ACC Participants Present (13)

Craig Burley, WDFW  
Michelle Day, NMFS  
Diana Gritten-MacDonald, Cowlitz PUD  
Adam Haspiel, USDA FS  
LouEllyn Jones, USFWS (via teleconference)  
Eric Kinne, WDFW  
George Lee, Yakama Nation  
Erik Lesko, PacifiCorp Energy  
Todd Olson, PacifiCorp Energy  
Arianne Poindexter, PacifiCorp Energy  
Frank Shrier, PacifiCorp Energy  
Karen Thompson, USDA FS  
Richard Turner, NMFS  
John Weinheimer, WDFW

Calendar:

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 14, 2006</td>
<td>ACC Meeting</td>
<td>Merwin Hydro</td>
</tr>
<tr>
<td>September 25, 2006</td>
<td>Engineering Subgroup Meeting</td>
<td>Merwin Hydro</td>
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Assignments from August 10th Meeting:

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>McCune: Edit July meeting notes and finalize.</td>
<td>Complete – 8/16/06</td>
</tr>
<tr>
<td>ACC – Review and comment on handout: Lewis River Spring Chinook – Timeline of H&amp;S Actions, as provided by PacifiCorp.</td>
<td>Complete – 9/14/06</td>
</tr>
<tr>
<td>McCune: Email notes to ACC from Bull Trout Limiting Factors Analysis subgroup meeting.</td>
<td>Complete – 8/17/06</td>
</tr>
<tr>
<td>McCune: Copy the ACC on all engineering subgroup meeting notes.</td>
<td>Complete – 8/16/06</td>
</tr>
<tr>
<td>McCune: Email ACC the Technical Memo and flow diagram from today’s meeting.</td>
<td>Complete – 8/17/06</td>
</tr>
<tr>
<td>Shrier: Ask R2 consultants to provide assumptions/references for estimated juvenile bull trout number.</td>
<td>Complete – 9/14/06</td>
</tr>
<tr>
<td>ACC - Review the Technical Memo and flow diagram and prepare to discuss at the September ACC meeting.</td>
<td>Complete - 9/14/06</td>
</tr>
<tr>
<td>Agencies - Review the flow chart paying close attention to the decision points.</td>
<td>Complete - 9/14/06</td>
</tr>
<tr>
<td>McCune: Email ACC the following maps: 1) Potential acclimation pond sites on one map; and 2) Potential pond sites and fish passage barriers.</td>
<td>Complete – 8/21/06</td>
</tr>
</tbody>
</table>
### Assignments from July 13th Meeting:

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Olson: Send a letter to the SA parties indicating that in order to meet fish production goals during the pond upgrades at the Lewis River Hatchery, the order and timing of pond upgrades has been modified from the schedule 8.7 of the SA.</td>
<td>Complete – 9/7/06</td>
</tr>
<tr>
<td>McCune: Email Hatchery Upgrade Proposed Schedule including memorandum from Erik Lesko dated 6/19/06, and request comment from ACC on or before 7/24/06.</td>
<td>Complete – 7/13/06</td>
</tr>
<tr>
<td>Olson: Prepare individual timelines of H&amp;S Actions for both Coho and Steelhead.</td>
<td>Complete – 9/7/06</td>
</tr>
<tr>
<td>Keown: Create a draft HGMP by the end of August or early September 2006 so the ACC can review prior to submitting the final version to NMFS.</td>
<td>Internal draft complete week of 9/5/06</td>
</tr>
</tbody>
</table>

### Opening, Review of Agenda and Meeting Notes

Frank Shrier (PacifiCorp Energy) called the meeting to order at 9:10 a.m. and conducted a review of the agenda for the day. He requested a round table introduction of all attendees. Shrier revised the agenda to include a status update of the Swift Surface Collector Design. Shrier requested comments and/or changes to the ACC 7/13/06 draft meeting notes. Several changes were requested. Arianne Poindexter will make the changes and finalize the July 13 meeting notes. The ACC accepts the July 13 meeting notes as final once changes are made.

