

HIGHLIGHTS FOR JANUARY 2016

DAKOTAS AREA OFFICE

Drought conditions degraded slightly, but showed areas of improvement also, within North Dakota during the month of January. North Dakota has 55 percent of the state with abnormally dry or moderate drought conditions, leaving 45 percent of the state with no drought. South Dakota has held steady and still has 11 percent of the state with abnormally dry conditions, leaving 89 percent of the state with no drought.

January precipitation was below average in the Heart River Basin with 53 percent of average and 22 percent of average precipitation at Dickinson and Heart Butte Dams, respectively. Within the Cheyenne, Grand and James River basins precipitation was below average, ranging from 0 percent of average at Jamestown Reservoir to 64 percent of average at Deerfield Reservoir.

January inflows in the Heart River basin were varied, with 167 percent of average at Dickinson and 75 percent of average at Lake Tschida. For the Cheyenne River basin, inflows were mostly above average, ranging from 1 percent of average at Belle Fourche Reservoir to 243 percent of average at Pactola. The James and Grand River basins received below average inflows, with 11 percent of average at Shadehill and 0 percent of average at Jamestown.

Reservoir storage in the Heart River basin finished the month near average; 91 percent of average for Dickinson, and 100 percent of average at Heart Butte. Storage in the Cheyenne River basin was above average at the end of January, ranging from 109 percent of average at Deerfield to 267 percent of average at Keyhole Reservoir. Storage at Shadehill and Jamestown Reservoirs was slightly above average for the end of January, showing 106 percent and 110 percent of average, respectively.

EASTERN COLORADO AREA OFFICE

Precipitation was below average over the Colorado-Big Thompson Project (CBT) during January. The Lake Estes watershed reported the lowest precipitation at 53 percent of average, while Green Mountain had the highest at 98 percent of average.

Inflows were about average over the CBT during January. The inflow to Lake Estes was the lowest at 92 percent of average. The inflow to Green Mountain was the highest at 119 percent of average.

The Lake Granby storage of 436,900 AF on January 31 was 66,900 AF above average and 60,000 AF lower than one year ago on this date. Terminal reservoir storage in Carter Lake and Horsetooth Reservoir was 87 and 104 percent of average, respectively. The January end-of-month CBT storage water in Green Mountain, Lake Granby, Carter Lake, and Horsetooth Reservoir was 691,300 AF; 41,400 AF above average.

Precipitation was above average over the Fryingpan-Arkansas Project (Fry-Ark) during January. Precipitation at Ruedi Reservoir was the lowest at 125 percent of average, while Pueblo Reservoir received the highest with 216 percent of average.

Native inflows were above average over the Fry-Ark during January. The inflow to Ruedi Reservoir was the lowest at 96 percent of average. The inflow to Pueblo Reservoir was the highest at 165 percent of average.

Reservoir storage is about average on the Fry-Ark. Turquoise Reservoir is the lowest at 88 percent of average. Pueblo Reservoir is the highest at 139 percent of average. The total January end-of-month storage in the four reservoirs of 522,500 AF is 114 percent of average.

MONTANA AREA OFFICE

January started out colder than normal across north-central Montana but gradually transitioned to an above normal weather pattern towards the middle of the month. From then on, temperatures remained near to above normal through the end of the month. Overall, temperatures in January showed more variability with temperatures ranging from a low of -12 at Havre to a high in the upper 50's at Great Falls. Precipitation and snowfall were both near to below normal.

Monthly precipitation for January was below average in most river basins; however, most basins remain near to above normal for February 1. State-wide precipitation was 79% of average for the month of January, and water year-to-date precipitation is 100% of average for February 1. Inflows for January ranged from much below average to much above average at Reclamation reservoirs in Montana east of the Continental Divide. Inflows for the month of January ranged from 80 percent of average at Fresno to 115 percent of average at Bighorn Lake.

Storage in Reclamation reservoirs ranged from much below average to much above average for the end of January. Storage content ranged from 64 percent of average at Gibson Reservoir to 142 percent of average at Fresno. February 1 storage in the Upper Missouri Basin was 2,385,900 acre-feet; 3,700 acre-feet less than the prior month. Storage for the Milk River Project was 150,300 acre-feet; 800 acre-feet less than the prior month. Storage in Bighorn Lake was 870,400 acre-feet; 30,900 acre-feet less than the prior month.

NEBRASKA-KANSAS AREA OFFICE

January precipitation was mostly below average in the Republican River Basin, ranging from 0 percent of average at Bonney Reservoir to 137 percent of average at Lovewell Reservoir. Inflows were varied and ranged from 8 percent of average at Bonny Reservoir to 235 percent of average at Harry Strunk Reservoir. Ignoring Bonny Reservoir, which has been drained for Compact compliance, storage ranges from 38 percent of average at Enders Reservoir to 109 percent of average at Harry Strunk Reservoir.

For the Solomon Basin, the precipitation was above average, ranging from 102 percent of average at Kirwin Reservoir to 165 percent of average at Webster Reservoir. The inflows were below average, ranging from 15 percent of average at Webster Reservoir to 87 percent of average at Kirwin Reservoir. End-of-month storage, generally below average, ranges from 49 percent of average at Webster Reservoir to 99 percent of average at Glen Elder Reservoir.

For the Smokey Hill, Niobrara, and Lower Platte Basins, precipitation was varied, ranging from 23 percent of average at Box Butte Reservoir to 147 percent of average at Merritt Reservoir. The inflows varied, ranging from 38 percent of average at Cedar Bluff Reservoir to 267 percent of average at Davis Creek Reservoir. End-of-month storage ranges from 53 percent of average at Cedar Bluff Reservoir to 168 percent of average at Box Butte Reservoir.

