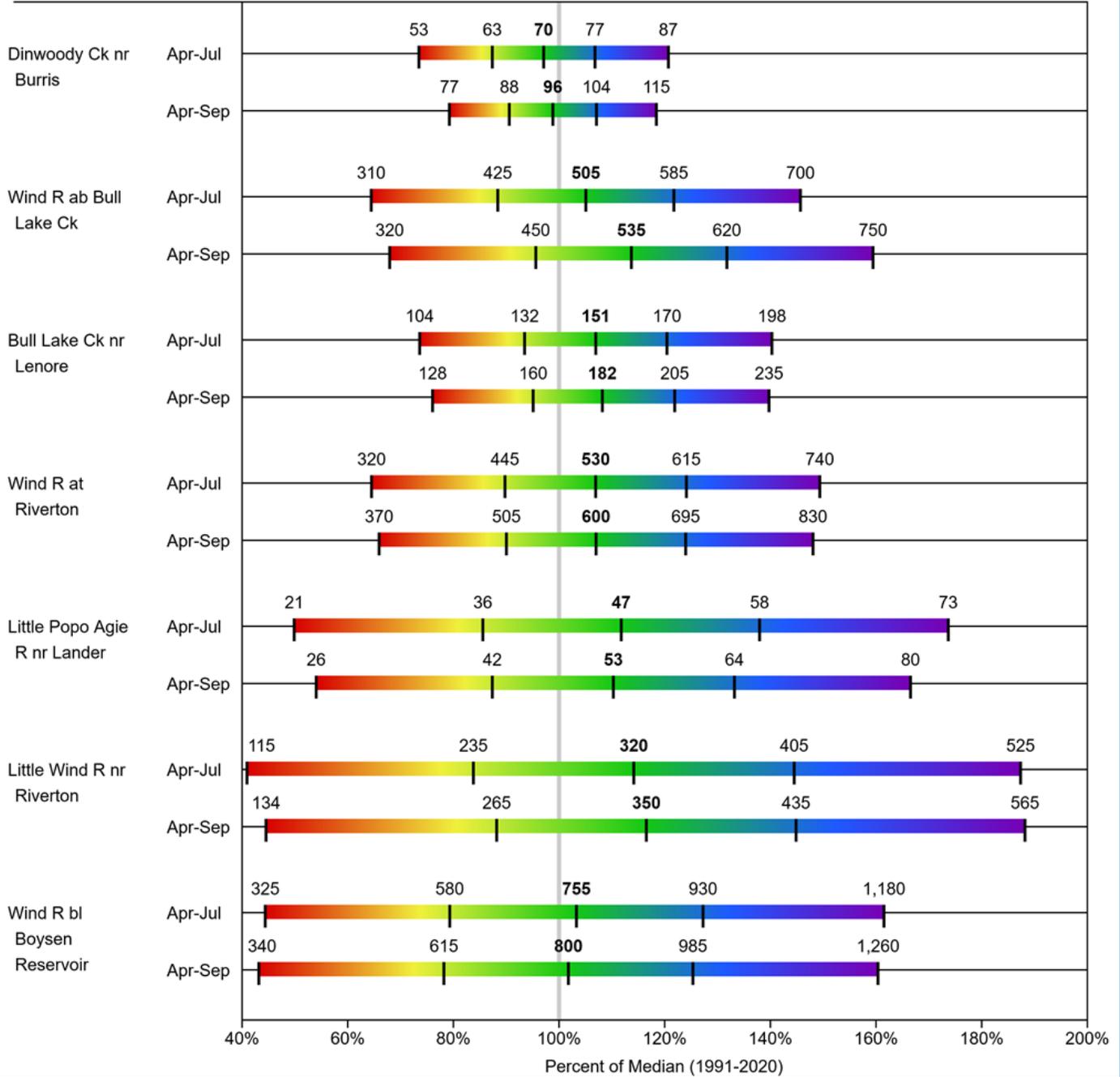
The 50% exceedance forecasts for the April through September runoff period are near normal for the Wind River. The Wind River above Bull Lake Creek will yield about 114% of median. Little Popo Agie River near Lander should yield around 110% of median. Little Wind River near Riverton will yield around 117% of median. Boysen Reservoir inflow will yield about 102% of median. *See the following graph for detailed runoff volumes.*

WIND RIVER BASIN
Water Supply Forecasts
January 1, 2023

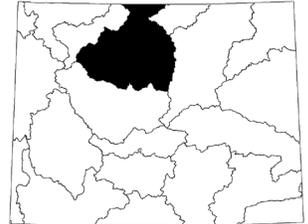
Forecast Exceedance Probabilities

<----- Drier ----- Future Conditions ----- Wetter ----->

Labels on chart represent volumes of water expressed in thousand acre-feet.

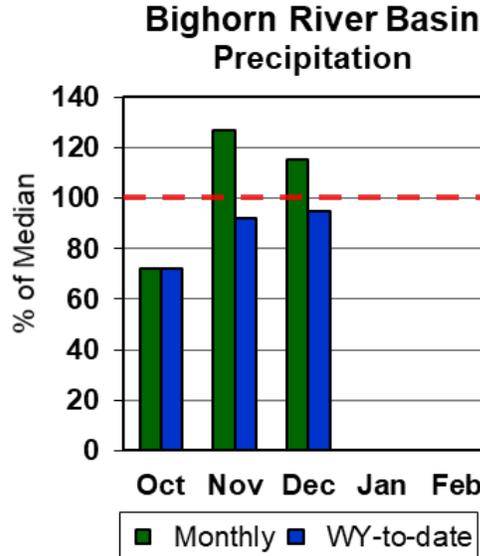
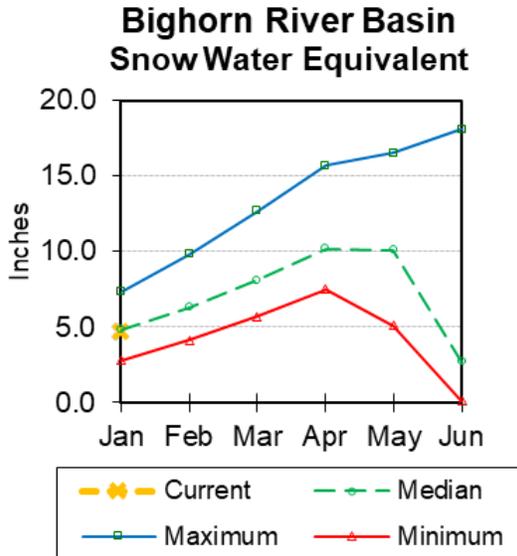


Bighorn River Basin



Snow

The Bighorn River Basin SWE (above Bighorn Reservoir) is 98% of median. The Greybull River SWE is at 87% of median. Shell Creek SWE is at 84% of median. *See Appendix at the end of this report for a detailed listing of snow course information.*



Precipitation

Last month's precipitation was 115% of median. Year-to-date precipitation is 95% of median.

Reservoirs

Current reservoir storage in the basin is 94% of median.

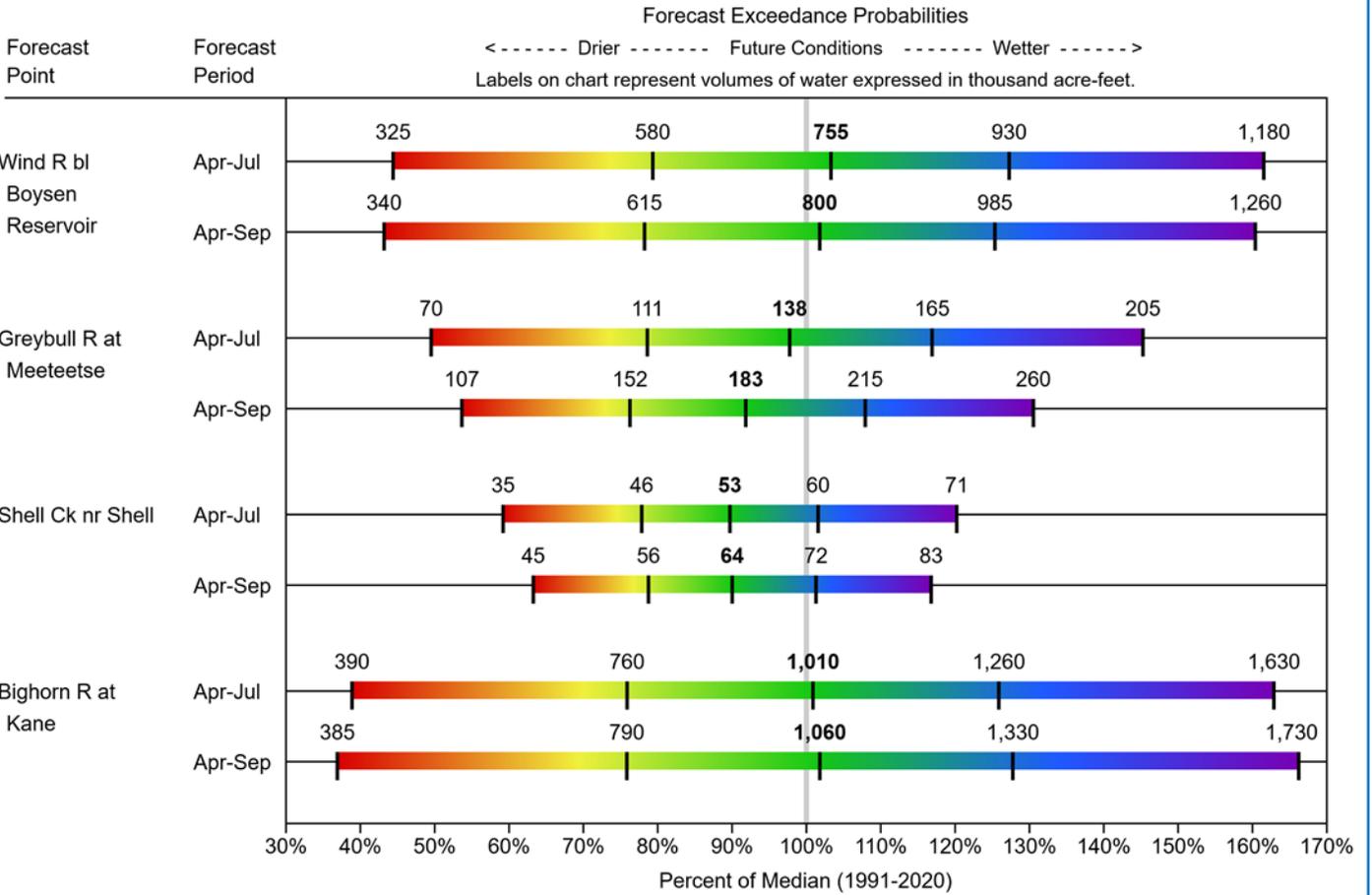
	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Bighorn Lake	845.3	856.2	895.1	1356.0	62%	63%	66%	94%	96%
Basin Index					62%	63%	66%	94%	96%
# of reservoirs					1	1	1	1	1

Streamflow

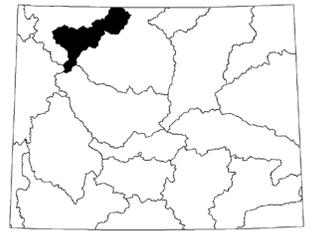
The 50% exceedance forecasts for the April through September runoffs are near normal. The Greybull River near Meeteetse should yield 92% of median. Shell Creek near Shell should also yield around 90% of median. The Bighorn River at Kane should yield around 102% of median.

