FINAL Meeting Notes
Lewis River License Implementation
Aquatic Coordination Committee (ACC) Meeting
November 9, 2006
Ariel, WA

ACC Participants Present (10)

Michelle Day, NMFS (via teleconference)
Diana Gritten-MacDonald, Cowlitz PUD (via teleconference)
Adam Haspiel, USDA Forest Service
LouEllyn Jones, USFWS (via teleconference)
Eric Kinne, WDFW
Erik Lesko, PacifiCorp Energy
Tammy Mackey, American River & Trout Unlimited
Kimberly McCune, PacifiCorp Energy
Frank Shrier, PacifiCorp Energy
Shannon Wills, Cowlitz Indian Tribe

Calendar:

Nov. 15, 2006	Hatchery Engineering Subgroup Meeting	Merwin Hydro
Nov. 30, 2006	Engineering Subgroup Meeting	Merwin Hydro
Dec. 12, 2006	Engineering Subgroup Meeting	Merwin Hydro
Dec. 14, 2006	ACC Meeting	Merwin Hydro

Assignments from November 9th Meeting:	**Status:**
McCune: Email link to ACC for viewing Storm photos on the Lewis River website.	**Complete – 11/9/06**
McCune: Email the Aquatic Fund Pre-Proposal conference call details to the ACC.	**Complete – 11/9/06**
McCune: Email the updated *Timeline of H&S Actions to the ACC.*	**Complete – 11/9/06**
Jones: Contact Frank Shrier no later than Tuesday, November 14th with her comments regarding the constructed channel.	**Complete – 11/9/06**
Shrier: Request a new *Bull Trout Limiting Factors Analysis* timeline and present to ACC.	**Complete – 11/16/06**

Assignments from October 12th Meeting:	**Status:**
Olson/MacDonald: Schedule a meeting with the Cowlitz County commissioners to discuss length of permitting process.	**Pending**
Keith Keown (WDFW): Bring the model to the November ACC meeting to illustrate a variety of scenarios for ACC review.	**Pending**

Assignments from September 14th Meeting:	**Status:**
George Lee: Discuss the tribes ceremonial and subsistence needs in more detail with the appropriate tribal staff person to determine the	**Complete – 12/14/06**

fish number they need annually and get information to Craig Burley (WDFW).	

Assignments from July 13th Meeting:	**Status:**
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.	**Complete – 12/14/06**

Opening, Review of Agenda and Meeting Notes

Frank Shrier (PacifiCorp Energy) called the meeting to order at 9:10 a.m. He conducted a review of the agenda for the day and requested a round table introduction for those attendees participating via teleconference. Shrier asked if attendees had any changes to the Agenda; no changes were requested. However, Shrier informed the ACC that the LWD – Request for Qualifications agenda item would be postponed to the next ACC meeting on 12/14/06.

Shrier requested comments and/or changes to the ACC 10/12/06 draft ACC meeting notes.

The ACC attendees present accepted the 10/12/06 meeting notes without any changes at 9:30am.

LWD – Request for Qualifications (RFQ's)

Postponed to 12/14/06 Meeting Agenda

Update – Operations and Weather

Shrier informed the ACC attendees present that two days ago PacifiCorp was spilling approximately 26,000 cfs at Yale & Merwin. The inflow was reduced to 40,000 cfs from 89,000 cfs. It was reported that over there was over 20" of rain at Swift along over the month of November and approximately 7 ½" of rain at Swift on 11/8/06. In addition, there was one slope failure in the Merwin area coming from debris flow from an adjacent property development near Cresap Bay. PacifiCorp Energy is still accessing the damage on their property. Diana Gritten-MacDonald (Cowlitz PUD) reported that at this time no major slides or slope failures have been reported on PUD lands. Adam Haspiel (USDA-FS) reported that Roads 81 & 83 suffered the largest slides near Marble Mountain Snow Park and also a complete washout of culverts. Approximately 20-30 roads are currently closed due to slides and culvert washouts. Haspiel provided storm photos for the ACC attendees to view. The photos can be located on the Lewis River website: http://www.pacificorp.com/Article/Article61767.html

Merwin Sorting Facility Design

Shrier asked the ACC attendees present if their were any comments, concerns or questions regarding the *Merwin Sorting and Handling Facility Holding Tank Configuration*, which was emailed to the ACC on 10/19/06. Shrier further noted that the comment period ends after a 30-day review period.

No comments were provided at the meeting so PacifiCorp will proceed with the 30% design. ACC members not in attendance have an additional seven (7) days to accept or reject the recommendation.

Aquatic Fund Recommendations

The Review of CY 2006 Aquatic Fund Pre-Proposals document was mailed to all ACC participants on Friday, November 3, 2006.

Shrier reviewed the PacifiCorp Energy evaluation sheet (attachment 2 in the document) with the ACC attendees. He pointed out that PacifiCorp Energy does not recommend five (5) of the proposals, however, if the ACC wants full proposals the proponents can be asked to do so. Shrier further noted that the comment period end date is November 28, 2006, at which time a conference call will be scheduled for 9:00am on 11/30/06 to discuss the final project selection (provided that we can achieve enough participation on that day). Kimberly McCune (PacifiCorp Energy) will email the conference call details to the ACC.

ATE Decision Discussion

Shrier communicated to the ACC attendees that the engineering subgroup are working diligently on this project and scheduling extra meetings, but no recommendation as to how the 95% ATE can be met has been made as of yet.

Status of Hatchery & Supplementation Plan

Keith Keown (WDFW) was to present an update of the HGMP today the document is not yet ready for review. This item has been scheduled for the ACC 12/14/06 agenda to review with the ACC.

Due to the low attendance at today's ACC meeting, McCune will email the updated *Timeline of H&S Actions* to the ACC (Attachment A)

Acclimation Pond Proposed Sites Discussion

Shrier requested input on the *Lewis River Acclimation Pond Site Recommendation* (Attachment B) document as input, selection and decision is critical because we have to be in place when the passage facilities are ready.

