

November 6, 2009

To: Memo to Lewis River Aquatics Coordination Committee representatives

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

Subject: Review of CY 2010 Aquatic Fund Pre-Proposals

On September 4, 2009 PacifiCorp Energy announced the availability of funds for aquatic related projects in the Lewis River Basin (letter to interested parties from T. Olson). The letter requested that individuals or parties interested in obtaining project funding submit a Pre-Proposal to PacifiCorp Energy. Pre-Proposals were due by October 5, 2009. At that time and in following the Aquatics Fund – Strategic Plan and Administrative Procedures, PacifiCorp Energy and Cowlitz PUD (Utilities) reviewed the Pre-Proposals and, with this memo are providing the ACC with a recommended project list for further consideration. Following ACC review and agreement with this project list, PacifiCorp Energy will request complete proposals from selected project proponents. The schedule for proposal request is early December with complete proposals due in late-January 2009.

In response to the announcement letter, six entities provided ten different project Pre-Proposals. They include:

Olympic Resource Management	9015/30 Rd Fish Passage Upgrade
USDA Forest Service	Sheep Bridge Removal
USDA Forest Service	Pepper-Lewis Side Channel Instream Habitat Restoration
USDA Forest Service	2010 Nutrient Enhancement on Pine Creek
USDA Forest Service	Pine Creek Instream and Floodplain Structures for Bull Trout and Steelhead
Lower Columbia Fish Enhancement Group	NF Lewis RM 13.5 Off-Channel Habitat Enhancement
US Fish & Wildlife Service	Bull Trout Habitat Use in Tributaries to Swift Reservoir and the NF Lewis River
US Fish & Wildlife Service	Bull Trout Population Structure in the Lewis River Basin
Gifford Pinchot Task Force	Clear Creek Habitat Improvement Project
Cowlitz Indian Tribe	Eagle Island Habitat Enhancement

PacifiCorp Energy and Cowlitz PUD subject matter experts have evaluated and scored the above proposals. Evaluations were conducted as outlined in the Aquatic Fund – Strategic Plan and Administrative Procedures document. For ACC review, the Utilities have attached to this memo an Evaluation matrix (Attachment 1). Costs for each project

are also included. Individual Pre-Proposals have been attached for reference (Attachments 2-11).

The Utilities evaluation suggests that while additional information is needed before a commitment of funds should be given, we propose that the following six projects be solicited to provide complete Proposals:

- USDA FS - Pepper-Lewis Side Channel Instream Habitat Restoration
- USDA FS - 2010 Nutrient Enhancement on Pine Creek
- USDA FS - Pine Creek Instream and Floodplain Structures for Bull Trout and Steelhead
- LCFEG - NF Lewis RM 13.5 Off-Channel Habitat Enhancement
- GPTF - Clear Creek Habitat Improvement Project
- CIT - Eagle Island Habitat Enhancement

The Utilities propose to not further consider the four projects: 9015/30 Rd Fish Passage Upgrade, Sheep Bridge Removal, and Bull Trout Habitat Use in Tributaries to Swift Reservoir and the NF Lewis River, and Bull Trout Population Structure in the Lewis River Basin.

For your information, PacifiCorp has included a financial reporting on the Aquatics Resource and Bull Trout (7.5) tracking accounts (Attachment 12) as of 10/31/09.

The Utilities are submitting this document and attachments for review in hopes of reaching concurrence on projects for further consideration. If, in your review of the Pre-proposals, you have comments or questions to ask the Project proponent, please provide us such and we will include in the formal Proposal request.

To meet the Funding Process Timeline as included in the Aquatics Fund – Strategic Plan and Administrative Procedures, **ACC representatives should provide comments and their project selection by Monday, December 7, 2009.** On December 10, 2009, project selection will be finalized during the ACC meeting. Soon after, the Utilities will request formal Proposals from identified project proponents.

September 4, 2009

Subject: Availability of Funds for Aquatic Related Projects in the Lewis River Basin

Dear Interested Party,

PacifiCorp owns the Merwin, Yale, and Swift No. 1 hydroelectric projects on the Lewis River in southwest Washington. Public Utility District No. 1 of Cowlitz County, Washington (Cowlitz PUD) owns the Swift No. 2 hydroelectric project, also located on the Lewis River. These projects are operated as a coordinated system. On November 30, 2004, the Lewis River Settlement Agreement established the Lewis River Aquatics Fund (Fund). On June 26, 2008, the Federal Energy Regulatory Commission acknowledged this fund as a stipulation of project operating licenses. The purpose of the Fund is to support resource protection measures via aquatic related projects (Resource Projects) in the Lewis River basin. The projects are evaluated for funding according to their:

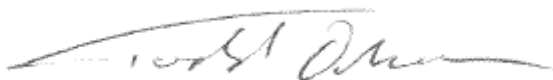
- (1) Benefit to fish recovery throughout the North Fork Lewis River, with priority to federal ESA-listed species;
- (2) Support of the reintroduction of anadromous fish throughout the Basin; and
- (3) Enhancement to fish habitat in the Lewis River Basin, with priority given to the North Fork Lewis River.

Species that are targeted to benefit from Resource Projects include Chinook, steelhead, coho, bull trout, chum, and sea-run cutthroat.

This letter is to provide you the opportunity to submit proposals for Resource Project funding. The total Fund amount available this year is limited to \$253,724.06 for Resource Projects and \$482,285.95 for Bull Trout Projects. The selection of Resource Projects will be conducted in two phases. To be considered, applicants must submit a completed Pre-Proposal Form (see attachment A for Form) **by close of business October 5, 2009**. Pre-Proposals will be evaluated with some projects appropriately selected for further consideration (see attachment B for evaluation criteria). If selected, applicants will be notified in early December, and be requested to submit a formal proposal by mid-January. The Utilities and representatives of the Lewis River Aquatic Coordination Committee will finalize the list of successful projects in early April 2010 and submit that list to the Federal Energy Regulatory Commission for approval shortly thereafter.

Please give attention to this excellent opportunity. If you should have any questions feel free to contact Mr. Frank Shrier, PacifiCorp, (503) 813-6622. We look forward to your response in early October.

Sincerely,

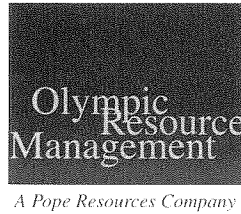


Todd Olson
Implementation Program Manager

ATTACHMENT 1

Lewis River Aquatic Fund - Utilities' Evaluation of 2009/2010 Project Proposals																	
								Cost	Consistency with	Benefit to	Scientific	Success Potential	Cost	Total Score	Selected by		
No.	Applicant	Project Title	Project Schedule	Benefit	Bull Trout	Project Partners	Funding	Share?	Fund Objectives	Priority Fish	Validity		Effectiveness		Utilities for Full-Proposal	Comments	
1	Olympic Resource Management	9015/30 Rd Fish Passage Upgrade	Summer 2010	This project involves removal of two culverts and installation of two bridges to allow fish passage which affects 2.3 miles of fish habitat on tributaries to Pine Creek/Lewis River/Swift Reservoir.	No	None	\$ 235,000.00	No	Yes		9.33	13.33	3.33	1	26.99	N	Assume these improvements are required under RMAP. What is ORM's contributions to the project? They're required through forest practice laws to take care of problem culverts on their own. Proposal doesn't stipulate which tributary to Pine Creek, therefore do not know if the culverts are above natural anadromous fish barriers. Are there other options to building bridges? Only consider if culverts rather than bridges are installed. Streams do not justify that type of protection.
2	USDA Forest Service	Sheep Bridge Removal	2010/2011	Removal of remaining timbers to clean up river and remove hazardous material	Yes	Gifford Pinchot National Forest	\$ 7,500.00	Yes	Yes, but benefit is low.		8	8	3.33	2.66	21.99	N	Hazardous material should be responsibility of landowner. Project is upstream of habitat accessible to anadromous fish. If this bridge is owned by USFS and the project is contributing hazardous material then the USFS should cleanup.
3	USDA Forest Service	Pepper-Lewis Side Channel Instream Habitat Restoration	2010/2011	LWD placement to create a pool capable of rearing a combination of juvenile coho salmon and steelhead trout.	No	Potential: Fish First, Swift community Action Team, WDFW, Salmon Recovery Board funds and FS Whole Watershed Joint Venture Fund	\$ 58,000.00	Yes	Yes		13.33	12	3.33	2.83	31.49	Y	Concerns about LWD structures staying intact on mainstem. Need additional information on how LWD will be anchored. Low amount of habitat. Question the connectivity to the Lewis mainstem during late summer. Monitoring costs should be in-kind. Project will also benefit juvenile spring Chinook as well as immature bull trout.
4	USDA Forest Service	2010 Nutrient Enhancement on Pine Creek	2010	Adult carcasses from various hatchery reared and collected salmonids species will be distributed by hand in areas accessible to vehicles, inaccessible areas would be seeded by helicopter.	No	Gifford Pinchot National Forest, Clark Skamania Fly Fishers, Mt. St. Helens Institute and ORM	\$ 41,000.00	Yes	Yes		16	12	3	3	34	Y	Would like to see previous efforts reported including observed benefits of carcasses.
5	USDA Forest Service	Pine Creek Instream and Floodplain Structures for Bull Trout and Steelhead	2010	LWD placement instream in Pine Creek to stabilize stream banks to capture suitable sized spawning gravel for adult bull trout and steelhead.	Yes	Gifford Pinchot National Forest and Title II Funds	\$ 72,000.00	Yes	Yes		14.66	12	1.66	2.5	30.82	Y	No mention of coho in the write-up, they will benefit from this if project is successful as well. Redd superimposition concerns would not be between bull trout and STHD as they spawn in different habitat and STHD spawn 5 months later. Superimposition concerns would be between bull trout and coho as their spawn time directly overlaps and they dig redds in the same margin areas. Question the efficacy of placing LW into such a wide, unstable floodplain and stability of structures. Concerns over project success.
6	Lower Columbia Fish Enhancement Group	NF Lewis RM 13.5 Off-Channel Habitat Enhancement	2010/2011	Re-connection and enhancement of approx. 1,500 lineal feet of backwater/ off-channel habitat, riparian and wetland re-vegetation and reconnection of a perennial tributary to mainstem to restore fish passage.	No	LCFRB, Inter-fluve and Sam Kysar (landowner)	\$ 214,695.00	Yes	Yes		13.33	12	2.33	1.33	28.99	Y	Funds should not be used for noxious weed control. Cost seem high, not much in-kind support. Support flow through (future) option, but habitat currently has inlet and outlet and is currently being used.
7	USFWS	Bull Trout Habitat Use in Tributaries to Swift Reservoir and the NF Lewis River	2010/2012	Expand network of radio telemetry receivers in tributaries to Swift Reservoir and NF Lewis River.	Yes	WDFW, PacifiCorp, USFS and Cowlitz Indian Tribe	\$ 65,000.00	Yes	Maybe, project does not directly "enhance fish habitat".		10.66	12	4	0.83	27.49	N	Prohibitive costs and benefit is limited over existing knowledge or alternative methods. Data gathering. Only benefits bull trout - can't make the benefits connection to other listed species. Project does not provide tangible on-the-ground benefit. If the ACC did select for funding, ACC should consider not approving Bull Trout projects until this work is completed.
8	USFWS	Bull Trout Population Structure in the Lewis River Basin	2010/2011	Describe population structure of bull trout using genetic analysis to better prioritize recovery actions in the Lewis River.	Yes	WDFW, PacifiCorp, USFS and Cowlitz Indian Tribe	\$ 33,000.00	Yes	Maybe, project does not directly "enhance fish habitat".		10.66	14.66	4	2.33	31.65	N	One year of data will not likely give enough information. Not a habitat improvement. Could be important for future actions, however it only benefits bull trout - can't make the benefits connection to other listed species. Is this the same as the request that Abernathy Lab is making to USFWS grant?
9	Gifford Pinchot Task Force	Clear Creek Habitat Improvement Project	2010	Removal of 1.2 miles of spur road, including culvert removal, slope shaping and stabilization, scarification of the roadbed and revegetation.	No	GP Task Force and GP National Forest	\$ 73,725.00	Yes	Yes		10.66	9.33	2.5	2	24.49	Y	Need maps to verify road location in relation to Clear Creek. Benefits to fish is questionable. Clear Creek is too warm for bull trout. These roads should be managed, maintained, and/or removed by the owners.
10	Cowlitz Indian Tribe	Eagle Island Habitat Enhancement	2011/2013	Placement of medium to large jams and individual pieces of LWD through a 1,200 foot long side channel and restoration of riparian plant communities to restore vital spawning and rearing habitat along Eagle Island.	No	Cowlitz Indian Tribe, Interfluvve, Clark County WDFW and LCFRB	\$ 74,300.00	Yes	Yes		14.66	10.66	2.5	2.33	30.15	Y	Note the funds would be returned to ACC if full funding is not secured from Salmon Recovery Funds. This is essentially a wood placement project. High value towards Lewis River recovery goals. Habitat in this side channel is already in decent shape, cost seems somewhat excessive considering not much needs to be done. Write-up from project applicant even states that "overall channel complexity is relatively high" and that "the reach already contains relatively high -quality aquatic habitat". Also, applicant states that this will not affect boat traffic which is questionable.
						Totals	\$ 874,220.00										
	Fund Objectives:	1. Benefit fish recovery throughout the North Fork Lewis River, priority to federal ESA-listed species				Bull Trout Funds	\$ 177,500.00										
		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															

ATTACHMENT 2



September 16, 2009

Mr. Frank Shrier
PacifiCorp- LCT 1500
825 NE Multnomah
Portland, OR 97232

Dear Mr. Shrier

Thank you for the consideration for a portion of the funds PacifiCorp has allocated to habitat enhancement in the North Fork Lewis River basin.

Applicant: Olympic Resource Management (ORM)
A Pope Resources Company

The purpose of ORM is to "Create value for our investors and others by owning and managing land and its related resources"

Project Manager
Byron Hinners
321 MAURIN Road Suite C
Chehalis WA 98532
Phone: 360-740-4323 Ext. 6
Fax: 360-740-4356
E-mail bhinners@orminc.com

I have 5 years experience in current position- primarily contract administration. I have been with ORM 11 years.

Project Title: 9015/30 Rd Fish Passage Upgrade

There are two culverts involved with this project which were installed decades ago under different standards than are practiced today. The past installation of the culverts resulted in 2 fish passage barriers (perched culverts) and made unavailable approximately 2.3 miles of fish habitat. Our plan would be to remove the blocking culverts and install 2 bridges instead. These two streams are tributaries to Pine Creek/Lewis River/Swift Reservoir which has a population of several ESA listed species.