See the following graph for detailed runoff volumes.

BIGHORN RIVER BASIN
Water Supply Forecasts
January 1, 2023

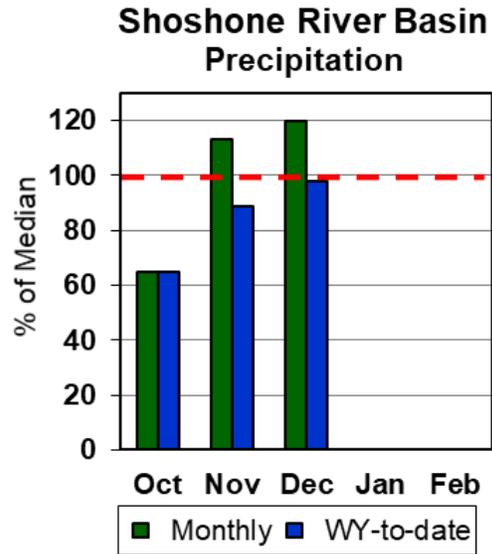
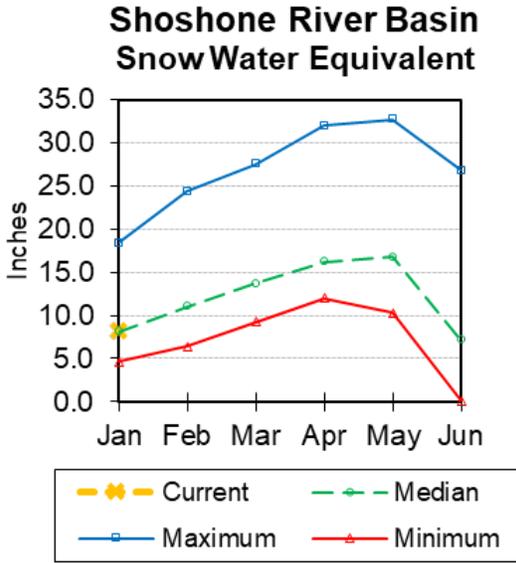


Shoshone River Basin



Snow

Snow Water Equivalent (SWE) is 103% 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 120% of median. The basin year-to-date precipitation is now 98% 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	463.3	388.8	452.6	646.6	72%	60%	70%	102%	86%
Basin Index					72%	60%	70%	102%	86%
# of reservoirs					1	1	1	1	1

Streamflow

The 50% exceedance forecasts for the April through September period are near normal for the basin. The North Fork Shoshone River at Wapiti should yield 102% of median. The South Fork of the Shoshone River near Valley should yield 96% of median. The Buffalo Bill Reservoir inflow should yield 102% of median. *See the following graph for detailed runoff volumes.*

SHOSHONE RIVER BASIN

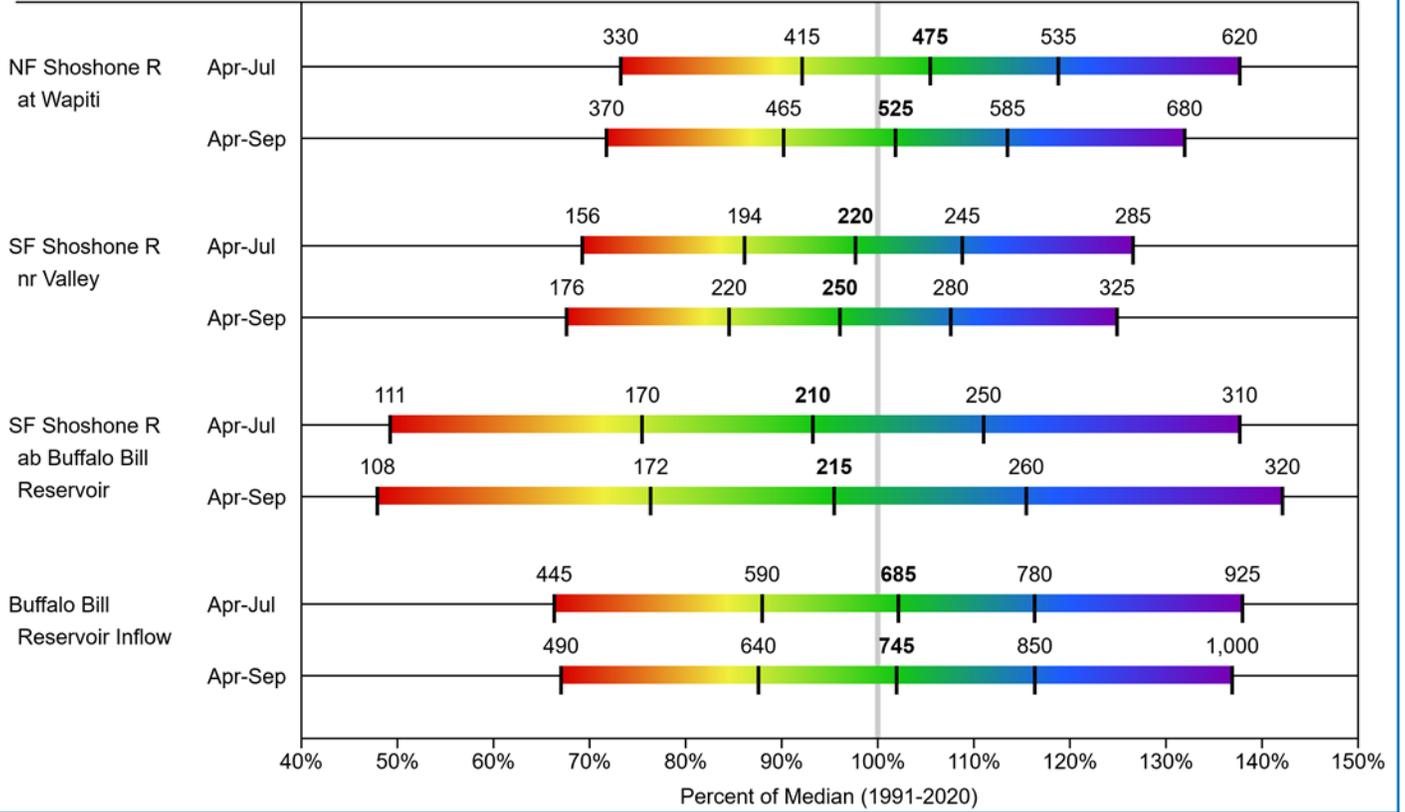
Water Supply Forecasts

January 1, 2023

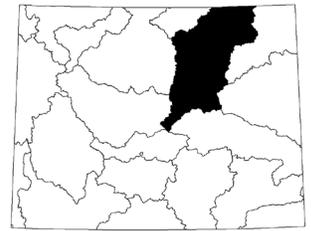
Forecast Exceedance Probabilities

<----- Drier ----- Future Conditions ----- Wetter ----->

Labels on chart represent volumes of water expressed in thousand acre-feet.

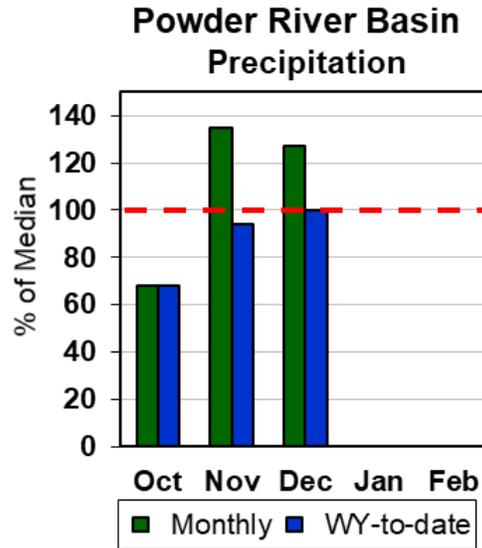
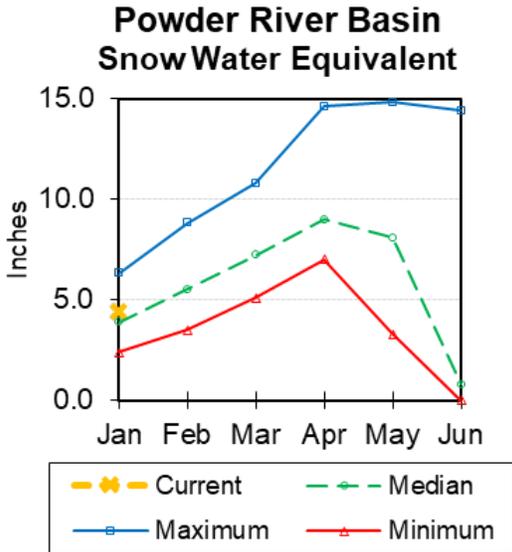


Powder River Basin



Snow

Powder River Basin SWE is at 113% of median. SWE in the Clear Creek drainage is 100% of median. *See appendix at the end of this report for a detailed listing of snow course information.*



Precipitation

Last month's precipitation was 127% of median in the basin. Year-to-date precipitation is 100% of median.

Reservoirs

No reservoir data for this basin.

