

# Packwood Lake Outage Proposal

Energy Northwest  
Prepared for Aquatics Sub  
Committee

*January 10-11, 2008*

## *Proposal: Move Outage to August 15 – September 15*

- Components to Outage
  - Outage Shifted to August 15 – September 15
  - No Pre-Outage Drawdown
    - Lake Elevation Maintained at El 2857 ± 6 inches Prior to Outage
  - Still Requires Winter Drawdown to El 2849 ft

## Advantages of Outage During This Period

- Can eliminate pre-outage drawdown due to low lake inflows during that time period
- Low inflows reduce the threat of overtopping events that result in uncontrolled fish flow releases

## *Advantages of Outage During This Period, Cont'd*

- ***No Drawdown minimizes the negative effects on:***
  - Out migration of juvenile fish from lake tributaries
  - Lowering water levels in wetland areas
  - Amphibian issues due to lower wetland water levels
  - Littoral habitat issues
  - Concerns on limiting uncontrolled shoreline access by recreationists

## *Advantages of Outage During This Period, Cont'd*

- Eliminates attraction flows in the tailrace slough.
- Performing the Outage in Aug/Sept when lake inflows are traditionally low will help assure adequate water is available from August 15 through October for Lake Creek fish flow.
- Removing the plant from operations with a lake level of approximately 2856.5' pre-outage drawdown effects are eliminated. (Historical low flows diminish the potential for overtopping when the proposed fish flows are factored in)

## Need for Drawdown After September 15

- This operating pool will be required to assure adequate water is available to provide the increased by-pass flows through the months of September and October which see traditionally the lowest inflows of the operating year.
- Flow continuation is required in the tailrace slough for spawning and incubation in September and October.
- The need to drawdown the lake level to 2849' in September is eliminated under this proposal. The station will manage the available operating pool to assure by-pass flows and priority firm deliveries are met. License conditions always take priority over contracts for generation.

## Energy Northwest Proposal

- Move the outage to August 15 – September 15
- Work with agencies to resolve temperature issue

### *Advantages of Outage During This Period, Cont'd*

- Chinook are spawning from mid August through September and the proposed flow regime will provide the necessary attraction flows in Lake Creek in August and rearing flows through October. (See revised flow proposal below)

### *Disadvantages of Outage During This Period*

- During the water quality study the water released from the project tailrace slightly exceeded the state standard for a short period of time in August. Initial proposals would have moved the outage to August so the warm lake water would be spilled down lake creek and mixed with the colder water from its tributaries.