Packwood Lake
Hydroelectric Project (P-2244)
Lake Creek Restoration Public Meeting

11/7/19
Packwood, Washington
Project Layout and Infrastructure

- 26+ MW
- 92,000 MWh/year average
- 511.65 federal acres occupied
- Packwood Lake – 452 acres
- Lake Intake to Surge Tank – approx. 4.1 miles
- 1.3 mile long asphalt/concrete lined tailrace emptying into the “tailrace slough”
- Lake Creek (bypass reach) – approx. 5.3 miles
- Lower 1 mile is the anadromous reach
Project Layout and Infrastructure

- The 4.1 mile of Pipeline tunnels 1&2
- Operating pressure is ~780psi.
- Unit is roughly 36,700 HP at 26MW
- Generator is rated at 26MW, 1150 amps @ 13.8KV and stepped up to 69KV
Project Layout and Infrastructure
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Regulatory Timeline

- 2004-2008 – Energy Northwest conducts relicensing effort in collaboration with agencies (USFS, NMFS, WDFW, WDOE, ACOE, Yakama Nation and Cowlitz Indian Tribe, FERC)
  - Integrated Licensing Process
  - Natural Resource Studies
  - Terms and Conditions agreements
- 2/25/08 – EN files Final License Application with FERC
- 7/1/09 – FERC issues Final Environmental Assessment
- 3/21/18 – NMFS issues Biological Opinion
- 10/11/18 – FERC issues new operating license
- October-Current – Compliance prep, site visits, re-initiate agency collaboration, 2019-specific planning
Public Meeting Intent

- Inform local public of required measures for lower Lake Creek
- Address all questions/concerns
- Describe general timeline for the effort
- Discuss potential for access via private lands
Lower Lake Creek Restoration

- Develop and implement a plan for restoring anadromous salmonid habitat in the lower 1.0 mile (anadromous reach) of Lake Creek. Both implementation and success criteria must be initially incorporated into the plan and updated on a regularly scheduled basis.
Develop and Implement Lake Creek Stream Restoration Plan

Timeline – Plan must be collaboratively developed within 2 years of license issuance and restoration activities must be completed by year 5.

Currently in discussions with agencies to extend implementation window to 7 years.

Implementation

- Formation of Restoration Sub-group
- Series of drafts, calls, site visits/meetings lead to restoration plan
- EN works with land owners and agencies on access and permits
- Implementation occurs in years 6-7 of new license (2024-2025)
- Follow-up monitoring of restoration success to occur
Lower Lake Creek
(Lower 0.3 Miles)

- **Lower 0.3 miles**
  - Focus on area below primary development
  - Lower 0.1 mile of this 0.3 mile stretch
  - Primarily focus on boulder placement to enhance habitat
    - 2,700 ft² rearing
    - 300 ft² spawning
  - High level of public communication and interaction to begin Fall 2019
Lake Creek
(Lower 0.3 Miles)
Lower Lake Creek
(Lower 0.3 Miles)
Lower Lake Creek
(Lower 0.3 Miles)
Lower Lake Creek
(Upper 0.7 Miles)

- Upper 0.7 miles
  - 12,600 ft² rearing
  - 1,400 ft² spawning
  - Focus primarily on long-term wood structures designed to increase pools (rearing) and gravel retention (spawning)
  - Supplemental gravel a consideration along with potential riparian plantings
  - Approximately 15 wood structures will be placed in this area; may not be evenly spaced depending on identification of priority areas
  - Likely focus area from RM 0.4 to area of significant gradient increase near RM 0.8
Lower Lake Creek
(Upper 0.7 Miles)

Likely Area of Focus

Thompson Road Bridge

RM 1.06 Partial Barrier
Lake Creek
(Upper 0.7 Miles)
Lake Creek
(Upper 0.7 Miles)
Energy Northwest Priorities and Potential Needs

- Collaborative process with the public
  - Consistent communication
  - Status updates
  - Key Contacts

- Land access
  - Surveys
  - Restoration efforts
  - Monitoring
Energy Northwest Questions

- Best outlets to utilize for local notifications?
  - Shopper
  - Flyers
  - Other?

- Identification of key contacts
  - Goat Rocks Development
  - Logging Company Contacts
  - Key Packwood Interests

- Sign-in Sheet
  - Personal contact info
  - Information related to key contacts
  - Other suggestions on appropriate notification
Public Feedback/Next Steps

- Questions/Concerns?
- Status Updates
- Additional Public Meetings
  - Post-Resource Agencies Committee Meeting (April 2020)
- General Schedule
- Adjourn