Pacific Lamprey Assessments and Recovery Actions in the Mid-Columbia River

February Meeting 2014: Recap of process

March – provide basic framework

April – provide basic components of framework

May – provide substantial details of components

June – provide draft implementation plan

July – provide a final draft implementation plan

August – have SOA moving forward

Premises

- Settlement Agreements understood all Project Effects not known and through Adaptive Management – Settlements obligate investigation where there is probable cause.
- The Settlement Agreement obligates <u>all Parties</u> to move forward with reasonable progress towards reasonable actions.
- PUD contributions to NNI and/or Regional Participation is anticipated in the Settlement Agreements and is part of the Settlement Agreements intent to Protect, Mitigate, Enhance and Monitor.
- Forward looking plan is central towards certainty and steady progress.
- Cumulative effect of passage and reservoir "losses" reduces population abundance and spatial diversity above Priest Rapids Dam.
- Supplementation is the only near-term "certainty" to rebuilding adult abundance

 and presumably juvenile abundance in the UC. It is not the longer-term solution.

General Framework – (potentially) 10 Year Agreement

- Emphasize adult passage and life stages in first five years.
 - Does not mean exclude juveniles first five years
- *Emphasize* juvenile life history second five years.
 - Does not mean exclude adults second five years

Translocation a strong component to get the fish back to the headwaters.

- Implies adequate monitoring will proceed to indicate benefits/risks of translocation and begin determining juvenile "capacity" within tributaries.
- Art Prop: in preparation for juvenile studies, (relative to Chelan PUD)
 - we shall measure the type and magnitude of any ongoing Project impacts on the downstream passage of juvenile lamprey using appropriate and reasonable methods....and shall develop the means to provide sufficient numbers of juvenile lamprey for these evaluations.
 - Consistent with findings from both technical documents developed and accepted by the RRFF.

Focal Objectives 2015 - 2017

Mainstem Adults

- 1. Mainstem Fishway Entrance, Passage and Exit Efficiency
- 2. <u>Proportion of Adults Ascending Tributaries</u>
- 3. Fate of Adults in Reservoirs

Mainstem Juveniles

- 4. Predation on Juveniles in Tailrace
- 5. Juvenile Occupancy and Use of Reservoir Habitat

Tributary

- 6. Regional Establishment Baseline / Status and Trend Information
- 7. <u>Adult Passage in Tributary Streams</u>
- 8. Juvenile Entrainment: Dryden Ditch / Other Irrigation Structures

Supplementation

- 9. Adult Translocation Research
- 10. Artificial Propagation Research

Focal Objectives 2018 - 2021

Mainstem Adults

- 1. Mainstem Fishway Entrance, Passage and Exit Efficiency
- 2. Proportion of Adults Ascending Tributaries
- 3. <u>Fate of Adults in Reservoirs</u>

Mainstem Juveniles

- 4. <u>Predation on Juveniles in Tailrace</u>
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Tributary

- 6. Regional Establishment Baseline / Status and Trend Information
- 7. Adult Passage in Tributary Streams
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Supplementation

- 9. Adult Translocation Research
- 10. Artificial Propagation Research

Focal Objectives 2022 - 2025

- Refinements in actions to achieve biological objectives.
- Continue monitor / supplementation program.
- other