

Lower Snake River Water Supply Replacement Study



Background

The U.S. Army Corps of Engineers' run-of-river dams on the lower Snake River (Ice Harbor, Lower Monumental, Little Goose, and Lower Granite) were built from 1962 to 1975, primarily for navigation and hydropower generation. Each of the lower Snake River dams is operated for fish passage to aid upstream and downstream migrating salmon and steelhead. The lower Snake River plays a multifaceted and vital role in the cultural, socio-economic, and environmental landscape of the Pacific Northwest.

Although not authorized to operate for water supply, use of water affected by these run-of-river projects has developed incidentally. The water withdrawn from the pools for irrigation or municipal and industrial uses is not stored behind these dams to support the withdrawals. Rather, it is natural flow incidentally made accessible by the elevated pool levels that result from operating the dams for their authorized purposes.

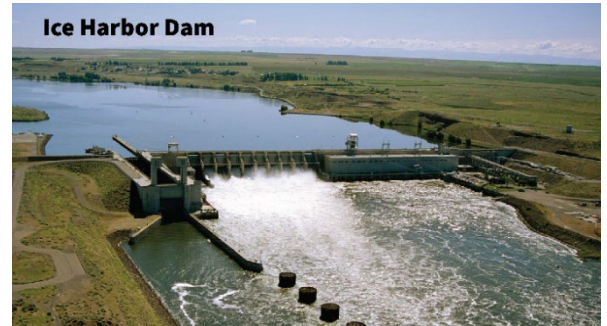
Fish passage at the LSR dams has been a source of regional conflict for decades, resulting in perennial litigation. Breaching, or partially removing, the four LSR dams has been proposed as a possible way to improve survival of Snake River anadromous fish. Breaching those dams, however, has the potential to impact water supplies that have benefitted from the current dam configuration on the lower Snake River.

Overview

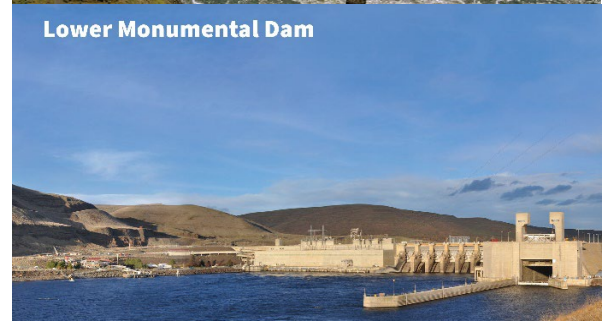
The Bureau of Reclamation and the Washington State Department of Ecology began the Lower Snake River Water Supply Replacement Study with the award of a contract to Jacobs Engineering Group in April 2024 to develop the study. This study is a component of federal government commitments made as part of a mediated agreement among parties in the Columbia River System Operations litigation. The agreement was signed December 14, 2023.

The study team will

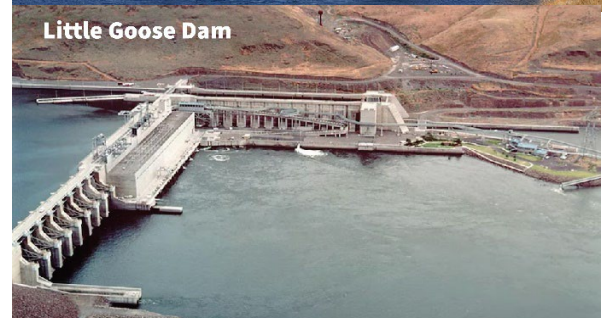
- Collect data across the study area where impacts are likely to occur,
- Evaluate the impacts on water supplies and explore mitigation approaches in the event the four lower Snake River dams were breached to allow for a free-flowing river,



Ice Harbor Dam



Lower Monumental Dam



Little Goose Dam



Lower Granite Dam



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- Describe options for replacing water supplies affected by potential dam breach and prepare preliminary engineering designs and cost estimates,
- Identify and analyze potential implementation challenges and solutions,
- Evaluate each dam individually and all four dams as a system.

The study does not address potential impacts associated with the following:

- Navigation
- Recreation
- Regional energy needs

These areas are being evaluated in separate studies led by the Corps and U.S. Department of Energy.

Data Collection

The Jacobs Group will gather information from public data sources, previous studies, and other references as well as conduct interviews with water users and related parties to better understand how water is provided and used. Additionally, individuals with relevant information that can contribute to the quality and thoroughness of the study may email that information to bor-sha-lsrwsrcomments@usbr.gov. The project team will incorporate the best available scientific information into this study as the contractor gathers information and identifies approaches for replacing water supplies should dam breach be authorized.

Timeline

The study is one of a set of federal studies committed to by the U.S. government as part of the December 14, 2023, mediated agreement on Columbia River system operations.

- In February 2024, the Bureau of Reclamation and the Washington State Department of Ecology entered into an agreement, committing resources to development of the water supply replacement study,
- In April 2024, the Bureau of Reclamation awarded a contract to Jacobs Engineering,
- A draft report is slated to be released for stakeholder review by the end of 2024,
- A final report will be released in mid-2025.
- This study and those conducted by the Corps and Department of Energy will be used to inform congressional decisions regarding breach of the lower Snake River dams in support of healthy and harvestable salmon populations.

