# FINAL Meeting Notes Lewis River License Implementation Hatchery & Supplementation Plan Subgroup Meeting November 21, 2008 Vancouver, WA

# **H&S Plan Subgroup Participants Present (15)**

Jim Byrne, WDFW
Clifford Casseseka, Yakama Nation
Michelle Day, NMFS
Jeremiah Doyle, PacifiCorp Energy
Pat Frazier, WDFW
Bryce Glasser, WDFW
Eric Kinne, WDFW
George Lee, Yakama Nation
Erik Lesko, PacifiCorp Energy
Kate Miller, Trout Unlimited
Elyssa Ray, WDFW
Frank Shrier, PacifiCorp Energy
Neil Turner, WDFW
Rich Turner, NMFS
Steve Vigg, WDFW

Assignments from November 21st Meeting:	Status:
WDFW: Will determine if a joint HGMP is possible or acceptable.	
Frazier: NMFS and WDFW Genetics staff to determine whether it is	
acceptable to use steelhead broodstock from other areas.	

## Opening, Review of Agenda

Erik Lesko (PacifiCorp Energy) called the meeting to order at 10:00am. Members of the Hatchery and Supplementation Subgroup met at WDFW offices to discuss the wild winter steelhead program proposed under the Hatchery and Supplementation Plan (HSP) and Hatchery and Genetic Management Plan (HGMP).

Decision: The subgroup decided to use a phased approach in an effort to finalize portions of both plans that are scheduled for implementation first (e.g., wild winter steelhead).

The topics below represent questions and concerns presented by PacifiCorp at the October 2008 ACC meeting with respect to the wild winter steelhead HGMP. A short summary of the discussion that took place and any decisions follows each topic.

1. Tagging Methods for wild winter steelhead smolts released from the hatchery

Subgroup agreed that all steelhead smolts released under this program will be tagged with blank wire in the snout. This decision is based on (1) high survival rates with

wire tags and (2) the lack of wire tags for unclipped steelhead in the region which will produce a unique tag. Marking by removal of one of the ventral fins was eliminated from consideration due to potentially lower survival rates.

#### 2. Kill spawning of wild winter steelhead

Concern for Infectious Pancreatic Necrosis (IPN) is the primary reason for screening. Screening at spawning provides the best management practice in terms of preventing disease at the Merwin hatchery. Unfortunately, this requires the killing of males to sample spleen and kidney tissues. Males were selected over females due to relatively low repeat spawning (survival) of males compared to female steelhead. The subgroup agreed that the kill spawning and sampling of males would continue for a period of three (3) years to gather baseline information. After 3 years of sampling, the group and WDFW pathology staff will evaluate whether additional sampling is required. **REQUIRES CHANGE TO HSP**.

### 3. DNA Analysis – type and suitability

Some discussion took place regarding the type of analysis required for each non-clipped winter steelhead captured at the traps. The goal of this sampling is to prevent strays from entering the broodstock. This discussion was postponed until WDFW can discuss the issue with NMFS and WDFW geneticists and determine if the use of stocks other than N. Fork Lewis River (e.g., Cedar Creek, Kalama) is acceptable.

#### 4. Use of alternative collection sites for broodstock

Numbers of wild steelhead at the Lewis River traps may not be sufficient to meet broodstock needs (25 females, 25 males). Other methods may need to be deployed including angling and netting. Special precautions would need to be in place for both methods in terms of reducing handling stress to captured fish or, in the case of angling, ensuring that anglers are properly trained to handle steelhead. Other potential collection sites discussed include Cedar Creek or Kalama trap. Genetics staff will need to determine whether it is acceptable to collect steelhead from other areas.

#### 5. Release location and release method of smolts

All smolts will be volitionally released from the Merwin hatchery. Smolts that volunteer to leave the hatchery pond will be transferred to the Lewis River and released at the Merwin boat ramp. This is believed to provide the best imprinting possible. Smolts that do not volunteer will be forced out of the ponds by June 1 and released near Woodland to minimize potential negative interactions with wild fall Chinook and other naturally produced smolts.

