

FINAL Meeting Notes
Lewis River License Implementation
Aquatic Coordination Committee (ACC) Meeting
February 14, 2008
Ariel, WA

ACC Participants Present (19)

Jim Byrne, WDFW
 Clifford Casseseka, Yakama Nation
 Jeremiah Doyle, PacifiCorp Energy
 Diana Gritten-MacDonald, Cowlitz PUD
 Adam Haspiel, USDA Forest Service
 LouEllyn Jones, USFWS
 Eric Kinne, WDFW
 George Lee, Yakama Nation
 Erik Lesko, PacifiCorp Energy
 Jim Malinowski, Fish First
 Kevin Malone, ICF Jones & Stokes (10:00am – 11:00am)
 Kimberly McCune, PacifiCorp Energy
 Bryan Nordland (via teleconference 10:30am – 12:30pm)
 Todd Olson, PacifiCorp Energy
 Frank Shrier, PacifiCorp Energy
 Shelley Spalding, USFWS
 Steve Vigg, WDFW (via teleconference 9:15am – 10:00am)
 John Weinheimer, WDFW
 Shannon Wills, Cowlitz Indian Tribe

Calendar:

March 12, 2008	TCC Meeting	Lacey, WA
March 13, 2008	ACC Meeting	Merwin Hydro

Assignments from February 14th Meeting:	Status:
Malone: Provide Coho data for the last two years and a like reporting for Spring Chinook.	Pending
Malone: provide the RMIS website information to Malinowski and copy Kimberly McCune (PacifiCorp Energy).	Pending
Nordlund: Provide data that supports the 24 hour passage/transit information relative to the ATE definition issue.	Complete - 3/7/08

Assignments from January 10th Meeting:	Status:
McCune: Notify the ACC when the Draft SMP is available for viewing.	Complete – 1/10/08
Lesko: Add paragraph to the Habitat Preparation Plan to address the following: should sufficient numbers of Spring Chinook adult return in 2008, some may be used for the HPP with approval from Yakama Nation	Pending

Opening, Review of Agenda and Meeting Notes

Frank Shrier (PacifiCorp Energy) called the meeting to order at 9:10 a.m. Shrier requested a round-table introduction and reviewed the agenda for the day.

In addition, Shrier requested comments and/or changes to the ACC Draft 1/10/08 meeting notes. The meeting notes were approved without changes at 9:30 a.m.

Relicensing Schedule Update

Shrier informed that ACC that the Utilities have not received any additional information regarding the expected FERC license issuance.

Lewis River Aquatic Funding Proposals Update

Todd Olson (PacifiCorp Energy) informed the ACC that the Utilities evaluated all proposals submitted and provided an evaluation matrix for ACC review, which was mailed to each ACC representative on February 8, 2008 (**Attachment A**). The Utilities recommended five (5) projects for funding in accordance with Appendix D:

Lewis River Aquatics Fund – Individual Project Evaluation Sheet, Sept. 2005 (**Attachment B**). If all projects are selected by the ACC for funding; the total is \$280,000 for the 2008 funding cycle. Olson also informed the ACC that all **comments are due on or before March 10, 2008** prior to the next ACC meeting so that PacifiCorp can compile individual ACC representative's responses. The compiled evaluation will be discussed at the March ACC meeting. The intent is to reach final agreement on which projects should receive funding at the March meeting.

General discussion took place regarding the 2008 East Fork Lewis River Instream Structures for Steelhead project and the project nexus. Shrier referenced language in the Lewis River Settlement Agreement regarding guidance for resource project approval (see SA 7.5.3.1).

Merwin Upstream 30% Design Report Review and Discussion

Shrier informed the ACC that the *Lewis River Fish Passage Merwin Upstream Collection and Transport Facility Preliminary Engineering 30% Design Report (SA 4.3)* is now available for a 30-day review and comment period. Copies of the document were handed out at the meeting.

Shrier communicated that all work product to date has been included in the document and the current trap design has up to 600 cfs attraction flow. In addition, the purpose of the upstream collection and transport facility is to collect and sort upstream migrating adult fish and prepare them for transport upstream to release sites above Merwin Dam. The upstream collection and transport facility would include improvements to the existing Merwin Trap and a new sorting facility located immediately downstream of the Merwin

Powerhouse along the left bank of the tailrace. Major components of the facility include the following:

- Fish entrance(s) and trap
- Fish left and conveyance flume to sorting facility
- Sorting facility
- Auxiliary water supply pump station

The ACC attendees reviewed Figure 1.1 which illustrates an overview of the Merwin Dam area with the major features of the upstream collection and transport facility improvements superimposed ([Attachment C](#)).

