

Wyoming Basin & Water Supply Outlook Report

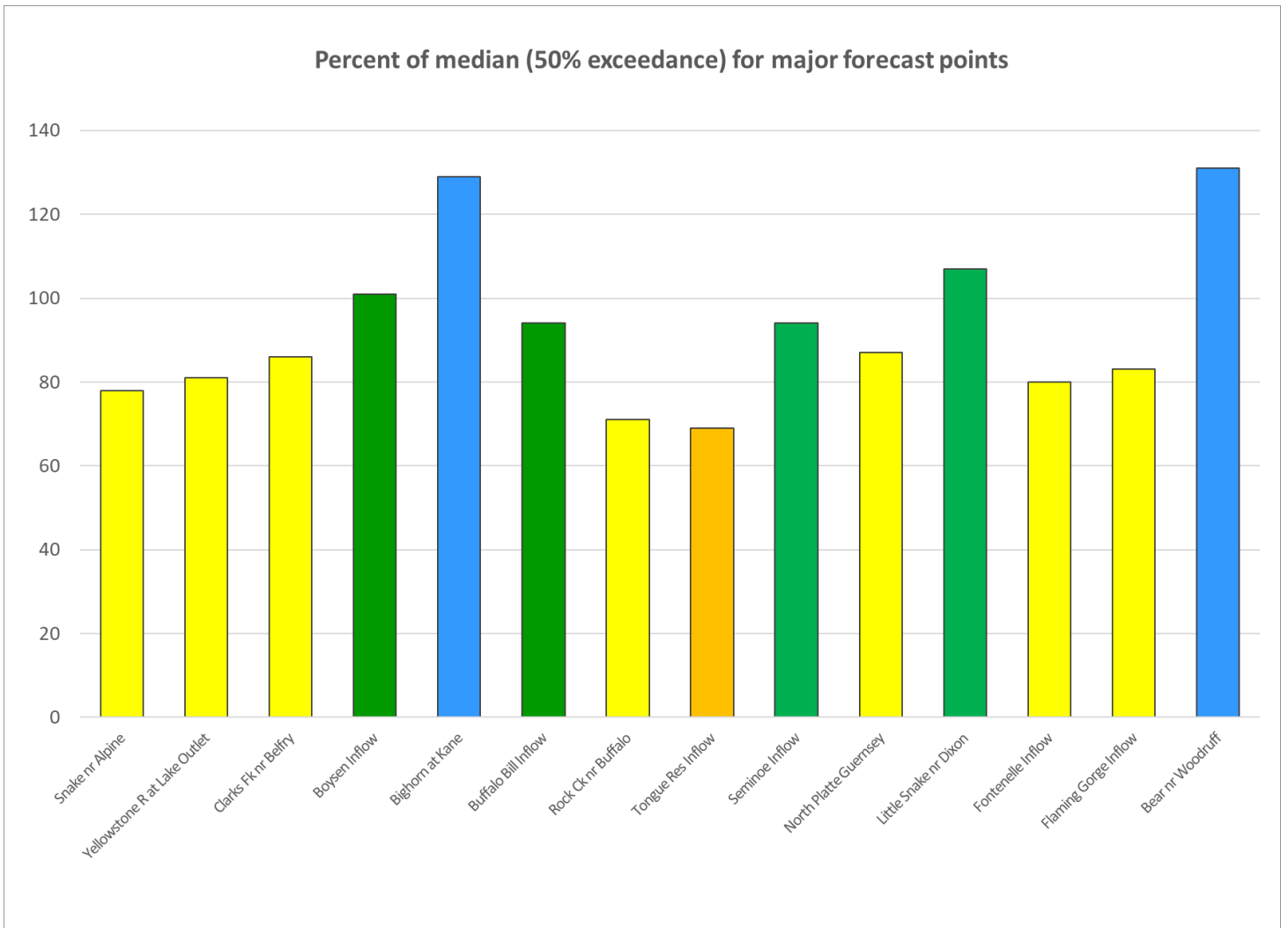
March 1, 2024

**Natural
Resources
Conservation
Service**



Owl Creek Basin March 4th, 2024, photo credit USDA-NRCS Wyoming taken by Jeff Coyle.

Forecasted stream flows for March 1st, 2024



Fifty percent exceedance probability for all major forecast points above are expected to be below 100% of normal except for Boysen Inflow, Bighorn River at Kane, Little Snake near Dixon, and Bear near Woodruff. The highest is Bear near Woodruff Reservoir inflow and is expected to be 131% of normal. Fifty percent exceedance probability for 3 major forecast points listed above are expected to be below 80% of normal.

Basin Outlook Reports

And

Federal - State - Private Cooperative Snow Surveys

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

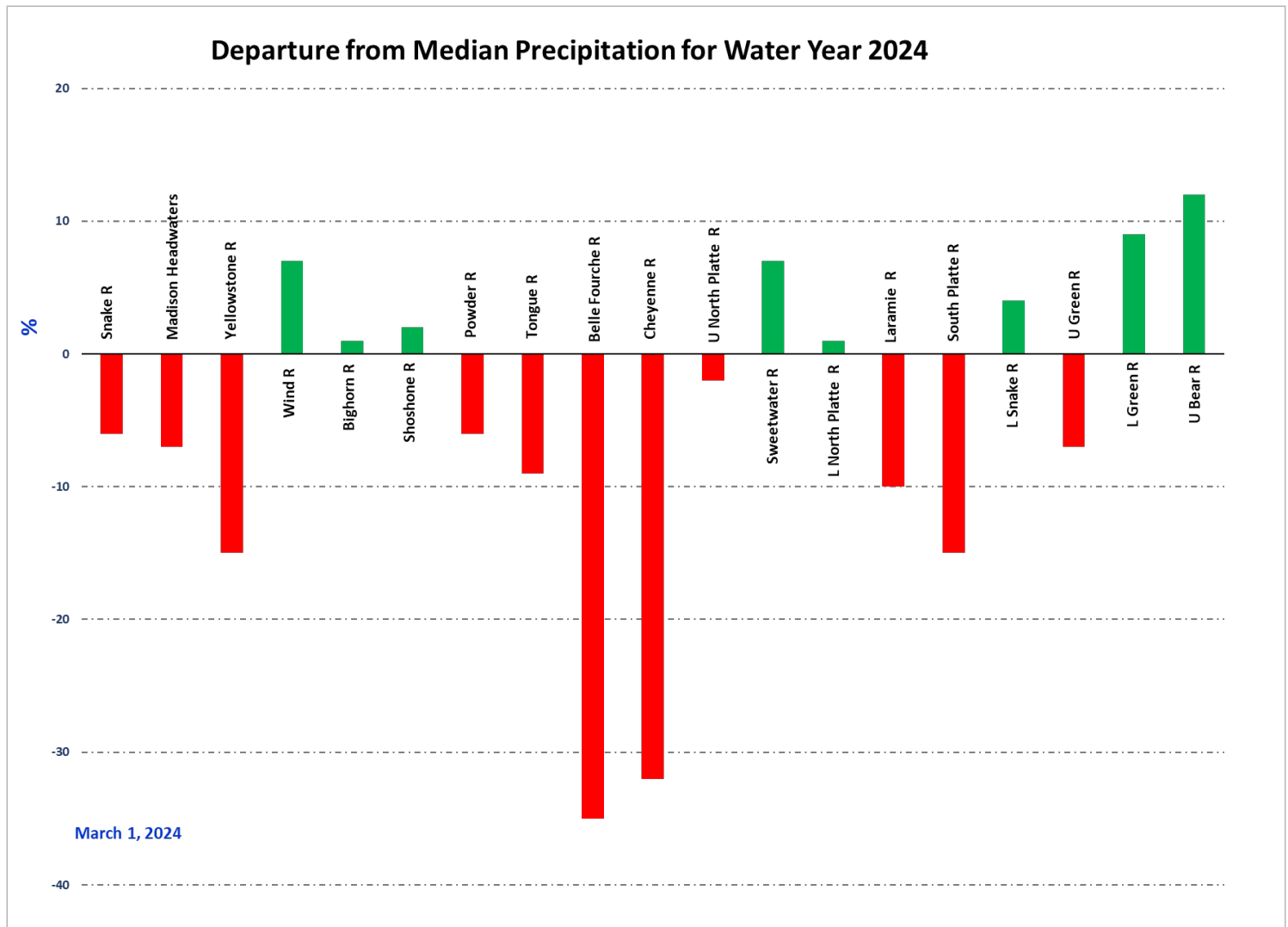
Snowpack

Snow water equivalent (SWE) across Wyoming for March 1st was at 68% of median. SWE in the Upper Bear River Basin was the highest at 113% of median and lowest for the Belle Fourche River Basin at 35% of median. On March 1st, 2024, the following basins were below 90% of median SWE recorded for the 1991 - 2020 interval: Belle Fourche, Cheyenne, South Platte, Powder, Tongue, Yellowstone in WY, Lower North Platte, Bighorn, Madison Headwater, Shoshone, Upper Green, and Laramie. *See the map on page 6 and the Appendix for further information.*

Precipitation

The Sweetwater Basin had the highest precipitation for the month at 203% of median. The Belle Fourche River Basin had the lowest precipitation amount for the month at 49% of median. The following graph displays the precipitation in major river basins and their departure from median for the water year beginning October 1st, 2023.

See Appendix for further information.



Streams

Forecast median streamflow yields for April thru September in Wyoming basins (except Green, Little Snake and Cheyenne) average 96%. Forecast median stream flow yields for April thru July in Green, Little Snake, and Cheyenne average 91%, 108%, and 51%. The Snake River and Yellowstone River in Wyoming, basins should yield about 87% and 84% of median. Yields from the Wind and Bighorn River basins should be about 106% and 108% of median. Yields from the Shoshone River basin should be 94% of median. Yields from the Powder and Tongue River basins should be about 80% and 75% of median. Yield for the Cheyenne River basin should be about 51% of median. Yields for the Sweetwater, Upper North Platte, Lower North Platte, and Laramie Rivers of Wyoming should be about 124%, 94%, 96%, and 93% of median, respectively.

Reservoirs

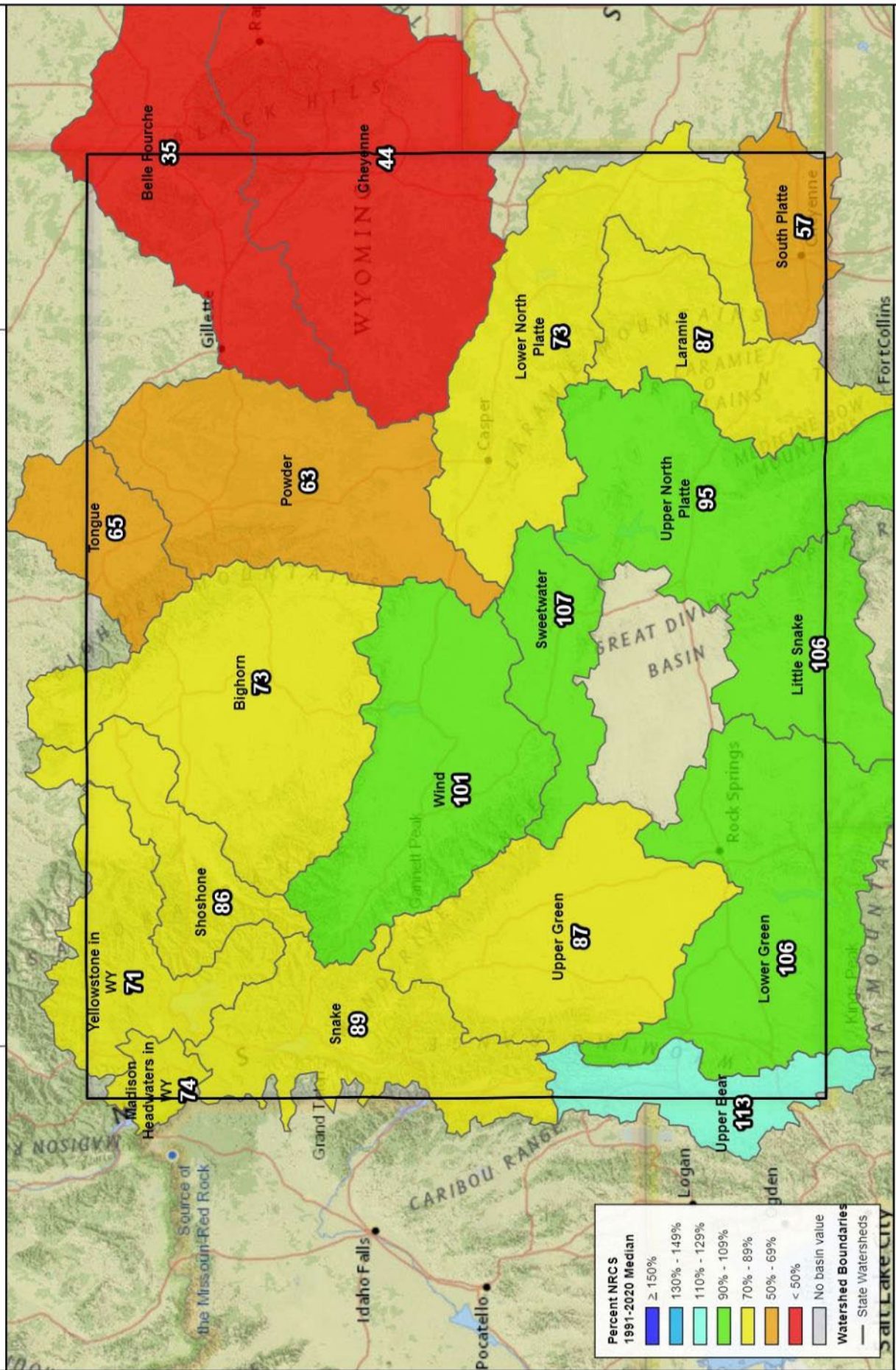
Reservoir storage was 104% of median across the entire state. Reservoirs in the Snake River basin are near median at 98%. Reservoirs in the Wind River basin are near median at 104%. Reservoirs on the Bighorn are 102% of median. The Buffalo Bill Reservoir on the Shoshone is near median at 108%. Reservoirs in the Belle Fourche and Cheyenne River basins are near median at 108% and 102% respectively. Reservoirs on the Upper and Lower North Platte River are above median at 117% and 103% respectively. Reservoirs on the Upper Green River are at 112% of median. Reservoirs on the Lower Green River are near median at 100%. *See below for further information.*

Wyoming Reservoir Levels

	Reservoir Storage Summary For the End of February 2024								
	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Alcova	156.9	157.3	156.6	184.3	85%	85%	85%	100%	100%
Angostura	102.2	65.3	98.1	122.1	84%	53%	80%	104%	67%
Belle Fourche	144.9	134.2	134.8	178.4	81%	75%	76%	107%	100%
Big Sandy	40.0	8.3	18.4	38.3	104%	22%	48%	218%	45%
Bighorn Lake	832.4	776.2	815.7	1356.0	61%	57%	60%	102%	95%
Boysen	581.9	544.2	547.6	596.0	98%	91%	92%	106%	99%
Buffalo Bill	476.4	466.1	441.9	646.6	74%	72%	68%	108%	105%
Bull Lake	71.3	74.4	80.9	151.8	47%	49%	53%	88%	92%
Deerfield	14.5	14.6	14.8	15.2	96%	96%	97%	98%	99%
Flaming Gorge Reservoir	3106.6	2457.3	3107.0	3749.0	83%	66%	83%	100%	79%
Fontenelle	127.2	141.4	131.1	344.8	37%	41%	38%	97%	108%
Glendo	333.8	288.3	320.8	506.4	66%	57%	63%	104%	90%
Grassy Lake	13.1	11.6	12.9	15.2	86%	77%	85%	102%	90%
Guernsey	17.7	15.9	15.8	45.6	39%	35%	35%	112%	101%
High Savery Res	14.2	NA	11.5	22.4	63%	NA	51%	123%	NA
Jackson Lake	613.8	185.9	626.4	847.0	72%	22%	74%	98%	30%
Keyhole	129.2	118.6	119.1	193.8	67%	61%	61%	109%	100%
Meeks Cabin Res	18.3	10.3	10.8	32.5	56%	32%	33%	170%	95%
Pactola	52.0	50.2	52.8	55.0	95%	91%	96%	99%	95%
Pathfinder	715.4	359.3	579.7	1016.5	70%	35%	57%	123%	62%
Pilot Butte	24.8	24.6	25.1	31.6	78%	78%	79%	99%	98%
Seminole	636.4	438.1	579.6	1016.7	63%	43%	57%	110%	76%
Stateline Res	8.3	6.4	5.7	12.0	69%	53%	48%	146%	112%
Tongue River Res	50.2	49.2	43.9	79.1	63%	62%	55%	114%	112%
Viva Naughton Res	34.7	30.5	29.5	42.4	82%	72%	70%	118%	103%
Wheatland #2	54.0	NA	48.8	98.9	54%	NA	49%	111%	NA
Woodruff Creek	2.0	2.4	2.4	4.0	49%	60%	60%	82%	100%
Woodruff Narrows Res	48.8	13.5	38.4	57.3	85%	24%	67%	127%	35%