Haspiel meet with rangers on 11/8/06 and the USDA-FS objects to the use of Crab Creek and recommends somewhere in the vicinity of Curly Creek as the more desirable location. Once the location is firmed up Haspiel said the next step is to submit a formal proposal for review by the rangers and issuance of special use permit. Haspiel suggested that PacifiCorp contract out the NEPA analysis to speed up the process. Tammy Mackey (American Rivers and Trout Unlimited) expressed that they do not want to see the acclimation pond in the Eagle Cliff area and that they did not want a big foot print left when the acclimation pond is removed.

Shrier informed the ACC that mid-February to mid-April is when the acclimation pond would be operational.

The ACC may be abandoning Crab Creek as an option based on USFS input and because it is being considered as a potential elk & deer preserve, a 10 mile stretch of road would have to be plowed, and there is a high potential for recurrent slides.

Study Updates

Shrier provided the following study updates:

Relicensing and BiOp Update – PacifiCorp received the 401 Water Quality Certifications on 10/26/06 and the Utilities do not intend to appeal. WDOE did however issue an order amendment to Cowlitz PUD 401 Certification. There may be some discussion ahead with the Signatory Parties regarding the ADR process as it relates to 401 requirements.

Michelle Day (NMFS) communicated that the BiOp is in its final stages and they are anticipating a late November to mid December 2006 completion. Shrier expressed that based upon this timeline; the License is expected no earlier than 60 days after receipt of the BiOp.

Yale Entrainment Study – Expect this report and study plan in the first quarter of 2007.

Bull Trout Limiting Factors Analysis – Consultant completing more in-depth study so the completion date will not be until after the end of November 2006. Shrier will request a new timeline and present to ACC.

Speelyai Hatchery Expansion – Completion was expected by end of November 2006, but the construction has been delayed. The contractor said they can catch up on the schedule.

Swift Surface Collector Design- A CFD flow model has been completed to help PacifiCorp composition of the collector. We received insight to the flow patterns that are there and how fish react to them based on the 2002 Radio tagging studies. Still developing 30% design. The capture velocity is the biggest issue currently.

Constructed Channel – NW Hydraulic Consultants has been selected to complete the design phase; they will be on site 11/20 & 11/21/06. In order to accommodate the needs of the consultant we want to drop the flow to 14 cfs. The temporary drawdown of the bypass reach for two days would be 15 cfs. Measurements and survey work cannot be completed in one day. PacifiCorp indicated that we will be within the ramp rates. PacifiCorp staff will walk the channels to address stranding issues, if any.

LouEllyn Jones (USFWS) will contact Shrier no later than Tuesday, November 14th with her comments.

Agenda items for December 14, 2006

- H&S Plan Discussion
- Keith Keown HGMP presentation

- LWD – Request for Qualifications
- ATE Decision Discussion
- Acclimation Pond Proposed Site Discussion
- Acclimation Pond Proposed Sites
- LWD - Request for qualifications (RFQ's)
- Study Updates

Next Scheduled Meetings

December 14, 2006	January 11, 2007
Merwin Hydro Facility	Merwin Hydro Facility
Ariel, WA	Ariel, WA
9:00am – 3:00pm	9:00am – 3:00pm

Meeting Adjourned at 11:00am

Handouts

- Final Agenda
- Draft ACC Meeting Notes 10/12/06
- Timeline of H&S Actions to the ACC (Attachment A)
- Lewis River Acclimation Pond Site Recommendation (Attachment B)

Lewis River Spring Chinook				Timeline of H&S Actions		NOTE: KEY ASSUMPTION -- THE RETURNING NOR NUMBERS ARE **SUFFICIENT** TO START SEGREGATED POPULATION ABOVE SWIFT						
	Pre 2002	2002 - 2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016 - Future
Hatchery	All returning fish available for broodstock program at hatchery. No differentiation between hatchery and wild fish	Fish with adipose fin segregated from hatchery fish. Only hatchery-marked fish used for broodstock.	Returning hatchery-origin (HOR) fish available for hatchery broodstock program. Any natural-origin returns (NOR) collected to be released back into river. Begin additional hatchery egg take per table 8.4 of the SA for harvest opportunity **dependent on HGMP approval**.	Returning HOR fish available for hatchery broodstock program. Any NORs collected to be released back into river. Additional hatchery egg take per table 8.4 of the SA for harvest opportunity	Returning HOR fish available for hatchery broodstock program. Any NORs collected to be released back into river. Additional hatchery egg take per table 8.4 of the SA for harvest opportunity	Returning HOR fish available for hatchery broodstock program. Any NORs collected to be released back into river. Additional hatchery egg take per table 8.4 of the SA for harvest opportunity. Begin rearing juvenile supplementation fish from hatchery broodstock.	Returning HOR fish available for hatchery broodstock program. Any NORs collected to be released back into river. Additional hatchery egg take per table 8.4 of the SA for harvest opportunity. Rear juvenile supplementation fish from hatchery broodstock.	Returning HOR fish available for hatchery broodstock program. Any NORs collected to be transported above Swift dam. Additional hatchery egg take per table 8.4 of the SA for harvest opportunity. Rear juvenile supplementation fish from hatchery broodstock.	Returning HOR fish available for hatchery broodstock program. Any NORs collected to be transported above Swift dam. Additional hatchery egg take per table 8.4 of the SA for harvest opportunity. Rear juvenile supplementation fish from hatchery broodstock.	Returning HOR fish available for hatchery broodstock program. Any NORs collected to be transported above Swift dam. Additional hatchery egg take per table 8.4 of the SA for harvest opportunity. Rear juvenile supplementation fish from hatchery broodstock.	Returning HOR fish available for hatchery broodstock program. Any NORs collected to be transported above Swift dam. Additional hatchery egg take per table 8.4 of the SA for harvest opportunity. Rear juvenile supplementation fish from hatchery broodstock.	Returning HOR fish available for hatchery broodstock program. Any NORs collected to be transported above Swift dam. Additional hatchery egg take per table 8.4 of the SA for harvest opportunity. Rear juvenile supplementation fish per H&S Plan.
Construction of Fish Passage Facilities				Begin construction of fish passage facilities			Merwin Upstream and Swift Downstream fish collectors, Acclimation Ponds upstream of Swift, and Stress Relief Pond downstream of Merwin are completed and put into operation	Fish passage facilities operational	Fish passage facilities operational	Fish passage facilities operational	Fish passage facilities operational	Fish passage facilities operational
							Test Swift FCE with Hatchery Juveniles	Test Swift FCE with Hatchery Juveniles	Monitoring and Evaluation Program	Monitoring and Evaluation Program	Monitoring and Evaluation Program	Monitoring and Evaluation Program
Supplementation						Begin adult supplementation using available NOR fish	Adult supplementation with available NOR fish; begin juvenile fish supplementation with 100,000 fish from hatchery. Mark X juvenile NOR fish collected at Swift as upper basin origin.	Adult supplementation with available NOR fish; begin juvenile fish supplementation with 100,000 fish from hatchery. Mark X juvenile NOR fish collected at Swift as upper basin origin.	Adult supplementation with available NOR fish; begin juvenile fish supplementation with 100,000 fish from hatchery. Mark X juvenile NOR fish collected at Swift as upper basin origin.	Adult supplementation with available NOR fish; begin juvenile fish supplementation with 100,000 fish from hatchery. Mark X juvenile NOR fish collected at Swift as upper basin origin.	Adult supplementation with available NOR fish; begin juvenile fish supplementation with 100,000 fish from hatchery. Mark X juvenile NOR fish collected at Swift as upper basin origin.	Adult supplementation with available NOR fish; begin juvenile fish supplementation with 100,000 fish from hatchery. Mark X juvenile NOR fish collected at Swift as upper basin origin.
HPP		HPP program - goal x fish	HPP program - goal x fish	HPP program - goal x fish	HPP program - goal x fish					Yale HPP Program - goal X fish	Yale HPP Program - goal X fish	Yale HPP Program - goal X fish

