Lewis River Hydroelectric Projects Settlement Agreement Aquatic Coordination Committee (ACC) Meeting Agenda

Date & Time: Thursday, January 14, 2016

9:00 a.m. - 3:00 p.m.

Place: Merwin Hydro Control Center

105 Merwin Village Court

Ariel, WA 98603

Contacts: Frank Shrier: (503) 320-7423

Time	Discussion Item											
9:00 a.m.	Welcome											
	➤ Review Agenda and ACC 12/10/15 Meeting Notes											
	➤ Comment & Accept Agenda and 12/10/15 Meeting Notes											
9:10 a.m.	Public Comment Opportunity											
9:20 a.m.	M&E Update											
10:00 a.m.	Break											
10:15 a.m.	Study/Work Product Updates											
	o 2016/2017 Aquatic Fund Process Update											
	 Smolt releases at LRH; first pass water and release options 											
	 Woodland Release Ponds - Status 											
	 Acclimation Ponds - Status 											
	 Merwin Upstream Passage – Status 											
	 Swift Floating Surface Collector – Status 											
11:15 a.m.	Next Meeting's Agenda											
	Public Comment Opportunity											
	Note: all meeting notes and the meeting schedule can be located at:											
	http://www.pacificorp.com/es/hydro/hl/lr.html#											
12:00 p.m.	Working Lunch/Adjourn ACC Meeting											
12:30 p.m.	Monitoring and Evaluation (M&E) Subgroup											
	 Ongoing discussion by section; Ocean recruits 											
3:00 p.m.	Adjourn M&E Subgroup Meeting											

Join by Phone

+1 (503) 813-5252 [Portland, Ore.]

+1 (855) 499-5252 [Toll Free]

Conference ID: 848594

FINAL Meeting Notes Lewis River License Implementation Aquatic Coordination Committee (ACC) Meeting January 14, 2016 Merwin Hydro Control Center

ACC Participants Present (12)

Chris Karchesky, PacifiCorp
Frank Shrier, PacifiCorp
Erik Lesko, PacifiCorp
Kim McCune, PacifiCorp (via conference)
Baker Holden, USDA Forest Service
Bryce Michaelis, USDA Forest Service
Aaron Roberts, WDFW
Peggy Miller, WDFW
Pat Frazier, WDFW
Michelle Day, NMFS
Shannon Wills, Cowlitz Indian Tribe

Guests

Al Thomas, Columbian

Calendar:

February 11, 2016	ACC Meeting	Merwin Hydro
March (TBD)	ACC Meeting (Aquatic Fund Subgroup)	Merwin Hydro

Assignments from January 14, 2016	Status
None	

Assignments from December 10, 2015	Status
Frazier: Advise Shrier of available dates specific to the EDT subgroup meetings in January and February 2016.	Complete – Scheduled for 2/19/16

Assignments from February 13, 2014 meeting (revised 9/10/15)	Status
Frazier: Work on securing the 2012, 2013 and 2014 lower river coho abundance survey data for tributaries. Provide this information to Erik Lesko (PacifiCorp).	Pending as of 2/11/16 (Frazier noted he is working to get this done by April 2016 meeting)

Opening, Review of Agenda and Meeting Notes

Frank Shrier (PacifiCorp) called the meeting to order at 9:15 a.m. and reviewed the agenda and December 10, 2015 meeting notes and assignments. Kim McCune (PacifiCorp) requested the addition of the 2015 Aquatic Fund financials

The December 10, 2015 meeting notes were reviewed and approved without changes at 9:25am.

Public Comment

Al Thomas (Columbian) inquired if there are any reports from the Forest Service on slides in the Lewis River area. Bryce Michaelis (Forest Service) said that no slides have been confirmed.

Shrier noted that tons of wood is floating in the Swift Reservoir; the booms have broken twice and it's a mess. PacifiCorp is containing the debris to some degree. Swift Creek boom broke loose but it is now back and functioning. The Muddy River channel did not move from the high flow event but the P8 tributary did jump its channel.