Wyoming Basins

Percent NRCS 1991-2020 Median



USDA
Natural Resources
Conservation Service
United States Department of Agriculture

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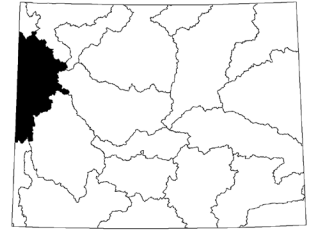
Miles
0 10 20 40 60 80 100

Created 3-06-2024

Snow Water Equivalent

March 1st, 2024

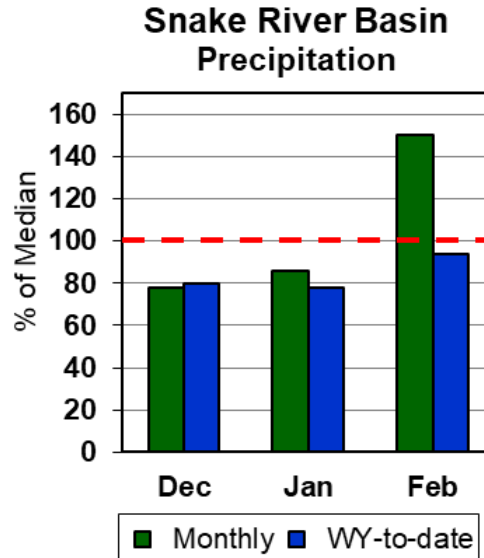
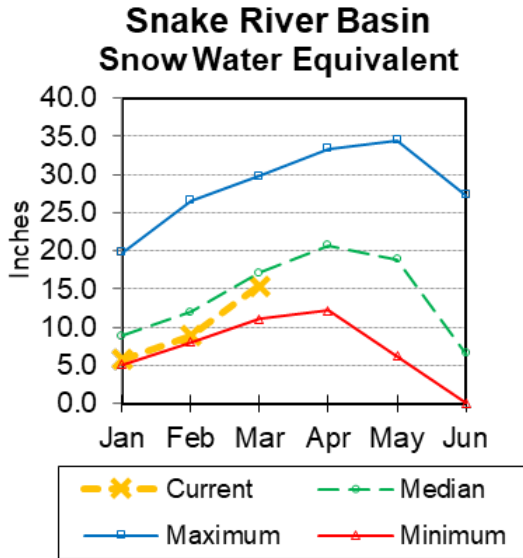
Snake River Basin



Snow

The overall Snake River basin SWE (portion above Palisades dam) is 89% of median. SWE in the Snake River Basin above Jackson Lake is 84% of median. Pacific Creek basin SWE is 86% of median. Buffalo Fork SWE is 78% of median. Gros Ventre River basin SWE is 84% of median. SWE in the Hoback River drainage is 84% of median. SWE in the Greys River drainage is 96% of median. Salt River Basin SWE is 110% 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 150% of median. Water-year-to-date precipitation is 94% of median.

Reservoirs

Current reservoir storage is 98% 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	13.1	11.6	12.9	15.2	86%	77%	85%	102%	90%
Jackson Lake	613.8	185.9	626.4	847.0	72%	22%	74%	98%	30%
Basin Index					73%	23%	74%	98%	31%
# of reservoirs					2	2	2	2	2

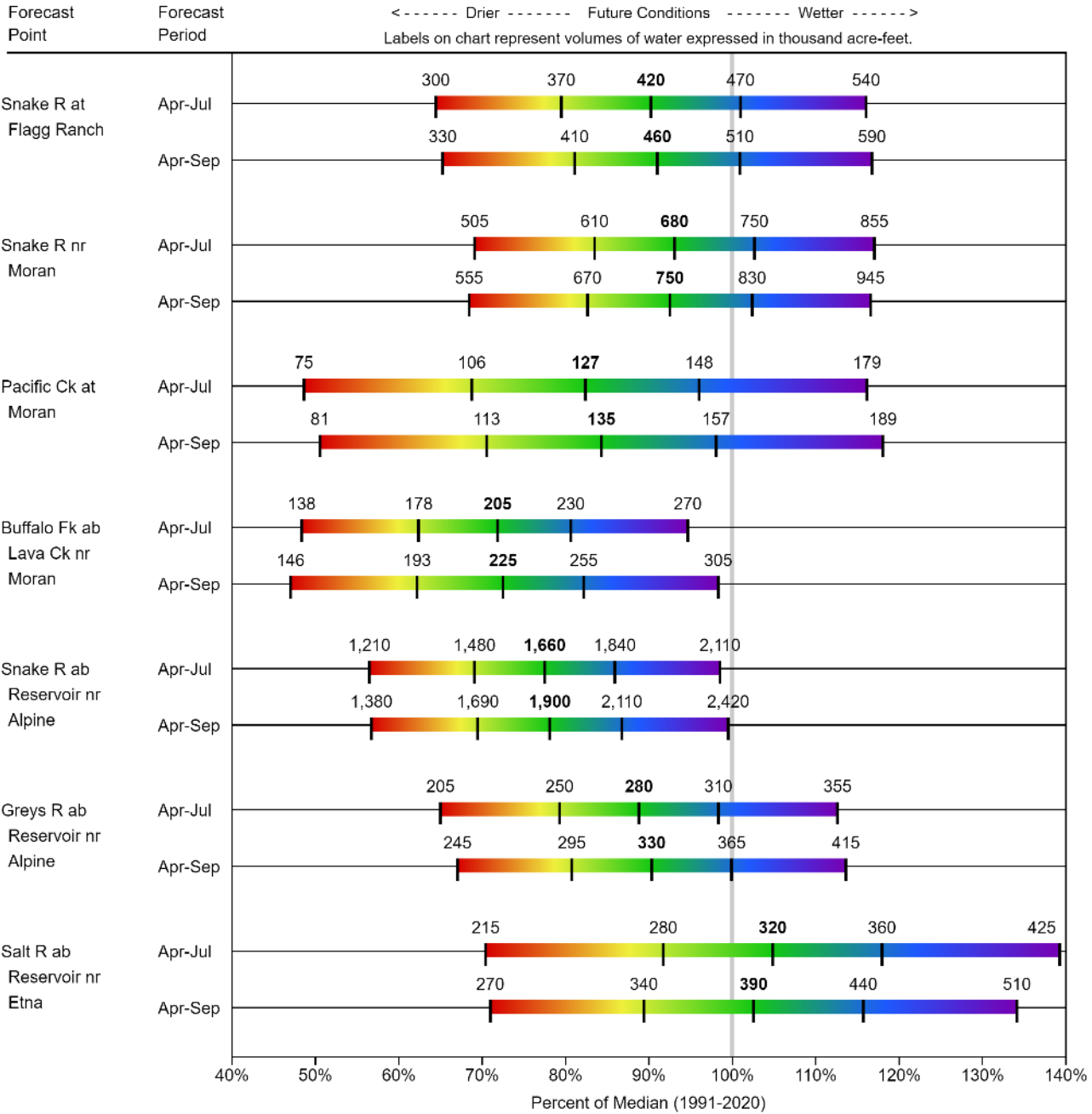
Streamflow

The 50% exceedance forecasts for April through September are below median for this basin. The Snake near Moran yield should be 93% of median. Snake River above reservoir near Alpine will yield about 78%. Pacific Creek near Moran yield will be around 84%. Buffalo Fork above Lava near Moran will be around 73% of median. Greys River above reservoir near Alpine should yield about 90%. Salt River near Etna yield will be about 103%.

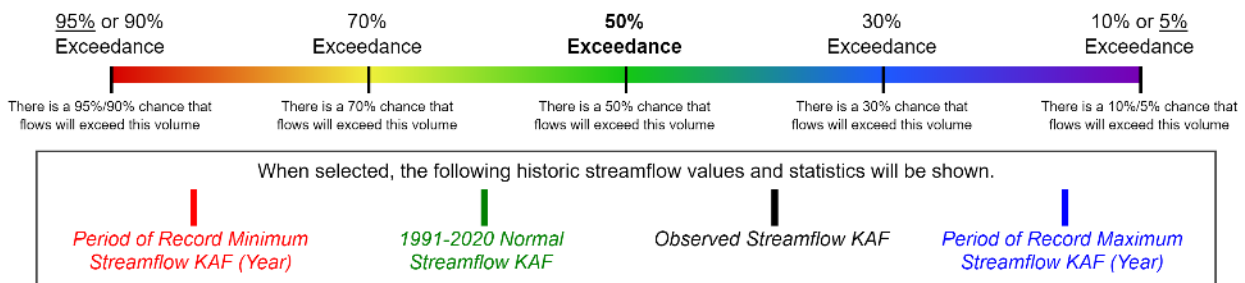
See the following graph for further information.

SNAKE
Water Supply Forecasts
March 1, 2024

Forecast Exceedance Probabilities

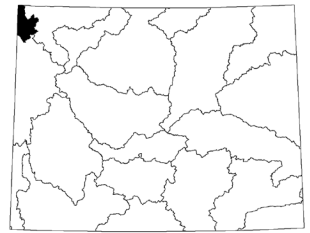


Legend



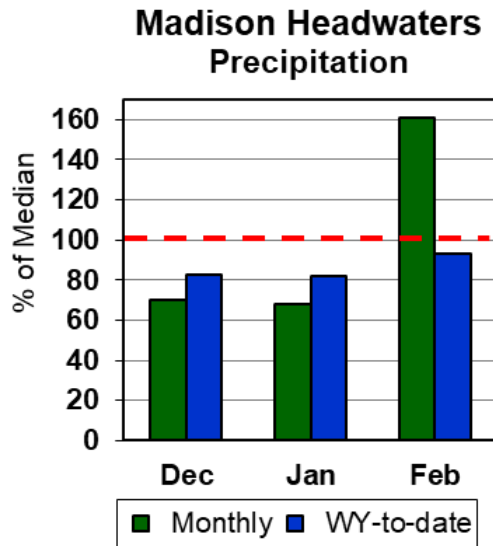
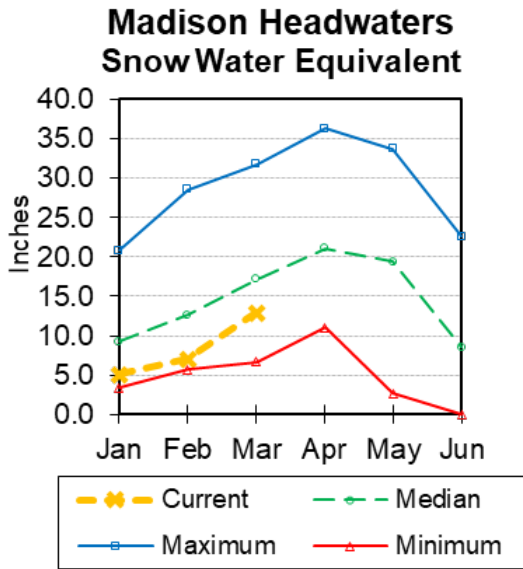
Some forecasts may be for volumes that are regulated or influenced by diversions and water management.

Madison Headwaters in Wyoming



Snow

SWE is 75% 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 161% of median. Water-year-to-date precipitation is at 93% of median.

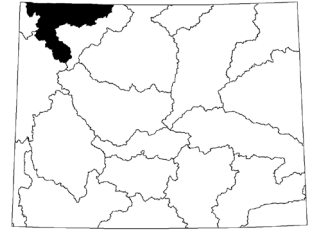
Reservoirs

No reservoir data.

Streamflow

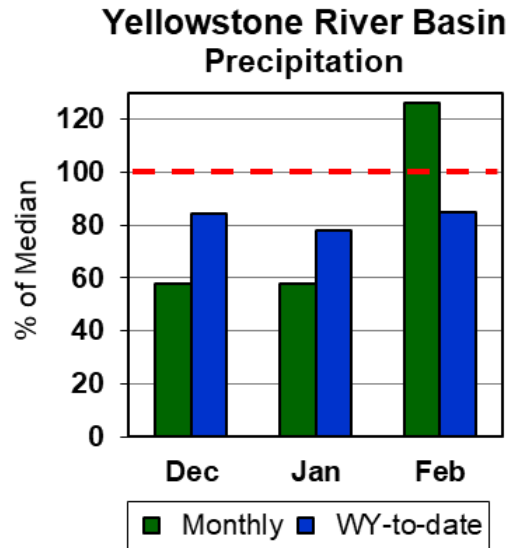
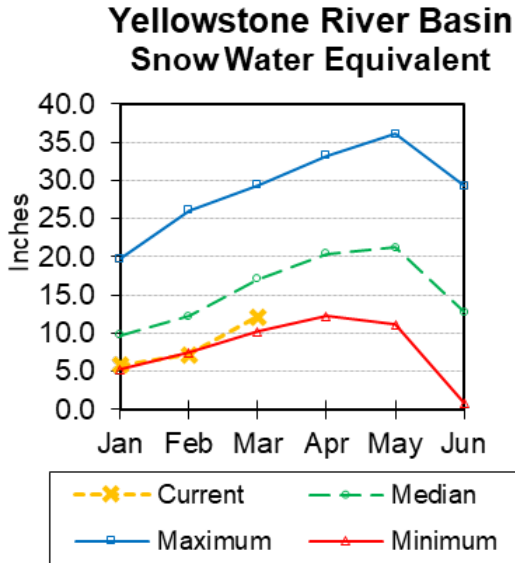
There are no streamflow forecast points for the basin.

Yellowstone River Basin



Snow

SWE in the Yellowstone River Basin is 71% of median. SWE in the Clarks Fork Drainage of the Yellowstone River basin in Wyoming is 69% 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 126% of median. Water-year-to-date precipitation is 85% of median.

Reservoirs

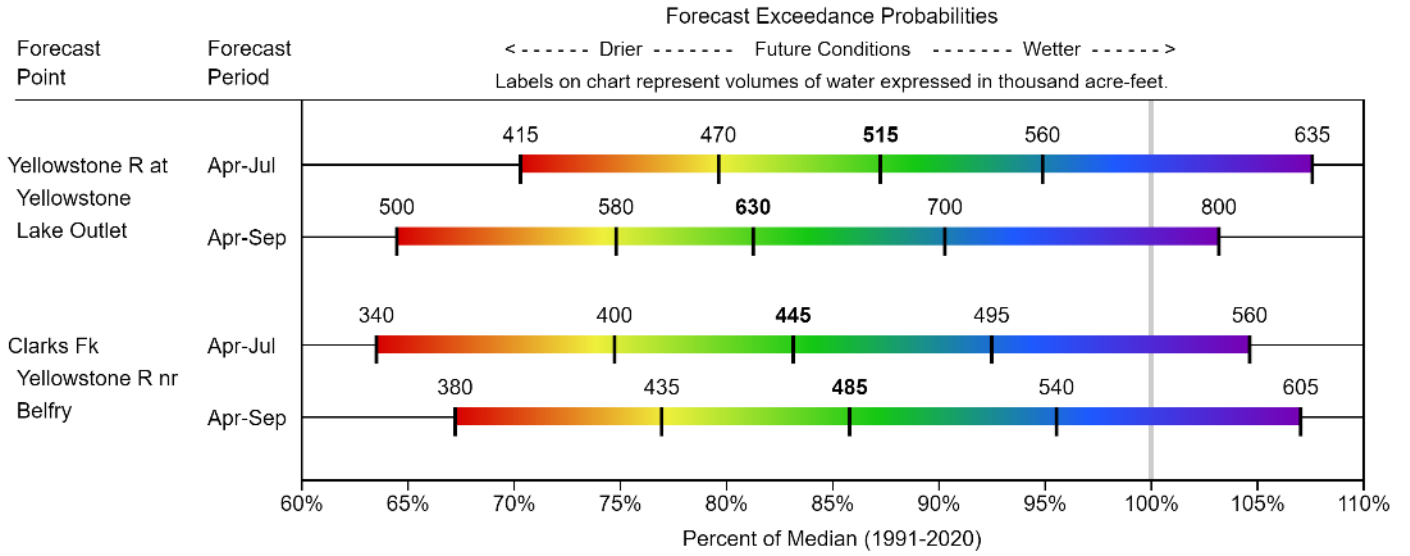
No reservoir data.