Lewis River Spring Chinook				Timeline of H&S Actions		NOTE: KEY ASSUMPTION -- THE RETURNING NOR NUMBERS ARE **INSUFFICIENT** TO START SEGREGATED POPULATION ABOVE SWIFT									
	Pre 2002	2002 - 2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016 - Future			
Hatchery	All returning fish available for broodstock program at hatchery. No differentiation between ad and ad-clipped fish	Fish with adipose fin segregated from hatchery fish. Only hatchery fish used for broodstock.	All returning fish available for hatchery broodstock program. No differentiation between hatchery origin and natural origin fish. Natural origin fish used will be tracked within broodstock program. Begin additional egg take per table 8.4 of the SA for harvest opportunity	All returning fish available for hatchery broodstock program. No differentiation between hatchery origin and natural origin fish. Natural origin fish used will be tracked within broodstock program. Additional egg take per table 8.4 of the SA for harvest opportunity	All returning fish available for hatchery broodstock program. No differentiation between hatchery origin and natural origin fish. Natural origin fish used will be tracked within broodstock program. Additional egg take per table 8.4 of the SA for harvest opportunity	All returning fish available for hatchery broodstock program. No differentiation between hatchery origin and natural origin fish. Natural origin fish used will be tracked within broodstock program. Additional egg take per table 8.4 of the SA for harvest opportunity. Begin rearing juvenile supplementation fish.	All returning fish available for hatchery broodstock program. No differentiation between hatchery origin and natural origin fish. Natural origin fish used will be tracked within broodstock program. Additional egg take per table 8.4 of the SA for harvest opportunity. Rear fish for juvenile supplemention program.	All returning fish available for hatchery broodstock program. No differentiation between hatchery origin and natural origin fish. Natural origin fish used will be tracked within broodstock program. Additional egg take per table 8.4 of the SA for harvest opportunity. Rear fish for juvenile supplemention program.	All returning fish available for hatchery broodstock program. No differentiation between hatchery and natural origin fish. Natural origin fish used will be tracked within broodstock program. Additional egg take per table 8.4 of the SA for harvest opportunity. Rear fish for juvenile supplemention program.	Returning NOR fish will be transported upstream with X % retained for hatchery broodstock. Additional egg take per table 8.4 of the SA for harvest opportunity. Rear fish for juvenile supplementation program.	Returning NOR fish will be transported upstream with X % retained for hatchery broodstock. Additional egg take per table 8.4 of the SA for harvest opportunity. Rear fish for juvenile supplementation program.	Returning NOR fish will be transported upstream with X % retained for hatchery broodstock. Additional egg take per table 8.4 of the SA for harvest opportunity. Rear fish for juvenile supplementation program per H&S Plan.			
Construction of Fish Passage Facilities				Begin construction of fish passage facilities			Merwin Upstream and Swift Downstream fish collectors, Acclimation Ponds upstream of Swift, and Stress Relief Pond downstream of Merwin are completed and put into operation	Fish passage facilities operational	Fish passage facilities operational	Fish passage facilities operational	Fish passage facilities operational	Fish passage facilities operational			
							Test Swift FCE with Hatchery Juveniles	Test Swift FCE with Hatchery Juveniles	Monitoring and Evaluation Program	Monitoring and Evaluation Program	Monitoring and Evaluation Program	Monitoring and Evaluation Program			
Supplementation						Begin adult supplementation (2000 adults) using hatchery fish	Adult supplementation with hatchery fish (2000 adults); begin juvenile fish supplementation with 100,000 fish from hatchery. Mark X juvenile NOR fish collected at Swift as upper basin origin.	Adult supplementation with hatchery fish (2000 adults); juvenile fish supplementation with 100,000 fish from hatchery. Mark X juvenile NOR fish collected at Swift as upper basin origin.	Adult supplementation with hatchery fish (2000 adults); juvenile fish supplementation with 100,000 fish from hatchery. Mark X juvenile NOR fish collected at Swift as upper basin origin.	Transported adults are mix of hatchery and NOR (priority) returns; juvenile fish supplementation with 100,000 fish from hatchery. Mark X juvenile NOR fish collected at Swift as upper basin origin	Transported adults are mix of hatchery and NOR (priority) returns; juvenile fish supplementation with 100,000 fish from hatchery. Mark X juvenile NOR fish collected at Swift as upper basin origin	Transported adults are NOR returns only; juvenile fish supplementation with 100,000 fish from hatchery. Mark X juvenile NOR fish collected at Swift as upper basin origin.			
HPP		HPP program - 154 hatchery fish	HPP program - goal x fish	HPP program - goal x fish	HPP program - goal x fish					Yale HPP Program - goal X fish	Yale HPP Program - goal X fish	Yale HPP Program - goal X fish			