Streamflow

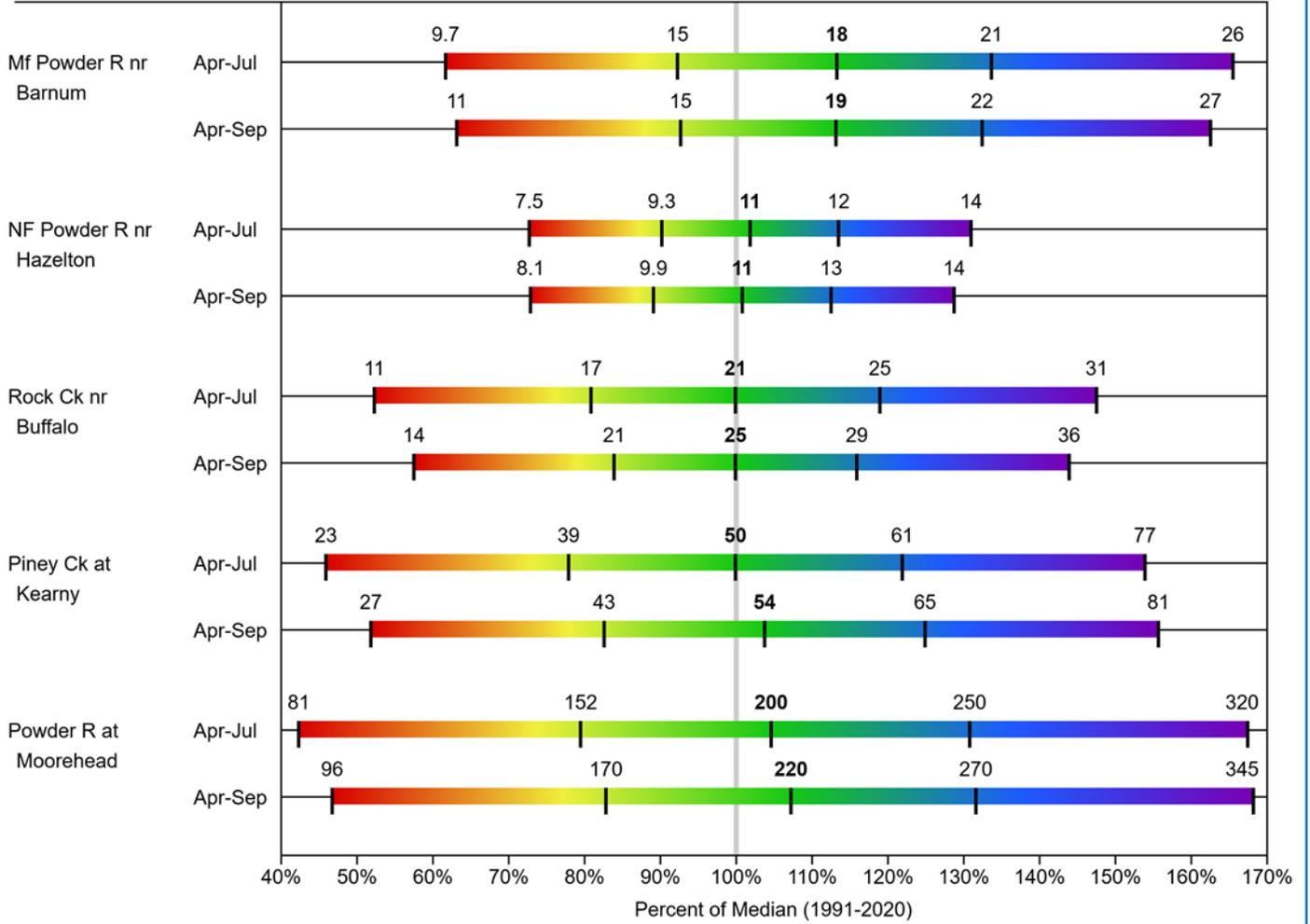
The 50% exceedance forecasts for the April through September period are near normal for the basin. The Middle Fork of the Powder River near Barnum should yield around 113% of median. The North Fork of the Powder River near Hazelton to yield around 101% of median.

See the following graph for detailed runoff volumes.

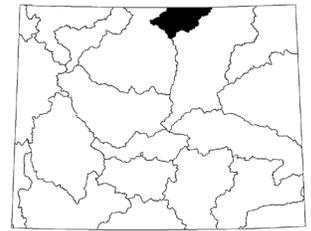
POWDER RIVER BASIN
Water Supply Forecasts
January 1, 2023

Forecast Exceedance Probabilities

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

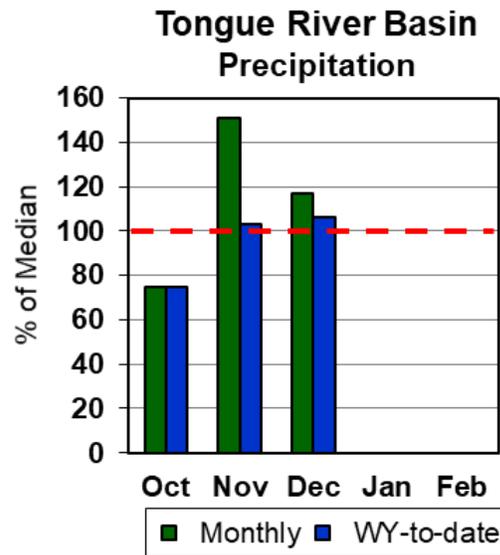
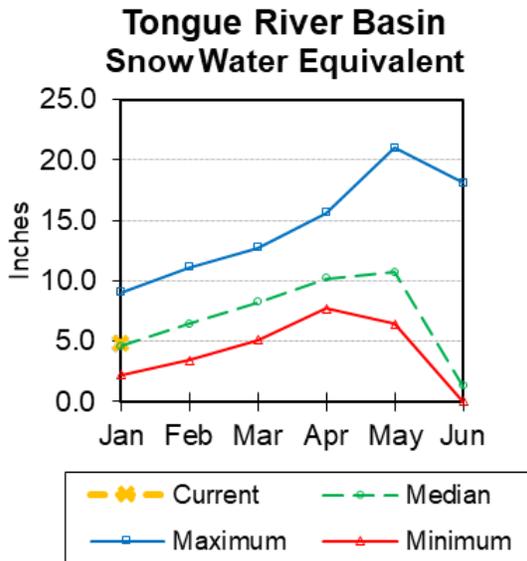


Tongue River Basin



Snow

Upper Tongue River drainage SWE is at 103% of median. *See Appendix at the end of this report for a detailed listing of snow course information.*



Precipitation

Last month's precipitation was 117% of median. Year-to-date precipitation is 106% of median in the basin.

Reservoirs

The Tongue River Reservoir is at 104% of median.

Tongue	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Tongue River Res	46.3	42.5	44.7	79.1	59%	54%	57%	104%	95%
Basin Index						54%	57%	104%	95%
# of reservoirs						1	1	1	1

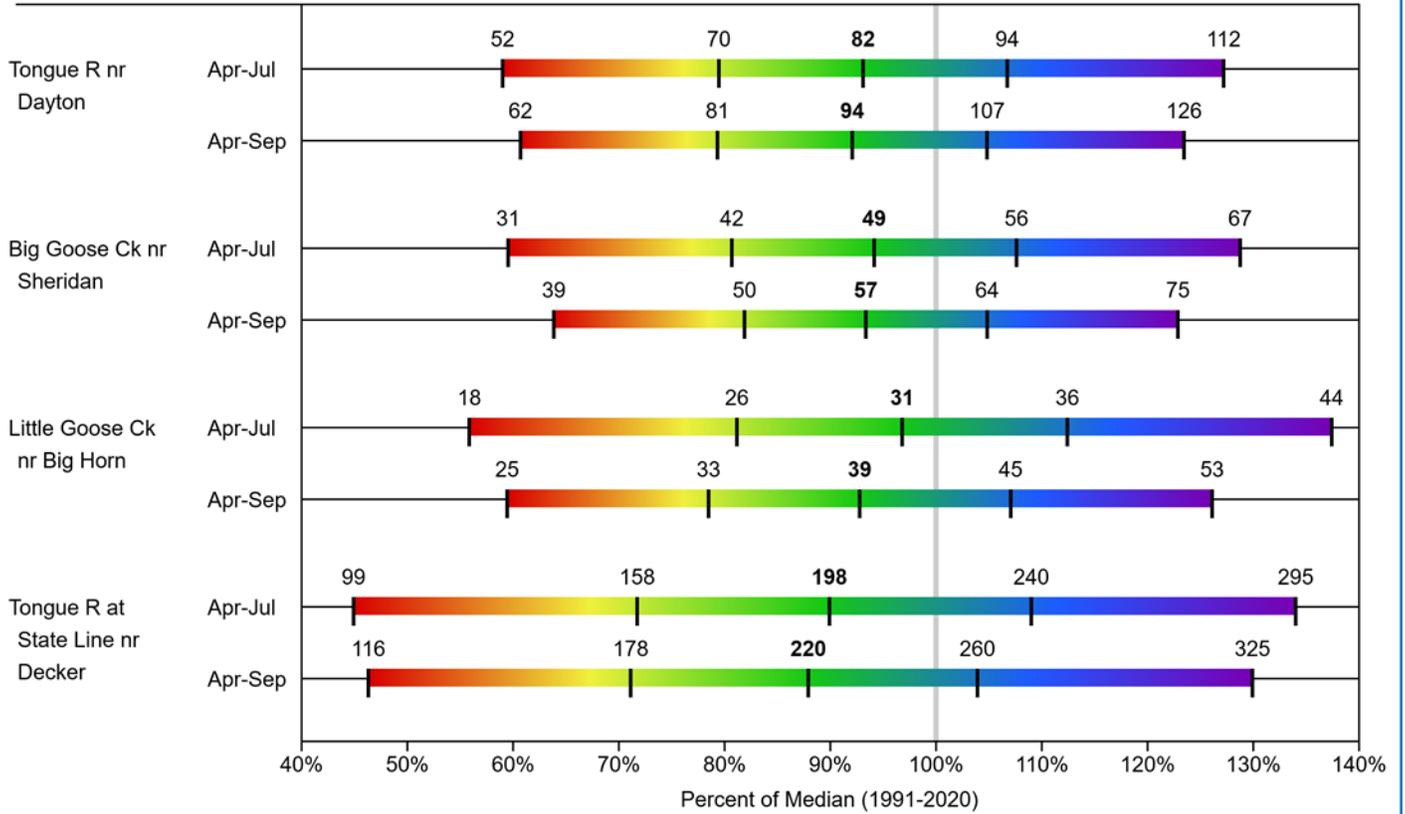
Streamflow

The 50% exceedance forecasts for the April through September period are slightly below normal for the basin. The yield for Tongue River near Dayton is forecasted to be 92% of median. Big Goose Creek near Sheridan should yield around 93%. Little Goose Creek near Bighorn should yield 93% of median. The Tongue River Reservoir Inflow should yield 88% of median. *See below for detailed runoff volumes.*

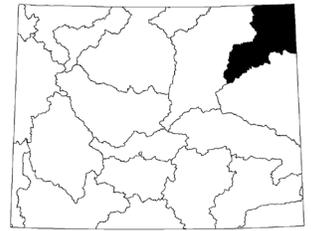
TONGUE RIVER BASIN
Water Supply Forecasts
January 1, 2023

Forecast Exceedance Probabilities

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

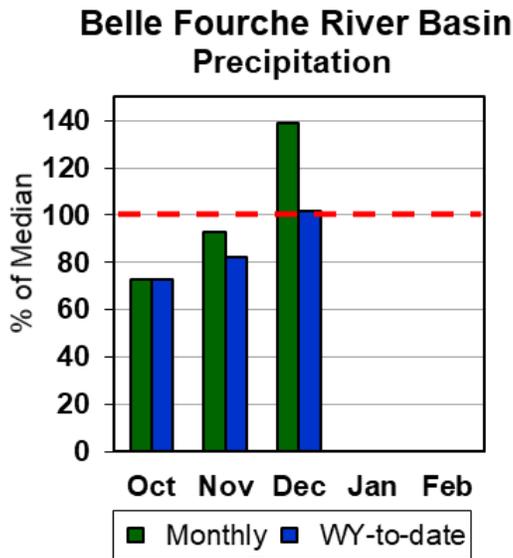
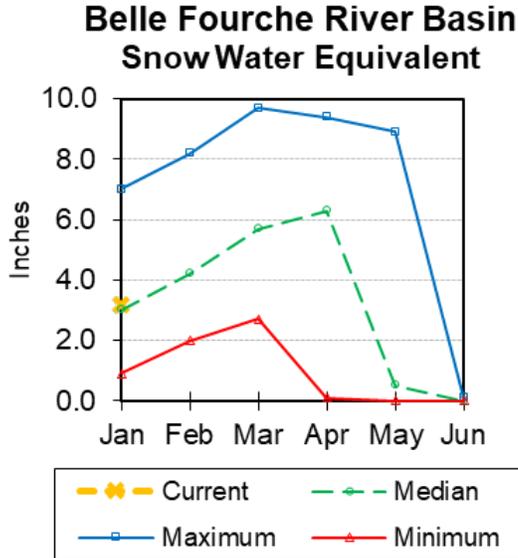


Belle Fourche River Basin



Snow

Currently the Belle Fourche River Basin SWE is at 108% of median. *See Appendix at the end of this report for a detailed listing of snow course information.*



Precipitation

Precipitation for last month was 139% of median in the Belle Fourche basin. Year-to-date precipitation is 102% of median.