Streamflow

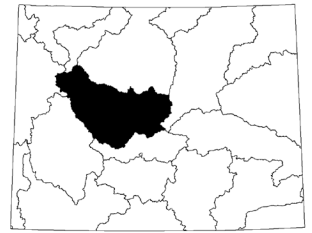
The 50% exceedance forecasts for April through September are below normal for the basin. Yellowstone at Lake Outlet will yield around 81% of median. Clarks Fork of the Yellowstone near Belfry will yield around 86%.

See the following graph for detailed information.

YELLOWSTONE IN WY
Water Supply Forecasts
March 1, 2024

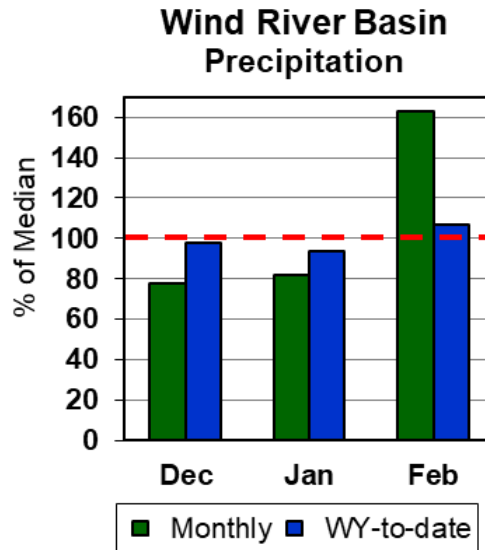
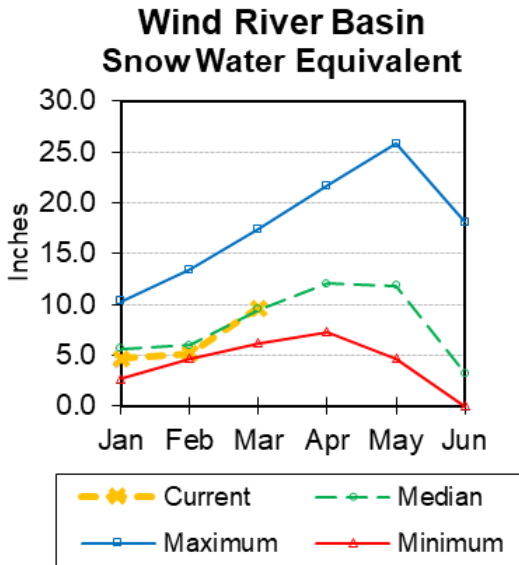


Wind River Basin



Snow

Wind River basin SWE (above Boysen Reservoir) is 101% of median. SWE in the Wind River above Dubois is 88% of median. Little Wind SWE is 115% of median, and Popo Agie drainage SWE is 112% 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 163% of median. Water year-to-date precipitation is 107% of median.

Reservoirs

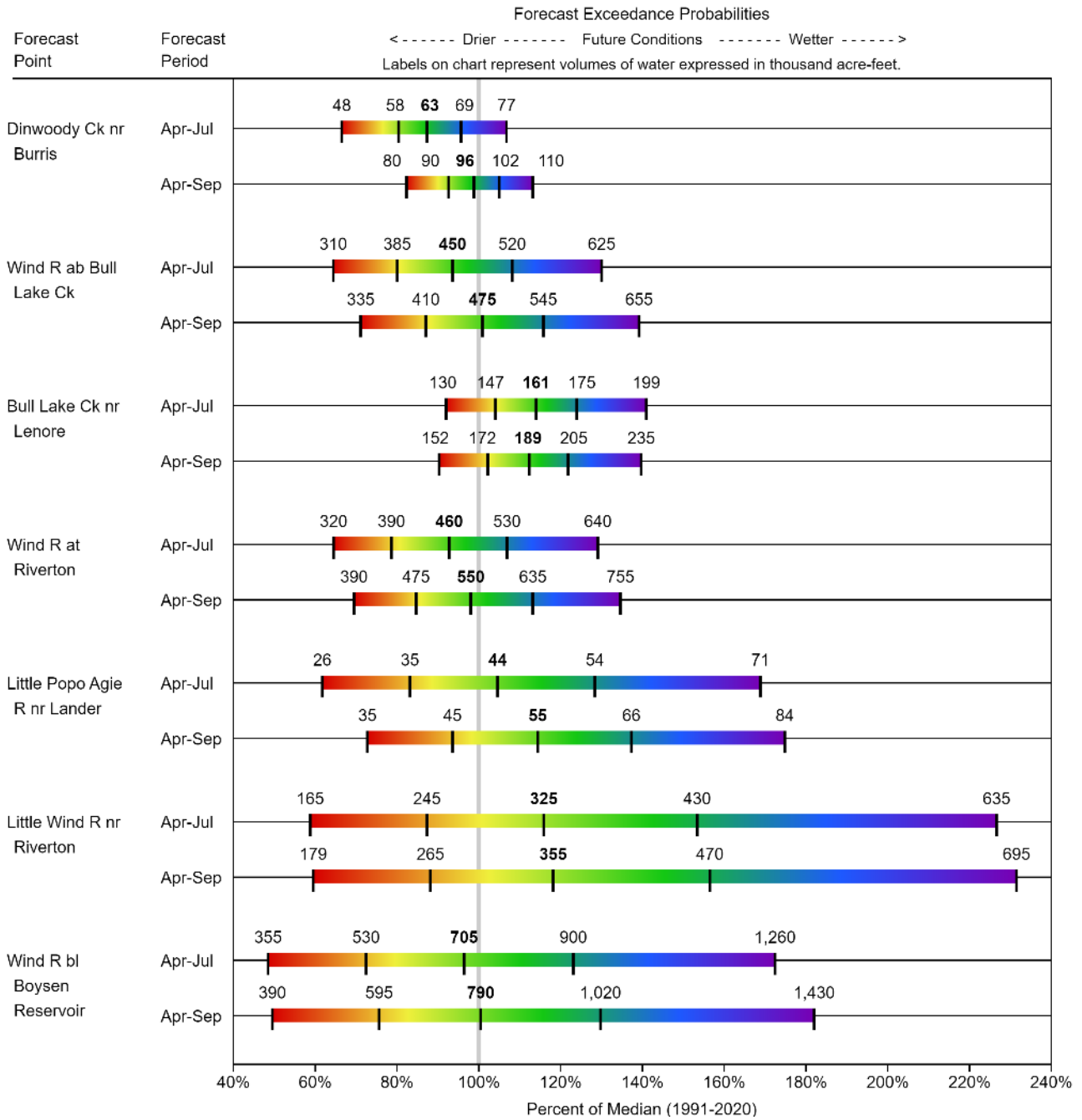
Current storage is 104% of median in the basin.

	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Pilot Butte	24.8	24.6	25.1	31.6	78%	78%	79%	99%	98%
Boysen	581.9	544.2	547.6	596.0	98%	91%	92%	106%	99%
Bull Lake	71.3	74.4	80.9	151.8	47%	49%	53%	88%	92%
Basin Index					87%	83%	84%	104%	98%
# of reservoirs					3	3	3	3	3

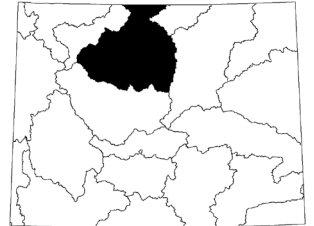
Streamflow

The 50% exceedance forecasts for the April through September runoff period are above normal for the Wind River. The Wind River above Bull Lake Creek will yield about 101% of median. Little Popo Agie River near Lander should yield around 115% of median. Little Wind River near Riverton will yield around 118% of median. Boysen Reservoir inflow will yield about 101% of median. *See the following graph for detailed runoff volumes.*

WIND
Water Supply Forecasts
March 1, 2024

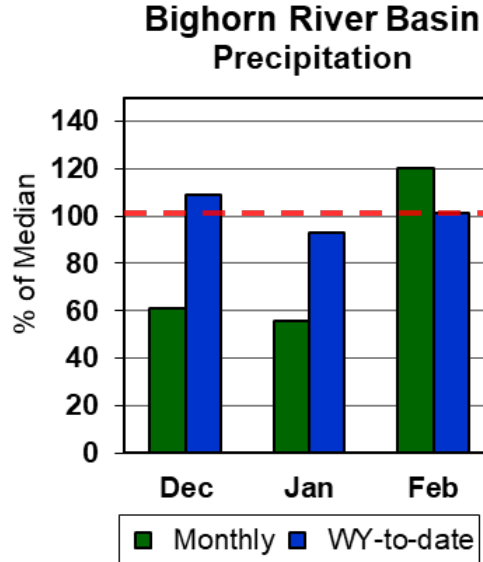
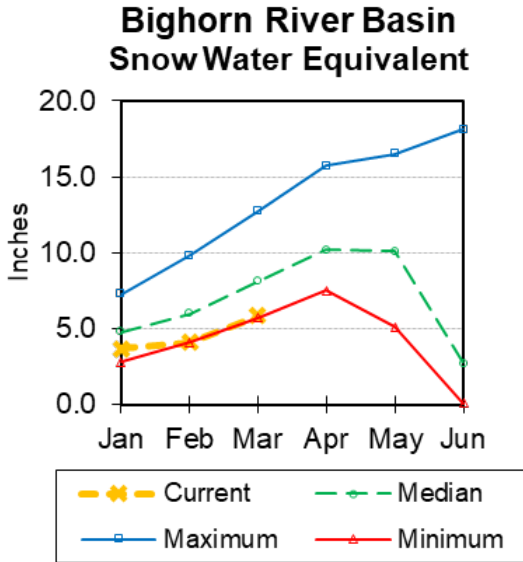


Bighorn River Basin



Snow

The Bighorn River Basin SWE (above Bighorn Reservoir) is 73% of median. The Greybull River SWE is at 137% of median. Shell Creek SWE is at 66% of median. *See Appendix at the end of this report for a detailed listing of snow course information.*



Precipitation

Last month's precipitation was 124% of median. Year-to-date precipitation is 102% of median.

Reservoirs

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

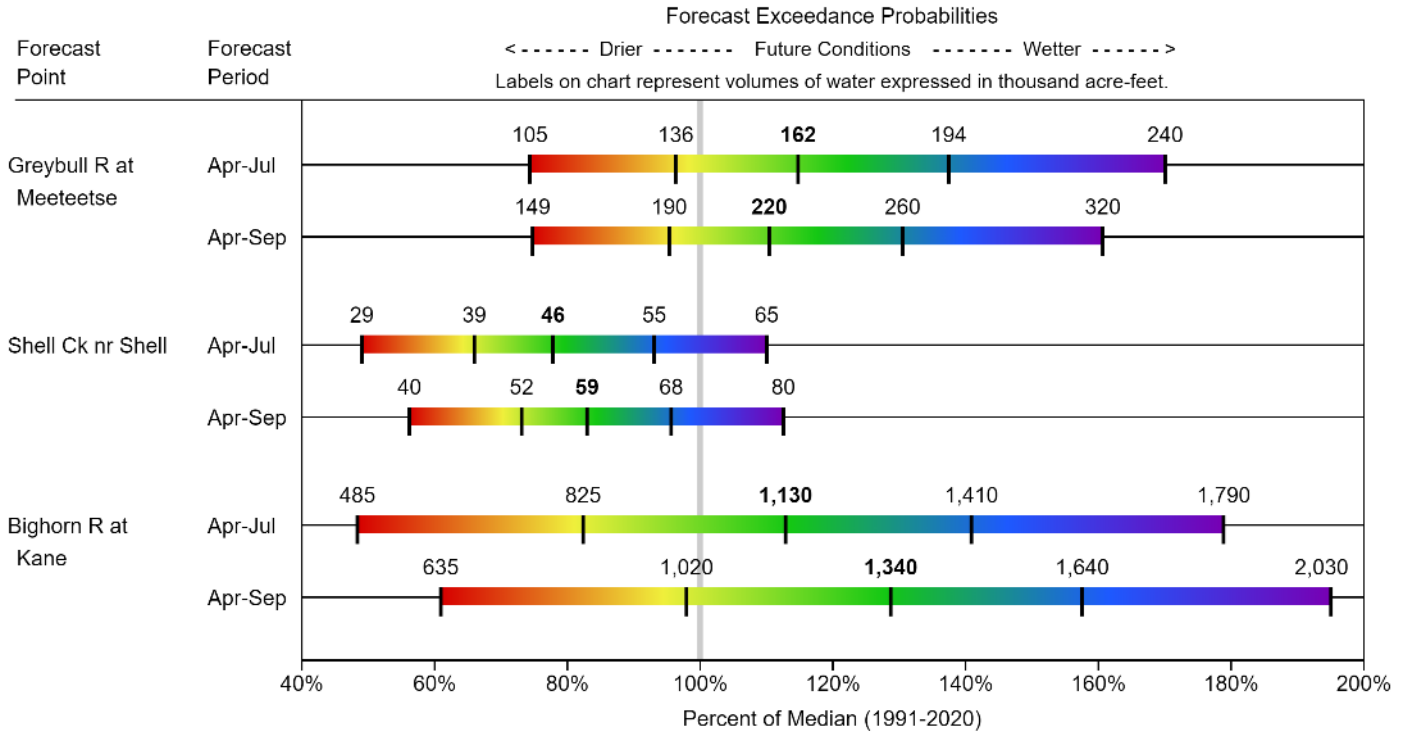
	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Bighorn Lake	832.4	776.2	815.7	1356.0	61%	57%	60%	102%	95%
Basin Index					61%	57%	60%	102%	95%
# of reservoirs					1	1	1	1	1

Streamflow

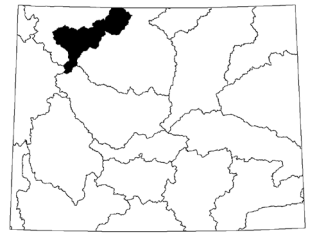
The 50% exceedance forecasts for the April through September runoffs are near normal. The Greybull River near Meeteetse should yield 111% of median. Shell Creek near Shell should yield around 83% of median. The Bighorn River at Kane should yield around 129% of median.

See the following graph for detailed runoff volumes.