M&E Update

Lesko informed the ACC attendees that a Hatchery & Supplementation (H&S) review of Sections 21 & 22 and combining results of the two. Rich Turner (NMFS) is needed at the next H&S Subgroup meeting. Discussion is needed about what to do with the steelhead program; overly successful; hold back or perhaps a hiatus of the wild brood program. Pat Frazier (WDFW) said they appear to be staying in the lower river (observed spawning in the lower river but it's all anecdotal at this time.

Steelhead Summit – there is a suggestion by the H&S Subgroup to hold a Summit to talk about genetics; how do we do the best job of measuring interaction of HORs and NORs in the lower river. Natural origin fish (NOR) have been low so far; we have been running the blank wire tag program for 4 years now; it is anticipated that a more NORs could be returning this year as a result of BWTs spawning in the lower river.

The M&E subgroup got through Section 9 of the plan and making progress on Sections 10 through 13.

Also a topic of discussion is the possibility of having an annual meeting (much like the bull trout subgroup) to review information collected regarding the M&E and H&S plans; are the current programs working, etc. When the subgroup is satisfied with the updated draft it will be submitted to the ACC for a 90-day review period for final submittal to the FERC on or before 12/31/16.

2015 Year-end Financial Reporting

McCune provided the following Lewis River Aquatic Fund year-end reporting, dated 12/31/2015. She also noted that the \$40,000 award to LCFEG for the 2014 Haapa Habitat Enhancement Group has yet to be funded and is not reflected in the 2014 financial reporting but will be included in the 2015 reporting. There will be no further contributions to the Bull Trout fund, according to the Lewis River Settlement Agreement, Section 7.5. However, the existing balance will carry forward each year until exhausted but no further interest will accrue.

7.5 Lewis River Aquatics Fund – Resource Projects: \$1,904,600.13*

*Balance as of 12/31/2015

7.5 Lewis River Aquatics Fund – Bull Trout: \$ 674,536.81*

*Balance as of 12/31/2015

7.1.1 Lewis River LWD Fund: \$ 64,500.00*

*Balance as of 12/31/2015

Note: The \$40,000 Aquatic Fund award to LCFEG for the 2014 Haapa Habitat Enhancement Group has yet to be contracted and funded and is not reflected in the 2015 financial reporting.

Study/Work Product Updates

Smolt releases at LRH; first pass water and release options

No updates from WDFW. WDFW suggested that this topic can be removed from the monthly agenda. This was in response to Michelle Day's (NMFS) question about WDFW efforts thus far for a temporary/alternative release site while we wait for the approvals of the Woodland Release Ponds. Aaron Roberts (WDFW) expressed creating a release mechanism for the fish in the existing adult pond is not feasible. The fish would not survive. WDFW has exhausted all possibilities. Netting out the fish was considered but this option will cause the fish too much stress. Day also suggested perhaps we could use a subsample method in a truck and gather data we need in a 24 hour period. Shrier said that would take one truck out of transport and crowding the fish for a 24 hour period is not recommended.

Day agreed that we can stop pursuing this option for now but if the Release Pond does not get constructed this year we will have to do something.

2016/2017 Aquatic Fund Process Update

The Aquatic Fund Subgroup met on January 7, 2016 to discuss changes/edits to a new edition of the synthesis matrix, LCFRB assessment of reach potential, incorporating readings of LCFRB and include that link as a tool for evaluators. These two tools are meant to be an aid for the proponents to help guide where the habitat enhancement efforts should be. The subgroup also discussed the idea of the "top 25" list, perhaps focusing efforts on Chinook but not let the other species go by the wayside.

The next Aquatic Fund subgroup meeting is in March 2016 with a specific date to be determined.

Woodland Release Ponds

Shrier informed the ACC that the City of Woodland has approved PacifiCorp's permit application; there is a public review period which ends February 29, 2016. PacifiCorp will then have everything needed to submit to the Department of Natural Resources (DNR). The ACC is requested to put pressure on DNR to treat this application as a priority in order that the release pond can be constructed in 2016.

Acclimation Pond/Crab Creek

Bryce Michaelis (USFS) recently visited the Clear Creek Acclimation pond after the high water event in December. Based on his assessment, the acclimation pond will need significant repairs. The intake of the pond was completely scoured out and the downstream channel eroded away.