The locations of the projects are in the East ½ of Section 8 Township 7N Range 6E North of Swift Reservoir and West of Pine Creek

Benefits of project would be making available approximately 2.3 miles of fish habitat along with allowing the downstream migration of LWD and other natural processes to occur.

Project schedule is subject to funding, however, could be as early as summer 2010

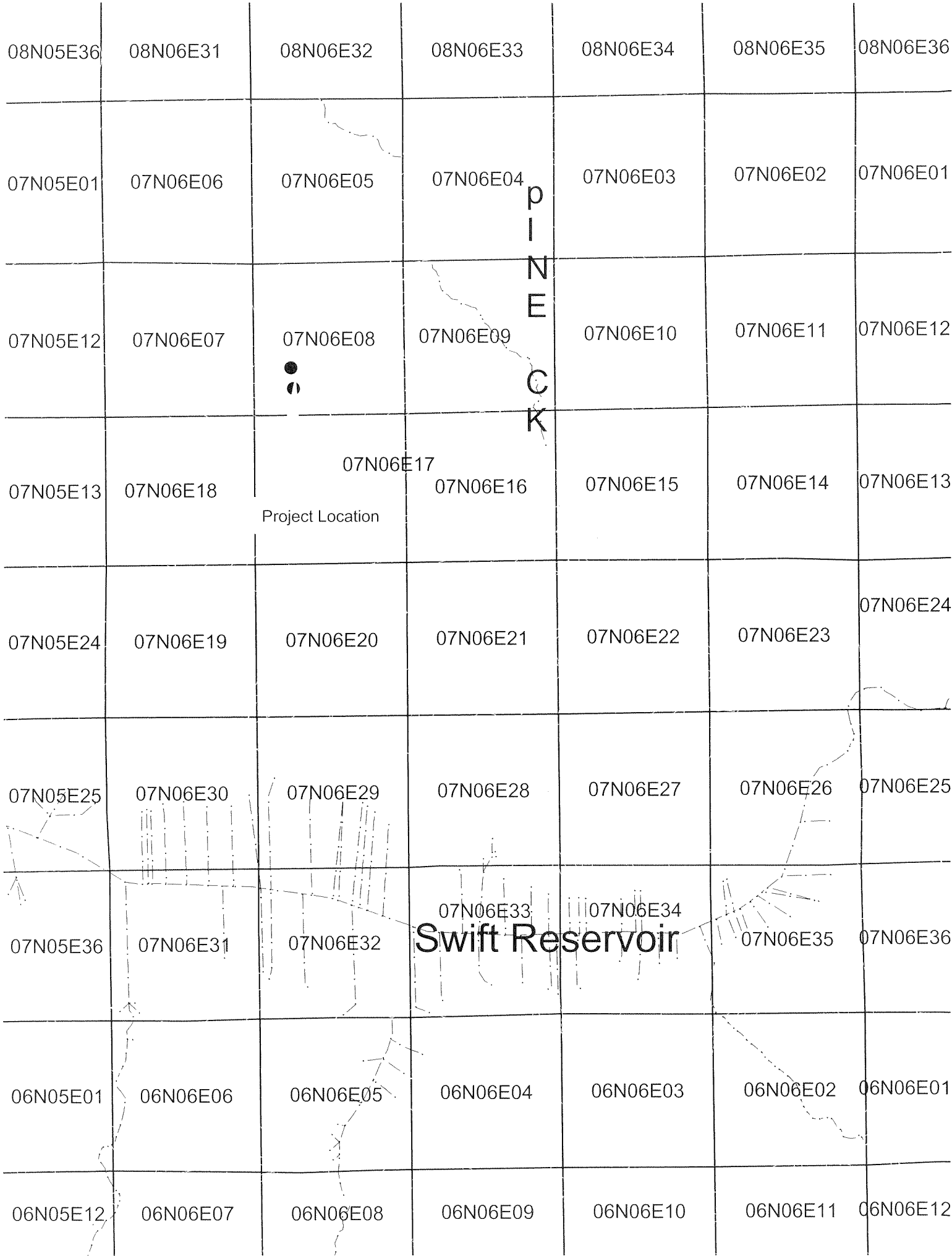
Funding Requested 235,000

Source for other contributions are In Kind – administration and permitting.
(Estimated 18,800 or 8% of project estimate)

Thank you for your consideration for this meaningful and relevant project.

A handwritten signature in dark ink, appearing to read 'BH', with a long horizontal line extending to the right.

Byron Hanners
Senior Forester
Olympic Resource Management



ATTACHMENT 3

PRE- PROPOSAL FORM -

1. Applicant organization.

USDA Forest Service
Gifford Pinchot National Forest

2. Organization purpose

Resource management agency

3. Project manager (name, address, telephone, email, fax).

Adam Haspiel
Mount Saint Helens National Volcanic Monument
42218 NE Yale Bridge Road
Amboy, WA 98601
360-449-7833
360-449-7801-FAX
ahaspiel@fs.fed.us e-mail

Fishery Biologist

20+ years experience with fish habitat restoration projects

Note: Please attach a resume or other description of the education and experience of the persons responsible for project implementation.

4. Project Title

Sheep Bridge Removal

5. Summary of Project proposal

This project would remove remnants of Sheep Bridge. Sheep bridge is an old road bridge crossing the Lewis River upstream of Lower Falls. The bridge abutments are concrete and will remain in place, but the bridge was constructed of treated (with creosote) and non-treated wood timbers. The bridge approaches failed and washed out years ago, but the bridge remained intact until sometime during the last two years, when it also failed. Most of the timbers are gone and are someplace downstream (several have been located in a logjam near Pepper Creek and can be removed during the Pepper-Lewis side channel project), but several treated and non-treated timbers remain attached to the bridge. These need to be removed before they too wash downstream and wind up in irretrievable locations.

Priority 1: *Benefit fish recovery throughout the North Fork Lewis River, with priority to federal ESA-listed species.*

Steelhead trout, Coho salmon, Chinook salmon, and Bull trout are listed as a threatened species under the ESA

Priority 2: Support the reintroduction of anadromous fish throughout the basin.

Removal of treated timbers will remove hazardous material from the Lewis River, and help ensure a pristine environment for re-introduced fish.

Priority 3: Enhance fish habitat in the Lewis River Basin-, with priority given to the North Fork Lewis River.

This project will remove hazardous material from the river and will improve fish habitat by doing so.

6. Project location (including River/Stream and Lat/Long coordinates if available).
Sheep Bridge. Approximately ½ mile above Lower Falls.

7. Expected products and results

Removal of remaining timbers will clean up the river and remove hazardous material from becoming permanently embedded in inaccessible locations in the river where bull trout and re-introduced salmon and steelhead will reside.

8. Benefits of proposed Project

The project will benefit fish by removing hazardous material from the river system

9. Project partners and roles.

None at this time

10. Community involvement (to date and planned).

The Forest Service maintains active community involvement by scheduling regular events with legislators, scientists, members, and key individuals for continual program and project development along with cultivating strong ties with agencies, academia, and local citizen groups.

11. Procedure for monitoring and reporting on results.

This project will be monitored by taking pre and post project photos.

12. Project schedule (anticipated start date, major milestones, completion date).

The NEPA for this project not been started yet.

NEPA- Summer 2010/Winter 2011

Project implementation July 2011

Pre-project monitoring July 2011

Post project monitoring August 2011 and beyond.

13. Funding requested (estimated cost for project design, permitting (including necessary resource surveys), construction, and monitoring).

Requesting a total of \$7.5K as a cost share portion for project implementation and monitoring.

NEPA cost- 2K

Monitoring cost-0.5K

Project preparation and implementation-3K

Materials and supplies including disposal of hazardous materials 2K.

14. Type and source of other contributions (Identify cash (C) and/or in-kind (IK), and status, pending (P) or confirmed (Co)).

Gifford Pinchot National Forest	\$3,000 (IK)	(Co)
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15. If you have technical assistance needs for this project, please briefly describe such needs.

None Needed

Sheep Bridge Project







ATTACHMENT 4

PRE- PROPOSAL FORM -

1. Applicant organization.

USDA Forest Service
Gifford Pinchot National Forest

2. Organization purpose

Resource management agency

3. Project manager (name, address, telephone, email, fax).

Adam Haspiel
Mount Saint Helens National Volcanic Monument
42218 NE Yale Bridge Road
Amboy, WA 98601
360-449-7833
360-449-7801-FAX
ahaspiel@fs.fed.us e-mail

Fishery Biologist

20+ years experience with fish habitat restoration projects

Note: Please attach a resume or other description of the education and experience of the persons responsible for project implementation.

4. Project Title

Pepper-Lewis Side channel Instream Habitat Restoration

5. Summary of Project proposal

Approximately 0.25 miles of side channel habitat in the Lewis River would have 14 structures placed in it. Approximately 161 piece of large wood material would be flown by helicopter to structure locations. Alternatively, it may also be possible to move woody material down a spur road with a skidder, and then move it up the river ¼ mile to the project site. An all terrain excavator (Spyder) or standard excavator would excavate into the streambanks to anchor the wood in place. Woody Material would come from a nearby Wildcat Timber Sale Unit. The all terrain excavator would access the area using the 9039330 road and then walk down the hillslope the final 800 feet to the side channel. An alternate route would be to access the Lewis River near the Muddy River confluence from a spur road on the 9039350 and cross private land to access a side channel that leads to the Lewis River. The excavator would then walk down the side channel to the Lewis River and then walk up the Lewis River for ¼ mile until reaching the project area. This project would create and improve rearing opportunities for coho salmon. Wood for this project would come from USFS lands and possibly from Swift Reservoir cleaning operations. A secondary part of this project would be to remove 10 pieces of creosote treated 10"x10" timbers 20' long from an existing logjam near the downstream edge of the side channel.

The excavator would remove the timbers and they would be disposed of at a hazardous materials facility.

Priority 1: Benefit fish recovery throughout the North Fork Lewis River, with priority to federal ESA-listed species.

Steelhead trout are listed as a threatened species under the ESA

Coho Salmon are listed as a threatened species under the ESA

Chinook Salmon are listed as a threatened species under the ESA

Bull Trout are listed as a threatened species under the ESA

Priority 2: Support the reintroduction of anadromous fish throughout the basin.

LWM in this quality side channel will increase pools and pool quality within the side channel, providing rearing opportunities for juvenile salmonids, particularly coho. This project will increase the chances for success when anadromous fish are reintroduced into the basin. Small numbers of juvenile coho salmon from habitat preparation activities are already using this section of the Pepper Lewis side channel for rearing.

Priority 3: Enhance fish habitat in the Lewis River Basin-, with priority given to the North Fork Lewis River.

LWM will directly enhance and increase fish habitat in the North Fork Lewis River Basin for re-introduced anadromous fish.

6. Project location (including River/Stream and Lat/Long coordinates if available).

Lewis River - This is an existing side channel that is kept watered by Pepper Creek in the summer months. The Lewis River also flows into this side channel during winter and spring months. From Eagle Cliff Bridge RM 2.1 to RM 2.4

7. Expected products and results

Each structure should create a pool capable of rearing a combination of juvenile coho salmon and steelhead trout. The woody material would also create quality hiding cover and increase production in the side channel.

8. Benefits of proposed Project

The project will benefit anadromous fish by increasing rearing habitat for juvenile fish. This side channel will act as a refugia from high flows in the mainstem Lewis River.

9. Project partners and roles. Potential Partners include: Fish First, Swift community Action Team, and Washington Department of Fish and Wildlife. Potential Funding sources include Salmon Recovery Board funds and Forest Service Whole Watershed Joint Venture Fund.

10. Community involvement (to date and planned).

The Forest Service maintains active community involvement by scheduling regular events with legislators, scientists, members, and key individuals for continual program and project development along with cultivating strong ties with agencies, academia, and

local citizen groups. Monitoring activities will include using the Mt. St. Helens institute and their Youth Stream Team to take measurements.

11. Procedure for monitoring and reporting on results.

This project will be monitored by taking pre and post project cross sections, pebble counts, snorkel counts, spawning surveys and photo points.

12. Project schedule (anticipated start date, major milestones, completion date).

The NEPA for this project not been started yet.

NEPA- Summer 2009/Winter 2010

Project implementation July 2011

Pre-project monitoring 2010 and/or 2011

Post project monitoring 2011 and beyond.

13. Funding requested (estimated cost for project design, permitting (including necessary resource surveys), construction, and monitoring).

Requesting a total of \$58K as a cost share portion for project implementation and monitoring.

NEPA cost- 0K

Monitoring cost-4K

Helicopter- 20K

Excavator- 20K

Project Preparation and administration-5K

Materials and supplies-5K.