Shrier informed that ACC that a presentation on the Merwin physical model which the Engineering subgroup reviewed on 1/30/08 will be included on the March 14, 2008 ACC agenda. Comments on the 30% Design Report **are due on or before March 14, 2008**.

<Break 10:15am>

<Reconvene 10:30am>

Ocean Recruit Calculation – Kevin Malone (ICF Jones & Stokes)

Steve Vigg (WDFW) informed the ACC that Ron Roler will address the ACC at the next meeting scheduled on March 14, 2008.

At the request of Jim Malinowski (Fish First), Kevin Malone (Jones and Stokes) was invited to address the ACC regarding the disposition of the hatchery fish from the Lewis River and why we are not calculating ocean recruits now as a way to test the methodology. In addition, Malinowski wants to know how we think we will be able to make reasonable estimates of ocean recruits in the future.

Malone handed out a document titled, “Coho Data from RMIS”, ([Attachment D](#)). Malone reviewed SAR (smolt to adult ratio – North) based on coded wire tag analysis using Coho as an example. Mortality is taken into account in the data provided. Malone also discussed HGMPs vs. RMIS and that RMIS data is an indicator of the point estimate. RMIS data is available to anyone and can be specialized to create a pull down menu to accommodate ACC participant requests. General discussion also took place regarding procedures for collecting coded wire tags such as sport ocean harvest and spawning surveys. Within the system there is an expansion factor built in for those fisheries not reported.

Malinowski expressed that he would like routine summary reporting of ocean recruit data provided to the ACC.

The ACC requested Malone provide Coho data for the last two years and a like reporting for Spring Chinook. In addition, Malone will provide the RMIS website information to Malinowski and copy Kimberly McCune (PacifiCorp Energy).

Lewis River Monitoring and Evaluation (M&E) Plan – Kevin Malone

Malone expressed to the ACC attendees that systems are set up for use of coded wire tags. He also stated that more data coming back from the tribes shows that pit tags are not reporting back accurate data. Malone reviewed ACC comments relating to overall juvenile production, relative survival over a period of time, measure of migrating fish, collection efficiency, overall downstream survival (ODS), rearing survival, benefits of radio tags, index count of major tributaries relative to out migration, index calculations to measure overall success from year to year. Olson expressed that the current purpose and intent of the Draft M&E plan is to provide data and direction that informs the engineering design group in the development of the fish passage facilities. Additional facility design is needed (60% - 90%) for the M&E Plan to be fully developed. Shrier informed the ACC attendees that the M&E plan comments were received and he suggested perhaps revisiting the M&E discussion after the 60% Swift Downstream Fish Collector design is complete.

Merwin Adult Trap Efficiency (ATE) Discussion – Bryan Nordlund

In response to the Adult Trap Efficiency (ATE) definition issue identified in ACC and engineering subgroup meeting notes, Bryan Nordlund (NMFS) initiated conversations with WDFW, USFWS, and within NMFS. To date, the agencies recommend:

- Section 4.1.4 of the Settlement Agreement defines which fish will be used to calculate ATE.
- “Safe Passage” implies that fish will be evaluated for injuries after they’ve passed through the trap system, including electro-anesthesia.
- “Timely Passage” has two aspects: (a) median delay of fish is less than 24 hours and (b) fewer than 5% of active migrating fish take longer than a week to be collected and move through the trap system.
- “Active Migrants” are all fish that do not drop out of the system.
- “Drop Outs” are fish which fall into one of the following three categories:
 - Fish that are sport caught.
 - Fish that return to the hatchery instead of the trap.
 - Fish that leave the Lewis River system.
- In practice, “Drop Outs” are difficult to account for because it’s hard to conclusively determine when a particular fish has left the Lewis River system.
- A recent PIT tag study on the mid-Columbia River (from Priest Rapids to Wells Dam) showed an actual achieved ATE of over 99% (once drop outs were statistically removed from the calculation). **Consequently, a target design ATE of 98% for Merwin may be appropriate.** Bryan noted that this information is public, from the DART website, adjusted for Wells Hatchery collection.