Reservoirs

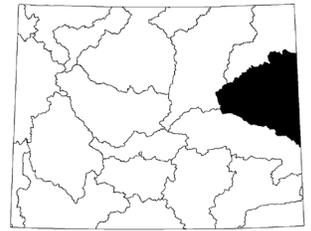
Combined storage for the 2 reservoirs in the basin is at 96% of median.

	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Belle Fourche	113.1	97.4	124.4	178.4	63%	55%	70%	91%	78%
Keyhole	117.4	127.8	116.7	193.8	61%	66%	60%	101%	110%
Basin Index					62%	61%	65%	96%	93%
# of reservoirs					2	2	2	2	2

Streamflow

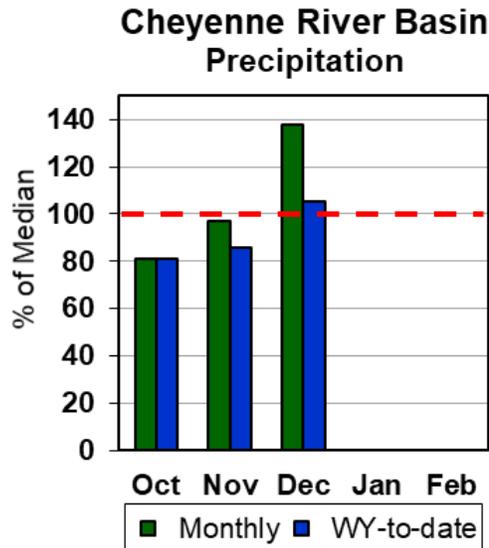
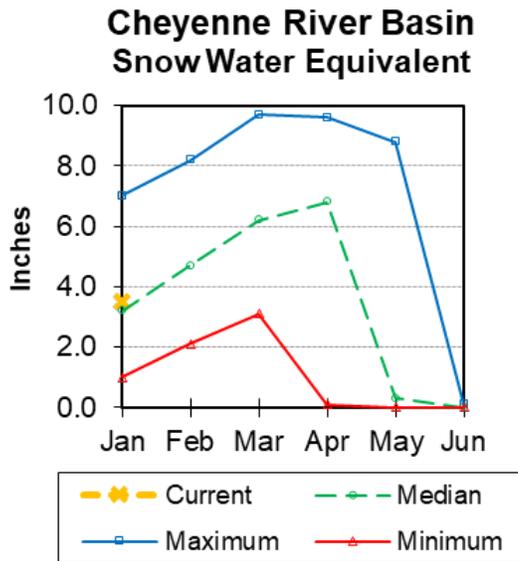
There are no streamflow forecast points for the basin.

Cheyenne River Basin



Snow

Currently SWE for sites in the Cheyenne River Basin are at 108% of median. *See Appendix at the end of this report for a detailed listing.*



Precipitation

Precipitation for last month was 138% of median. Year-to-date precipitation is 105% of median.

Reservoirs

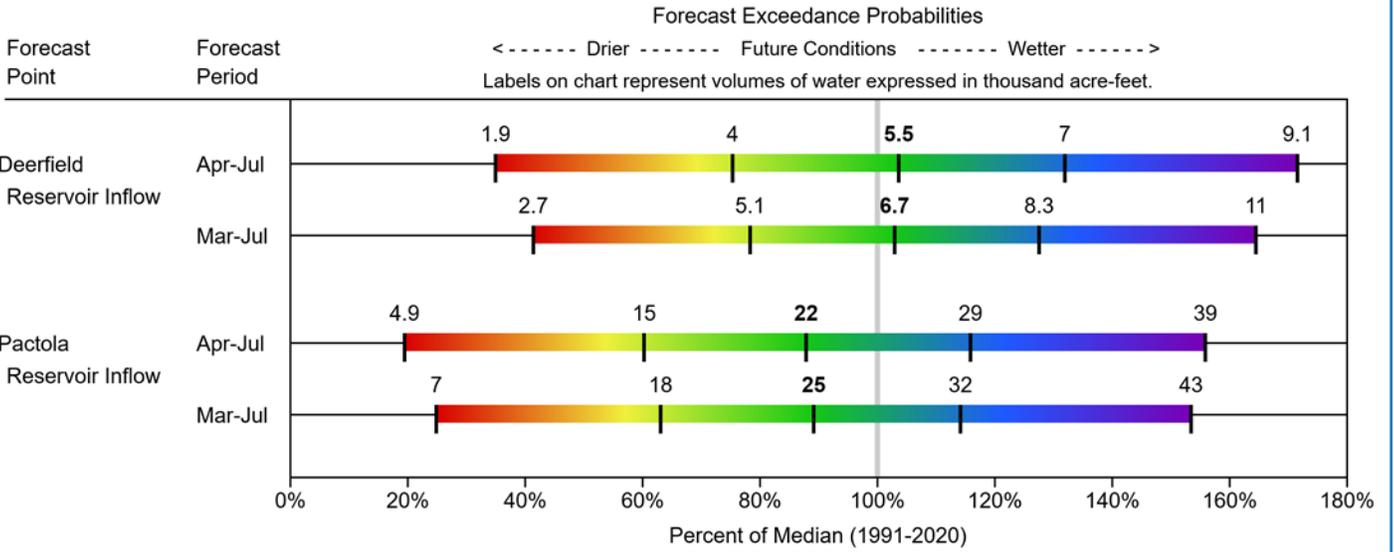
Combined storage for the 3 reservoirs in the basin is at 80% of median.

	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Deerfield	14.7	14.8	14.7	15.2	97%	98%	97%	100%	101%
Pactola	50.2	51.8	52.3	55.0	91%	94%	95%	96%	99%
Angostura	60.9	76.9	90.8	122.1	50%	63%	74%	67%	85%
Basin Index					65%	75%	82%	80%	91%
# of reservoirs					3	3	3	3	3

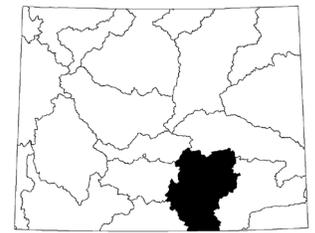
Streamflow

The 50% exceedance forecasts for the April through September period are near normal. The Deerfield Reservoir Inflow yield is forecasted at 104% of median. Pactola Reservoir Inflow yield should be 88% of median. *See the following graph for detailed runoff volumes.*

CHEYENNE RIVER BASIN
Water Supply Forecasts
January 1, 2023



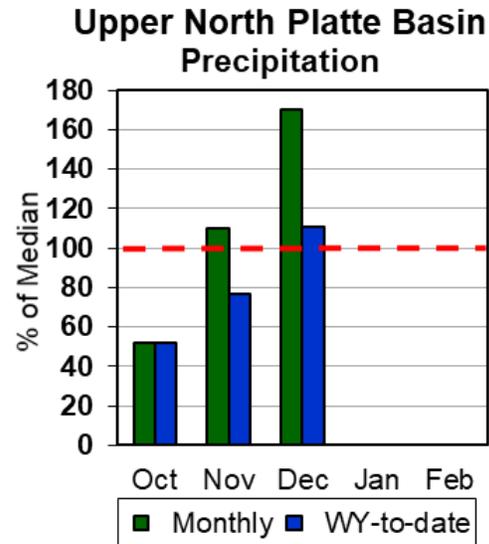
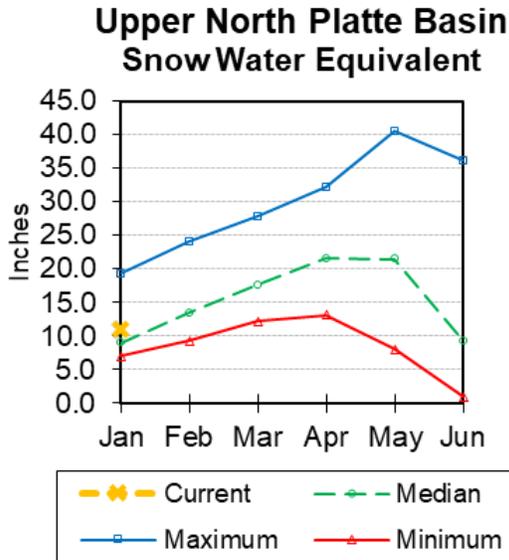
Upper North Platte River Basin



Snow

The Upper North Platte River basin SWE is 121% of median. North Platte above Northgate SWE is 127% of median. Encampment River SWE is 124% of median. Medicine Bow and Rock Creek SWE are 96% of median.

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



Precipitation

Last month's precipitation was 170% of median. Total water-year-to-date precipitation is 111% of median.

Reservoirs

Seminole Reservoir storage is at 74% of median.

	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Seminole	453.4	296.9	613.2	1016.7	45%	29%	60%	74%	48%
Pathfinder	341.2	641.3	555.1	1016.5	34%	63%	55%	61%	116%
Basin Index					39%	46%	57%	68%	80%
# of reservoirs					2	2	2	2	2

Streamflow

The 50% exceedance forecasts for the April through September period are above normal for the Upper North Platte River Basin. The yield for the North Platte River near Northgate will be around 134% of median. The Encampment River near Encampment yield will be about 125%. Rock Creek near Arlington yield will be around 104%. Seminole Reservoir inflow should be about 114% of median. *See the following page for more detailed information on projected runoff.*