Todd Olson (PacifiCorp Energy) noted that only WDFW had responded to the proposed changes in hatchery upgrades schedule. Olson further suggested that to track such changes PacifiCorp could prepare a letter outlining all of the allowable minor changes to the settlement agreement or, present the changes in the annual ACC/TCC report. Those ACC participants present agreed that capturing the settlement agreement changes in one document would be useful.

George Lee (Yakama Nation) expressed disappointment that he had not been notified of last month’s meeting location change. Olson inquired whether Kim McCune (PacifiCorp Energy) had Lee’s current email information. Lee stated that McCune should have his current email information.

### Discussion Points for Fish Reintroduction Efforts and Future Hatchery Operations Under a Hatchery Integrated Approach (presented by Erik Lesko), Attachment A

Erik Lesko (PacifiCorp Energy) lead the discussion on the handout which was prepared by PacifiCorp with the intent of letting folks know of their current assumptions and questions regarding a hatchery integrated approach for SPCH and Coho. The purpose was to not resolve any issues at the meeting, but to simply notify parties that PacifiCorp is considering how an integration program might work, questions, etc. Lesko requested any comments for next month’s meeting.
Assumption 1 – Initially, Lesko asked for concurrence from WDFW and NOAA Fisheries that the assumption was correct. The ACC discussed assumption one. Questions arose regarding whether there will be distinctions between supplemented adults and hatchery adults for harvest; settlement agreement and numbers for adult recruits; juvenile production numbers; and upriver integrated program and hatchery program. The ACC concluded that all production falls within maximum hatchery amounts. The ACC also concluded that some of the ‘old’ programs would be integrated into the new hatchery integration approach.

Assumption 2 – Lesko asserted that §8.7 of the Settlement Agreement specifically details upgrades which further define the limitations of any hatchery production. Those ACC participants present generally agreed to this assumption.

Assumption 3 – WDFW stated that potentially more manpower will be required for sorting fish. NOAA Fisheries stated that the plan hasn’t been completed and so this assumption could be premature.

Assumption 4 – Olson/Shrier summarized previous conversation with Clifford Casseseka (Yakama Nation), who expressed his concern regarding using hatchery juveniles for the supplementation program. Olson/Shrier/Casseseka understood that if no wild spring Chinook are in the basin in significant numbers, an integration program should work with the fish species that ARE in the basin. (George Lee (Yakama Nation) wasn’t present during the above-mentioned conversation and could not endorse, nor correct, what Casseseka might have agreed to). Those ACC participants present agreed with the preference that native/wild fish should be moved above the project. Olson asked Lee, “If there are no wild fish to use in the supplementation program, what are the Yakama Nation’s thoughts about using hatchery stock as brood?” Lee responded that hatchery stock will have to be used initially while working towards establishing a wild run. WDFW confirmed they are working on gathering information to determine the availability of wild spring Chinook.

Assumption 5 – Did not have agreement on this assumption by all ACC participants present.

Question 6 – The ACC clarified that “the proposed hatchery integrated program” will be thoroughly addressed in the Hatchery Genetic Management Plans (HGMP). NMFS clarified that each species has its own HGMP which will be written with the Hatchery and Supplementation (H&S) plan in mind. The settlement agreement directs the preparation of the H&S plan and therefore HGMP’s should not be inconsistent with the settlement agreement. Once the draft HGMP’s are provided, the ACC needs to ensure that they are consistent with the H&S plan. Craig Burley (WDFW) reminded the group that the Lewis River hatchery was included in the congressional review of hatchery programs and wondered if this would affect the newly prepared/proposed HGMP’s. Once Keith Keown (WDFW) completes the draft HGMP’s he should send them to the ACC for some level of review. The ACC will check for consistency with the H&S plan and the congressional review.

Question 7 – Discussed which fish should be clipped and where. The ACC concluded that harvest discussion is premature. Lee believes the supplementation program will work
and that juveniles that will be moved upstream of the project should be marked. The discussion turned to “Todd’s Spreadsheet” (Lewis River Spring Chinook - Attachment D to July 13, 2006 ACC meeting notes). The ACC should review and comment on this spreadsheet. Burley raised concern that the group was regressing in the development of the H&S plan by debating the assumptions and questions on the handout. Burley felt a lot of progress was made at the last ACC meeting by working through the spreadsheet. Day agreed that a lot of the assumptions and questions needed further discussion. Olson summarized by stating that the group will return to working through the spreadsheet while keeping the assumptions and questions in mind.

