

Great Plains Region, Facility Status & Snowpack Condition Update: **May 27, 2011**

For more information contact the Great Plains Regional Public Affairs Office, 406-247-7610

Garrison Dam/Lake Sakakawea, North Dakota: Record high runoff from recent rain in the Yellowstone River basin resulted in record inflows to Lake Sakakawea (Garrison Dam), a U.S. Army Corps of Engineers (Corps) facility, of over 200,000 cfs.

This extremely high runoff filled all the lake's multi-use pool and a good portion of its exclusive flood pool. With nearly all mountain snowpack yet to melt and limited storage space available in the lake, it has been necessary for the Corps to increase releases to the Missouri River to an all time record high of 85,000 cfs, 20,000 cfs higher than its previous record. This high release is expected to cause significant flooding through Bismarck, ND.

Releases are expected to reach over 100,000 cfs in June.

Lake Audubon: As an emergency measure to assist with controlling record flood runoff into the Corps' Lake Sakakawea (Garrison Dam), the Corps has requested assistance from the Fish and Wildlife Service (FWS) in utilizing storage space in Lake Audubon, a National Wildlife Refuge (also the lake that allows diversion to Reclamation's McClusky Canal).

Lake Sakakawea is at elevation 1851.1 and Lake Audubon is currently at elevation 1846.5. The difference in storage between these elevations is about 90,000 acre-feet.

Reductions in planned releases from Lake Elwell, Bighorn Lake and Boysen Reservoir: In order to provide the maximum assistance possible to Corps during their flood emergency, Reclamation has reduced releases from Lake Elwell from 2500 cfs to 500 cfs and reduced releases from both Boysen Reservoir and Bighorn Lake by 500 cfs.

Record Rain in Billings: On May 24 Billings received 3.12 inches of rain setting an all time record for precipitation in any 24 hour period in the area. The rains resulted in flooding in the downtown as well as a number of surrounding areas. The rain was also fairly widespread above Billings pushing the Yellowstone River to 1 foot above its flood stage on May 26.

Lovewell Reservoir: Heavy rain through much of Nebraska resulted in high flood runoff in several basins. Inflow to Lovewell has filled the reservoir nearly 6 feet into its exclusive flood pool, using nearly half of the available flood control space.

Jamestown Reservoir: The Jamestown Reservoir level continues to slowly recede. The reservoir elevation is 1448.5. Releases from the dam continue at 1,600 cfs to maintain a flow close to 1,800 cfs at the Jamestown gage. To evacuate storage in a timely manner the current plan is to continue a combined release from Jamestown and Pipestem reservoirs of 1,800 cfs through the end of June.

Bighorn Lake: The lake elevation increased over 16 feet over the past week. A major storm system moved into the area and produced heavy rain causing high runoff above and below the dam. Inflows have increased to over 17,000 cfs while releases have been kept under 5,000 cfs to provide relief to flooding concerns downstream. Snowpack in the Bighorn basin above Bighorn Lake is currently much above average and with the cooler temperatures, very little of the mountain snowpack has started to melt.



RECLAMATION

Managing Water in the West

North Platte System: Snowpack above Seminoe Reservoir is 220 percent of average and 153 percent of peak. The May water supply forecast indicates an above average April to July inflow into Seminoe Reservoir of 245% of average for the most probable inflow forecast.

Seminoe Reservoir was evacuated to near its lowest practical level to provide space for flood control and is now starting to refill from high snowmelt runoff.

Pathfinder has filled over a half-foot into its surcharge pool and is spilling over its natural spillway.

Glendo Reservoir is gradually filling to control downstream flooding. Glendo is expected to fill most of its exclusive flood pool to control the high flood runoff this spring. River flows from the state line down to North Platte are currently above flood stage. Reclamation is working closely with state and local emergency management staff and the Corps of Engineers to coordinate river and reservoir system operations.

Canyon Ferry: Canyon Ferry started filling on May 22. Inflows to Canyon Ferry have increased to over 20,000 cfs are forecasted to peak at over 30,000 cfs in June. Current releases are approximately 14,200 cfs. The current reservoir elevation is 3778.7 feet and is projected to fill into the exclusive flood control space, above 3797.0 feet, in June.



RECLAMATION

Managing Water in the West

Drainage Basin Snowpack Conditions for Great Plains Region

May 23, 2011

	Percent of Average	Change from Last Week	Percent of Average Peak
Montana			
Jefferson River Basin	156	↑ 9	94
Madison River Basin	154	↑ 13	105
Gallatin River Basin	189	↑ 20	116
Missouri River Basin above Toston	168	↑ 13	100
Missouri River Basin Mainstem	211	↑ 29	109
Smith, Judith and Musselshell River Basins	276	↑ 58	107
Sun, Teton and Marias River Basins	218	↑ 18	111
St Marys and Milk River Basins	148	↓ -4	91
Upper Yellowstone River Basin	175	↑ 16	112
Wyoming			
Wind River Basin	207	↑ 62	122
Bighorn River Basin	197	↑ 40	130
Shoshone River Basin	155	↑ 10	114
Powder/Tongue River Basins	306	↑ 123	146
Belle Fourche River Basin	0	↓ -533	0
Upper North Platte River Basin	220	↑ 25	153
Lower North Platte River Basin	200	↑ 44	120
Colorado			
Upper Colorado River Basin	247	↑ 56	115
South Platte River Basin	236	↑ 55	136
Arkansas River Basin	159	↑ 29	77
Upper Rio Grande River Basin	106	↑ 19	48

Footnotes:

-Average is generally the 30 year average (1971-2000)

-In many basins, the snow water equivalent (SWE) typically peaks about mid-April. Past mid-April, the SWE as a % of average SWE can be misleading since the average SWE is decreasing. It is important to also observe the SWE as a % of average peak.



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