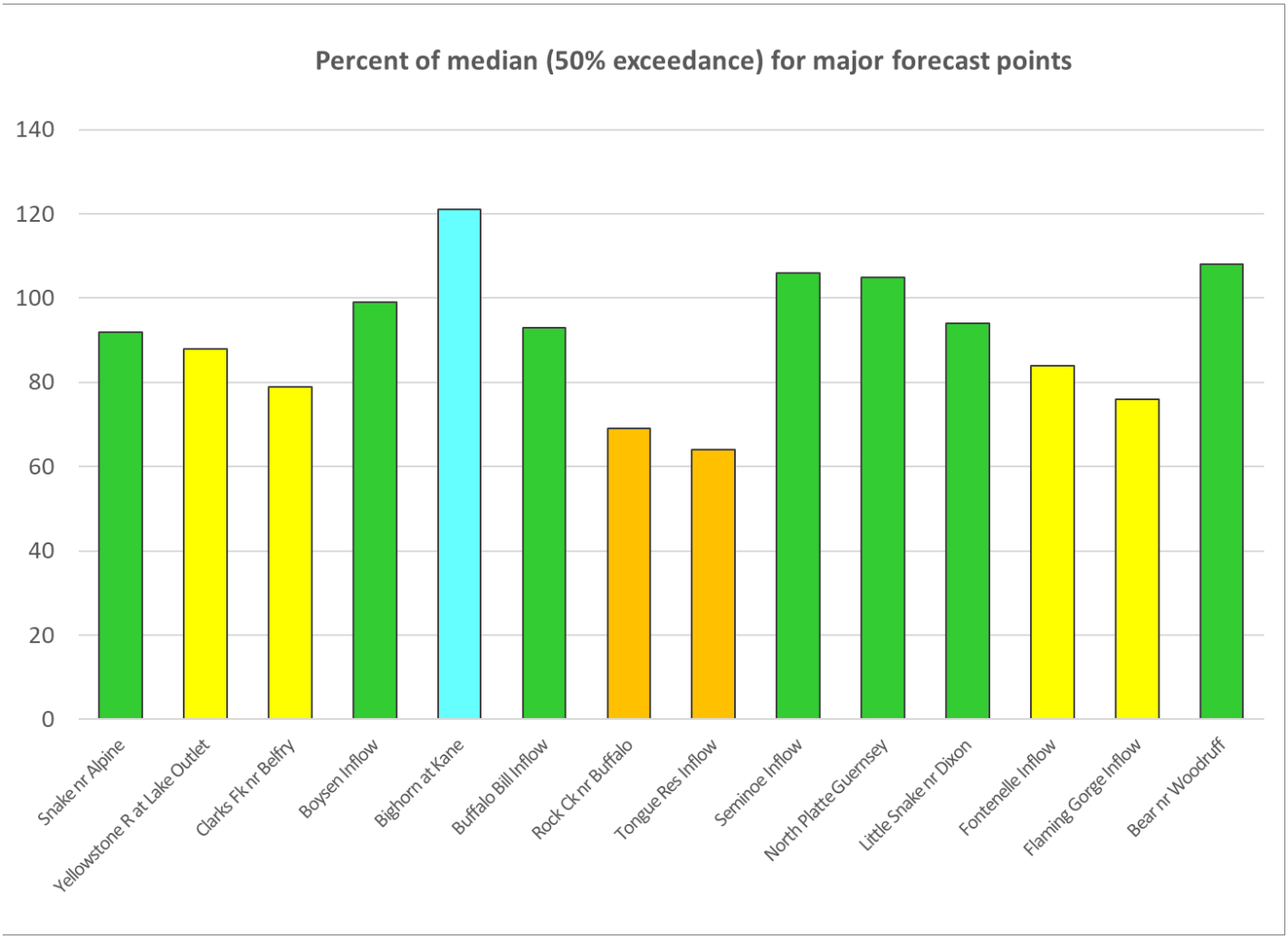
United States
Department of
Agriculture

Wyoming Basin & Water Supply Outlook Report
May 1, 2024

Natural
Resources
Conservation
Service

Tyrell Ranger Station, Big Horn Mountains, April 28th, 2024, photo credit Wyoming State Engineer's Office.

Forecasted stream flows for May 1st, 2024



Fifty percent exceedance probability for 4 out of 14 major forecast points are expected to be above 100% of normal. Fifty percent exceedance probability for 7 out of 14 major forecast points above are expected to be near 100% of normal. The highest is the Bighorn at Kane and is expected to be 121% of normal. Fifty percent exceedance probability for 6 major forecast points listed above are expected to be below 90% 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.

Wyoming Basin & Water Supply Outlook Report

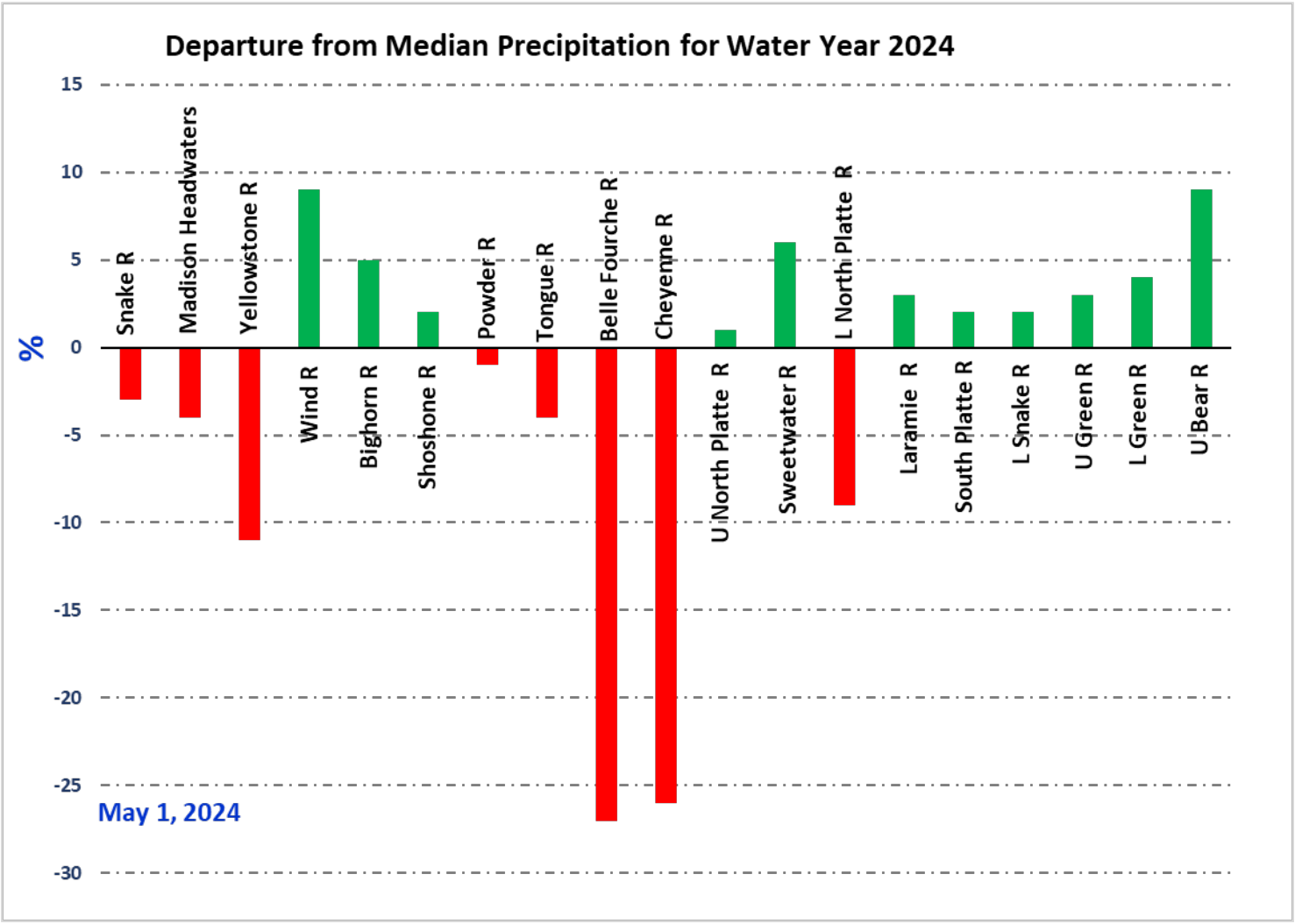
Snowpack

Snow water equivalent (SWE)across Wyoming for May 1st was at 93% of median. SWE in the Laramie River Basin was the highest at 105% of median and lowest for the Belle Fourche and Cheyenne River Basin at 0% of median. On May 1st, 2024, the following basins were below 90% of median SWE recorded for the 1991 - 2020 interval: Belle Fourche, Cheyenne, Lower North Platte, Powder, Yellowstone, Madison Headwaters in WY, Upper Green, Tongue, South Platte, Shoshone, Lower Green, Bighorn, and Snake. *See the map on page 6 and the Appendix for further information.*

Precipitation

The Powder Basin had the highest precipitation for the month at 126% of median. The Lower Green Basin had the lowest precipitation amount for the month at 52% of median. The following graph displays the precipitation in major river basins and their departure from median for the water year beginning October 1st, 2023.

See Appendix for further information.



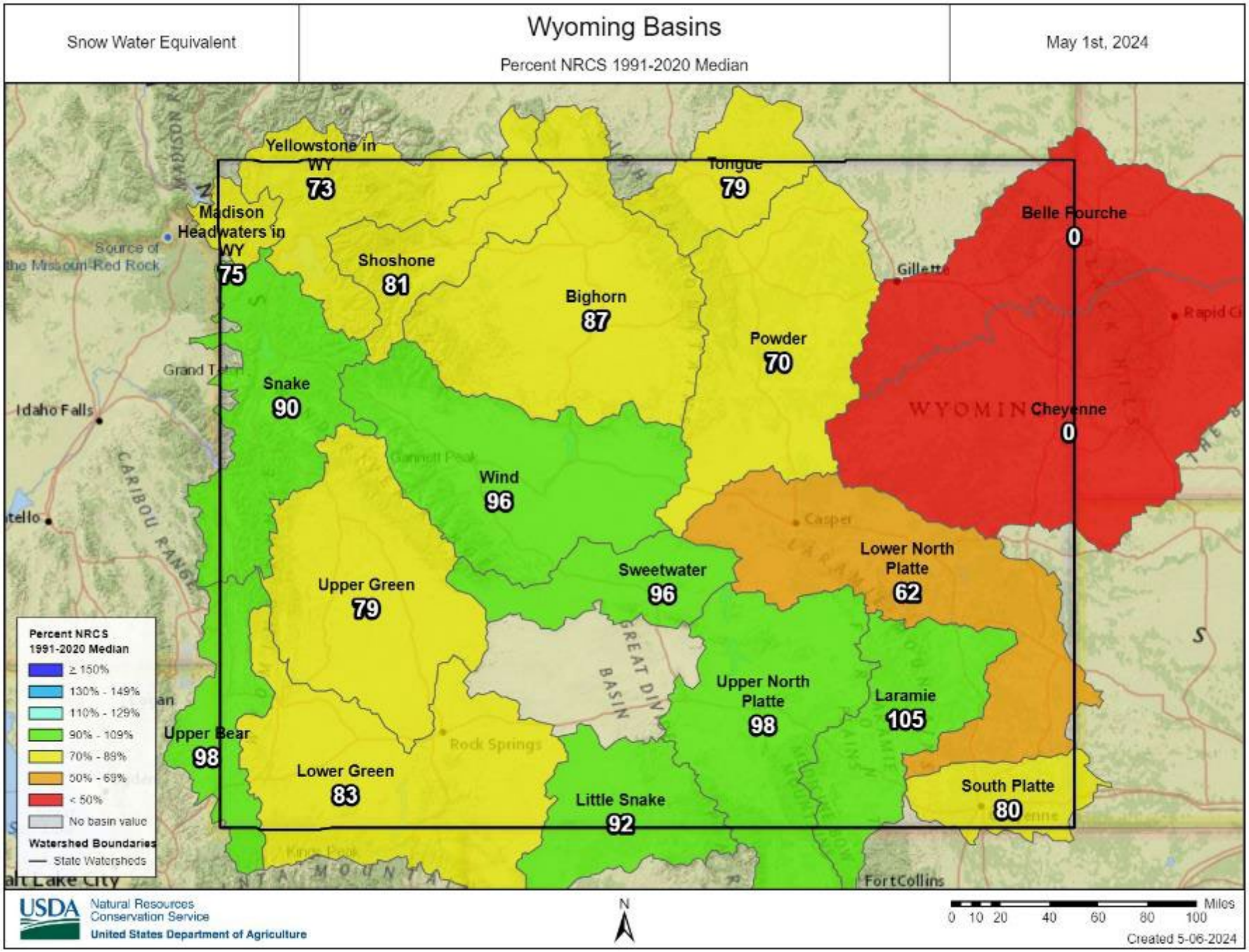
Streams

Forecast median streamflow yields for May thru September in Wyoming basins (except Green, Little Snake and Cheyenne) average 82%. Forecast median stream flow yields for May thru July in Green, Little Snake, and Cheyenne average 86%, 99%, and 60%. The Snake River and Yellowstone River in Wyoming, basins should yield about 92% and 84% of median. Yields from the Wind and Bighorn River basins should be about 105% of median. Yields from the Shoshone River basin should be 87% of median. Yields from the Powder and Tongue River basins should be about 67% and 71% of median. Yield for the Cheyenne River basin should be about 60% of median. Yields for the Sweetwater, Upper North Platte, Lower North Platte, and Laramie Rivers of Wyoming should be about 112%, 104%, 91%, and 107% of median, respectively.

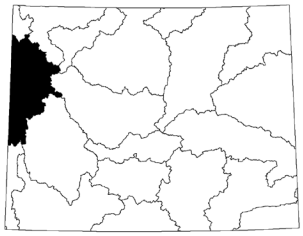
Reservoirs

Reservoir storage was 106% of median across the entire state. Reservoirs in the Snake River basin are above median at 112%. Reservoirs in the Wind River basin are near median at 101%. Reservoirs on the Bighorn are 101% of median. The Buffalo Bill Reservoir on the Shoshone is above median at 118%. Reservoirs in the Belle Fourche and Cheyenne River basins are near median at 93% and 100% respectively. Reservoirs on the Upper and Lower North Platte River are above median at 121% and 97% respectively. Reservoirs on the Upper Green River are above median at 117%. Reservoirs on the Lower Green River are near median at 102%. *See below for further information.*

	Reservoir Storage Summary For the End of April 2024								
	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Alcova	180.4	180.4	179.9	184.3	98%	98%	98%	100%	100%
Angostura	112.3	76.6	110.8	122.1	92%	63%	91%	101%	69%
Belle Fourche	159.5	160.6	160.0	178.4	89%	90%	90%	100%	100%
Big Sandy	45.5	13.3	23.5	38.3	119%	35%	61%	194%	57%
Bighorn Lake	783.1	775.9	777.4	1356.0	58%	57%	57%	101%	100%
Boysen	524.8	464.8	507.4	596.0	88%	78%	85%	103%	92%
Buffalo Bill	465.7	405.2	395.7	646.6	72%	63%	61%	118%	102%
Bull Lake	76.7	77.9	83.9	151.8	51%	51%	55%	91%	93%
Deerfield	15.1	15.0	15.1	15.2	99%	98%	99%	100%	99%
Flaming Gorge Res	3150.7	2589.4	3114.0	3749.0	84%	69%	83%	101%	83%
Fontenelle	136.1	126.3	131.4	344.8	39%	37%	38%	104%	96%
Glendo	412.3	358.4	431.3	506.4	81%	71%	85%	96%	83%
Grassy Lake	13.9	12.0	13.6	15.2	92%	79%	89%	102%	88%
Guernsey	28.6	27.8	26.6	45.6	63%	61%	58%	107%	105%
High Savery Res	19.7	10.2	15.0	22.4	88%	46%	67%	131%	68%
Jackson Lake	676.8	220.4	600.7	847.0	80%	26%	71%	113%	37%
Keyhole	129.4	127.9	149.0	193.8	67%	66%	77%	87%	86%
Meeks Cabin Res	26.7	14.1	15.6	32.5	82%	43%	48%	171%	90%
Pactola	53.4	52.4	54.9	55.0	97%	95%	100%	97%	95%
Pathfinder	748.9	419.3	603.0	1016.5	74%	41%	59%	124%	70%
Pilot Butte	25.7	24.7	27.2	31.6	81%	78%	86%	94%	91%
Seminoe	662.0	457.4	565.6	1016.7	65%	45%	56%	117%	81%
Stateline Reservoir	10.5	7.5	6.5	12.0	87%	62%	54%	161%	115%
Tongue River Res	79.1	64.2	48.2	79.1	100%	81%	61%	164%	133%
Viva Naughton Res	35.0	16.8	32.8	42.4	80%	40%	77%	107%	51%
Wheatland #2	71.1	NA	59.7	98.9	72%	NA	60%	119%	NA
Woodruff Creek	4.0	3.2	4.0	4.0	100%	79%	100%	100%	79%
Woodruff Narrows Res	52.0	44.6	55.5	57.3	91%	78%	97%	94%	80%


