

(Tuesday, December 15)

Subject: 2020 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

**\*\*Lake Walcott is nearing targeted levels, which marks the end of elevated flows through the turbines at American Falls. On Monday, December 21, releases at American Falls will be reduced from the current turbine release of 1,000 cubic feet per second (cfs) to approximately 350 cfs through the low-level outlet gates. Please see the additional information provided below.**

## Operations Summary

**Upper Snake Reservoir System:** Current storage in the 9 federal reservoirs is 59% of capacity at approximately 2,403,371 acre-feet, which is 326,399 acre-feet lower than last year and 114% of the base period average\*. Over the last week, system storage has been increasing at a rate of approximately 10,126 acre-feet/day.

**Jackson Lake:** Current storage is 76% of capacity at approximately 648,157 acre-feet, which is 58,448 acre-feet higher than last year and 130% of average. At 340 cfs, releases have been maintaining acceptable reservoir levels. Small adjustments to outflow may be needed over the next few months to maintain the winter requirement for 200,000 acre-feet of available capacity. Provisional inflow calculations, so far, for the month of December indicate 65% of average baseflow conditions.

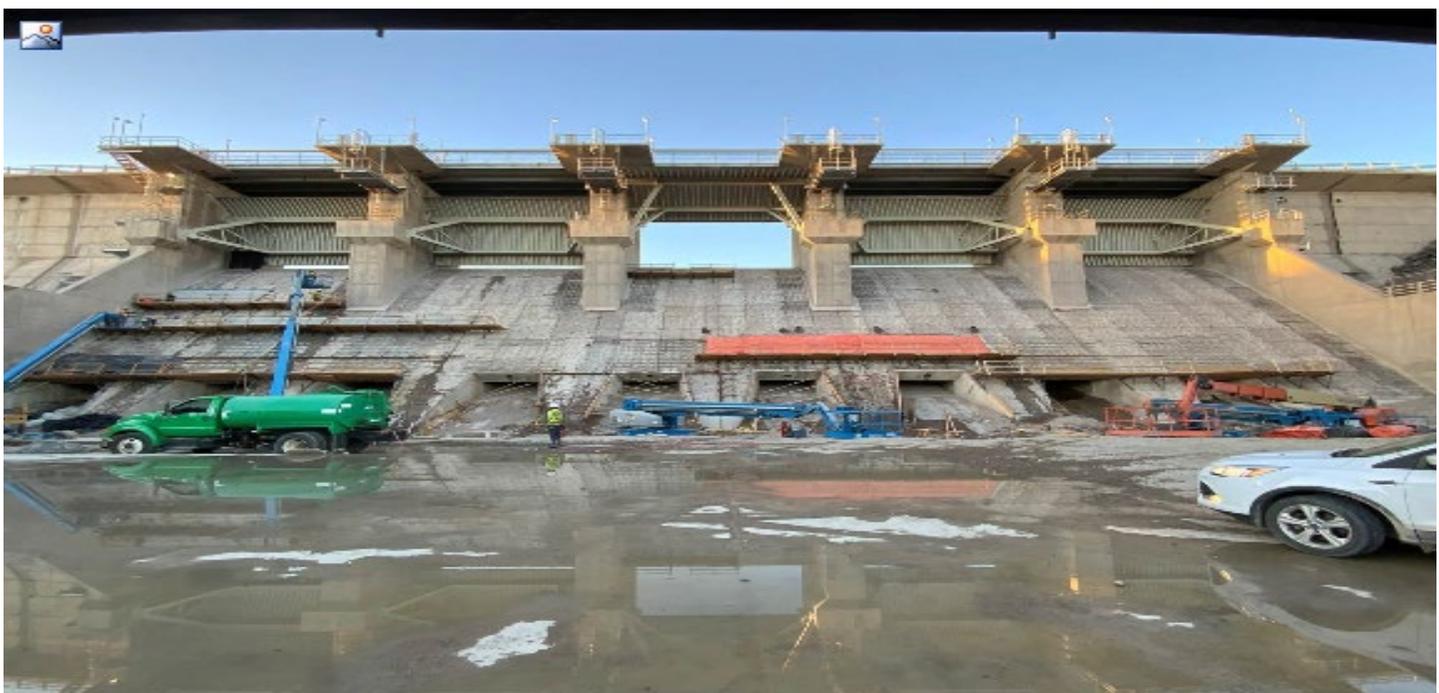
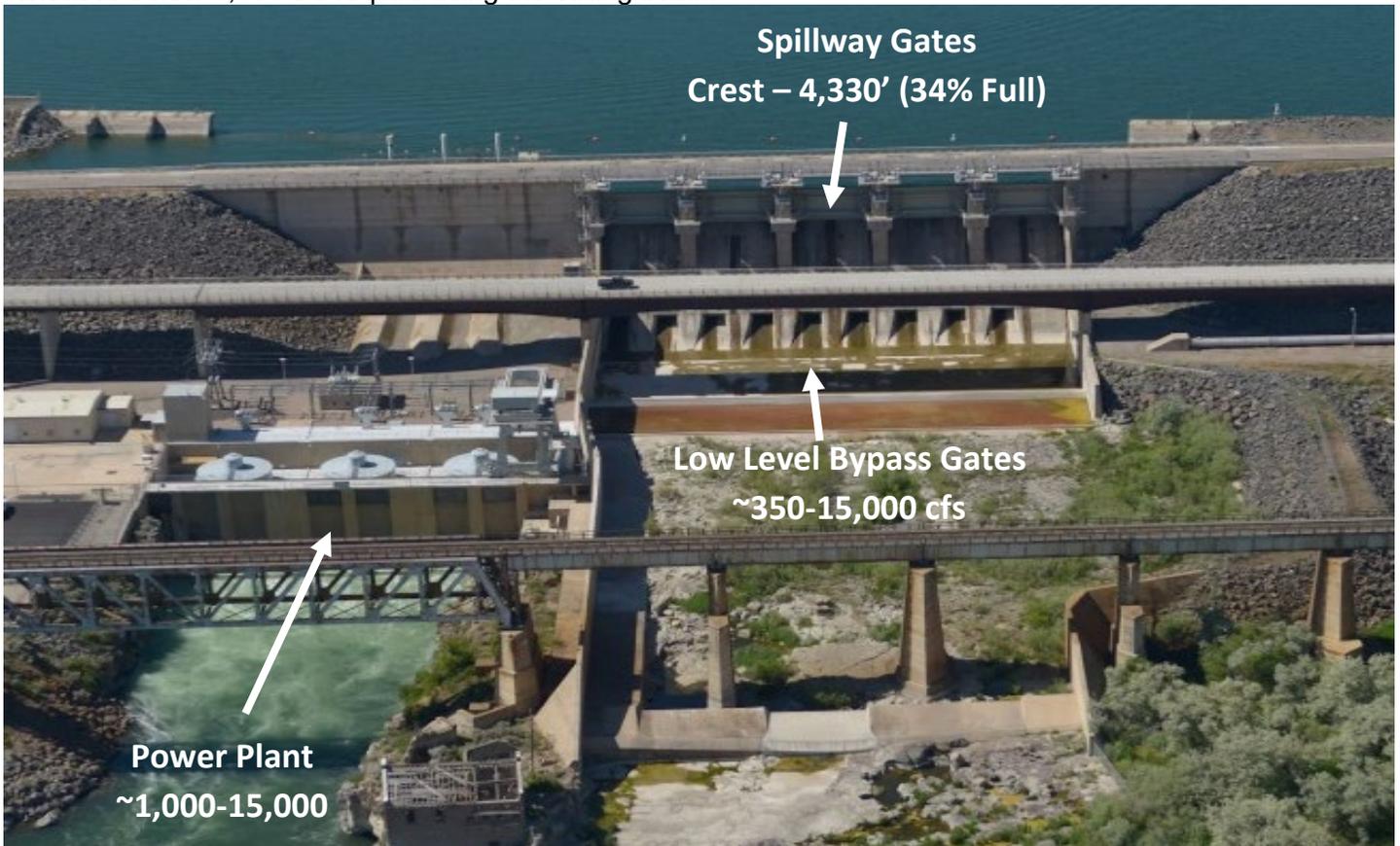
**Palisades:** Current storage is 56% of capacity at approximately 676,752 acre-feet, which is 339,131 acre-feet lower than last year and 113% of average. At a release of 900 cfs, reservoir storage has been increasing at a rate of approximately 2,935 acre-feet/day over the last week. Combined storage between Jackson and Palisades is 54% of capacity at approximately 1,097,521 acre-feet, which is 280,683 acre-feet less than last year and 121% of the base period average.