Lesko briefly read through the remaining questions from the handout and agreed that comments would not be required next month. As the ACC works through the Spring Chinook spreadsheet any issues/concerns/questions/assumptions will be addressed.

Break <10:30am>
Reconvene <10:45am>

**Study Updates**

Shrier provided the following study updates:

**FERC Process** – The agencies are completing the biological opinions for proposed submission to FERC on September 1, 2006. Department of Ecology’s 401 should also be completed by September 1st. Shrier estimates a FERC license order by November 1, 2006.

**Yale Entrainment Study** – Study completed last month. A draft report can be expected in September or October 2006.

**Merwin Tailrace Behavior Study** – Study expected to end tomorrow, August 11, 2006. Consultants expect to issue a draft report by September 5th. Shrier requested that the ACC focus on adult trap efficiency (ATE) and be prepared to discuss for decision-making and setting a standard for ATE at next month’s meeting (2-3 hours). Bryan Nordlund (NMFS) will not sign off on the 30% design until the ACC has agreed on what ATE will be. The engineering subgroup is meeting on September 25th and Shrier would like to inform them of the ACC’s decision regarding ATE (see Attachment F for Lewis River Trap Data)

Day expressed concern that the engineering subgroup seemed to be moving ahead and yet no consultation with the ACC had occurred. §4.1.4 c of the settlement agreement states “As soon as practicable, the Licensees, together with Services, WDFW, Yakama nation, and the CIT, and in Consultation with the ACC, shall develop an ATE performance standard for the terms of each New...”. Day stated that drafting an ATE standard at/by next month’s meeting was an aggressive schedule that probably couldn’t be met.

It was suggested that the group mentioned in §4.1.4 c of the settlement agreement meet prior to September 14th.

The following is the proposed schedule to discuss the Merwin Tailrace Behavior Study:
September 5 – draft report released
September 5-14 – group reviews report
September 15-24 – ATE group meets to discuss report
September 25 – Engineering subgroup meets

Shrier will give a presentation on the Merwin Tailrace Behavior study and the ATE model (Kramer) at the next ACC meeting.

**Bull Trout Limiting Factors Analysis** – Thermographs are deployed. A subgroup met to discuss this study plan. Notes were produced (Attachment E). Shrier has commented on the notes and Shelley has requested a follow-up meeting. No response yet. The ACC requested that the notes be emailed to the group and that in the future the ACC be copied on all subgroup meeting notes.

**Merwin Sorting Facility Design** – Some questions need to be answered before work can continue for parts of the design work.

<LouEllyn Jones, USFWS, phoned in>

**Speelyai Hatchery Expansion** – On schedule. Next Tuesday water supply will be shutdown and a new valve will be put in.

**Swift Downstream Collector, Design Update** – Shrier provided two handouts: 1) Technical Memo – Swift No. 1 Downstream Fish Passage Biological Criteria by R2 Consultants and 2) Swift Downstream Fish Passage – Fish Handling Process Diagram, draft for August 10th ACC meeting (Attachments B & C). Shrier will email copies of these handouts to the ACC members. Shrier asked USFWS, “At peak times there is potential to see 2 juvenile bull trout a day, so how much will it matter if they are not separated from the other fish? Secondly, Will it be sufficient to dip net bull trout adults? Jones asked how long the peak might last. Shrier expects May and June to be peak months. Shrier will ask R2 consultants to provide assumptions/references for estimated juvenile bull trout number. The ACC should review the handouts and prepare to discuss at the September ACC meeting. The agencies should review the flow chart paying close attention to the decision points.

