



— BUREAU OF —
RECLAMATION



DEPARTMENT OF
ECOLOGY
State of Washington

Lower Snake River Water Supply Replacement Study

Information Session

Week of June 24, 2024

Agenda

- Background and Federal / State Commitment
- Study Description
- Opportunities for Engagement
- Questions and Answers



Background and Federal / State Commitments



Federal Commitment

- Columbia River System Operations EIS/ROD, biological opinions (2020) and litigation
- Mediated agreement (12/14/23) and litigation stay (2/8/2024)
- USG commitment related to lower Snake River dams
 - “BOR working with USDA will provide \$4.2 million to fund a water supply replacement study, in coordination with ongoing analyses by the State of Washington. This study will address the irrigation, municipal, and industrial withdrawals associated with the potential breach of the four LSR dams, if authorized by Congress.”
 - The U.S. Government (USG) will complete the aforementioned outreach and analyses by [late-2024], in cooperation with the Six Sovereigns...”
- Funded through Bipartisan Infrastructure Law (BIL) Aquatic Ecosystems Restoration Program (AERP)



State Commitment and Participation

- Washington State legislation – (S.B. 5187, 2023)
- Reclamation/Ecology partnership agreement
 - "Reclamation and Ecology agree to work collaboratively to perform the Lower Snake River Water Supply Replacement Study (Study). The Study will evaluate the impacts on water supplies in the event the four lower Snake River (LSR) dams are breached and describe options for providing replacement irrigation, and municipal and industrial (M&I) water supplies to impacted users."



Related Studies

- Regional energy needs planning – Dept. of Energy
- Recreation analysis – Corps of Engineers
- Transportation Infrastructure analysis – Corps of Engineers



Study Activities to Date

- Reclamation and Ecology agreement to co-sponsor the study
- Contract awarded to Jacobs - 4/26/24
- Tribal outreach and invitations to consult
- News release of the study and virtual information sessions - 6/14/2024



