



Dworshak Reservoir Operations

Spring and Summer 2017

U.S. ARMY CORPS OF ENGINEERS

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What's Up With the Water? Each spring and summer, people visiting Dworshak Dam near Orofino, Idaho, ask about the fluctuating water level in the reservoir. Managing Dworshak's reservoir is a complex task involving many federal, state and local entities. Knowing what goes into making water-management decisions can help people understand the U.S. Army Corps of Engineers (Corps) operational changes and anticipate monthly reservoir levels.

One Reservoir...Many Uses Dworshak Dam creates a large multi-purpose reservoir with competing interests:

Flood Risk Management – reduce flood risk from Orofino, Idaho, to Portland, Oregon

Recreation – a Corps-managed byproduct of a flood risk management reservoir

Water Supply – a Corps-managed byproduct of a flood risk management reservoir

Hydropower – the dam has three turbines to convert falling water into electricity

Environmental Operations – reduce impacts of man-made activities on nature

How the Corps Manages the Reservoir The Corps' Walla Walla District operates the Dworshak reservoir considering the following:

Snow Pack and Weather. The region's snow pack and weather impact flood risk. Due to the unusually wet winter and spring priming the snowpack and a warmer than normal May in the Clearwater Basin, runoff came swiftly. As a result, the reservoir is on track to fill about 10 days before the July 1 target this year, to ensure adequate water supply to meet flow-augmentation requirements in the Snake River and offer optimal reservoir recreation conditions for as long as possible.

Environmental Operations. The Columbia River System Biological Opinion mandates the National Oceanic and Atmospheric Administration (NOAA) and the Corps meet several objectives to enhance ESA-listed fish survival:

- ♦ Maintain minimum water flows for resident fish and salmon
- ♦ Minimize total dissolved gasses (TDG). When water spills over the dam, gasses absorb into the water. High TDG levels can be unhealthy for fish. This year, power generator unit 3 is out of service for rehabilitation and unable to pass water, so the Corps is working with regional partners to secure a short-duration TDG waiver to operate up to 120 percent TDG for the summer.
- ♦ Release reservoir water to maintain lower Snake River water temperatures and help speed juvenile fish downriver to the ocean

What to Expect This Year Given 2017's snowpack, weather and continuing environmental operation requirements, visitors can anticipate seeing the following water-management operations at the Dworshak reservoir:

April– Reservoir elevation was 1,527.4 feet on April 1 – about 73 feet below full-pool elevation (1,600 feet). This was roughly halfway to the 1448.3-foot mid-April draft required. While the mid-April target was missed, discharges were high through April 15 to make enough space to accommodate the spring runoff and meet the spring refill requirements.

May – Managed refill while balancing flood risk. May 31 pool elevation was 1,576.5 feet – about 23 feet lower than full pool.

June 21 – Estimated Reservoir fill date (1,600 feet in elevation).

June 21 through July 5 – Keep reservoir full for recreation, unless high temperatures require early releases to reduce river water temperatures, and provide flow augmentation for ESA-listed fish survival.

July 6 through August – Lower reservoir water level to reduce river water temperatures and provide flow augmentation as necessary.

September – Further reduce reservoir level to meet the Nez Perce water supply accord.

October - December – Maintain minimum water flows until 2018 flood season begins in December.

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