

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

Date & Time: Thursday, July 9, 2015
9:00 a.m. – 1:00 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 <ul style="list-style-type: none"> ➤ Review Agenda and 6/11/15 Meeting Notes ➤ Comment & accept Agenda and 6/11/15 Meeting Notes ➤ Public Comment Opportunity
9:15 a.m.	Mason, Bruce & Girard – Provide update on lower river EDT, and talk about potential projects
10:30 a.m.	DECISION: Reduce sorting fish at the Merwin Trap to a 5-day week schedule beginning mid-July through August 2015 – Karchesky
10:30 a.m.	Break
10:45 a.m.	Smolt releases at LRH; first pass water and release options – Kinne/Lesko
11:15 a.m.	Production Numbers for 2016 Discussion – Spring Chinook in Upper watershed or release downstream
11:30 a.m.	Review the <i>Aquatic Fund Strategic Plan and Administrative Procedures, September 2013</i> Aquatic Fund Procedure <ul style="list-style-type: none"> ➤ 2015/2016 Aquatic Fund Discussion; modify procedures, suspend for one year, etc. (cont'd)
12:00 p.m.	Working Lunch (Please bring your lunch)
12:30 p.m.	Study/Work Product Updates: <ul style="list-style-type: none"> ○ Woodland Release Ponds - Status ○ Hatchery Upgrades - Status ○ Acclimation Ponds - Status ○ Merwin Upstream Passage – Status ○ Swift Floating Surface Collector – Status ○ Monitoring and Evaluation Plan Revision - Status
12:45 p.m.	<ul style="list-style-type: none"> ➤ Next Meeting's Agenda Note: all meeting notes and the meeting schedule can be located at: http://www.pacificorp.com/es/hydro/hl/lr.html# <ul style="list-style-type: none"> ➤ Public Comment Opportunity
1:00 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
July 9, 2015
Conference Call

ACC Participants Present (16)

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
 Eric Kinne, WDFW
 Peggy Miller, WDFW
 Aaron Roberts, WDFW
 Bryce Glaser, WDFW
 Diana MacDonald, Cowlitz PUD
 Pat Frazier, LCFRB
 Carol Serdar, WDOE

Guests

Allen Thomas, Columbian
 Willis E. (Chip) McConnaha, Ph.D.

Calendar:

August 13, 2015	ACC Meeting	Merwin Hydro
September 10, 2015	ACC Meeting	Merwin Hydro

Assignments from July 9, 2015 meeting	Status
McCune: Email the <i>Capturing Habitat Restoration Actions in Ecosystem Diagnostics & Treatment (EDT)</i> PowerPoint presentation to the ACC.	Complete – 7/10/15
McCune: Email the final document titled, <i>Operational Guidelines in Consideration of a 5-Day summer Work Schedule at the Merwin Fish Collection Facility</i> to the ACC.	Complete – 7/17/15
McCune: Distribute a copy of the updated Lewis River Synthesis Matrix CD to the ACC members upon completion.	
ACC: Schedule an initial meeting in the month of October 2015 for the review of the Aquatic Fund Strategic Plan and Administrative Procedures 2016/2017 funding cycle.	
McCune/Shrier: Submit a one year extension request to the FERC for the M&E Revised Plan.	
McCune: Provide an additional 7-day review and comment period to those ACC members not in attendance specific to the Aquatic Fund moratorium decision.	Complete – 7/17/15

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

Assignments from February 13, 2014 meeting (revised 7/9/15)	Status
Kinne: Work on securing the 2012, 2013 and 2014 lower river coho abundance survey data for tributaries. Provide this information to Erik Lesko (PacifiCorp).	As of 7/9/15, this assignment is still pending.

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. Shrier noted that he will provide an update on the Lewis River low flow conditions.

The June 11, 2015 meeting notes were reviewed and approved without change at 9:15 am.

Kim McCune (PacifiCorp) will finalize the June 11, 2015 meeting notes for posting to the Lewis River website.

Public Comment

None

Mason, Bruce & Girard/ICF (Willis E. (Chip) McConnaha, Ph.D.) – Provide update on lower river EDT, and talk about potential projects

McConnaha provided a PowerPoint presentation titled, “*Capturing Habitat Restoration Actions in Ecosystem Diagnostics & Treatment (EDT)*” (see [Attachment A](#) for greater detail) for ACC review.

McConnaha addressed the objectives of Phase 1 specific to the Lower Lewis River Habitat Restoration Assessment to include, but not limited to, the following:

- Contribute to development of an updated Lewis River EDT model to evaluate restoration projects
- Incorporate restoration projects completed after 2007
- Develop conceptual models of potential effectiveness of categories of restoration actions
- Define intensity of implementation of specific actions
- Compute change in EDT output based on new environmental data

Subsequent phases will focus on quantification of biological benefits of implemented actions and restoration strategies.

McConnaha informed the ACC attendees that Mobrاند Biometrics were the original creator of the 2007 EDT Model which has been reprogrammed and updated to the EDT 3 platform; new software update. The basic methodology used to estimate attributes at a reach scale did not change.

McConnaha provided a map of the habitat restoration projects (see PowerPoint) that have already occurred in the Lewis River basin including some that PacifiCorp has funded using the Aquatic Funds. He further explained how those projects would be added into the 2007 model database to update the EDT model and how they would take a list of proposed projects they are developing to evaluate for potential in lieu funding using the EDT.

The approach McConnaha described would be to determine the Effectiveness and Intensity of each project and then fit that into a Restoration Strategy. Effectiveness is a scientific approach that steps back and looks at the biological benefits of certain restoration activities on a broad scale.

Depending on how each project “scores” it will be plugged into the EDT model as a viable In-Lieu project and the EDT will spit out the benefits to fish and how much fish production you can expect from each action. EDT will also look at all the activities as a whole to give an overall picture of the benefits. As an example, a project of low Intensity will not likely be a large enough scale to show up on EDT’s radar.

McConnaha provided detail in the PowerPoint illustrating that, in the world of fish habitat restoration there are really only six different types: flow modification, riparian restoration, reconnecting floodplains (dike removal), wood structures, connectivity (removing or replacing culverts), and road decommissioning (reduces sediment to streams)

McConnaha provided an example of an action termed ‘Large woody debris delivery’ which would be enhancing riparian with wood structures but also planting trees that would provide wood to the stream in the future. The more planting you do, the higher the future rating of the project.

McConnaha then provided an illustration of the six habitat actions in terms of how they are organized in the model and what features contribute to the action. The purple circles have an effectiveness rating from 1 to 5. The final PowerPoint slide was detail from the Lower Columbia Fish Recovery Board’s project list with Lockwood Creek restoration that has a high potential because it hits on restoring riparian habitat, adding to the wood inputs, and reconnecting the floodplain.

McCune will email the PowerPoint presentation to the ACC.

In response to a question from Michelle Day (NMFS) about what is happening with the baseline, McConnaha stated that they are updating the 2007 EDT platform up to what is currently being used now. This is accomplished by starting with the baseline from 8 years ago and providing updated inputs.

McConnaha stated that collecting new data is ongoing to include subsequent phases of searching for new information.

General discussion took place regarding data collected since early 2000s, the need to be careful about going back and what are the ultimate objectives. Also discussed is how far we have come from the baseline to where we are now; how does it allow us to evaluate new projects.