- Regarding the latest draft of the tailrace fish behavior study, at the most recent Engineering subgroup meeting, Curt Leigh (WDFW) voiced particular concern for data collection near “the point” by the bridge. This area has previously been considered as a potential second trap entrance location. Leigh wants to ensure that quality data will be collected in this area, in case it needs to be looked at in the future as a potential trap entrance location. To address this possibility, current plans for an array location at the bridge have one antenna in the bridge array particularly focused on this site. Shrier noted that he knows where this point is, and has confirmed with MaryLouise Keefe (R2 Resource) that quality data will be collected. Shrier will follow up with Keefe to confirm that necessary data will be collected in a quality manner.

Olson noted that overall PacifiCorp thought the ATE proposal was close, but requested that Nordlund provide data that supports the 24 hour passage/transit information. This time period may be appropriate for some species such as coho, but not for early migrating species such as spring Chinook.

<Working Lunch 12:00pm>

Lewis River Baseline Monitoring Discussion – Shannon Wills (Cowlitz Indian Tribe) and Jim Bryne (WDFW)

Bryne expressed to the ACC attendees that the original intent of the Settlement Agreement language (see 9.7) relating to monitoring may not have included certain aspects to the level that certain ACC participants think is called for now for a successful reintroduction program. Bryne mentioned that important items to consider are:

- Species census
- Predator/prey relationships
- Diet & prey analysis/food webs (isotope study)
- Risk benefit analysis/where competition may occur
- Disease and pathogen baseline
- Adaptive management

SA 9.7 Resident Fish Assessment. PacifiCorp shall include in the M&E Plan elements to monitor the following with respect to resident fish: (1) the interaction between reintroduced anadromous salmonids and resident fish species; and (2) kokanee spawner population size in Yale Lake in the fall of each year. The results of such monitoring may inform adaptive management of the operation of the passage facilities but shall not require any physical changes to fish passage facilities or Project operations.

Bryne proposes the structuring of a Baseline Monitoring Subgroup (Subgroup) to review the needs in greater detail. Those who volunteered to participate in the Subgroup

LouEllyn Jones – USFWS
Shannon Wills – Cowlitz Indian Tribe
Adam Haspiel – USDA FS

Shelley Spalding - USFWS
Jim Bryne (lead) - WDFW
Frank Shrier/Erik Lesko - PacifiCorp

Shoreline Management Plan (Plan) Update

Olson informed the ACC attendees that PacifiCorp conducted a SMP public meeting on February 6, 2008, with the purpose of gaining public input on the Initial Working Draft of the SMP. This draft is available on the Lewis River website at: <http://www.pacificorp.com/Article/Article76278.html>. Approximately 33 attendees were present, mostly private land owners. Questions and comments were recorded at the meeting and will also be made available on the Lewis River website.

In summary, the public inquired about community docks and the process for permitting (PacifiCorp is still creating the details of the permit process). A couple of specific cases were addressed whereby a property owners land is divided between their access to the reservoir by a small piece of PacifiCorp-owned land. These property owners requested modification of the classification from Resource to Integrated. In addition, comments were received regarding the possibility of an easement granted to a private owner to cross PacifiCorp lands for reservoir access. Olson informed the attendees at the public meeting that all comments will be considered as PacifiCorp proceeds with development of the SMP.

PacifiCorp plans to submit a 30-day Public Review Draft sometime in March 2008.

Study Updates

Shrier, Lesko and Olson provided the following study updates, unless noted otherwise:

Swift Constructed Channel Concept Design and Swift Upper Release Design – No changes since the last ACC meeting. Given the delay in license issuance construction will likely take place in 2009. Water right issue resolved.

Hatchery Upgrades –

Lewis River Pond 15 – 90% design complete; need engineer buyoff from WDFW. Construction is planned for January 2009.

Speelyai Burrows Pond – Construction planned for January 2009.

Lewis River Ponds 13, 14 & 16 – Engineers working on design.

Hatchery and Supplementation Plan (H&S) – The following HGMPs are all pending: Lewis River Type S Coho HGMP, Late winter steelhead, spring Chinook program, type N Coho and the segregated winter and summer steelhead.

Acclimation Pond Plan – Internal approvals pending for PacifiCorp to hire a consultant to complete engineering requirements.

Habitat Preparation Plan – Developing a plan this March or April 2008.