**Island Park:** Current storage is 68% of capacity at 105,492 acre-feet, which is 14,488 acre-feet lower than last year and 116% of average. The release target has been steady at 325 cfs and the reservoir is filling at a rate of approximately 169 acre-feet/day. Provisional baseflow conditions, for the month of December, are 91% of average

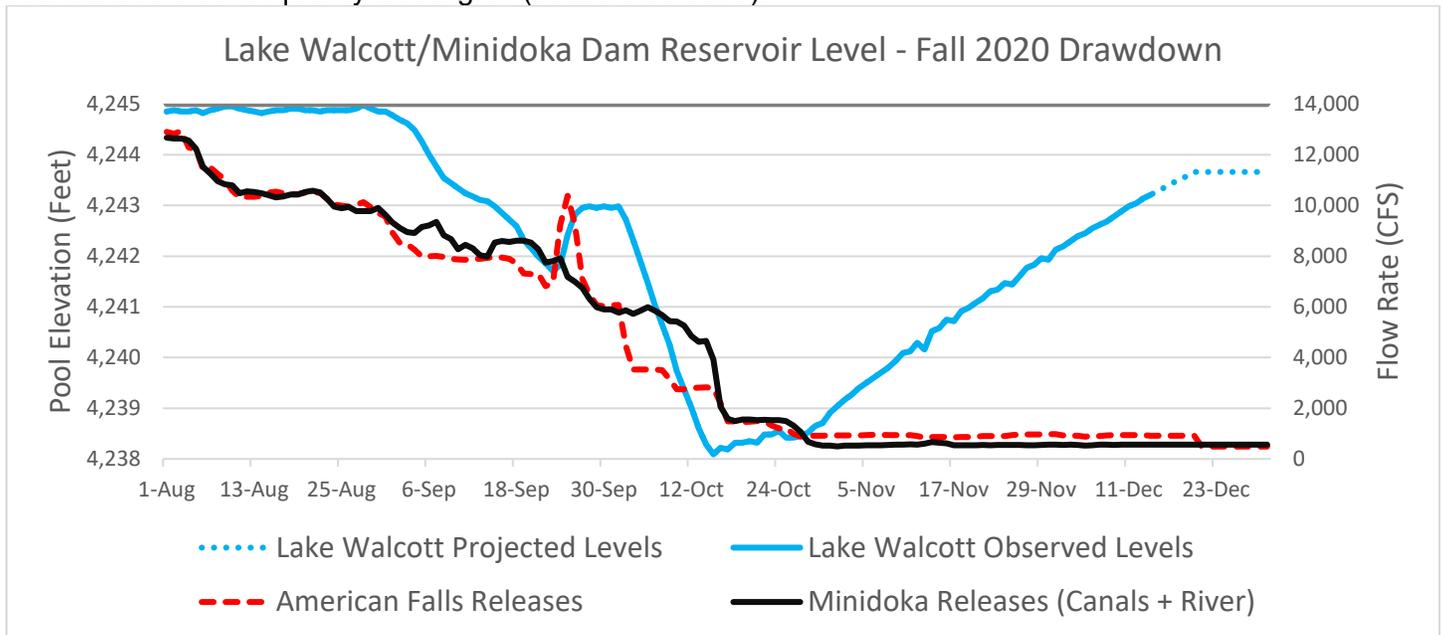
**Grassy Lake:** Current storage is 77% of capacity at 11,802 acre-feet, which is 536 acre-feet lower than last year and 100% of average. Releases are at 0 cfs and the reservoir is filling at a rate of approximately 7 acre-feet/day.

**Ririe:** Current storage is 46% of capacity at 43,665 acre-feet, which is 1,167 acre-feet lower than last year and 119% of average. The release target has been steady at 0 cfs and the reservoir is filling at a rate of approximately 61 acre-feet/day. Provisional baseflow conditions, for the month of December, are 71% of average

**\*\*American Falls:** Year 1 construction activities in the spillway and stilling basin were wrapped up on December 4. The special operations to re-fill downstream reservoirs with minimum powerplant releases after the irrigation season is nearing completion. These re-fill operations allowed the construction window to extend past the end of irrigation season whereas typical winter operations would have required utilizing the stilling basin and inundating the work area. On Monday, December 21, American Falls releases will be transferred to the outlet works and reduced to the typical winter flow of 350 cfs. The image below identifies the powerplant, bypass gates, and spillway gates. Additionally, their respective flow constraints are also listed on the image. Releases below 1,000 cfs require using the stilling basin.



**\*\*Lake Walcott/Minidoka Dam:** The graphic below depicts the 2020 operations for Lake Walcott. Releases below Minidoka Dam (black trace) have been at the winter minimum since late October when irrigation deliveries ended. The blue traces represent observed and projected Lake Walcott Levels through the end of December. Please note the American Falls release (red trace) being reduced Monday, December 21 and Lake Walcott levels consequently leveling off (dotted blue trace).



**Milner:** The minimum releases from Minidoka Dam, plus gains, is resulting in approximately 587 cfs of inflow to Milner Lake. Of the 587 cfs, approximately 200 cfs is being released to the river below Milner and the remaining 350-400 cfs is being diverted for recharge.

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 to 1991-2020*