BIGHORN
Water Supply Forecasts
March 1, 2024

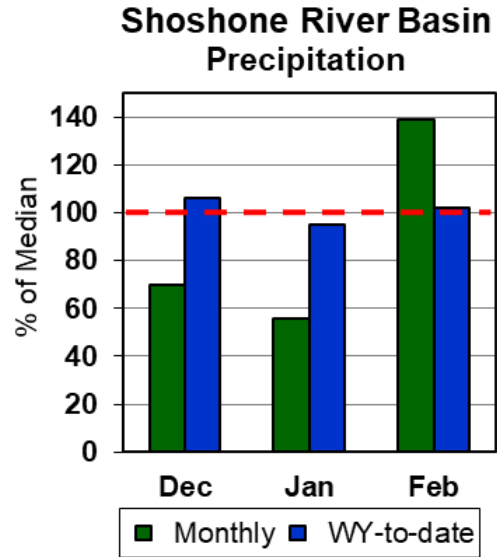
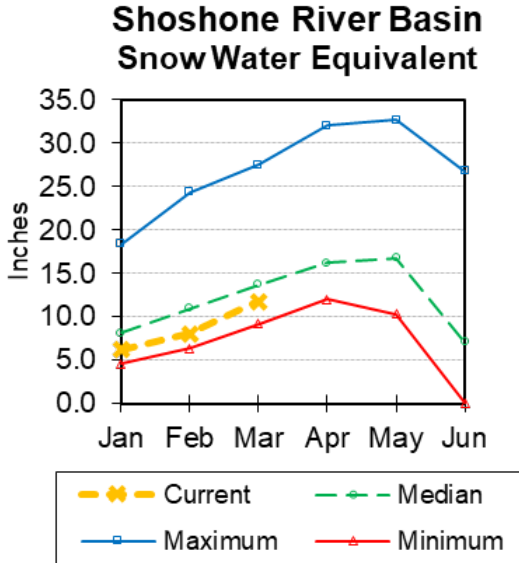


Shoshone River Basin



Snow

Snow Water Equivalent (SWE) is 86% 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 139% of median. The basin year-to-date precipitation is now 102% of median.

Reservoirs

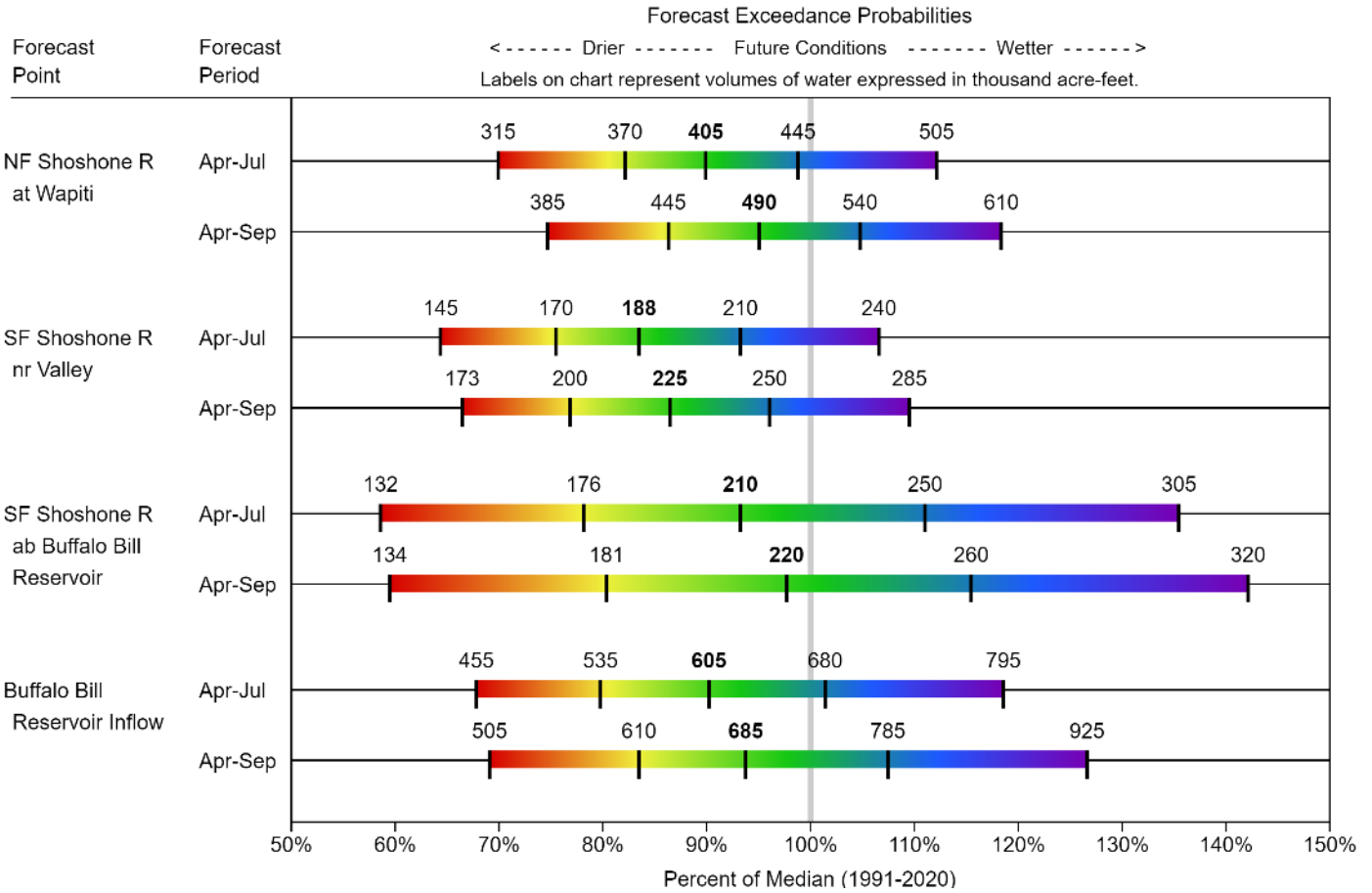
Current storage in Buffalo Bill Reservoir is about 108% of median.

	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Buffalo Bill	476.4	466.1	441.9	646.6	74%	72%	68%	108%	105%
Basin Index					74%	72%	68%	108%	105%
# of reservoirs					1	1	1	1	1

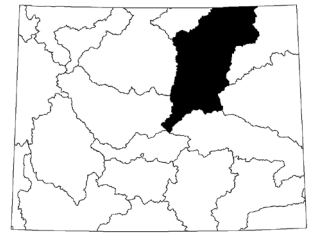
Streamflow

The 50% exceedance forecasts for the April through September period are below normal for the basin. The North Fork Shoshone River at Wapiti should yield 95% of median. The South Fork of the Shoshone River near Valley should yield 87% of median. The Buffalo Bill Reservoir inflow should yield 94% of median. *See the following graph for detailed runoff volumes.*

SHOSHONE Water Supply Forecasts March 1, 2024

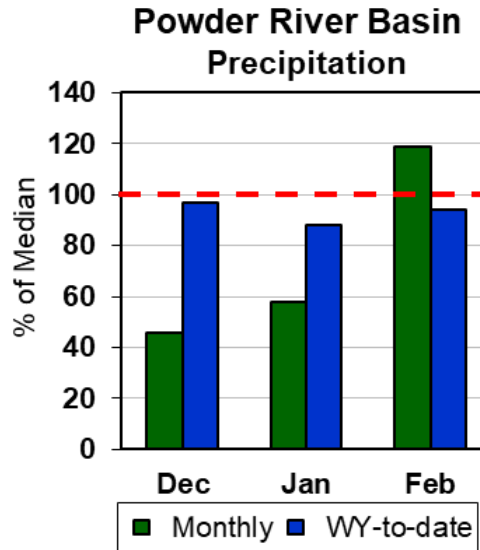
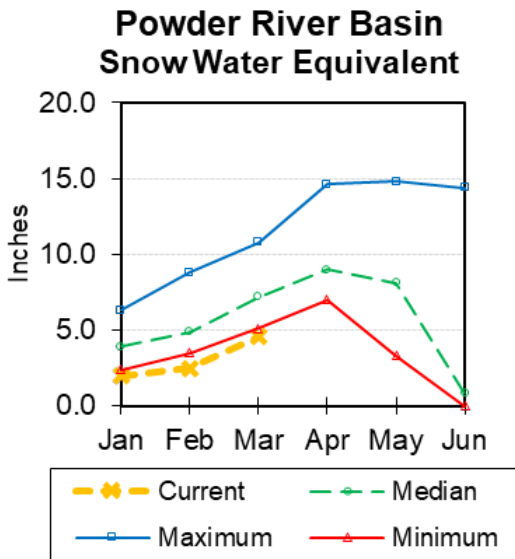


Powder River Basin



Snow

Powder River Basin SWE is at 63% of median. SWE in the Clear Creek drainage is 73% of median. *See appendix at the end of this report for a detailed listing of snow course information.*



Precipitation

Last month's precipitation was 119% of median in the basin. Year-to-date precipitation is 94% of median.

Reservoirs

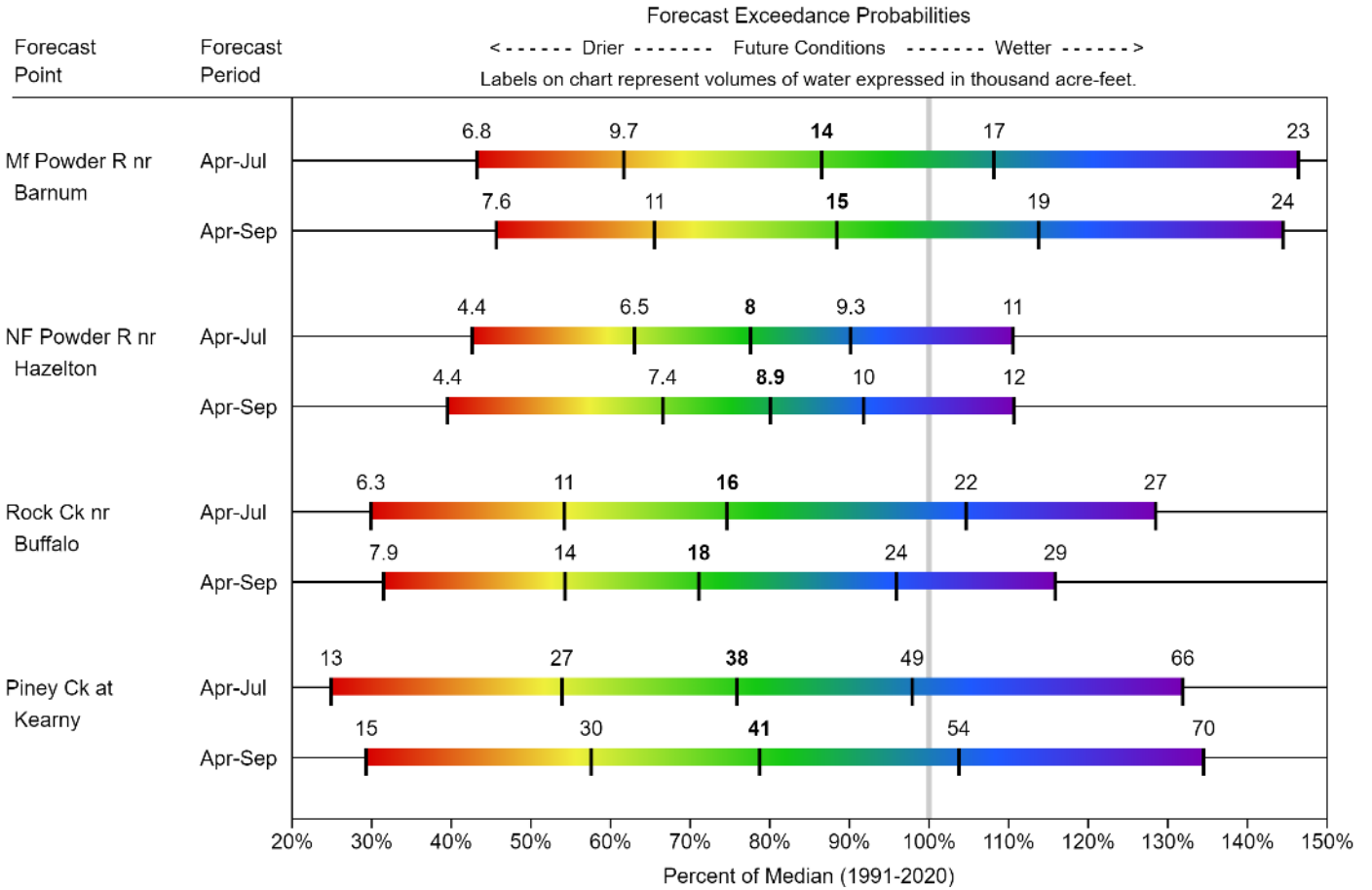
No reservoir data for this basin.

Streamflow

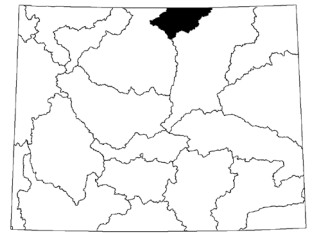
The 50% exceedance forecasts for the April through September period are below normal for the basin. The Middle Fork of the Powder River near Barnum should yield around 89% of median. The North Fork of the Powder River near Hazelton to yield around 80% of median.

See the following graph for detailed runoff volumes.

POWDER
Water Supply Forecasts
March 1, 2024

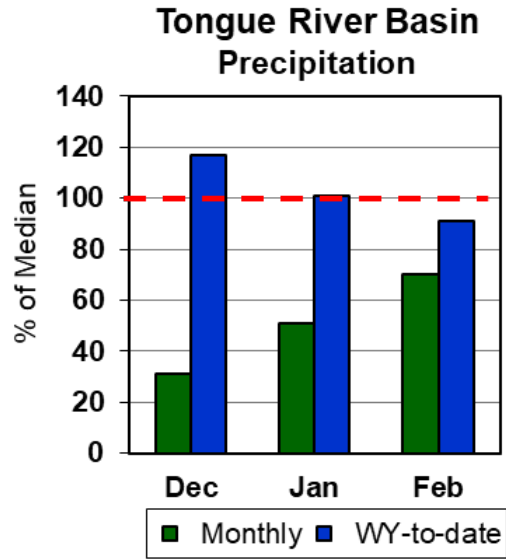
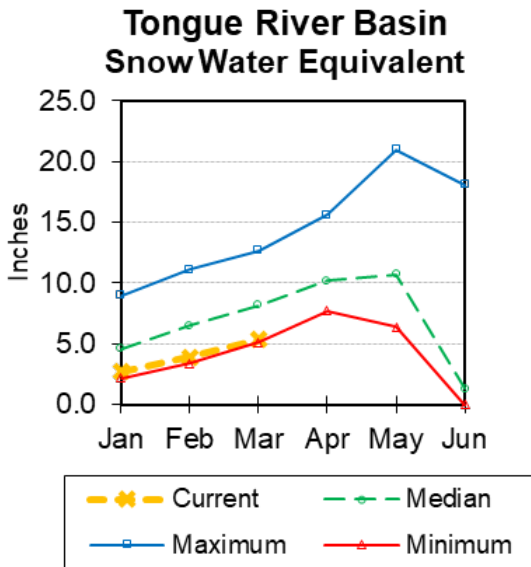


Tongue River Basin



Snow

Upper Tongue River drainage SWE is at 65% of median. *See Appendix at the end of this report for a detailed listing of snow course information.*



Precipitation

Last month's precipitation was 70% of median. Year-to-date precipitation is 91% of median in the basin.

