

HIGHLIGHTS FOR JANUARY 2019

MONTANA AREA OFFICE

Precipitation during January was above average in the Upper Missouri River basin, ranging from 100 percent of average at Clark Canyon Reservoir to 308 percent of average at Canyon Ferry Reservoir. Inflows were varied ranging from 81 percent of average at Gibson Reservoir to 119 percent of average at Clark Canyon. Reservoir storage is about average, and ranges from 98 percent of average at Canyon Ferry Reservoir to 113 percent of average at Tiber Reservoir.

For the Milk River Basin, the precipitation was near average, ranging from 89 percent of average at Sherburne Reservoir to 97 percent of average at Fresno Reservoir. The inflows were below average, ranging from 64 percent of average at Sherburne Reservoir to 48 percent of average at Fresno Reservoir. End-of-month storage ranges from 75 percent of average at Sherburne Reservoir to 121 percent of average at Nelson Reservoir.

January precipitation was 159 percent of average at Yellowtail Dam. Inflows were 123 percent of average. Storage was normal at 97 percent of average.

WYOMING AREA OFFICE

January precipitation was varied in the Bighorn River Basin. January precipitation ranged from 20 percent of average at Bull Lake Reservoir to 109 percent of average at Buffalo Bill Reservoir. Reservoir inflow in the Bighorn basin was varied, ranging from 44 percent of average at Bull Lake Reservoir to 123 percent of average at Buffalo Bill Reservoir. Storage in the Bighorn Basin is above average, ranging from 107 percent of average at Boysen Reservoir to 108 percent of average at Buffalo Bill and Bull Lake Reservoirs.

Precipitation during January was above average in the North Platte River Basin, ranging from 107 percent of average at Glendo Reservoir to 176 percent of average at Pathfinder Reservoir. Inflows were varied, ranging from 49 percent of average at Pathfinder Reservoir to 108 percent of average at Guernsey Reservoir. Reservoir storage is above average, and ranges from 96 percent of average at Glendo Reservoir to 130 percent of average at Guernsey Reservoir.

DAKOTAS AREA OFFICE

January precipitation was varied in the Heart River Basin with 17 percent and 129 percent of average precipitation at Dickinson and Heart Butte Dams, respectively. Within the Cheyenne, Grand and James River basins precipitation was varied, ranging from 47 percent of average at Jamestown Reservoir to 326 percent of average at Keyhole Reservoir.

January inflows in the Heart River basin were average, with 119 percent of average inflow at Dickinson and 109 percent of average inflow at Lake Tschida. For the Cheyenne River basin, inflows were varied, ranging from 3 percent of average at Belle Fourche Reservoirs to 204 percent of average at Angostura Reservoir. The James and Grand River basins exhibited average inflows, with 89 percent of average at Jamestown Reservoir and 135 percent of average at Shadehill Reservoir.

Reservoir storage in the Heart River basin finished the month above average; 150 percent of average for Dickinson Reservoir, and 108 percent of average at Heart Butte Reservoir. Storage in the Cheyenne River basin was above average at the end of January, ranging from 114 percent of

average at Deerfield Reservoir to 254 percent of average at Keyhole Reservoir. Storage at Shadehill and Jamestown Reservoirs was above average for the end of January, displaying 124 percent and 113 percent of average, respectively.

EASTERN COLORADO AREA OFFICE

Precipitation was varied over the Colorado-Big Thompson Project (CBT) during January. The Willow Creek and Granby Reservoir weather stations reported the lowest precipitation at 53 percent of average, while Green Mountain Reservoir had the highest at 124 percent of average.

Inflows were varied over the CBT during January. The inflow to Willow Creek Reservoir was the lowest at 87 percent of average. The inflow to Green mountain and Lake Granby Reservoir were the highest at 101 percent of average.

The Lake Granby storage of 391,100 AF on January 31 was 21,100 AF above average and 100,300 AF lower than one year ago on this date. Terminal reservoir storage in Carter Lake and Horsetooth Reservoir was 92 and 85 percent of average, respectively. The January end-of-month CBT storage water in Green Mountain, Lake Granby, Carter Lake, and Horsetooth Reservoirs was 616,300 AF; 33,600 AF below average.

Precipitation was varied over the Fryingpan-Arkansas Project (Fry-Ark) during January. The Ruedi Reservoir weather station reported the lowest precipitation at zero inches, while Pueblo Reservoir had the highest at 224 percent of average.

Native inflows were varied over the Fry-Ark during January. The inflow to Twin Lakes Reservoir was the lowest at zero, while Turquoise had the highest with 338 percent of average.

Reservoir storage is varied for the Fry-Ark. Turquoise Reservoir is the lowest at 69 percent of average. Pueblo Reservoir is the highest at 110 percent of average. The total January end-of-month storage in the four reservoirs is 430,500 AF, 94 percent of average.

NEBRASKA-KANSAS AREA OFFICE

January precipitation was varied in the Republican River Basin, ranging from 21 percent of average at Swanson Lake to 143 percent of average at Lovewell Reservoir. Inflows were varied and ranged from 14 percent of average at Enders Reservoir to 306 percent of average at Lovewell Reservoir. Ignoring Bonny Reservoir, which has been drained for Compact compliance, storage ranges from 35 percent of average at Enders Reservoir to 130 percent of average at Keith Sebelius Reservoir.