Pat Frazier (LCFRB) indicated that the analysis using projects completed to date represents what we have done and how far we have moved the needle; and indicates if the Lewis River is on track with the Recovery Plan

McConnaha stated that the purpose is to provide a platform to evaluate benchmarks and the documentation phase will include where attributes are changed.

McConnaha informed the ACC attendees that there are potentially 46 attributes within EDT but not all of them are currently being used.

<Break 10:40am>

<Reconvene 10:50am>

DECISION: Reduce sorting fish at the Merwin Trap to a 5-day week schedule beginning mid-July through August 2015 – Chris Karchesky

Karchesky provided a cursory review of the memo titled, “*Operational Guidelines in Consideration of a 5-Day summer Work Schedule the Merwin Fish Collection Facility*” (DRAFT) – July 1, 2015 document for ACC consideration ([Attachment B](#)). This document was emailed to the ACC for its review on July 1, 2015.

The ACC agreed with the new schedule as written, however, PacifiCorp will consult with the ACC prior to implementing the five (5) day per week summer operations schedule each year.

Smolt releases at LRH; first pass water and release options – Kinne/Lesko

Still looking for a vessel suitable for this release; no further update. Add this topic to the August 13, 2015 ACC meeting agenda.

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

Add this topic to the monthly updates to inform the ACC of any changes.

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

Shrier informed the ACC that he has nearly completed updating the 2007 Lewis River Habitat Synthesis Tool. McCune will distribute a copy of the updated CD to the ACC members upon completion.

The ACC attendees expressed that they would like to consider an Aquatic Fund moratorium for the 2015/2016 funding cycle due to a number of reasons:

- Time needed to review data specific to EDT model to evaluate restoration projects
- Updated Synthesis Matrix
- Insurance requirements; PacifiCorp’s review of its limits
- Establishing process for securing landowner acknowledgement/access form

McCune review the following Lewis River Settlement Agreement requirement as adopted into the *Aquatics Fund – Strategic Plan and Administrative Procedures, Prepared by PacifiCorp and Cowlitz PUD - September 2005, revised January 2009 and September 2013*

7.5.3.2 Resource Project Proposal, Review, and Selection.

(1) *By the first anniversary of the Effective Date, the Licensees shall develop, in Consultation with the ACC, (a) a strategic plan consistent with the guidance in Section 7.5.3.1 above to guide Resource Project development, solicitation, and review; and (b) administrative procedures to guide implementation of the Aquatics Fund. Both may be modified periodically with the approval of the ACC.*

The ACC attendees agreed to gather a subgroup to address the modifications, process and procedures to prepare for the 2016/2017 Aquatic Fund cycle. Those members include, but are not limited to, the following and they will meet periodically over the next twelve months:

Kim McCune	PacifiCorp
Frank Shrier	PacifiCorp
Michelle Day	NMFS
Baker Holden	USFS
Adam Haspiel	USFS
Shannon Wills	Cowlitz Indian Tribe
Peggy Miller	WDFW
Eric Kinne	WDFW
Diana Gritten-MacDonald	Cowlitz PUD
Pat Frazier	LCFRB

The ACC will schedule an initial meeting in the month of October 2015.

The ACC agreed to a moratorium of the 2015/2016 Aquatic funding cycle. The subgroup will determine all appropriate steps relative to notifying external parties to include the FERC and the Annual Reporting requirement in April 2016.

McCune will provide an additional 7-day review and comment period to those ACC members not in attendance.

Study/Work Product Updates

Lewis River Flow Regime

Shrier informed the ACC attendees that the flow conditions on the Lewis River are poor and there is very little projected rain in the near future.

In an effort to slow drafting of the reservoirs in order to preserve water for the more biologically sensitive fall spawning period the Flow Coordination Committee agreed to the following modified minimum flow schedule.

Date	Minimum Flow
July 3 – July 10	1500 cfs
July 11-30	1200 cfs
July 31 – October 15	800 cfs

The current inflow is as follows:

Speelyai	2.9cfs
Muddy	89 cfs
Merwin	897 cfs
Swift	724 cfs
Yale	763 cfs

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. The in-water work plan is currently in review with Department of Ecology.

Hatchery Upgrades:

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

Speelyai Hatchery Intake Modifications – working on coffer dams; on schedule for 2015 completion.

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

Acclimation Pond/Muddy Status

Shrier recommended the use of the ice melt technique as an experiment; however, results would not be seen for five (5) years. There may be a benefit to the use of ice, its early acclimation (embryonic imprint) as part of the overall acclimation process.

Bob Rose (Yakama Nation) is touring with Shrier on July 10, 2015 and Shrier will discuss the Muddy acclimation pond, available options and report back to the ACC.

The ACC is open to the idea and the kind of testing that Andrew Dittman wants to do. But Shrier committed that if we pursue this experiment, then the acclimation fish numbers will still remain at 100,000 unless WDFW wants to change the stocking numbers.

Acclimation Pond/Crab Creek

Construction began this week; where the pond intake will be placed has been sited; fire restrictions currently in effect so the contractor is working through these challenges.

Monitoring and Evaluation (M&E) Revised Plan

The draft red-line was emailed to the ACC on July 1, 2015 for its 90-day review and comment period. The ACC attendees expressed concern about the ability to complete its review within that time frame.

The ACC agreed that in order to provide a thorough and comprehensive 5-year M&E Revised Plan it was appropriate to request a one year extension (December 26, 2016) from the FERC.

McCune and Shrier will write the extension request letter and submit to the FERC.

Lewis River Fish Passage

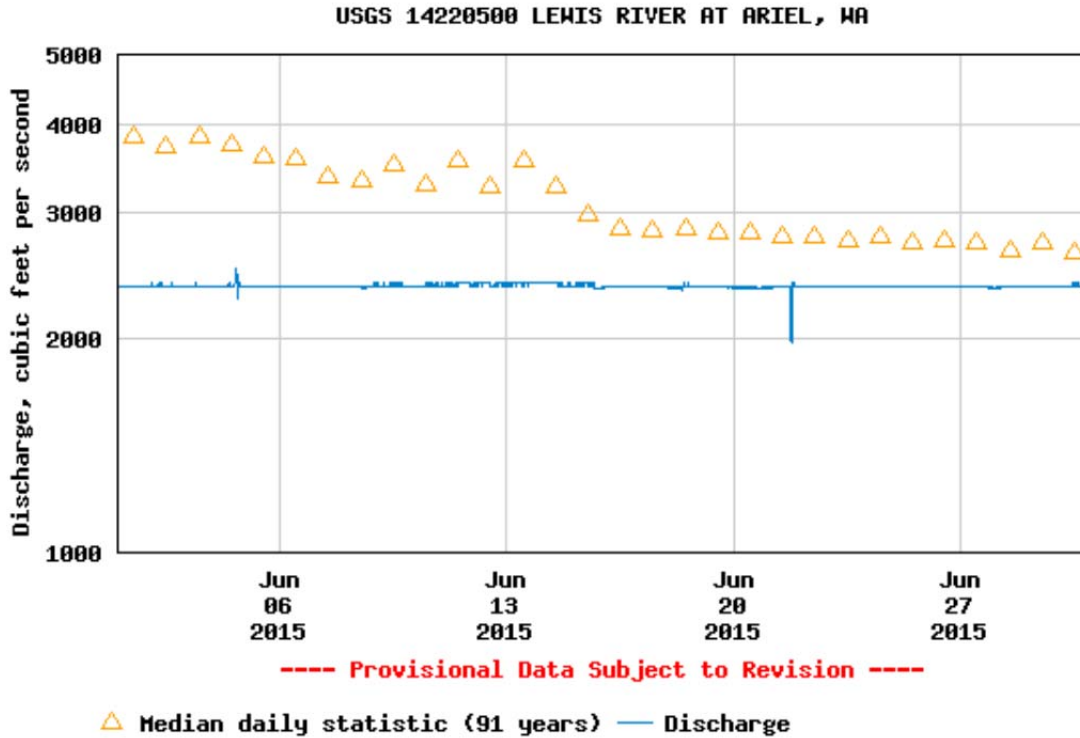
Karchesky informed the ACC that PacifiCorp is making efforts to install a lead (or fish guidance) net at the floating surface collector (FSC) before the 2016 out-migration season. This net will help smolts find the entrance of the FSC and improve collection efficiency. Current estimates of collection efficiency are below the 98 percent required in the settlement agreement. Karchesky will provide a presentation of items learned during the 2015 fish behavior study at the September ACC meeting.