Muddy River site was also affected by the recent high water event but damage to the site was not assessed. The iron deposits still remain. The Crab Creek Acclimation site was not accessed due to high snow.





Merwin Fish Collection Facility and General Operations (Attachment A)

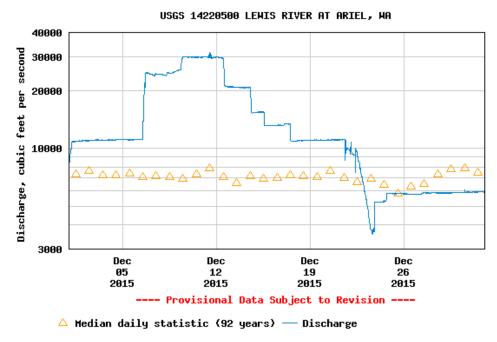
Chris Karchesky (PacifiCorp) reported during the month of December, a total 1,986 fish were captured at the Merwin Fish Collection Facility; the majority (79%) of these fish were hatchery winter steelhead (n=1,570) followed by late run hatchery coho (n=377). All hatchery summer and winter steelhead, hatchery fall Chinook, coded wire tag coho, and hatchery coho jacks were given to Washington Department of Fish and Wildlife. WDFW also retrieved seven wild adult coho for brood stock. Three wild winter steelhead and eleven resident rainbow trout less than twenty inches were captured at Merwin trap and returned downstream. Seven derby trout from Merwin reservoir were captured at Merwin trap post spill event and given to WDFW. Five blank

wire tag (BWT) winter steelhead, four cutthroat trout greater than thirteen inches, and three hundred seven were transported upstream of Swift Dam.

Operations at the Merwin trap were suspended on December 8-15, 17-18, and 20th of 2015 during a high flow/spill event. The Merwin trap was put back into automated service on December 20, 2015 following flows meeting criteria for safe trap operation. The Auxiliary Water Supply (AWS) system, which can boost attraction flow up to 400 cfs, was operated daily in exception to high water events during peak spill at Merwin Dam.

River flow below Merwin Dam ranged between approximately 3,590 cfs to 31,700 cfs during December.

Discharge, cubic feet per second



Karchesky (PacifiCorp) also informed the ACC that the upstairs sorting area floor will be sealed the week of January 18th. Cracks in the concrete have contributed to the floor leaking into the downstairs. During repairs PacifiCorp will continue to operate the elevator, but will not sort fish. It is anticipated that fish sorting will resume Monday, January 25th.

The second year of the Merwin Adult Trap Efficiency (ATE) Study will begin in mid-February. The 2015 interim report will be included in the 2015 Annual Fish Passage Report. The contractor is schedule to present the first year results and study status at the March 2016 ACC meeting.

Upstream Transport (Attachment A)

To date, 1,223 (746 m: 477 f) BWT winter steelhead have been transported and released upstream of Swift Reservoir (27 of which were captured via tangle net in the lower river as part of the Hatchery and Supplementation Plan Monitoring). In addition, 3,754 (2,030 m: 1,694 f: 30 j) coho (2,259 of which were captured at Lewis River Fish Hatchery) and 31 coastal cutthroat trout exceeding thirteen inches have been transported upstream of Swift Reservoir this year.

Swift Floating Surface Collector (Attachment A)

A total of 2,607 juvenile fish were collected during the month of December and 2,555 target species (>60mm) were transported downstream. The majority (69 percent) of these fish were coho (n=1,795), followed by spring Chinook (n=642), cutthroat (n=105), steelhead (n=40), planted rainbow (n=24), and bull trout (n=1). All salmonid fry, planted rainbow, and bull trout were returned to Swift Reservoir. Operations at the FSC were suspended on December 9-16, 23-26, and 30-31st of 2015 due to a spill event and heavy debris loading following recent flooding in the upper tributaries. To date, 47,780 fish have been captured at the FSC and a total of 40,002 target species (>60mm) have been transported below Merwin Dam.