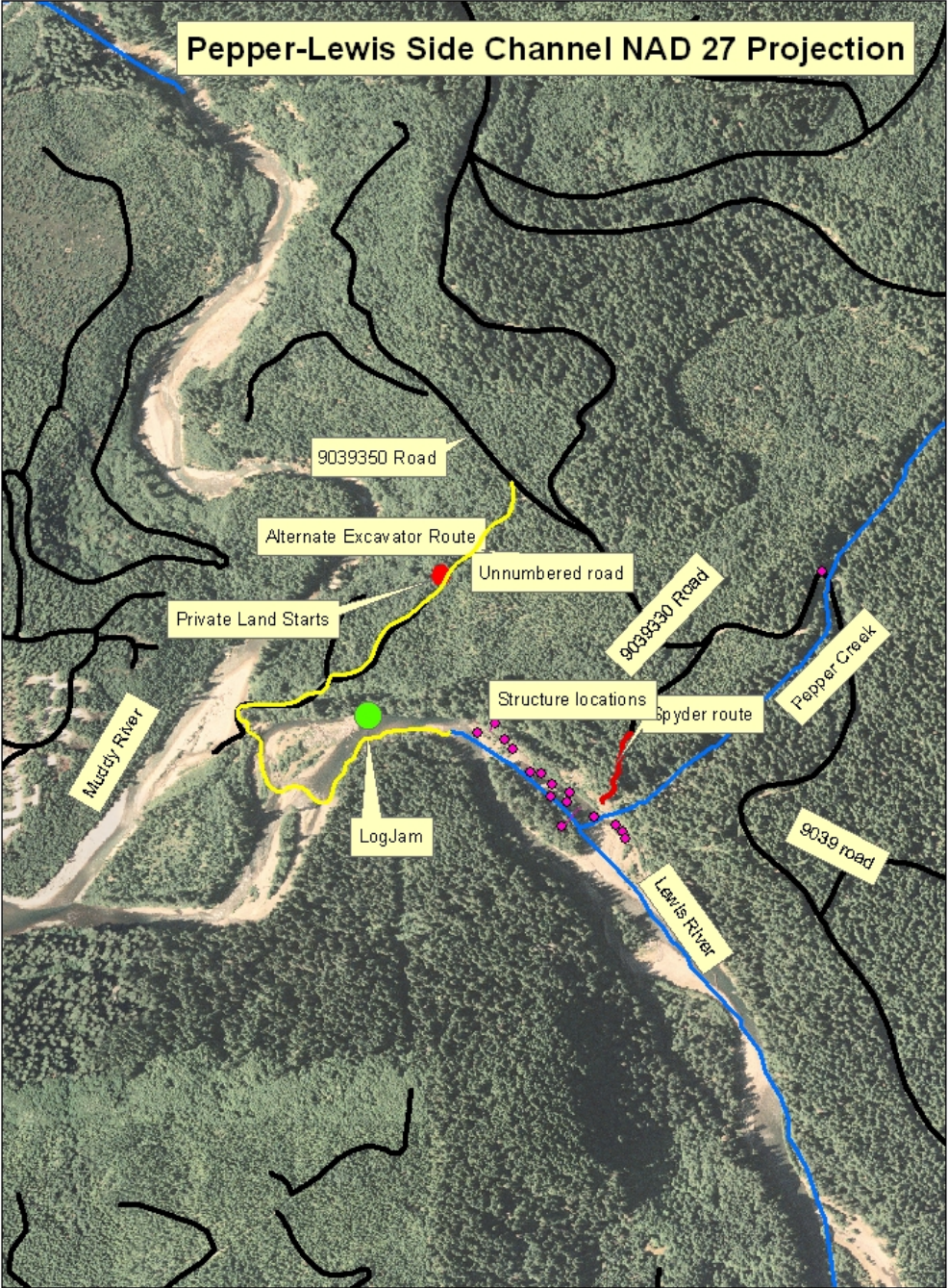
Hazardous Materials transport and disposal 4K

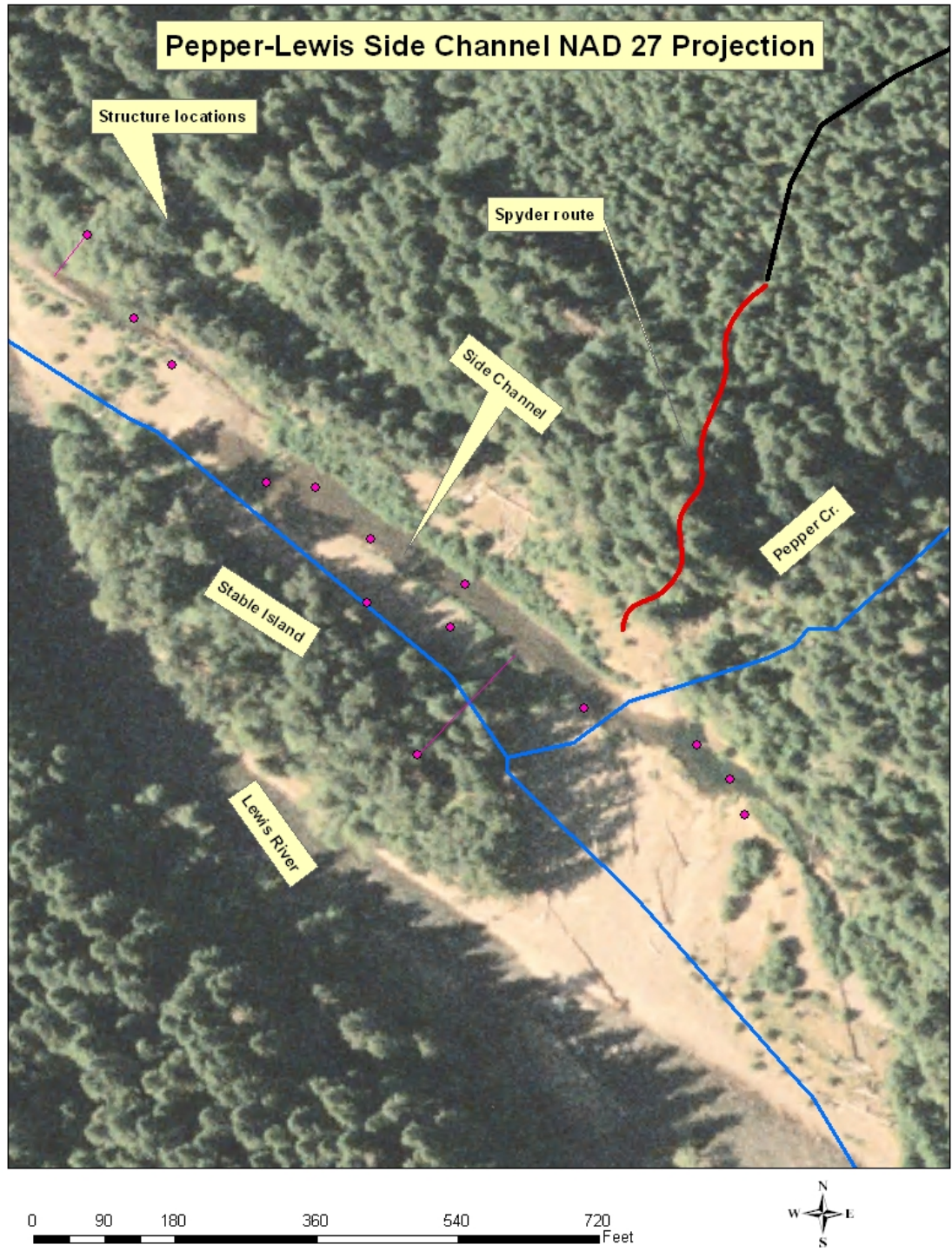
14. Type and source of other contributions (Identify cash (C) and/or in-kind (IK), and status, pending (P) or confirmed (Co)).

Gifford Pinchot National Forest	\$8,000 (IK)	(Co)
Materials from USFS	\$16,000 (IK)	(Co)
Mt St Helens Institute	\$2,000 (IK)	(Co)

15. If you have technical assistance needs for this project, please briefly describe such needs.

None Needed





ATTACHMENT 5

1. Project Title

2010 Nutrient Enhancement on Pine Creek

2. Project Manager

Adam Haspiel

Mt. St. Helens National Volcanic Monument
42218 NE Yale Bridge Road
Amboy, WA 98604
360-449-7833
360-449-7801 (fax)
ahaspiel@fs.fed.us

3. Identification of problem or opportunity to be addressed

Pine Creek was affected by the eruption of Mount St. Helens in 1980 when a lahar scoured the length of it, eventually depositing sediment into Swift Reservoir. As a result of the eruption, nutrient levels decreased due to loss of allochthonous materials and decreased primary production (Lower Lewis River Watershed Analysis (WA) 1995). Additionally, the floods of 1996 removed much of the river's newly established riparian vegetation. Dams built in the 1930's prevented anadromous fish from returning to spawn in the Upper Lewis River System, including Pine Creek. This greatly decreased the nutrient levels in affected streams over time by eliminating contributions of carcasses and eggs.

Nutrients added to Pine Creek and P8 in the form of carcasses would increase primary and secondary production, leading to increased feeding opportunities for bull trout. The areas along Pine Creek and P8 that could be reached by vehicles would be treated by hand, while inaccessible areas would be treated by helicopter. A total of six miles in Pine Creek, and two miles in P8 are available to be treated depending upon partnership funding. The project will benefit bull trout and all species of introduced anadromous fish.

This project compliments the 2006 and 2008, and 2009 Nutrient Enhancement projects funded by the ACC.

The proposal is to use a helicopter to distribute carcasses to Pine Creek and P8 as in past projects. Carcasses would be distributed in early December.

4. Background

Provide information related to how this project fits into greater watershed objectives and any previously collected information at the project site (e.g. fish surveys, habitat delineation, etc)

The Lower Lewis River Watershed Analysis (WA) (1995), and "A study of ecological responses to the 1980 eruption of Mount St. Helens (2005), have identified Pine Creek and its associated floodplains and riparian areas as containing high priority restoration needs.

Coho salmon fry from adult live plants in Swift Reservoir in 2005 were located in Pine Creek and P8 by WDFW during 2006 bull trout surveys.

In December 2006, approximately 3,300 coho carcasses (26,400 lbs) were distributed in Pine Creek and Tributary P8 using a helicopter, and 100 carcasses were distributed by Fish First using a truck. Approximately 4.5 miles of stream were treated with carcasses. The helicopter was able to distribute them fairly evenly with most of them landing instream near the stream edge, some inadvertently landed on the stream bank and in the water. The helicopter distributed them so the majority of carcasses were in slower water areas (i.e. stream margins). Approximately 0.3kg/m² were placed. (Studies performed on streams on the Mt. Hood National Forest that were treated at a rate of 0.4kg/m² showed increases in biofilm production and coho fork lengths.) In December 2008 approximately 2,600 coho carcasses were placed in Pine Creek and P8 using a helicopter, and 100 carcasses were distributed by hand using a truck. 800 of the carcasses were placed in the first two miles of P8 and the 2,000 were placed in Pine Creek above the Forest Boundary. At the time of this writing we have not yet completed the 2009 project.

5. Project Objective(s)

State the objectives of your proposal including how the project is consistent with Aquatics Fund objectives and recovery plans. Describe the technical basis for the objectives including the identification of any supporting technical references.

GOAL:

Enhance the quality of fish habitat in Pine Creek by:

- ◆ Improving the nutrient levels in Pine Creek and associated floodplains and riparian areas using carcasses.

Based on ACC direction in 2006, carcasses will be targeted for instream distribution only. Riparian vegetation may benefit slightly from this activity as nutrients are dispersed via animal activity, and helicopter misplacement.

Increased nutrient availability instream will provide increased primary production - leading to increased secondary production of aquatic macroinvertebrates, which juvenile bull trout and other salmonids feed upon. Pine Creek and especially P8 are important spawning tributaries for bull trout in the Upper Lewis River Sub basin. It is one of only a few streams (Rush Creek and possibly sections of Muddy River) with cold enough summer water temperatures to allow for successful bull trout spawning and egg incubation.

This project addresses the following Aquatic Fund priorities.

Priority 1: *Benefit fish recovery throughout the North Fork Lewis River, with priority to federal ESA-listed species.*

Bull trout are listed as a threatened species under the ESA.

Steelhead trout are listed as a threatened species under the ESA

Coho salmon are listed as a threatened species under the ESA

Priority 2: *Support the reintroduction of anadromous fish throughout the basin.*

Nutrients will enhance the growth and production of anadromous fish.

Priority 3: Enhance fish habitat in the Lewis River Basin-, with priority given to the North Fork Lewis River.

WDFW has produced a report titled, (*Pacific Salmon and Wildlife Ecological Contexts, Relationships, and Implications for Management*); the report states that there is a 50% increase in the size of coho in streams enriched with salmon carcasses. The assumption is made that bull trout and steelhead juveniles will respond in similar fashion.

6. Tasks:

State the specific actions which must be taken to achieve the project objectives.

- 1) secure funding;
- 2) acquire required permits;
- 3) secure carcasses and/or carcass analogs;
- 4) enlist volunteer groups to help distribute carcasses by truck/hand where applicable; and,
- 5) contract to secure helicopter for distribution of carcasses and/or analogs to areas inaccessible to trucks or hand distribution.

Pre-project monitoring has already been occurring as part of the 2006 and 2008 project. Current monitoring includes analysis of macroinvertebrate samples. Monitoring could be expanded and follow a number of protocols including ones used by the BPA under a contract titled, "Assessment of Three Alternative Methods of Nutrient Enhancement on Biological Communities in Columbia River Tributaries."

7. Methods:

Describe methods to be used. When using Best Management Practices (BMPs) identify sources of BMPs and how they will protect resource values.

Adult carcasses from various hatchery reared and collected salmonids species will be distributed by hand in areas accessible to vehicles, inaccessible areas would be seeded by helicopter. The Gifford Pinchot National Forest completed a nutrient enhancement project in 2006 and 2008 using a helicopter. Many of the logistical problems were worked out at that time, which makes this proposal solid. Mt. Hood National Forest completed a similar project using a helicopter (see attached write-up from Mt. Hood), carcasses distributed in streams with wood floated less than ¼ mile before lodging up, in streams devoid of wood, carcasses floated further lodging around boulders or in slack waters or pool eddies. WDFW guidelines from their draft nutrient supplementation paper "Protocols and guidelines for distributing salmonids carcasses, salmon carcass analogs, and delayed release fertilizers to enhance stream productivity in Washington State" allow up to 1.9 kg/m². We are proposing to seed at the rate of 0.4 kg/m², this equates to approximately four tons per mile, or about 1000 fish per mile.

The project would take place in December of 2009. The December time period mimics natural coho spawning periods.

Species that occurred in Pine Creek prior to Dam construction include coho salmon, steelhead trout, and possibly chinook salmon. At this time due to WDFW restrictions, and/or tribal concerns, the only species available for nutrient enhancement are coho salmon.

8. Specific Work Products

Identify specific deliverable results of the project. Project managers will be required to provide status updates with submission of project invoices.

The preferred method to measure deliverables is number/pounds of carcasses/carcass analogs distributed per stream segment. For project assessment purposes, stream segments can be ½ mile increments based on river miles. To verify amounts distributed, hatchery forms documenting numbers of carcasses supplied for the project would be on file at the Mt. St. Helens Ranger District. Invoices for purchases of carcass analogs, if used, will also be on file at Mt. St. Helens Ranger District.

9. Project Duration

a. Identify project duration. Note that duration of a project funded from Fiscal Year 20xx appropriations may extend beyond the end of the fiscal year.

b. Provide a detailed project schedule to include:

- Initiation of project.

- Completion date for each milestone or major task.

- Project close-out site visit (with PacifiCorp, Cowlitz PUD, and ACC representatives)

The duration of this project under the current Proposal would continue for one season. The Proposal would build on efforts from 2006 and 2008. It could continue for several more years, depending on the results and ACC funding. If the project continues for several years, it would be similar in scope and size to this years project; however, it would include minor changes as needed on an annual basis.

The project would take 7 to 21 days to complete. Nutrients would be distributed by helicopter over 4 to 5 miles of stream over a 2-5 day period. Hand distribution would concurrently with or just after helicopter distribution and should be completed by the end of January.

Access may be limited during the months of December and January due to snow, if this is the case, helicopter distribution may occur in areas that were initially identified for hand distribution.

A project closeout meeting would occur at the soonest ACC meeting following project completion and access is available.

10. Permits

NEPA- The Forest Service completed NEPA for this project in 2006. NEPA documents allow us to continue this as an ongoing project for another 5 years.

