

(Monday, March 15)

Subject: 2021 Upper Snake River and Reservoir Operations Update

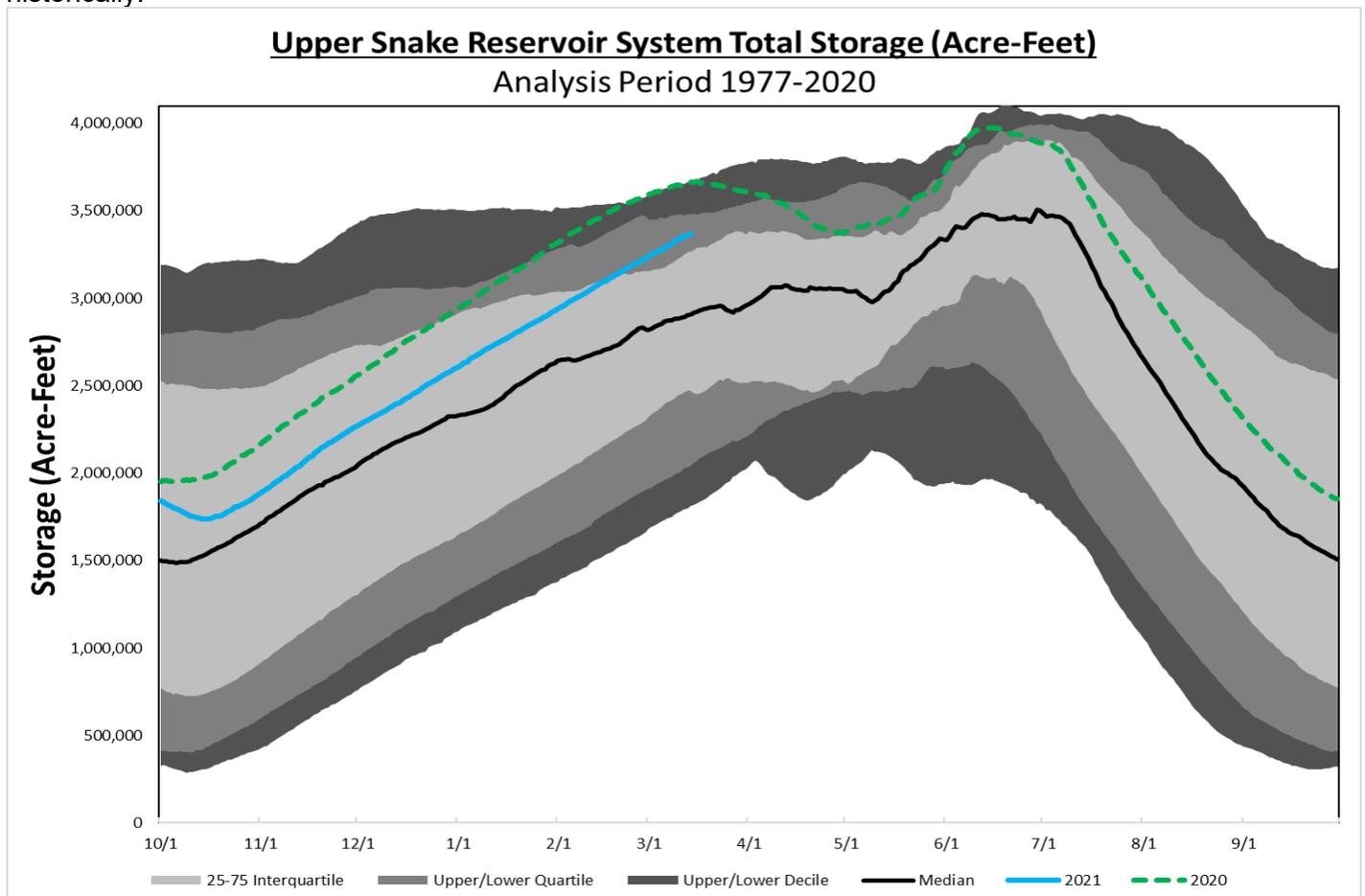
Purpose: The purpose of these updates is to provide information regarding Reclamation's operations and basin conditions as the season progresses. The operations outlined in this update are based on the best data available at the time and are subject to change as new information becomes available. For additional information and resources, please visit our website at: <https://www.usbr.gov/pn/hydromet/uppersnake/>.

Highlights

- Reservoirs will continue to fill as the onset of low elevation snow-melt increases inflow.
- Reservoir releases will increase over the next two weeks as irrigation deliveries begin in the lower valley.

