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

Date & Time: Thursday, June 11, 2015

9:00 a.m. – 2:15 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 5/14/15 Meeting Notes
	➤ Comment & accept Agenda and 5/14/15 Meeting Notes
9:15 a.m.	Discussion of acclimation pond fish outplanting; possibly moving that to a
0.15	fall timeframe
9:45 a.m.	Smolt releases at LRH; first pass water and release options – Kinne/Lesko
10:15 a.m.	Break
10:30 a.m.	Production Numbers for 2016 Discussion – Spring Chinook in Upper watershed or release downstream
11:00 a.m.	Review the <i>Aquatic Fund Strategic Plan and Administrative Procedures</i> , <i>September 2013</i> Aquatic Fund Procedure
	• 2015/2016 Aquatic Fund Discussion (cont'd)
	Synthesis Matrix
12:00 p.m.	Lunch
1:00 p.m.	Procedural Discussion (whether ACC meetings could go to monthly
	updates with in-person meetings as needed).
1:30 p.m.	 Study/Work Product Updates
	 Woodland Release Ponds - Status
	 Hatchery Upgrades - Status
	 Acclimation Ponds - Status
	 Merwin Upstream Passage – Status
	 Swift Floating Surface Collector – Status
2:00 p.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#
2:15 p.m.	Adjourn

Join by Phone

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

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

Conference ID: 5687805

FINAL Meeting Notes Lewis River License Implementation Aquatic Coordination Committee (ACC) Meeting June 11, 2015 Conference Call

ACC Participants Present (15)

Chris Karchesky, PacifiCorp
Frank Shrier, PacifiCorp
Kim McCune, PacifiCorp
Erik Lesko, PacifiCorp
Adam Haspiel, USDA Forest Service
Baker Holden, USDA Forest Service
Michelle Day, NMFS
Rich Turner, NMFS (via conference)
Eric Kinne, WDFW
Peggy Miller, WDFW (via conference)
Aaron Roberts, WDFW
Diana MacDonald, Cowlitz PUD
Shannon Wills, Cowlitz Indian Tribe
Pat Frazier, LCFRB

Guests

Allen Thomas, Columbian

Calendar:

July 9, 2015	ACC Meeting	Merwin Hydro
August 13, 2015	ACC Meeting	Merwin Hydro

Assignments from June 11, 2015 meeting	Status
Frazier: Provide McCune a form that LCFRB uses whereby a	Complete –
landowner can sign evidencing his/her/their interest in supporting the	6/15/15
project and access thereto which is included with the aquatic fund	
project proposal.	
Shrier: Email Dr. Robert Al-Chokhachy data table that has been	Complete –
collected since the previous EDT runs in the upper Lewis, and data that	6/17/15
is currently lacking (i.e., needed)	
Shrier: Email article to ACC regarding using river ice to imprint fish in	Complete –
the embryonic stage.	6/17/15
Karchesky: Provide the ACC with a proposed summer operations	Complete –
(5 day/week – mid-July/August) protocols and trigger points for	7/1/15
Merwin Trap prior to the July 9, 2015 meeting.	

Assignments from February 13, 2014 meeting (revised 7/9/15)	Status
Kinne: Work on securing the 2011/2014 lower river	As of 7/09/15, this assignment is
coho abundance survey data for tributaries. Provide this	still pending.
information to Erik Lesko (PacifiCorp) for the 2013	
H&S Annual Report.	
Provide 2011 "final" maninstem abundance results.	

Opening, Review of Agenda and Meeting Notes

Frank Shrier (PacifiCorp) called the meeting to order at 9:05 a.m. and reviewed the agenda and assignments. No additions to the agenda were requested.

The May 14, 2015 meeting notes were reviewed and approved without change at 9:20am.

Kim McCune (PacifiCorp) will finalize the May 14, 2015 meeting notes for posting to the Lewis River website.

Review the Aquatic Fund Strategic Plan and Administrative Procedures, September 2013 Aquatic Fund Procedure; 2015/2016 Aquatic Fund Discussion (cont'd)

Shrier communicated that the Habitat Synthesis Matrix (created by the ACC in 2007) is not required but he would like the ACC to consider making this a requirement as part of a project proposal to aid the ACC in its review and evaluation. The proposer should also review the interactive map on Lower Columbia Fish Recovery Board (LCFRB) website http://www.lowercolumbiasalmonrecovery.org/mappage to see if anything has already been completed or if a project has already been proposed in the same reach. As a second step the ACC can also look at the LCFRB map(s) to see if there are any projects proposed or completed in the vicinity of the proposed habitat project.