Merwin Fish Collection Facility and General Operations ([Attachment C](#))

During the month of June, a total 861 fish were captured at the Merwin Fish Collection Facility; the majority (72%) of these fish were hatchery summer steelhead (n=619) followed by hatchery spring Chinook (n=217). All hatchery steelhead were either transported downstream by Washington Department of Fish and Wildlife as part of the angler recycling program or taken to Merwin Hatchery for brood stock. All spring Chinook captured were transported to Speelyai Fish Hatchery for brood stock. The Merwin Fish Collection Facility ran continuously throughout the month of June.

The Auxiliary Water Supply (AWS) system, which can boost attraction flow up to 400 cfs, was operated daily in addition to the Ladder Water Supply (LWS) throughout the month of June. River flow below Merwin Dam ranged between approximately 2,340 cfs to 2,510cfs during June.

Discharge, cubic feet per second



Upstream Transport ([Attachment C](#))

To date, 1,218 (741 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, eight coastal cutthroat trout exceeding thirteen inches have been transported upstream of Swift Reservoir this year.

Swift Floating Surface Collector ([Attachment C](#))

A total of 8,288 fish were collected at the Swift Floating Surface Collector (FSC) during the month of June. The majority (87 percent) of these fish were juvenile coho (n=7,192), followed by hatchery rainbow trout (n=569), juvenile spring Chinook (n=300), juvenile steelhead (n=152), cutthroat trout (n=68), steelhead kelt (n=7) and bull trout (n=1). All hatchery rainbow trout, bull trout, and salmonid fry (< 60mm) were returned back to Swift Reservoir. The FSC continuously ran throughout the month of June.

Other

None

< Meeting adjourned at 1:00 p.m. >

Agenda items for August 13, 2015

- July 9, 2015 Meeting Notes
- Dr. Al Chokhachy – Development of New Information to Inform Fish Passage Decisions at the Yale and Merwin Hydro Projects on the Lewis River Smolt releases at LRH; first pass water and release options
- Fish Release Procedure and Evaluation at Lewis River Hatchery

- Monitoring and Evaluation (M&E) Subgroup; 90-day review of redline draft
- Study/Work Product Updates

Public Comment: Al Thomas (Columbian) requested information on hatchery brood stock numbers for Lewis River adult Chinook salmon. Thomas also requested information on reservoir water conditions and projected summer time elevations.

Next Scheduled Meetings:

August 13, 2015	September 10, 2015
Merwin Hydro Control Center	Merwin Hydro Control Center
Ariel, WA	Ariel, WA
9:00 a.m. – 4:00 p.m.	9:00 a.m. – 3:00 p.m.

Meeting Handouts & Attachments:

- Notes from 6/11/15
- Agenda from 7/9/15
- **Attachment A** – PowerPoint: Capturing Habitat Restoration Actions in Ecosystem Diagnostics & Treatment (EDT)
- **Attachment B** – Operational Guidelines in Consideration of a 5-Day summer Work Schedule at the Merwin Fish Collection Facility” (DRAFT) – July 1, 2015
- **Attachment C** - Lewis River Fish Passage Report (June 2015)

Capturing Habitat Restoration Actions in EDT

Lewis River: PacifiCorp

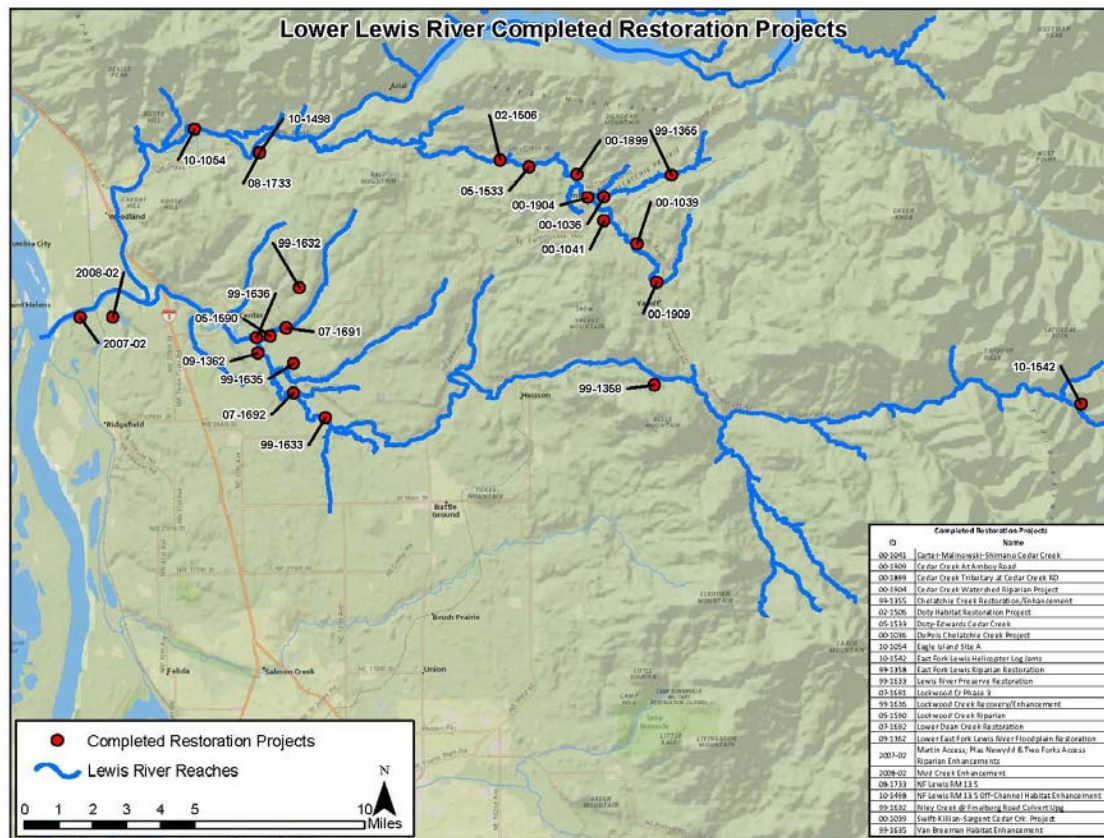
Lower Lewis River Habitat Restoration Assessment