Study Description

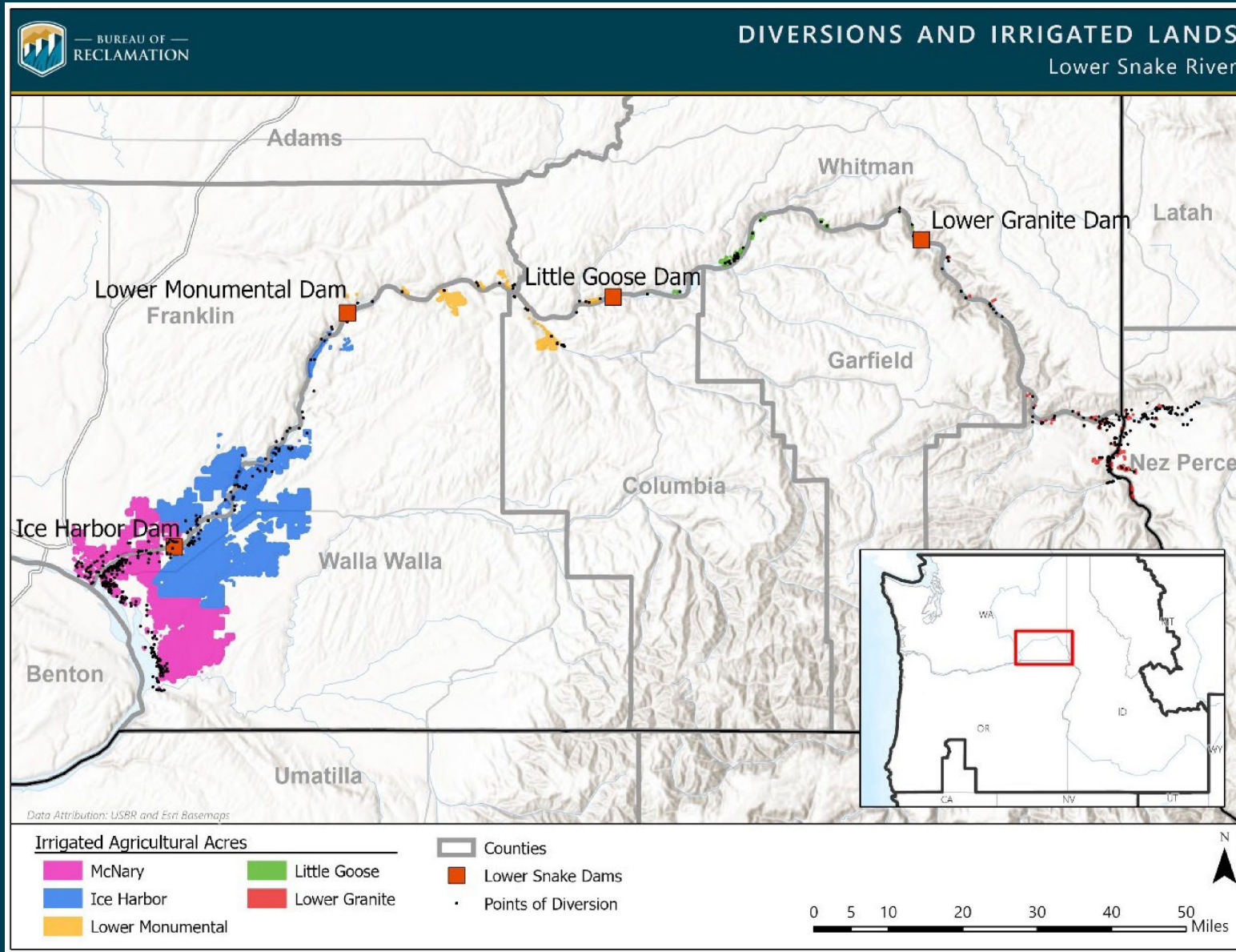


LSR Water Supply Replacement Study Consultant Team

- Jacobs Engineering Group (Prime)
 - Subconsultants
 - NHC
 - Aspect
 - AECOM
 - Greene Economics
 - QRS



LSR Water Supply Replacement Study Area



Summary of Study Content

- Objective technical analysis of water supply and long-term availability of water in the event the four LSR dams are breached (e.g., pools drop ~100 feet and/or groundwater levels decline)
- Related economic analysis
- Pre-feasibility designs and cost estimates of potential replacement alternatives
- Identification of implementation issues and additional efforts required



Scope and Schedule for Study

1. Initial Communications

- Tribal and Public Information Sessions (Jun 2024)
- Water User Interviews / Site Visits (Jul 2024)

2. Study Sections 1 & 2 (summer 2024)

- Analysis of Current Water Supply
- Water Availability Analysis

3. Study Sections 3 & 4 (fall 2024)

- Potential Solutions for Water Supply Replacement
- Identification and Analysis of Potential Implementation Issues

4. Report and Review

- Public Draft Report available for Review (Dec 2024)
- Tribal and Public Information Sessions (winter 2025)
- External Review and Independent Peer Review (early 2025)
- Final Report (mid 2025)

5. Administrative Record



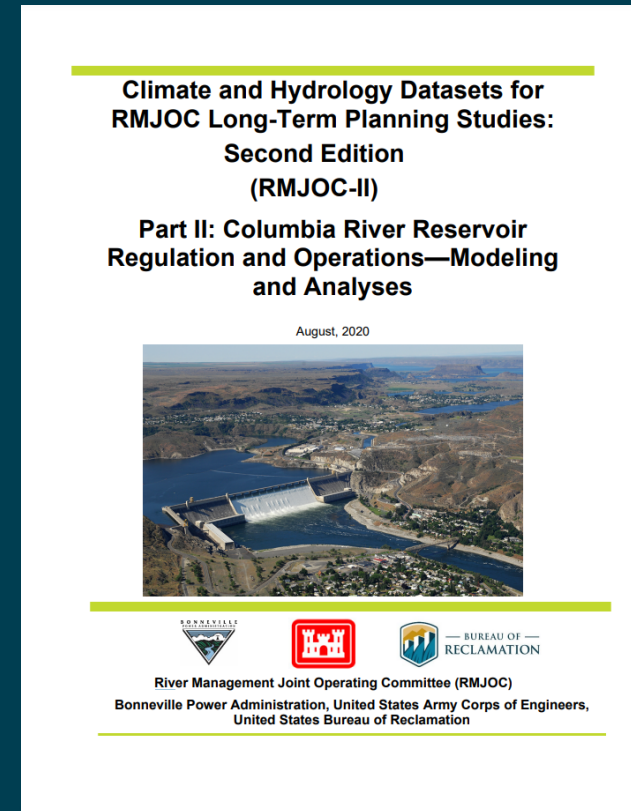
Study Section 1 – Analysis of Current Water Supply

- Inventory surface water and groundwater rights, points of diversion, and places of use in study area
- Data validation and completeness
- Confirm irrigated acreages
- Water user interviews
- Economic benefits analysis



Study Section 2 – Water Availability Analysis

- Run-of-river / natural flow surface water rights made more easily accessible by elevated pool levels
- Evaluation of seasonal and long-term variations in flow
- Future climate projections and hydrology data from RMJOC-II study
- Potential impact to groundwater wells in study area