Lewis River Coho (Type S)				Timeline of H&S Actions		NOTE: KEY ASSUMPTION -- USE TYPE S HATCHERY STOCK TO START SEGREGATED POPULATION ABOVE SWIFT						
	Pre 2002	2002 - 2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016 - Future
Hatchery	All returning fish available for broodstock program at hatchery. No differentiation between ad and ad-clipped fish	All returning HOR fish available for hatchery broodstock program. **NOR fish are returned to river.**	All returning HOR fish available for hatchery broodstock program. **NOR fish are returned to river.** Adjust egg take per table 8.4 of the SA for harvest opportunity.	All returning HOR fish available for hatchery broodstock program. **NOR fish are returned to river.** Adjust egg take per table 8.4 of the SA for harvest opportunity.	All returning HOR fish available for hatchery broodstock program. **NOR fish are returned to river.** Adjust egg take per table 8.4 of the SA for harvest opportunity.	All returning HOR fish available for hatchery broodstock program. **NOR fish are returned to river.** Adjust egg take per table 8.4 of the SA for harvest opportunity.	All returning HOR fish available for hatchery broodstock program. NOR fish to be transported above Swift dam. **If NOR returns are sufficient, consider starting Integrated Program of hatchery brood stock.** Adjust egg take per table 8.4 of the SA for harvest opportunity.	All returning HOR fish available for hatchery broodstock program. NOR fish to be transported above Swift dam. Adjust egg take per table 8.4 of the SA for harvest opportunity.	All returning HOR fish available for hatchery broodstock program. NOR fish to be transported above Swift dam. Adjust egg take per table 8.4 of the SA for harvest opportunity.	All returning HOR fish available for hatchery broodstock program. NOR fish to be transported above Swift dam. Adjust egg take per table 8.4 of the SA for harvest opportunity.	All returning HOR fish available for hatchery broodstock program. NOR fish to be transported above Swift dam. Adjust egg take per table 8.4 of the SA for harvest opportunity.	All returning HOR fish available for hatchery broodstock program. NOR fish to be transported above Swift dam. Adjust egg take per table 8.4 of the SA for harvest opportunity.
Construction of Fish Passage Facilities				Begin construction of fish passage facilities			Merwin Upstream and Swift Downstream fish collectors, Acclimation Ponds upstream of Swift, and Stress Relief Pond downstream of Merwin are completed and put into operation	Fish passage facilities operational	Fish passage facilities operational	Fish passage facilities operational	Fish passage facilities operational	Fish passage facilities operational
							Test Swift FCE with Hatchery Juveniles	Test Swift FCE with Hatchery Juveniles	Monitoring and Evaluation Program	Monitoring and Evaluation Program	Monitoring and Evaluation Program	Monitoring and Evaluation Program
Supplementation						Begin adult supplementation. Transport 9,000 (minumum) NOR and HOR adult coho to above Swift.	Transport all NORs collected then supplement with HOR adult coho to reach transport of 9,000 (minumum) adults to above Swift. Mark X juvenile NOR fish collected at Swift as upper basin origin.	Transport all NORs collected then supplement with HOR adult coho to reach transport of 9,000 (minumum) adults to above Swift. Mark X juvenile NOR fish collected at Swift as upper basin origin.	Transport all NORs collected then supplement with HOR adult coho to reach transport of 9,000 (minumum) adults to above Swift. Mark X juvenile NOR fish collected at Swift as upper basin origin.	Transport all NORs collected then supplement with HOR adult coho to reach transport of 9,000 (minumum) adults to above Swift. Mark X juvenile NOR fish collected at Swift as upper basin origin.	Transport all NORs collected then supplement with HOR adult coho to reach transport of 9,000 (minumum) adults to above Swift. Mark X juvenile NOR fish collected at Swift as upper basin origin.	Transport all NORs collected then supplement with HOR adult coho to reach transport of 9,000 (minumum) adults to above Swift. Mark X juvenile NOR fish collected at Swift as upper basin origin.
HPP		HPP program - goal 2,000 fish	HPP program - goal 2,000 fish	HPP program - goal 2,000 fish	HPP program - goal 2,000 fish					Yale HPP Program - goal 2,000 fish	Yale HPP Program - goal 2,000 fish	Yale HPP Program - goal 2,000 fish

