

PRE- PROPOSAL FORM -

Lewis River Aquatic Fund

1. Applicant organization.

USDA Forest Service
Gifford Pinchot National Forest

2. Organization purpose

Resource management agency

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

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Fishery Biologist
20+ years experience with fish habitat restoration projects

4. Project Title

Muddy River Side Channel Restoration

5. Summary of Project proposal

Two side channels on the Muddy River will have large woody material placed in them to enhance and restore juvenile salmonid rearing habitat. Coho salmon will be the main species to benefit from these actions, however steelhead may also use these side channels to escape high winter flows in the mainstem of Muddy River. Approximately 80 pieces of large woody material will be placed in side channel 1, and 120 pieces will be placed in side channel 2 using a small excavator.

The Muddy River was probably the top coho producing stream in the Upper North Fork Lewis River sub-basin prior to dam construction.

A lahar from the eruption of Mt. St. Helens in 1980 scoured the Muddy River, depositing course sediment and burying large wood in the floodplain. The floods of 1996 removed much of the young riparian vegetation that had established following the lahar event, causing the continuance of the tributaries flowing through the Muddy River floodplain to be minimally stable with few pools and non sorted substrates.

This project address the following Aquatic Fund priorities.

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

Coho salmon and steelhead trout are listed as a threatened species under the ESA. This project will directly benefit recovery of listed species by providing quality side channel habitat for rearing of juvenile salmonids. Spawning habitat will also be restored in the side channel for adult salmonids. The Lower Columbia Fish Recovery identifies the mainstem reach of this tributary as Muddy River 1A, and ranked it as Tier 2. The Plan rates this reach's potential restoration as High for Coho and Medium for Steelhead with top two critical life stages identified as Egg incubation and 0-age active rearing. The Plan also suggests measures and sub-measures of active restoration necessary to fish recovery which include enhancing cover, pool formation, and sediment sorting.

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

Creating quality rearing habitat in side channels will support reintroduction of anadromous fish in the Muddy River Basin

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

This project is located in the North Fork Lewis River Basin. It is well documented that coho salmon juveniles prefer slow water habitats with large wood components.

6. Project location

Side Channel 1. This 2000 foot side channel is connected to the Muddy River at RM 2.25 at the upper end (just upstream from the Muddy River restoration work completed in 2008). An unnamed perennial creek joins the side channel before it re-enters the Muddy River at RM 1.75.

Side Channel 2. Side channel two is located at RM 2.85, approximately ½ mile downstream of the Clearwater Creek confluence. It is approximately 3,300 feet long, and is associated with a perennial stream that crossed through the decommissioned portion of the 8322700 road.

7. Expected products and results

This project will result in approximately 20 complex structures in Side Channel 1 and 30 complex structures in Side Channel 2. Each structure will have an excavated pool and 3-5 pieces of large wood for cover. Additional pieces of large wood will be placed in random fashion in slow water pockets to provide varied habitat niches.

8. Benefits of proposed Project

Increased numbers of juvenile salmonids over expected background levels (from reintroduction activities) are expected to occur from this project. Increased spawning habitat will be created.

9. Project partners and roles.

Mount St. Helens Institute Youth Stream Team.-Pre and Post project monitoring

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. The Gifford Pinchot NF will complete NEPA including public involvement.

11. Procedure for monitoring and reporting on results.

- 1) Perform baseline monitoring. This monitoring will occur prior to project implementation and include a longitudinal profile, cross-sections, pebble counts, photo-documentation and snorkel surveys. MSHI will provide two interns (ACC funds), five volunteer youth from the youth stream team (ACC funds), and a supervisor (MSHI IK) to perform monitoring work. They will perform all aspects of the monitoring with supervision and training from the Forest Service.
- 2) Perform after project monitoring. This monitoring will occur following project implementation and will continue on an annual basis for several years following project completion. MSHI will provide two interns for this portion of the work supervised by the Forest Service (MSHI IK).
- 3) Monitoring Report. A monitoring report will be written each year following project implementation. MSHI will provide raw data in excel format, the Forest Service will provide analysis of data. The Report will describe description of the cover, number of pools created and approximate fish presence.

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

2011 Complete final designs, procure large wood for the project

2012

- Write contracts
- Implement projects
- Pre and post project monitoring

2013 Post project monitoring

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

Total ACC Funds-\$39,000

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- **\$32,000** \$22,000- Personnel, \$10,000 trees (IK)(Co)
Mt. St. Helens Institute- **\$2,000** \$2,000 Personnel, (IK)(Co).

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

None Needed

13. Budget

| | NEPA | Final designs | Project Mgmt | Construction | Monitoring/Labor /Reporting/Coord. |
|--|-----------------|-------------------------------|-------------------------------|-------------------------------|------------------------------------|
| Personnel Costs | | | | | |
| FS - Zone Team or Contract | \$8,000 (IK) | | | | |
| FS -Fish Bio and Hydrologist | | \$4,000 (IK) \$1,000 (ACC) | | | |
| FS - Fish Bio and Hydrologist | | | \$5,000 (IK) \$3,000 (ACC) | | \$1,000 (ACC) |
| FS - Contract administrator - | | | | \$3,000 (IK) \$4,000 (ACC) | |
| FS - Contract Specialist | | | | \$2,000 (IK) | |
| DNR Specialist | | | | | |
| Mt St. Helens Institute | | | | | \$2,000 (IK) |
| Mt. St. Helens Institute Community Education | | | | | \$3,000 (ACC) |
| Materials | | | | | |
| Forest Service 200 Pieces of LWM | | | | \$10,000 (IK) | |
| Contract Payables | | | | | |
| Excavator and Skidder Contract | | | | \$15,000 (ACC) | |
| Logging and hauling of trees | | | | \$11,000 (ACC) | |
| Materials and Supplies | | | \$ 1,000(ACC) | | |
| Administrative Overhead | | | | | |
| Total ACC Funds | \$39,000 | \$1,000 | \$4,000 | \$30,000 | \$4,000 |
| <i>Total FS Funds</i> | <i>\$32,000</i> | <i>\$8,000</i> | <i>\$4,000</i> | <i>\$15,000</i> | |
| <i>Total Partner Funds</i> | <i>\$2,000</i> | | | | <i>\$2,000</i> |
| Project Total | \$73,000 | | | | |

2011 Muddy River Side Channel Project Proposal