Debris loading at the Swift FSC has remained high due to the recent influx of material entering the reservoir from the December high flow event. As a short term solution, PacifiCorp has instated 24/7 attendants on the collector to help manage debris and maintain daily operations. Karchesky (PacifiCorp) indicated that the majority of passage related injury and mortality observed has been associated with debris loading. As of January 14th, overall collection survival is 97.2%. PacifiCorp is considering what the best approach for long-term debris management is. Several small modifications that would focus on debris management and reducing fish mortality at the facility have been considered and maybe implemented this year. PacifiCorp has spent a lot of time exchanging ideas with others power utilities such as Tacoma Power who visiting the PacifiCorp site next month to refine ideas and learn from each other.

< Meeting adjourned at 10:35 a.m. >

Agenda items for February 11, 2016

- ➤ January 14, 2016 Meeting Notes
- ➤ M&E Update
- > EDT Presentation Phil Roni/Kevin Malone
- ➤ 2015 Fish Passage Overview
- > Study/Work Product Updates

Next Scheduled Meetings:

February 11, 2016	March 10, 2016
Aquatic Fund Subgroup (HCC)	Merwin Hydro Control Center (HCC)
Ariel, WA	Ariel, WA
12:00 p.m. –3:00 p.m.	9:00 a.m. – 3:00 p.m.

Meeting Handouts & Attachments:

- ➤ Meeting Notes from 12/10/15
- ➤ Agenda from 1/14/16
- ➤ Attachment A Lewis River Fish Passage Report (December 2015)

Lewis River Fish Passage Report

December 2015

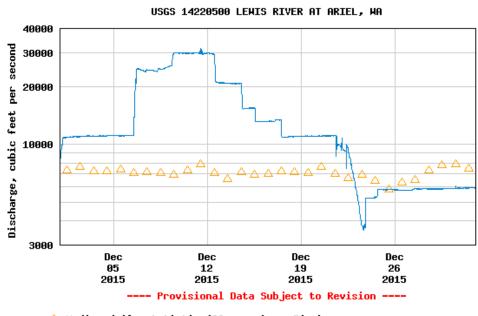
Merwin Fish Collection Facility and General Operations

During the month of December, a total 1,986 fish were captured at the Merwin Fish Collection Facility; the majority (79%) of these fish were hatchery winter steelhead (n=1,570) followed by late run hatchery coho (n=377). All hatchery summer and winter steelhead, hatchery fall Chinook, coded wire tag coho, and hatchery coho jacks were given to Washington Department of Fish and Wildlife. WDFW also retrieved seven wild adult coho for brood stock. Three wild winter steelhead and eleven resident rainbow trout less than twenty inches were captured at Merwin trap and returned downstream. Seven derby trout from Merwin reservoir were captured at Merwin trap post spill event and given to WDFW. Five blank wire tag (BWT) winter steelhead, four cutthroat trout greater than thirteen inches, and three hundred seven were transported upstream of Swift Dam.

Operations at the Merwin trap were suspended on December 8-15, 17-18, and 20th of 2015 during a high flow/spill event. The Merwin trap was put back into automated service on December 20, 2015 following flows meeting criteria for safe trap operation. The Auxiliary Water Supply (AWS) system, which can boost attraction flow up to 400 cfs, was operated daily in exception to high water events during peak spill at Merwin Dam.

River flow below Merwin Dam ranged between approximately 3,590 cfs to 31,700 cfs during December.

Discharge, cubic feet per second



△ Median daily statistic (92 years) — Discharge

Upstream Transport

To date, 1,223 (746 m: 477 f) BWT winter steelhead have been transported and released upstream of Swift Reservoir (27 of which were captured via tangle net in the lower river as part of the Hatchery and Supplementation Plan Monitoring). In addition, 3,754 (2,030 m: 1,694 f: 30 j) coho (2,259 of which were captured at Lewis River Fish Hatchery) and 31 coastal cutthroat trout exceeding thirteen inches have been transported upstream of Swift Reservoir this year.

Swift Floating Surface Collector

A total of 2,607 juvenile fish were collected during the month of December and 2,555 target species (>60mm) were transported downstream. The majority (69 percent) of these fish were coho (n=1,795), followed by spring Chinook (n=642), cutthroat (n=105), steelhead (n=40), planted rainbow (n=24), and bull trout (n=1). All salmonid fry, planted rainbow, and bull trout were returned to Swift Reservoir. Operations at the FSC were suspended on December 9-16, 23-26, and 30-31st of 2015 due to a spill event and heavy debris loading following recent flooding in the upper tributaries. To date, 47,780 fish have been captured at the FSC and a total of 40,002 target species (>60mm) have been transported below Merwin Dam.