Snow Water Equivalent
Wyoming Basins
Percent NRCS 1991-2020 Median
May 1st, 2024
Yellowstone in WY
73
Madison Headwaters in WY
75
Shoshone
81
Bighorn
87
Tongue
79
Belle Fourche
0
Powder
70
Cheyenne
0
Snake
90
Wind
96
Sweetwater
96
Lower North Platte
62
Upper Green
79
Upper North Platte
98
Laramie
105
Upper Bear
98
Lower Green
83
Little Snake
92
South Platte
80
Percent NRCS 1991-2020 Median
≥ 150%
130% - 149%
110% - 129%
90% - 109%
70% - 89%
50% - 69%
< 50%
No basin value
Watershed Boundaries
State Watersheds
USDA Natural Resources Conservation Service
United States Department of Agriculture
N
Miles
0 10 20 40 60 80 100
Created 5-06-2024

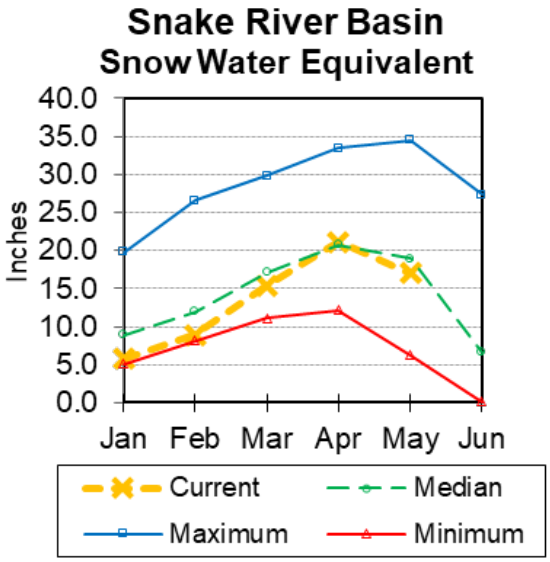
Snake River Basin

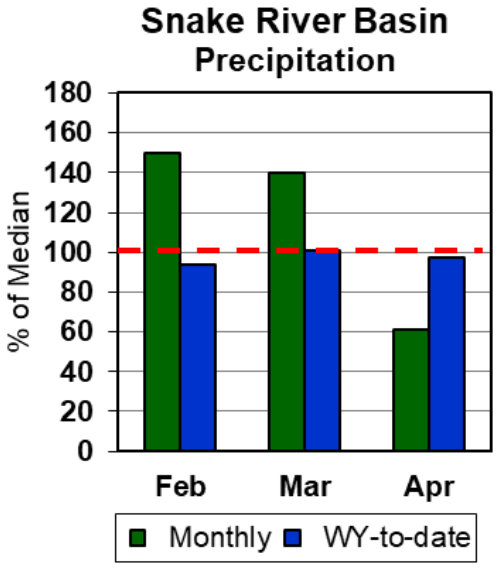


Snow

The overall Snake River basin SWE (portion above Palisades dam) is 90% of median. SWE in the Snake River Basin above Jackson Lake is 88% of median. Pacific Creek basin SWE is 88% of median. Buffalo Fork SWE is 76% of median. Gros Ventre River basin SWE is 82% of median. SWE in the Hoback River drainage is 74% of median. SWE in the Greys River drainage is 93% of median. Salt River Basin SWE is 104% 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 61% of median. Water-year-to-date precipitation is 97% of median.

Reservoirs

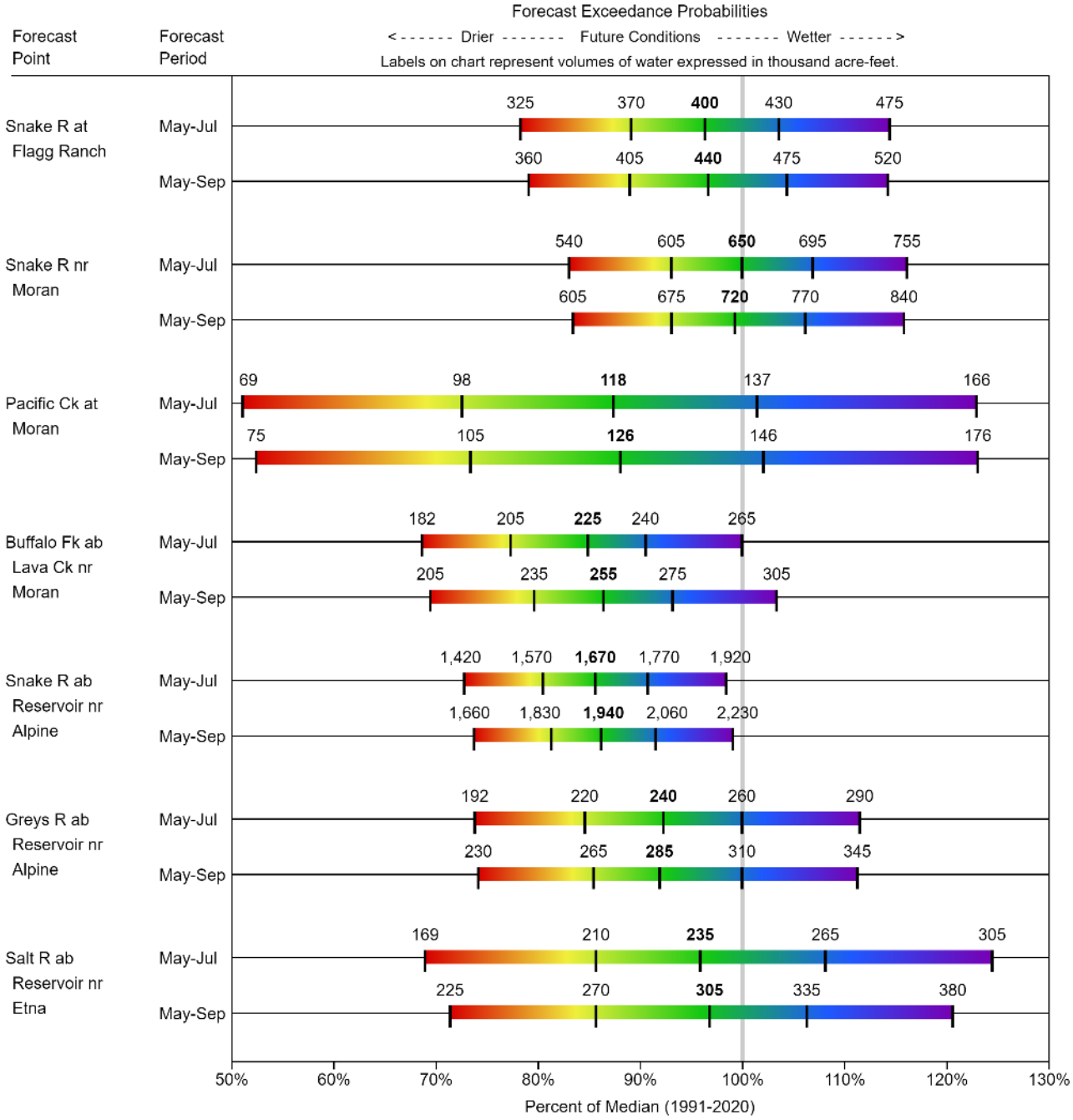
Current reservoir storage is 112% of median for the two storage reservoirs in the basin.

	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Grassy Lake	13.9	12.0	13.6	15.2	92%	79%	89%	102%	88%
Jackson Lake	676.8	220.4	600.7	847.0	80%	26%	71%	113%	37%
Basin Index					80%	27%	71%	112%	38%
# of reservoirs					2	2	2	2	2

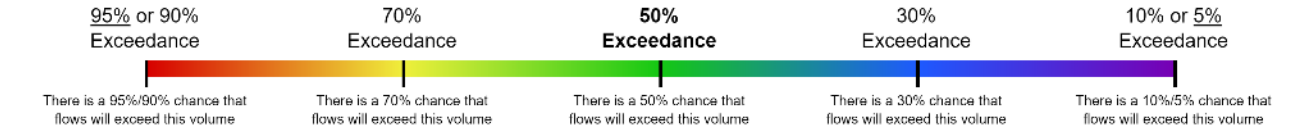
Streamflow

The 50% exceedance forecasts for May through September are near median for this basin. The Snake near Moran yield should be 98% of median. Snake River above reservoir near Alpine will yield about 92%. Pacific Creek near Moran yield will be around 88%. Buffalo Fork above Lava near Moran will be around 86% of median. Greys River above reservoir near Alpine should yield about 92%. Salt River near Etna yield will be about 97%. *See the following graph for further information.*

SNAKE
Water Supply Forecasts
May 1, 2024



Legend



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

Period of Record Minimum Streamflow KAF (Year)

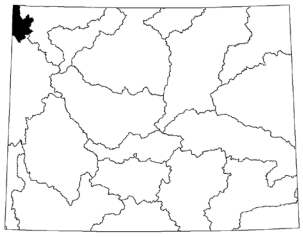
1991-2020 Normal Streamflow KAF

Observed Streamflow KAF

Period of Record Maximum Streamflow KAF (Year)

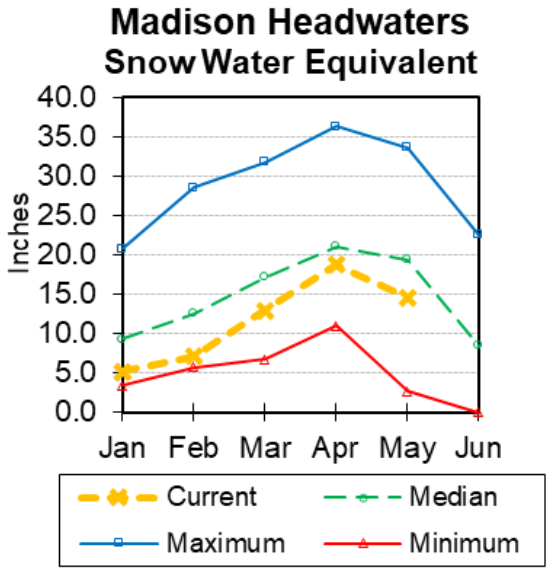
Some forecasts may be for volumes that are regulated or influenced by diversions and water management.

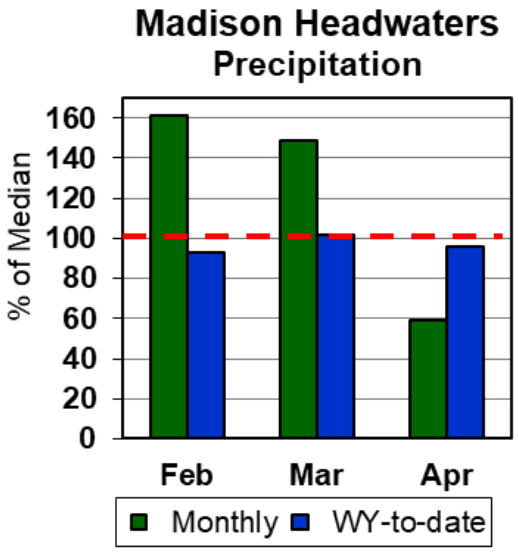
Madison Headwaters in Wyoming



Snow

SWE is 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 59% of median. Water-year-to-date precipitation is at 96% of median.

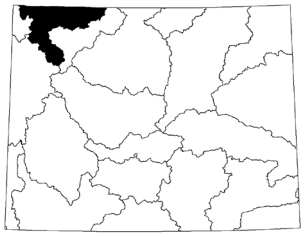
Reservoirs

No reservoir data.

Streamflow

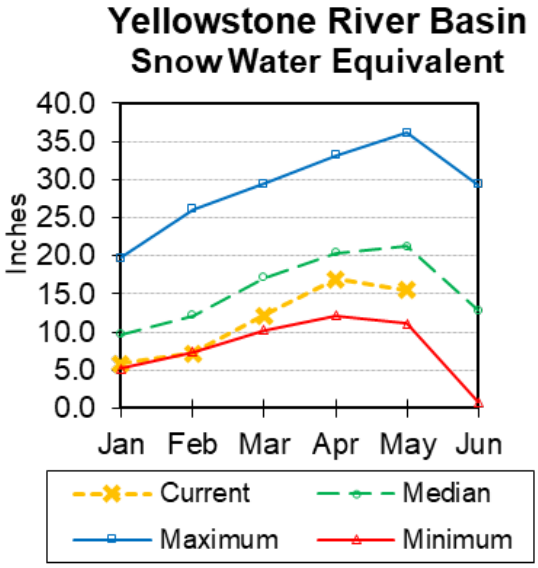
There are no streamflow forecast points for the basin.

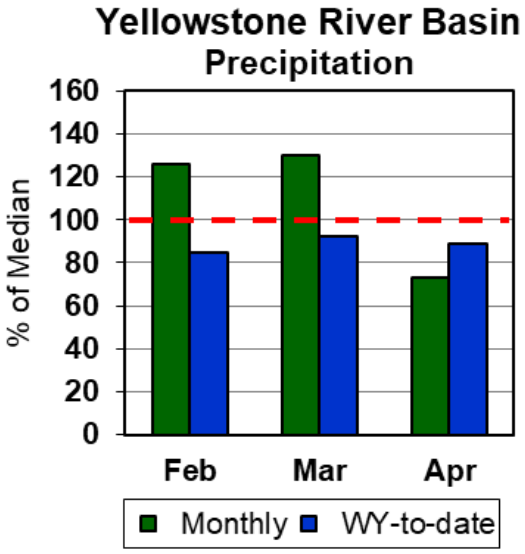
Yellowstone River Basin



Snow

SWE in the Yellowstone River Basin is 73% of median. SWE in the Clarks Fork Drainage of the Yellowstone River basin in Wyoming is 72% of median. *See Appendix at the end of this report for a detailed listing of snow course information.*





Precipitation

Last month's precipitation in the Yellowstone River Basin was 73% of median. Water-year-to-date precipitation is 89% of median.

Reservoirs

No reservoir data.

Streamflow

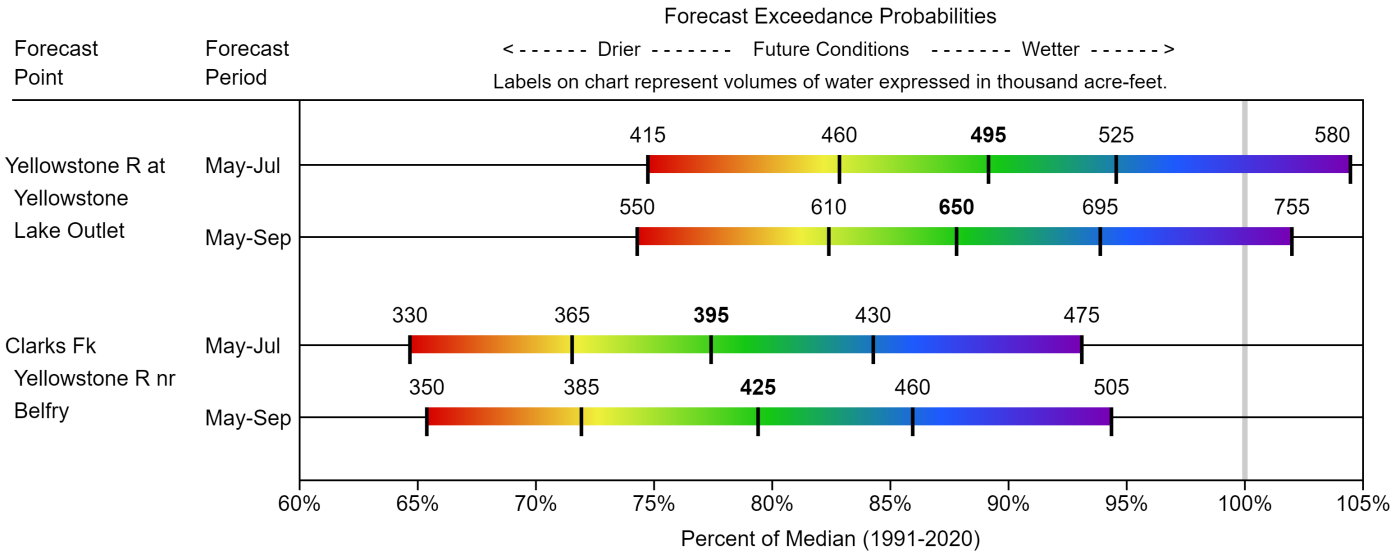
The 50% exceedance forecasts for May through September are below normal for the basin. Yellowstone at Lake Outlet will yield around 88% of median. Clarks Fork of the Yellowstone near Belfry will yield around 79%.