- Objectives of Phase 1
 - Contribute to development of an updated Lewis River EDT model to evaluate restoration projects
 - Incorporate restoration projects completed after 2007
 - Add up to 30 LCRFRB and SRB implemented action to the 2007 EDT model
 - Develop conceptual models of potential effectiveness of categories of restoration actions
 - Define intensity of implementation of specific actions
 - Compute change in EDT environmental data
- Subsequent phases will focus on quantification of biological benefits of implemented actions
 - Restoration strategies

Status of Lewis River EDT

- Above Merwin Dam (upper Lewis EDT)
 - Recently updated to incorporate USGS information
 - Refined potential spawning distribution
- Below Merwin Dam (lower Lewis EDT)
 - Baseline model completed in 2007
 - Now being updated

Completed Restoration Projects



LewisRiver_CompletedRestorationProjects_Overview.mxd 6/3/2015

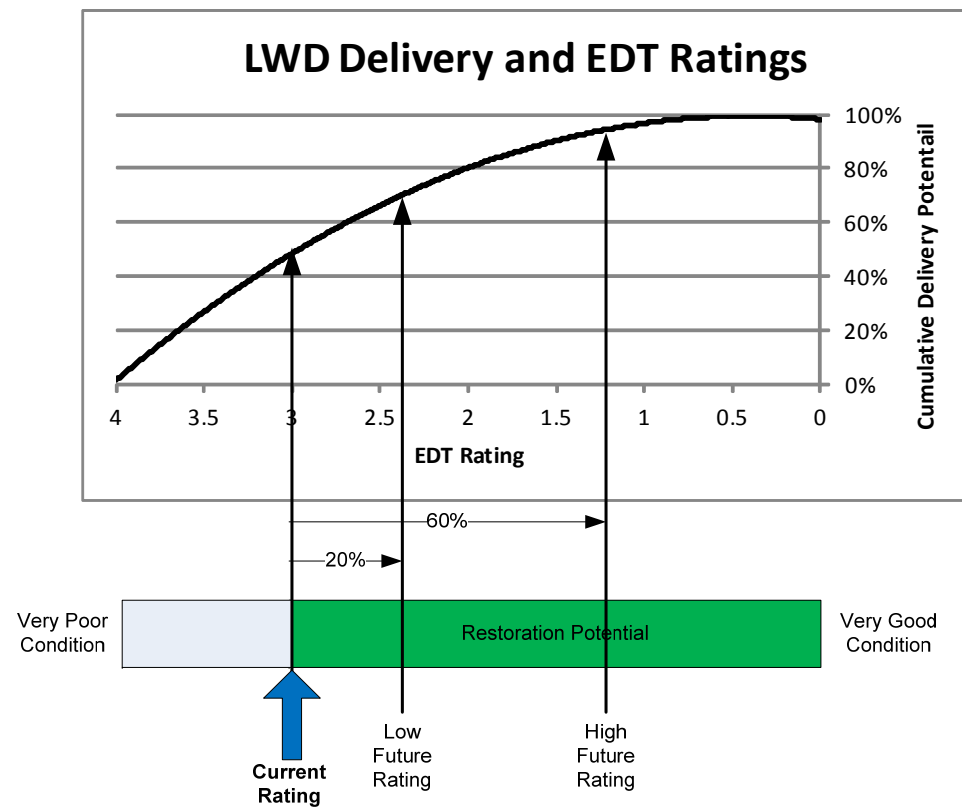
How do we capture projects in EDT?

- **Change in an attribute in a reach = (Effectiveness X Intensity) X Restoration Potential of the Attribute**
- Effectiveness: A scientifically based conclusion regarding the potential of an action category to change an EDT environmental attribute (0-5 scale)
- Intensity: The extent and amount of application of a specific action in a specific location (acts as a scalar to adjust potential effectiveness to a specific action in a location).
- Restoration Potential: The difference between the EDT rating of an attribute in the Current Condition compared to the Reference Condition.

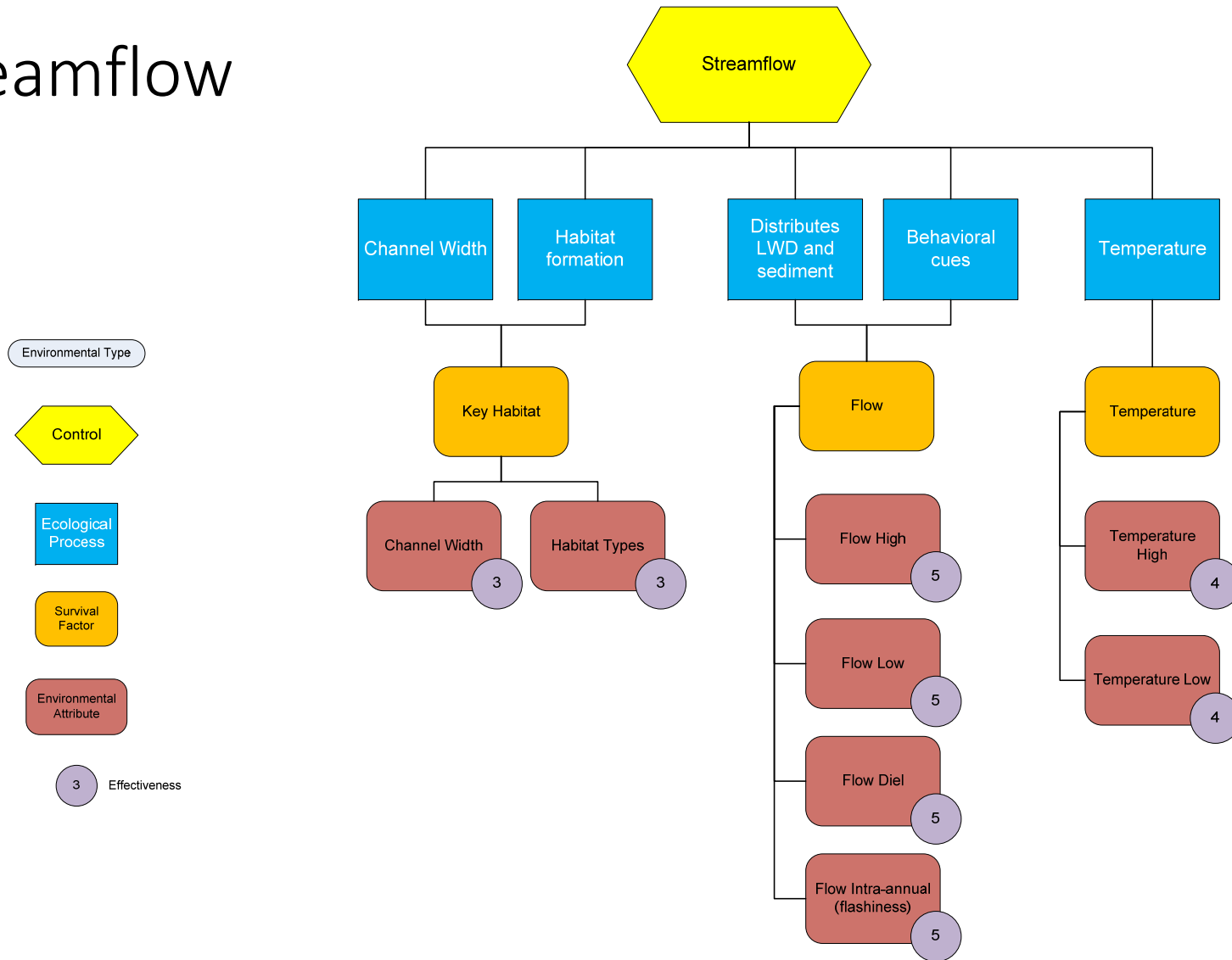
Action Categories

- Modify instream flow
- Restore riparian condition
- Reconnect floodplains
- Install engineered wood structure
- Improve passage (connectivity)
- Remove/manage forest roads