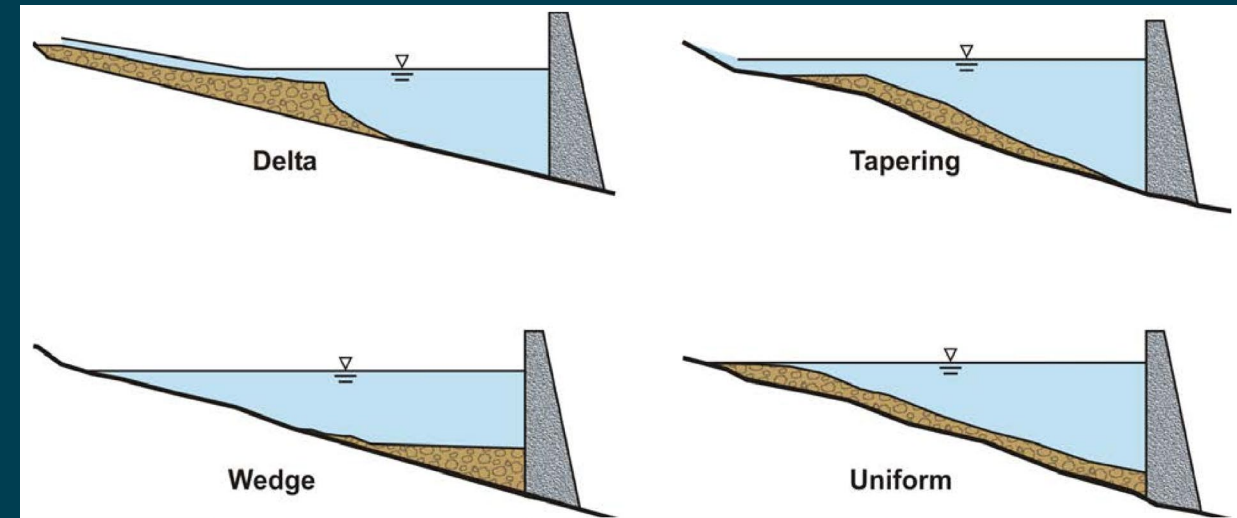
Study Section 3 – Potential Solutions for Water Supply Replacement

- Identify broad range of alternatives
- Workshop to identify alternatives to advance
- Pre-feasibility designs and cost estimates



Study Section 4 – Identification and Analysis of Potential Implementation Issues

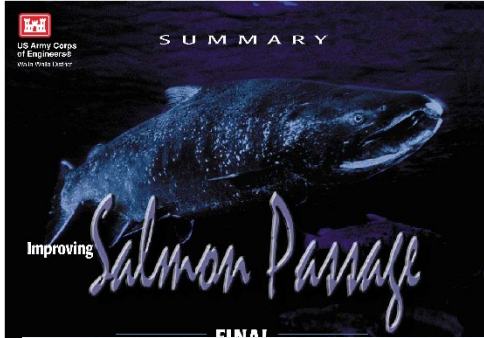
- Transition from current conditions to potential future dam breach state
- Phasing/sequencing constraints and impacts
- Sedimentation issues
- Environmental compliance – NEPA framework approach



Four basic patterns of reservoir sediment deposition (Morris and Fan, 1997)



Key Data Sources & References



Columbia River Diversions and Irrigated Agricultural Acres

Technical Memorandum

Columbia Pacific Northwest Region

A VISION for SALMON and STEELHEAD

Goals to Restore Thriving Salmon and Steelhead to the Columbia River Basin



Plus many other data sources, previous studies, and other references



EXECUTIVE SUMMARY Columbia River System Operations Environmental Impact Statement



U.S. Dept

Irrigation Sector Economic Impacts on the Lower Snake River Benchmark Review for Dam Breaching and Mitigation Costs



Ice Harbor Dam Tailrace, Lower Snake River (2023)

Prepared For:
Office of Columbia River
WA State Department of Ecology
And the Washington State Legislature

Prepared By:
Franklin Conservation District
Pasco, WA
Columbia-Snake River Irrigators Association
Kennewick, WA

January 2024



Lower Snake River Dams: Benefit Replacement Report

FINAL: AUGUST 2022



Near-Term Work Activities

- Data review and validation
- Water user interviews
- Water availability evaluation



Engagement Opportunities

- June 25 & 27, 2024 – Tribal and Public information sessions
- Late 2024 – Early 2025 – In-person Tribal and Public information sessions presenting the draft report
- Early 2025 – Review of draft document



Questions

- Email questions to mcoffey@usbr.gov



Contact Information:

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