McCune expressed that the project proposer should identify in its initial proposal what resources they reviewed that supports the submittal of their project for funding, i.e. the Habitat Synthesis Matrix and the LCFRB map page (link indicated above).

In addition, McCune expressed that as long as PacifiCorp is providing contract administrative service specific to the Lewis River Aquatic Fund she would like to see those who submit a project for funding to include a statement of their efforts thus far with achieving landowner access/support if their project must be crossed for access or if the project is on another's land. The absence of a Landowner Access Agreement can slow down a project significantly or stop a project from going forward even after the ACC has awarded funding.

Pat Frazier (LCFRB) will provide McCune a form that LCFRB uses whereby a landowner can sign evidencing his/her/their interest in supporting the project and providing access thereto which is included with the aquatic fund project proposal.

Frazier provided three (3) documents for ACC review to include Population Recovery Classifications, Reach Tier Designation Rules, a Summary of Selected Information from the Synthesis Matrix (on-the-ground knowledge) and he provided a cursory review of the Upper NR Lewis portion of the WA Lower Columbia Salmon Recovery and Fish & Wildlife Subbasin Plan, May 2010, (Attachment A).

The full version of the WA Lower Columbia Salmon Recovery and Fish & Wildlife Subbasin Plan http://media.wix.com/ugd/810197_55e6602727d64ec096afdb506b0d4ac8.pdf

These documents/resources are intended also to aid the ACC in its evaluations of Aquatic Fund projects going forward.

Frazier also provided a cursory review of the LCFRB map page that Shrier referenced earlier in this meeting. http://www.lowercolumbiasalmonrecovery.org/mappage

Frazier also pointed out on the website where each project is located, the title and description, full project details, species focus, project cost, project active and completion dates and limiting factors for a variety of species.

Shrier also mentioned that Dr. Al-Chochacky has developed a table of drainages that have recent data and where there are gaps that need to be updated to be able to populate the new modeling effort. Shrier will get that table to Frazier and Lesko and all other ACC representatives.

<Break 10:40am> <Reconvene 10:50am>

Discussion of Acclimation Pond Fish Outplanting; Possibly Moving to Fall Timeframe

Shrier informed the ACC attendees that this strategy fits with the new release strategy for the Lewis River hatchery spring Chinook. However, there is a concern about water availability. If we use Crab Creek as our guide, the water availability is better towards the end of October. Shrier will look for other records in the basin to make sure that, historically, water would be available for Muddy River and Clear Creek in the fall timeframe.

General discussion took place regarding a mid to late-October release before fish start smolting in the fall and to avoid disease outbreaks. Baker Holden (USDA Forest Service) said we may have to go through a NEPA Analysis again to include the public review process. Adam Haspiel (USDA Forest Service) indicated that a water rights and water usage analysis will need to be reviewed again to include 20-year precipitation data. Haspiel further stated that November 1st is a better date than mid-October for watering up the acclimation ponds. The ACC discussed the best release timing and possible benefits of a direct release sooner in the fall as opposed to waiting for the acclimation ponds to water up later in the fall.

The ACC agreed that releasing fish earlier in the fall is a better strategy and more akin to the natural out-migration behavior that has developed in the upper basin. The ACC agreed that a direct release of smolts would be done this fall as opposed to waiting for the acclimation ponds to fill. A general discussion took place in which two release sites were identified – one at the Clear Creek Bridge and the other at the bridge over the upper Lewis River near Crab Creek. Approximately 55,000 smolts would be released between to two sites.

Smolt Releases at LRH; First Pass Water and Release Options

WDFW is currently working on locating a trough at one of their other facilities for use as a temporary and periodic means to evaluate potential delayed mortality (ODS) prior to completion of the Woodland release ponds.

Production Numbers for 2016 Discussion – Spring Chinook juveniles in Upper watershed or release downstream

Aaron reported that, because of an oversight by the hatchery staff, only 55,000 spring Chinook will be available for acclimation direct release this fall. PacifiCorp will PIT tag 5,000 of those fish prior to release.

Study/Work Product Updates

Woodland Release Ponds

The Woodland Release Ponds will not be completed by December 26, 2015 due to Department of Natural Resources (DNR) land lease permitting. PacifiCorp proposed an extension letter to the FERC (by October 2015) requesting a new date of December 26, 2016.