Yale Entrainment – Plan approved by USFWS on 1/18/08; submitted to the FERC on 1/23/08; PacifiCorp has 120 days for development of design.

New topics/issues

Diana Gritten- MacDonald (Cowlitz PUD) informed the ACC that the PUD is submitting permits to remove the Dry Creek culvert this summer which involves 0.7 acres. Of this area 0.6 acres, will be re-vegetated.

Shelly Spalding (USFWS) informed the ACC attendees that they have received a land acquisition proposal in the Pine Creek area as a submittal for Section 6 grants (details of the proposal are considered confidential) and would like to know what the ACC's opinion is on the submittal. In general, the ACC is in support of this proposal and felt that the land acquisition is important to bull trout conservation.

Erik Lesko (PacifiCorp Energy) informed the ACC attendees that the Bull Trout 2007 Report and 2008 Plan will be distributed next week for a 30-day review and comment period. Submittal of the final 2007 Report and 2008 Plan are due to the FERC no later than March 31, 2008. An annual meeting with USFWS will be needed prior to the FERC submittal. The ACC attendees agreed that the annual meeting will take place immediately after the March 13, 2008 ACC meeting.

Agenda items for March 13, 2008

- Ocean recruit calculation – Ron Roler
- Merwin Model Presentation – Lisa Larson (NHC)
- Merwin 30% Design Review and Discussion
- Aquatic Funding Proposals Review
- Shoreline Management Planning Update
- Study/Work Product Updates
- Relicensing Update
- Bull Trout Annual Meeting (immediately after the ACC meeting)

Public Comment Opportunity

No public comment was provided.

Next Scheduled Meetings

March 13, 2008	April 10, 2008
Merwin Hydro Facility	Merwin Hydro Facility
Ariel, WA	Ariel, WA
9:00am – 3:00pm	9:00am – 3:00pm

Meeting Adjourned at 12:45pm

Handouts

- Final Agenda
- Draft ACC Meeting Notes 1/10/08
- **Attachment A** – Lewis River Aquatic Fund Utilities Evaluation and Matrix, dated February 8, 2008

- **Attachment B** - *Appendix D, Lewis River Aquatics Fund – Individual Project Evaluation Sheet, Sept. 2005*
- **Attachment C** – Figure 1.1 Merwin Dam Area and Upstream Fish Passage Improvements
- **Attachment D** - Coho Data from RMIS, as provided by Kevin Malone – ICF Jones & Stokes

February 8, 2008

Memo to Lewis River Aquatics Coordination Committee representatives

From: Frank Shrier – PacifiCorp Energy and Diana Gritten-MacDonald – Cowlitz PUD

Subject: Review of CY 2007 Aquatic Fund Proposals

In September 2005 the Lewis River Aquatics Coordination Committee (ACC) established the Aquatics Fund – Strategic Plan and Administrative Procedures to meet obligations of the Lewis River Settlement Agreement. Since that time PacifiCorp Energy and the Public Utility District No. 1 of Cowlitz County (Cowlitz PUD) (collectively the Utilities) have been working under the Plan and with the ACC to identify and select aquatic resource projects for funding.

On December 13, 2007 the ACC selected seven aquatic project proposals for additional consideration. Shortly thereafter PacifiCorp Energy notified the project sponsors and requested full proposals by January 31, 2008. On January 10, 2008, the Cowlitz Indian Tribe withdrew the Two Forks Off-Channel Habitat Reconnection. Upon the due date, five full proposals were submitted. The proposed projects include:

Applicant	Proposed Project
Cowlitz Indian Tribe	Mud Creek Enhancement
USDA Forest Service	Muddy River Thinning/Brushing/Invasive Plant Project (combined with Muddy River Riparian/Floodplain, Brushing and Thinning)
USDA Forest Service	Clear Creek Road Decommission (2575200) – modified to 2575000
USDA Forest Service	East Fork Lewis River Instream Structures Steelhead
PacifiCorp Energy	Panamaker Creek Road Closure and Culvert Removal

The Utilities subject matter experts have evaluated and scored the above proposals. Evaluations were conducted as outlined in the Aquatic Fund – Strategic Plan and Administrative Procedures (PacifiCorp and Cowlitz PUD, September 2005). For ACC review, the Utilities have attached an Evaluation Matrix to this memo which identifies the average total score of the Utility reviewers for each Proposal and comments/questions (Attachment 1). Costs for each project are also included. Individual Proposals have been attached for reference (Attachments 2-6).