See the following graph for detailed information.

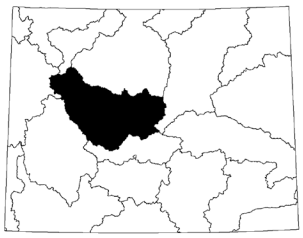
YELLOWSTONE IN WY

Water Supply Forecasts

May 1, 2024

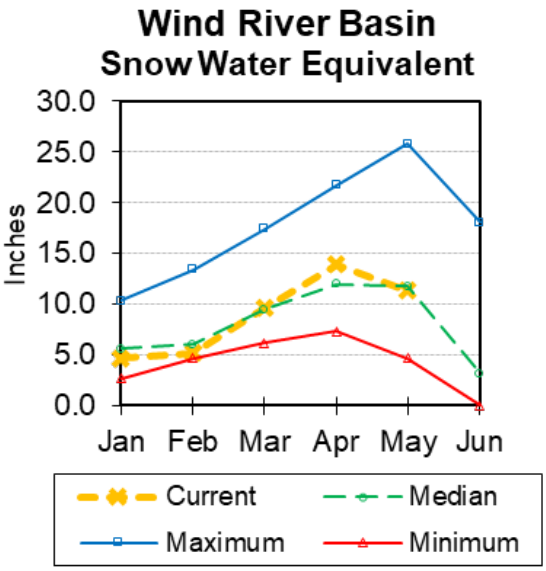


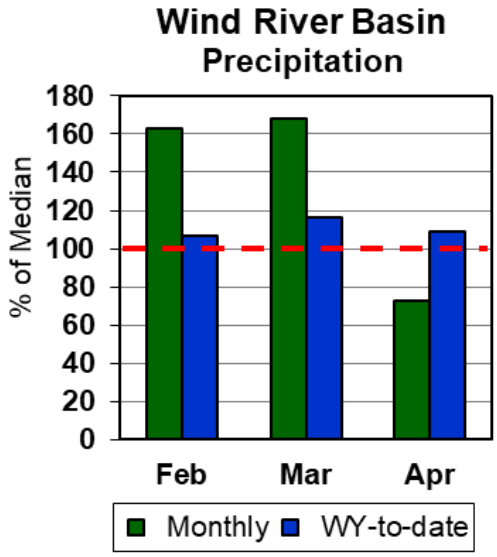
Wind River Basin



Snow

Wind River basin SWE (above Boysen Reservoir) is 96% of median. SWE in the Wind River above Dubois is 84% of median. Little Wind SWE is 107% of median, and Popo Agie drainage SWE 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 for the basin was 73% of median. Water year-to-date precipitation is 109% of median.

Reservoirs

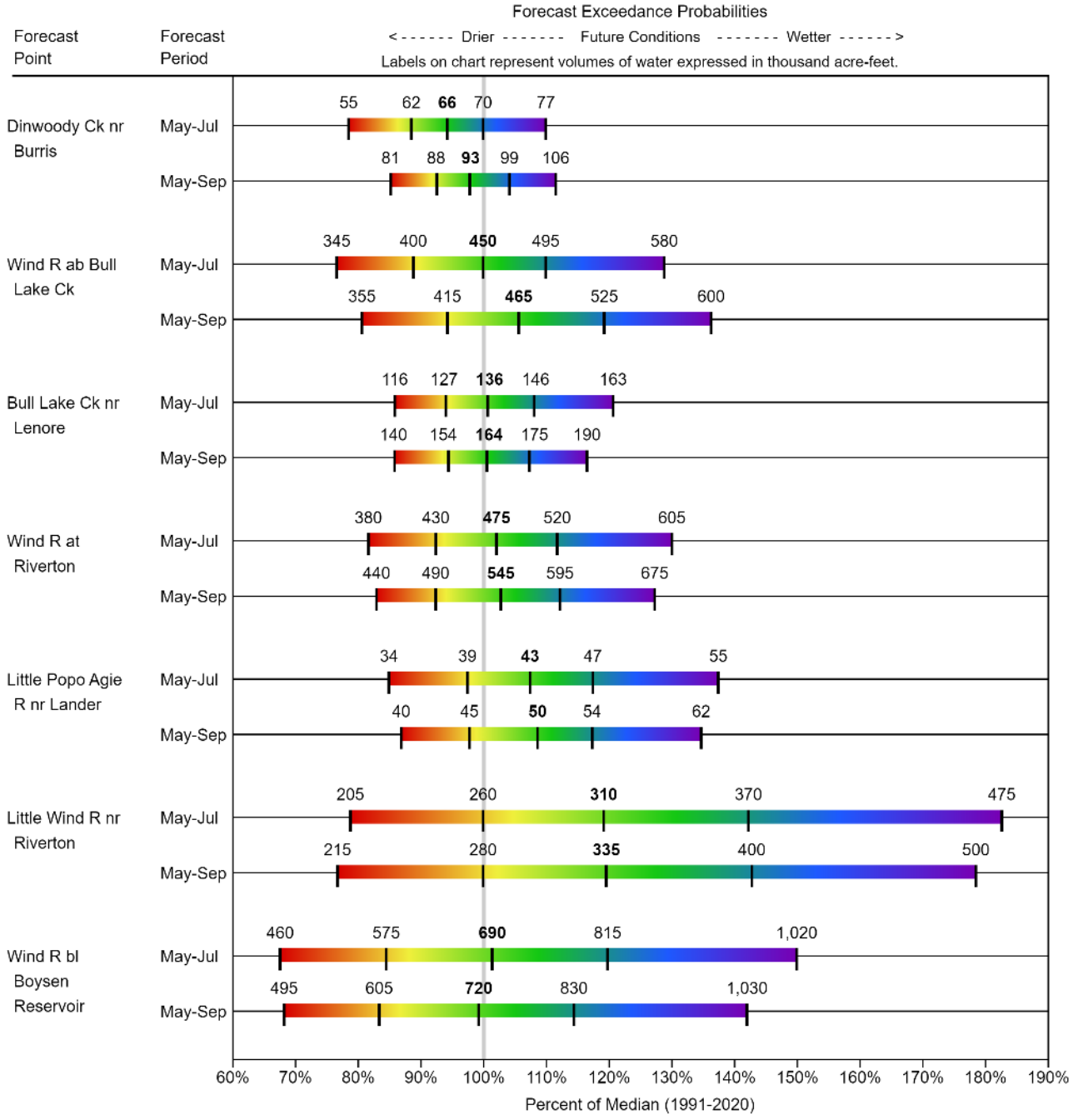
Current storage is 101% of median in the basin.

	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Pilot Butte	25.7	24.7	27.2	31.6	81%	78%	86%	94%	91%
Boysen	524.8	464.8	507.4	596.0	88%	78%	85%	103%	92%
Bull Lake	76.7	77.9	83.9	151.8	51%	51%	55%	91%	93%
Basin Index					80%	73%	79%	101%	92%
# of reservoirs					3	3	3	3	3

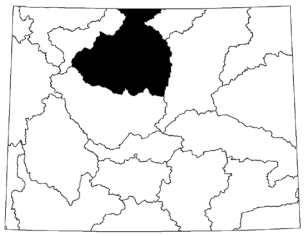
Streamflow

The 50% exceedance forecasts for the May through September runoff period are near normal for the Wind River. The Wind River above Bull Lake Creek will yield about 106% of median. Little Popo Agie River near Lander should yield around 109% of median. Little Wind River near Riverton will yield around 120% of median. Boysen Reservoir inflow will yield about 99% of median. *See the following graph for detailed runoff volumes.*

WIND
Water Supply Forecasts
May 1, 2024

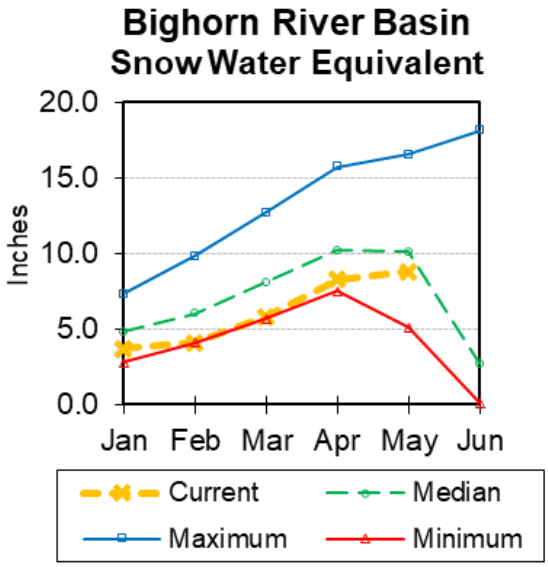


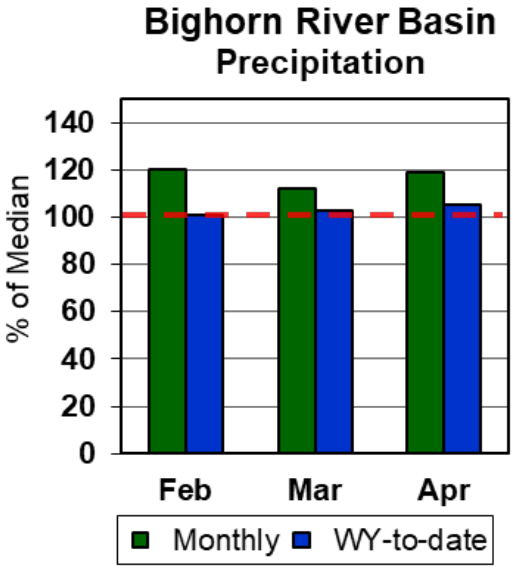
Bighorn River Basin



Snow

The Bighorn River Basin SWE (above Bighorn Reservoir) is 87% of median. The Greybull River SWE is at 154% of median. Shell Creek SWE is at 80% of median. *See Appendix at the end of this report for a detailed listing of snow course information.*





Precipitation

Last month's precipitation was 119% of median. Year-to-date precipitation is 105% of median.

Reservoirs

Current reservoir storage in the basin is 101% of median.

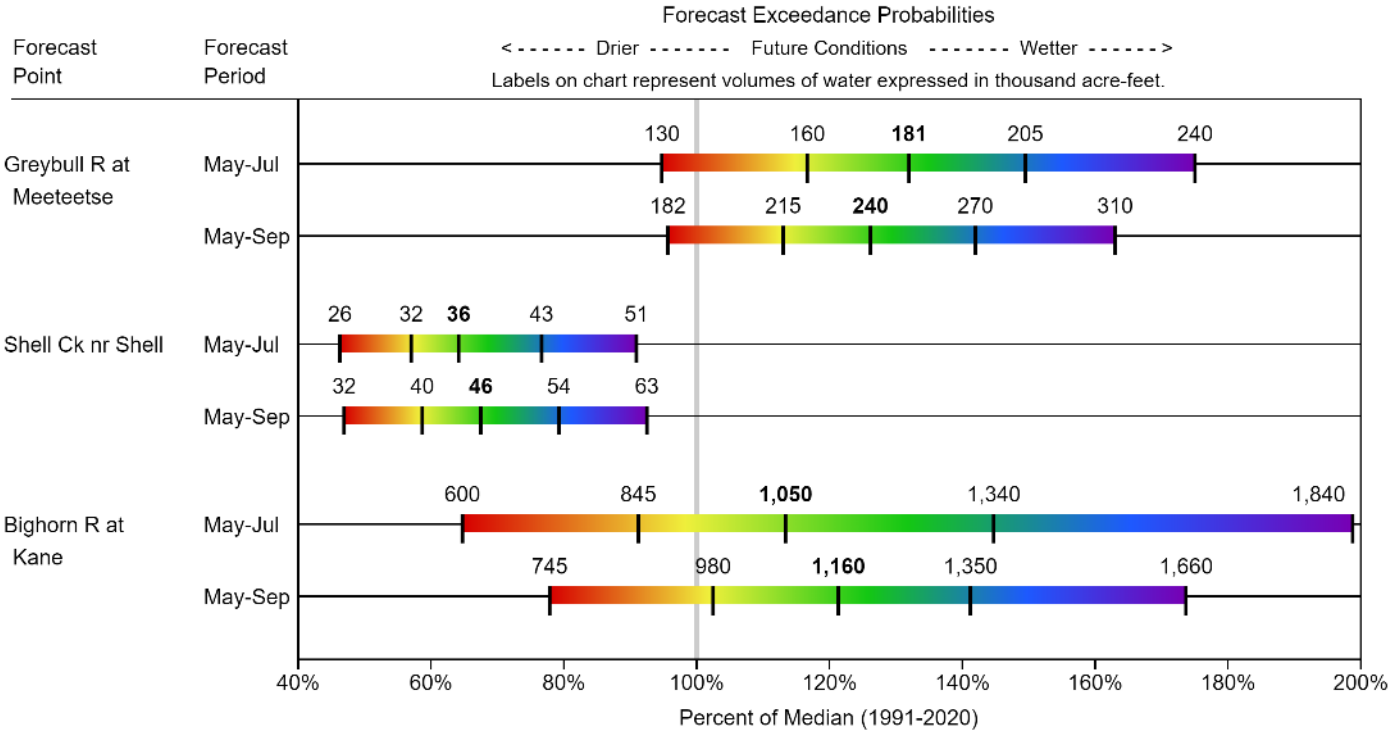
	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Bighorn Lake	783.1	775.9	777.4	1356.0	58%	57%	57%	101%	100%
Basin Index					58%	57%	57%	101%	100%
# of reservoirs					1	1	1	1	1

Streamflow

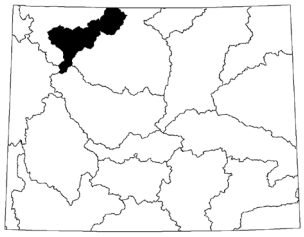
The 50% exceedance forecasts for the May through September runoffs are above normal. The Greybull River near Meeteetse should yield 126% of median. Shell Creek near Shell should yield around 68% of median. The Bighorn River at Kane should yield around 121% of median.

See the following graph for detailed runoff volumes.