Reservoirs

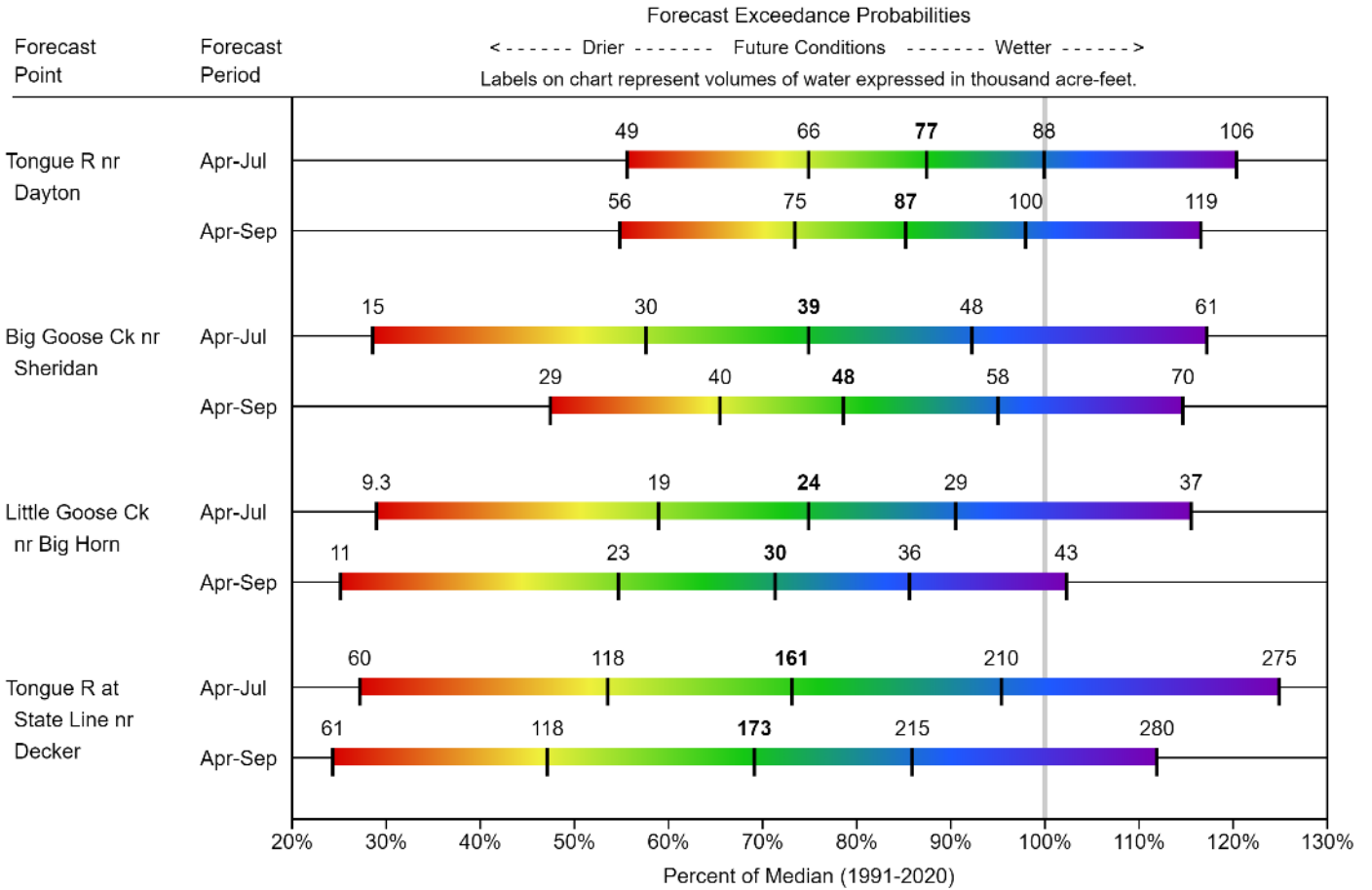
Current storage in Tongue River Reservoir is about 114% of median.

	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Tongue River Res	50.2	49.2	43.9	79.1	63%	62%	55%	114%	112%
Basin Index					63%	62%	55%	114%	112%
# of reservoirs					1	1	1	1	1

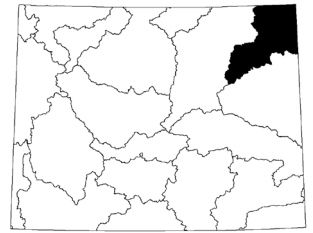
Streamflow

The 50% exceedance forecasts for the April through September period are below normal for the basin. The yield for Tongue River near Dayton is forecasted to be 85% of median. Big Goose Creek near Sheridan should yield around 79%. Little Goose Creek near Bighorn should yield 71% of median. The Tongue River Reservoir Inflow should yield 69% of median. *See below for detailed runoff volumes.*

TONGUE Water Supply Forecasts March 1, 2024

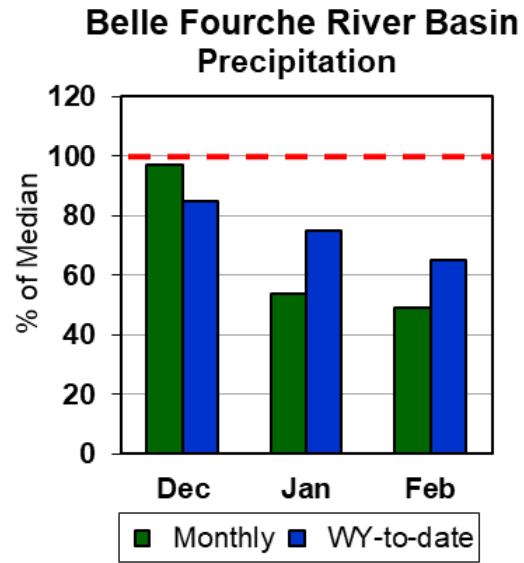
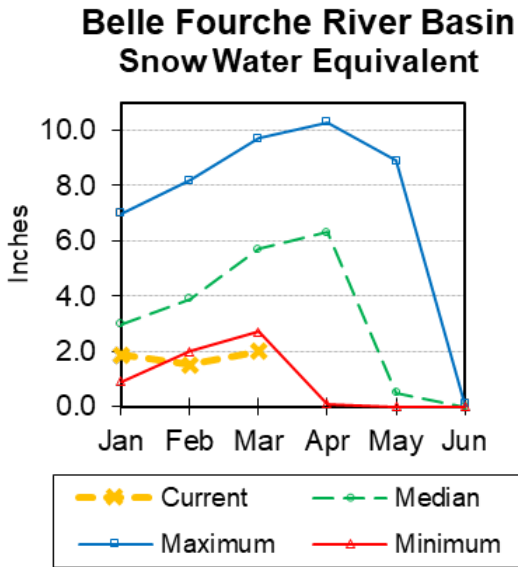


Belle Fourche River Basin



Snow

Currently the Belle Fourche River Basin SWE is at 35% of median. *See Appendix at the end of this report for a detailed listing of snow course information.*



Precipitation

Precipitation for last month was 49% of median in the Belle Fourche basin. Year-to-date precipitation is 65% of median.

Reservoirs

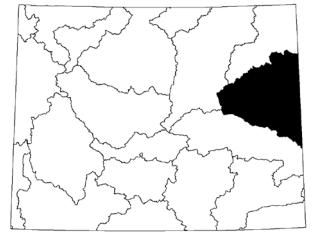
Combined storage for the 2 reservoirs in the basin is at 108% of median.

	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Belle Fourche	144.9	134.2	134.8	178.4	81%	75%	76%	107%	100%
Keyhole	129.2	118.6	119.1	193.8	67%	61%	61%	109%	100%
Basin Index					74%	68%	68%	108%	100%
# of reservoirs					2	2	2	2	2

Streamflow

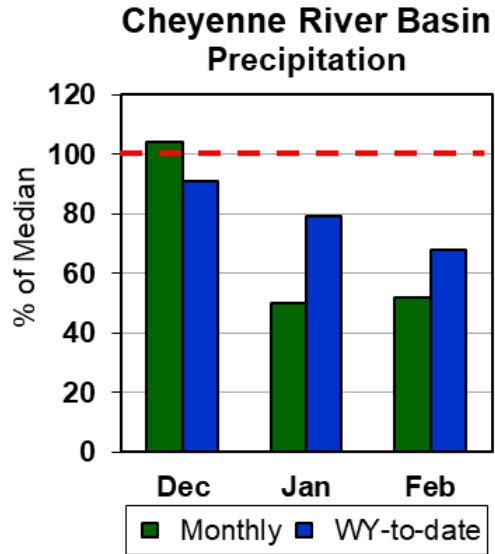
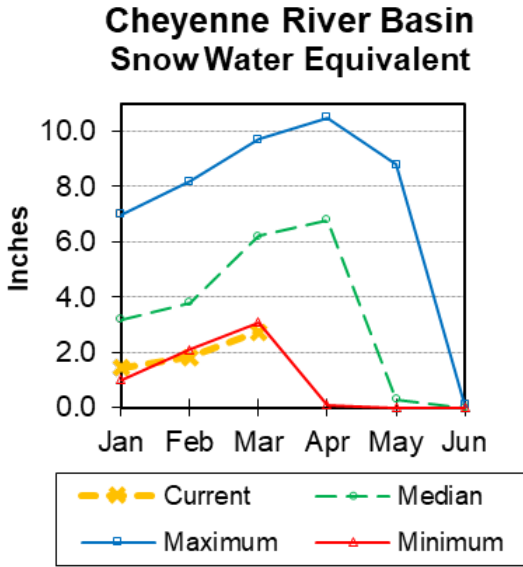
There are no streamflow forecast points for the basin.

Cheyenne River Basin



Snow

Currently SWE for sites in the Cheyenne River Basin are at 44% of median. *See Appendix at the end of this report for a detailed listing.*



Precipitation

Precipitation for last month was 52% of median. Year-to-date precipitation is 68% of median.

Reservoirs

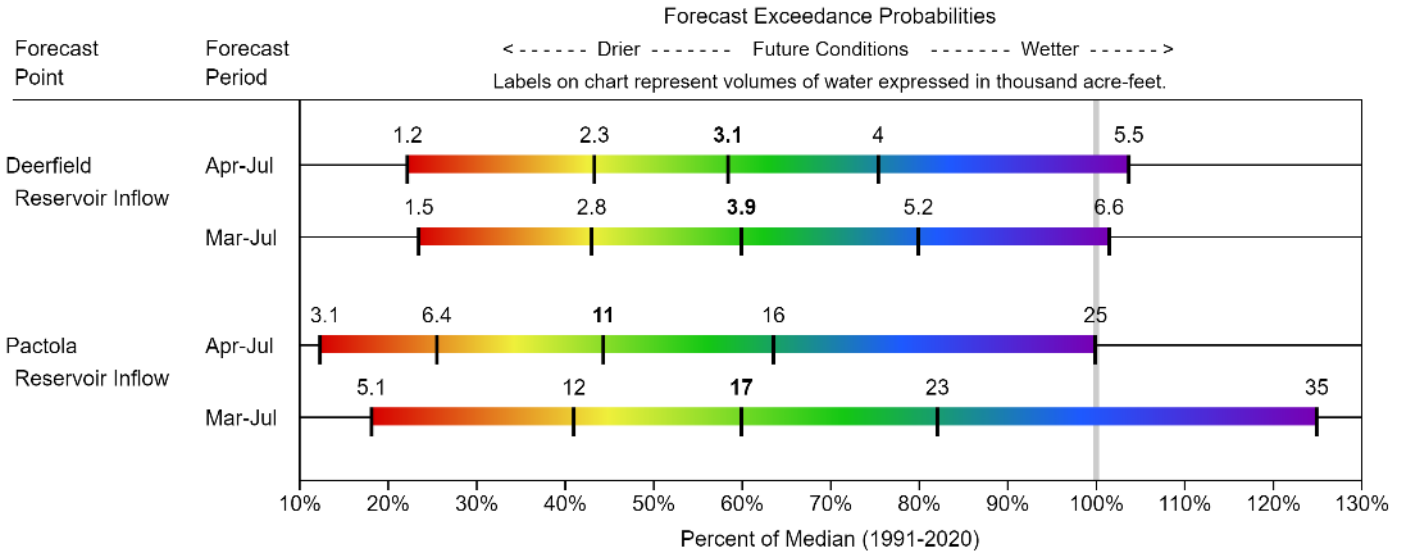
Combined storage for the 3 reservoirs in the basin is at 102% of median.

	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Deerfield	14.5	14.6	14.8	15.2	96%	96%	97%	98%	99%
Pactola	52.0	50.2	52.8	55.0	95%	91%	96%	99%	95%
Angostura	102.2	65.3	98.1	122.1	84%	53%	80%	104%	67%
Basin Index					88%	68%	86%	102%	78%
# of reservoirs					3	3	3	3	3

Streamflow

The 50% exceedance forecasts for the April through July period are below normal. The Deerfield Reservoir Inflow yield is forecasted at 58% of median. Pactola Reservoir Inflow yield should be 44% of median. *See the following graph for detailed runoff volumes.*

CHEYENNE
Water Supply Forecasts
March 1, 2024



Upper North Platte River Basin

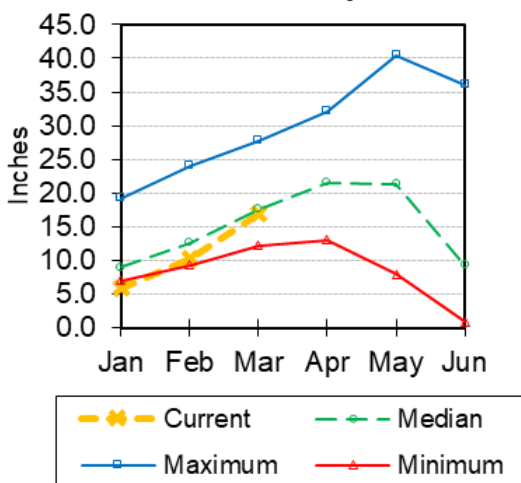


Snow

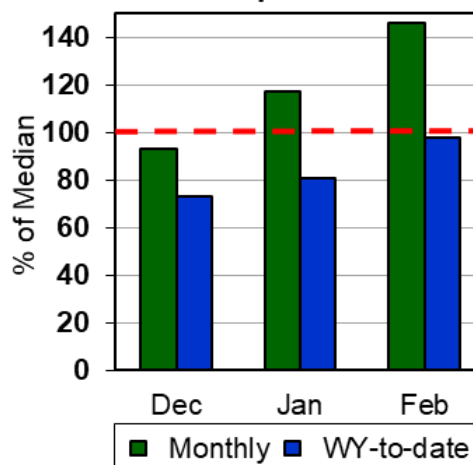
The Upper North Platte River basin SWE is 96% of median. North Platte above Northgate SWE is 94% of median. Encampment River SWE is 111% of median. Medicine Bow and Rock Creek SWE are 96% of median.

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

**Upper North Platte Basin
Snow Water Equivalent**



**Upper North Platte Basin
Precipitation**



Precipitation

Last month's precipitation was 146% of median. Total water-year-to-date precipitation is 98% of median.

Reservoirs

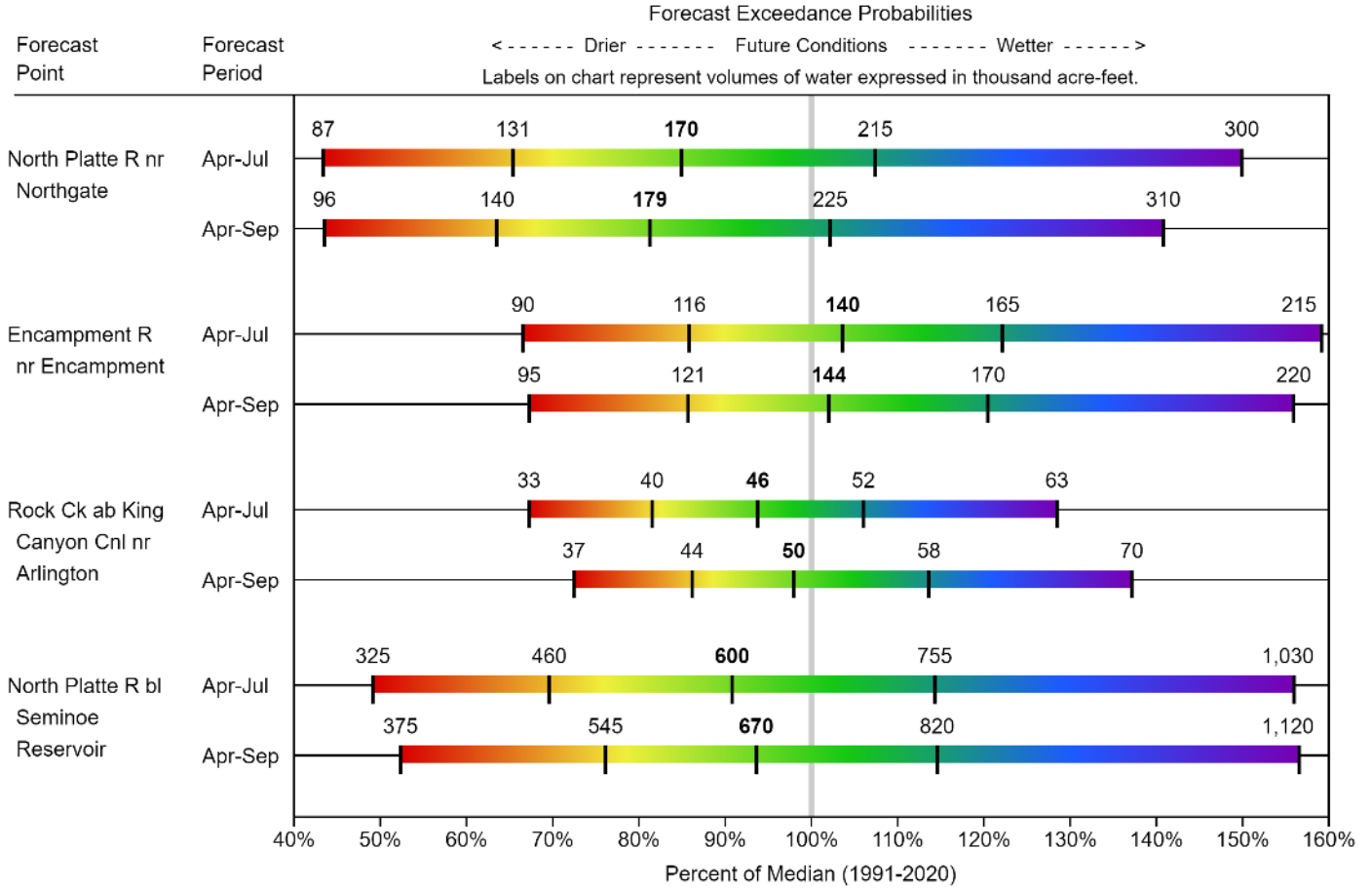
Combined storage for reservoirs in the Upper North Platte River Basin is at 117% of median.