By this memo the Utilities provide the ACC with a list of the projects and our recommendation for funding.

Mud Creek Enhancement – Funding request is for \$43,500. Utilities recommend: Funding with contingency that Washington Department of Ecology imposes fine that results in minimization of turbidity from gravel mining and washing.

Muddy River Thinning/Brushing/Invasive Plant Project – Funding request is for \$117,000. Utilities recommend: Funding

Clear Creek Road Decommission (2575000) – Funding request is for \$34,000. Utilities recommend: Funding

East Fork Lewis River Instream Structures Steelhead – Funding request is for \$60,000. Utilities recommend: Not funding

Panamaker Creek Road Closure and Culvert Removal – Funding request is for \$25,000. Utilities recommend: Funding

The next step in the process is for the ACC to review and provide input on selection of projects to be funded. The Utilities welcome review and your comments including your agreement or disagreement with the Utilities evaluation, and ask that you provide them to PacifiCorp **by March 10, 2008**. This timing is so we may compile results for discussion at our March 13, 2008 ACC meeting. To continue to meet the Funding Process Timeline as included in the Plan, the ACC should reach agreement on projects by early April.

Thank you for your attention to this matter, we look forward to receiving your input.

Lewis River Aquatic Fund - Utilities' Evaluation of 2007/2008 Project Proposals															
Applicant	Project Title	Project Schedule	Benefit	Bull Trout	Project Partners	Funding	Cost Share?	Consistency with Fund Objectives	Benefit to Priority Fish	Scientific Validity	Success Potential	Cost Effectiveness	Total Score	Selected by Utilities for Full-Proposal	Comments
Cowlitz Indian Tribe	Mud Creek Enhancement - Cowlitz Indian Tribe	2008/2009	Reduce sediment loads in the lower Lewis, and re-establish fish passage in Mud Creek. Install a minimum of 30 small LWD in Mud Creek	No	Plas Newydd Farm	\$ 43,550.00	Yes	Meets	14.5	13.3	2.5	3.3	33.6	Yes	Project still needs Burlington Northern Railroad permission in lowest reach. Assumes LWD is available from PacifiCorp/ACC. Not sure how successful this will be in the tidal zone. Project should be contingent on Washington DOE imposing fine that results in minimization of turbidity from gravel mining and washing.
Cowlitz Indian Tribe	Two Forks Off-Channel Habitat Reconnection	2008/2009	Increasing the amount of off-channel habitat available in the lower Lewis; may also provide educational benefits.	No	WDFW	\$ -	No								Project withdrawn 1/10/08
USDA Forest Service	Muddy River Thinning/Brushing/Invasive Plant Project	2008 - 2012	Riparian recovery action on the mainstem Muddy River and the ecological interactions amongst those species who rely on riparian function. Allow conifers to grow and mature faster, providing shade to the Muddy River to help cool warm summer water temperatures; more robust salmonids.	No	USDA FS, FS Regional, Clark Skamania Fly Fishers, Fish First, Cowlitz Indian Tribe, Trout Unlimited, WDFW	\$ 117,000.00	Yes	Meets	12.3	14	2.5	2	30.8	Yes	Muddy River Riparian/Floodplain Improvement and Muddy River Riparian Brushing and Thinning were combined into one Proposal. Assumes that work over a 3-year period gives the ecology of the area enough of a "re-set" to continue native succession. Cost vs. expected benefit seems a bit excessive.
USDA Forest Service	Clear Creek Road Decommission (2575000)	2008	Elimination of risk of excessive sediment delivery from the road to Clear Creek.	No	Gifford Pinchot Task Force, Mt. St. Helens Institute	\$ 34,000.00	Yes	Meets	13.3	14.5	3.5	4	35.3	Yes	Modified from Clear Creek Road 2575200. Cost vs. expected benefit seems good.
USDA Forest Service	East Fork Lewis River Instream Structures Steelhead	2008/2009	Benefit steelhead by restoring spawning areas and creating cover and resting areas for adults, and benefit juveniles by creating pools with hiding cover for rearing opportunities.	No	LCFRB, Northwest Steelheaders, Trout Unlimited, WDFW	\$ 60,000.00	Yes	Meets - However project is located outside Settlement Agreement priority area	10.5	13	3.5	2.5	29.5	No	High cost for little value to the North Fork of the Lewis River and project area. No FERC nexus. Project does not address specific fund objectives in that it is on the East Fork of the Lewis River and benefits only Summer Steelhead, a non-reintroduced species.
PacifiCorp	Panamaker Creek Road Closure and Culvert Removal	2008	Benefit bull trout that spawn and rear in Cougar creek through reduction of sediment inputs and reduction of vehicular traffic.	Yes	N/A	\$ 25,000.00	No	Meets	12.5	14.5	3.5	3.5	34	Yes	Concern of ability to keep ATVs from disturbing restored area. Good cost benefit. Expected benefit to bull trout is protection of migration corridor in that the bulk of bull trout spawn and rear above where Panamaker enters Cougar Creek. Biggest impact of excessive sediment delivery would be to the kokanee that spawn in the lower part of the creek.
						Totals	\$ 279,550								
Fund Objectives:	1. Benefit fish recovery throughout the North Fork Lewis River, priority to federal ESA-listed species				Bull Trout Funds	\$ 25,000									
	2. Support the re-introduction of anadromous fish throughout the basin														
	3. Enhance fish habitat in the Lewis River Basin, with priority given to North Fork Lewis River														