Upper Snake Field Office River and Reservoir Update

Upper Snake Federal Reservoir System: As of March 14, combined storage in the federal reservoir system above Milner Dam amounts to 3,371,907 acre-feet (AF), which is 83% of capacity and 120% of normal. Since November 1, reservoir storage has increased by approximately 1.5 million acre-feet (MAF). The graphic below illustrates current storage relative to the previous year and the period of record. Comparatively, 2021 storage is approximately 290,393 AF lower than it was on this date in 2020. System storage is in the 83rd percentile historically.



South Fork above Heise: Jackson and Palisades have a combined storage of 1,600,758 AF, which is 78% of their 2,047,000 AF combined capacity. Comparatively, current storage above Heise is 133% of average and 156,268 AF lower than on this date in 2020. Reclamation's March 1 operational forecast for the March-July unregulated runoff volume above the Heise river gauge is 3,250,000 AF, which would be 94% of normal.

Jackson Lake Dam: Reservoir content is 651,297 AF, which is 77% of capacity and 125% of normal. Over the course of the winter, releases from Jackson Lake Dam have increased from 325 cubic feet per second (CFS), to approximately 510 CFS. The increases in outflow were necessary to achieve storage targets in relation to the winter space requirements for the reservoir. Releases will be adjusted over the next month as needed to maintain acceptable reservoir levels. To facilitate scheduled inspections and maintenance this fall, Jackson Lake will be drawn down in a similar fashion to what was observed in 2019. To achieve this objective, slightly higher releases during the late summer and early fall can reasonably be expected.

Palisades Dam: Reservoir content is 949,461 AF, which is 79% of capacity and 139% of normal. Over the course of the winter, releases from Palisades have been steady around 900 CFS. At this time, flood-risk management (FRM) operations are not expected to occur before irrigation season begins. If irrigation demand develops as expected, releases over the next 2-3 weeks will likely be driven by streamflow targets at Lorenzo and Blackfoot.

Henry's Fork above St. Anthony: Henry's Lake, Island Park, and Grassy Lake reservoirs have a combined storage of 217,754 AF, which is 91% of their combined capacity of 217,754 AF. Comparatively, storage on the Henry's Fork is 109% of normal, and only 969 AF lower than on this date in 2020.

Island Park Dam: Reservoir content is 119,380 AF, which is 88% of capacity and 112% of normal. When the reservoir is frozen over, Island Park storage is constrained to levels that prevent damage to the spillway. With that constraint, releases are expected to continue being adjusted as needed to maintain acceptable reservoirs levels until the ice breaks up around the spillway in April. Reclamation's March 1 forecast for March-July unregulated-runoff volume above Island Park is 207,000 AF, which would be 84% of normal.

Grassy Lake Dam: Reservoir content is 12,547 AF, which is 83% of capacity and 101% of average. Releases are at 0 CFS and the reservoir is filling at a rate of approximately 4 AF per day.

Willow Creek: Storage content in Ririe Reservoir is 50,578 AF, which is 63% of capacity and 115% of normal. Releases from the dam are expected to remain at zero through mid-April. Reclamation's March 1 forecast for March-July unregulated runoff volume above Ririe Reservoir is 60,000 AF, which would be 88% of normal.

Lower System above Milner Dam: American Falls and Lake Walcott reservoirs have a combined storage of 1,588,644 AF, which is 90% of their capacity and 109% of normal.

American Falls Dam: Reservoir content is 1,514,015 AF, which is 91% of capacity and 108% of normal. Releases from American Falls have been steady at ~400 CFS since the end of December. At the current inflow and outflow, American Falls is projected to fill in early April. However, releases from American Falls are expected to increase over the next two weeks as lower valley irrigation develops.

Lake Walcott/Minidoka Dam: Lake Walcott will be filled to normal operation levels over the next few weeks in preparation for irrigation deliveries. Releases from Minidoka Dam are currently hovering around 525 CFS.

Milner Dam: Releases from Minidoka Dam and reach gains are currently being diverted, and Milner's river release is at zero. Relative to recent years, margins are much tighter regarding the potential for water in excess of the lower systems storage and diversion capacity to occur and be released below Milner Dam.

Reservoir levels, reservoir discharge, and river flows can be monitored on the USBR Hydromet page here: <https://www.usbr.gov/pn/hydromet/>

The Upper Snake “teacup” diagram which provides a graphical overview of system conditions can be accessed here: <https://www.usbr.gov/pn/hydromet/burtea.html>

**The base period shifts in 2021 from 1981-2010 to 1991-2020*