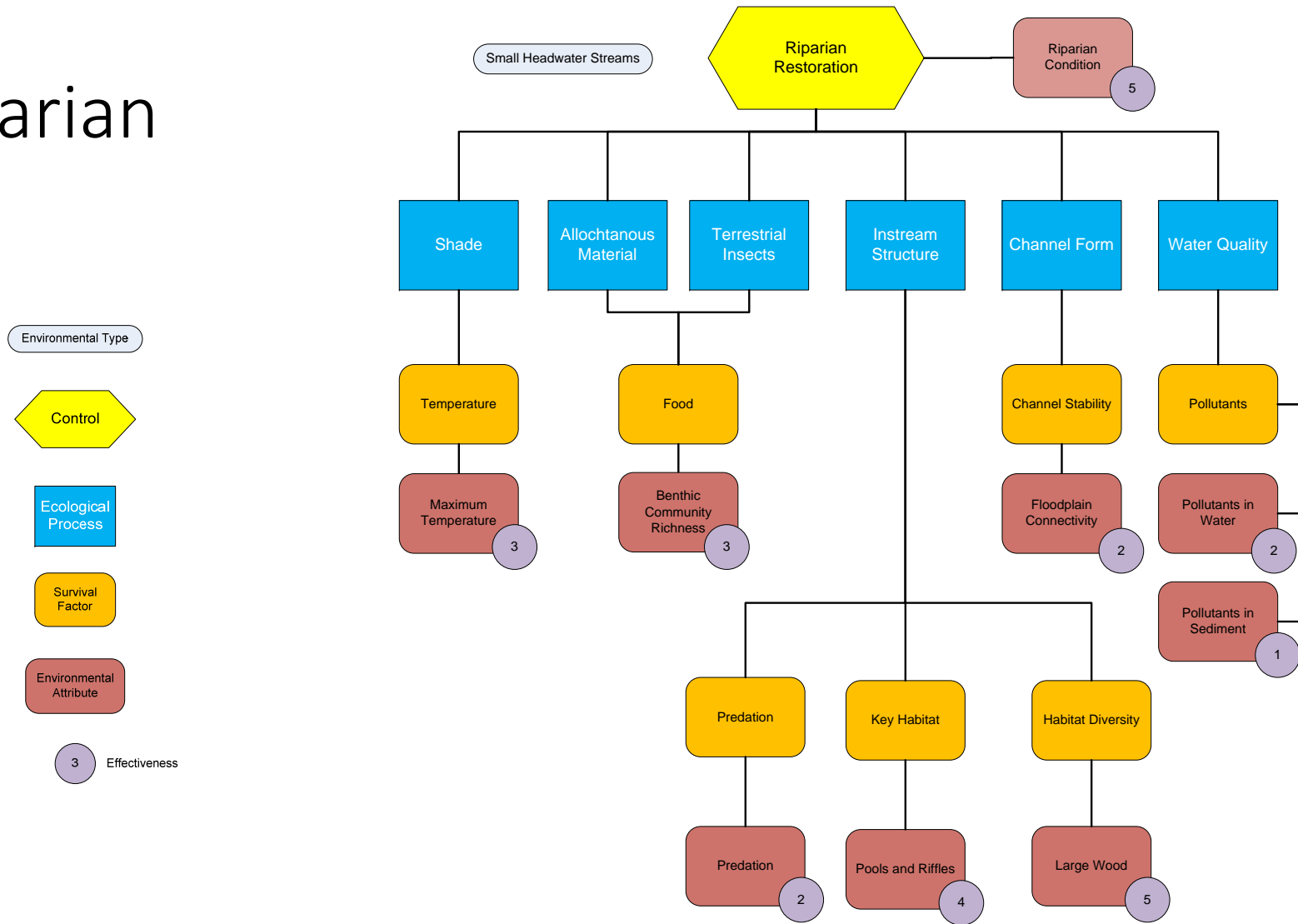
Example of Action Parameterization



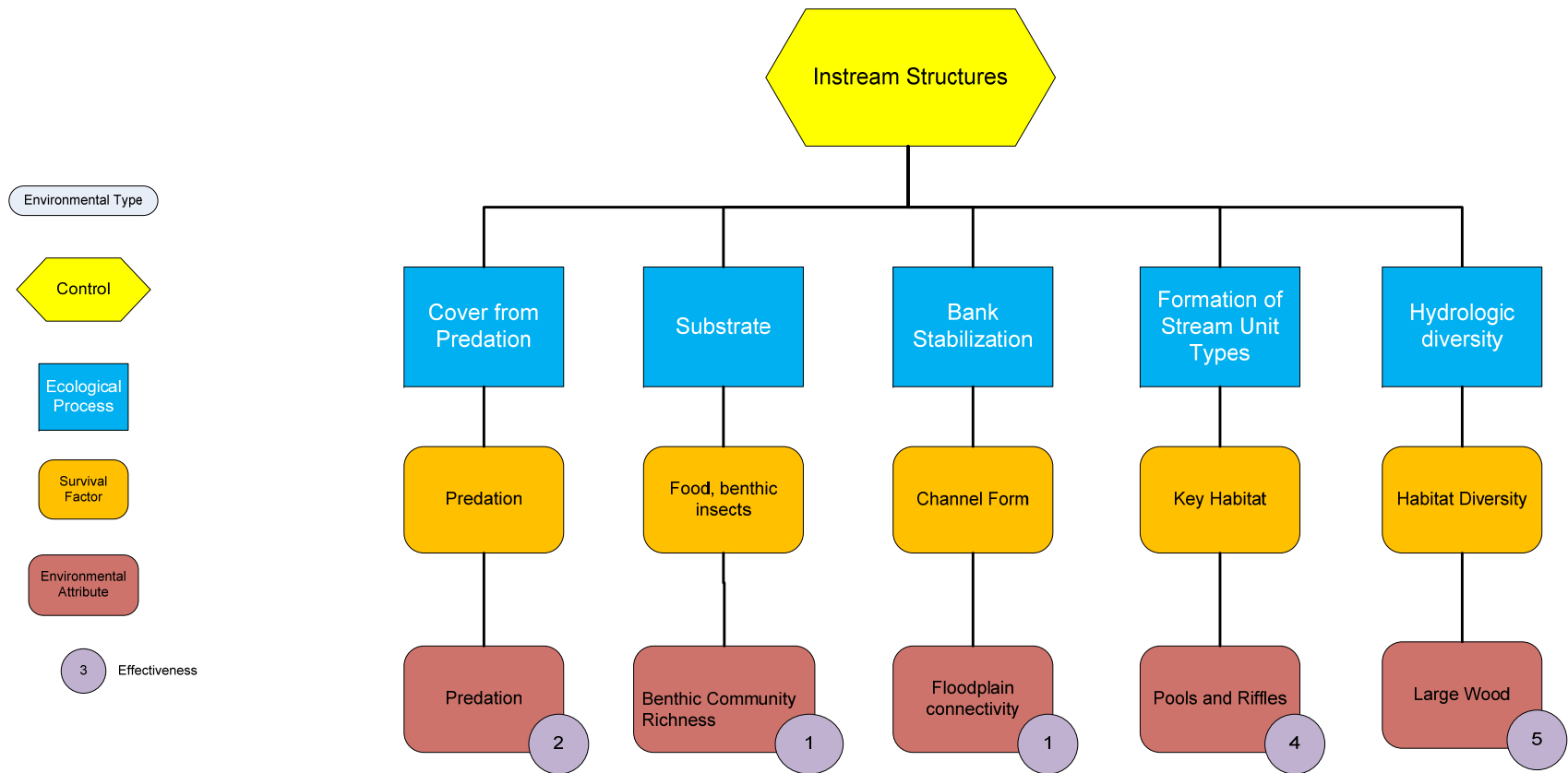
Streamflow