**Acclimation Sites Discussion**

Shrier provided handout: Potential Lewis River Acclimation Pond Sites and Decision Criteria, draft (Attachment D). The group reviewed the handout and clarified terms. “Access to River?” = vehicle access possible and water supply available. “High in the watershed” = not related to distance, related to vehicle accessibility in the upper watershed. “Close proximity to quality habitat?” = based on quality of spawning and rearing habitat near site. Water supply quantity/quality = assumes need quantity/quality is available late February – mid April. The ACC discussed assumptions for pond size needed. SENN criteria was used to calculate water flow. The ACC requested a basin level map showing the potential pond sites and fish passage barriers on one map.
The ACC discussed the initial fish numbers and the timeframe for pond operation. The ACC had agreed to 100,000 fish at 8 fpp in the past. Shrier/McCune will locate the meeting notes that contain this past discussion. WDFW stated that 100,000 fish has not been agreed to as the juvenile supplementation cap. Shrier reiterated that the spreadsheet provided a size estimate to use while viewing the potential ponds.

Gritten-MacDonald asked whether Cle Elum annual reports are available. Lee confirmed that annual reports are available on the BPA website at the following link: [http://www.efw.bpa.gov/publications/P00022463-1.pdf](http://www.efw.bpa.gov/publications/P00022463-1.pdf)

**Agenda items for September 14, 2006**

- Presentation – Merwin Tailrace Behavior Study
- Presentation – ATE model
- Swift Design Handling Criteria
- Aquatic Fund
- Spring Chinook Spreadsheet – continue working through

**Next Scheduled Meetings**

<table>
<thead>
<tr>
<th>September 14, 2006</th>
<th>October 12, 2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Merwin Hydro Facility</td>
<td>Merwin Hydro Facility</td>
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<tr>
<td>Ariel, WA</td>
<td>Ariel, WA</td>
</tr>
<tr>
<td>9:00am – 3:00pm</td>
<td>9:00am – 3:00pm</td>
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</table>

**Meeting Adjourned at 12:15p.m.**

**Handouts**

- Final Agenda
- Draft Meeting Notes 7/13/06
- Discussion Points for Fish Reintroduction Efforts and Future Hatchery Operations Under a Hatchery Integrated Approach (Attachment A)
- Technical Memo – Swift No. 1 Downstream Fish Passage Biological Criteria by R2 Consultants (Attachment B)
- Swift Downstream Fish Passage – Fish Handling Process Diagram, draft for August 10 ACC meeting (Attachment C)
- Potential Lewis River Acclimation Pond Sites and Decision Criteria, draft (Attachment D)
Attachment A

DISCUSSION POINTS FOR FISH REINTRODUCTION EFFORTS AND FUTURE HATCHERY OPERATIONS UNDER A HATCHERY INTEGRATED APPROACH

1. Assumption -- Integrated fish approach will meet the production obligations in the Settlement Agreement, both for hatchery production and supplementation programs.

2. Assumption -- Integration of natural-origin fish into the hatchery will not create additional rearing and incubation areas or upgrades from what is proposed in Schedule 8.7 of the Settlement Agreement.

3. Assumption -- Integrated program can be completed within current hatchery work routine (i.e. no additional manpower needed).

4. Assumption -- Integrated fish produced at the hatchery are to be used to initiate the supplementation program above Merwin and for harvest.

5. Assumption -- Integrated fish and or eggs will not be transported or planted anywhere else besides the North Fork Lewis River.

6. Question -- Will the proposed hatchery integrated program cause any inconsistencies with the goals and objectives of the H&S plan and therefore the Settlement Agreement? And if so, how does the ACC rectify that?

7. Question -- Will integrated fish be adipose clipped and thus subject to harvest?

8. Question -- How are integrated fish to be counted for purposes of meeting the Settlement Agreement?

9. Question -- Will tagging and marking program changes been needed as a result of implementing an integrated program?

10. Question -- How do we ensure that the reintroduction program is not adversely affected by the hatchery integrated program? That is, that adequate fish are made available for the reintroduction programs.
Technical Memorandum

Date: August 9, 2006

Project Number: 1591.04/MM101

To: Frank Shrier

From: MaryLouise Keefe

Subject: Swift No. 1 Downstream Fish Passage Biological Criteria

cc: Dana Postlewait, Peter Christensen – R2
    Kevin Malone – Jones & Stokes
    Al Giorgi – Bioanalysts

As part of the conceptual design of downstream passage at Swift No.1, R2 Resource Consultants was tasked with developing biological criteria for the trapping, holding, and transporting of migratory salmonids. Five species of migratory salmonids are included as target species for passage: spring Chinook salmon, coho salmon, winter steelhead, bull trout and sea-run cutthroat trout.