Lewis River Winter Steelhead				Timeline of H&S Actions		NOTE: KEY ASSUMPTION -- THE RETURNING NOR NUMBERS ARE **SUFFICIENT** TO IMMEDIATELY START SEGREGATED POPULATION ABOVE SWIFT										
	Pre 2002	2002 - 2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016 - Future				
Hatchery		Collect HOR adults for use as broodstock.	Collect HOR adults for use as broodstock.	Collect HOR adults for use as broodstock.	Collect HOR adults for use as broodstock.	Collect HOR adults for use as broodstock.	Collect HOR adults for use as broodstock.	Collect HOR adults for use as broodstock.	Collect HOR adults for use as broodstock.	Collect HOR adults for use as broodstock.	Collect HOR adults for use as broodstock.	Collect HOR adults for use as broodstock.				
Construction of Fish Passage Facilities				Begin construction of fish passage facilities			Merwin Upstream and Swift Downstream fish collectors, Acclimation Ponds upstream of Swift, and Stress Relief Pond downstream of Merwin are completed and put into operation	Fish passage facilities operational	Fish passage facilities operational	Fish passage facilities operational	Fish passage facilities operational	Fish passage facilities operational				
							Test Swift FCE with Hatchery Juveniles	Test Swift FCE with Hatchery Juveniles	Monitoring and Evaluation Program	Monitoring and Evaluation Program	Monitoring and Evaluation Program	Monitoring and Evaluation Program				
Supplementation			Collect NOR adults for use as supplementation broodstock; take eggs to produce 50,000 smolts (age 1+). Rear then release smolts into Lewis River.	Collect NOR adults for use as supplementation broodstock; take eggs to produce 50,000 smolts (age 1+). Rear then release smolts into Lewis River.	Collect NOR adults for use as supplementation broodstock; take eggs to produce 50,000 smolts (age 1+). Rear then release smolts into Lewis River.	Collect NOR adults for use as supplementation broodstock; take eggs to produce 50,000 smolts (age 1+). Rear then release smolts into Lewis River. Any Enhanced Natural stock returns (rtns from 50,000 smolts) will be transported above Swift dam (Passage goal = 500 adults).	Collect NOR adults for use as supplementation broodstock; take eggs to produce 50,000 smolts (age 1+). Rear then release smolts into Lewis River. Any Enhanced Natural stock returns (rtns from 50,000 smolts) will be transported above Swift dam (passage goal = 500 adults). Mark juvenile NOR fish collected at Swift as upper basin origin.	Collect NOR adults for use as supplementation broodstock; take eggs to produce 50,000 smolts (age 1+). Rear then release smolts into Lewis River. Any Enhanced Natural stock returns (rtns from 50,000 smolts) will be transported above Swift dam (passage goal = 500 adults). Mark juvenile NOR fish collected at Swift as upper basin origin.	Collect NOR adults for use as supplementation broodstock; take eggs to produce 50,000 smolts (age 1+). Rear then release smolts into Lewis River. Any Enhanced Natural stock returns (rtns from 50,000 smolts) will be transported above Swift dam (passage goal = 500 adults). Mark juvenile NOR fish collected at Swift as upper basin origin.	Collect NOR adults for use as supplementation broodstock; take eggs to produce 50,000 smolts (age 1+). Rear then release smolts into Lewis River. Any Enhanced Natural stock returns (rtns from 50,000 smolts) will be transported above Swift dam (passage goal = 500 adults). Mark juvenile NOR fish collected at Swift as upper basin origin.	Collect NOR adults for use as supplementation broodstock; take eggs to produce 50,000 smolts (age 1+). Rear then release smolts into Lewis River. Any Enhanced Natural stock returns (rtns from 50,000 smolts) will be transported above Swift dam (passage goal = 500 adults). Mark juvenile NOR fish collected at Swift as upper basin origin.	Collect NOR adults for use as supplementation broodstock; take eggs to produce 50,000 smolts (age 1+). Rear then release smolts into Lewis River. Any Enhanced Natural stock returns (rtns from 50,000 smolts) will be transported above Swift dam (passage goal = 500 adults). Mark juvenile NOR fish collected at Swift as upper basin origin.				
HPP		None	None	None	None					Yale HPP Program - goal X fish	Yale HPP Program - goal X fish	Yale HPP Program - goal X fish				

Lewis River Acclimation Pond Site Recommendation

Attachment B

The Lewis River Settlement Agreement (SA) calls for PacifiCorp to establish fish acclimation sites in the upper Lewis River to aid in the reintroduction of anadromous fish in the upper Lewis River watershed. The language in the SA states:

8.8 Juvenile Acclimation Sites.

8.8.1 Above Swift No. 1 Dam. Beginning upon completion of the Swift Downstream Facility, the Licensees shall place juvenile salmonid acclimation sites in areas reasonably accessible to fish hauling trucks and in practical areas in the upper watershed above Swift No. 1 Dam, as determined by the Licensees in Consultation with the Yakama Nation and the ACC. The acclimation sites shall consist of fish containment areas that allow juvenile fish to acclimate in natural or semi-natural waterways and allow necessary pre-release juvenile fish management; such sites will not consist of or include concrete-lined ponds or waterways, but may include other concrete structures necessary for facility functionality and structural integrity during the supplementation program.

Section 8.8.2 addresses acclimation sites for Yale Lake and Lake Merwin which will be addressed prior to the Yale Lake reintroduction in license year 13.

In the course of the past year discussions have occurred during the monthly ACC meetings regarding location of the acclimation sites and whether or not all 3 introduced species should be placed in the acclimation ponds. During the June 8th ACC meeting at the WDFW office in Vancouver, the parties present agreed to use a target of 100,000 spring Chinook juveniles for the supplementation program and that it was not necessary to supplement juvenile coho and steelhead. The general agreement was that coho and steelhead adults will be able to seed the watershed without additional juveniles. For the ensuing discussion, then, it is assumed that the acclimation ponds will be sited, designed and managed solely for the juvenile spring Chinook supplementation program.

For the Swift Creek Reservoir fish four sites have been under consideration (Figure 1). Table 1 provides a brief comparison of the four sites. Extensive search for other possible sites has not yielded any additional candidate sites. We expect that each pond structure will be designed to hold one-third of the 100,000 juveniles in approximately 2,100 cubic feet of water with a 1.3 cfs water supply. Pond designs will vary to accommodate the terrain and access at each site.

The Muddy River site is located on USFS land approximately 4 miles upstream of the confluence with Lewis River and just upstream of the Forest Road 25 crossing. There is a day-use park at this location which will provide for paved access to the site. In this particular section of the Muddy River, a natural side-channel exists. The channel is barely visible through the trees in the aerial photograph (Figure 2). It is lined with trees and has boulder, gravel and large woody debris (LWD) components already in place. We intend to modify that channel on the upper and

lower end to provide some pass-through water from the main river and to allow for containment of the juvenile spring Chinook for the late-February to mid-April timeframe. Otherwise the channel will remain as natural as possible. PacifiCorp recommends selection of this site.

The Clear Creek site is located on USFS land approximately 1.5 miles upstream of the confluence with Muddy River. This site is also located near a day-use/dispersed camping site on Forest Road 9303. Note that just above the point where FR 9303 turns off of FR 25, FR 25 is closed and gated during the winter so there is no further upstream access available. Discussions have centered around constructing a pond on either side of the creek on the downstream side of the bridge. Currently USFS staff is recommending the site just upstream of the bridge on the river bend. There is an abandoned road leading to this site. USFS staff is looking into this possibility. Any of the locations would be suitable. We anticipate the site will be excavated to provide side-channel type habitat much like the Muddy River site with concrete structures on the upstream and downstream ends. PacifiCorp recommends selection of this site.