Hatchery Upgrades:

Two projects remain as part of Schedule 8.7 of the Settlement Agreement.

Speelyai Hatchery Intake Modifications – begins week of 6/15/15; Project is still on schedule for completion in 2015.

Lewis River Downstream Intake - Project is still on schedule for completion by October 2015.

Acclimation Pond/Muddy Status

Shrier reported that PacifiCorp's internal engineer(s) are working up a feasibility study to utilize the existing water conveyance pipe at the Muddy Acclimation Ponds to service a free-standing tank (much like Crab Creek) to hold fish. This would be done instead of using the natural channel that has had water quality problems in the past.

In addition, Shrier mentioned another technique he read about that involves freezing water and allowing it to melt over the incubation trays. Recent work has shown that this technique imprints the fish embryos with cues for them to find the source stream when they return as adults. Ice must be fresh; no longer than 5 days. However, the results of some sort of experimentation would not be back for 4-5 years.

Shrier will email alternative information about the ice melt to the ACC for its review.

Acclimation Pond/Crab Creek

Scheduled to begin in July 2015.

Merwin Fish Collection Facility and General Operations (Attachment B)

Chris Karchesky (PacifiCorp) informed the ACC attendees that he plans to request a reduction to a 5-day per week sorting schedule beginning mid-July through August 2015. Karchesky will provide the data and detail to the ACC for its review and requests a decision at the July 9, 2015 meeting. Michelle Day (NMFS) requested that consideration be given to what is the trigger to go back to a 7-day per week schedule. When concessions are made it can be difficult to go back. The ACC agrees it makes sense to look at the 5-day per week proposal.

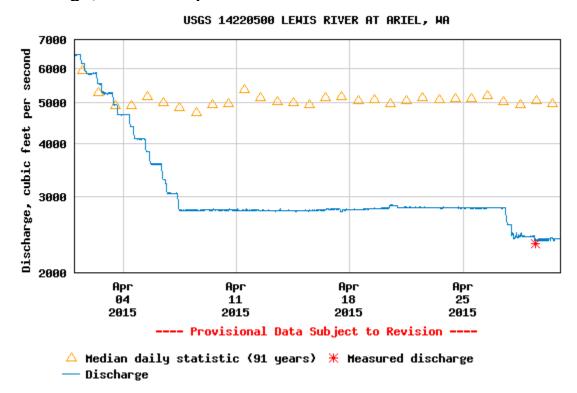
During the month of April, a total 856 fish were captured at the Merwin Fish Collection Facility; the majority (76%) of these fish were blank wire tag (BWT) winter steelhead (n=654) followed by hatchery spring Chinook (n=119). All hatchery steelhead were transported to Lewis River

Fish Hatchery and processed by WDFW. A total 72 of 654 BWT winter steelhead captured were radio tagged and returned downstream as part of the required Adult Trap Efficiency (ATE) study. The remainder of BWT winter steelhead were transported upstream in addition to one cutthroat trout and fifty-four recaptured radio tagged steelhead. Twenty-two wild winter steelhead, five wild spring Chinook, and one hundred-nineteen hatchery spring Chinook were captured and held for brood stock collection at Merwin and Speelyai Fish Hatcheries. Daily operation of the Merwin Fish Collection Facility were suspended on Friday, April 17 through and Sunday, April 19 due to a faulty limit switch that caused some minor mechanical damage to the fish crowder and lift system. The Merwin Trap was returned to service on Monday, April 20.

The Auxiliary Water Supply (AWS) system, which can boost attraction flow up to 400 cfs, was operated daily. The Ladder Water Supply (LWS) was operated daily throughout the month of April.

River flow below Merwin Dam ranged between approximately 2,370 cfs to 6,460 cfs during April.

Discharge, cubic feet per second



Upstream Transport (Attachment B)

To date, 1,064 (642 m: 422 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, seven cutthroat trout exceeding thirteen inches have been transported upstream of Swift Reservoir.

Swift Floating Surface Collector (Attachment B)

A total of 1,755 juvenile fish were collected during the month of April. The majority (42 percent) of these fish were coho (n=739), followed by spring Chinook (n=535), hatchery rainbow trout (n=272), steelhead (n=144), cutthroat trout (n=63), and bull trout (n=2). All hatchery rainbow trout, bull trout, and salmonid fry (<60mm) were returned back to Swift Reservoir. The FSC continuously ran throughout the month of April.