	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Seminole	636.4	438.1	579.6	1016.7	63%	43%	57%	110%	76%
Pathfinder	715.4	359.3	579.7	1016.5	70%	35%	57%	123%	62%
Basin Index					66%	39%	57%	117%	69%
# of reservoirs					2	2	2	2	2

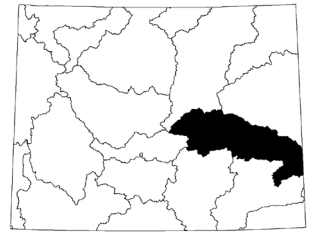
Streamflow

The 50% exceedance forecasts for the April through September period are about normal for the Upper North Platte River Basin. The yield for the North Platte River near Northgate will be around 81% of median. The Encampment River near Encampment yield will be about 102%. Rock Creek near Arlington yield will be around 98%. Seminole Reservoir inflow should be about 94% of median. *See the following page for more detailed information on projected runoff.*

UPPER NORTH PLATTE
Water Supply Forecasts
March 1, 2024

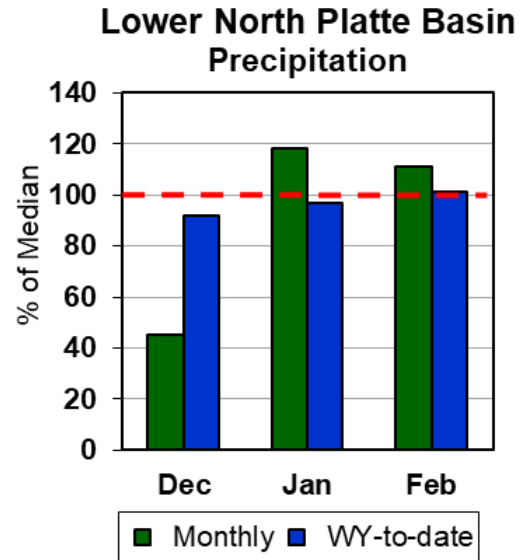
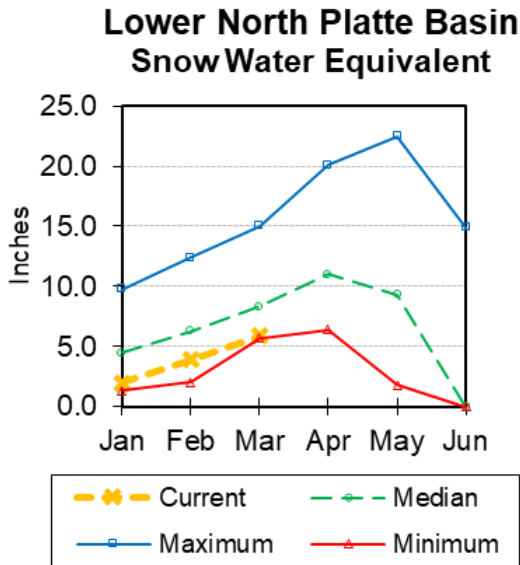


Lower North Platte River Basin



Snow

Currently, SWE in the Lower North Platte River Basin is 73% of median. *See Appendix at the end of this report for a detailed listing of snow course information.*



Precipitation

Last month's precipitation was 111% of median. The water year-to-date precipitation for the basin is currently 101% of median.

Reservoirs

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

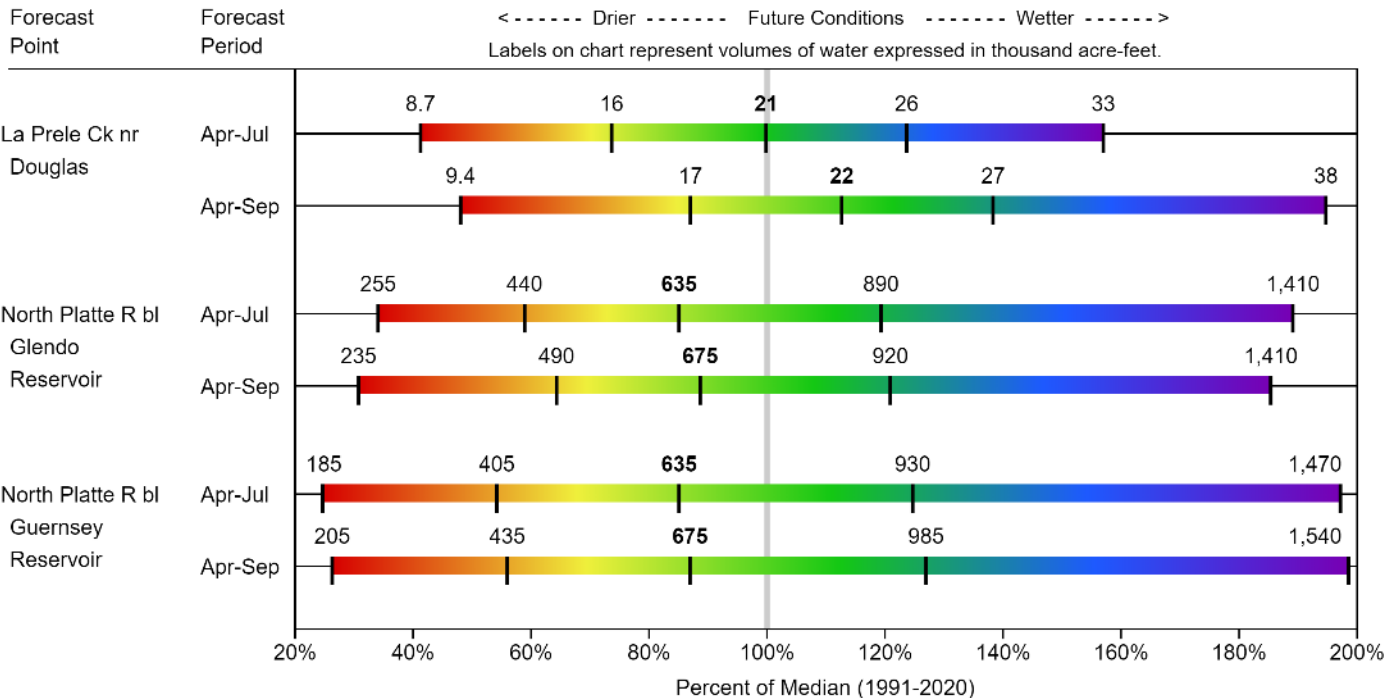
	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Guernsey	17.7	15.9	15.8	45.6	39%	35%	35%	112%	101%
Glendo	333.8	288.3	320.8	506.4	66%	57%	63%	104%	90%
Alcova	156.9	157.3	156.6	184.3	85%	85%	85%	100%	100%
Basin Index					69%	63%	67%	103%	94%
# of reservoirs					3	3	3	3	3

Streamflow

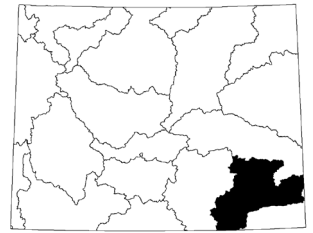
The 50% exceedance forecasts for the April through September period are about normal. LaPrele Creek near Douglas is forecasted to yield 113% of median. North Platte River below Guernsey Reservoir should yield around 87% of median. *See the following for more detailed information on projected runoff.*

LOWER NORTH PLATTE
Water Supply Forecasts
March 1, 2024

Forecast Exceedance Probabilities

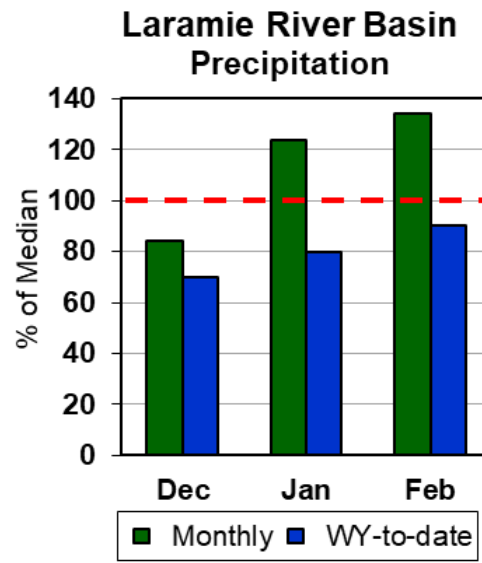
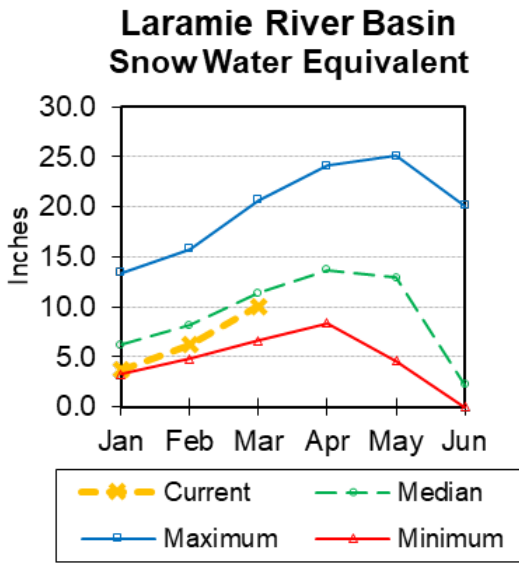


Laramie River Basin



Snow

SWE for the entire Laramie River Basin (above mouth entering North Platte) is 88% of median. SWE for the Laramie River above Laramie is 89% of median. SWE for the Little Laramie River 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 134% of median. The water year-to-date precipitation for the basin is currently 90% of median.

Reservoirs

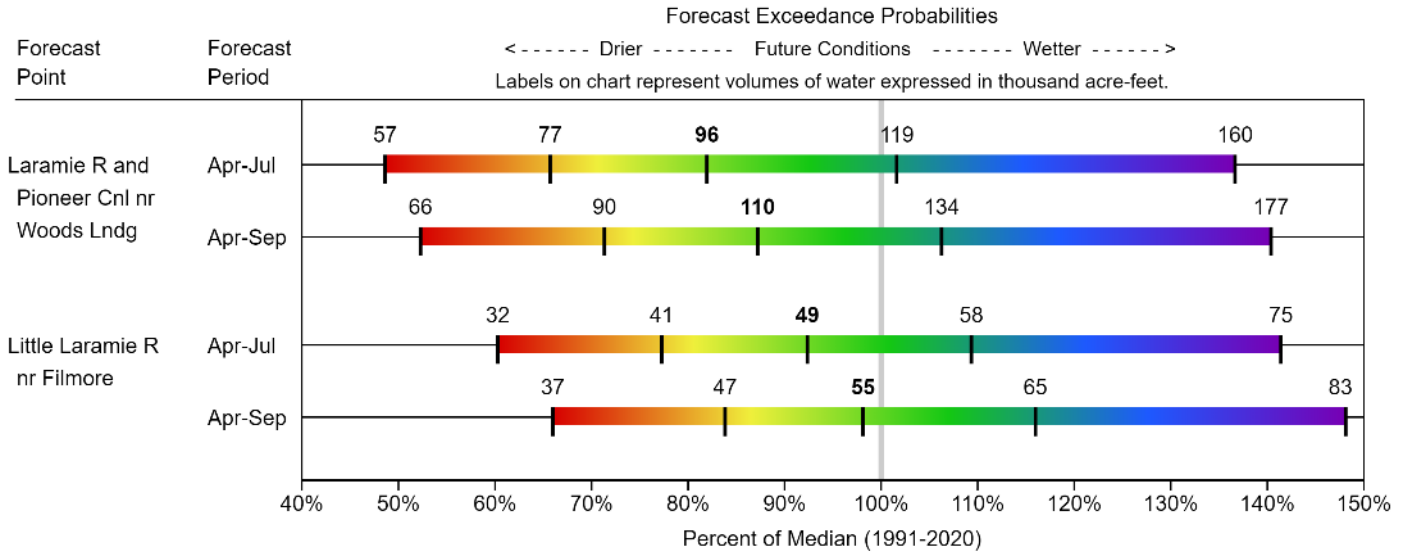
The storage for the reservoir in this basin is at 111% of median.

	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Wheatland #2	54.0	NA	48.8.0	98.9	54%	NA	49%	111%	NA
Basin Index					52%	NA	47%	111%	NA
# of reservoirs					1	1	1	1	1

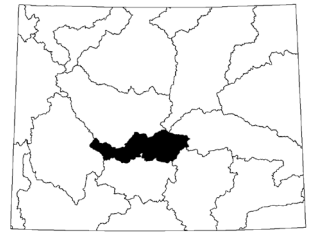
Streamflow

The 50% exceedance forecasts for the April through September period are about normal. Laramie River near Woods Landing is forecasted to yield around 87% of median. The Little Laramie near Filmore should produce about 98% of median. *See the following graph for detailed runoff volumes.*

LARAMIE
Water Supply Forecasts
March 1, 2024

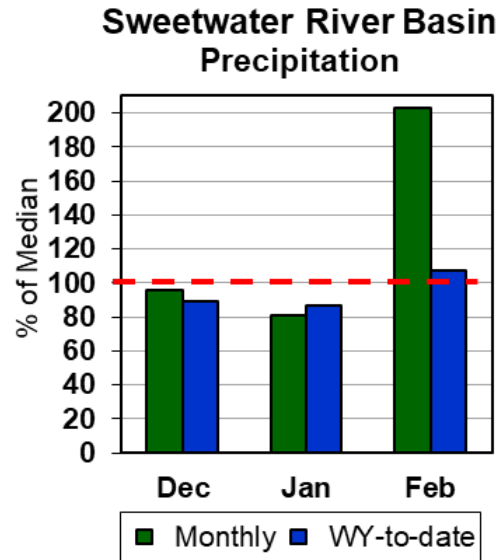
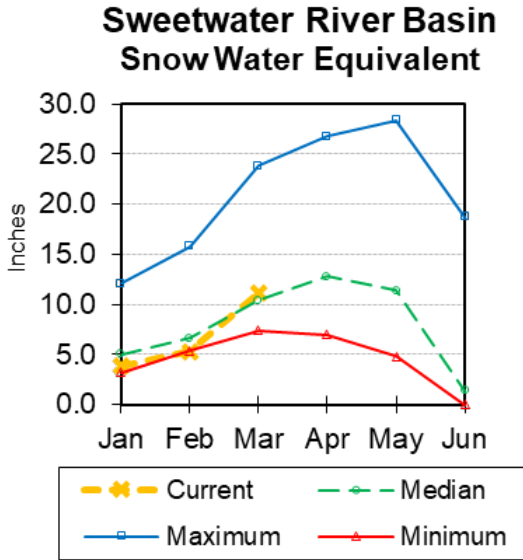


Sweetwater River Basin



Snow

Sweetwater River Basin SWE is at 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 203% of median. The water year-to-date precipitation for the basin is currently 107% of median.