There is currently minimal natural production of target salmonids occurring in the upper Lewis River above Swift Reservoir and no passage facilities. Consequently there was little site-specific data on migration patterns for target species. Biological design criteria were developed based on projections of future fish production, migration timing, and passage numbers. The projections were derived using recent data collected in the Lewis River and the Cowlitz River as well as recent natural production model results and hatchery planning documents relevant to the Lewis River Reintroduction Program. This memorandum describes the data sources, calculations and assumptions used to develop projection of migration timing, total production, and peak daily numbers and weights of fish that would be expected to pass through the facilities (Table 1).

The basis of the migration timing used for the Swift facilities design was the Lewis River periodicity table developed and approved by agency personnel during Lewis River Relicensing (PacifiCorp 2004b). The periodicity table provided information on peak run timing anticipated for anadromous salmon and bull trout, in other words the window during which the peak run would be expected to occur. Data collected during the Swift Entrainment study (PacifiCorp 2004) were used to fill in gaps for life stages not included in periodicity tables, while recent passage data from the Cowlitz Falls facility (Serl and Morrill 2005) was used to provide potential migration timing for sea-run cutthroat. Data from both of these documents was also used to extend the migration timing to include non-peak migration periods when fewer numbers of fish might be moving through the facility. Data from the Cowlitz facility was also used to project the duration of the peak runs at Swift.
Total production estimates were calculated by summing natural and hatchery production estimates. Hatchery production goals were obtained from the Draft Hatchery and Supplementation Plan (Jones and Stokes 2006). Natural production was assumed to be a minimal production goal. It was derived from expected minimum adult releases of 2000 spring Chinook salmon, 9000 coho salmon and 500 steelhead (Jones and Stokes 2006) multiplied by literature based estimates of 100, 75, and 50 smolts per spawner for spring Chinook salmon, coho salmon, and steelhead respectively. Kelt production was assumed to be 8% of the steelhead total production, while cutthroat trout production was assumed to be 10% of coho production (PacifiCorp 2004a).

To generate peak daily abundance for steelhead kelts and smolts of all species the total production estimate for each species and life stage was divided by the number of days during the peak run. This daily value was increased approximately threefold to account for possible daily variation and to estimate peak daily numbers for smolts and kelts. The peak daily number of fry and parr were assumed to be 10% of daily smolt numbers. Peak daily numbers were then multiplied by the anticipated fish size (fish per pound) to generate estimates of peak daily weight. Fish per pound values were obtained from the Draft Hatchery Supplementation Plan (Jones and Stokes 2006) or were based on professional judgment.

The following example of coho salmon calculations will illustrate the derivation of peak daily pounds as described above. The total production estimate for coho salmon smolts was spread out over a six week peak migration window that is anticipated to occur during April and May. Thus the division of 675,000 total smolts by 42 days gives an average daily number of 16,071 smolts. This number is multiplied by three to generate an estimated peak daily count of 48,213 smolts. The size range of coho smolts is expected to be 8 to 12 fish per pound. Being conservative, we divide the peak daily count of smolts by 8 fish per pound to estimate the peak daily weight of 6000 pounds for coho smolts. The peak daily number of fry was assumed to be approximately 10% of smolts so was rounded up for coho salmon fry to 5,000.

Literature Cited


### Table 1: Biological Criteria for Swift Sorting and Transport Design.

<table>
<thead>
<tr>
<th>Species</th>
<th>Life Stage</th>
<th>Anticipated Marks</th>
<th>Possible Destinations</th>
<th>Design Data</th>
<th>Month of Migration</th>
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<tr>
<td></td>
<td>Nore</td>
<td>CHIT</td>
<td>Other</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Swit Res</td>
<td>Yale Res</td>
<td>Menwin Res</td>
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**Notes:**
1. Marks derived from Table 4.1 Draft Hatchery and Supplementation Plan, April 2006.
2. Daily peak numbers were generated by spreading total production across anticipated run duration at Cowitz. The daily average for the run was increased three fold to generate a daily peak.
3. Maximum fish weight was estimated based on maximum fish per lb in range.
4. Natural production estimates are based on expected minimum adult releases (draft Lewis River Hatchery and Supplementation Plan) and literature based smolt/spawner estimates of 100, 75 and 50 smolts per spawner for CHS, CO, and STW, respectively.
5. Natural production was assumed 8% per Lewis River Fish Planning Document.
6. Cutthroat trout natural production was estimated as 10% of coho salmon per Lewis River Fish Planning Document.
7. Non-target species include: rainbow trout, suckers, stickbacks, whitefish, and non-target adult drop-backs.
Swift Downstream Fish Passage – Fish Handling Process Diagram
DRAFT – for August 10th ACC Meeting