Other

Monitoring & Evaluation (M&E) 5-year Rewrite – Shrier informed the ACC that he will be emailing the M&E review schedule for its 90-day review period on or about June 26, 2015. During the 90-day review period an M&E Subgroup will work out any sticking points. PacifiCorp will suggest a meeting schedule spanned over the next 90 days.

< Meeting adjourned at 12:40 p.m. >

Agenda items for July 9, 2015

- ➤ Review June 11, 2015 Meeting Notes
- Mason, Bruce & Girard; update on lower river EDT, and talk about potential projects
- ➤ Aquatic Fund Process for 2015/2016
- > Smolt releases at LRH; first pass water and release options
- > Discussion of acclimation pond fish releases and possibly moving that to a fall timeframe
- ➤ Study/Work Product Updates

Public Comment: None

Next Scheduled Meetings:

July 9, 2015	August 13, 2015
Merwin Hydro Control Center	Merwin Hydro Control Center
Ariel, WA	Ariel, WA
9:00 a.m. – 1:00 p.m.	9:00 a.m. – 3:00 p.m.

Meeting Handouts & Attachments:

- \triangleright Notes from 5/14/15
- \triangleright Agenda from 6/11/15
- ➤ Attachment A Population Recovery Classifications, Reach Tier Designation Rules, a Summary of Selected Information from the Synthesis Matrix and Upper NF Lewis portion of the WA Lower Columbia Salmon Recovery and Fish & Wildlife Subbasin Plan, May 2010
- ➤ Attachment B Lewis River Fish Passage Report (April 2015)



Table 1. Population Recovery Classifications

Population	Viability Goal	Description	Persistence
Classification			Probability ¹
Primary (P)	High (H) or High+ (H+)	Low (negligible) risk of extinction	95-99%
		(represents a "viable" level)	
Contributing (C)	Medium (M)	Medium risk of extinction	75-94%
Stabilizing (S)	Low (L)	Stable, but relatively high risk of extinction	40-74%

¹100-year persistence probabilities

Table 2. Reach Tier Designation Rules

Des	ignation Rule
Reaches	Rule
Tier 1	All high priority reaches (based on EDT) for one or more Primary populations.
Tier 2	All reaches not included in Tier 1 and which are medium priority reaches for one or more Primary population and/or all high priority reaches for one or more Contributing populations.
Tier 3	All reaches not included in Tiers 1 and 2 and which are medium priority reaches for Contributing populations and/or high priority reaches for Stabilizing populations.
Tier 4	Reaches not included in Tiers 1, 2, and 3 and which are medium priority reaches for Stabilizing populations and/or low priority reaches for all populations.

Population/Reach ratings for mainstem estuary and tidally influenced reaches are determined on a case-by-case basis. See the rating and scoring criteria for these projects discussed later in this paper.

POPULATION/ REACH SCORE

Each project receives a numerical Population/Reach score to acknowledge the value of reaches providing habitat to multiple populations. Reaches differ in their actual or potential value to fish populations. The score is the total of the population classification (Primary = 3, Contributing = 2, Stabilizing =1) plus the species reach potential (high=3, medium=2, low=1) for each population using the targeted reach or reaches. Population classifications and species reach potentials for specific

Summary of Selected Information from Synthesis Matrix

	Sy	nthesis (Group Re	storatio	n Potent	tial	Re	covery	Plan T	ier Rat	ing	Reco	very Plan R	each Pot	ential
	High	H/M	Med	Low	NA	Unk	1	2	3	4	NA	High	Medium	Low	NA
Spring Chinook											The second	111-011	Mediam	LOVV	IVA
Upper Basin Coho	0	0	7	18	20	0	6	18	9	11	1	6	7	15	17
Upper Basin Vinter Steelhead	0	2	13	20	6	4	6	18	10	10	1	5	15	24	1
Upper Basin	1	2	20	11	7	4	6	18	10	10	1	18	9	12	6