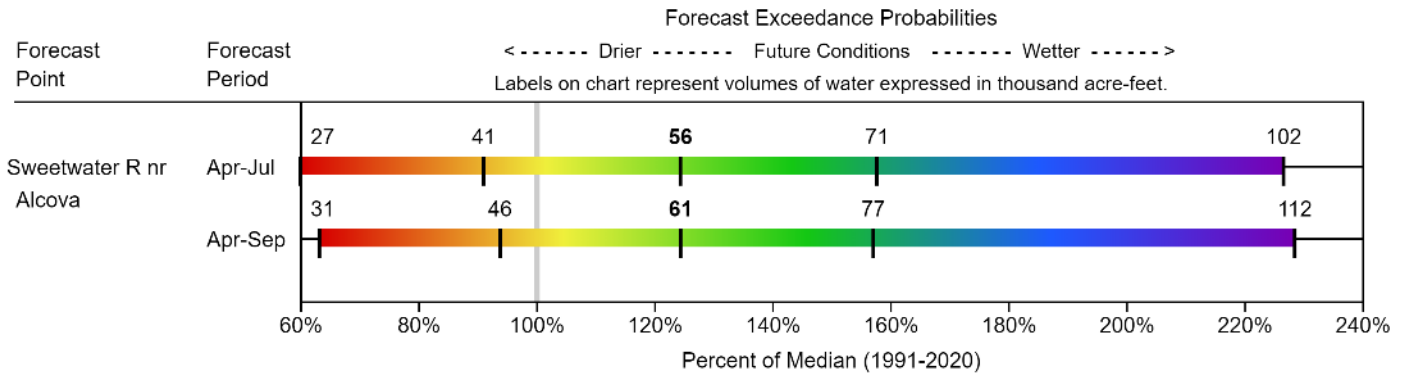
Reservoirs

No reservoir data for the basin.

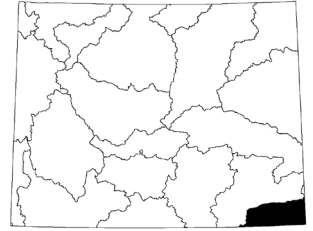
Streamflow

The 50% exceedance forecasts for the April through September period in the Sweetwater Basin is above normal. The Sweetwater River near Alcova will yield about 124% of median. *See below for detailed information on projected runoff.*

SWEETWATER
Water Supply Forecasts
March 1, 2024

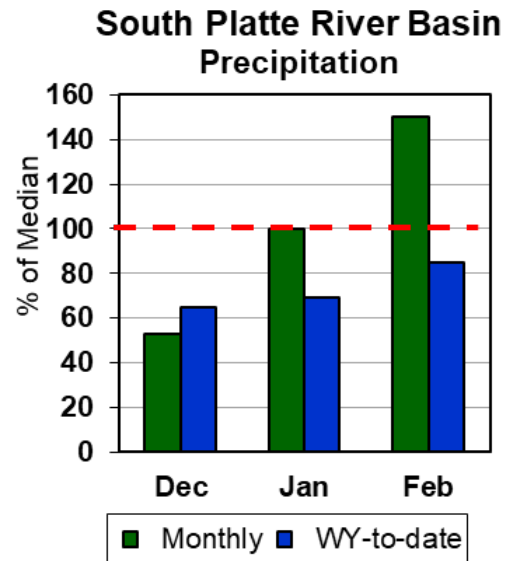
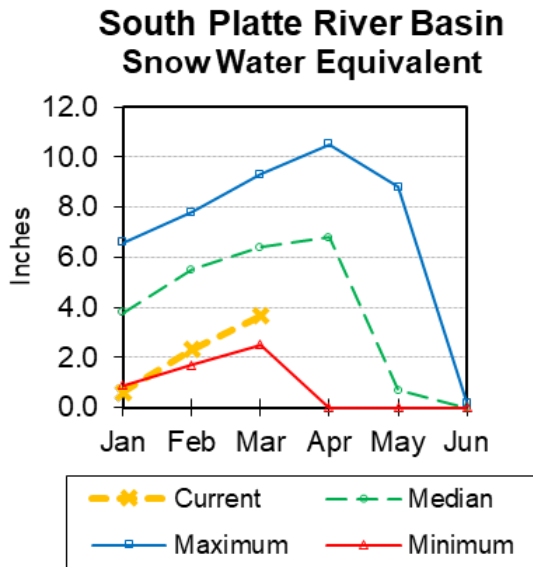


South Platte River Basin (WY)



Snow

The median SWE for sites in the South Platte River Basin is 57% of median. *See Appendix at the end of this report for a detailed listing of snow course information.*



Precipitation

Last month's precipitation was 150% of median. The water year-to-date precipitation for the basin is currently 85% of median.

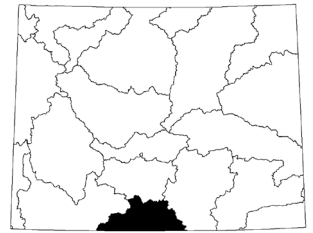
Reservoirs

No reservoir data for the basin.

Streamflow

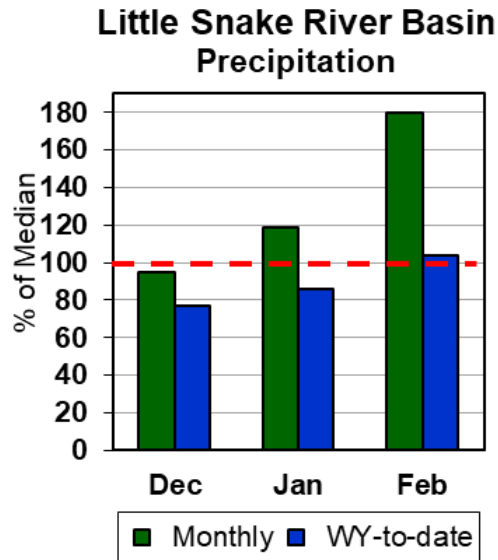
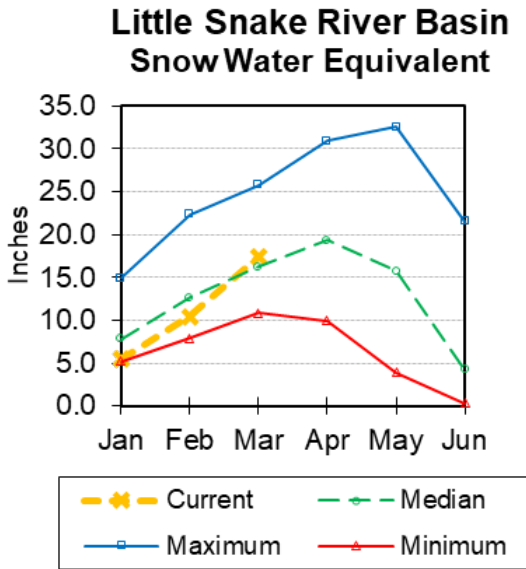
There are no streamflow forecast points for the basin.

Little Snake River Basin



Snow

Little Snake River drainage SWE is 107% of median. See *Appendix at the end of this report for a detailed listing of snow course information.*



Precipitation

Precipitation across the basin was 180% of median. The Little Snake River Basin water-year-to-date precipitation is currently 104% of median.

Reservoirs

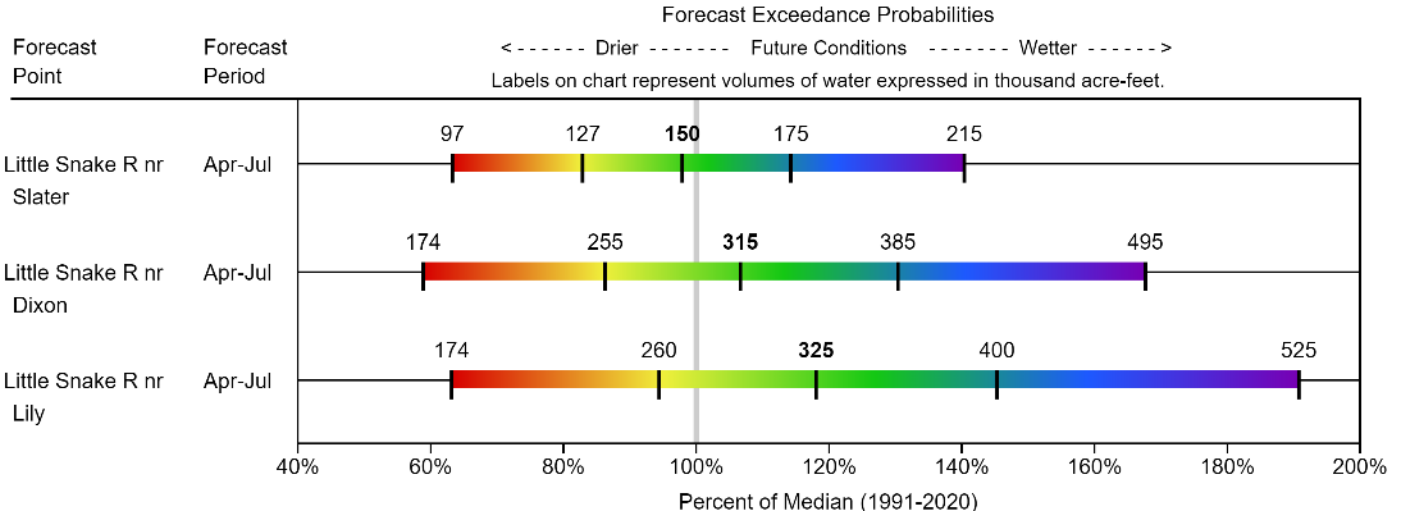
The storage for the reservoir in this basin is at 120% of median.

	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
High Savery Res	14.2	NA	11.5	22.4	63%	NA	51%	123%	NA
Basin Index					62%	31%	52%	120%	59%
# of reservoirs					1	1	1	1	1

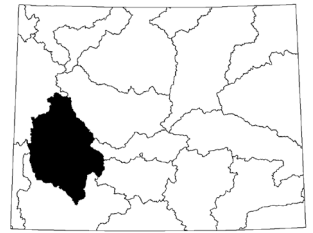
Streamflow

The 50% exceedance forecasts for the April through July period is above normal. The Little Snake River near Slater is forecasted to yield around 98% of median. *See below for detailed information on projected runoff.*

LITTLE SNAKE
Water Supply Forecasts
March 1, 2024

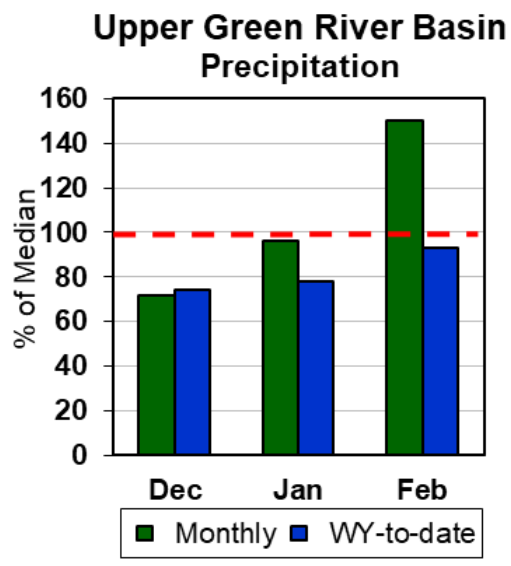
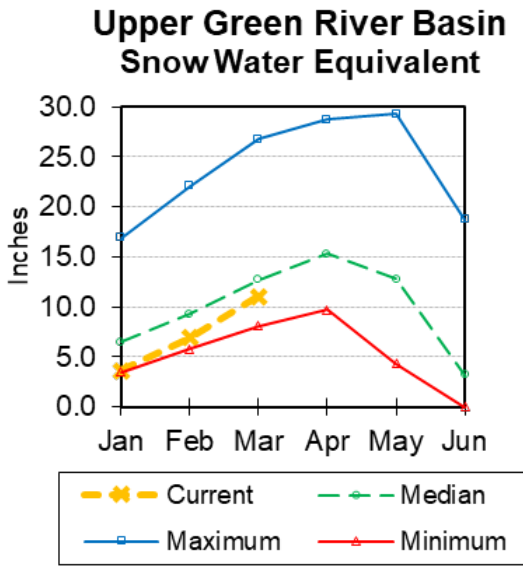


Upper Green River Basin



Snow

The Upper Green River Basin SWE (above Fontenelle Reservoir) is 87% of median. Green River Basin above Warren Bridge SWE is 83% of median. West Side of Upper Green River Basin SWE is 85% 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 150% of median last month. Water year-to-date precipitation is 93% of median.

Reservoir

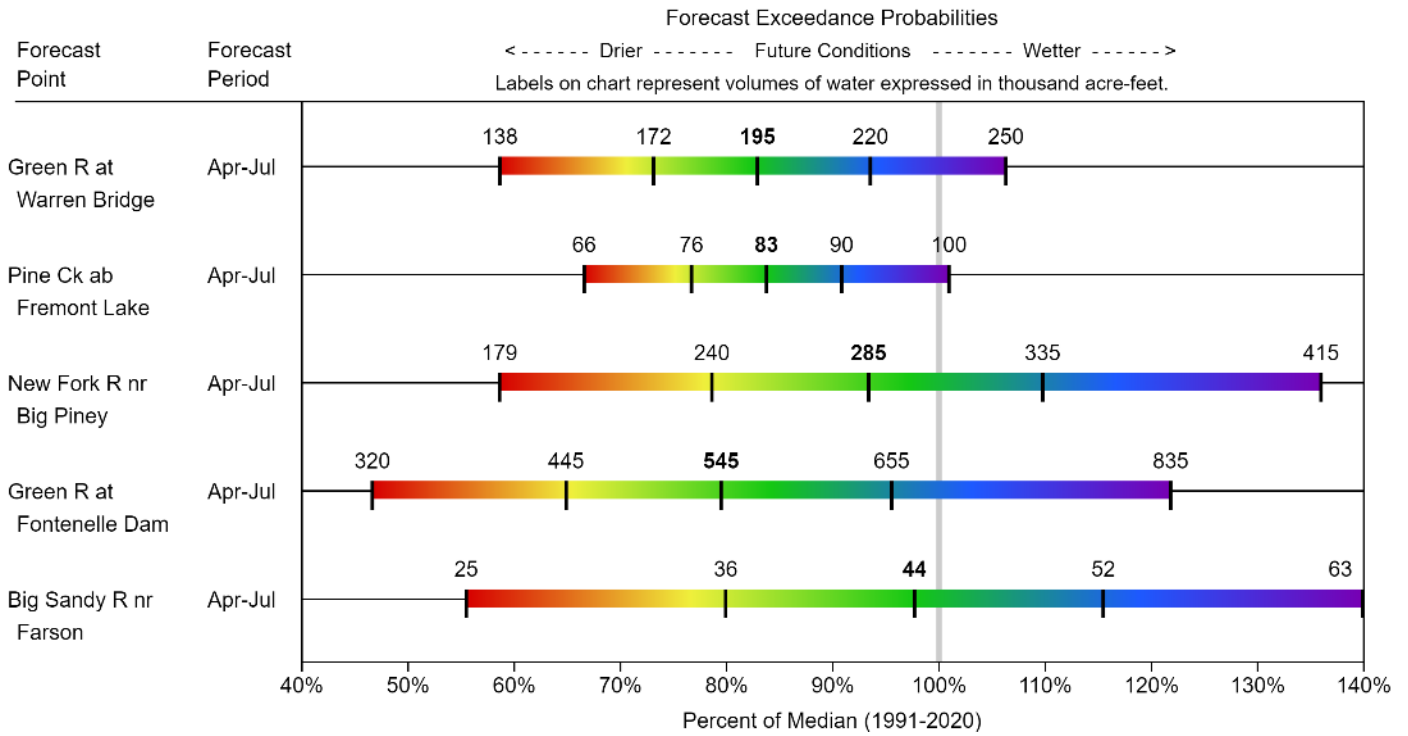
Combined water storage in the basin was at 112% of median for the 2 reservoirs.