Notes:
1) Supplementation Fish will have Coded Wire Tag (CWT).
2) Number of Fish is peak design value, from Biological Criteria Table 1.
3) Subsample gate set to take random samples based on counted fish numbers, time, or manual override (per M&E Plan).
4) Dual anesthetic tanks, designed to handle 12-15 fish/minute. Number of inspection stations TBD.
5) Inspect for Condition/Injury, Length, Weight.

Tributaries / Acclimation Ponds

Screw Trap at Upstream end of Reservoir

Sort #2B: R9500 Tube Type CWT Scanner

ID as Supplementation Fish and Count

Count and Mark for Studies

No

Yes

Scan For CWT

Fry

Other Fish / Frybacks (number TBD)

Per USFWS Protocols

Adult Bull Trout
(1 per day)

SH Keels (3 per day)

Adult Cutts (5 per day)

Other Large Fish / Frybacks (number TBD)

Per USFWS Protocols

Destination Decision

Load

Truck (Fish Taxi or Small Tank)

Transport to one of the following destinations:
- Swift Reservoir
- Yale Reservoir
- Merwin Reservoir
- Below Merwin

Load

Release Ponds (Volitional release protocol to be defined)

Transport via 1,800 Gal Fish Truck to Woodland Release Ponds

Release to River

To River

Screw Trap upstream of reservoir to:
- detect Supplementation Fish (SP-CH)
- collect and mark fish for studies
- This is not a permanent facility. Anticipate use initially for first 3 to 5 years to monitor supplementation fish and for other studies, then possible intermittent use in the future.

R9500 Tube Type CWT Scanner

SP CH from Acclimation Ponds w/ potential for Extra Fish

Yes

No

Subsample Gate

Yes

Anesthetic Tank

(SP-CH)

(MS 222)

Species ID, inspect

Count

Other (non-target) Species

Bull Trout Sub-Adult
(1 / day)

BT #2 - Small BT Recovery / Transport Tank (Cooler style with Aerator & Chiller)

Recovery / Holding Pond

Load

BT #1 - Small BT Tank Cooler style with Aerator & Chiller

Per USFWS Protocols

Transport to Swift Reservoir

Release Directly to River (Ramp below Merwin)

Fry Tank – Transport to River Below Merwin

Recovery / Holding Pond

Load

PT-CH (2,000/day)

& Coho Fry (5,000/day)

Adults

FSC

Smolts

Swift Reservoir

Automatic Fish Counter

Net small numbers of adults from top of passive bar grader

Species ID

Adult Bull Trout

(1 per day)

SH Keels (3 per day)

Adult Cutts (5 per day)

Fry

Per USFWS Protocols

End
<table>
<thead>
<tr>
<th>Site</th>
<th>Access to River?</th>
<th>High in the watershed?</th>
<th>Close proximity to quality habitat?</th>
<th>Water supply Quality/Quality</th>
<th>Other Considerations</th>
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<td></td>
<td>Has side channel that could be modified</td>
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<td>Clear Creek</td>
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<td>Relatively</td>
<td>Y</td>
<td>Good/Good</td>
<td>Can use either side of the Creek</td>
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<tr>
<td>Mainstem Lewis at Lower falls</td>
<td>Difficult</td>
<td>Relatively Y</td>
<td>Good/Good</td>
<td></td>
<td>May have some esthetic/cultural concern</td>
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<tr>
<td>Mainstem Lewis at Eagle Cliff</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
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<td>Very low in the Upper watershed</td>
</tr>
<tr>
<td>Other</td>
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<td></td>
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</tr>
</tbody>
</table>