Fish Facility Report Merwin Adult Trap December 2015 Spring Chinook Early Coho Late Coho S. Steelhead W. Steelhead Fall Chinook RT Recap $TOTAL^2$ AD-Clip RT Recap CWT Wild Recap AD-Clip Wild Wild Recap TOTAL² AD-Clip BWT RT Recap AD-Clip Recap M F JK 69 01-Dec 11 12 1 02-Dec 26 22 2 19 21 2 100 93 03-Dec 16 22 0 05-Dec 12 15 2 71 06-Dec 17 13 52 07-Dec 11 08-Dec 09-Dec 10-Dec 11-Dec 12-Dec 13-Dec 14-Dec 15-Dec 16-Dec 115 17-Dec 18-Dec 19-Dec 20-Dec 21-Dec 104 43 22-Dec 0 0 0 3 4 0 21 15 3 2 0 7 12 1 23-Dec 36 24-Dec 248 0 0 0 113 115 25-Dec 5 10 0 54 63 139 26-Dec 27-Dec 63

2 4 0

5 9 0

0 0 0

40 43 1

0 0 0

0 0 0

³ Total counts of resident rainbows include twenty-three derby trout.



28-Dec

29-Dec

30-Dec

31-Dec

Monthly

Monday, January 4th, 2016

49

90

149 84

246

1986

Only hatchery verses wild distinctions are currently being made. All hatchery fish are labeled as "AD-Clip".

² Total counts do not include recaptured salmon.

Fish Facility Report **Swift Floating Surface Collector** December 2015

	Coho			oho Chinook Steelhead								utthroat			Bull Trou	Planted		
Day	fry	parr	smolt	fry	parr	smolt	fry	parr	smolt	kelt	fry	< 13 in	> 13 in	fry	< 13 in	> 13 in	Rainbow	Total
01	0	23	6	0	7	1	0	2	0	0	0	1	0	0	0	0	0	40
02	0	38	42	0	0	11	0	0	0	0	1	7	0	0	0	0	1	100
03	0	37	37	0	1	26	0	0	3	0	0	6	0	0	0	0	1	111
04	0	27	40	0	0	35	0	0	5	0	0	5	0	0	0	0	2	114
05	1	22	22	0	0	4	0	0	2	0	0	7	0	0	0	0	3	61
06	0	29	37	0	1	10	0	0	2	0	1	4	0	0	0	0	1	85
07	0	25	17	0	0	17	0	3	1	0	2	6	0	0	0	0	0	71
08	0	27	40	0	0	14	0	0	4	0	0	2	0	0	0	0	0	87
09																		
10																		
11																		
12																		
13																		
14																		
15																		
16																		
17	3	288	124	0	0	112	1	5	1	0	4	26	0	0	1	0	3	568
18	2	80	110	0	0	100	0	0	3	0	0	4	0	0	0	0	0	299
19	6	35	42	0	0	33	1	0	3	0	0	3	0	0	0	0	2	125
20	0	1	93	0	0	115	0	0	0	0	0	3	0	0	0	0	3	215
21	0	54	80	0	1	46	0	1	1	0	0	5	0	0	0	0	0	188
22	0	2	5	0	0	0	0	0	0	0	0	3	0	0	0	0	0	10
23																		
24																		
25																		
26																		
27	0	83	102	0	9	16	0	0	1	0	0	8	0	0	0	0	7	226
28	0	70	35	0	4	45	0	0	1	0	5	0	0	0	0	0	0	160
29	0	4	106	0	0	34	0	0	0	0	0	2	0	0	0	0	1	147
30																		
31																		
Monthly	12	845	938	0	23	619	2	11	27	0	13	92	0	0	1	0	24	2607
Annual	5860	6729	25555	0	230	5305	5	47	1282	31	17	776	48	0	16	4	1876	47780



Monday, January 4th, 2016