# **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).

Adam Haspiel Mount St. 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 30+ years experience with fish habitat restoration projects

#### 4. Project Title Lewis River Side Channel 5

#### 5. Summary of Project proposal

The Forest Service proposes to restore approximately 800 feet of side channel habitat on the Lewis River. This site was located during project planning for the 2014 funded alcove project. This side channel is currently functionally inactive and needs to be reconnected to the river to restore it to properly functioning conditions. Currently good existing riparian areas on both sides of the side channel exist that will provide immediate shade and cover for fish. This side channel is protected from high flows of the Lewis River by natural landforms. Coho salmon will be the main species expected to benefit from this restoration however steelhead and Chinook juveniles out migrating from the Crab Creek acclimation pond can also use these structures. This project is in the same vicinity as the 2014 funded Alcove and Old Side Channel project, and proposed 2015 Mainstem Project (see map).

Approximately 100 pieces of large woody material with rootwads will be placed in the side channel to improve rearing habitat. Woody material will be trucked down the 480 spur off Forest Road (FR) 90 and skidded to the side channel using heavy equipment. This spur road will be used and then returned to its current closed status. An excavator will remove material at both the inlet and outlet of the side channel to reconnect it with the mainstem. The excavator will also anchor woody material into streambanks to create hiding cover and complex habitat for juvenile fish. Access for the excavator and skidder

to the river will be the 480 spur off FR 90. Large Woody Material for this project will come from USFS Lands and if available, Swift Reservoir cleaning operations.

This project addresses the following Aquatic Fund priorities.

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

Chinook and coho salmon along with steelhead trout are listed as a threatened species under the ESA. This project will directly benefit recovery of listed species by providing quality rearing habitat for juvenile salmonids, and increased spawning opportunities for adult fish.

### **Priority 2:** <u>Support the reintroduction of anadromous fish throughout the basin.</u>

Creating quality rearing and overwintering habitat in side channels directly off the Lewis River will support reintroduction of anadromous fish in the Lewis River Watershed. WDFW survey crews contracted by PacifiCorp to survey for spawning adult fish, have noticed heavy use by juvenile coho salmon in Lewis River Side channels.

#### **Priority 3**<u>: Enhance fish habitat in the Lewis River Basin-, with priority given to the</u> 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. This project restores and creates valuable side channel habitat in the Lewis River.

# 6. Project location

The project area is located approximately 500 feet downstream of Spencer Creek. The project area can be accessed from the 480 spur off FR 90.

# 7. Expected products and results

This project will result in a restored side channel approximately 800 feet in length. Creating approximately 10 complex structures within the side channel will provide quality rearing and overwintering habitat. Each structure will create a pool providing overwintering and summer rearing habitat for a combination of juvenile coho salmon and steelhead trout, with some benefit to Chinook salmon. The woody material would create high quality hiding cover and increase production in the side channel. Structures will facilitate gravel sorting, increasing spawning opportunities for anadromous fish.

# 8. Benefits of proposed Project

Increased numbers of juvenile salmonids above background levels from reintroduction activities are expected to occur from this project. The project will benefit anadromous fish by increasing overwintering and summer rearing habitat for juvenile fish. This side channel will act as refugia from high flows in the mainstem Lewis River. The quality of spawning areas in the side channel will be protected from high winter flows in the mainstem.

#### 9. Project partners and roles.

Mount St. Helens Institute (MSHI). MSHI will provide monitoring of structures.

## 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 partnering with the Mt. St. Helens institute and their urban youth outreach programs.

### 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, urban youth and a supervisor to perform monitoring work.
- 2) They will perform most aspects of the monitoring with supervision and training from the Forest Service. The Forest Service will perform Snorkel Surveys.
- 3) 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.
- 4) 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 and report.
- 12. Project schedule (anticipated start date, major milestones, completion date).

NEPA – Complete in 2015 Project Implementation July 2016 Post project monitoring 2017

**13. Funding requested** (estimated cost for project design, permitting (including necessary resource surveys), construction, and monitoring). **Total ACC Funds-\$82,000** 

**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- **\$45,000** (IK) (Co) Mt. St. Helens Institute- **\$3,000** (IK)(Co).

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

None Needed



Figure 1. Map of side channel, and road used to access the project



Figure 2. Enlarged view of side channel



Figure 3. Side channel project in relation to other projects proposed or already funded in the area.



Figure 4. Side Channel to restore



Figure 5. Side channel to restore



Figure 6. Middle section of side channel