- **Time of year for Pond operation**: Late-Feb to mid-April
- **Number of fish anticipated**: 100,000 @ 8 fps
- **Pond size needed (assume 4 cfs)**: 15' W x 70' L x 6' D
Lewis River Bull Trout LFA Study Plan - Conference Call - July 21, 2006 - 10:00 am to 12:00 pm

Attendees:
George Gilmour (MEI)
Jason Shappart (MEI)
Erik Lesko (PacifiCorp)
Kevin Malone (Mobrand/Jones and Stokes)
Chip McConnaha (Mobrand/Jones and Stokes)
Shelley Spalding (USFWS)
LouEllyn Jones (USFWS)
Joe Hiss (USFWS)
Jim Byrne (WDFW)

General conference call discussion regarding the LFA Scope of Work:

1. The agency participants were not in full agreement with the existing scope of the LFA. In general, the agency participants felt that a comprehensive approach to assessing bull trout limiting factors in the Lewis River basin should be developed in collaboration with the USFWS and WDFW. We noted that it was not our position to discuss the overall scope of the LFA and that our task was to respond to the scope of work as it was presented in PacifiCorp’s RFP and described in the Settlement Agreement. The agency participants understood this, but would like to meet with PacifiCorp to discuss the overall scope.

2. In addition to the tributaries to Lake Merwin and Swift Reservoir, the agency participants thought that the LFA should include streams that are known to contain bull trout (i.e. Rush and Pine creeks) to serve as reference reaches and also to evaluate limiting factors and to assess actions that could be implemented to enhance habitat in those streams that already contain bull trout.

3. All agency participants felt that in addition to tributary habitat, reservoir limiting factors should be addressed in this study. Chip McConnaha’s response to this was that the QHA could be modified if needed to address reservoir habitat. We agreed to survey the reservoir drawdown zones for any potential barriers to upstream migration but felt that it was not our position recommend any modifications to the scope.

4. Jim Byrne also felt strongly that Yale Reservoir and tributaries should be included and that all the reservoir habitat and ecological interactions in the reservoirs should be included in the limiting factors analysis. LouEllyn Jones and Shelley Spalding felt that this LFA should at least discuss how this effort is consistent with the Yale LFA analysis and results (conducted by Karen Pratt) to provide a "big picture" view of bull trout limiting factors in the Lewis River basin. We noted that we could add the information included in Karen’s report to our LFA report. The SA is clear that Yale is not included. That is because Karen Pratt already did that analysis.

5. Kevin Malone commented that it would be valuable to link this study with the salmon re-introduction effort in terms of monitoring effects of the reintroduction on bull trout.

6. The agency participants were concerned that electrofishing may have adverse effects on bull trout, especially in relatively warm water. Although we felt there was little risk to bull trout associated with electrofishing (based on past sampling experience), we agreed to use night snorkel surveys in some of the larger tributaries and large pools (if possible).
Agency recommended changes to the study plan based on the conference call consensus:

1. Add language regarding how the Yale Lake LFA is related to this study (where applicable). It’s OK to add this to the discussion section of the final report.

2. Add language on why all the streams from AQU 4 were not carried forward into the list of streams to be initially assessed in this study (Table 4 of the Bull Trout LFA Study Plan). An explanation is warranted.

3. For temperature monitoring, add language that all streams (in Table 4) will be monitored this year, and that in the late summer, a cold water refugia verification survey will be conducted that will involve walking the accessible reaches of each stream and taking hand-held thermometer readings (every 100 to 200 feet or so) to determine if any cold water refugia are present and to generally see how the thermograph data matches up with the stream temperature profile during the late summer. OK

4. The initial bull trout habitat ranking category (Table 2 of the study plan) for spawning should be for the time frame of mid-November, not the end of September. Why so late? Is this intended to be a redd survey?

5. The criteria for maximum temperature is good and streams should be excluded from further analysis if the temperature is clearly greater than 18°C, but if there are only a few readings over 18°C, then a group decision will be made on whether to rank the stream as "poor" and excluded it from further analysis. This could only be determined by group consensus after the field season – not a practical solution.