WDFW- An approval form to distribute both carcasses and carcass analogs will be submitted to WDFW when funding is secured. WDFW coordinates with Department of Ecology (DOE) as part of the approval process.

DNR- A Land Use License from Washington DNR will need to be obtained to use Swift Reservoir boat launch parking area as a helicopter landing and staging area. Both of these permits were secured for the 2006 and 2008 project, and should be easily obtainable for an ongoing project.

Identify any applicable permits and resource surveys required for project. Please include timeline for obtaining and any action taken to-date. Applicant will be responsible for securing all such necessary permits. Landowner permission is required prior to finalization of a Funding Agreement with PacifiCorp. On-the-ground (dirt moving) projects will be required to be in compliance with Sections 401 and 404 of the Clean Water Act, Sections 7 and 10 of the Endangered Species Act, and the National Historic Preservation Act of 1966, as well as Department of the Interior regulations on hazardous substance determinations. Project site surveys may be required in order to comply with these and other regulations.

Land ownership in Pine Creek is comprised of federal and private lands. The Forest Service manages approximately 2 miles of stream in the area proposed for carcass seeding. Olympic Resources Management owns approximately 4 miles of stream in the proposed project area, and Three Rivers Recreational Area owns about 1 mile of stream near the mouth of Pine Creek. Olympic Resources Management and Three Rivers Recreational Area landowners have been contacted and wish to participate in the project.

11. Matching Funds and In-kind Contributions

If applicable, describe any matching funds and/or in-kind contributions that you have secured or have requested through other means. Matching funds are those funds contributed to the project from other funding sources. In-kind contributions may include donated labor, materials, or equipment. Please be specific in your description of contributions and use of volunteers (e.g. ACE construction is donating 8 hours of backhoe operation including operator).

Partner	Contribution	Funds
Forest Service	Project development, Contracting, Permitting, Monitoring	\$12,000 In-kind
Clark Skamania Fly Fishers	Labor for carcass collection, Nutrient distribution, Vehicle use 200 miles	\$2,000 In-kind
Mt. St. Helens Institute	Monitoring	\$3,000 In-kind
Olympic Resource Management	Agreements, road use	\$1,000 In-kind

12. Professional Review of Proposed Project

It is encouraged that the proposal be reviewed by an applicable resource professional prior to submission for funding. Focus of such review should be on biological value and proposed methodology. Please note who completed the review and contact information. This does not have to be a third party review, and can come from someone associated with the sponsoring organization.

This project proposal was reviewed by Gifford Pinchot National Forest (GPNF) Hydrology program manager, Ruth Tracy.

13. Budget

Provide a detailed budget for the project stages (Final design, Permitting, Construction, Monitoring/Reporting). Include:

Personnel costs

Labor and estimated hours

Operating expenses

Supplies and materials

Mileage

Administrative overhead

If in-kind contributions have been acquired, please note contributions according to project stage within the budget.

Pine Creek Nutrient Enhancement Helicopter **CARCASS**

	Total	NEPA	Final designs	Project Mgmt.	Construction	Monitoring/Labor /Reporting
Personnel Costs						
FS - Zone Team or Contract						
FS –Fish Bio and Hydrologist			\$5,000 (IK)			
FS - Fish Bio and Hydrologist				\$2,000(IK) \$2,000 (ACC)		\$5,000 (ACC)
FS - Contract administrator -					\$3,000 (IK)	
FS - Contract Specialist					\$2,000 (IK)	
Clark Skamania FlyFishers						\$2,000 (IK)
Pope & Talbot Timber (ORM)						\$1,000 (IK)
Mt. St. Helens Institute						\$3,000 (IK) \$2,000 (ACC)
Contract Payables						
Helicopter Contract,					\$28,600 (ACC)	
Refrigerated Trailer Rental and mobilization					\$1,400 (ACC)	
Forklift Rental and mobilization					\$1,000 (ACC)	
Supplies					\$ 1000 (ACC)	
Administrative Overhead		\$3,500(IK)	\$1,500 (IK)			
Total ACC Funds	\$41,000			\$2,000	\$32,000	\$ 7,000
<i>Total FS Funds</i>	<i>\$12,000</i>		<i>\$5,000</i>	<i>\$2,000</i>	<i>\$5,000</i>	
<i>Total other Partner Funds</i>	<i>\$8,000</i>					<i>\$8,000</i>
Project Total	\$60,000					
FS personnel estimated as \$300/day.						

This project can be implemented with funds solely acquired from the ACC and Forest Service in kind contributions allowing for four to five miles of carcass seeding, if funds from other groups such as LCFRB come through we can treat up to eight miles. Any other funds acquired will be used to extend the area of distribution.

PINE CREEK NUTRIENT ENHANCEMENT HELICOPTER COST SHEET for CACRCASS

Prepared by R. Pankratz / Helicopter Manager

Assumptions:

- 1) Approximately 4 tons of fish carcasses per mile to be distributed along Pine Creek by air for four river miles.
- 2) Calculations based upon utilization of Northwest Helicopters Jet Ranger (206 B-III) with custom fish bucket
- 3) No cost factors considered for delivery of fish to operations site
- 4) No cost factors considered for any personnel other than those required to accommodate safe and effective helicopter delivery of fish.
Positions considered are helicopter manager, helitack, road guards, streamside safety monitors, forklift operators, fish loaders.
- 5) Two weathered out days have been factored in.
- 6) Swift boat launch will serve as the heliport and staging area for fish carcasses

- 7) Average weight per fish carcass is ten pounds
- 8) It's an approximate 1 mile flight from the Swift boat launch heliport to the confluence of the Pine Creek and Lewis River
- 9) Personnel salary will include necessary aviation safety and logistical planning
- 10) Helicopter rates derived from Region 6 light helicopter contract with cost modifications addressing this operation
- 11) During proj. imp. phase 12 hour days are accounted for to allow for daily prep time, travel times, daily clean-up, contract docs etc.
Objective is to effectively use aircraft resource during available windows with salary costs secondary to aircraft logistics
- 12) Helicopter mobilization calculated from Olympia, Washington
- 13) Mobilization, recon and operational flight time are all accounted for in separate line items
- 14) A scale is identified for use at heliport as required by regional aviation oversight
- 15) No vehicle costs assumed for project support equip.-will need type 6 engine, several pickups, forklift, equip. trailer and tow rig
- 16) No cost listed for rental of refer trailer to hold fish

Estimated costs are developed below. . .

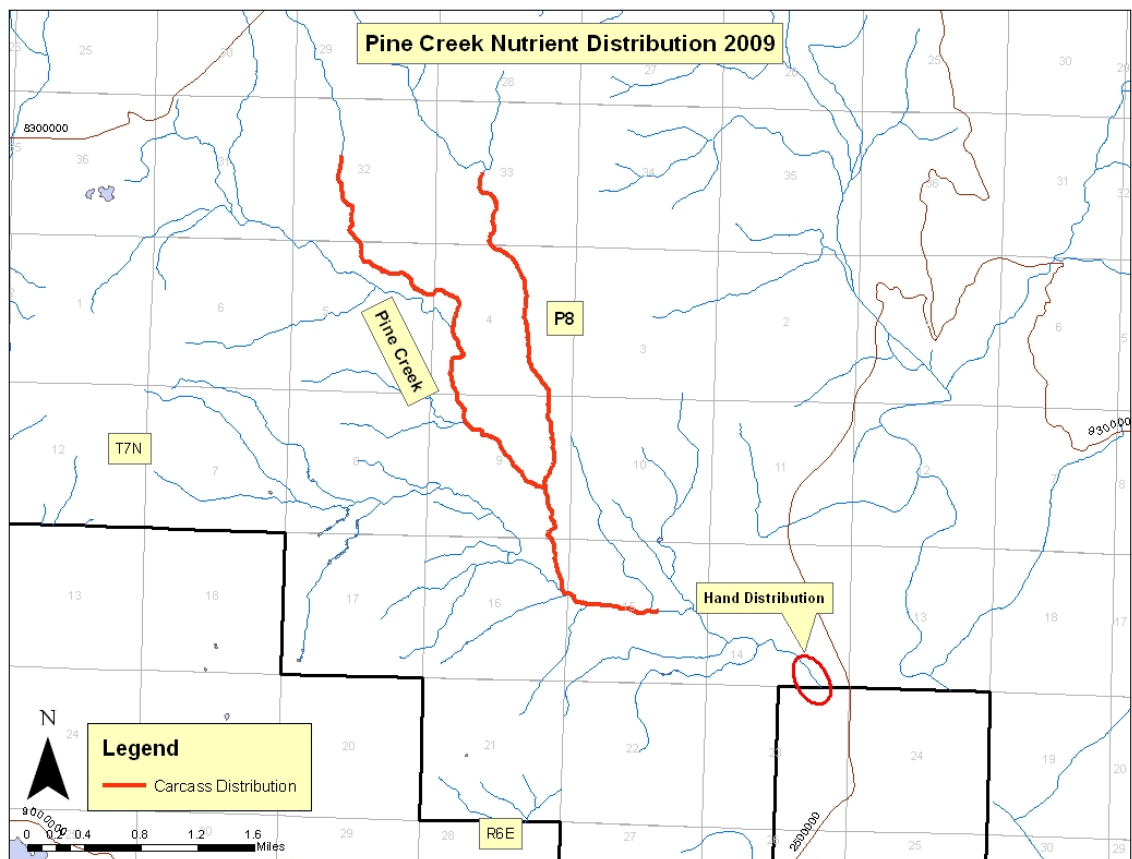
<u>COST ITEM</u>	<u>UNIT</u>	<u># OF UNITS</u>	<u>COST PER UNIT</u>	<u>COST ITEM TOTAL</u>
Helicopter Manager developing project aviation safety plan and logistical planning	day	6	\$271.00	\$1,626.00
Helicopter Manager daily implementation oversight	day	5	\$271.00	\$1,355.00
Helicopter manager overtime	hour	20	\$42.00	\$840.00
Helicopter manager hazard pay for actual flying days	hour	24	\$6.97	\$167.28
Helitack for daily operations = one GS-6	day	4	\$199.00	\$796.00
GS-6 overtime	hour	16	\$24.44	\$391.04
GS-6 hazard pay for actual flying days	hour	24	\$4.07	\$97.68
Helitack for daily operations = two GS-5	day	8	\$130.00	\$1,040.00
GS-5 overtime	hour	32	\$21.21	\$678.72
GS-5 hazard pay for actual flying days	hour	48	\$3.54	\$169.92
Streamside monitoring personnel = two GS-5	day	8	\$130.00	\$1,040.00
GS-5 overtime	hour	32	\$21.21	\$678.72
Road guards for 25 road = two GS-5	day	8	\$130.00	\$1,040.00
GS-5 overtime	hour	32	\$21.21	\$678.72
Fork lift operator GS-9	day	4	\$271.00	\$1,084.00
GS-9 overtime	hour	16	\$42.00	\$672.00
Fish handlers/loaders two GS-9	day	4	\$271.00	\$1,084.00
GS-9 overtime	hour	32	\$42.00	\$1,344.00
Helicopter mobilization flat fee	ea	1	\$555.00	\$555.00
Helicopter demobilization flat fee	ea	1	\$555.00	\$555.00

Helicopter hourly cost project recon	hour	0.5	\$865.00	\$432.00
Helicopter hourly cost project implementation	hour	12	\$865.00	\$10,380
Helicopter daily guarantee	day	1	\$1,000.00	\$1,000.00
Fuel truck mileage fee	mile	620	\$1.40	\$868.00

\$

Total cost estimate for aviation component of fish carcass placement / Pine Creek

\$28,573.00



ATTACHMENT 6

Appendix C
PROPOSAL FORM -
Lewis River Aquatic Fund

1. Project Title

Pine Creek Instream and Floodplain Structures for Bull Trout and Steelhead.

2. Project Manager

Adam Haspiel

Mt. St. Helens National Volcanic Monument

42218 NE Yale Bridge Road

Amboy, WA 98604

360-449-7833

360-449-7801 (fax)

ahaspiel@fs.fed.us

20+ years of fish habitat restoration experience

3. Identification of problem or opportunity to be addressed

The Pine Creek system was affected by the eruption of Mount St. Helens in 1980 when a lahar scoured the length of it, eventually dumping sediment into Swift Reservoir. As a result of the eruption and subsequent floods of 1996 much of the instream wood was removed, leaving Pine Creek devoid of instream Large Woody Material (LWM).

A variety of log structures will be placed instream in Pine Creek using helicopters and/or heavy equipment to stabilize streambanks, capture suitable sized spawning gravel for adult bull trout and steelhead. Additionally, the structures will create slow water pockets to enhance juvenile rearing habitat and create resting areas for spawning adult bull trout and steelhead. Floodplain structures will allow point bars to build up and riparian vegetation to become well established and withstand flood waters. The project will be implemented on FS lands in section 14 (see attached map).

4. Background

Provide information related to how this project fits into greater watershed objectives and any previously collected information at the project site (e.g. fish surveys, habitat delineation, etc).

The overall objective for bull trout restoration in the Upper Lewis watershed focuses on Pine Creek, Cougar Creek, Muddy River and Rush Creek. Currently Pine Creek has the highest use by adult bull trout (Personal communication WDFW). Spawning gravel is limited (but more abundant than Rush Creek) in Pine Creek and it is uncertain what actually is the success rate of spawning adults. Currently spawning superimposition probably occurs due to low amounts of available spawning gravel. Therefore, it is desirable to increase the amount of spawning gravel available to bull trout to ensure species recovery.

Reintroduction of salmonids: Steelhead trout will most likely use Pine Creek once reintroduction occurs, and they will be competing with bull trout for spawning gravel. It is likely steelhead will superimpose their redds on bull trout redds because bull trout spawn earlier than steelhead.

A stream survey conducted in 2005 found LWM to vary from 2.2 to 12.3 pieces per mile throughout the entire survey. This is well below the 80 pieces per mile identified in a

Properly Functioning Condition (PFC) for west side streams. More wood is found in the lower reaches than in the upper reaches. The pool/ riffle ratio averaged 5/95. Spawning gravel was found to be in sparse pockets throughout the reach. Streambanks were found to have some erosion and instability.

The above information leads us to believe that placing LWM in Pine Creek would allow useable areas of spawning gravel to form. Placing LWM in flood plains will allow the formation of point bars to occur, eventually leading to establishment of riparian vegetation and creating stable banks.

5. Project Objective(s)

State the objectives of your proposal including how the project is consistent with Aquatics Fund objectives and recovery plans. Describe the technical basis for the objectives including the identification of any supporting technical references.