BIGHORN
Water Supply Forecasts
May 1, 2024

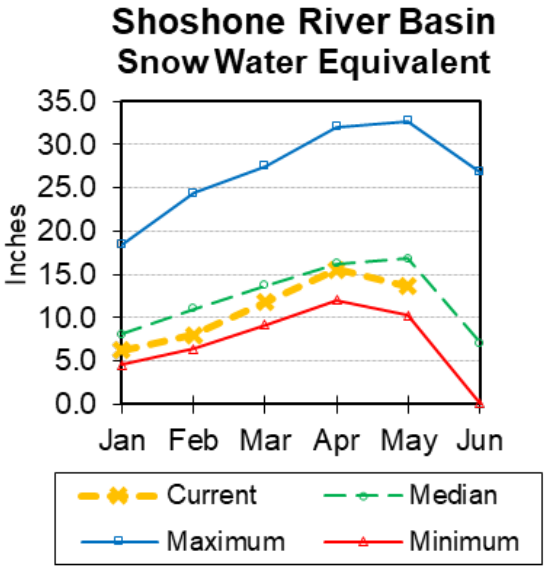


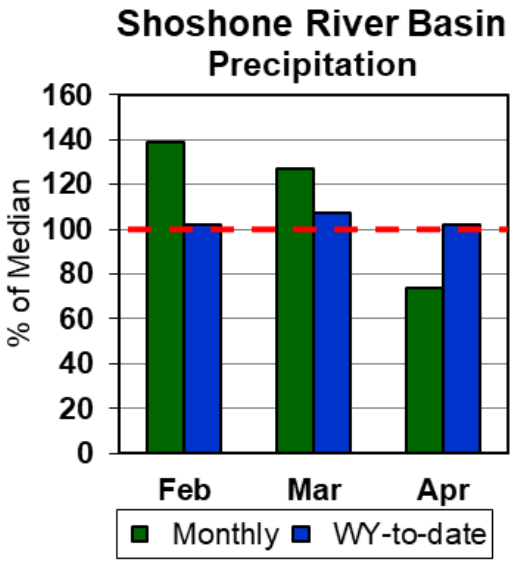
Shoshone River Basin



Snow

Snow Water Equivalent (SWE) is 81% 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 74% of median. The basin year-to-date precipitation is now 102% of median.

Reservoirs

Current storage in Buffalo Bill Reservoir is about 118% 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	465.7	405.2	395.7	646.6	72%	63%	61%	118%	102%
Basin Index					72%	63%	61%	118%	102%
# of reservoirs					1	1	1	1	1

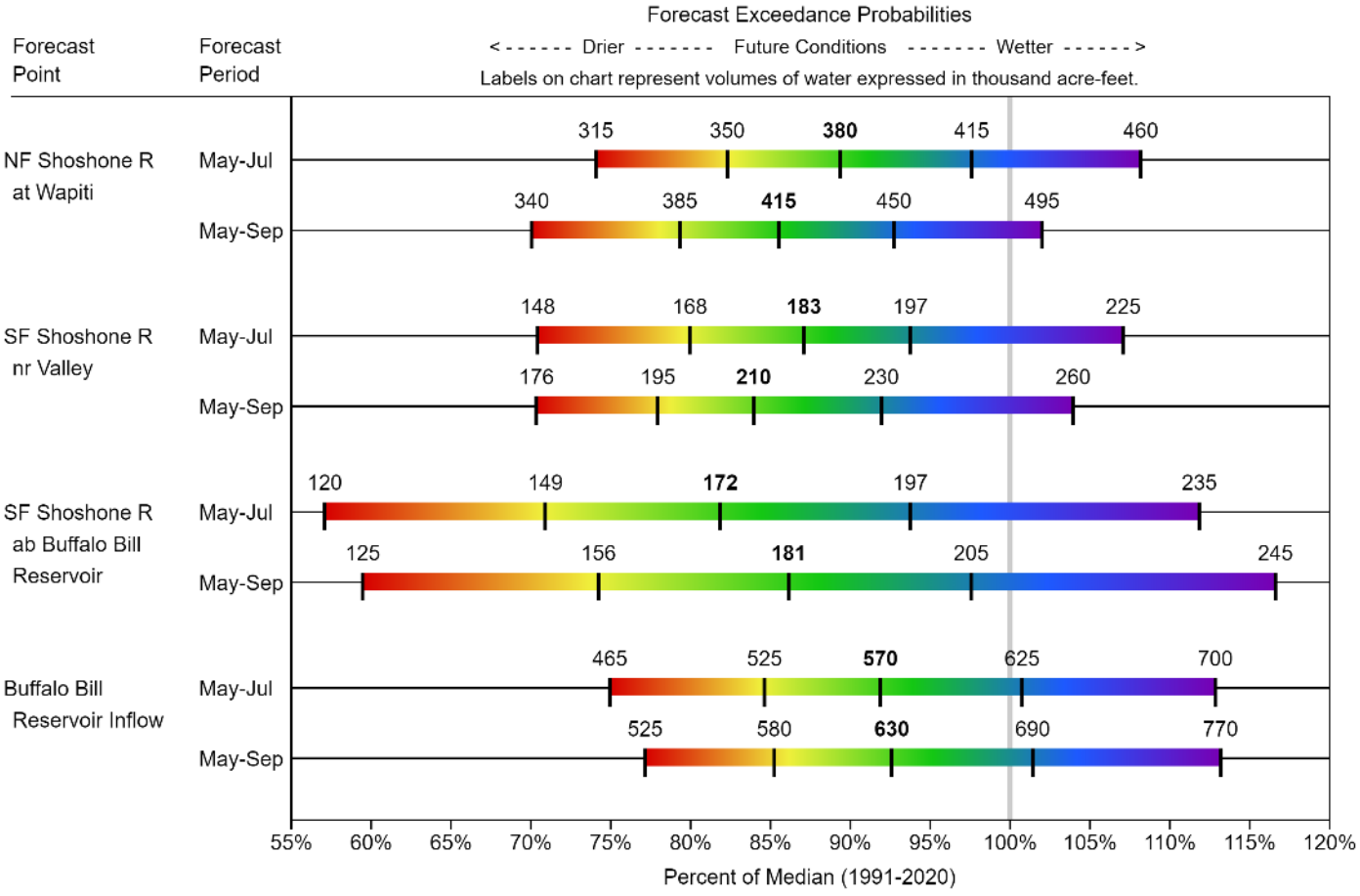
Streamflow

The 50% exceedance forecasts for the May through September period are near normal for the basin. The North Fork Shoshone River at Wapiti should yield 86% of median. The South Fork of the Shoshone River near Valley should yield 84% of median. The Buffalo Bill Reservoir inflow should yield 93% of median. *See the following graph for detailed runoff volumes.*

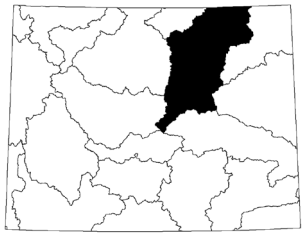
SHOSHONE

Water Supply Forecasts

May 1, 2024

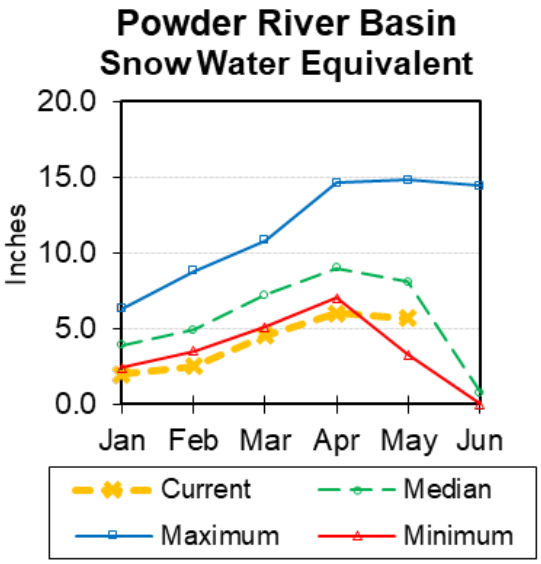


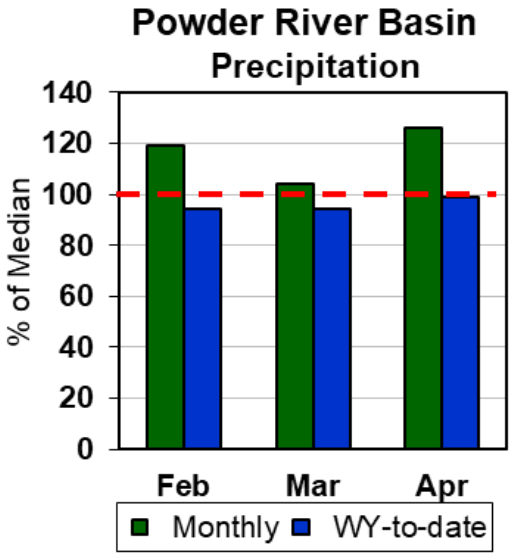
Powder River Basin



Snow

Powder River Basin SWE is at 70% of median. SWE in the Clear Creek drainage is 78% of median. *See appendix at the end of this report for a detailed listing of snow course information.*





Precipitation

Last month's precipitation was 126% of median in the basin. Year-to-date precipitation is 99% of median.

Reservoirs

No reservoir data for this basin.

Streamflow

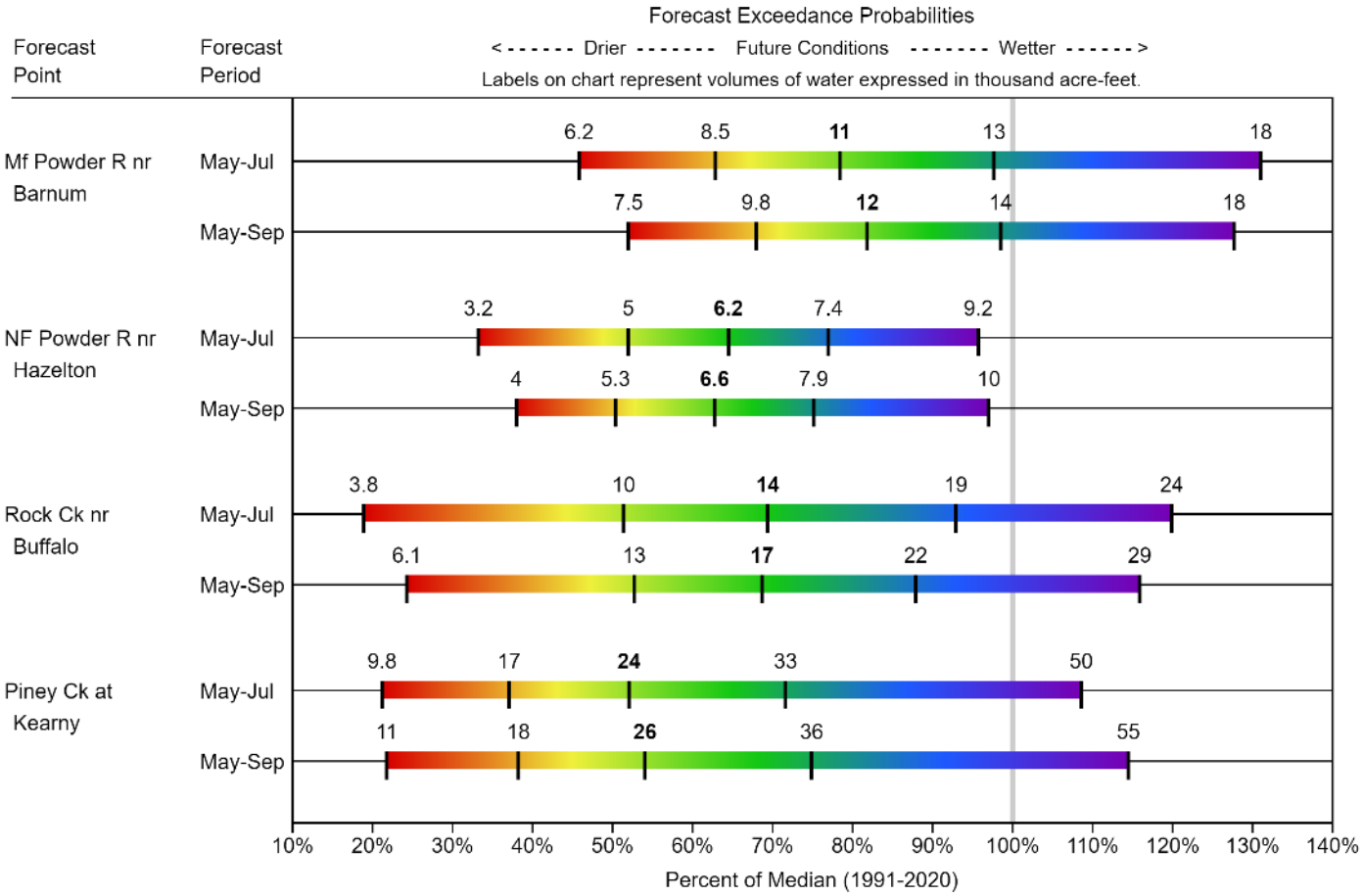
The 50% exceedance forecasts for the May through September period are below normal for the basin. The Middle Fork of the Powder River near Barnum should yield around 82% of median. The North Fork of the Powder River near Hazelton to yield around 63% of median.

See the following graph for detailed runoff volumes.

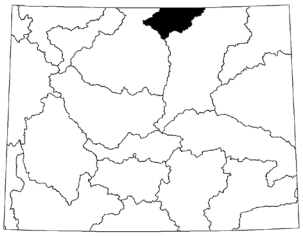
POWDER

Water Supply Forecasts

May 1, 2024

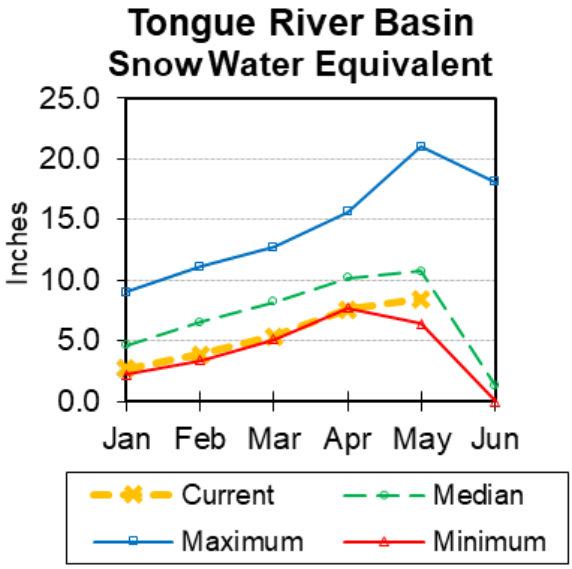


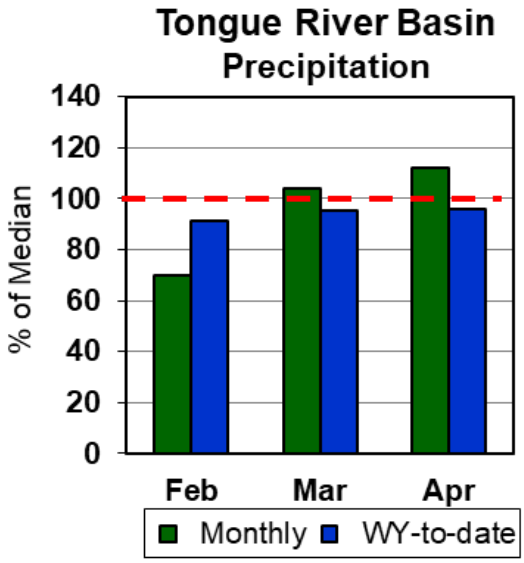
Tongue River Basin



Snow

Upper Tongue River drainage SWE is at 79% 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. Year-to-date precipitation is 96% of median in the basin.