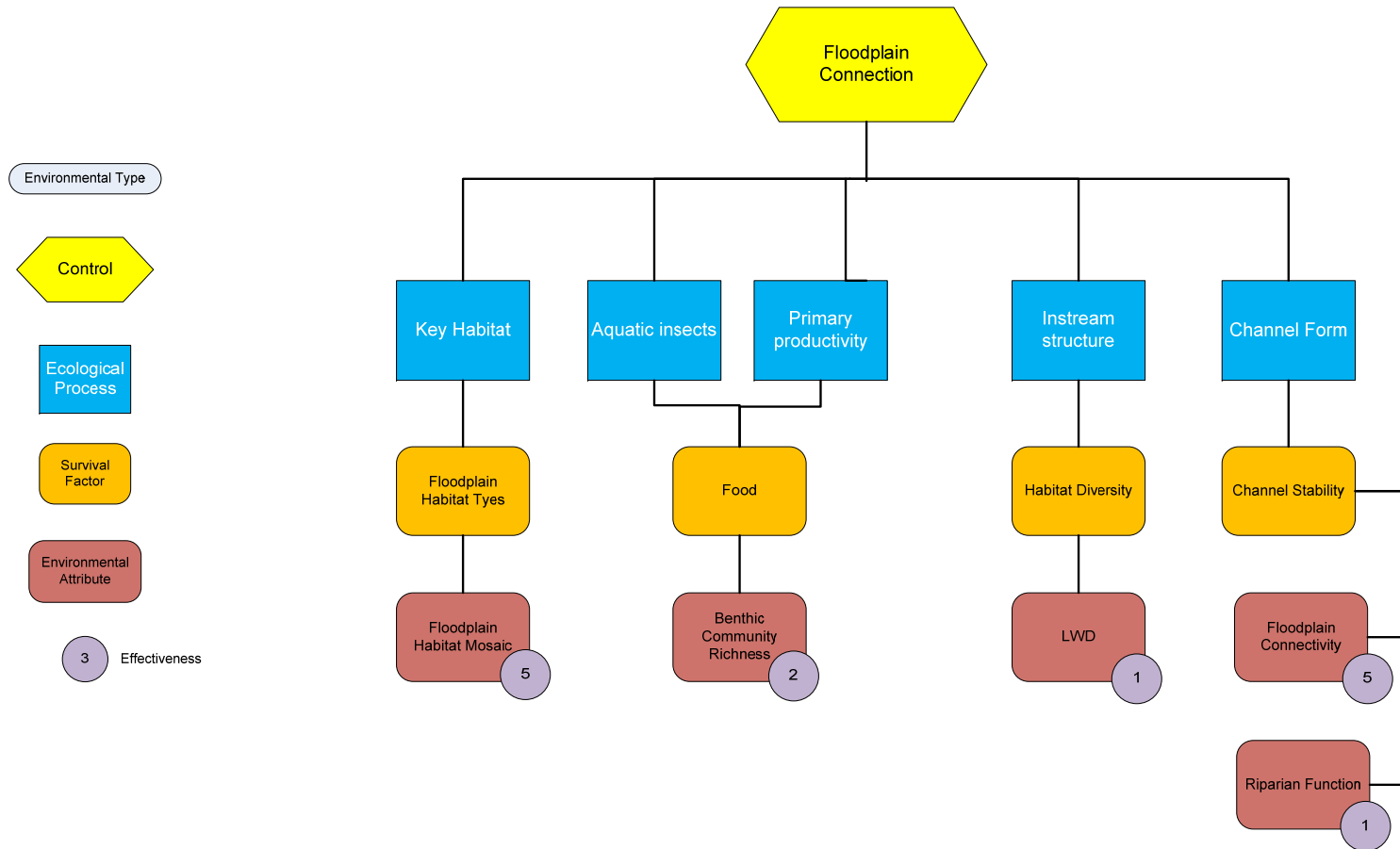
Riparian



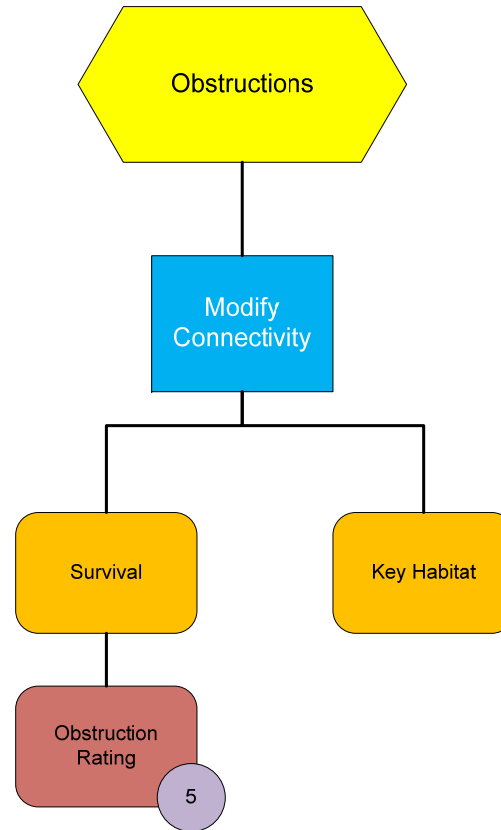
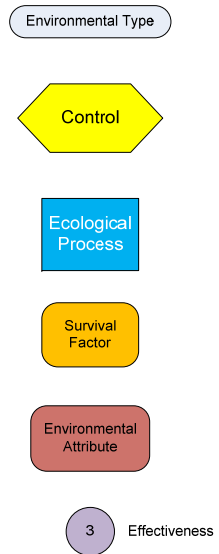
Instream Structures