Upper NF Lewis Spring Chinook

Potential change in population performance with degradation and restoration

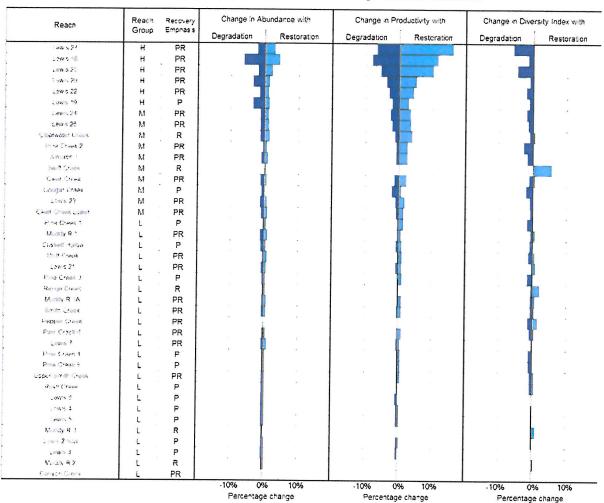


Figure K-28. Upper North Fork Lewis River subbasin spring Chinook ladder diagram. The rungs on the ladder represent the reaches and the three ladders contain a preservation value and restoration potential based on abundance, productivity, and diversity. The units in each rung are the percent change from the current population. For each reach, a reach group designation and recovery emphasis designation is given. Percentage change values are expressed as the change per 1000 meters of stream length within the reach. See Appendix E Chapter 6 for more information on EDT ladder diagrams. Some low priority reaches are not included for display purposes.

Upper NF Lewis Coho

Potential change in population performance with degradation and restoration

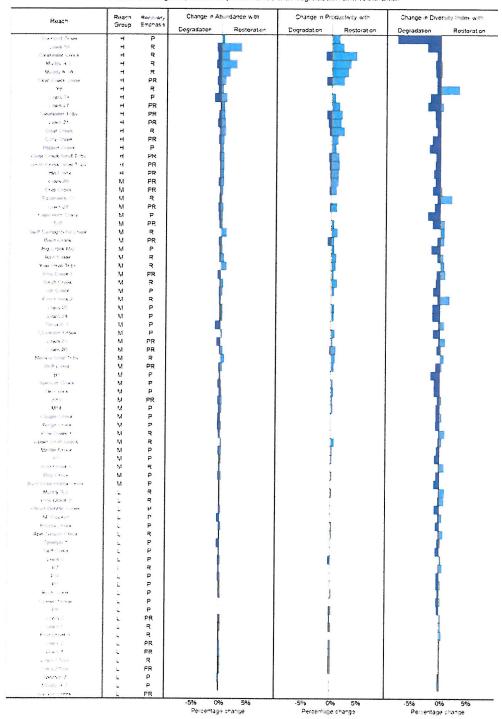


Figure K-29. Upper NF Lewis coho ladder diagram. The rungs on the ladder represent the reaches and the three ladders contain a preservation value and restoration potential based on abundance, productivity, and diversity. The units in each rung are the percent change from the current population. For each reach, a reach group designation and recovery emphasis designation is given. Percentage change values are expressed as the change per 1000 meters of stream length within the reach. See Appendix E Chapter 6 for more information on EDT ladder diagrams. Some low priority reaches are not included for display purposes.

Upper NF Lewis Winter Steelhead Potential change in population performance with degradation and restoration

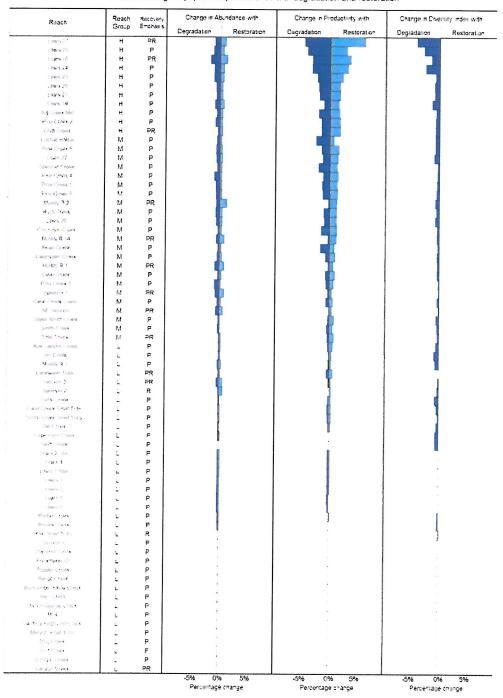


Figure K-30. Upper Lewis winter steelhead ladder diagram. The rungs on the ladder represent the reaches and the three ladders contain a preservation value and restoration potential based on abundance, productivity, and diversity. The units in each rung are the percent change from the current population. For each reach, a reach group designation and recovery emphasis designation is given. Percentage change values are expressed as the change per 1000 meters of stream length within the reach. See Appendix E Chapter 6 for more information on EDT ladder diagrams. Some low priority reaches are not included for display purposes.