#### 6. Lack of abundance information (for steelhead) in the lower Lewis River.

The effect of this program on naturally produced steelhead in the Lewis River downstream of Merwin dam is not fully known. This is due in part to the lack of information available for naturally produced steelhead in the system. Adding too

many fish to the system may exceed AHA modeling or increase founder effects. While both plans state the release of 50,000 smolts, there is no provision for higher than anticipated releases. For example, if survival is better than expected and the program produced 60,000 smolts; what is the fate of those excess fish? It was suggested however that excess smolts be released upstream of the projects despite the lack of collection facilities (in the short term), however, this was not resolved. [Lesko does not believe we made a decision here, if so, please let him know]

## 7. Rearing Strategies

Isolated rearing strategies will be employed using existing facilities (with some modification). The program will be isolated from other programs at the facility and will incorporate isolated families (5 family isolation).

Water may need to be heated to ensure fish smolt after 1 year in the facility. This may require up to 3 months of heating (between 5 and 6 degrees) to rearing water. The amount of heating will need to be calculated.

#### 8. Responsibility for program implementation (e.g., kelt reconditioning, upgrades)

Kelt reconditioning is proposed in the HGMP as a tool for enhancing survival of fully spawned females (males are to be kill-spawned for the first 3 years). The group discussed the limitations of the programs to include limited reconditioning for no more than one (1) month, borrowing a circular tank to conduct a pilot study and initial feed costs (use of krill). The group agreed that the program would be beneficial to the survival of female steelhead and that the program size is small (up to 25 females) that the costs would be minimal.

No upgrades to the hatchery are planned as a result of this program. Some plumbing and trough modifications, however, will be necessary to handle the program and meet the goals of the HSP and HGMP.

#### 8. Supplementation of smolts to the upper basin

Supplementation of juveniles upstream of Swift was discussed. It was agreed that supplementation may be considered at some point down the road and would only take place after the downstream collector was in place. This will remain in consideration and language will be added to the HSP to reflect this. It was the understanding of the group that any supplementation program would not alter smolt production goals in the lower river of 50,000.

#### 9. Schedule

The schedule for finalizing both plans is still undetermined. Assuming 4(d) rules, the HGMP must go out for a 30-day public comment period. NMFS will have to complete and Environmental Assessment for the HGMP(s). Given these tasks it is unlikely that the HGMP or HSP will be approved in time, however, both plans will be in the process of being completed, which is no different than the current operations at the hatchery.

It was discussed whether a joint concurrence letter for a joint (PacifiCorp and WDFW) HGMP were beneficial. PacifiCorp believes that a joint HGMP would be beneficial. WDFW will determine if that is possible or acceptable.

## Agenda items for January 9, 2009

- ➤ Review November 21, 2008 Meeting Notes
- Discussion of broodstock collection
- > Review changes to wild winter steelhead HGMP

## **Next Scheduled Meetings**

January 9, 2009
WDFW, Region 5 Office
Vancouver, WA
10:00am – 3:00pm

# Meeting Adjourned at 2:00 p.m.

#### **Handouts**

- o Final Agenda
- o Draft ACC Meeting Notes 10/9/08
- Attachment A –ONCOR Leave One Out Results, as provided by Bryce Glasser (WDFW)

## ONCOR Leave One Out Results

	Kalama R.	Lewis R. @ Merwin	Lewis R. @ Cedar	E.F. Lewis R.	Total
Kalama R.	55	15	8	5	83
Lewis R. @ Merwin	17	37	6	3	63
Lewis R. @ Cedar	2	5	9	1	17
E.F. Lewis R.	8	2	5	41	56

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	Kalama R.	Lewis R. @ Merwin	Lewis R. @ Cedar	E.F. Lewis R.
Kalama R.	66.3%	18.1%	9.6%	6.0%
Lewis R. @ Merwin	27.0%	58.7%	9.5%	4.8%
Lewis R. @ Cedar	11.8%	29.4%	52.9%	5.9%
E.F. Lewis R.	14.3%	3.6%	8.9%	73.2%

what does this mean

#### GENECLASS Jacknife

	Kalama	LewMer	LewCed	EFLew	
Kalama	65	18	11	6	100
LewMer	22	60	11	5	98
LewCed	12	13	29	. 5	59
EFLew	9	3	5	60	77

	Kalama	LewMer	LewCed	EFLew
Kalama	65.0%	18.0%	11.0%	6.0%
LewMer	22.4%	61.2% TE	11.2%	5.1%
LewCed	20.3%	22.0%	49.2%	8.5%
EFLew	11.7%	3.9%	6.5%	77.9%