The main objective of this project is to stabilize streambanks and amass spawning gravel in Pine Creek. The addition of LWM to sections of Pine Creek would slow water velocities, allowing gravels moving through the system to deposit, creating additional spawning opportunities for bull trout and soon to be reintroduced steelhead trout. LWM will also create resting areas for migrating and spawning adults, and rearing habitat for juvenile salmonids, an important feature for territorial fish such as steelhead and bull trout. Additional available spawning gravel in Pine Creek may also eliminate redd superimposition.

Specific project designs would involve the placement of at least 150 or more pieces of LWM per mile.

Forest Service managed land includes the lower and higher sections of the Pine Creek drainage. While, timber companies own the middle sections of the drainage (where much of the spawning probably occurs). This project would focus on Forest Service managed lands.

This project address the following ACC priorities.

Priority 1: Benefit fish recovery throughout the North Fork Lewis River, with priority to federal ESA-listed species.

Bull trout are listed as a threatened species under the ESA.

Steelhead trout are listed as a threatened species under the ESA

Priority 2: Support the reintroduction of anadromous fish throughout the basin.

Steelhead trout will use the cold, fast water of Rush Creek to rear and spawn if given the opportunity.

Priority 3: Enhance fish habitat in the Lewis River Basin-, with priority given to the North Fork Lewis River.

This project is composed of large woody material placed instream designed specifically to enhance and restore fish habitat.

6. Tasks:

State the specific actions which must be taken to achieve the project objectives.

1. Secure funding.
2. Design project plans
3. Collect baseline data
4. Secure required permits- including NEPA
5. Develop Contract
6. Implement Contract
7. Monitor Results

If monitoring of project is funded and warranted by ACC, pre-project monitoring would begin as permits are acquired, and post monitoring efforts would begin when Large wood has gone through a winter season. Items to monitor would include stability and location of introduced large wood, and amounts of available spawning gravel. Substrate size can also be monitored using Wolman pebble counts.

7. Methods:

Describe methods to be used. When using Best Management Practices (BMPs) identify sources of BMPs and how they will protect resource values.

Due to high water velocities introduced wood must have a large diameter and be longer than twice the bankfull width to remain stable. In Pine Creek pieces of wood should be at least 75 to 100 feet long to provide structure stability.

Methods used to place wood include heavy equipment such as all excavators, mobile yarders, and large helicopters capable of 10,000lb lift. Large wood can be collected from a variety of sources including logs washed into Pacific Corp reservoirs, trees blown down on Forest Service lands, from a forest service timber sale, and hazard trees removed from roadsides. Large wood from reservoirs and FS timber sale will be our primary source for wood.

8. Specific Work Products

Identify specific deliverable results of the project. Project managers will be required to provide status updates with submission of project invoices.

The best way to measure deliverables are amounts of large wood placed instream, and clocked hours on machinery. Other costs such as move-ins and wood delivery can be tracked through invoices.

9. Project Duration

a. Identify project duration. Note that duration of a project funded from Fiscal Year 20xx appropriations may extend beyond the end of the fiscal year.

b. Provide a detailed project schedule to include:

- Initiation of project.

- Completion date for each milestone or major task.

- Project close-out site visit (with PacifiCorp, Cowlitz PUD, and ACC representatives)

This project would commence in 2011 to allow adequate time for NEPA, project design, gathering materials, and securing contractors.

WDFW guidelines allow instream work to occur in the Upper Lewis River basin from July 1st through July 31st. Because of the short work window it would be necessary to stage wood nearby the stream prior to July 1st.

10. Permits

NEPA- This project would require NEPA. The Forest Service will complete NEPA for this project in time to meet implementation dates of July 2011.

The Gifford Pinchot National Forest has a Memorandum of Agreement with the Washington State Department of Ecology (DOE). The agreement recognizes the Forest Service will ensure that 1) all waters on National Forest lands meet or exceed water quality laws and regulations (Sections 301, 302, 303, 306 and 307) of the Clean Water Act and 2) activities on those lands are consistent with the level of protection of the Washington Administrative Code relevant to state and federal water quality requirements. This agreement is neither a fiscal nor a funds obligation document.

The Gifford Pinchot National Forest has a Memorandum of Understanding (MOU) with the Washington State Department of Fish and Wildlife Regarding Hydraulic Projects conducted by USDA Forest Service Northwest Region (2005). This MOU allows fish habitat restoration without an individual hydraulic project approval (HPA) if the project complies with the provisions of the MOU. This fish habitat enhancement project will be conducted within the provisions set forth in this MOU.

The Clean Water Act (as amended by the Water Quality Act of 1987, Public Law 100-4) authorizes the states to regulate the “fill and removal” activities of Federal agencies. In Washington, the Forest Service has authorization for its fill and removal projects through the MOU with WDFW when the projects comply with the provisions of the MOU.

The project is in compliance with all pertinent sections.

Identify any applicable permits and resource surveys required for project. Please include timeline for obtaining and any action taken to-date. Applicant will be responsible for securing all such necessary permits. Landowner permission is required prior to finalization of a Funding Agreement with PacifiCorp. On-the-ground (dirt moving) projects will be required to be in compliance with Sections 401 and 404 of the Clean Water Act, Sections 7 and 10 of the Endangered Species Act, and the National Historic Preservation Act of 1966, as well as Department of the Interior regulations on hazardous substance determinations. Project site surveys may be required in order to comply with these and other regulations.

11. Matching Funds and In-kind Contributions If applicable, describe any matching funds and/or in-kind contributions that you have secured or have requested through other means. Matching funds are those funds contributed to the project from other funding sources. In-kind contributions may include donated labor, materials, or equipment. Please be specific in your description of contributions and use of volunteers (e.g. ACE onstruction is donating 8 hours of backhoe operation including operator).

12. Professional Review of Proposed Project

It is encouraged that the proposal be reviewed by an applicable resource professional prior to submission for funding. Focus of such review should be on biological value and proposed methodology. Please note who completed the review and contact information. This does not have to be a third party review, and can come from someone associated with the sponsoring organization.

This project proposal was reviewed by Gifford Pinchot National Forest (GPNF) Hydrology program manager, Ruth Tracy, and the GPNF Fisheries program manager, Dave Hu.

13. Budget

Provide a detailed budget for the project stages (Final design, Permitting, Construction, Monitoring/Reporting). Include:

Personnel costs

Labor and estimated hours

Operating expenses

Supplies and materials

Mileage

Administrative overhead

If in-kind contributions have been acquired, please note contributions according to project

stage within the budget.

ACC \$72,000

Title II Funds \$20,000

FS \$52,000

Pine Creek Instream and Floodplain Structures for Bull Trout and Steelhead.

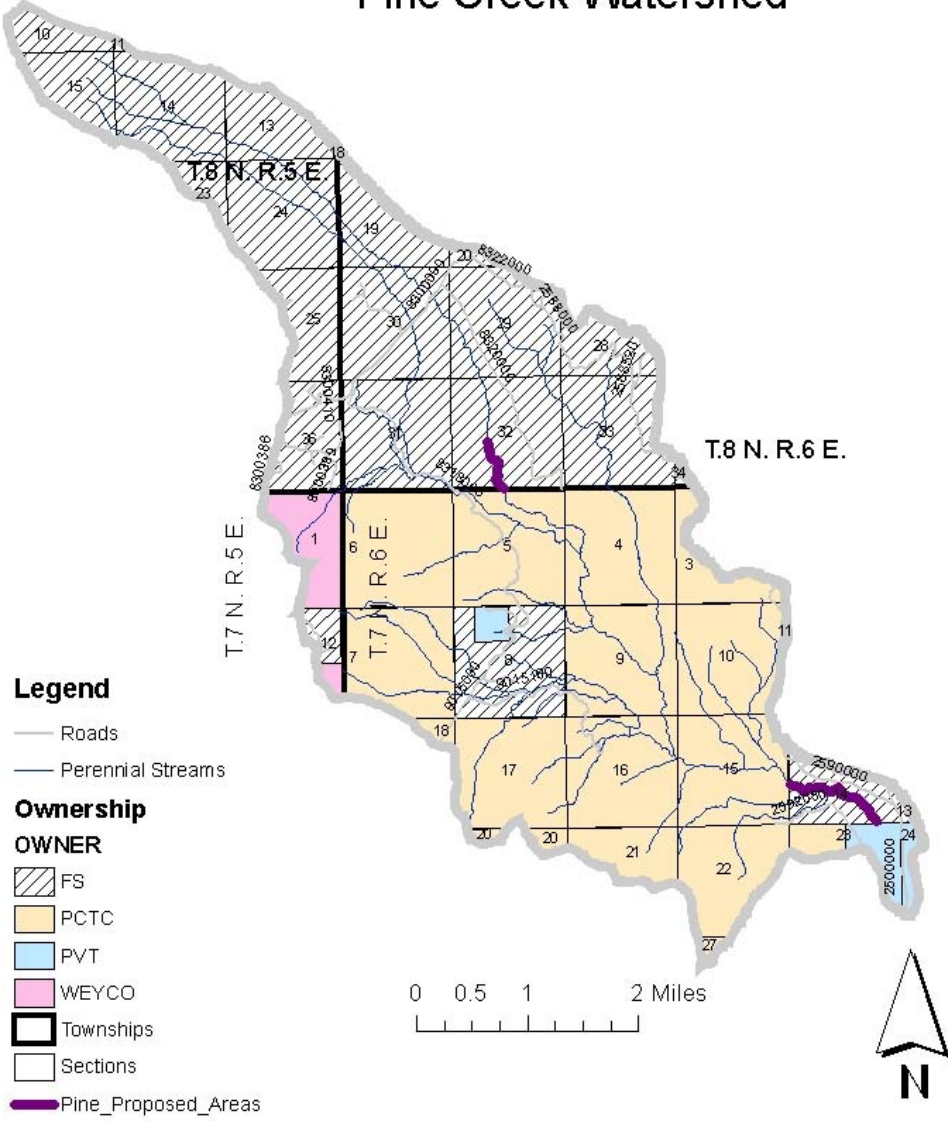
	NEPA	Final designs	Permitting	Construction	Monitoring /Reporting
Personnel Costs					
FS - Zone Team or Contract	\$10,000 (ACC)				
FS –Fish Bio and Hydrologist		\$5,000 (IK)		\$10,000 (ACC)	
FS - Fish Bio and Hydrologist			\$2,000(IK)		\$5,000 (ACC)
FS - Contract administrator -				\$3,000 (IK)	
FS - Fish Bio to meet MOU Requirements				\$5,000 (IK)	
FS - Contract Specialist				\$2,000 (IK)	
FS Materials -Trees				\$ 30,000	\$
				\$20,000 (need to submit grant in '2011)	
Title II funds				(cash)	
Contract Payables					
Helicopter or Mobile Yarder Contract				\$30,000ACC	
Excavator Contract				\$7,000 ACC	
Log haul Contract				\$10,000 ACC	

Administrative Overhead	\$3,500(IK)	\$1,500 (IK)
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FS personnel estimated as \$300/day.

This project can be implemented with funds solely acquired from the ACC and Forest Service in kind contributions, the treated area would be only Forest Service Lands. Any other funds acquired will be used to enlarge the project area and work on private lands. Helicopter costs are approximately \$5,000 per hour.

Proposed Stream Restoration Areas
in the
Pine Creek Watershed



ATTACHMENT 7

PRE-PROPOSAL FORM

Lewis River Aquatic Fund

1. Applicant organization.

Lower Columbia Fish Enhancement Group

2. Organization purpose

Our program was established in 1990 by the Washington State Legislature as a 501-c3 non-profit organization responsible for restoring salmon and steelhead populations to healthy, harvestable levels.

3. Project manager (name, address, telephone, email, fax).

Tony Meyer
12404 SE Evergreen Hwy
Vancouver, WA 98683
360-882-6671; cwfish@comcast.net

4. Project Title

NF Lewis RM 13.5 Off-Channel Habitat Enhancement

5. Summary of Project proposal

This project is located on the NF Lewis River near river mile 13.5, in reach Lewis 5, a Tier 1 reach according to the Lower Columbia Salmon Recovery and Fish & Wildlife Subbasin Plan (LCFRB 2004). This project will increase the availability of off-channel habitat for salmon and steelhead. Off-channel habitat has been significantly reduced from its historical distribution and is considered a high priority for restoration in the LCFRB 6-year Habitat Work Schedule and Lead Entity Habitat Strategy (LCFRB 2009). This proposal is for implementation and monitoring for the following project components:

- 1) Re-connection and enhancement of approximately 1,500 lineal feet of backwater / off-channel habitat. This project will expand off-channel rearing habitat capacity and will reduce stranding risk that currently exists at the site.
- 2) Re-connection of a perennial tributary to the mainstem to restore fish passage to historical spawning areas.
- 3) Riparian and wetland re-vegetation.

Design funding for these elements were obtained as part of the SRFB project "NF Lewis Side-Channel Design". Designs are currently complete to the 60% stage. The LWD material has already been obtained and delivered to the site.

The river along this reach is currently composed of a long glide with little cover, complexity, or pools. Construction and operation of the Lewis River hydrosystem, including blockage of fluvial LWD transport, interruption of sediment transport, and flow regulation, has altered natural processes. The area has also been impacted by past clearing and snagging, past gravel mining, and residential development. These impacts have reduced LWD loading, reduced channel complexity, and have reduced habitat-forming processes (e.g. floods) necessary for creating and maintaining complex habitats.

This proposed off-channel habitat project is one component of a larger restoration effort at this site. This proposal requests funding for implementation of a portion of the total side-channel design project. Other restoration elements include LWD additions along the mainstem shoreline (funded, permitted, and awaiting 2010 construction), addition of LWD cover to existing backwater ponds (pending funding), creation of a flow-through side-channel (future phase), and enhancement of habitat within the perennial tributary (future phase). See Figure 1 for the relationship with other component phases of this project.

6. Project location (including River/Stream and Lat/Long coordinates if available).

Mainstem Lewis River approximately River Mile 13.5; river left bank
Latitude: 122° 39' 7" W Longitude: 45° 55' 41" N

7. Expected products and results (Please attach any drawings).

The desired future condition is a stream reach that provides the habitat quantity and complexity that better resembles the conditions to which Lewis River fish populations have adapted to over time. Expected products include the implementation of the following elements. See Figure 1 for a map:

1. Creation of 42,000 square feet of off-channel / backwater habitat that is connected to the mainstem Lewis River. This backwater area will be constructed in an abandoned meander-scar of the historical mainstem Lewis River.
2. Elimination of existing stranding risk. The perennial tributary currently flows into an abandoned Lewis River channel. The relic Lewis River pool forms a ponded area that does not have an outlet to the mainstem that allows for fish passage. Furthermore, the ponded area creates a stranding risk to fish that seek velocity refuge and forage habitat on the floodplain and become trapped in the ponded area as flood stage recedes.
3. Restoration of fish passage into the perennial tributary. Reconnecting the off-channel area will also restore fish access to the tributary. A failed culvert near the mouth of the tributary will also be removed to improve passage conditions.
4. Restoration of the native riparian plant community. Riparian areas will be planted with site-adapted native riparian species. Invasive/noxious species will be removed, primarily Japanese knotweed.