	Channel etability		rabitat diversity	Predation	Competition (other spp)	Competition (hatchery fish)	Withdrawals	ue		nent		Chemicals	Obstructions	Pathogens	Harassment / poaching	
Reach Name	5			Pred	Com	Com (hatc	WEF	Oxygen	Flow	Sediment	Food	Chem	Obstr	Patho	-taras poach	
Lewis 27			0	0		0			0	0	0			•		1
Lewis 18	0	0	0						0					•	•	
Lewis 25	 0			•		•			•		0			•		1
Lewis 20	•	0	•	0		•			•		•					1
Lewis 22	 •	•	•	•		•			•		•		1			
Lewis 19	 •	•	•	•		•			•	0	•					
Lewis 24	•	•	•	0		•			•	Ŏ	•					(
Lewis 26	0	•		0		•			•	Ŏ	0					1
Clearwater Creek	•	•		•		•			•	Ŏ	•	_	-			
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Swift Creek		•							•	•		_	-+		+	_
Clear Creek	•	•		•		•			0		•	-+	-+			-
Cougar Creek										•	+		\dashv			_
Lewis 23	•	•	•	•		•								-+	\dashv	_
Clear Creek Lower	•	•		•		•			0		0	-	\dashv	_		-
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Muddy R 1		•	•	•		•			•				-		-+	4
Cussed Hollow	ė	•	•						•	•		-		-+		7
Drift Creek	•	•	•						•	0		\neg	\dashv		\dashv	
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Pine Creek 3	•	0								•					-	4
Range Creek	•	0								•		_	-		-	_
fluddy R 1A	•	•	•			•				•	•		-		-	_
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Figure K-31. Upper North Fork Lewis River subbasin spring Chinook habitat factor analysis diagram. Diagram displays the relative impact of habitat factors in specific reaches. The reaches are ordered according to their restoration and preservation rank, which factors in their potential benefit to overall population abundance, productivity, and diversity. The reach with the greatest potential benefit is listed at the top. The dots represent the relative degree to which overall population abundance would be affected if the habitat attributes were restored to template conditions. See Appendix E Chapter 6 for more information on habitat factor analysis diagrams. Some low priority reaches are not included for display purposes.

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Occability of		Channel stability	Habitat diversity	lemperature	Competition	Competition	Withdrawala	S S S S S S S S S S S S S S S S S S S	500	Sediment	9	Chemicals	Obstructions	Pathogens	Harassment / poaching	
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Clearwater Creek				1	'	-		-		9	9			•	•	0
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Clear Creek Lower) •	•	-		+	-	0	9	0			•		+
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Clearwater Tribs	•	1	-			•	-	-		0	•			•		
Lewis 21	•		•	0		0	ļ		•	0	•			•		
Clear Creek	•	15	-	•		•			0		0			•		0
Curly Creek	•		4-			•			•		•					
Pepper Creek				•		•			•		•					0
Clear Creek Small Tribs	•			•		•					•			•		0
Smith Creek Small Tribs	•	0		•		•			•		0			•		Ŏ
Little Creek	•					•			•		•					0
Lewis 20	•		•	•		•			•	•	0					•
Crab Creek	•		•	•		•			•		•					0
Panamaker Cr	•	•							•	•				$\neg \tau$	_	
Lewis 22	•	•		•		•				0	•			_		•
Cape Horn Creek	•	•	•			•			•	•					_	0
810	•	•							•	0			-	+	-	•
Bean Creek	•	0							•	•	•	\dashv		-	\rightarrow	0
Big Creek Mid	0	0							•	0			_	-	-+	•
Rain Creek	0	0	•	•		•			0		•		_	\dashv		=
Pine Creek 1											-		-	-		
mith Creek	•		•	•						•		+	-+	•	-	_
im Creek	•	0	•				_		•		0			+	-+	+
ine Creek 2							_		-		-	-		-	+	•
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Figure K-32. Upper NF Lewis coho habitat factor analysis diagram. Diagram displays the relative impact of habitat factors in specific reaches. The reaches are ordered according to their restoration and preservation rank, which factors in their potential benefit to overall population abundance, productivity, and diversity. The reach with the greatest potential benefit is listed at the top. The dots represent the relative degree to which overall population abundance would be affected if the habitat attributes were restored to template conditions. See Appendix E Chapter 6 for more information on habitat factor analysis diagrams. Some low priority reaches are not included for display purposes.