The third site is located on the mainstem Lewis River at the Crab Creek Bridge on USFS land which is approximately 10 miles upstream of the confluence with Swift Creek Reservoir and 1 mile downstream of Lower Falls. Current discussions have been focused on the area just upstream of the bridge on the same side as the road. However, a number of problems exist with that location including cultural and esthetic effects. An alternative is currently under consideration by USFS management and staff that involves utilizing the Lower Falls Campground site during the closure period (closed after Labor Day weekend to Memorial Day weekend). This would involve use of a portable pond similar to the holding ponds used for fire fighting. The pond would be assembled in the fall and a temporary water supply line would be installed to capture water from the Lewis River and gravity feed it to the pond. In the Spring, a crew would go to the site, clean up the holding pond and generally prepare the pond to receive fish. Access may need to occur using snowmobiles or a snow cat. After fish release occurs, the structure would be disassembled and stored for the next season. This option allows for little to no disturbance to the riparian area. It also allows for flexibility such that if this site does not seem to be effective, it could be moved to an alternative location. PacifiCorp recommends the alternative portable pond system at this site.

The Eagle Cliff site is located just upstream of the FR 90 Bridge on PacifiCorp property. This site is very accessible and contains quality habitat but it is at the lowermost point of the upper watershed and does not meet the ultimate need to acclimate fish as high in the watershed as possible. PacifiCorp is therefore dropping this site from further consideration.

Figure 2. Muddy River proposed acclimation pond site.

Figure 3. Clear Creek proposed acclimation pond site.

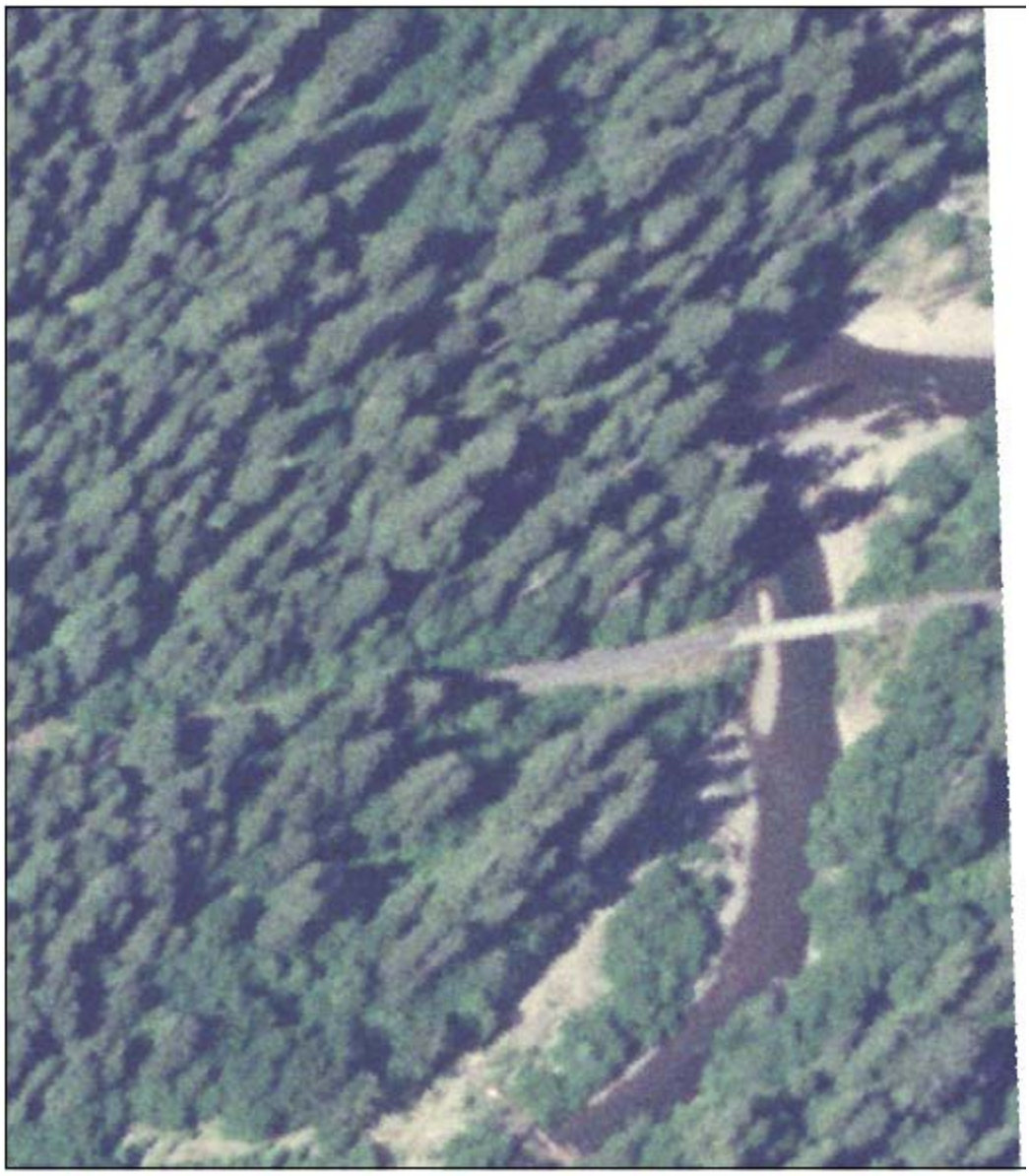


Figure 4. Mainstem Lewis River at Lower Falls proposed acclimation pond site.