Reservoirs

Current storage is 164% 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
Tongue River Res	79.1	64.2	48.2	79.1	100%	81%	61%	164%	133%
Basin Index					100%	81%	61%	164%	133%
# of reservoirs					1	1	1	1	1

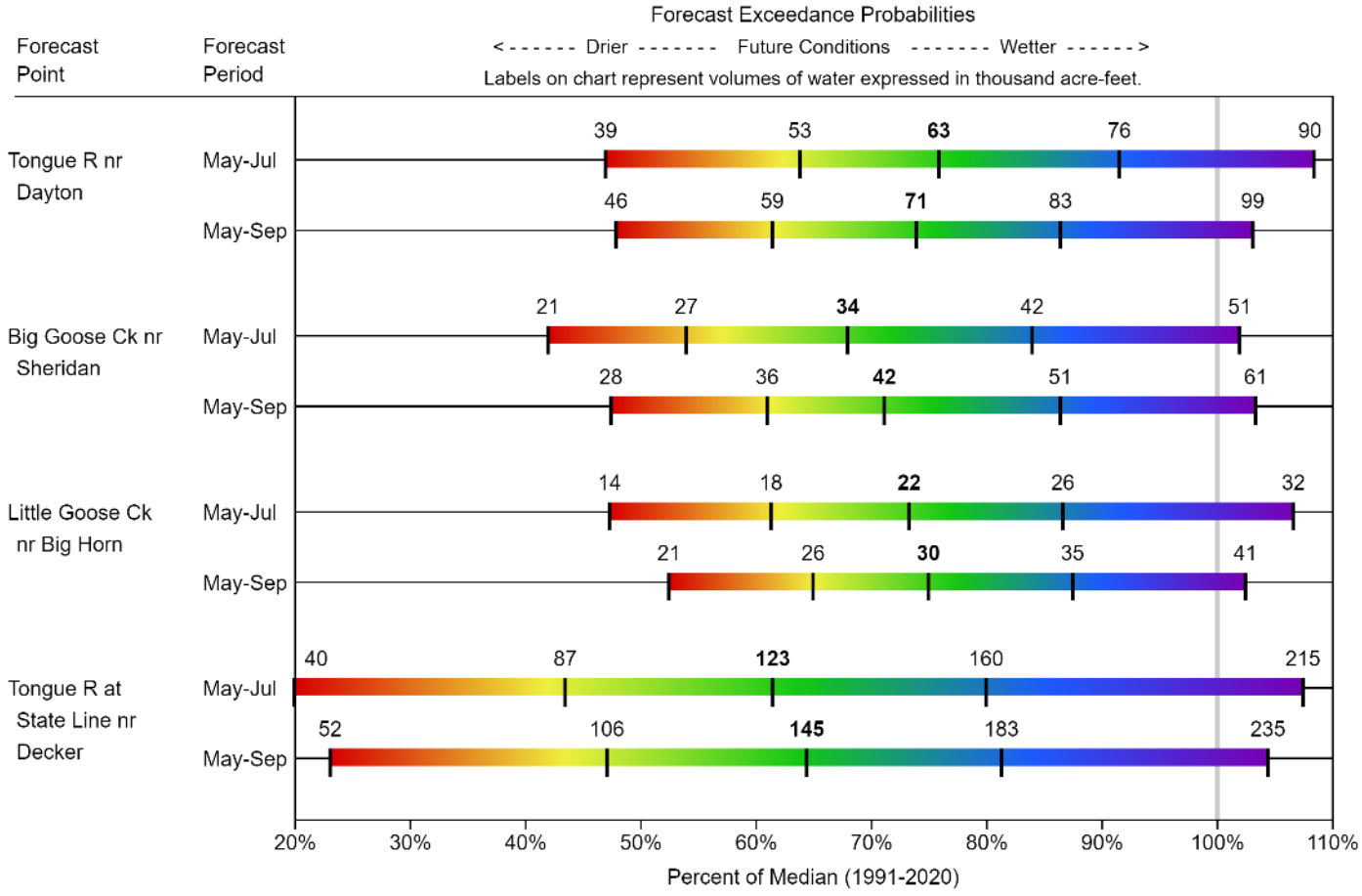
Streamflow

The 50% exceedance forecasts for the May through September period are below normal for the basin. The yield for Tongue River near Dayton is forecasted to be 74% of median. Big Goose Creek near Sheridan should yield around 71%. Little Goose Creek near Bighorn should yield 75% of median. The Tongue River Reservoir Inflow should yield 64% of median. *See below for detailed runoff volumes.*

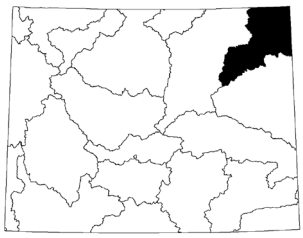
TONGUE

Water Supply Forecasts

May 1, 2024

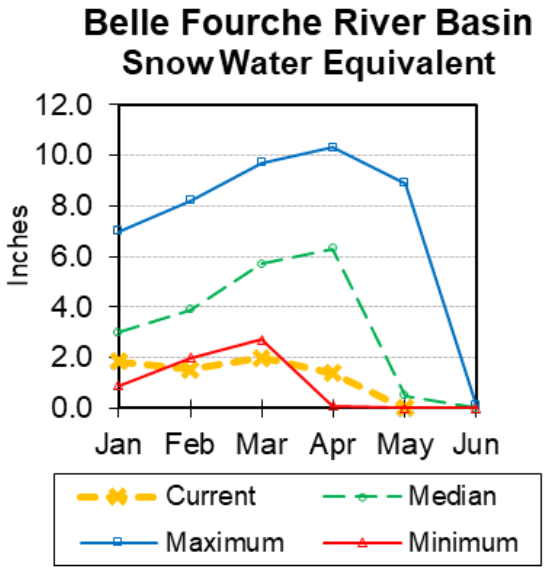


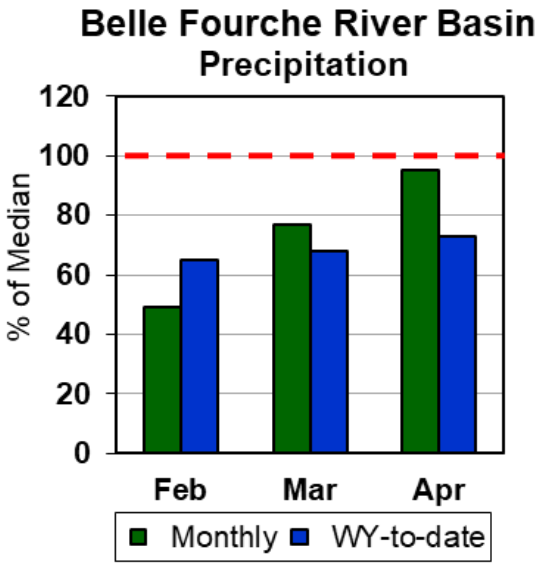
Belle Fourche River Basin



Snow

Currently the Belle Fourche River Basin SWE is at 0% of median. *See Appendix at the end of this report for a detailed listing of snow course information.*





Precipitation

Precipitation for last month was 95% of median in the Belle Fourche basin. Year-to-date precipitation is 73% of median.

Reservoirs

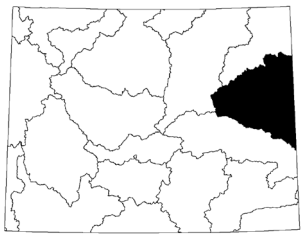
Combined storage for the 2 reservoirs in the basin is at 93% of median.

	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Belle Fourche	159.5	160.6	160.0	178.4	89%	90%	90%	100%	100%
Keyhole	129.4	127.9	149.0	193.8	67%	66%	77%	87%	86%
Basin Index					78%	78%	83%	93%	93%
# of reservoirs					2	2	2	2	2

Streamflow

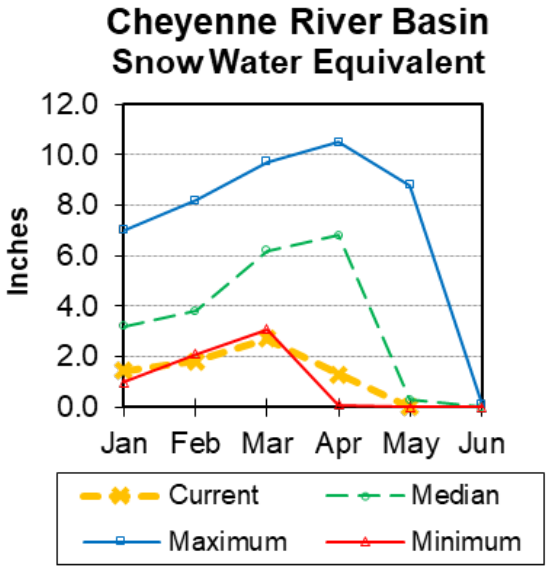
There are no streamflow forecast points for the basin.

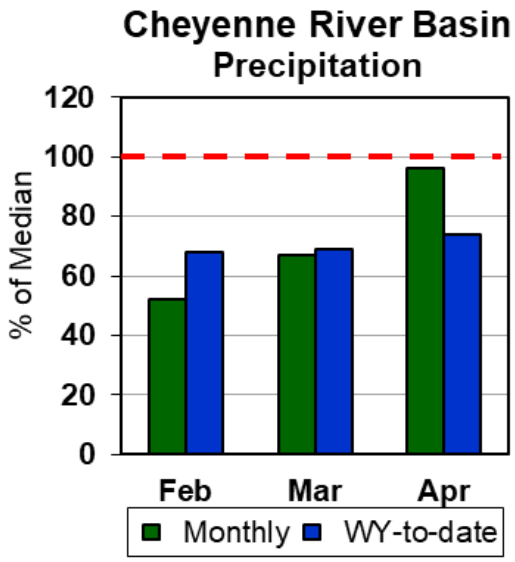
Cheyenne River Basin



Snow

Currently SWE for sites in the Cheyenne River Basin are at 0% of median. *See Appendix at the end of this report for a detailed listing .*





Precipitation

Precipitation for last month was 96% of median. Year-to-date precipitation is 74% of median.

Reservoirs

Combined storage for the 3 reservoirs in the basin is at 100% of median.

	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Deerfield	15.1	15.0	15.1	15.2	99%	98%	99%	100%	99%
Pactola	53.4	52.4	54.9	55.0	97%	95%	100%	97%	95%
Angostura	112.3	76.6	110.8	122.1	92%	63%	91%	101%	69%
Basin Index					94%	75%	94%	100%	80%
# of reservoirs					3	3	3	3	3

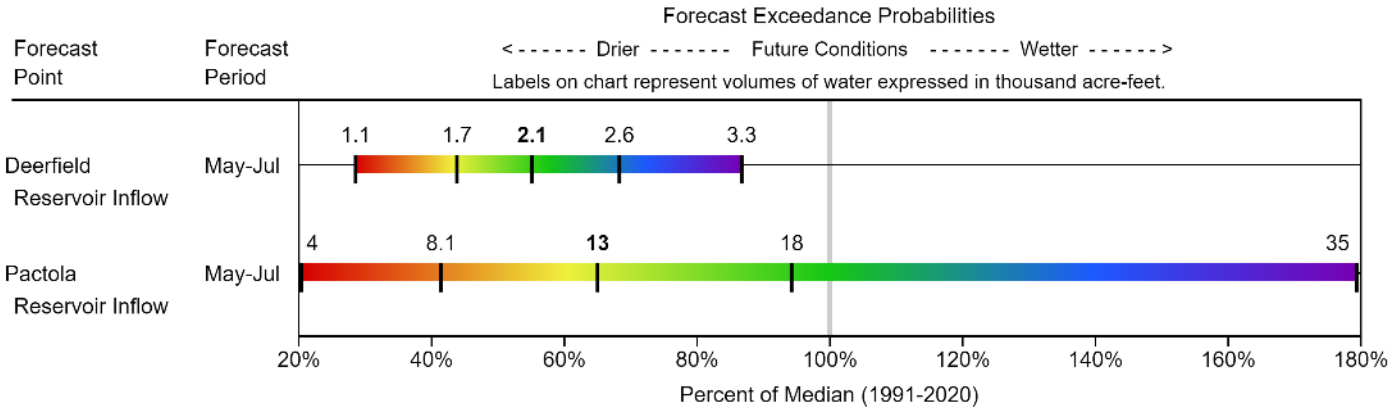
Streamflow

The 50% exceedance forecasts for the May through July period are below normal. The Deerfield Reservoir Inflow yield is forecasted at 55% of median. Pactola Reservoir Inflow yield should be 65% of median. *See the following graph for detailed runoff volumes.*

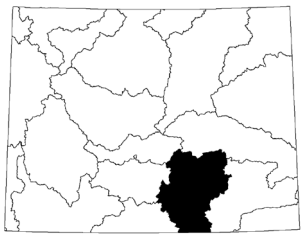
CHEYENNE

Water Supply Forecasts

May 1, 2024



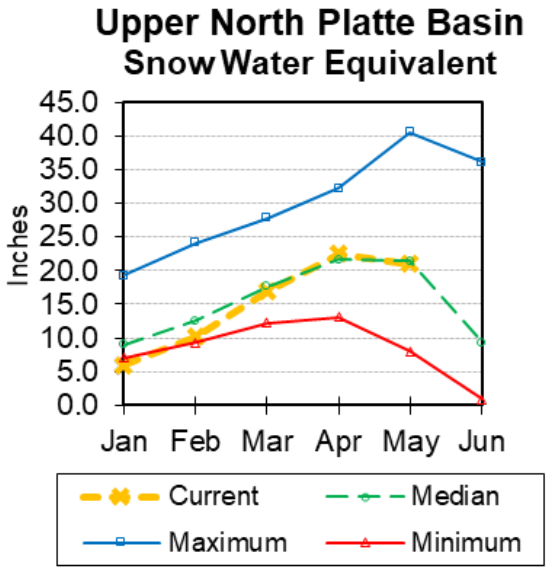
Upper North Platte River Basin

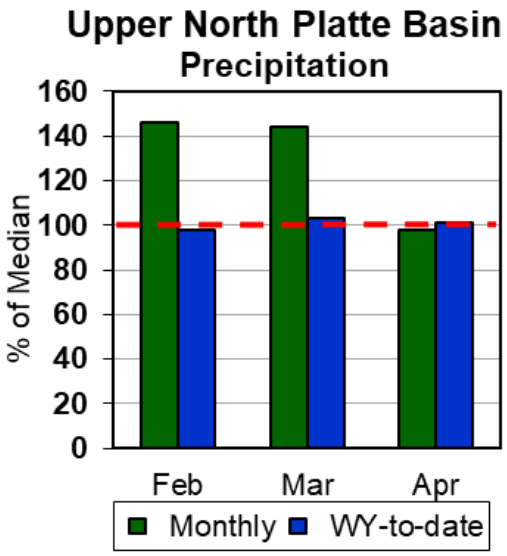


Snow

The Upper North Platte River basin SWE is 98% of median. North Platte above Northgate SWE is 97% of median. Encampment River SWE is 101% of median. Medicine Bow and Rock Creek SWE are 108% of median.

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





Precipitation

Last month's precipitation was 98% of median. Total water-year-to-date precipitation is 101% of median.

Reservoirs

Combined storage for reservoirs in the Upper North Platte River Basin is at 121% of median.