6. Some verbiage should be added that all the accessible habitat is <20% gradient, this category is not really applicable, but may justify why some of the AQU 4 streams were not included in this LFA study. OK

7. Shelly Spalding felt that the seasonal stream criteria may not be justified, but the consensus was that if one is looking at spawning and rearing streams that the greatest potential would be in perennial streams. No final resolution to this issue was clear, but most if not all of the streams (1st draft of the LFA Study Plan, Table 3) are probably perennial according to Jim Byrne so it would not really be an issue.

8. For the presence/absence surveys, night snorkeling will be used based on safety and appropriateness, i.e. if it is too shallow then electrofishing will be used. OK with safety and practicality in mind.

9. Before the habitat surveys occur, we will have a meeting to identify parameters to be surveyed in order to make sure that we collect data for parameters that participants anticipate will be used in the QHA. OK

10. Have meetings during the QHA phase to develop habitat rules for the analysis. OK

Additional information to supply to participants:

1. Provide AQU 4 study, or link to study, and data sheets, etc. to agency participants (Meridian will do this).

2. Revise the study plan and send it out for review to participants (Meridian will do this).

3. Prepare a written response to Jim Byrne’s comment letter (Meridian will do this).

This is the actual SA language:

5.5 Bull Trout Limiting Factors Analysis. By the second anniversary of the Effective Date, PacifiCorp shall provide a limiting factors analysis for bull trout occurring in Lake Merwin tributary streams and Swift Reservoir tributary streams and finalize this evaluation in Consultation with the ACC. If the Licensees, in Consultation with the ACC and with the approval
of USFWS, determine that one or more locations have the potential to provide long-term, sustainable habitat for critical life stages of bull trout, the ACC may implement enhancement measures through the use of the Aquatics Fund as described in Section 7.5 below.

Since the parties in this meeting were not at the settlement negotiations, let me add this. The request to conduct a limiting factors analysis for bull trout came from WDFW following review of Karen Pratt’s work and with the intent to complete the other two reservoir tributaries so that we had a complete picture of the spawning and rearing potential in the reservoir area. Rush and Pine creeks were not added to the mix since they were already undergoing observation and there was known presence. Because of this and because of the need to stay true to the SA intent, I cannot agree to work that is significantly outside the present scope. If the meeting participants would still like to meet and discuss this issue, I am happy to oblige.
My email and attached notes and comments related the LFA conference call.

I've attached some notes that George recorded from the LFA conference call on July 21st. These are not official notes but they did serve to capture the main points of the call and gave me an opportunity to review what was said. I understand that Lou Ellyn also took some notes. I've added in responses to George's and, if anything, these responses will serve to keep the conversation going. I'm assuming there will be a follow-up call.
Here's notes from Lou Ellyn on the LFA study plan discussion. I'll also send George Gilomour's notes along with my comments.

-----Original Message-----
From: Lesko, Erik
Sent: Monday, July 31, 2006 11:01 AM
To: Shrier, Frank
Subject: FW: meeting notes for LFA study plan discussion

Erik Lesko
(503) 813-6624

-----Original Message-----
From: LouEllyn_Jones@fws.gov [mailto:LouEllyn_Jones@fws.gov]
Sent: Wednesday, July 26, 2006 3:55 PM
To: Lesko, Erik; byrnejbb@dfw.wa.gov
Subject: meeting notes for LFA study plan discussion

Here is what I put together for our meeting. If you will take a look and see if it accurately reflects what we talked about, we can send it to Frank so he will have some context of why we want to get together with him.

(See attached file: Comments on LFA study plan.doc)

Lou Ellyn Jones
U.S. Fish and Wildlife Service
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telephone: 360-753-5822
fax: 360-753-9008
Merwin Operation vs. Fish Trapping

Total fish trapped by day

Date (April 21 to Dec. 31, 2003)
Spring Chinook trapping

Merwin Flow vs. Spring Chinook Trapping

Flow (cfs)

Date (Apr. 21 to Dec. 31, 2003)
Steelhead trapping

Merwin Operations vs. Steelhead trapping

Date (Apr. 21 to Dec. 31, 2003)

Unit Flow (cfs)

Number of Fish

Unit #1
Unit #2
Unit #3
S STHD - Hat.
S STHD - Wild
W STHD - Hat.
W STHD - Wild