Appendix D
Lewis River Aquatics Fund – Individual Project Evaluation Sheet

For each Evaluation Criteria listed below, a determination of “meets” or “does not meet” or a score of 1 to 5 is assigned by project evaluator. If during the Pre-Proposal review the project receives a “does not meet” response to any “Consistency with Fund Objectives and Priorities” component, the proposal will be dropped from further evaluation and funding. A 1 is the lowest score (does not or very unlikely to meet objectives), a 5 the highest score (greater likelihood of meeting objectives). Scores are multiplied by the assigned weighting then totaled for a single project score.

<p>A. Consistency with Fund Objectives and Priorities (Meets or Does not meet):</p> <ol style="list-style-type: none"> 1. Benefit fish recovery throughout the North Fork Lewis River, priority to federal ESA-listed species (Bull Trout, Chinook, Steelhead, and Chum) 2. Support the re-introduction of anadromous fish throughout the Basin (Spring Chinook, Winter Steelhead, Coho, and Searun Cutthroat) 3. Enhance fish habitat in the Lewis River Basin, with priority given to the North Fork Lewis River. 	
<p>B. How does the project benefit priority fish species and stocks? (Spring Chinook, Winter Steelhead, Coho, Bull Trout, and Searun Cutthroat) (40 % weight):</p> <ul style="list-style-type: none"> ▪ Does the proposal clearly describe the expected fish benefits of the project? ▪ Does the proposal clearly identify the salmonid species and stocks that would benefit from the project? ▪ Does the project address a limiting factor(s) to the target species, a limiting life history stage, or an important habitat process or condition? ▪ Will the project provide long-term benefits? Does the project provide tangible, on-the-ground benefits? ▪ Is the project generally consistent with the intent (strategies, measures, actions, and priorities) of applicable recovery and planning documents (e.g. Lower Columbia Salmon Recovery 	<p>Score = _____ multiplied by 4.0 = _____</p>

Plan)?	
<p>C. Scientific validity and technical quality of proposed project (40% weight):</p> <ul style="list-style-type: none"> • Is the problem to salmonids and the associated objectives of the proposed project clearly described? • Does the proposal employ appropriate techniques, adequate design and proper siting? • Is it clear how the proposed project will meet its intent and purpose? • Is it likely that the project will achieve stated objectives? • Does the project provide for implementation monitoring? If so what monitoring protocols will be used? Are the benefits or outcomes from the project measurable (e.g. number of trees planted or amount of structure placed)? • Have watershed processes and a larger global aspect been considered in developing the proposal? • How does the project fit within the fish needs as identified through watershed planning documents, recovery plans, etc? • Has the project proposal received professional review? • Does the proposal identify any negative or positive impacts to other resource areas (e.g. wildlife, recreation, etc.)? 	<p>Score = _____ multiplied by 4.0 = _____</p>
<p>D. Ability for the project proponent to successfully implement proposed project (10% weight)</p> <ul style="list-style-type: none"> • Does proposal include both appropriate numbers of personnel and experienced team members? • Has the applying party submitted proposals in previous years? If their proposal received funding, has it been successfully implemented? • Will the project be able to obtain the necessary permits in a timely manner? 	<p>Score = _____ multiplied by 1.0 = _____</p>