8. Benefits of proposed Project

This project benefits fish recovery in the NF Lewis River, with priority given to federal ESA-listed species. Habitat will be created for ESA-listed Chinook, coho, steelhead, and chum.

The availability of off-channel habitat in this reach has been substantially reduced compared to historical conditions (R2 Resource Consultants 2004). Creation of off-channel habitat will primarily benefit juvenile rearing for coho, steelhead, and Chinook. Existing juvenile stranding risk will also be reduced for these species. Re-establishment of passage into the perennial spring-fed tributary will allow for coho, steelhead, and potentially chum spawning. This tributary also offers over 2,000 feet of off-channel rearing habitat in addition to the nearby rearing habitat provided by the proposed backwater area.

The quantity and quality of LWD has been reduced as a result of historical streambank clearing, in-stream snagging, basin-wide riparian harvest, reduction in channel dynamics, and interruption of fluvial wood transport due to the hydrosystem (Interfluve et al 2008). This project will restore wood quantity and quality to within the range of historical conditions. Recovery of native riparian forest vegetation will also ensure that long-term benefits are provided.

9. Project partners and roles.

Project partners and roles are described below:

- Lower Columbia Fish Enhancement Group: LCFEG will provide project management and coordination. The LCFEG has conducted numerous stream habitat projects in the region and will play an active role in design and implementation of enhancements.
- Lower Columbia Fish Recovery Board: Approval is pending for Salmon Recovery Funding Board (SRFB) funds for other habitat improvement elements associated with this project. The LCFRB staff and TAC have assisted with review of the proposed treatments and will be an important cooperator throughout project implementation
- Sam Kysar (left bank landowner): Sam remembers coho salmon spawning in the tributary. He is very supportive of this effort and has indicated his interest in providing project support in the form of labor and materials and long-term maintenance and monitoring. The Kysars have also expressed interest in placing a conservation easement on their floodplain property to protect salmon recovery investments.
- Inter-Fluve: Inter-Fluve will perform construction oversight services and effectiveness monitoring. Inter-Fluve has already conducted survey, analysis, and design work for the project.

10. Community involvement (to date and planned).

The LCFEG and Inter-Fluve have worked closely with primary landowners at the project site. These landowners will be important and active partners. We will ensure that other community interests, including recreation interests, are factored directly into design criteria for the project. LCFEG will work

with WDFW and Clark County to post temporary and permanent signage at boat ramps to inform recreational users of the restoration activities in the area.

11. Procedure for monitoring and reporting on results.

Implementation monitoring will be performed to ensure design criteria are met. Implementation monitoring metrics include amount of connected off-channel habitat created, pieces of LWD installed, and density and survival of riparian plantings. As-built drawings will be developed and a long-term monitoring plan will be created in order to measure project success and guide maintenance activities. Before and after photo points will be established.

12. Project schedule (anticipated start date, major milestones, completion date).

Start: April/May 2010

Survey, design and permitting: Currently underway as part of existing SRFB-funded project.

Construction: July-August 2010

Completion: Fall 2011. Riparian maintenance to extend to 2012.

13. Funding requested.

Item	Cost	Description
Off-channel creation/re-connection	\$96,000	Earthwork (~12,000 cu yds). Assumes nearby spoils disposal area.
Placement of LWD habitat	\$45,000	Placement of LWD in off-channel area. LWD material has already been acquired.
Riparian planting, site prep & rehab, erosion control	\$20,000	Within disturbance limits. ~2 acres at \$10,000/ac
Tax (3.5% of construction costs)	\$5,635	
Total Construction	\$166,635	
Construction staking and oversight	\$26,400	4 weeks total
Monitoring (3%)	\$5,000	Effectiveness monitoring
Admin (10%)	\$16,660	
Total request	\$214,695	

14. Type and source of other contributions (Identify cash (C) and/or in-kind (IK), and status, pending (P) or confirmed (Co)).

Salmon Recovery Funding Board (SRFB) – \$117,000 (C) for design of multiple project components, including the work proposed in this proposal.

PacifiCorp ACC - \$190,000 (C) for LWD additions to the mainstem Lewis River (river-left shoreline).

Design, analysis, and permitting is complete. Construction awaiting 2010 in-water work window.

SRFB - \$141,750 (C) for LWD additions to the mainstem Lewis River (river-right shoreline; pending shifting to enhancement of existing river-left off-channel ponds).

Sam Kysar (landowner) – labor, materials, maintenance TBD (IK) (P)

LCFEG – \$15,000 labor and materials (IK) (Co)

Cowlitz Tribe – \$5,000 labor (Co)

15. If you have technical assistance needs for this project, please briefly describe such needs.

No technical assistance is required as we intend to hire Inter-Fluve, Inc to design and assist in implementation of this project.

References

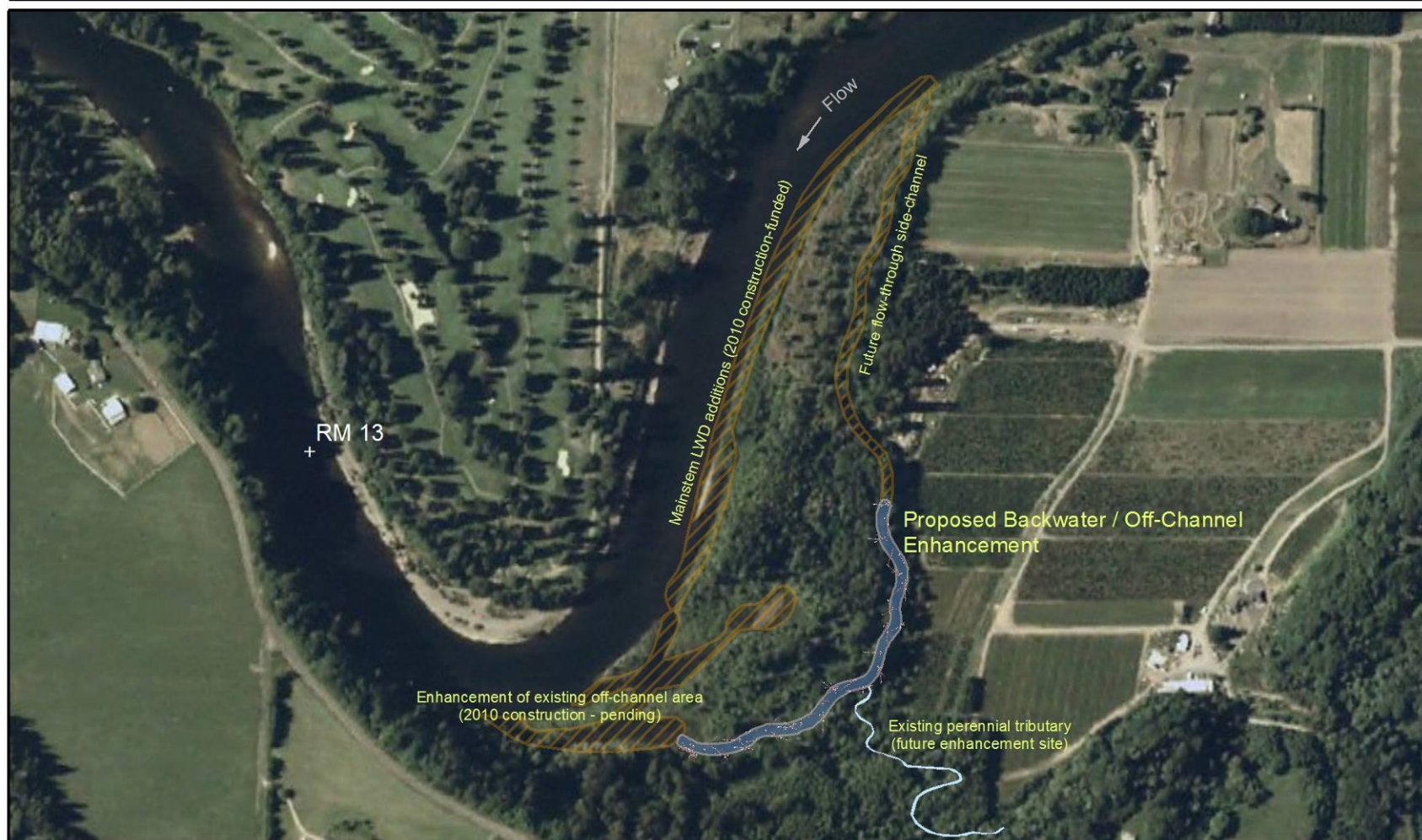
Interfluve, Cramer Fish Sciences, and Fox Environmental Services. 2008. Lewis River LWD Study. Prepared for PacifiCorp, Portland, OR.

LCFRB (Lower Columbia Fish Recovery Board). 2009. LCFRB Habitat Strategy. Available on-line at <http://www.lcfrb.gen.wa.us/2008%20HWS.htm>.

R2 Resource Consultants. 2004. Kalama, Washougal and Lewis River Habitat Assessments Chapter 3: The North Fork Lewis River Basin.

Figure 1 Lewis River Aquatic Fund - Proposal

Plan View for: NF Lewis RM 13.5 Off-Channel Habitat Enhancement



Legend

- Proposed activity - ACC 2010
- Associated project components - not part of this proposal
- Perennial tributary

0 200 400 800 1,200 1,600 Feet



2006 aerial photography

ATTACHMENT 8

Attachment A

PRE-PROPOSAL FORM

Lewis River Aquatic Fund

1. Applicant organization.

U.S. Fish and Wildlife Service

2. Organization purpose

The Mission of the U.S. Fish & Wildlife Service is working with others to conserve, protect and enhance fish, wildlife, and plants and their habitats for the continuing benefit of the American people.

3. Project manager (name, address, telephone, email, fax).

Michael Hudson
Supervisory Fish Biologist
U.S. Fish and Wildlife Service – Columbia River Fisheries Program Office
1211 SE Cardinal Ct – Ste 100
Vancouver, WA 98683
360-604-2500 (ph) / 360-604-2505 (fax)
michael_hudson@fws.gov

Note: Please attach a resume or other description of the education and experience of the persons responsible for project implementation.

4. Project Title

Bull Trout Habitat Use in Tributaries to Swift Reservoir and the NF Lewis River

5. Summary of Project proposal

The focus of this project is the Federally listed bull trout population(s) associated with Swift Reservoir in the NF Lewis River. The objective of the proposed work is to better understand bull trout use of various tributaries to the reservoir and the NF Lewis in order to better prioritize locations for habitat restoration that will benefit the species. Current work being conducted by USFWS-CRFPO is focused on use of Rush Creek, Pine Creek and Swift Creek by bull trout adults larger than 525 mm. Past work indicates that smaller adults may use these known spawning areas as well. Furthermore, recent findings during baseline assessment surveys (WDFW and PacifiCorp, personal communication) indicate that juvenile bull trout are using tributaries (i.e., Swift Creek, Drift Creek), but it is not known to what extent. This project proposes to expand the network of radio telemetry receivers established by USFWS-CRFPO (Swift Creek, Eagle Cliff, Pine Creek, Rush Creek, above Rush Creek on the NF Lewis, and the head of Yale Reservoir)

with additional sites (i.e., Muddy River, Clear Creek, Drift Creek, Range Creek). Small adult (< 525 mm) and juvenile bull trout will be captured using a number of techniques and radio tagged. Radio telemetry data from this fixed network of antennas will provide information on seasonal timing of tributary use and duration of use. Additional mobile tracking will identify areas of these tributaries that are being utilized. This study will focus on small adult and juvenile bull trout but will potentially benefit from large adults (> 525 mm) being radio tagged at the head of Swift Reservoir in a separate effort. The proposed work addresses Lewis River Aquatic Fund priorities by benefitting Federally listed bull trout, not impacting reintroduction of anadromous species, and providing direction for future enhancement to fish habitat.

6. Project location (including River/Stream and Lat/Long coordinates if available).

The proposed project will be conducted in tributaries to Swift Reservoir and the NF Lewis River (i.e., Swift Creek, Drift Creek, Range Creek, Pine Creek, Muddy River, Clear Creek, Rush Creek).

7. Expected products and results (Please attach any drawings).

An annual report will be completed each winter and a final report will be completed at the terminus of the project. Results will provide direction for prioritizing future habitat restoration projects.

8. Benefits of proposed Project

The proposed project benefits bull trout through implementation of the recovery plan, the Lewis River Bull Trout Action Plan, and addressing priorities of the Lewis River Aquatic Fund. Chapter 20 of the draft recovery plan is specific to the Lower Columbia Recovery Unit which includes the Lewis River Core Area. This project addresses the following Action Needed and associated tasks according to that plan: 5.2 Conduct research evaluating relationships among bull trout distribution and abundance, bull trout habitat, and recovery tasks. This project addresses the following Category 1 action and associated tasks identified in the Lewis River Bull Trout Action Plan: 1.4 This project addresses the priorities of the Lewis River Aquatic Fund as described above.

9. Project partners and roles.

PacificCorp – Coordination and information sharing.
WDFW – Coordination and information sharing.
USFS – Coordination and information sharing.
Cowlitz Tribe – Coordination and information sharing.

10. Community involvement (to date and planned).

Community involvement will be coordinated through the ACC.

11. Procedure for monitoring and reporting on results.

Radio antennas will be downloaded approximately every ten days. Mobile tracking will be conducted in conjunction with that task. Reporting of results will be coordinated with the ACC within the timeframes described above

12. Project schedule (anticipated start date, major milestones, completion date).

Project implementation – Summer 2010

Annual report – Winter 2010/2011

Project completion – Summer 2011 (unless additional funding secured)

Completion report – Winter 2011/2012

13. Funding requested (estimated cost for project design, permitting (including necessary resource surveys), construction, and monitoring).

Personnel - \$16,500

Equipment - \$48,500

Total - \$65,000

14. Type and source of other contributions (Identify cash (C) and/or in-kind (IK), and status, pending (P) or confirmed (Co)).

