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

20+ years experience with fish habitat restoration projects

4. Project Title

2011 Pine Creek Nutrient Enhancement by Snowcats and Snowmobiles

5. Summary of Project proposal

The proposal is to use snowmobiles, snow cats and pick-up trucks to distribute Salmon carcasses in the Pine Creek Watershed. A total of six miles in Pine Creek, and two miles in P8 are available to be treated depending upon partnership funding and access.

Dams built in the 1930's prevent anadromous fish from returning to spawn in the Upper Lewis River System, including Pine Creek. This greatly decreases the nutrient levels in affected streams over time by eliminating contributions of carcasses and eggs.

Pine Creek was further effected 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 allochthanous materials and decreased primary production (Lower Lewis River Watershed Analysis 1995). Additionally, the floods of 1996 removed much of the river's young riparian vegetation.

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 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.

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.

The Lower Columbia Fish Recovery Plan rated restoration reach potential for Pine Creek 1- Pine Creek 5 as High for Steelhead. The ACC Synthesis Group matrix ranked these reaches as Medium restoration potential for Bull Trout and Steelhead and ranked P8 tributary as High restoration potential for Bull Trout and Steelhead.

Priority 2: <u>Support the reintroduction of anadromous fish throughout the basin.</u> 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*. Coho size increases 50% in streams enriched with salmon carcasses. The assumption is made that bull trout and steelhead juveniles will respond in similar fashion.

6. Project location

Pine Creek- RM 2.0 to RM 8. T. 7N, R.6E, Sections. 4, 5, 9, 15, 16, and 24. Pine Creek Work Center will be used as a staging area for the project.

7. Expected products and results

Increased nutrients in Pine Creek and Pine Creek riparian areas have been documented with aquatic macroinvertebrate monitoring since 2006. Nutrient additions from this project are expected to produce similar results.

8. Benefits of proposed Project

The project will benefit Bull trout and anadromous fish by increasing aquatic productivity, food resources, and riparian vegetation growth.

9. Project partners and roles.

Snowmobile club –They will use their snowmobiles to pull sleds and distribute carcasses Pope and Talbot Timber Company- They will write permits and let us past gated roads to distribute nutrients.

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.

Aquatic Benthic Macro-invertebrate communities will be assessed prior to and following carcass seeding. Monitoring will build on the efforts from 2006-2009. Macroinvertebrate samples will be collected in select locations in Pine Creek basin and analyzed by Aquatic Biology Associates.

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

The project would take place in October, November or December of 2011. The December time period mimics natural coho spawning periods.

- **13. Funding requested** (estimated cost for project design, permitting (including necessary resource surveys), construction, and monitoring). **Total ACC Funds-\$7,500**
- **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- \$4,500 Snowmobile Club- \$5,000 (P) Pope and Talbot Timber Company- \$1,000

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

None Needed

Pine Creek Nutrient Enhancement CARCASS

	Total	NEPA	Final designs	Project Mgmt.	Construction	Monitoring/Labor /Reporting
Personnel Costs						
FS - Zone Team or Contract						
FS –Fish Bio and Hydrologist						
FS - Fish Bio and Hydrologist				\$2,000(IK) \$2,000 (ACC)		\$2,000 (ACC) \$1,500 (IK)
FS - Contract administrator -				1 (200)		ψ1,000 (114)
10 - Oomaot administrator		***************************************				
FS - Contract Specialist						
Snowmobile club				\$5,000 (IK)		
Pope & Talbot Timber (ORM)				\$1,000 (IK)		
Mt. St. Helens Institute						
Other						
Travel					\$1,000 (ACC) \$1,000 (IK)	
Equipment					\$2,000 (ACC)	
Supplies					\$ 500 (ACC)	
Administrative Overhead					<u> </u>	
Total ACC Funds	\$7,500			\$2,000	\$3,500	\$ 2,000
Total FS Funds	\$4,500			\$2,000	\$1,000	\$1,500
Total other Partner Funds	\$6,000			\$6,000		
Project Total	\$18,000					