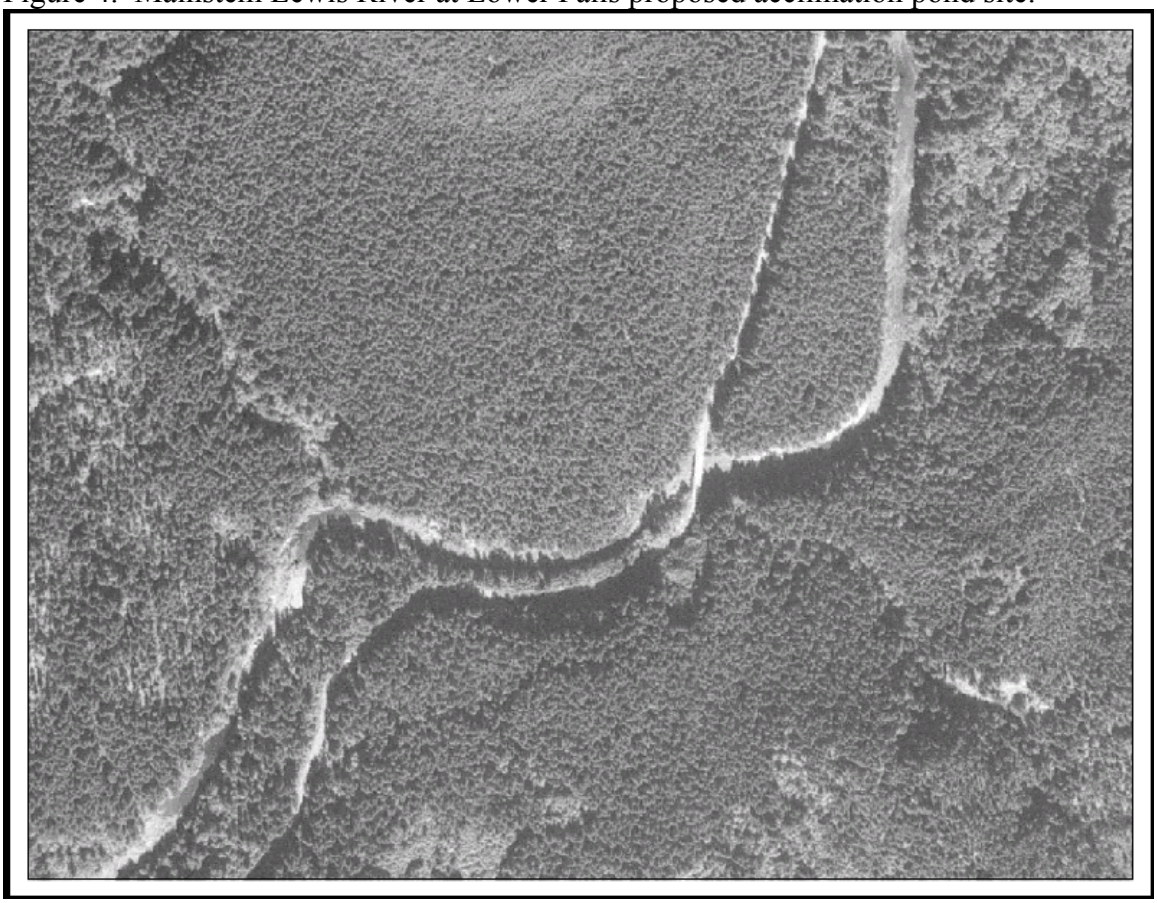
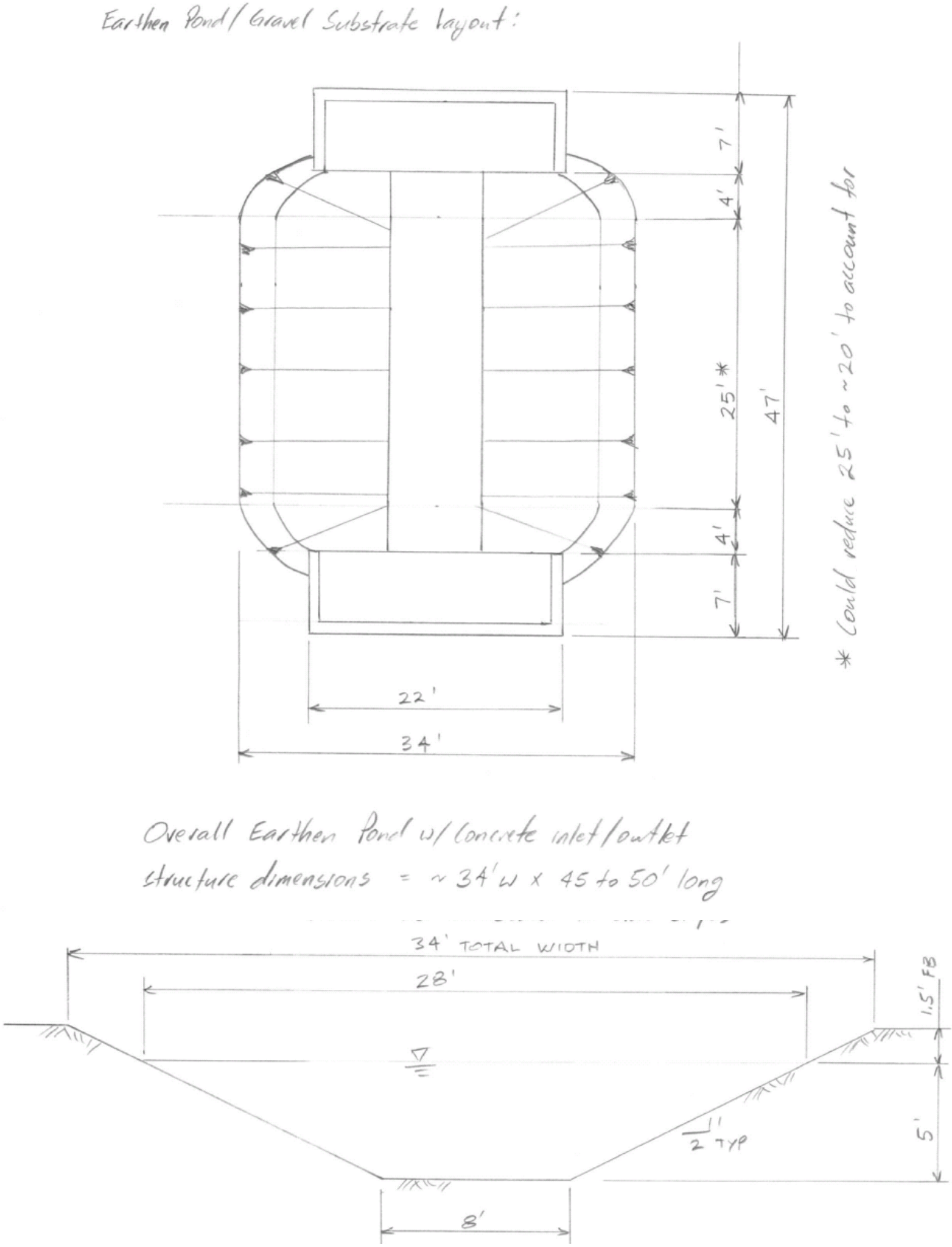