	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Seminoe	662.0	457.4	565.6	1016.7	65%	45%	56%	117%	81%
Pathfinder	748.9	419.3	603.0	1016.5	74%	41%	59%	124%	70%
Basin Index					69%	43%	57%	121%	75%
# of reservoirs					2	2	2	2	2

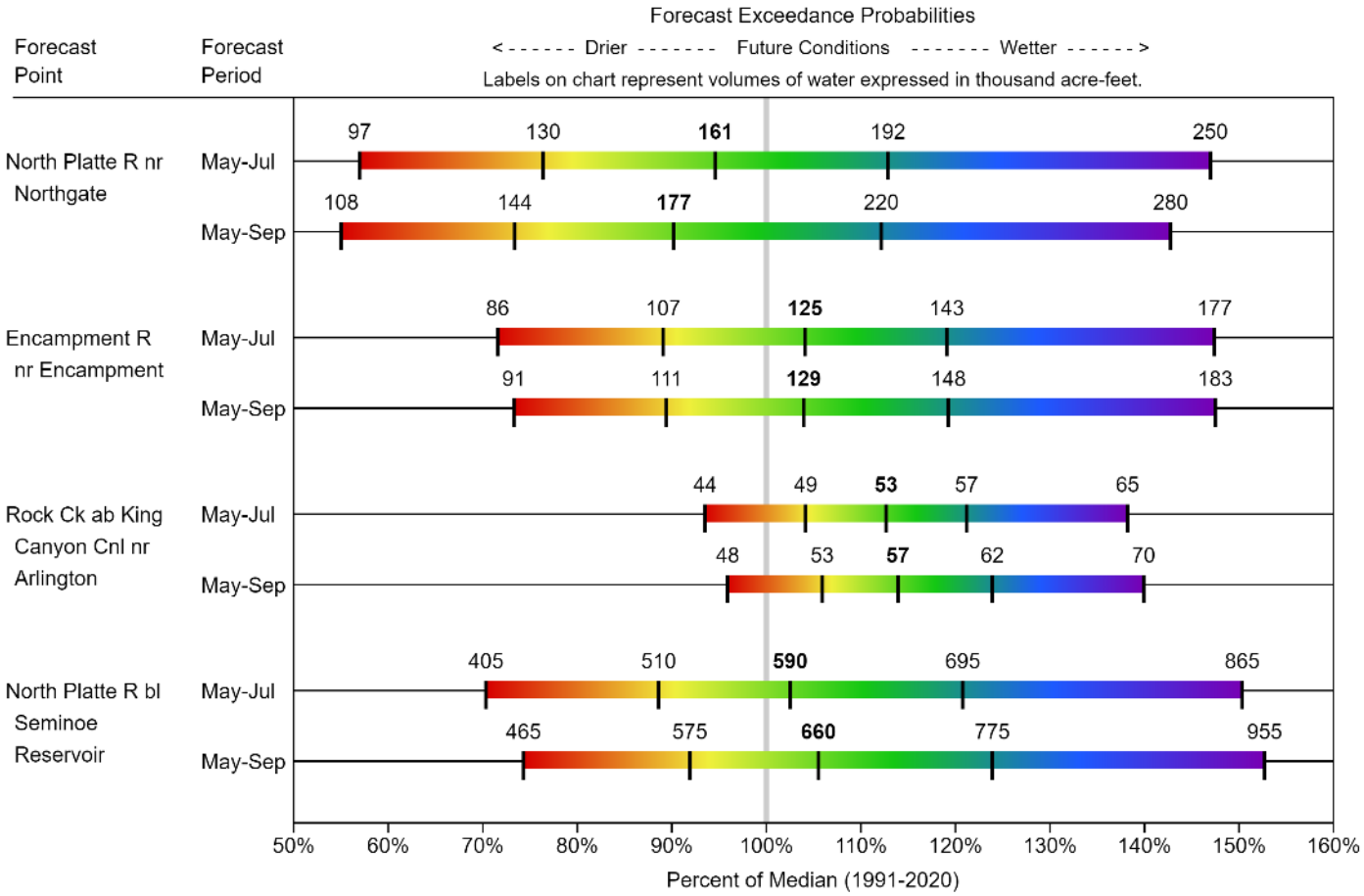
Streamflow

The 50% exceedance forecasts for the May through September period are near normal for the Upper North Platte River Basin. The yield for the North Platte River near Northgate will be around 90% of median. The Encampment River near Encampment yield will be about 104%. Rock Creek near Arlington yield will be around 114%. Seminoe Reservoir inflow should be about 106% of median. *See the following page for more detailed information on projected runoff*

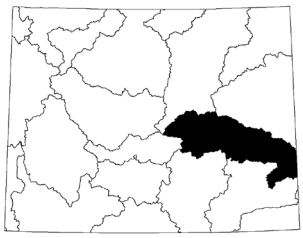
UPPER NORTH PLATTE

Water Supply Forecasts

May 1, 2024

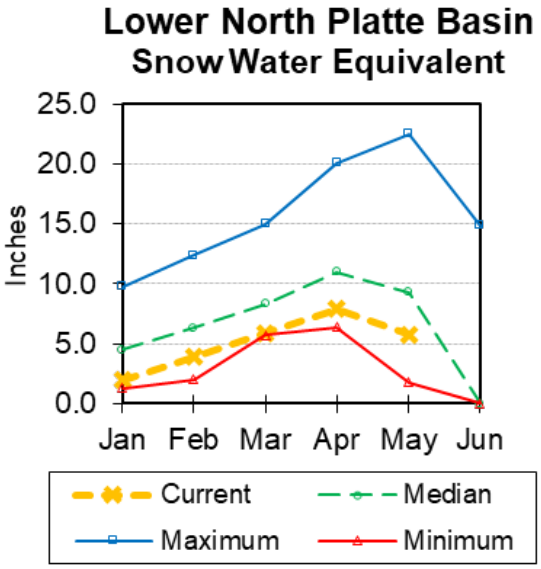


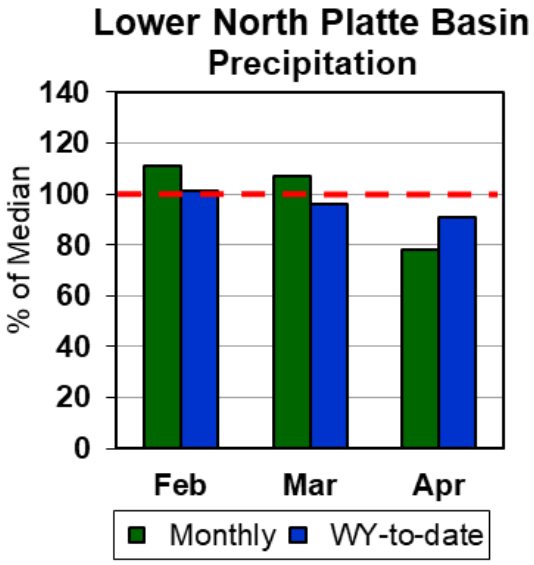
Lower North Platte River Basin



Snow

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





Precipitation

Last month's precipitation was 78% of median. The water year-to-date precipitation for the basin is currently 91% of median.

Reservoirs

Combined storage for the 3 reservoirs in the basin is at 97% of median.

	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Guernsey	28.6	27.8	26.6	45.6	63%	61%	58%	107%	105%
Glendo	412.3	358.4	431.3	506.4	81%	71%	85%	96%	83%
Alcova	180.4	180.4	179.9	184.3	98%	98%	98%	100%	100%
Basin Index					84%	77%	87%	97%	89%
# of reservoirs					3	3	3	3	3

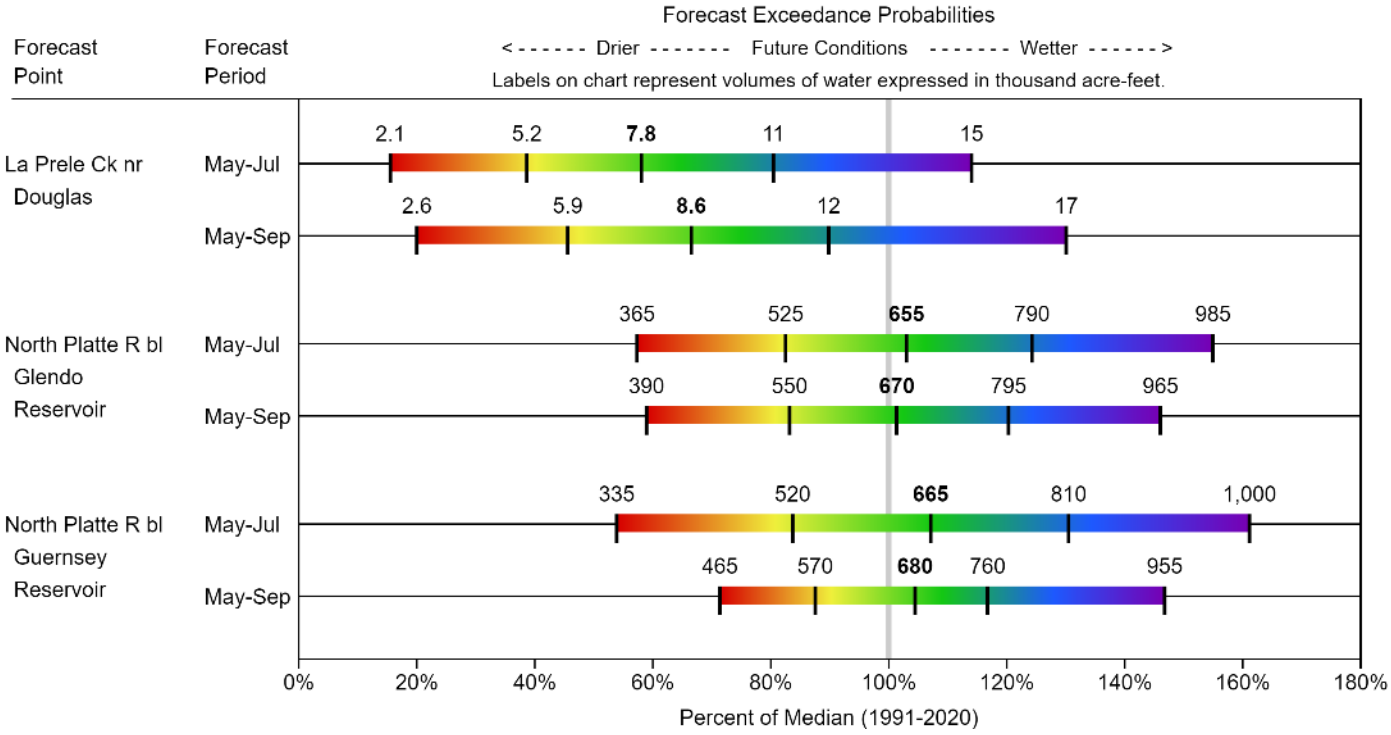
Streamflow

The 50% exceedance forecasts for the May through September period are near normal. LaPrele Creek near Douglas is forecasted to yield 67% of median. North Platte River below Guernsey Reservoir should yield around 102% of median. ***See the following for more detailed information on projected runoff.***

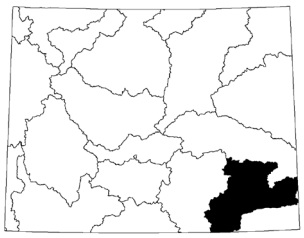
LOWER NORTH PLATTE

Water Supply Forecasts

May 1, 2024

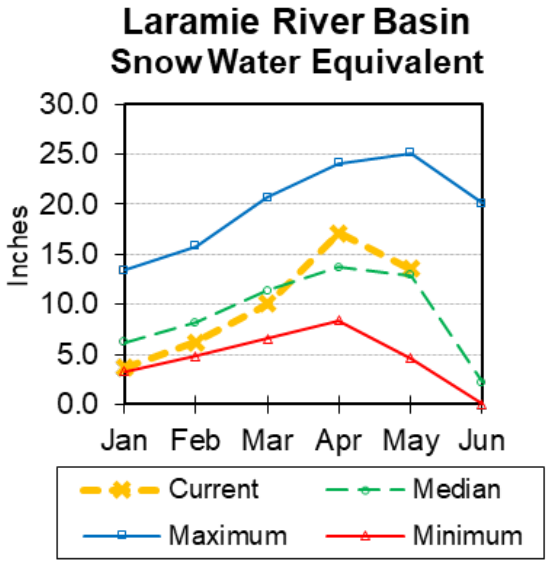


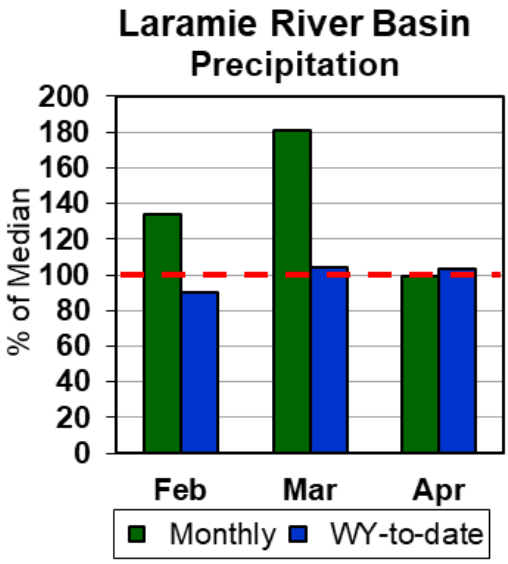
Laramie River Basin



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 108% of median. SWE for the Little Laramie River is 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 99% of median. The water year-to-date precipitation for the basin is currently 103% of median.

Reservoirs

The storage for the reservoir in this basin is at 119% 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	71.1	NA	59.7	98.9	72%	NA	60%	119%	NA
Basin Index			59.7	98.9	72%	NA	60%	119%	NA
# of reservoirs					1	1	1	1	1

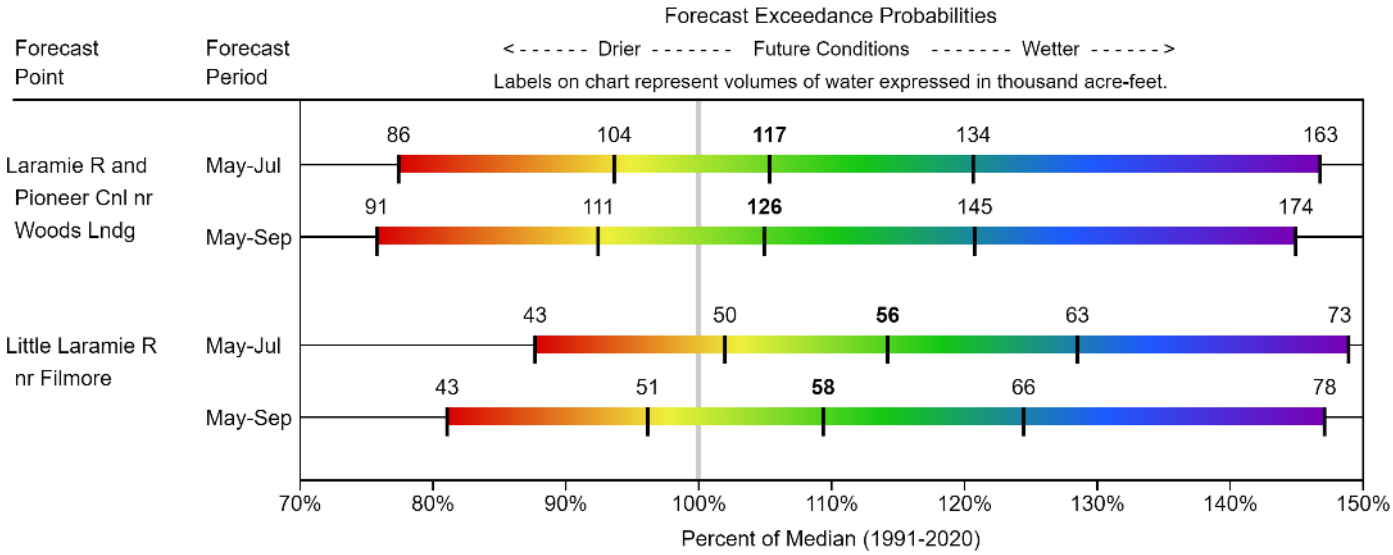
Streamflow

The 50% exceedance forecasts for the May through September period are above normal. Laramie River near Woods Landing is forecasted to yield around 105% of median. The Little Laramie near Filmore should produce about 109% of median. *See the following graph for detailed runoff volumes.*

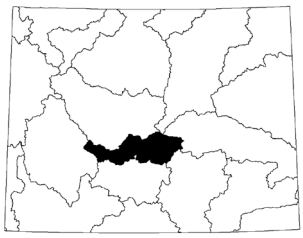
LARAMIE

Water Supply Forecasts

May 1, 2024

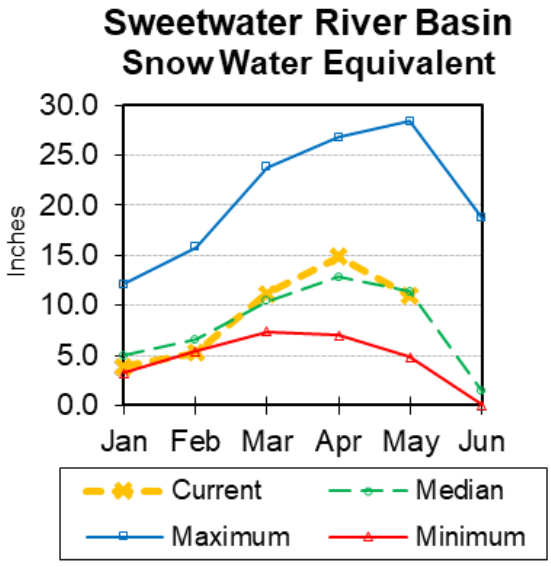


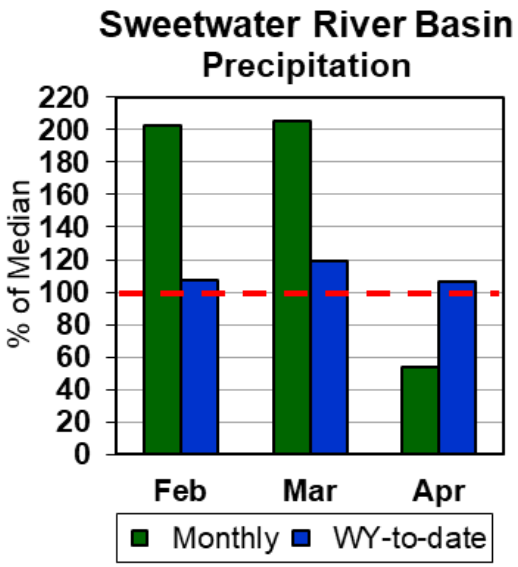
Sweetwater River Basin



Snow

Sweetwater River Basin SWE is at 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 54% of median. The water year-to-date precipitation for the basin is currently 106% of median.