<p>E. Cost effectiveness and timeliness (10% weight)</p> <ul style="list-style-type: none"> • Does the project have matching funding or in-kind participation? Is there collaboration between numerous parties? • Is the project budget identified by work effort (administration, materials, labor, etc.) and is it appropriate? • Does the project have a reasonable cost relative to the anticipated benefits? • Is the project self-maintaining once completed? If not, how will maintenance be achieved? • Can the project activities be planned and initiated in one year? 	<p>Score = _____ multiplied by 1.0 = _____</p>
Total Weighted Score	XX

Figure 1.1 shows an overview of the Merwin Dam area with the major features of the upstream collection and transport facility improvements superimposed.

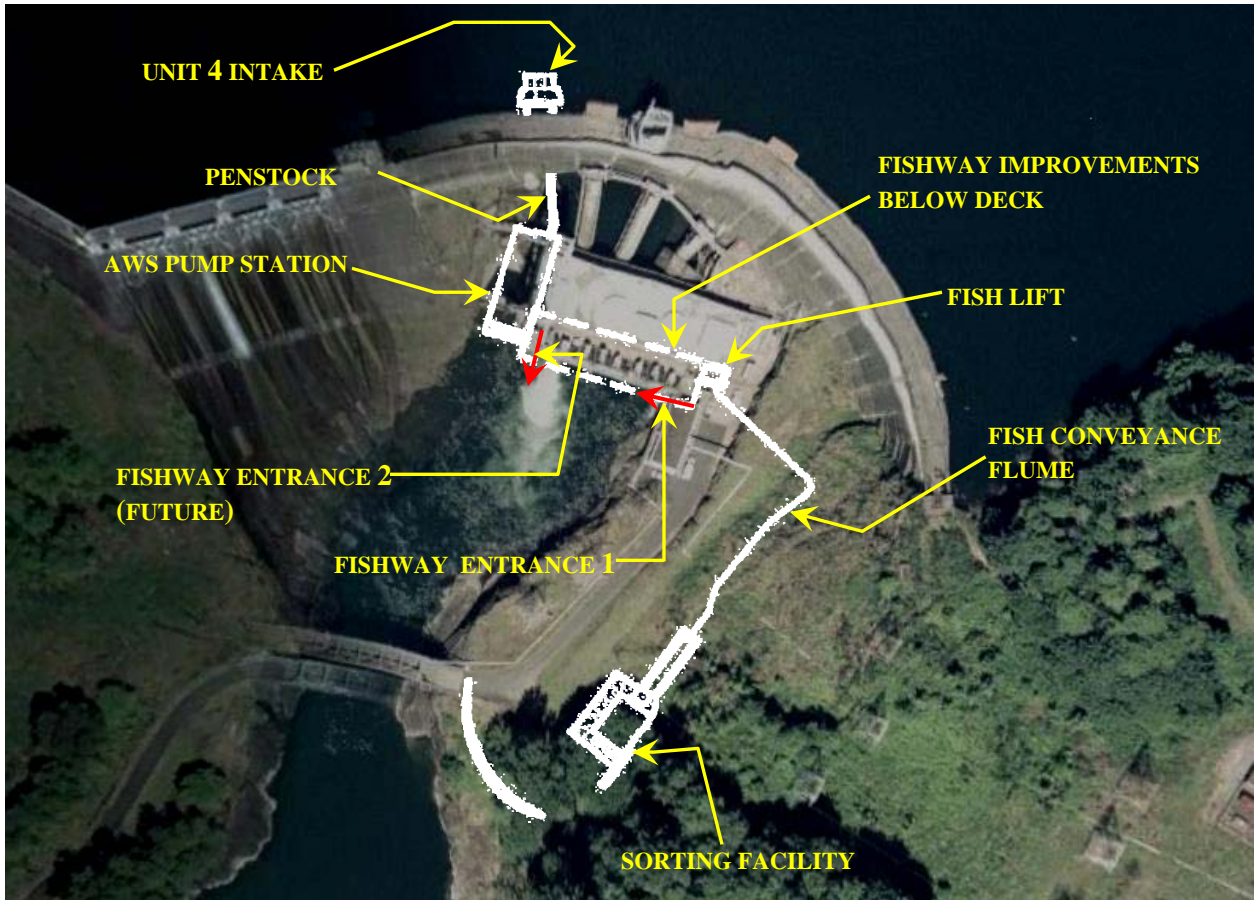


Figure 1.1: Merwin Dam Area and Upstream Fish Passage Improvements

Coho Data From RMIS
Actual Data

Release Year	Type N Juveniles	SAR (Smolt-to-Adult Ratio) (North)	Total Adults	Type-S Juveniles	SAR (Smolt-to-Adult Ratio) (South)	Total Type-S Adults	Grand Total
1991	4,476,700	1.74%	77,895		1.02%	0	77,895
1992	4,233,000		0	908,500			
1993	3,438,700	0.59%	20,288	956,900	0.32%	3,062	23,350
1994	869,400	0.20%	1,739	839,300	0.25%	2,098	3,837
1995	2,199,200	0.41%	9,017	888,400	0.85%	7,551	16,568
1996	2,414,000	0.92%	22,209	897,200	0.51%	4,576	26,785
1997	1,981,379			968,369			
1998	2,289,440	1.92%	43,957	945,321	2.76%	26,044	70,001
1999	2,193,653	3.00%	65,810	902,448	2.69%	24,276	90,085
2000	2,126,655	7.91%	168,112	1,395,072	4.30%	60,035	228,147
2001	868,756	1.63%	14,139	909,038	2.07%	18,817	32,956
2002	841,000	5.76%	48,400	874,579	6.22%	54,399	102,798
Average	2,327,657	2.41%	42,870	953,193	2.10%	20,086	67,242