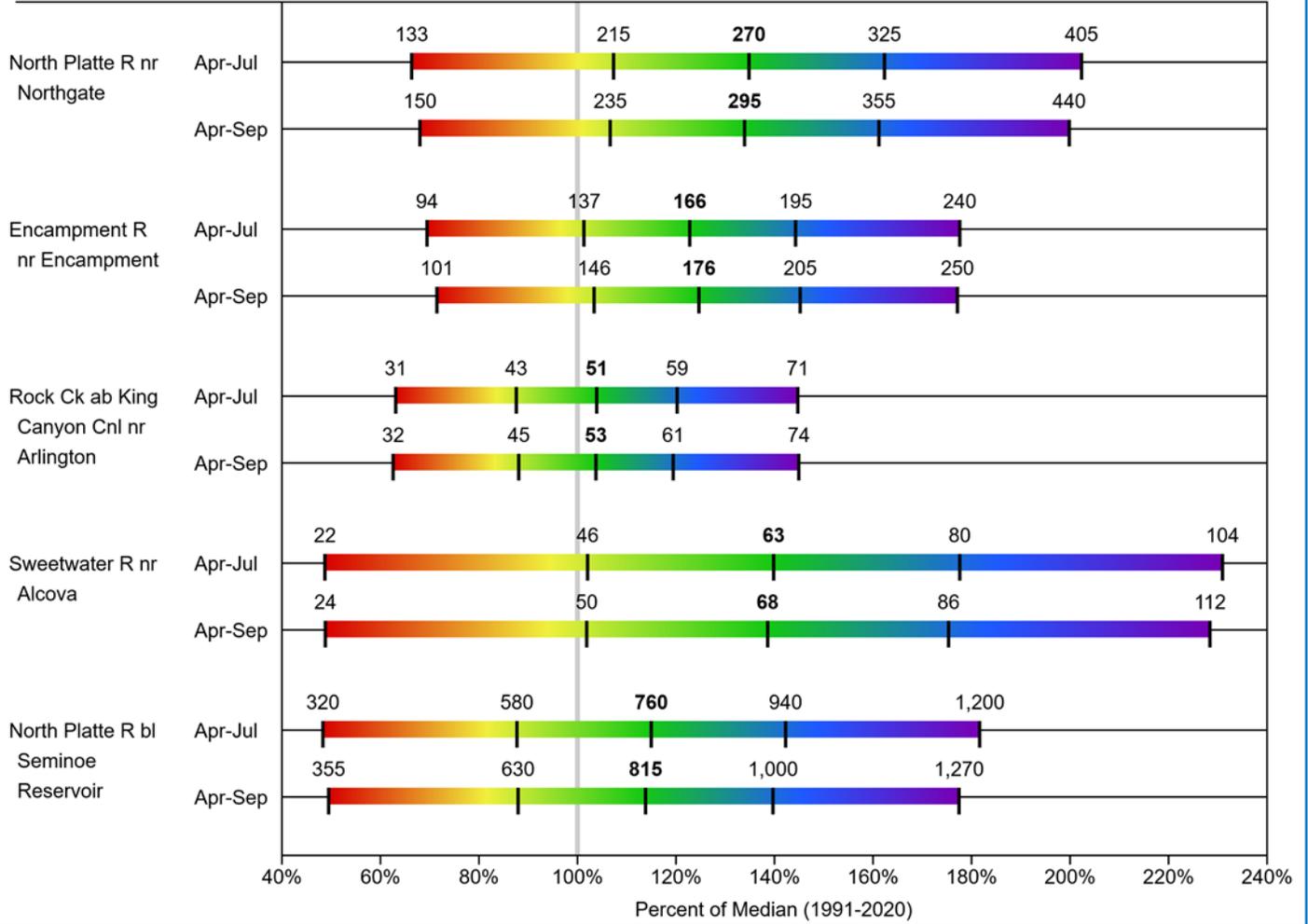
UPPER NORTH PLATTE RIVER BASIN

Water Supply Forecasts

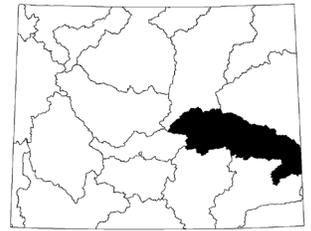
January 1, 2023

Forecast Exceedance Probabilities

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

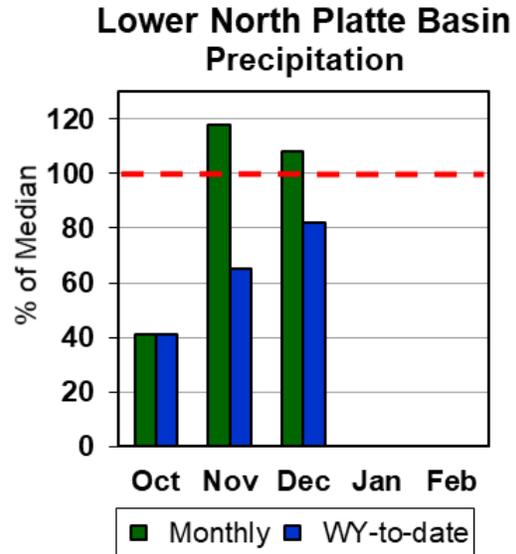
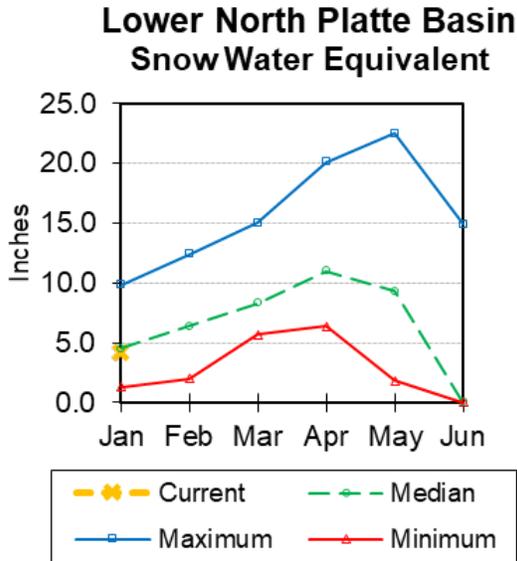


Lower North Platte River Basin



Snow

Currently, SWE in the Lower North Platte River Basin is 93% of median. *See Appendix at the end of this report for a detailed listing of snow course information.*



Precipitation

Last month's precipitation was 108% of median. The water year-to-date precipitation for the basin is currently 82% of median.

Reservoirs

Combined storage for the 3 reservoirs in the basin is at 95% of median.

	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Guernsey	11.2	0.0	11.5	45.6	25%	0%	25%	97%	0%
Glendo	221.9	249.8	243.4	506.4	44%	49%	48%	91%	103%
Alcova	157.5	157.3	156.5	184.3	85%	85%	85%	101%	101%
Basin Index					53%	55%	56%	95%	99%
# of reservoirs					3	3	3	3	3

Streamflow

The 50% exceedance forecasts for the April through September period should be near normal. LaPrele Creek near Douglas is forecasted to yield 83% of median. North Platte River below Guernsey Reservoir should yield around 108% of median. *See the following for more detailed information on projected runoff.*

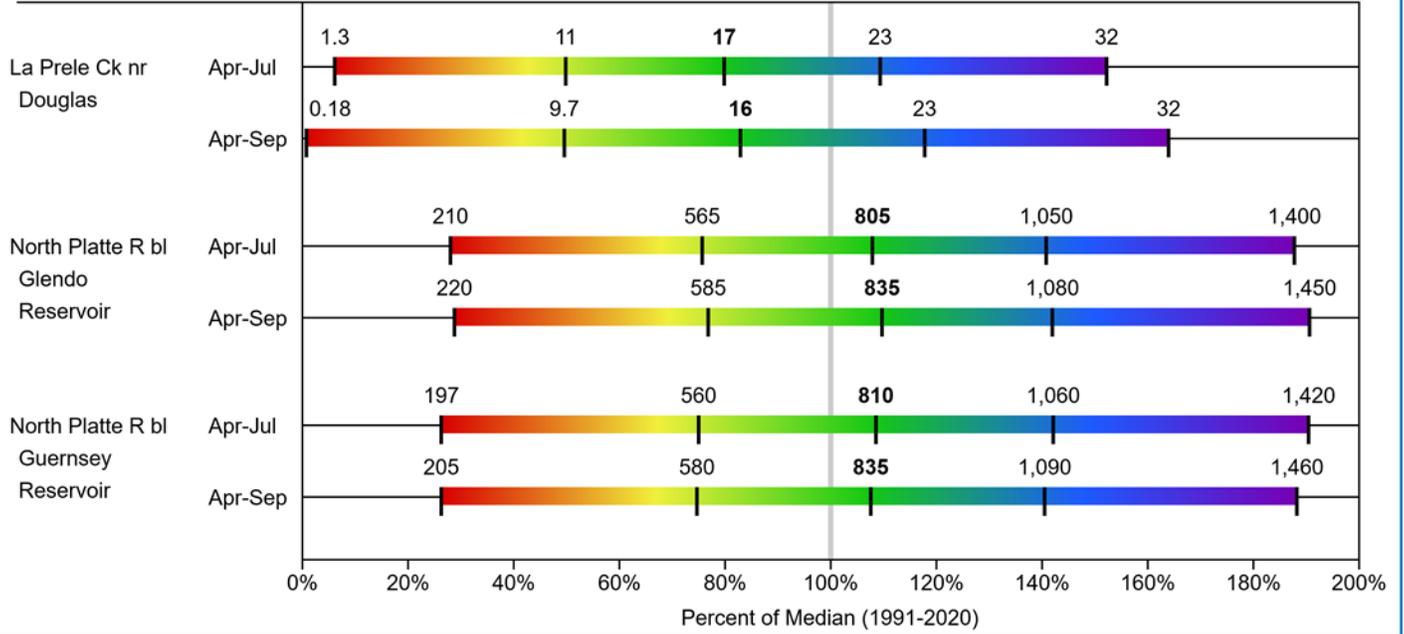
LOWER NORTH PLATTE RIVER BASIN

Water Supply Forecasts

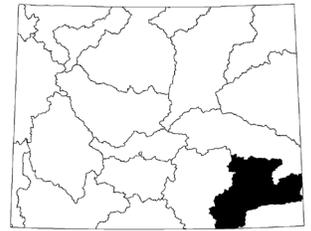
January 1, 2023

Forecast Exceedance Probabilities

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



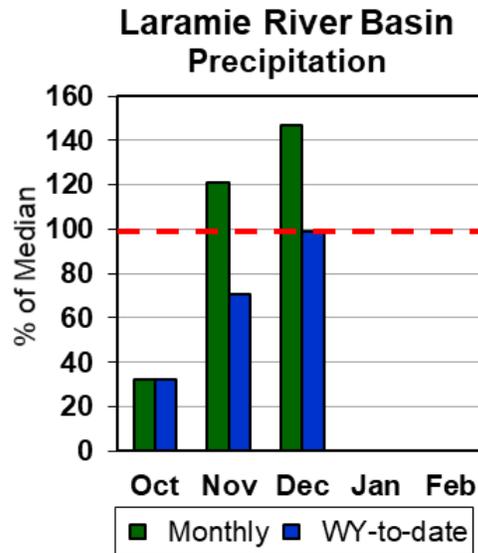
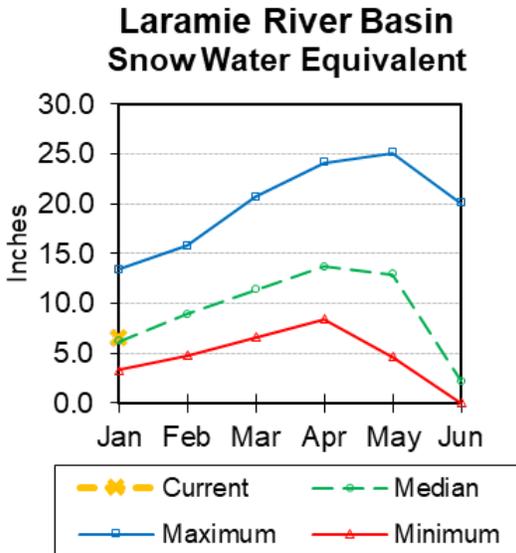
Laramie River Basin



Snow

SWE for the entire Laramie River Basin (above mouth entering North Platte) is 105% of median. SWE for the Laramie River above Laramie is 125% of median. SWE for the Little Laramie River is 99% of median.

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



Precipitation

Last month's precipitation was 147% of median. The water year-to-date precipitation for the basin is currently 99% of median.