For the Solomon Basin, the precipitation was varied, ranging from 50 percent of average at Glen Elder Reservoir to 195 percent of average at Kirwin Reservoir. The inflows were well above average, ranging from 241 percent of average at Kirwin Reservoir to 777 percent of average at Webster Reservoir. End-of-month storage ranges from 100 percent of average at Glen Elder Reservoir to 218 percent of average at Webster Reservoir.

For the Smokey Hill, Niobrara, and Lower Platte Basins, precipitation was varied, ranging from 20 percent of average at Davis Creek Reservoir to 147 percent of average at Cedar Bluff Reservoir. The inflows were above average, ranging from 91 percent of average at Box Butte

Reservoir to 560 percent of average at Cedar Bluff Reservoir. End-of-month storage ranges from 65 percent of average at Cedar Bluff Reservoir to 107 percent of average at Davis Creek Reservoir.

OKLAHOMA-TEXAS AREA OFFICE

January precipitation was varied over the Arkansas River Basin, ranging from zero at Sanford Reservoir to 143 percent of average at Cheney Reservoir. Inflows were varied, ranging from 77 percent of average at Sanford Reservoir to 626 percent of average at Norman Reservoir. Storage in the Arkansas River basin is above average and ranges from 101 percent of average at Sanford Reservoir to 123 percent of average at Cheney Reservoir.

For the Red River Basin, the January precipitation was varied, ranging from 24 percent of average at Mountain Park Reservoir to 135 percent of average at Arbuckle Reservoir. The inflows ranged from 84 percent of average at Mountain Park Reservoir to 317 percent of average at Arbuckle Reservoir. Storage in the Red River basin ranges from 97 percent of average at Altus Reservoir to 144 percent of average at Mountain Park Reservoir.

For the Nueces, Colorado and Washita Basins, the precipitation was varied, ranging from 53 percent of average at Nasworthy Reservoir to 113 percent of average at Foss Reservoir. The inflows were varied, ranging from 57 percent of average at Nasworthy Reservoir to 318 percent of average at Twin Buttes Reservoir. Storage in these basins ranges from 85 percent of average at Choke Canyon Reservoir to 156 percent of average at Twin Buttes Reservoir, which is at its highest storage content since the early 1990s.

CORPS OF ENGINEERS REPORT

All 2018 stored flood waters were evacuated from the Missouri River mainstem reservoir system (System) as of Jan. 29. The latest annual runoff forecast for the Missouri River basin above Sioux City, Iowa is 25.6 MAF, slightly more than the long-term average of 25.3 MAF. Runoff into Fort Peck and Garrison is expected to be below average over the next few months due to the lighter-than-average plains snowpack and below-average mountain snowpack. Runoff in the Sioux City reach is expected to be above average over the next few months as the northern portions of the James River and Big Sioux River basins have widespread and moderate-to-heavy plains snowpack. Portions of those basins contain 4 to 5 inches of estimated liquid content in the snowpack. The remainder of the upper and lower Missouri River basin has light to no snow cover.

As of February 4, the mountain snowpack was 88 percent of average in the reach above Fort Peck and 89 percent of average in the reach from Fort Peck to Garrison. Normally, by February 1, 64 percent of the total mountain snowpack accumulation has occurred. Mountain snowpack will continue to accumulate over the next few months and normally peaks in mid-April.

Reservoir Forecasts

Gavins Point Dam

- Average releases past month – 23,100 cfs
- Current release rate – 20,000 cfs
- Forecast release rate – 17,000 cfs by mid-February
- End-of-January reservoir level – 1204.2 feet
- Forecast end-of-February reservoir level – 1206.0 feet

- Notes: Due to scheduled maintenance on the hydropower units, releases may be made from both the powerhouse and spillway.

Fort Randall Dam

- Average releases past month – 20,700 cfs
- End-of-January reservoir level – 1344.7 feet (up 4.2 feet from December)
- Forecast end-of-February reservoir level – 1350.0 feet
- Notes: Releases will be adjusted as necessary to maintain the desired reservoir elevation at Gavins Point. Gradually refilled the reservoir to 1350.0 feet allows increased winter hydropower generation at Oahe and Big Bend.

Big Bend Dam

- Average releases past month – 23,100 cfs
- Forecast average release rate – 22,300 cfs
- Forecast reservoir level – 1420.0 feet

Oahe Dam

- Average releases past month – 24,900 cfs
- Forecast average release rate – 22,000 cfs
- End-of-January reservoir level – 1605.9 feet (down 1.3 feet from December)
- Forecast end-of-February reservoir level – 1606.7 feet
- Notes: River ice conditions continue to be monitored below the dam and releases will be adjusted accordingly to minimize flood risk caused by river ice.

Garrison Dam

- Average releases past month – 20,200 cfs (ranging from 16,000 cfs to 26,000 cfs)
- Current release rate – 26,000 cfs
- Forecast average release rate – 26,000 cfs
- End-of-January reservoir level – 1838.9 feet (down 0.7 feet from December)
- Forecast end-of-February reservoir level – 1837.5 feet
- Notes: River ice conditions continue to be monitored below the dam and releases will be adjusted accordingly to minimize flood risk caused by river ice.

Fort Peck Dam

- Average releases past month – 11,800 cfs
- **Forecast average release rate** – 12,000 cfs
- **End-of-January reservoir level** – 2235.8 feet (down 1.4 feet from December)
- **Forecast end-of-February reservoir level** – 2234.7 feet

The six mainstem power plants generated 804 million kWh of electricity in January. Typical energy generation for January is 708 million kWh. The power plants are projected to generate 9.7 billion kWh of electricity this year, 104 percent of the long-term average, 9.3 billion kWh.