Adjusted for 1.8 million release

Release Year	Type N Juveniles	SAR (Smolt-to-Adult Ratio) (North)	Total Adults	Type-S Juveniles	SAR (Smolt-to-Adult Ratio) (South)	Total Type-S Adults	Grand Total
1991	900,000	1.74%	15,660	900,000	1.02%	9,180	24,840
1992	900,000	0.77%	6,930	900,000			6,930
1993	900,000	0.59%	5,310	900,000	0.32%	2,880	8,190
1994	900,000	0.20%	1,800	900,000	0.25%	2,250	4,050
1995	900,000	0.41%	3,690	900,000	0.85%	7,650	11,340
1996	900,000	0.92%	8,280	900,000	0.51%	4,590	12,870
1997	900,000	0.00%		900,000			
1998	900,000	1.92%	17,280	900,000	2.76%	24,795	42,075
1999	900,000	3.00%	27,000	900,000	2.69%	24,210	51,210
2000	900,000	7.91%	71,145	900,000	4.30%	38,730	109,875
2001	900,000	1.63%	14,648	900,000	2.07%	18,630	33,278
2002	900,000	5.76%	51,795	900,000	6.22%	55,980	107,775
Average	900,000	2.07%	20,322	900,000	2.10%	18,890	37,494

Adjusted for 2.0 million release

Release Year	Type N Juveniles	SAR (Smolt-to-Adult Ratio) (North)	Total Type-N Adults	Type-S Juveniles	SAR (Smolt-to-Adult Ratio) (South)	Total Type-S Adults	Grand Total
1991	1,000,000	3.00%	30,000	1,000,000	3.00%	30,000	60,000
1992	1,000,000	3.00%		1,000,000	3.00%		
1993	1,000,000	3.00%	30,000	1,000,000	3.00%	30,000	60,000
1994	1,000,000	3.00%	30,000	1,000,000	3.00%	30,000	60,000
1995	1,000,000	3.00%	30,000	1,000,000	3.00%	30,000	60,000
1996	1,000,000	3.00%	30,000	1,000,000	3.00%	30,000	60,000
1997	1,000,000	3.00%		1,000,000	3.00%		
1998	1,000,000	3.00%	30,000	1,000,000	3.00%	30,000	60,000
1999	1,000,000	3.00%	30,000	1,000,000	3.00%	30,000	60,000
2000	1,000,000	3.00%	30,000	1,000,000	3.00%	30,000	60,000
2001	1,000,000	3.00%	30,000	1,000,000	3.00%	30,000	60,000
2002	1,000,000	3.00%	30,000	1,000,000	3.00%	30,000	60,000
Average	1,000,000	3.00%	30,000	1,000,000	3.00%	30,000	60,000