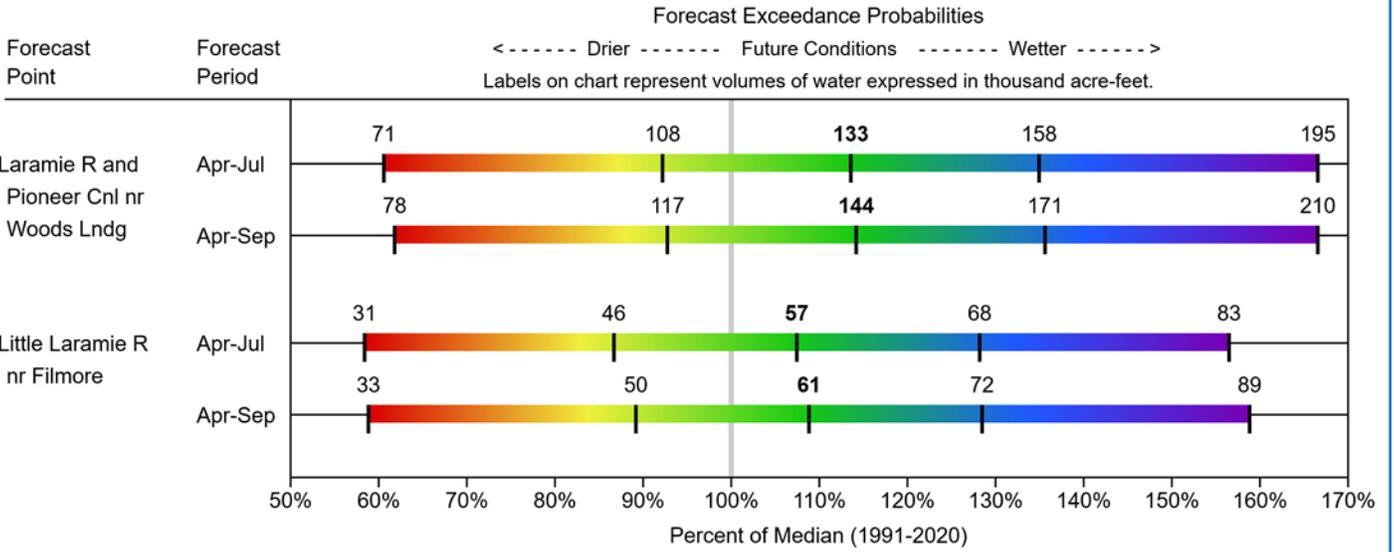
Reservoirs

No reservoir data for this basin.

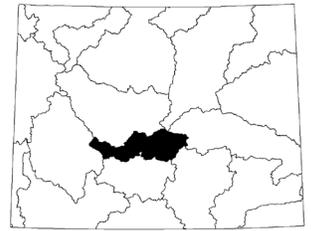
Streamflow

The 50% exceedance forecasts for the April through September period at Laramie River near Woods Landing should yield around 114% of median. The Little Laramie near Filmore should produce about 109% of normal. *See the following graph for detailed runoff volumes.*

LARAMIE RIVER BASIN
Water Supply Forecasts
January 1, 2023

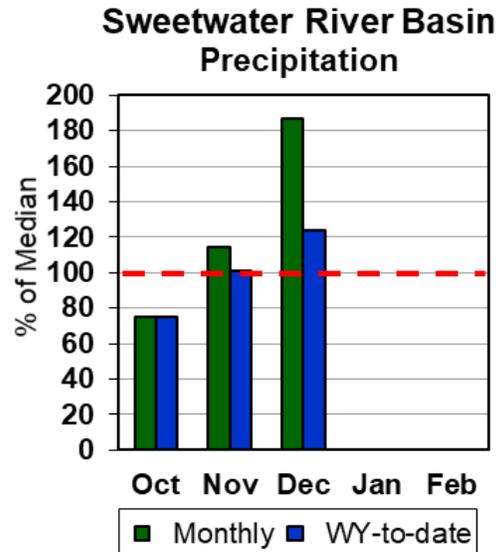
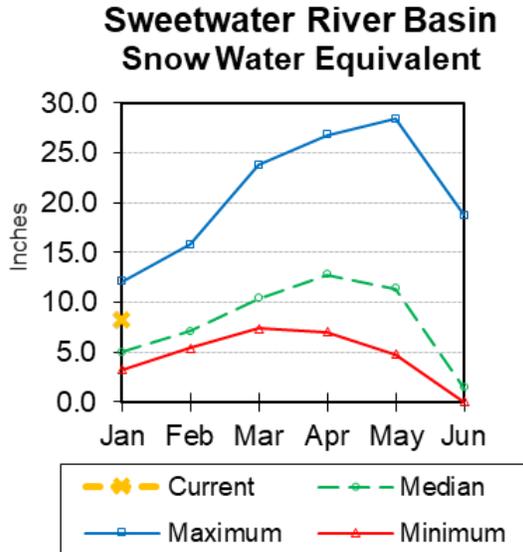


Sweetwater River Basin



Snow

Sweetwater River Basin SWE is at 164% of median. *See Appendix at the end of this report for a detailed listing of snow course information.*



Precipitation

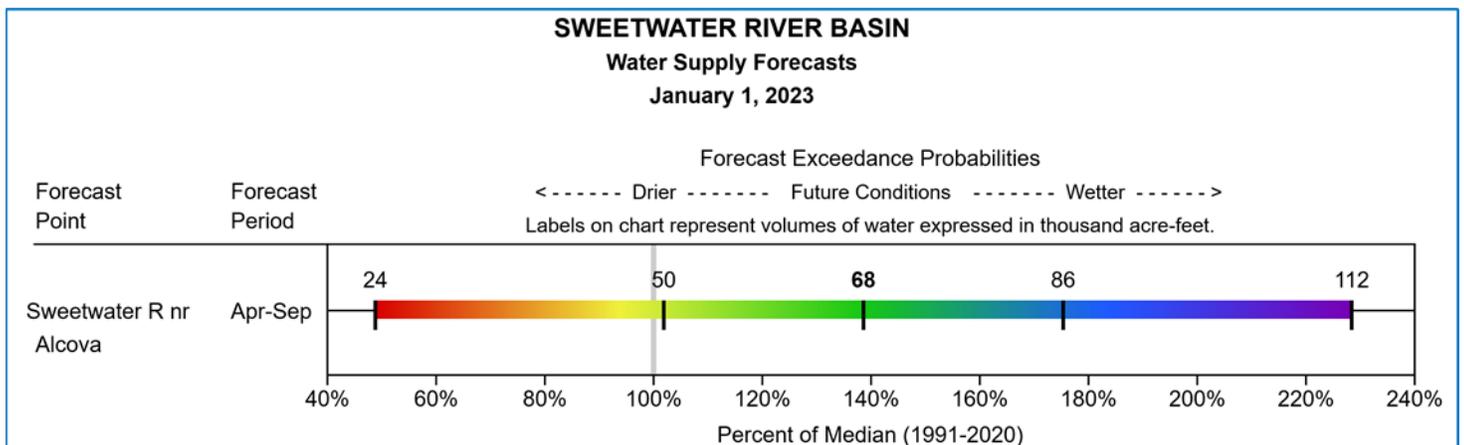
Last month's precipitation was 187% of median. The water year-to-date precipitation for the basin is currently 124% of median.

Reservoirs

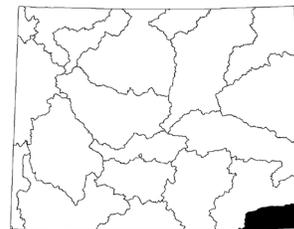
No reservoir data for the basin.

Streamflow

The 50% exceedance forecasts for the April through September period in the Sweetwater Basin is well above normal. The Sweetwater River near Alcova will yield about 139% of median. *See below for detailed information on projected runoff.*

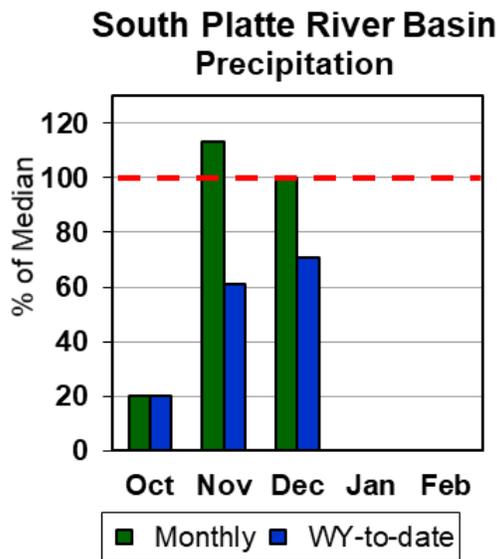
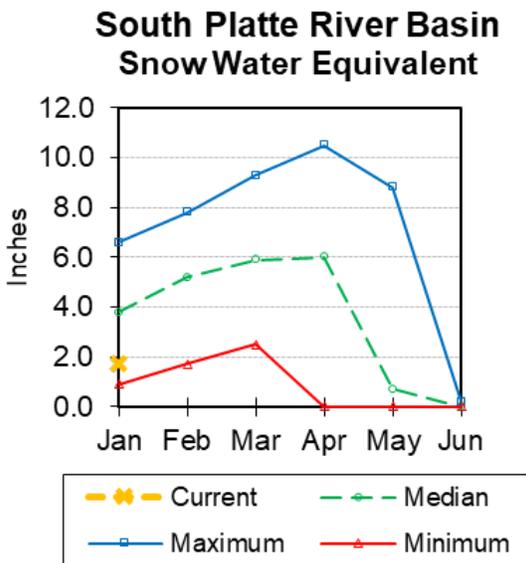


South Platte River Basin (WY)



Snow

The median SWE for sites in the South Platte River Basin is 45% of median. *See Appendix at the end of this report for a detailed listing of snow course information.*



Precipitation

Last month's precipitation was 100% of median. The water year-to-date precipitation for the basin is currently 71% of median.

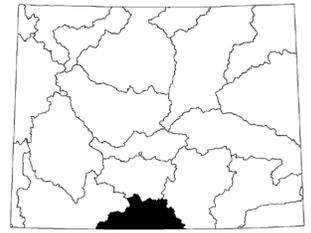
Reservoirs

No reservoir data for the basin.

Streamflow

There are no streamflow forecast points for the basin.