Figure 5. Mainstem Lewis River at Eagle Cliff proposed acclimation pond site.

Figure 6. Conceptual acclimation pond drawing.



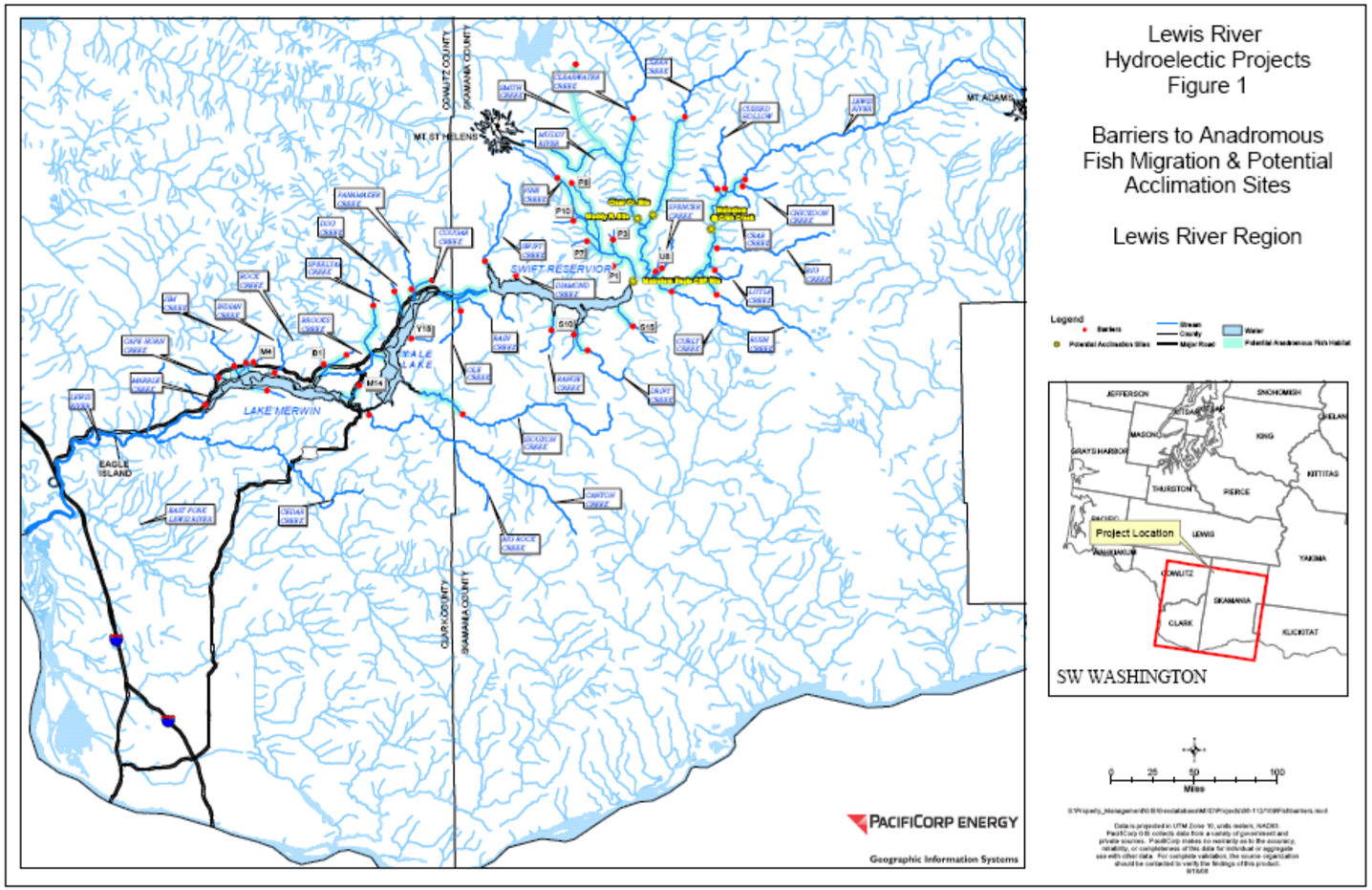


Figure 1. Map of the Lewis River basin showing all accessible habitat and the four possible acclimation site locations.

Table 1. Brief comparison of potential acclimation sites in the upper Lewis River watershed.

Potential Lewis River Acclimation Pond Sites and decision Criteria

Site	Access to River?	High in the watershed?	Close proximity to quality habitat?	Water supply Quantity/Quality	Other Considerations
Muddy River	Y	Relatively	Marginal	Good/Good	Has side channel that could be modified
Clear Creek	Y	Relatively	Y	Good/Good	Can use either side of the Creek
Mainstem Lewis at Lower falls	Difficult	Relatively	Y	Good/Good	May have some esthetic/cultural concerns
Mainstem Lewis at Eagle Cliff	Y	N	Y	Good/Good	Very low in the Upper watershed
Other					
	Time of year for Pond operation:	Late-Feb to mid-April			
	Number of fish anticipated:	100,000 @ 8 fpp			
	Pond size needed (assume 1.2 cfs)	34' W x 47' L x 5' D			
	Also assume 33,333 fish per pond				