Reservoirs

No reservoir data for the basin.

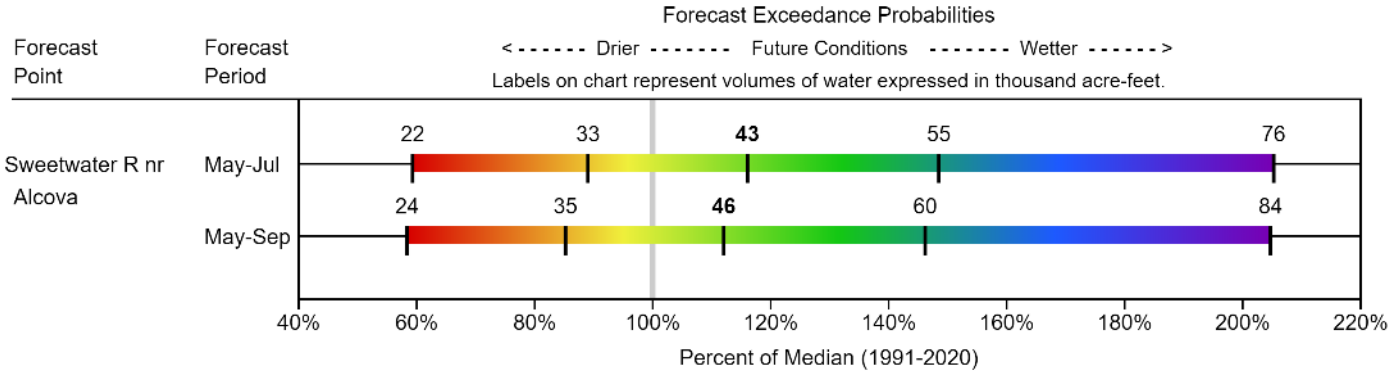
Streamflow

The 50% exceedance forecasts for the May through September period in the Sweetwater Basin is above normal. The Sweetwater River near Alcova will yield about 112% of median. *See below for detailed information on projected runoff.*

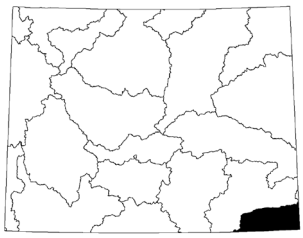
SWEETWATER

Water Supply Forecasts

May 1, 2024

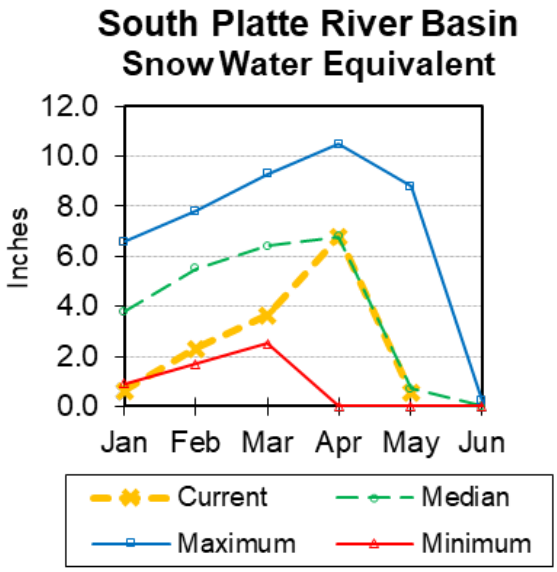


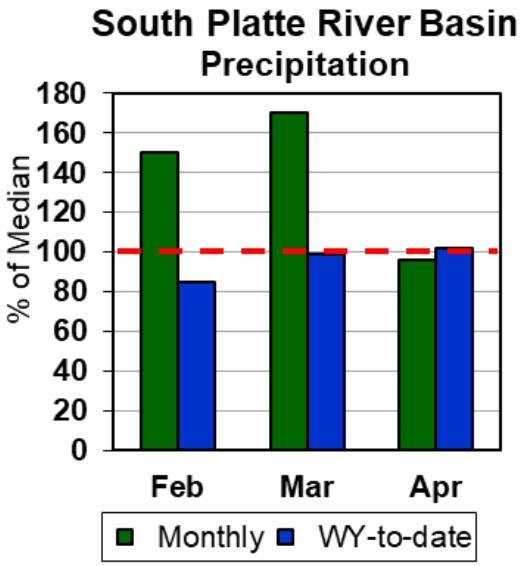
South Platte River Basin (WY)



Snow

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





Precipitation

Last month's precipitation was 96% of median. The water year-to-date precipitation for the basin is currently 102% of median.

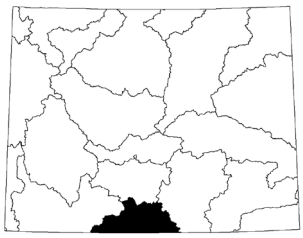
Reservoirs

No reservoir data for the basin.

Streamflow

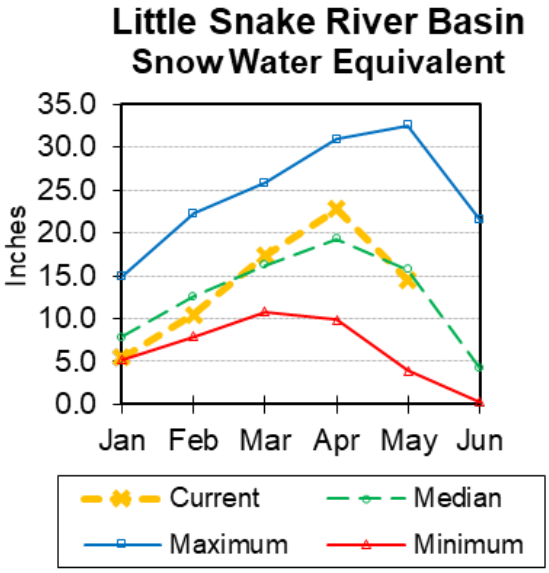
There are no streamflow forecast points for the basin.

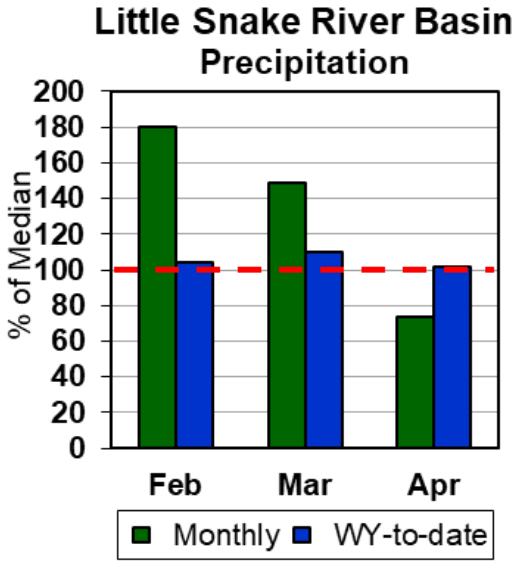
Little Snake River Basin



Snow

Little Snake River drainage SWE is 92% of median. See *Appendix at the end of this report for a detailed listing of snow course information.*





Precipitation

Precipitation across the basin was 74% of median. The Little Snake River Basin water-year-to-date precipitation is currently 102% of median.

Reservoirs

The storage for the reservoir in this basin is at 131% 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	19.7	10.2	15.0	22.4	88%	46%	67%	131%	68%
Basin Index		10.2	15.0	22.4	88%	46%	67%	131%	68%
# of reservoirs					1	1	1	1	1

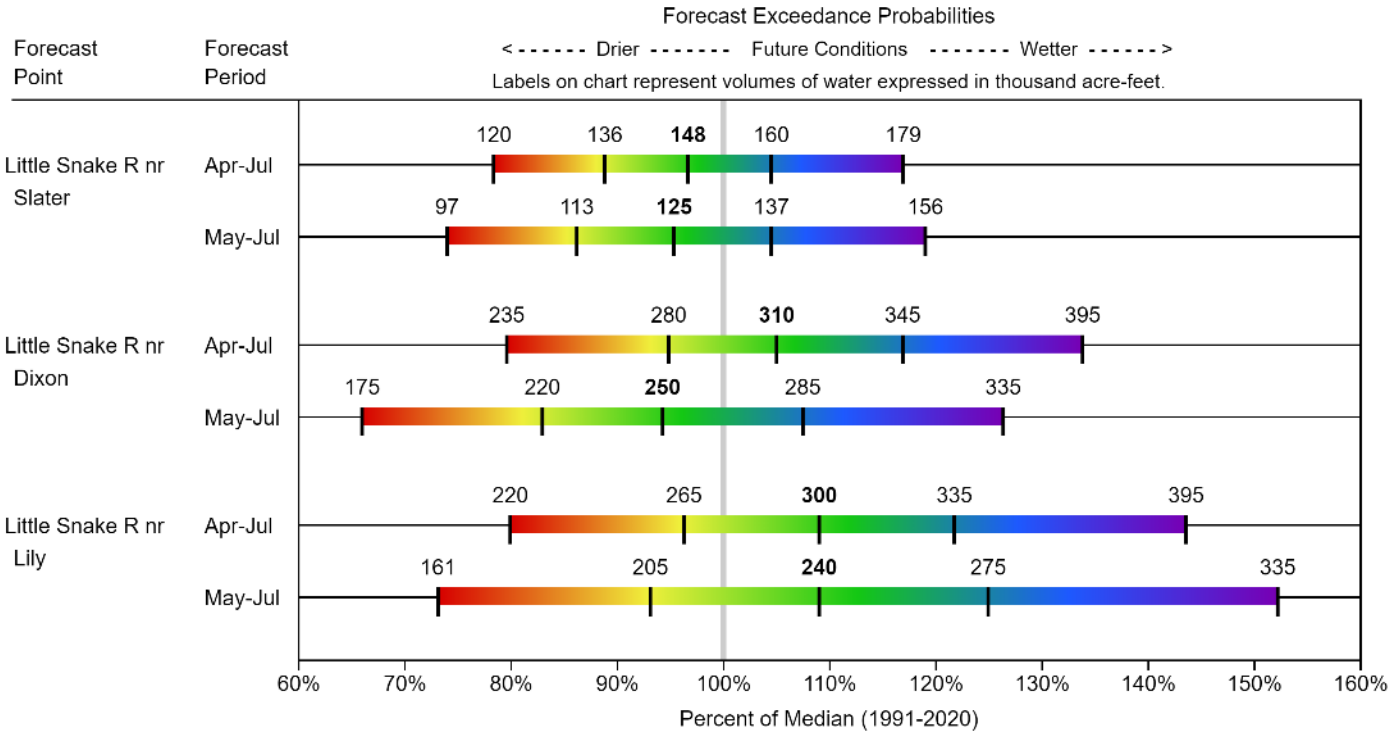
Streamflow

The 50% exceedance forecasts for the May through July period is about normal. The Little Snake River near Slater is forecasted to yield around 95% of median. *See below for detailed information on projected runoff.*

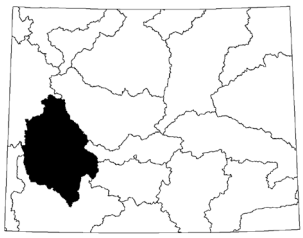
LITTLE SNAKE

Water Supply Forecasts

May 1, 2024

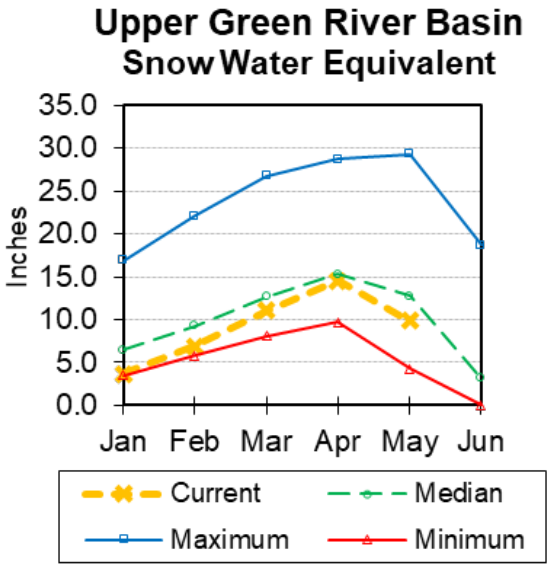


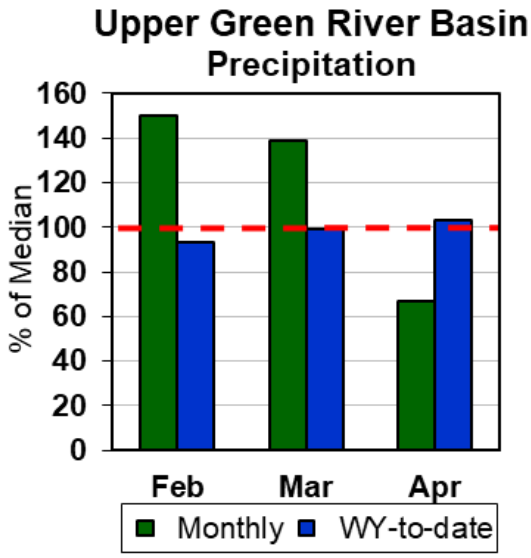
Upper Green River Basin



Snow

The Upper Green River Basin SWE (above Fontenelle Reservoir) is 77% of median. Green River Basin above Warren Bridge SWE is 60% of median. West Side of Upper Green River Basin SWE is 92% 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 67% of median last month. Water year-to-date precipitation is 103% of median.

Reservoir

Combined water storage in the basin was at 117% 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	45.5	13.3	23.5	38.3	119%	35%	61%	194%	57%
Fontenelle	136.1	126.3	131.4	344.8	39%	37%	38%	104%	96%
Basin Index					47%	36%	40%	117%	90%
# of reservoirs					2	2	2	2	2

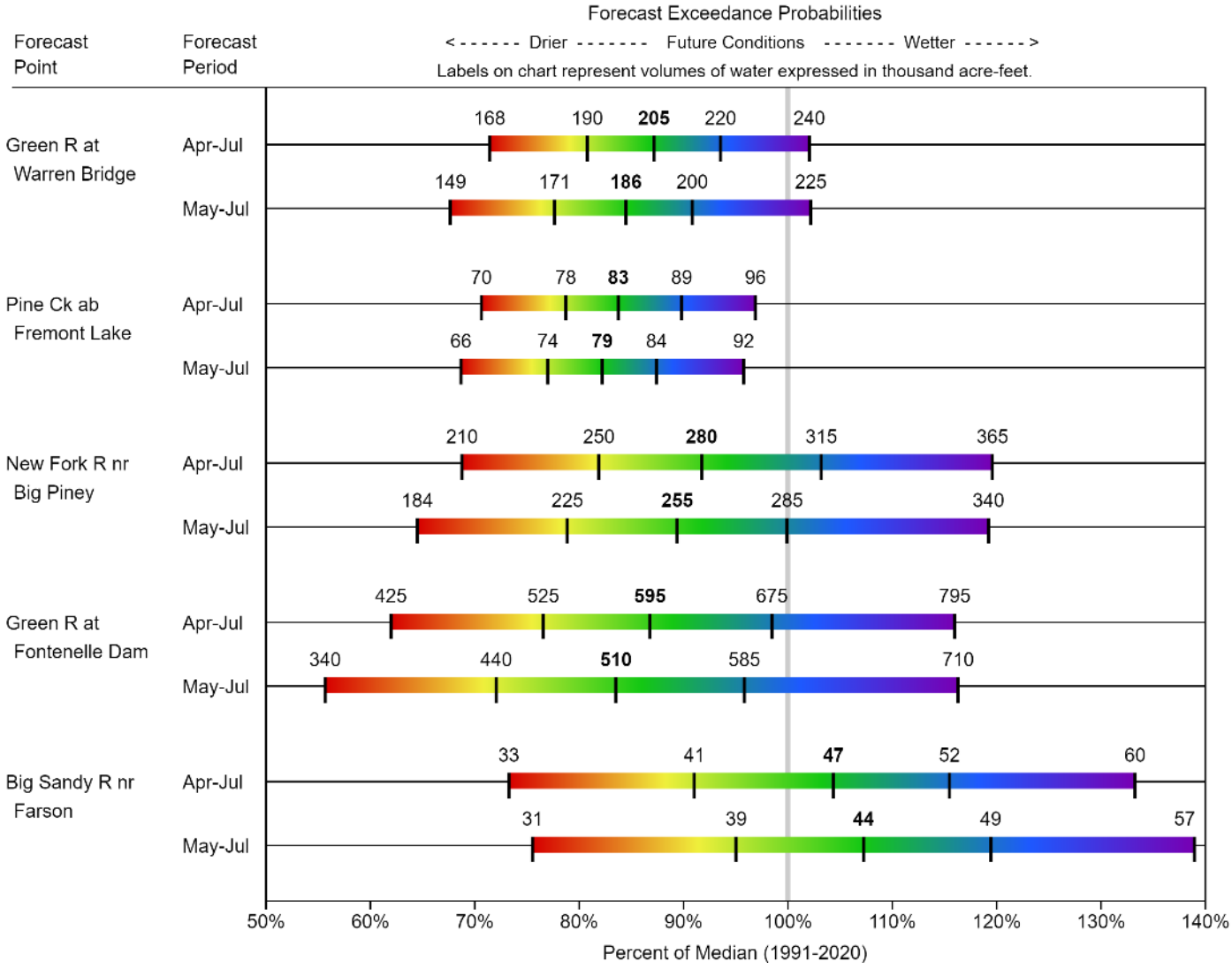
Streamflow

The 50% exceedance forecasts for the May through July period will be about normal. The yield on the Green River at Warren Bridge is about 85% of median. New Fork River near Big Piney yield will be around 92% of median. Green River at Fontenelle Dam is estimated to be about 84% of median. *See the following for a more detailed forecast.*