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Doubles			Channel stability	riabitet diversity	l emperature	Predation	Competition (other spp)	Competition (hatchery fish)	Mithdesimal	nor awars	Oxygen	2	1	Juaninac	Don Ho	Obstructions	Pathocana	Harassment /	chlng
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Figure K-33. Upper NF Lewis winter steelhead habitat factor analysis diagram. Diagram displays the relative impact of habitat factors in specific reaches. The reaches are ordered according to their restoration and preservation rank, which factors in their potential benefit to overall population abundance, productivity, and diversity. The reach with the greatest potential benefit is listed at the top. The dots represent the relative degree to which overall population abundance would be affected if the habitat attributes were restored to template conditions. See Appendix E Chapter 6 for more information on habitat factor analysis diagrams.

Lewis River Fish Passage Report

May 2015

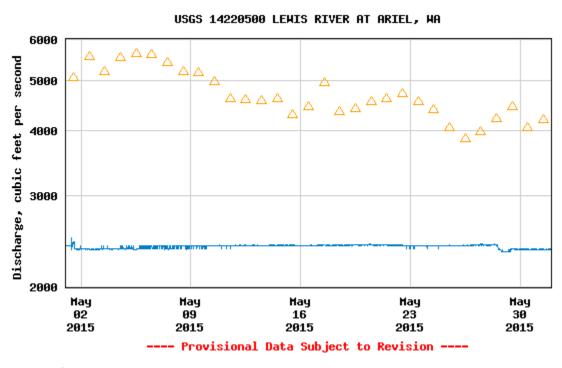
Merwin Fish Collection Facility and General Operations

During the month of May, a total 598 fish were captured at the Merwin Fish Collection Facility; the majority (44%) of these fish were hatchery spring Chinook (261) followed by blank wire tag (BWT) winter steelhead (n=158). All hatchery steelhead were given to Washington Department of Fish and Wildlife. A total 12 of 158 BWT winter steelhead captured were radio tagged and returned downstream as part of the ongoing Adult Trap Efficiency (ATE) study required as part of the Lewis River Settlement Agreement. The remainder of BWT winter steelhead were transported upstream in addition to twenty-five recaptured radio tagged steelhead. Twelve wild winter steelhead, seven wild spring Chinook, and two hundred-twenty eight (three of which were recaptured) hatchery spring Chinook were collected and held for brood stock at Merwin and Speelyai Fish Hatcheries. Daily operation of the Merwin Fish Collection Facility was suspended late Friday, May 1 due to a faulty limit switch. The Merwin Trap was returned to service on Saturday, May 2.

The Auxiliary Water Supply (AWS) system, which can boost attraction flow up to 400 cfs, was operated daily. The Ladder Water Supply (LWS) was operated daily throughout the month of May.

River flow below Merwin Dam ranged between approximately 2,360 cfs to 2,410 cfs during May.

Discharge, cubic feet per second



△ Median daily statistic (91 years) — Discharge

Upstream Transport

To date, 1,210 (737 m: 473 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, seven cutthroat trout exceeding thirteen inches have been transported upstream of Swift Reservoir.

Swift Floating Surface Collector

A total of 18,637 fish were collected during the month of May. The majority (80 percent) of these fish were juvenile coho (n=14,912), followed by juvenile spring Chinook (n=1,938), juvenile steelhead (n=887), hatchery rainbow trout (n=541), cutthroat trout (n=333), steelhead kelt (n=23) and juvenile bull trout (n=3). All hatchery rainbow trout, bull trout, and salmonid fry (<60mm) were returned back to Swift Reservoir. The FSC continuously ran throughout the month of May.