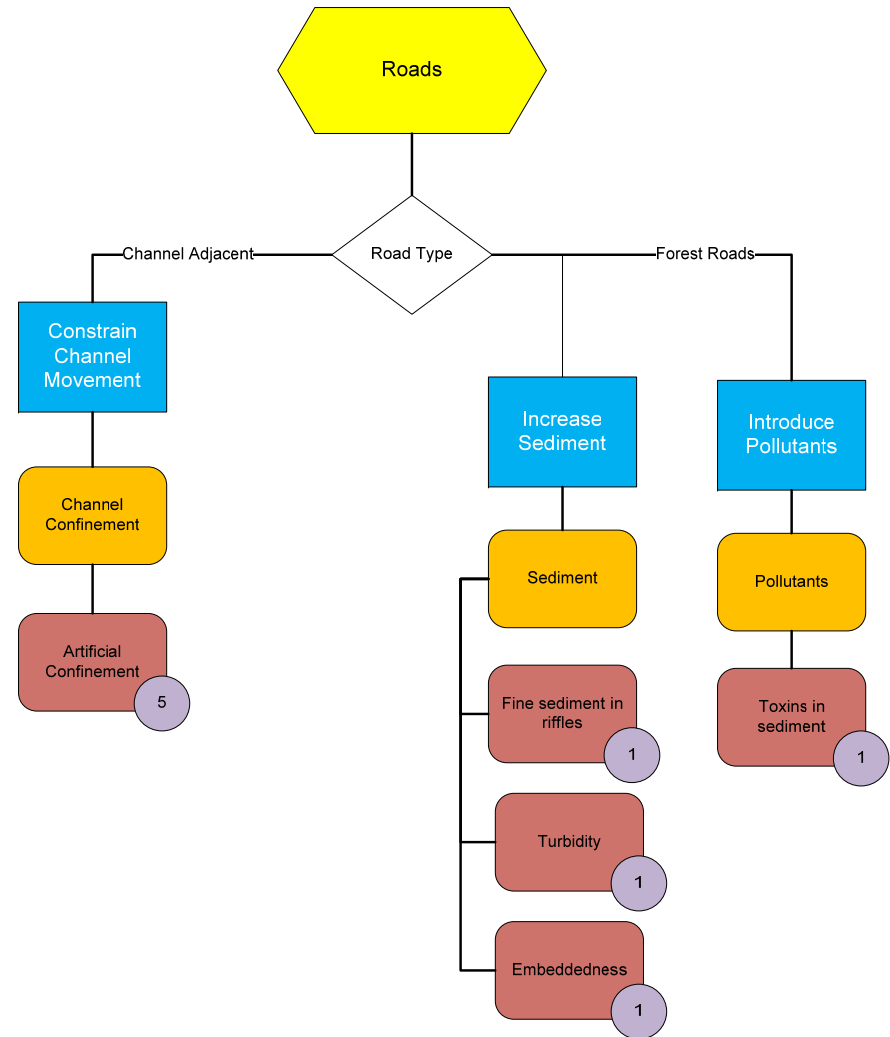
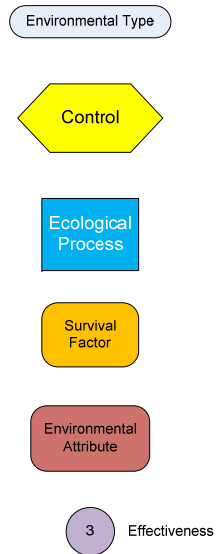
Floodplain Connectivity




Obstructions



Road Management



Example: Effectiveness



LOWER COLUMBIA FISH RECOVERY BOARD

Map Project Tracking Program Tracking Plan Actions Partners Library LCFRB Contact Us

Lockwood Creek Riparian

Project ID: 05-1590
PRISM Snapshot

Summary Target Species Project Categories Project Metrics Team Budget Permits & Permissions Milestones Attachments

Lockwood Creek Riparian

Description

Clark Public Utilities will use this grant to restore 2,000 lineal feet of degraded floodplain habitat along Lockwood Creek at the confluence with the east fork of the Lewis River. Lockwood Creek is home to cutthroat, steelhead and chum, Chinook and coho salmon. This grant will continue a \$250,000 Centennial Clean Water grant and combined, the two will restore 26 acres of riparian habitat, place large woody debris in the creek for salmon habitat, construct an off-channel rearing pond and re-connect the creek to its floodplain and wetlands by removing a 2,500-foot-long dike. Clark Public Utilities is partnering with the Monahan family and the Lower Columbia Regional Fisheries Enhancement Group. Clark Public Utilities will contribute \$8,000 in donated materials.

Total Project Cost: \$50,000

Grant: \$42,000 (PCSRF)
Match: \$8,000 (LCFEG, Labor)

Grant Program: Pacific Coast Salmon Recovery Fund	Subbasin
Sponsor: Clark Public Utilities	EF Lewis
Project ID: 05-1590	Action Reaches
Project Type: Restoration	L1_Lockwood Cr 1
Status: Completed	Benefiting Reaches
Strata: Cascade	L1_Lockwood Cr 1
County: Clark	
WRIA: 27	

[Map](#)

Action Categories

[Restore](#) Riparian Condition

[Install](#) Engineered Wood Structures

[Reconnect](#) Floodplain

Example: Intensity



The screenshot shows the website for the Lower Columbia Fish Recovery Board. The header includes the board's logo and name, along with navigation links: Map, Project Tracking, Program Tracking, Plan Actions, Partners, Library, LCFRB, and Contact Us. The main content area is titled "Lockwood Creek Riparian" and includes a "Project ID: 05-1590" and "PRISM Snapshot" label. A navigation menu below the title includes Summary, Target Species, Project Categories, Project Metrics (selected), Team, Budget, Permits & Permissions, Milestones, and Attachments. A dropdown menu for "Riparian Conditions and Functions" is open, showing a table with the following data:

	Pre-restoration	Proposed	Completed
Vegetation density (plants/acre)		1,000	
Width of enhancement (ft.)		150	
Length of enhancement (ft.)		4,000	
Width of invasive treatment (ft.)			
Length of invasive treatment (ft.)			
Width of area protected by fencing (ft.)			
Length of area protected by fencing (ft.)			
Vegetation			
Type			
Species			

Both sides?

MEMO

Operational Guidelines in Consideration of a 5-Day Summer Work Schedule at the Merwin Fish Collection Facility

Prepared by PacifiCorp

For the Aquatic Coordination Committee

Draft: July 1, 2015

Background

During the June 2015 monthly Aquatic Coordination Committee (ACC) meeting, PacifiCorp requested that operations of the Merwin Fish Collection Facility (MFCF) be modified to a five (5) day per week work schedule during the summer months of July and August. Currently the facility operates seven (7) days a week. Rational for this request is that during this timeframe, catch at the facility consists almost exclusively of adult hatchery summer steelhead. These fish are either transported back downstream as part of the WDFW angler recycling program or are taken directly to a hatchery; summer steelhead are not transported upstream. PacifiCorp's proposal is to go to a schedule in which the fish lift and conveyance system remains operational seven (7) days per week, however, daily sorting of fish would only occur Monday through Friday. Fish collected on Saturday and Sunday would be held in the presort pond and then processed the following Monday. The following section provides a summary of the protocols that would be used to guide operational decisions for the MFCF during the summer and returning to a seven (7) day per week schedule in the fall.

Proposed Operational Protocols

An adaptive management type approach will be used for determining if/when the abbreviated summer work schedule is implemented each year. The reason for this is that conditions can change from year to year, and full fish reintroduction has not yet been established. Currently, all spring Chinook are being transported to the hatchery as part of brood stock collection. While the majority of these fish arrive at the MFCF in May and June, some of these fish are also collected in July and August. Once full reintroduction has been established, transport of these adults into the upper basin will need to be considered. PacifiCorp will consult with the ACC prior to implementing the five (5) day per week summer operations schedule each year.

PacifiCorp will resume a seven (7) day per week sorting and transport schedule when early-run coho begin to arrive at the MFCF and no later than the first day of September. Returning to an extended schedule prior to September would occur when a combined total of five (5) early run coho are collected over the preceding five (5) day work period or conditions are forecasted that would stimulate fish to pass (i.e., increased flows at Merwin Dam). Coho counts downstream at Lewis River Hatchery will be used to guide this decision.