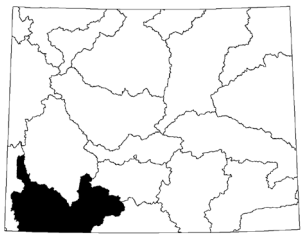
UPPER GREEN

Water Supply Forecasts

May 1, 2024



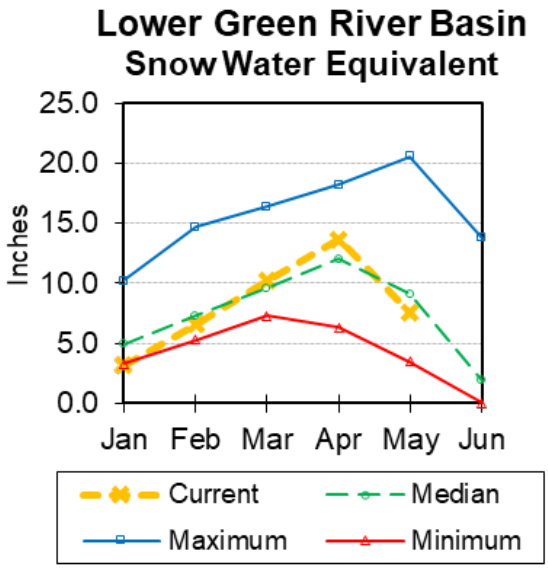
Lower Green River Basin

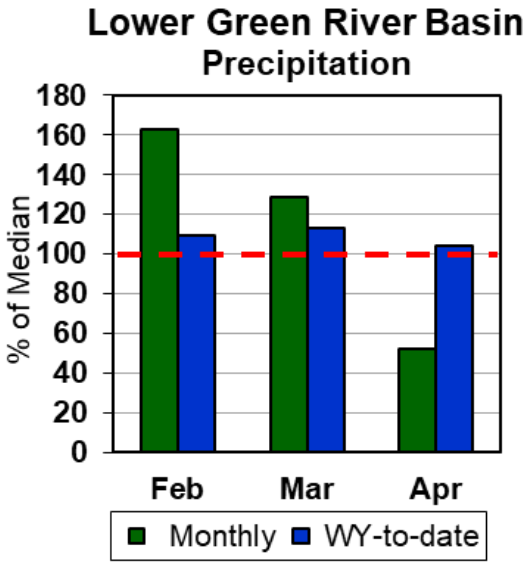


Snow

Lower Green River Basin SWE is at 83% of median. Hams Fork drainage SWE is 90% of median. Blacks-Smiths Forks drainage SWE is 76% 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 52% of median. The basin year-to-date precipitation is currently 104% of median.

Reservoirs

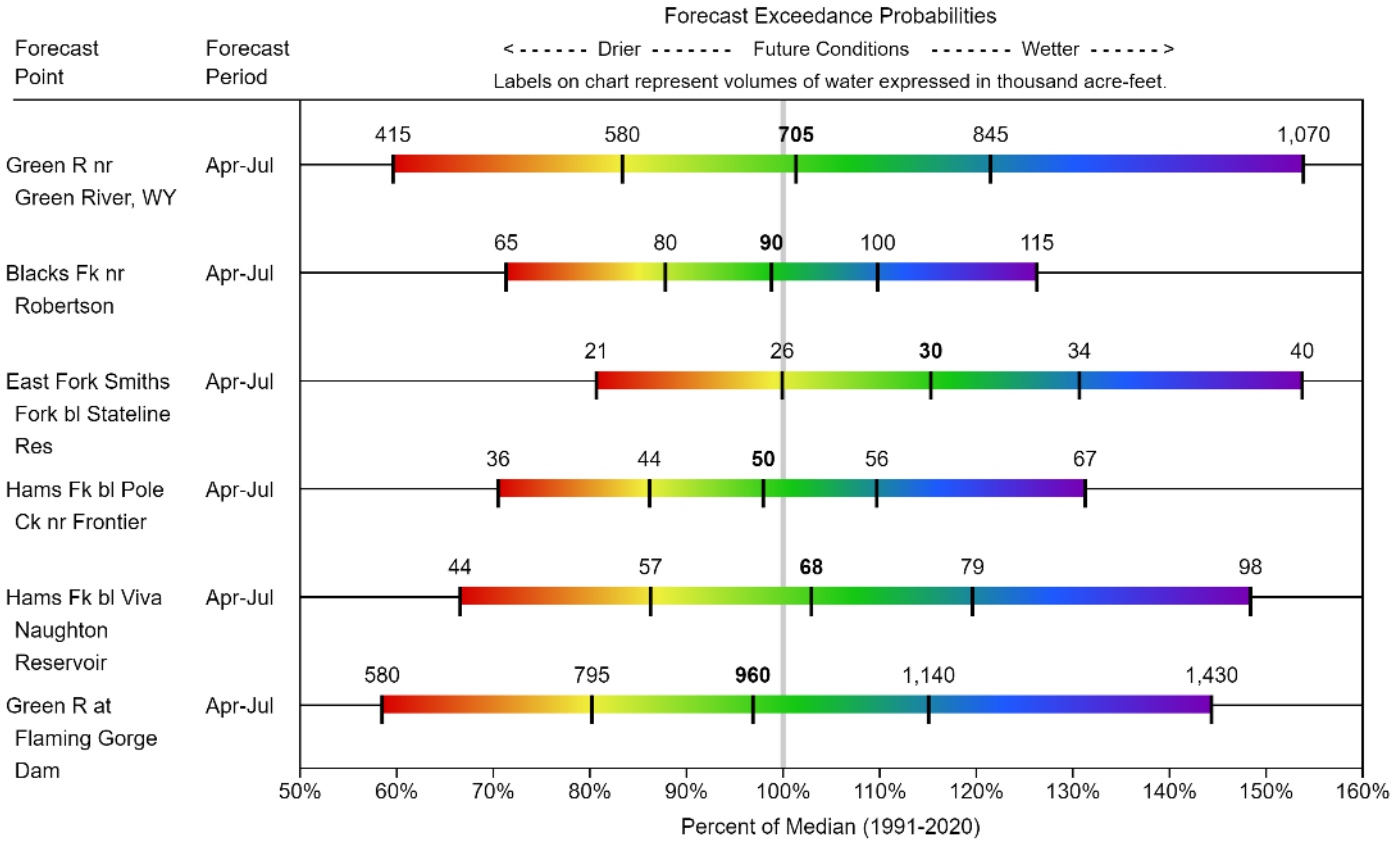
Combined storage for the 4 reservoirs in the basin was at 102% of median at the end of last month.

	Current (KAF)	Last Year (KAF)	Median (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Median % Capacity	Current % Median	Last Year % Median
Viva Naughton Res	35.0	16.8	32.8	42.4	0.83	40%	77%	107%	51%
Stateline Res	10.5	7.5	6.5	12.0	87%	62%	54%	161%	115%
Flaming Gorge Res	3150.7	2589.4	3114.0	3749.0	84%	69%	83%	101%	83%
Meeks Cabin Res	26.7	14.1	15.6	32.5	82%	43%	48%	171%	90%
Basin Index					84%	69%	83%	102%	83%
# of reservoirs					4	4	4	4	4

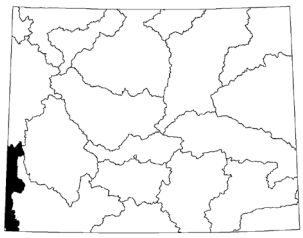
Streamflow

The following are the 50% exceedance forecasts for the May through July period is below normal. The Green River near Green River will yield about 82% of median. The Flaming Gorge Reservoir inflow will be about 76% of median. *See the following page for more detailed information on projected runoff.*

LOWER GREEN
Water Supply Forecasts
April 1, 2024



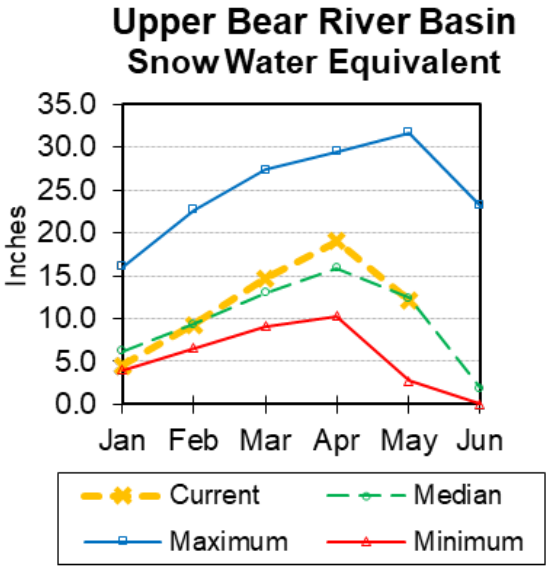
Upper Bear River Basin

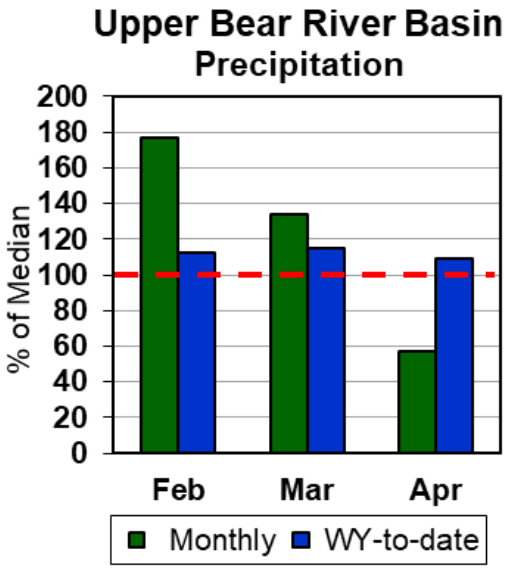


Snow

SWE in the Upper Bear River Basin of Utah is 98% of median. SWE in the Wyoming portion of the Bear River drainage (Smiths and Thomas Forks) is 92% of median.

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





Precipitation

Precipitation for last month was 56% of median in the basin. The year-to-date precipitation for the basin is 109% of median.

Reservoirs

Combined reservoir storage in this basin is at 94% 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	4.0	3.2	4.0	4.0	100%	79%	100%	100%	79%
Woodruff Narrows Res	52.0	44.6	55.5	57.3	91%	78%	97%	94%	80%
Basin Index					91%	78%	97%	94%	80%
# of reservoirs					2	2	2	2	2

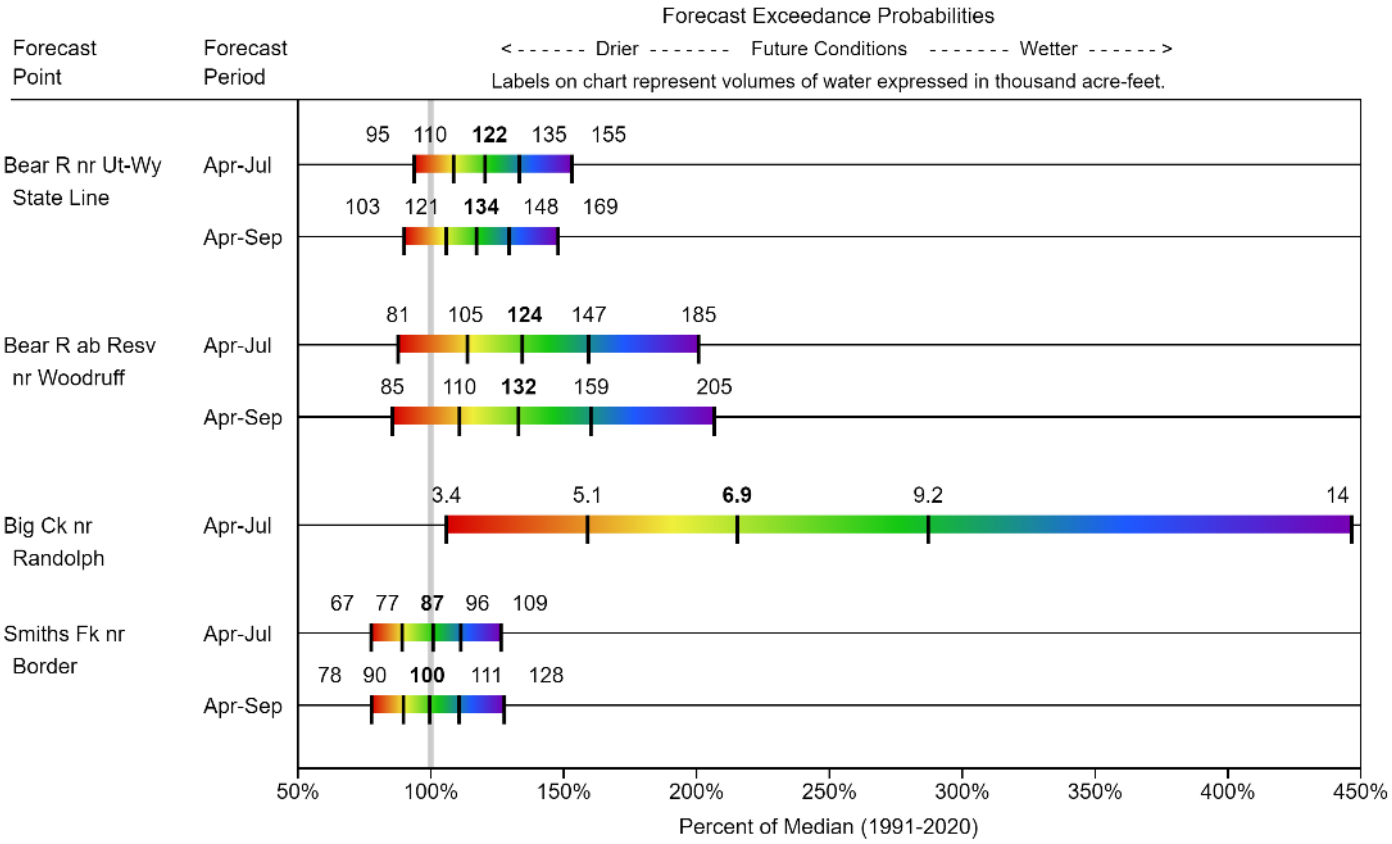
Streamflow

The 50% exceedance forecasts for the May through September period are above normal. The Bear River above Reservoir near Woodruff should yield around 108% of median. For May to September the Smiths Fork River near Border Jct. will yield around 89%. *See the following page for more detailed information on projected runoff.*

UPPER BEAR

Water Supply Forecasts

April 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