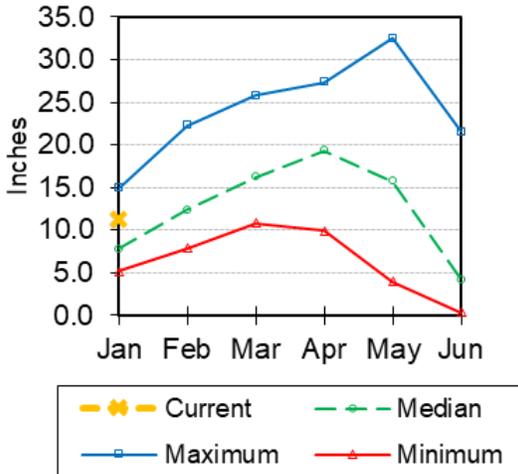
Little Snake River Basin



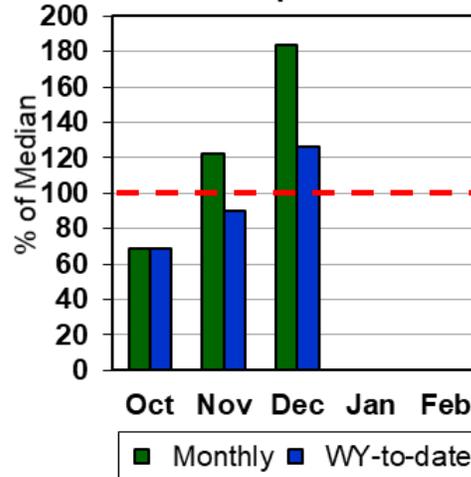
Snow

Little Snake River drainage SWE is 144% of median. See *Appendix at the end of this report for a detailed listing of snow course information.*

**Little Snake River Basin
Snow Water Equivalent**



**Little Snake River Basin
Precipitation**



Precipitation

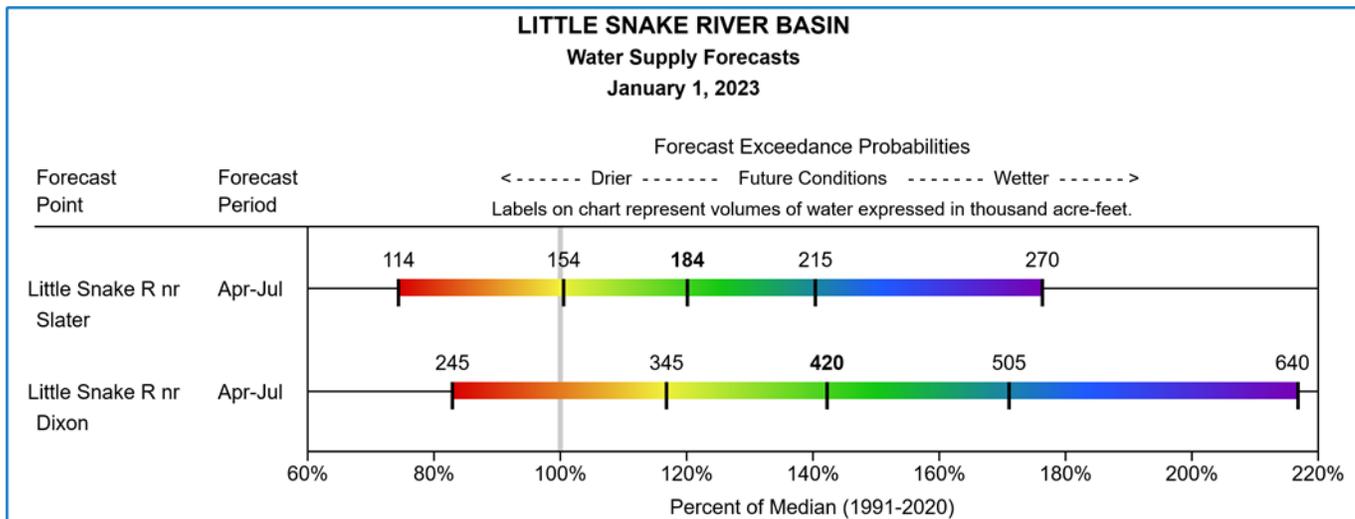
Precipitation across the basin was 184% of median. The Little Snake River Basin water-year-to-date precipitation is currently 126% of median.

Reservoirs

No reservoir data for the basin.

Streamflow

The 50% exceedance forecasts for the April through July period will be well above normal. The Little Snake River near Slater is forecasted to yield around 120% of median. *See below for detailed information on projected runoff.*

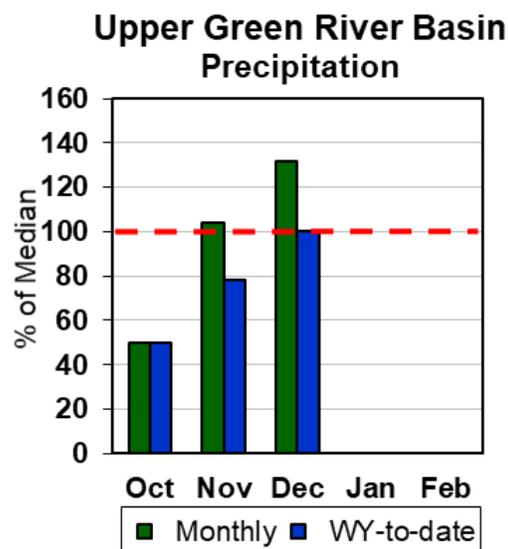
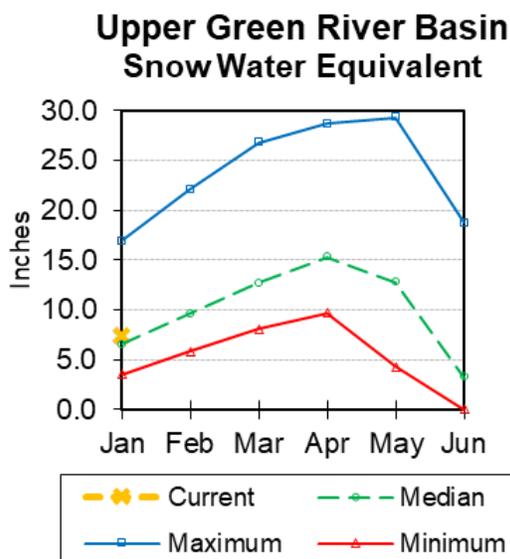


Upper Green River Basin



Snow

The Upper Green River Basin SWE (above Fontenelle Reservoir) is 112% of median. Green River Basin above Warren Bridge SWE is 108% of median. West Side of Upper Green River Basin SWE is 115% 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 132% of median last month. Water year-to-date precipitation is 100% of median.

Reservoir

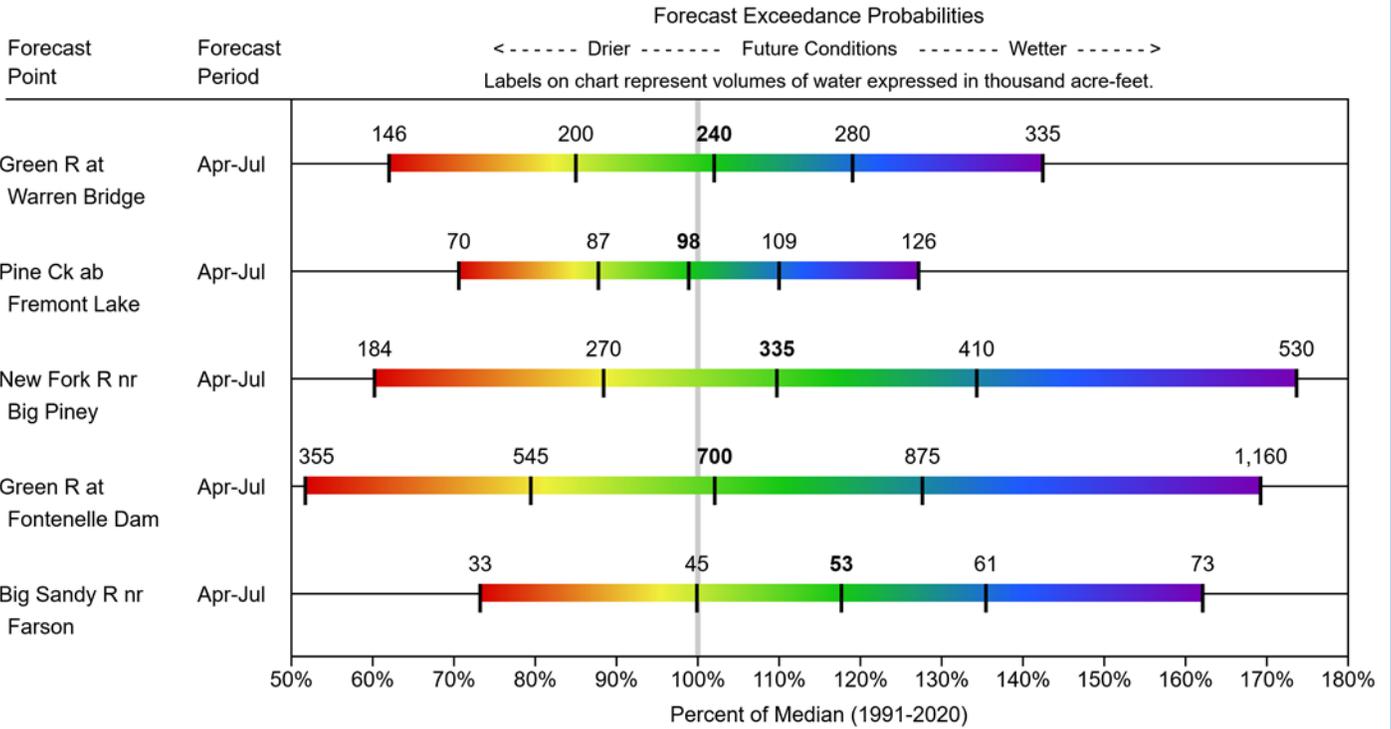
Combined water storage in the basin was at 93% of median for the 2 reservoirs.

	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Big Sandy	6.5	6.1	17.4	38.3	17%	16%	45%	37%	35%
Fontenelle	193.7	203.0	198.5	344.8	56%	59%	58%	98%	102%
Basin Index					52%	55%	56%	93%	97%
# of reservoirs					2	2	2	2	2

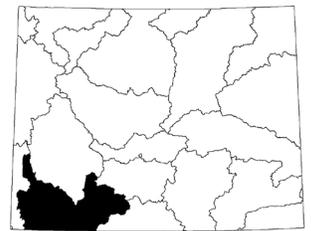
Streamflow

The 50% exceedance forecasts for the April through July period will be near normal. The yield on the Green River at Warren Bridge is about 102% of median. New Fork River near Big Piney yield will be around 110% of median. Green River at Fontenelle Dam is estimated to be about 102% of median. *See the following for a more detailed forecast.*

UPPER GREEN RIVER BASIN
Water Supply Forecasts
January 1, 2023



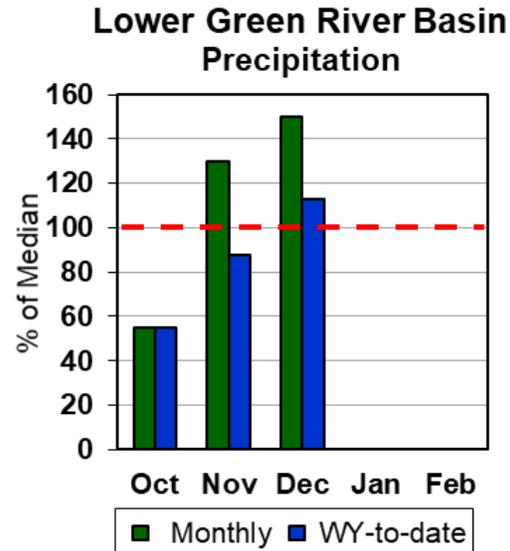
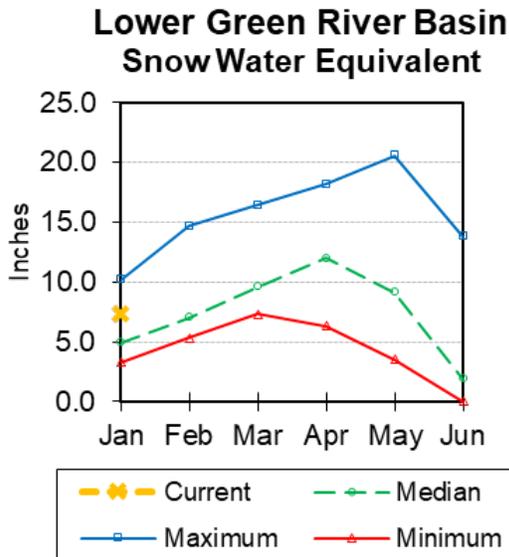
Lower Green River Basin



Snow

Lower Green River Basin SWE is at 148% of median. Hams Fork drainage SWE is 127% of median. Blacks Fork drainage SWE is 174% 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 150% of median. The basin year-to-date precipitation is currently 113% of median.