Lewis River Fish Passage Report

June 2015

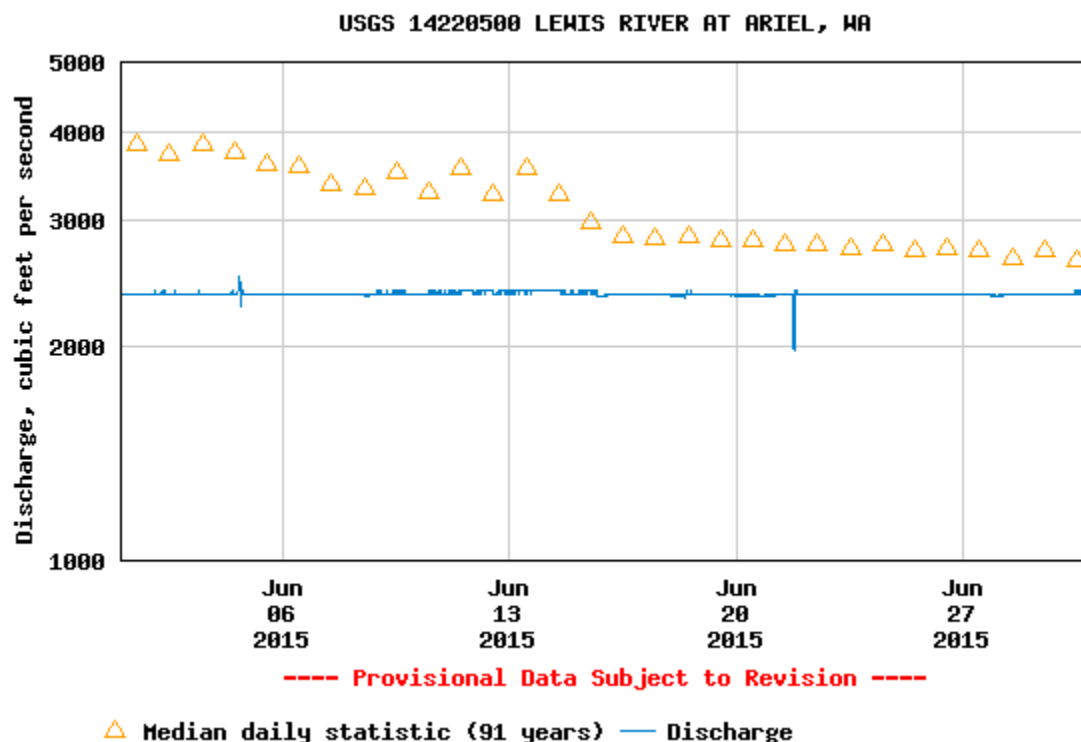
Merwin Fish Collection Facility and General Operations

During the month of June, a total 861 fish were captured at the Merwin Fish Collection Facility; the majority (72%) of these fish were hatchery summer steelhead (n=619) followed by hatchery spring Chinook (n=217). All hatchery steelhead were either transported downstream by Washington Department of Fish and Wildlife as part of the angler recycling program or taken to Merwin Hatchery for brood stock. All spring Chinook captured were transported to Speelyai Fish Hatchery for brood stock. The Merwin Fish Collection Facility ran continuously throughout the month of June.

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

River flow below Merwin Dam ranged between approximately 2,340 cfs to 2,510cfs during June.

Discharge, cubic feet per second



Upstream Transport

To date, 1,218 (741 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, eight coastal cutthroat trout exceeding thirteen inches have been transported upstream of Swift Reservoir this year.

Swift Floating Surface Collector

A total of 8,288 fish were collected at the Swift Floating Surface Collector (FSC) during the month of June. The majority (87 percent) of these fish were juvenile coho (n=7,192), followed by hatchery rainbow trout (n=569), juvenile spring Chinook (n=300), juvenile steelhead (n=152), cutthroat trout (n=68), steelhead kelt (n=7) and bull trout (n=1). All hatchery rainbow trout, bull trout, and salmonid fry (< 60mm) were returned back to Swift Reservoir. The FSC continuously ran throughout the month of June.

Fish Facility Report
Swift Floating Surface Collector
June 2015

Day	Coho			Chinook			Steelhead				Cutthroat			Bull Trout			Planted Rainbow	Total
	fry	parr	smolt	fry	parr	smolt	fry	parr	smolt	kelt	fry	< 13 in	> 13 in	fry	< 13 in	> 13 in		
01	0	0	193	0	0	18	0	0	0	0	0	4	0	0	0	0	6	221
02	0	0	290	0	8	45	0	0	14	0	0	8	0	0	0	0	1	366
03	0	0	89	0	0	12	0	0	8	2	0	1	0	0	0	0	0	112
04	0	0	400	0	0	11	0	2	16	1	0	2	0	0	0	0	6	438
05	0	1	97	0	0	5	0	0	18	0	0	0	2	0	0	0	4	126
06	0	0	557	0	0	8	0	0	7	0	0	0	0	0	0	0	7	579
07	0	0	515	0	0	4	0	0	14	0	0	1	0	0	0	0	2	536
08	0	0	223	0	0	25	0	0	6	0	0	1	0	0	0	0	4	259
09	0	5	236	0	0	17	0	0	7	0	0	6	0	0	0	0	15	285
10	0	7	292	0	0	14	0	0	4	0	0	0	0	0	0	0	25	342
11	0	7	542	0	0	4	0	0	6	1	0	5	0	0	0	0	75	640
12	0	8	778	0	0	13	0	0	9	1	0	3	0	0	0	0	61	875
13	0	14	502	0	0	49	0	0	6	1	0	5	0	0	0	1	60	637
14	0	20	140	0	10	14	0	0	7	1	0	2	1	0	0	0	28	223
15	0	3	58	0	0	5	0	0	4	0	0	5	0	0	0	0	31	104
16	0	2	88	0	0	2	0	0	1	0	0	1	0	0	0	0	28	121
17	0	15	371	0	0	1	0	0	5	0	0	4	0	0	0	0	115	511
18	0	18	430	0	0	3	0	0	4	0	0	4	0	0	0	0	26	486
19	0	18	98	0	0	5	0	0	2	0	0	4	0	0	0	0	20	147
20	0	14	461	0	2	11	0	0	5	0	0	2	0	0	0	0	42	537
21	0	16	149	0	0	3	0	0	2	0	0	0	0	0	0	0	4	175
22	0	13	42	0	0	0	0	0	2	0	0	2	0	0	0	0	2	60
23	0	10	140	0	2	2	0	0	1	0	0	3	0	0	0	0	6	164
24	0	14	127	0	0	0	0	0	1	0	0	1	0	0	0	0	0	143
25	0	4	70	0	0	2	0	0	1	0	0	1	0	0	0	0	1	79
26	0	3	24	0	0	1	0	0	0	0	0	0	0	0	0	0	1	29
27	0	0	19	0	0	2	0	0	0	0	0	0	0	0	0	0	0	21
28	0	1	13	0	0	1	0	0	0	0	1	0	0	0	0	0	0	16
29	0	0	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25
30	1	0	29	0	0	1	0	0	0	0	0	0	0	0	0	0	0	31

Monthly	1	193	6998	0	22	278	0	2	150	7	1	64	3	0	0	1	569	8288
Annual	5824	4239	23137	0	189	4227	0	22	1199	31	1	594	48	0	14	1	1848	41373



Wednesday, July 1st, 2015