	CRFPO (IK/Co)*	WDFW (IK/Co)**	Pacificorp (IK/Co)**
Personnel	\$16,000	\$5,000	\$5,000
Equipment	\$8,000		
Total	\$24,000	\$5,000	\$5,000

* CRFPO cost share is provided for project completion in FY2011

** WDFW and Pacificorp cost share is provided by effort to capture small adults at the head of Swift Reservoir in Spring/Summer 2010

15. If you have technical assistance needs for this project, please briefly describe such needs.

N/A

ATTACHMENT 9

Attachment A

PRE-PROPOSAL FORM

Lewis River Aquatic Fund

1. Applicant organization.

U.S. Fish and Wildlife Service

2. Organization purpose

The Mission of the U.S. Fish & Wildlife Service is working with others to conserve, protect and enhance fish, wildlife, and plants and their habitats for the continuing benefit of the American people.

3. Project manager (name, address, telephone, email, fax).

Michael Hudson
Supervisory Fish Biologist
U.S. Fish and Wildlife Service – Columbia River Fisheries Program Office
1211 SE Cardinal Ct – Ste 100
Vancouver, WA 98683
360-604-2500 (ph) / 360-604-2505 (fax)
michael_hudson@fws.gov

Note: Please attach a resume or other description of the education and experience of the persons responsible for project implementation.

4. Project Title

Bull Trout Population Structure in the Lewis River Basin

5. Summary of Project proposal

The focus of this project is the Federally listed bull trout populations in the Lewis River basin. The objective of the proposed work is to describe population structure of bull trout in the Lewis River basin to better prioritize recovery actions (i.e., habitat restoration). Population structure will be described using genetic analysis. Individuals from known bull trout spawning tributaries (i.e., Cougar Creek, Rush Creek, Pine Creek) will be collected for tissue samples. Genetic samples will also be collected from bull trout in other tributaries in which they occur (i.e., Swift Creek, Drift Creek). All tissue samples will be processed by U.S. Fish and Wildlife Service – Abernathy Fish Technology Center. Resulting population structure will identify putative number of bull trout populations in the Lewis River basin. These results will assist in prioritizing recovery actions (i.e., habitat restoration). For example, if bull trout from multiple tributaries to Swift Reservoir represent a single population, it may be most beneficial to

enhance/maintain viability in those tributaries that currently best support the species. On the other hand, if the same tributaries represent multiple populations, it may be most beneficial to enhance/maintain viability in tributaries currently most impacted. The proposed work addresses Lewis River Aquatic Fund priorities by benefitting Federally listed bull trout, not impacting reintroduction of anadromous species, and providing direction for future enhancement to fish habitat.

6. Project location (including River/Stream and Lat/Long coordinates if available).

The proposed project will be conducted in tributaries to Swift Reservoir and the NF Lewis River (i.e., Swift Creek, Drift Creek, Range Creek, Pine Creek, Muddy River, Clear Creek, Rush Creek).

7. Expected products and results (Please attach any drawings).

A final report will be completed at the terminus of the project. Results will provide direction for prioritizing future habitat restoration projects.

8. Benefits of proposed Project

The proposed project benefits bull trout through implementation of the recovery plan, the Lewis River Bull Trout Action Plan, and addressing priorities of the Lewis River Aquatic Fund. Chapter 20 of the draft recovery plan is specific to the Lower Columbia Recovery Unit which includes the Lewis River Core Area. This project addresses the following Action Needed and associated tasks according to that plan: 5.2 Conduct research evaluating relationships among bull trout distribution and abundance, bull trout habitat, and recovery tasks. This project addresses the following Category 1 actions and associated tasks identified in the Lewis River Bull Trout Action Plan: 1.2 Characterize genetic diversity and gene flow among local populations; 1.4.1 Clarify population structure and diversity among Cougar, Pine and Rush creeks. Results of this project will benefit implementation of the following high priority actions and associated tasks identified in the Lewis River Bull Trout Action Plan: 3.1.2 Protect riparian corridor structure and function; 3.1.2.1 Protect habitat through purchase from willing sellers, land exchange, conservation easement, etc. This project addresses the priorities of the Lewis River Aquatic Fund as described above.

9. Project partners and roles.

PacificCorp – Coordination and information sharing.
WDFW – Coordination and information sharing.
USFS – Coordination and information sharing.
Cowlitz Tribe – Coordination and information sharing.

10. Community involvement (to date and planned).

Community involvement will be coordinated through the ACC.

11. Procedure for monitoring and reporting on results.

This project has no associated monitoring. Reporting of results will be coordinated with the ACC within the timeframes described above.

12. Project schedule (anticipated start date, major milestones, completion date).

Project implementation – Summer 2010

Project completion – Spring 2011

Completion report – Spring 2011

13. Funding requested (estimated cost for project design, permitting (including necessary resource surveys), construction, and monitoring).

Personnel - \$16,000

Equipment - \$17,000

Total - \$33,000

14. Type and source of other contributions (Identify cash (C) and/or in-kind (IK), and status, pending (P) or confirmed (Co)).

	CRFPO (IK/Co)*	WDFW (IK/Co)*	Pacificorp (IK/Co)*
Personnel	\$5,000	\$5,000	\$5,000
Equipment			
Total	\$5,000	\$5,000	\$5,000

* Cost share by identified agencies is for genetic samples that have been collected to date

15. If you have technical assistance needs for this project, please briefly describe such needs.

N/A

ATTACHMENT 10



GIFFORD PINCHOT TASK FORCE

917 SW Oak Street, Suite 410 Portland, OR 97205 Phone: (503) 221-2102 Fax: (503) 221-2146 <http://www.gptaskforce.org>

Frank Shrier
PacifiCorp – LCT 1500
825 NE Multnomah
Portland, OR 97232

October 5, 2009

Dear Mr. Shrier:

Thank you for the opportunity to present you with a pre-proposal for the Lewis River Aquatic Fund. Our proposal builds on past investments made by PacifiCorp and complements current Forest Service projects and plans.

We would be happy to walk the project area with interested parties or provide you with any additional information that might be helpful for your review. Thank you again for your consideration.

Sincerely,



Emily Platt
Executive Director

PRE-PROPOSAL FORM

Lewis River Aquatic Fund

1. Applicant organization.

Gifford Pinchot Task Force (Task Force)

2. Organization purpose

The Gifford Pinchot Task Force supports the biological diversity and communities of the Northwest through conservation and restoration of forests, rivers, fish and wildlife. We believe thriving biological diversity supports the high quality of life in the Northwest and is embodied by healthy fish runs, functioning forest ecosystems, clean drinking water, and inspirational recreational experiences. We also believe the Northwest is one of the best places to demonstrate that conservation and restoration can support vibrant local communities because the region still has high quality habitat and an infrastructure of businesses that have expertise working in the woods and restoring watersheds. We prefer a collaborative approach that engages local community members, government, and other organizations because this can lead to longer-term, more stable conservation solutions.

3. Project manager (name, address, telephone, email, fax).

* While the Task Force will coordinate this project, we will work closely with Dave Hu and other Forest Service specialists on project implementation.

Emily Platt, Executive Director
917 SW Oak Street, Suite 407
Portland, OR 97205

Cell: 360-521-7973
Fax: 503-221-2146
Emily@gptaskforce.org

4. Project Title

Clear Creek Habitat Improvement Project

5. Summary of Project proposal

The Lewis River Aquatic Fund has invested in restoring the Clear Creek subwatershed in the past, and it makes strategic sense to build on this investment because Clear Creek offers exceptional restoration opportunities. It was protected from the lahars that blasted through nearby creeks, and the subwatershed is important for the recovery coho, chinook, and steelhead. In addition, Clear Creek is a major tributary to the Muddy River, which is a priority area for bull trout recovery within the Gifford Pinchot National Forest (GPNF).

The Clear Creek Habitat Improvement Project (Project) will restore natural flow patterns and improve habitat for anadromous and resident fish while also benefiting deer, elk and other native wildlife populations. Clear Creek drains the Spencer Ridge Roadless Area just east of the Mount St. Helens National Volcanic Monument. Roadless areas in southwest Washington are known to provide some of the best habitat for both native fish populations

and resident wildlife. This project aims to improve the roadless character, water quality, and habitat conditions of Clear Creek and the surrounding area.

The Project will directly improve habitat for coho, chinook, and especially steelhead by removing two spur roads (2573460 and 2573464) totaling 1.2 miles. The project will also improve habitat for bull trout by reducing the impact of sediment delivery to the Muddy River.

The GPNF has not had the capacity to invest in repairing and maintaining its road system at adequate levels for well over a decade now, and the results are evident across the forest. Limited access for fishermen, administrators and others is the least of the problem. Unmaintained roads and plugged culverts have resulted in massive road washouts and huge sediment delivery episodes that stress already struggling fish populations. Many of these events could be avoided if proper maintenance or removal could have been afforded. By removing unneeded and high aquatic impact roads in high priority watersheds, an investment is being made that directly improves threatened fish and wildlife habitats now and also invests in the protection of this habitat in the long-term.

Priority Project

In 2007, the Task Force completed an analysis of the GPNF's restoration needs and potential. The Task Force used GPNF data and consulted with external experts throughout the analysis. The project resulted in a working plan that includes high priority subwatersheds for restoration activities. Removal of the 2573460 and 2573464 spurs was ranked as a high priority in the restoration plan for native fish recovery as well as gray wolf recovery. Moreover, the 2573460 is designated a high aquatic impact road by the GPNF and both road segments are slated for removal in completed NEPA documents.

The Project addresses limiting factors analyzed in the Upper North Fork Lewis River Subbasin Plan produced by the Lower Columbia Fish Recovery Board: habitat connectivity and water quality. Recovery actions identified in the Plan include managing federal forest lands to protect and restore watershed processes. Road decommissioning will restore hydrologic connectivity at stream crossings, eliminate sediment delivery from the existing road prism, and eliminate the risk of road failure and associated sediment delivery to fish habitat in the mainstem of Clear Creek, which has been identified as an important recovery area for coho, chinook, and steelhead. As mentioned above, the project will also reduce sediment delivery to the Muddy River which will improve bull trout habitat.

6. Project location (including River/Stream and Lat/Long coordinates if available).

Muddy River/ Clear Creek

7. Expected products and results (Please attach any drawings).

The project will result in the removal of 1.2 miles of spur road including culvert removal, slope shaping and stabilization, scarification of the roadbed, and revegetation. In addition, a monitoring report will be produced which documents pre and post conditions.

8. Benefits of proposed Project

Removal of the spurs listed above will improve habitat for steelhead, chinook, and coho which will be reintroduced next year. The removal of culverts will restore natural river flow patterns and prevent road failure and habitat blockages. Road removal will limit sediment delivery to Clear Creek and the Muddy River. Native vegetation will reestablish, improving fish and wildlife habitat. The Project will provide important forest work to rural contractors in southwest Washington and will also benefit resident fish species, deer, and elk. Removing these spurs will restore connectivity within the roadless area and help the Forest Service reduce the impact of its road system on water quality.

9. Project partners and roles.

- Gifford Pinchot Task Force: project preparation, administration and monitoring.
- Gifford Pinchot National Forest: contract administration and consulting.

10. Community involvement (to date and planned).

The Project will foster a greater understanding of the natural hydrologic process in a functioning watershed. Local residents will be invited to a field tour of the project, and the Task Force will work with local media outlets to highlight the project and its supporters.

11. Procedure for monitoring and reporting on results.

The Task Force will be monitoring another project in the area as well and will create additional transects to gather data needed to assess the Project's effectiveness.

12. Project schedule (anticipated start date, major milestones, completion date).

Winter/ early spring 2010 through late fall 2010.

13. Funding requested (estimated cost for project design, permitting (including necessary resource surveys), construction, and monitoring).

Contract preparation: \$ 1,500
Construction contracts: \$56,000
Monitoring: \$4,000
Contract administration: \$3,000
Project management: \$9,225
Total project cost: \$ 73,725

14. Type and source of other contributions (Identify cash (C) and/or in-kind (IK), and status, pending (P) or confirmed (Co)).

Foundation support: \$25,000 (P)

15. If you have technical assistance needs for this project, please briefly describe such needs.

NA

EMILY PLATT

917 SW OAK STREET, SUITE 407 PORTLAND, OR 97205
CELL: 360-521-7973 EMAIL: EMILY@GPTASKFORCE.ORG

Recent Professional Experience

December 2001 – Current

Gifford Pinchot Task Force

Portland, Oregon

Executive Director (June 2003 – Current)

- Manage programs, budget, and administration for 5 FTEs and 6 PTEs.
- Coordinated NEPA for the largest set of restoration projects on the Gifford Pinchot National Forest (GPNF) in more than a generation.
- Coordinated collaborative involvement in federal planning for a 10,000 acre restoration project on the Malheur National Forest.
- Initiated collaborative restoration working group on the Gifford Pinchot National Forest and developed innovative programs that have gained national recognition.
- Identified efficiencies in the federal restoration planning process.
- Raised over \$500,000 in federal and private funds for restoration projects on the GPNF.
- Supervised creation of restoration plan for the GPNF based on federal data and expert consultation.
- Developed expertise on national forest laws and regulations, including processes associated with implementing federal projects, NEPA, the NW Forest Plan, FACA and stewardship contracting.
- Built diverse coalition of restoration supporters including union and tribal representatives, rural leaders, loggers, the Forest Service, local elected officials, conservationists, and others.

Outreach Coordinator (December 2001 – June 2003)

- Developed campaigns and coordinated outreach efforts including conferences and field tours.
- Initiated outreach to rural communities that led to the creation of the Pinchot Partners, a collaborative group in the GPNF's Cowlitz Valley.

Education

- Green Corps Leadership Training Program, Boston (2000 - 2001)
- BA English Literature, Gonzaga University, Spokane (1993–96/2000)
 - Dean's List (93-96), President's List (2000)

ATTACHMENT 11

PRE-PROPOSAL FORM

Lewis River Aquatic Fund 2010

Form Intent:

To provide a venue for an applicant to clearly indicate the technical basis and support for proposed project. Specifically the project's consistency with recovery plans, Settlement Agreement Fund objectives, technical studies and assessments which support the proposed action and approach.

Proposal format:

Please complete the following form for each proposal. Maps, design drawings and other supporting materials may be attached. The request is to be brief in response with a total completed form length of no more than 3 pages of text.