Reservoirs

Combined storage for the 4 reservoirs in the basin was at 81% of median at the end of last month.

Lower Green	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Viva Naughton Res	30.8	28.2	31.1	42.4	73%	66%	73%	99%	91%
Stateline Reservoir	5.6	5.1	5.7	12.0	47%	43%	48%	98%	90%
Flaming Gorge Res.	2540.1	2899.9	3127.0	3749.0	68%	77%	83%	81%	93%
Meeks Cabin Res.	7.7	9.0	8.6	32.5	24%	28%	26%	90%	105%
Basin Index					67%	77%	83%	81%	93%
# of reservoirs					4	4	4	4	4

Streamflow

The following are the 50% exceedance forecasts for the April through July period. The Green River near Green River will yield about 103% of median. The Flaming Gorge Reservoir inflow will be about 98% of median. *See the following page for more detailed information on projected runoff.*

LOWER GREEN RIVER BASIN

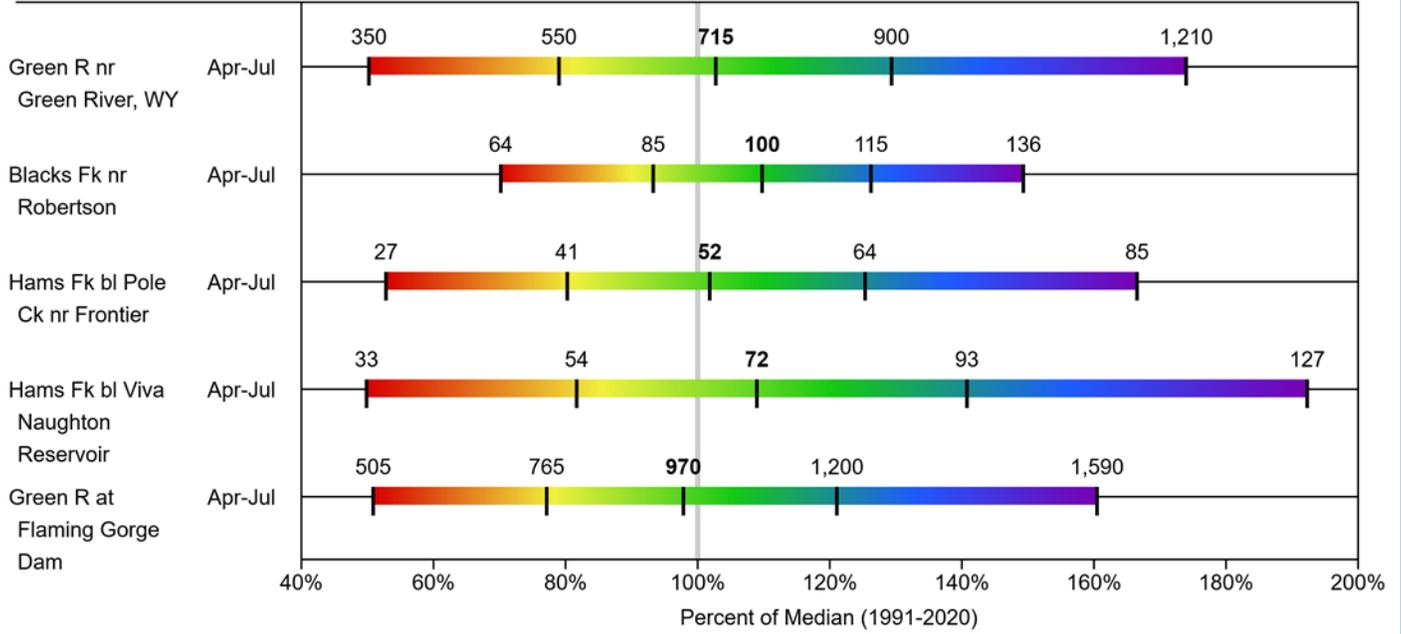
Water Supply Forecasts

January 1, 2023

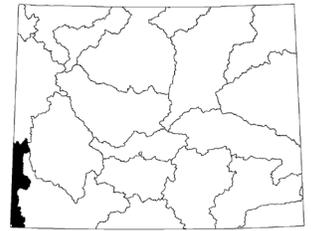
Forecast Exceedance Probabilities

<----- Drier ----- Future Conditions ----- Wetter ----->

Labels on chart represent volumes of water expressed in thousand acre-feet.



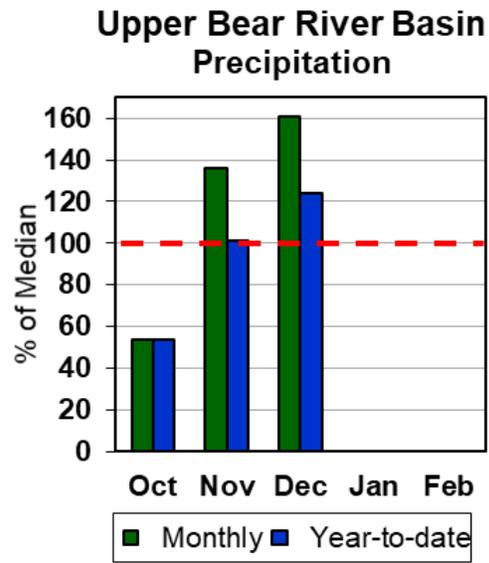
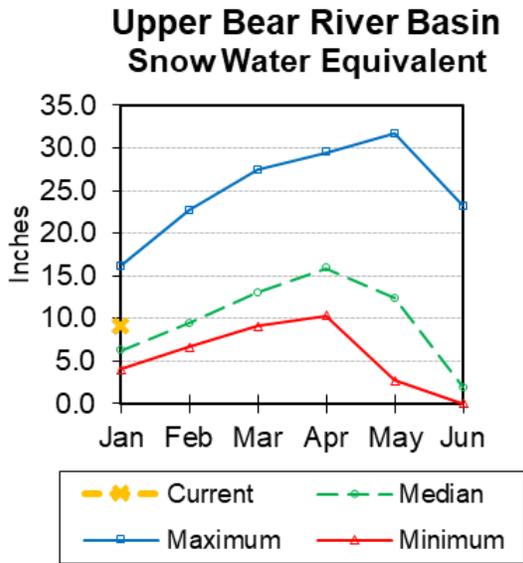
Upper Bear River Basin



Snow

SWE in the Upper Bear River Basin of Utah is 148% of median. SWE in the Wyoming portion of the Bear River drainage (Smiths and Thomas Forks) is 130% of median.

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



Precipitation

Precipitation for last month was 161% of median in the basin. The year-to-date precipitation for the basin is 124% of median.

Reservoirs

No reservoir data for the basin.

Streamflow

The 50% exceedance forecasts for the April through September period are well above normal. The Bear River above Reservoir near Woodruff should yield around 142% of median. The Smiths Fork River near Border Jct. will yield around 113%. *See the following page for more detailed information on projected runoff.*

UPPER BEAR RIVER BASIN

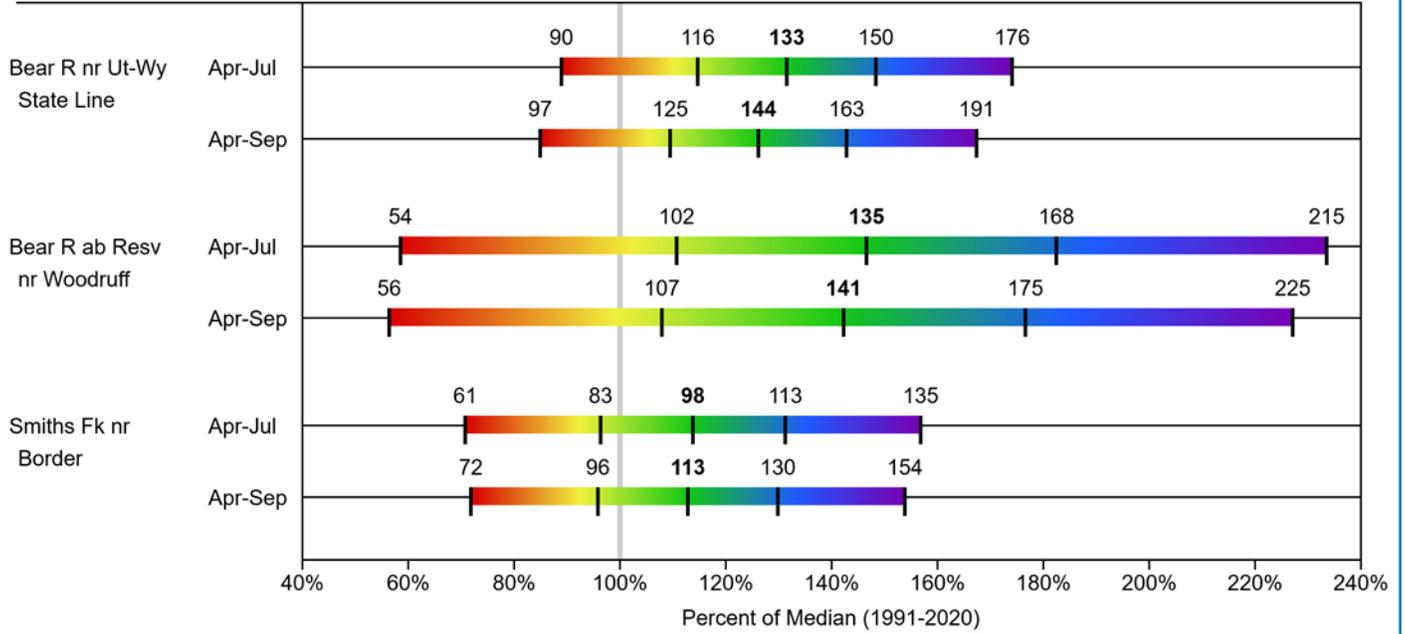
Water Supply Forecasts

January 1, 2023

Forecast Exceedance Probabilities

<----- Drier ----- Future Conditions ----- Wetter ----->

Labels on chart represent volumes of water expressed in thousand acre-feet.



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/

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

Appendix - Precipitation Data

Wyoming Basin Outlook Report

Natural Resources Conservation Service

Casper, Wyoming

Issued by:

Terry Cosby (Chief)
U.S.D.A.
Natural Resources Conservation Service
Washington D.C.

Released by:

Andi Neugebauer
Acting 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