OKLAHOMA-TEXAS AREA OFFICE

January precipitation was varied over the Arkansas River Basin, ranging from 35 percent of average at Cheney Reservoir to 302 percent of average at Sanford Reservoir. Inflows were also above average, ranging from 0 percent of average at Cheney Reservoir to 354 percent of average at Sanford Reservoir. Storage in the Arkansas River basin is about average and ranges from 74 percent of average at Sanford to 119 percent of average at Cheney Reservoir.

For the Red River Basin, the January precipitation was above average, ranging from 125 percent of average at McGee Creek Reservoir to 181 percent of average at Mountain Park Reservoir. The inflows ranged from 0 percent of average at Mountain Park to 53 percent of average at Arbuckle Reservoir. Storage in the Red River basin ranges from 104 percent of average at McGee Creek to 144 percent of average at Mountain Park Reservoir.

For the Nueces, Colorado and Washita Basins, the precipitation was above average, ranging from 99 percent of average at Foss Reservoir to 292 percent of average at Choke Canyon Reservoir. The inflows were mostly below average, ranging from 0 percent of average at Foss Reservoir to 52 percent of average at Fort Cobb Reservoir. Storage in these three basins ranges from 9 percent of average at Twin Buttes Reservoir to 100 percent of average at Fort Cobb Reservoir.

WYOMING AREA OFFICE

Precipitation during January was above average in the North Platte River Basin, ranging from 119 percent of average at Pathfinder Reservoir to 252 percent of average at Guernsey Reservoir. Inflows were above average ranging from 103 percent of average at Seminoe to 145 percent of average at Pathfinder Reservoir. Reservoir storage is above average, and ranges from 90 percent of average at Glendo to 171 percent of average at Guernsey Reservoir.

January precipitation was mostly below average in the Bighorn River Basin. January precipitation ranged from 0 percent of average at Bighorn Reservoir to 100 percent of average at Boysen Reservoir. Reservoir inflow in the Bighorn basin was about average, ranging from 83 percent of average at Bull Lake Reservoir to 118 percent of average at Buffalo Bill Reservoir. Storage in the Bighorn Basin is about average, ranging from 94 percent of average at Bull Lake Reservoir to 105 percent of average at Boysen Reservoir.

CORPS OF ENGINEERS REPORT

The full flood control capacity of the Missouri River mainstem reservoir system is available for the 2016 runoff season. All 2015 stored flood waters have been evacuated from the reservoir system, according to the U.S Army Corps of Engineers (Corps) Missouri River Water Management Division. Releases from Gavins Point were reduced from 24,000 cfs to the normal winter release rate of 17,000 cfs starting in late January.

As of Feb. 1, the mountain snowpack was 92 percent of average in the reach above Fort Peck and 72 percent of average in the reach from Fort Peck to Garrison. Normally 64% of the total mountain snowpack accumulation has occurred by Feb. 1. Mountain snowpack will continue to accumulate over the next few months and normally peaks in mid-April.

January runoff above Sioux City, Iowa, was 114 percent of average. Based on the current soil moisture and mountain and plains snowpack conditions, 2016 runoff in the Missouri River Basin

above Sioux City, Iowa, is forecast to be 23.3 MAF, 92 percent of average. Average annual runoff is 25.3 MAF.

Flow support for Missouri River navigation will likely be at full service levels for the first half of the 2016 season. The actual service level will be based on the total volume of water stored in the reservoir system on Mar. 15, in accordance with guidelines in the Master Manual. The Missouri River navigation season will begin on Apr. 1 at the mouth. Flow support for the second half of the navigation season, as well as the navigation season length, will be based on the actual July 1 system storage.

Reservoir Forecasts

Gavins Point Dam releases averaged 22,400 cfs in January. Releases were reduced from 24,000 cfs to 17,000 cfs beginning on Jan. 28. Releases are expected to average 17,000 cfs through February. The reservoir behind Gavins Point Dam ended January at elevation 1206.0 feet. The reservoir will rise slightly at the beginning of February, before ending the month back near elevation 1206.0 feet.

Fort Randall Dam releases averaged 20,800 cfs in January. Releases will range from 14,000 cfs to 17,000 cfs during February as necessary to maintain the elevation at Gavins Point. The reservoir ended January at elevation 1345.4 feet, up 5.6 feet during the month. The reservoir is expected to rise more than 4 feet during February. The refill of the reservoir is designed to increase winter hydropower generation at Oahe and Big Bend.

Big Bend Dam releases averaged 22,500 cfs during the month of January. Releases are expected to average 19,700 cfs this month. The reservoir will remain near its normal elevation of 1420.0 feet during February.

Oahe Dam releases averaged 24,800 cfs during the month of January. Releases are expected to average 18,600 cfs this month. The reservoir ended January at elevation 1607.5 feet, down 1.7 feet during the month. The reservoir level is expected to remain near its current elevation in February.

Garrison Dam releases were gradually increased from 15,000 cfs to 20,000 cfs during January averaging 17,400 cfs for the month. Releases are expected to average 19,000 cfs in February. Garrison ended January at elevation 1838.8 feet, down 1.2 feet from the end of January. The reservoir level is expected to decline about 1 foot during February.

Fort Peck Dam releases averaged 6,800 cfs in January. Releases were reduced to 6,000 cfs in early February. The reservoir dropped 0.5 foot during January, ending the month at elevation 2233.8 feet. The reservoir level is forecast to rise slightly during February.

The six mainstem power plants generated 741 million kilowatt hours of electricity in January. Typical energy generation for the month of January is 708 million kWh. The power plants are projected to generate 9.3 billion kWh of electricity this year, compared to the normal of 10 billion kWh.