The deadline for Pre-Proposal Form submission is **October 5, 2009**. Please submit materials to:

Frank Shrier
PacifiCorp – LCT 1500
825 NE Multnomah
Portland, OR 97232

1. Applicant organization

Cowlitz Indian Tribe

2. Organization purpose

Federally Acknowledged Indian Tribe

3. Project manager

Rudy Salakory, Biologist
Cowlitz Indian Tribe, Natural Resources Department
PO Box 2547
Longview, WA 98632
Phone: 360.508.6039
Email: rsalakory@cowlitz.org

4. Project Title

Eagle Island Habitat Enhancement: Site A

5. Summary of Project Proposal

This project (Site A) restores vital spawning and rearing habitat along Eagle Island on the North Fork Lewis River by constructing Large Woody Debris (LWD) along a stretch of the NF Lewis. This is one of the best sites on the lower Lewis River for enhancement of channel complexity and re-introduction of LWD, primarily due to the following: 1) wood jams can be constructed that are protected from mainstem flows, 2) the project enhances existing complexity and channel dynamics, and 3) the project will not affect boat traffic.

Medium to large jams and individual pieces will be placed throughout the 1,200 foot long side channel (See attached maps, attachment A). At the head of the side channel, a large bar apex jam will be constructed that wraps the upstream end of the island and extends into the main channel; this will provide habitat benefit to the main channel and will be designed to encourage the maintenance of a split-flow condition during low flows.

Approximately 200 pieces of LWD will be installed as the following placement types: Habitat cover wood, lateral scour pool jams, bar apex jams, and floodplain wood.

Restoration of riparian plant communities will be a major component of work in this area. Vegetation enhancements near the eastern end of the study area will focus on control of Himalayan blackberry and Japanese knotweed, as well as the establishment of a native shrub/scrub layer. Establishment of a dense shrub layer will improve wildlife habitat values, reduce scour during moderate flood events, and help prevent further establishment of invasive species. Species to be planted in this area will be specially selected due to the extremely sandy nature of the soil. Soil sample pits revealed very little organic matter in the soil which will severely limit the ability of some native species to become established. Primary restoration species will consist of willow, red-osier dogwood, and spirea.

The Eagle Island Project Development Team has identified other projects in the Eagle Island Area, including Sites B and C. All are currently in a design development. The *Site A* project discussed here is only the first of a large suite of restoration projects to be implemented in Eagle Island area reaches of the North Fork Lewis River.

This project addresses the following priorities:

Priority 1: Benefit fish recovery throughout the North Fork Lewis River, with priority to federal ESA-listed species.

1. The Lower Columbia River ESU of Chinook salmon are listed as a threatened species under the ESA.
2. The Columbia River ESU of chum salmon are listed as a threatened species under the ESA
3. The Lower Columbia River ESU of coho salmon are listed under the ESA
4. The Lower Columbia River DPS of steelhead trout are listed as a threatened species under the ESA

Priority 2: Support the reintroduction of anadromous fish throughout the basin.

An increase in the number of salmonids that can survive navigation further upstream, and thus to recolonize tributaries is directly affected by the quality of refugia/rearing habitat available to salmonids. Higher carrying capacity and increased survivorship of salmonids will translate into higher potential returns of salmon to the Lewis River System.

Priority 3: Enhance fish habitat in the Lewis River Basin, with priority given to the North Fork Lewis River.

The enhancement of quality rearing habitat along the Lewis River will facilitate an increase in the number of salmonids that use the Lewis River Complex.

6. Project location (including River/Stream and Lat/Long coordinates if available)

North Fork Lewis River, Eagle Island, South Channel (45.936532N -122.689905E [approx])

This site is located on the leftbank (south) side of the south channel 250 meters downstream of the upstream end of Eagle Island, and consists of a perennially-active side-channel that is approximately 1,200 feet long (**Error! Reference source not found.**). The side-channel is a moderately sinuous gravel-bed channel. The gravel bar that separates the channel from the mainstem is well-vegetated and has a few mature riparian trees. There are several small islands in this side channel, and overall channel complexity is relatively high. There is currently some wood in the side-channel but scour pools are scarce and riparian cover is poor. The inlet begins in a shallow water reach just upstream of a riffle and the outlet is downstream of the riffle; the gradient is similar to the mainstem.

Modest channel complexity has been maintained throughout the 1,200 foot long side-channel. Deposition of gravel bars has created a multithread channel during low water conditions with small backwater eddies

and side-channels. However, there are only a few existing pieces of LWD to provide habitat cover and promote pool scour.

7. Expected products and results (Please attach any drawings)

- Increase LWD quantities to greater than 57 pieces/100 meters (25 percentile historical modeled LWD frequency, Interfluve et al. 2008).
- Maintain channel complexity in the form of off-channel and side-channel habitat through placement of LWD jams.
- Increase pool abundance through LWD placements that promote pool scour.
- Restore a native streambank, riparian, wetland, and floodplain vegetation community to provide stability, shade, wildlife habitat, and future LWD recruitment.
- These enhancements will increase the abundance of salmonids in the Lewis River System and the establishment of quality rearing habitat and summer refugia.

8. Benefits of Proposed Project

This reach is ideal for restoration since it already contains relatively high-quality aquatic habitat, especially for rearing juvenile salmonids, which were observed in abundance during an initial survey. Wood placement in the side channel will provide cover and scour pools that will benefit juvenile steelhead, Chinook, and coho rearing throughout the year. LWD jams will also enhance adult holding and spawning.

9. Project partners and roles.

Cowlitz Indian Tribe – Project management, implementation and contracting

Interfluve – Project Design

Clark County – Landowner

Lower Columbia Fish Recovery Board – Lead entity for WRIA 27, design funding

Washington State Department of Fish and Wildlife – Design consultation and advisory partner

10. Community involvement (to date and planned)

The Cowlitz Indian Tribe maintains active community involvement by cultivating strong ties with agencies, academia, and local citizen groups. In addition, the Tribe often schedules educational events with legislators, scientists, Tribal members, and other key individuals. Successful implementation of the project will be accompanied by educational opportunities and press releases for distribution to media.

11. Procedure for monitoring and reporting on results

A project performance report will be prepared, including detailed methods and as-built construction plans. Monitoring will be conducted which will assess the function of the completed project. A monitoring plan will be prepared.

12. Project schedule (anticipated start date, major milestones, completion date)

Whole project design will be completed and submitted to SRFB for FY 2011. If funded, RFQ's for construction and materials will go out January 2011. Construction will begin in low water 2011 (August through September). Project will be complete before October 2011, effectiveness monitoring will begin immediately and follow through to summer 2012, and 2013.

13. Funding requested (estimated cost for project design, permitting (including necessary resource surveys), construction, and monitoring).

Estimated cost of the entire project is **\$371,500.60**. The Tribe requests funding of **\$74,300.00** from PacifiCorp to use as a twenty percent (20%) value to “anchor” the whole project. The balance of funding for the whole project will be requested by the Cowlitz Indian Tribe from the Salmon Recovery Funding Board in FY 2010 for construction in 2011, using this ACC award as match. If PacifiCorp’s ACC funds this request, the Cowlitz Indian Tribe agrees that if the award of the balance of whole-project funding from the Salmon Recovery Funding Board is not successful, the Tribe will return the ACC funding to PacifiCorp.

14. Type and source of other contributions (Identify cash (C) and/or in-kind (IK), and status, pending (P) or confirmed (Co)).

\$297,200.00 (C, P) Washington State Salmon Recovery Funds

15. If you have technical assistance needs for this project, please briefly describe such needs.

No technical assistance will be needed at this time.

References

Interfluve, Cramer Fish Sciences, and Fox Environmental Services. 2008. Lewis River LWD Study. Prepared for PacifiCorp, Portland, OR.

LCFRB (Lower Columbia Fish Recovery Board). 2004. Lower Columbia Salmon and Steelhead Recovery and Subbasin Plan. Prepared for Northwest Power and Conservation Council.

PacifiCorp. 2004. Stream channel morphology and aquatic habitat study (WTS-3 Study). Final Licensees' 2001 Technical Studies Status Report for the Lewis River Hydroelectric Projects.

Stillwater Sciences. 2006. Lewis River Spawning Gravel Evaluation. Prepared for PacifiCorp, Portland, Oregon and Public Utility District No. 1 of Cowlitz County, Longview, Washington.

Attachment A

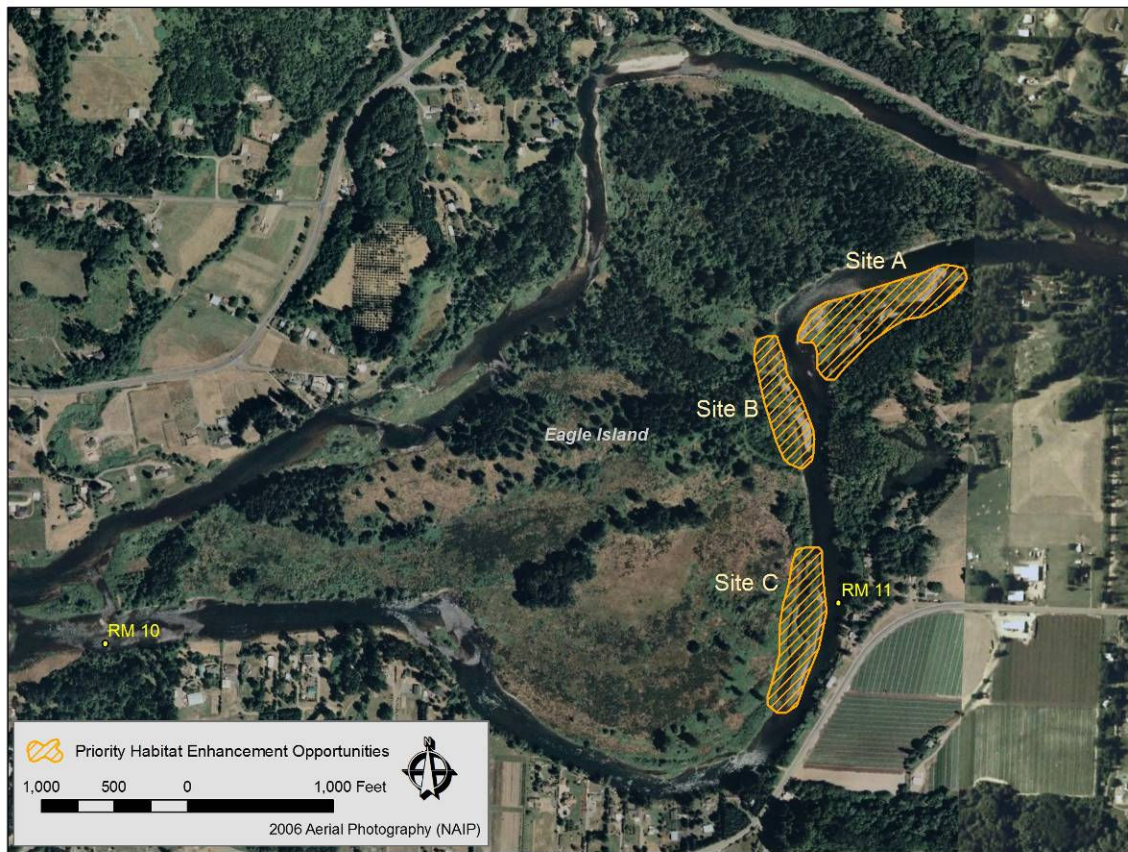


Figure One. The project proposed for funding through PacifiCorp and eventually the SRFB is shown on this map as “Site A” Sites B and C are 30% designs being developed through a LCFRB design grant which developed this project.



Figure Two. WDFW data (unpublished) of steelhead redd locations in the project area.

ATTACHMENT 12

Lewis River License Implementation
Lewis River Aquatics Fund - Resource Projects
Sections 7.5, 7.5.1, 7.5.3, 7.5.3.1 & 7.7

Funding Start Date: 4/30/05

Release Date	Funds Received	Expense	Interest	Balance	Notes
12/31/05				\$ 161,327.11	Contributions in 2004 dollars, adjusted for inflation.
4/30/06	\$ 212,172.03				
9/30/06		\$ 46,000.00			Muddy River Tributary Road Decommission - USDA FS *
12/31/06			\$ 24,305.00		
4/30/07	\$ 163,897.54	\$ 80,000.00			Fish Passage Culvert Replacement - USDA FS
8/23/07		\$ 79,000.00			2007 Dispersed Camping & Day Use Road Restoration - USDA FS
9/6/07		\$ 75,000.00			2007 Aquatic Funding Enhancement Projects - Cowlitz Indian Tribe*
12/31/07			\$ 30,833.16		
4/30/08	\$ 225,347.95				
7/3/08		\$ 34,000.00			2008 Clear Creek Road Decommission - USDA FS
7/3/08		\$ 117,000.00			2008 Muddy River Habitat Improvement - USDA FS
10/2/08		\$ 43,500.00			2008 Mud Creek Enhancement - Cowlitz Indian Tribe *
4/30/09	\$ 230,341.27				
8/20/09		\$ 190,000.00			2009 NF RM 13.5 Habitat Enhancement - LCFEG
9/16/09		\$ 106,000.00			2009 Clear Creek Instream - USDA FS
9/24/09		\$ 33,000.00			2009 Spencer Peak Road Decommission - USDA FS
9/25/09		\$ 41,000.00			2009 Nutrient Enhancement Pine Creek - USDA FS
		\$ 50,000.00			2009 Plas Newydd RM 2.0 - Cowlitz Indian Tribe
4/30/10	\$ 200,000.00				
Total Spent to Date:			\$ 894,500.00		
Balance Remaining:			\$ 253,724.06		

* Project close out complete

Lewis River License Implementation

Lewis River Aquatics Fund - Bull Trout

Sections 7.5, 7.5.1, 7.5.3, 7.5.3.1 & 7.7

Funding Start Date: 4/30/05

Release Date	Funds Received	Expense	Interest	Balance	Notes
12/31/05				\$ 161,327.11	Contributions in 2004 dollars, adjusted for inflation.
4/30/06	\$ 106,086.01				
11/30/06		\$ 37,889.08			Pine Creek Nutrient Enhancement - USDA FS
12/31/06			\$ 19,176.61		
4/30/07	\$ 163,897.54	\$ 25,000.00			Pine Creek Instream & Floodplain Structures for Bull Trout and Steelhead - USDA FS
7/31/07		\$ 20,000.00			Rush Creek Gravel Restoration - USDA FS
8/21/07		\$ 43,150.00			2007 Pine Creek Nutrient Enhancement - USDA FS
12/31/07			\$ 27,400.40		
4/30/08	\$ 112,673.98				
7/3/08		\$ 25,000.00			2008 Panamaker Crk. Rd Close & Culvert Removal - PacifiCorp *
3/25/09	\$ 19,269.66				Return of funds: Rush Creek Gravel Restoration - USDA FS
3/31/09	\$ 23,493.72				Return of funds: Pine Creek Instream & Floodplain Structures for Bull Trout and Steelhead - USDA FS
		Total Spent to Date:	\$ 151,039.08		
		Balance Remaining:	\$ 482,285.95		

* Project close out complete