	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Big Sandy	40.0	8.3	18.4	38.3	104%	22%	48%	218%	45%
Fontenelle	127.2	141.4	131.1	344.8	37%	41%	38%	97%	108%
Basin Index					44%	39%	39%	112%	100%
# of reservoirs					2	2	2	2	2

Streamflow

The 50% exceedance forecasts for the April through July period will be below normal. The yield on the Green River at Warren Bridge is about 83% of median. New Fork River near Big Piney yield will be around 93% of median. Green River at Fontenelle Dam is estimated to be about 80% of median. *See the following for a more detailed forecast.*

UPPER GREEN
Water Supply Forecasts
March 1, 2024



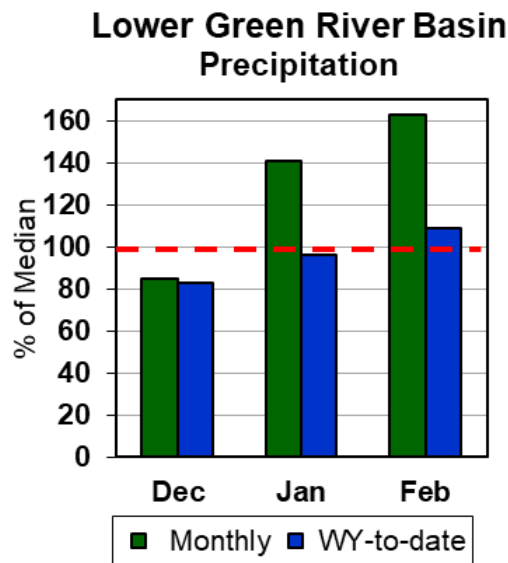
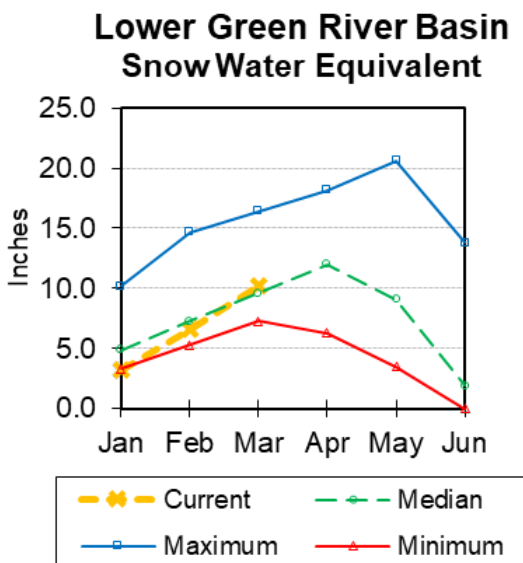
Lower Green River Basin



Snow

Lower Green River Basin SWE is at 106% of median. Hams Fork drainage SWE is 101% of median. Blacks-Smiths Forks drainage SWE is 111% 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 163% of median. The basin year-to-date precipitation is currently 109% of median.

Reservoirs

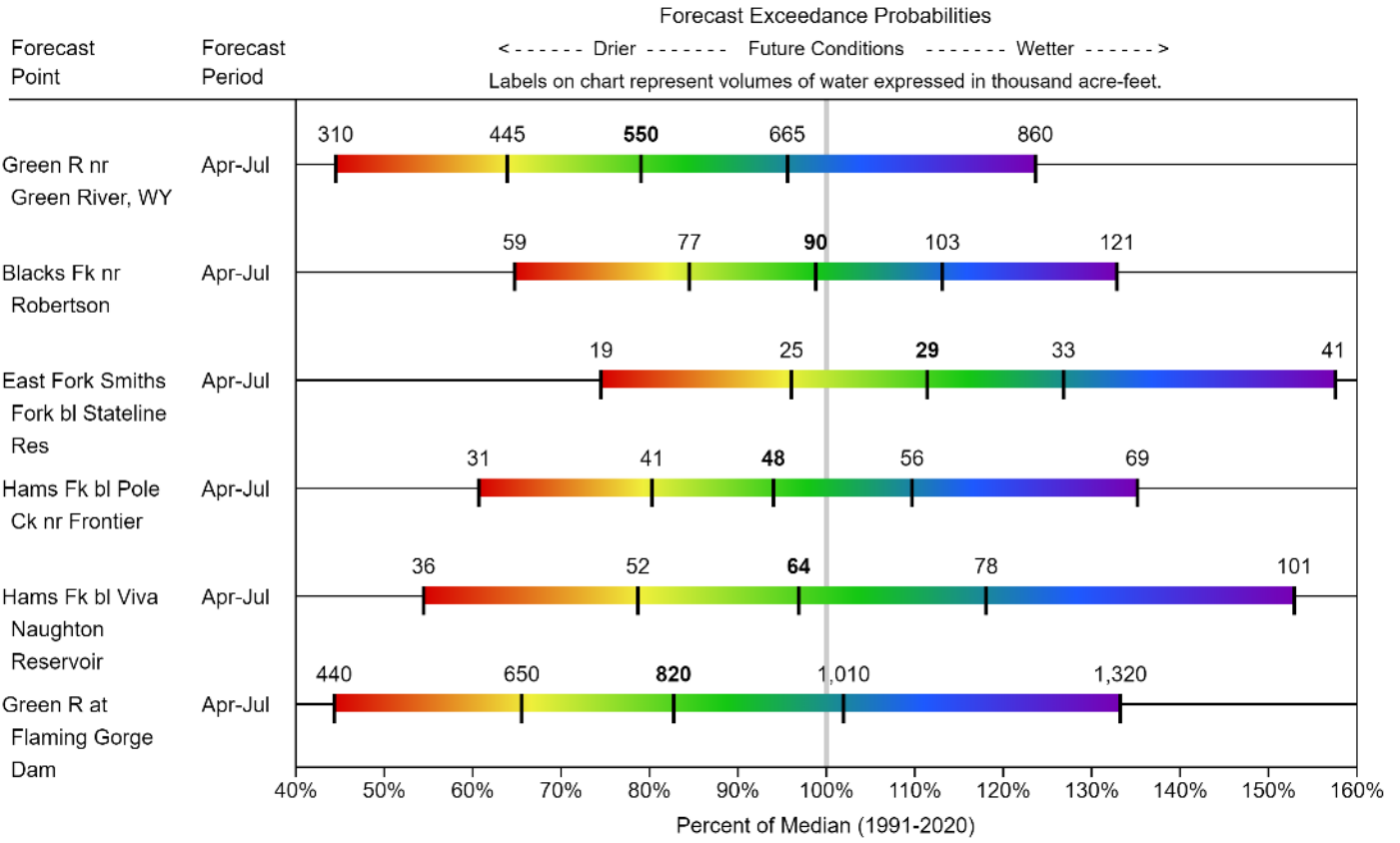
Combined storage for the 4 reservoirs in the basin was at 100% of median at the end of last month.

	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Viva Naughton Res	34.7	30.5	29.5	42.4	82%	72%	70%	118%	103%
Stateline Res	8.3	6.4	5.7	12.0	69%	53%	48%	146%	112%
Flaming Gorge Res	3106.6	2457.3	3107.0	3749.0	83%	66%	83%	100%	79%
Meeks Cabin Res	18.3	10.3	10.8	32.5	56%	32%	33%	170%	95%
Basin Index					83%	65%	82%	100%	79%
# of reservoirs					4	4	4	4	4

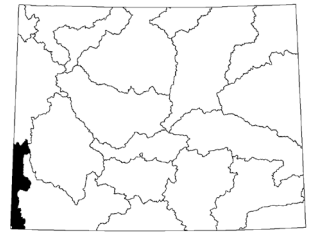
Streamflow

The following are the 50% exceedance forecasts for the April through July period is below normal. The Green River near Green River will yield about 79% of median. The Flaming Gorge Reservoir inflow will be about 83% of median. *See the following page for more detailed information on projected runoff.*

LOWER GREEN
Water Supply Forecasts
March 1, 2024



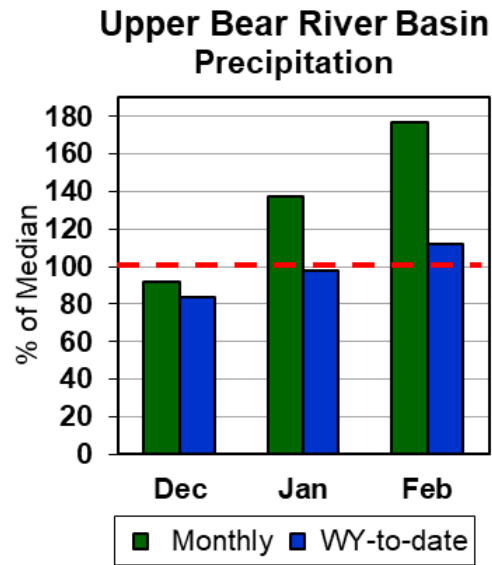
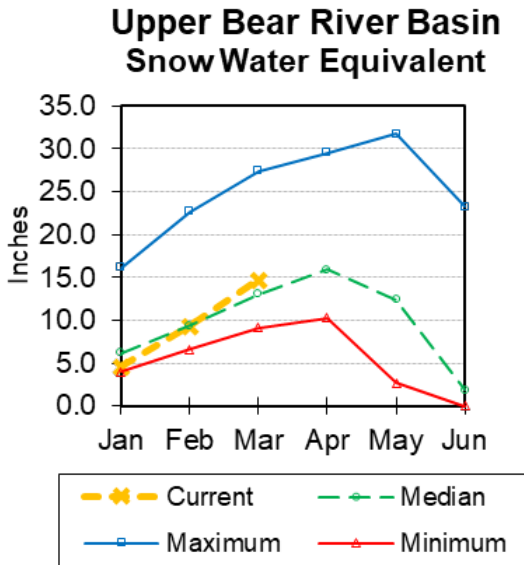
Upper Bear River Basin



Snow

SWE in the Upper Bear River Basin of Utah is 113% of median. SWE in the Wyoming portion of the Bear River drainage (Smiths and Thomas Forks) is 107% of median.

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



Precipitation

Precipitation for last month was 177% of median in the basin. The year-to-date precipitation for the basin is 112% of median.

Reservoirs

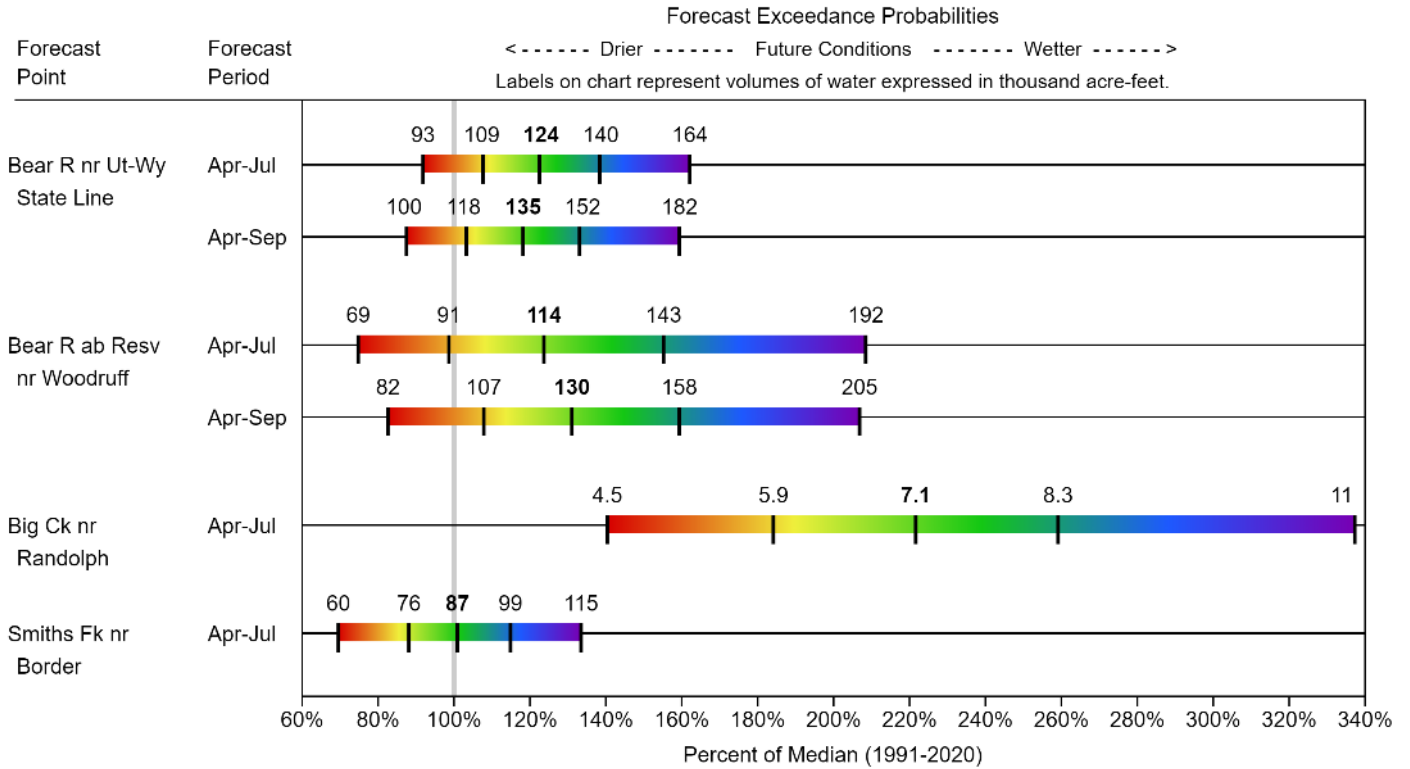
Combined reservoir storage in this basin is at 124% of median.

	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Woodruff Creek	2.0	2.4	2.4	4.0	49%	60%	60%	82%	100%
Woodruff Narrows Res	48.8	13.5	38.4	57.3	85%	24%	67%	127%	35%
Basin Index					83%	26%	67%	124%	39%
# of reservoirs					2	2	2	2	2

Streamflow

The 50% exceedance forecasts for the April through September period are above normal. The Bear River above Reservoir near Woodruff should yield around 131% of median. For April to July the Smiths Fork River near Border Jct. will yield around 101%. *See the following page for more detailed information on projected runoff.*

UPPER BEAR
Water Supply Forecasts
March 1, 2024



Appendix

MEDIAN INFORMATION

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

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

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

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

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

Topics include:

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

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

https://www.wcc.nrcs.usda.gov/ftpref/support/srvo_norms_comps/

LINKS (for more information/graphics)

National Water Climate Center (NWCC)

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

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

Water Resources Data System and State Climate Office (WRDS)

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

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

USGS WaterWatch

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

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

Appendix - Snowpack Data

In Word double click the object below to view entire document

Appendix - Precipitation Data

In Word double click the object below to view entire document

Appendix - Streamflow Data

In Word double click the object below to view entire document

Wyoming Basin Outlook Report

Natural Resources Conservation Service

Casper, Wyoming

Issued by:

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

Released by:

Jackie Byam
State Conservationist
N R C S
Casper, Wyoming

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

FEDERAL:

United States Department of the Interior (National Park Service)

United States Department of the Interior (Bureau of Reclamation)

United States Department of Agriculture (Forest Service)

United States Department of Commerce NOAA (National Weather Service)

STATE:

The Wyoming State Engineer's Office

The University of Wyoming

LOCAL:

The City of Cheyenne