Date																			Fish Mer	Faci win Mag	Adul	t Tra	rt ip																		e ²		oat (>13 inches)	vat (< 15 menes) w (< 20 inches)	out (> 13 inches) out (< 13 inches)	-
ing]			Sprin	g Chir	nook ¹]	Early (Coho								Late C	oho					S. S	steelhead			7	W. Stee	lhead			F	Fall Chinook	C		ckey	ш	thr	nbo	1. I	Total
port	A	D-Clip	RT Reca	р	Wild	TOT	ΓAL	A	AD-Clip	RT Re	cap	CWT		Wild	Wild Reca	p	TOTAL ³		AD-Clip	С	WT	Wild	1	Wild Recap	TOTA	L^3	Fresh		Recap	Wild	AD-Cl	ip 1	BWT	RT Recap	Wild	AD-0	Clip	Wild	Recap		Soc	Chum	Cul	Rai	Bul Bul	Daily 7
Re	M	F JK	K M I	M	F JK	M	F JK	M	F Jk	M	F N	и F	JK N	M F JI	M F .	JK	M F JK	М	F JI	M	F JK	M F	JK	M F JK	M F	JK	M	F	M F	M F	M	F M	F	M F	M F	M F	JK	M F JK	M F	JK M	1 F I	M F	1		. '	Da
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 $^{^3\,\}mathrm{Total}$ counts do not include recaptured salmon.



Monday, June 1st, 2015

 $^{^{1}\,\}text{Only hatchery verses wild distinctions are currently being made.}\,\,\text{All hatchery fish are labeled as "AD-Clip"}.$

² Juvenile sockeye are unsexed and recorded as males.

Fish Facility Report Swift Floating Surface Collector May 2015

	Coho			Chinook			Steelhead				Cutthroat			Bull Trout			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	0	107	0	0	17	0	0	28	0	0	18	2	0	0	0	6	178
02	0	0	56	0	0	26	0	1	13	0	0	4	8	0	0	0	5	113
03	0	0	314	0	0	22	0	0	38	0	0	13	0	0	0	0	21	408
04	1	0	198	0	0	31	0	0	29	0	0	17	1	0	0	0	9	286
05	0	0	205	0	0	18	0	0	17	0	0	12	0	0	0	0	25	277
06	0	0	80	0	0	11	0	0	20	0	0	17	1	0	0	0	54	183
07	0	0	248	0	0	13	0	0	39	1	0	29	10	0	0	0	56	396
08	0	0	481	0	0	66	0	0	39	0	0	10	6	0	0	0	31	633
09	0	3	409	0	1	84	0	0	27	0	0	10	1	0	0	0	9	544
10	0	2	737	0	1	161	0	0	21	0	0	5	0	0	0	0	13	940
11	0	0	637	0	1	121	0	0	16	0	0	3	0	0	0	0	16	794
12	0	1	539	0	0	76	0	2	27	0	0	4	0	0	0	0	30	679
13	0	0	830	0	0	117	0	0	54	2	0	13	0	0	0	0	33	1049
14	0	3	1840	0	0	56	0	0	62	1	0	26	3	0	0	0	51	2041
15	0	0	397	0	0	128	0	0	53	2	0	5	1	0	0	0	24	610
16	0	15	484	0	0	60	0	0	35	1	0	7	1	0	0	0	27	630
17	0	1	685	0	0	68	0	4	24	1	0	8	1	0	0	0	17	809
18	0	2	1540	0	0	40	0	0	75	4	0	14	0	0	1	0	37	1713
19	0	1	226	0	0	33	0	0	20	1	0	8	1	0	0	0	16	306
20	0	0	475	0	0	52	0	0	13	1	0	23	0	0	1	0	11	576
21	0	1	998	0	1	98	0	0	58	0	0	11	1	0	0	0	28	1196
22	2	1	174	0	0	24	0	0	9	3	0	4	0	0	1	0	11	229
23	0	0	243	0	0	38	0	0	15	0	0	10	0	0	0	0	2	308
24	0	0	172	0	0	30	0	0	7	1	0	2	0	0	0	0	1	213
25	0	0	118	0	0	38	0	0	23	1	0	4	1	0	0	0	1	186
26	0	0	316	0	0	58	0	0	16	4	0	1	0	0	0	0	1	396
27	0	0	128	0	0	39	0	0	19	0	0	0	0	0	0	0	0	186
28	1	0	250	0	0	59	0	0	20	0	0	2	0	0	0	0	3	335
29	1	0	248	0	0	54	0	0	24	0	0	3	0	0	0	0	0	331
30	0	0	468	0	0	131	0	0	14	0	0	2	0	0	0	0	3	617
31	0	4	1271	0	0	165	0	0	26	0	0	10	0	0	0	0	0	1476
Monthly	5	34	14873	0	4	1934	0	7	881	23	0	295	38	0	3	0	541	18637
Annual	5823	4046	16139	0	167	3949	0	20	1049	24	0	530	45	0	14	0	1279	33085



Monday, June 1st, 2015