

2008 EMBRACE-A-STREAM - Budget Form

Item	EAS Cost	Matched Cost & Name of Contributor*	Total Project Cost
Personnel / Consultants / Contractors			
TU Volunteer Labor** \$18.77/hr^ . x # of hrs. 15 people x 6 days x 8 hours	0	TU Chapter 720 \$13,514	\$13,514
Agency Volunteer Labor*** IDF&G assistance in application prep 10 x \$29.61/hr		Dick Scully \$296	\$296
Other Volunteer Labor Lanny Holbrook rancher 10 days x 8 hours x \$18.77		Self \$1,501	\$1501
Materials / Equipment Purchases^^			
Cross bucks 370 x \$15	\$5000	TU chapter 720 \$550	\$5,500
Fence rails 611 x \$8.50	\$5000	TU chapter 720 \$194	\$5,194
Hardware nuts, bolts, spikes		TU chapter 720 \$825	\$825
Equipment Rentals			
Materials/ Equipment Donations			
Gas powered drill 6 days x \$30		TU Volunteer \$180	\$180
Chainsaw \$30/day x 6 days x 8 hours		IDF&G \$180	\$180
Generator \$15 hour x 8 hours x 6 days		IDF&G \$720	\$720
Misc hand tools		IDF&G \$150	\$150
Truck and trailer 6 days x \$120		IDF&G \$720	\$720
Other Expenses			
Volunteer mileage 8 vehicles x 90 miles x 6 days = 4,320 x \$0.485		Volunteers \$2,095	\$2095
6 lunches for 15 people		TU Chapter 720 \$600	\$600
TOTAL	\$10,000	\$21,525	\$31,525

Notes: Please provide detailed itemizations for each EAS cost. Where applicable, please specify unit costs and quantities for materials, equipment, consultant, and contractor time, etc. Attach additional pages if necessary.

*Identify type & amount of donation & name of donor.

**Value of TU volunteer labor must be placed in "Matched Cost & Name of Contributor" column.

***Agency labor must be placed in "Matched Cost & Name of Contributor" column.

^Dollar value of volunteer time for most recent year (2006) as determined by Independent Sector.

^^Identify type & amount of donation & name of donor.

2. Executive Summary

The Idaho Department of Fish and Game emphasizes restoration of native Yellowstone cutthroat trout (YCT), a species of interest, within a 5 mile reach of the Upper Portneuf River. YCT petition for listing under ESA “Not Warranted” determination is under appeal by conservation groups. This reach was chosen for YCT restoration because of its excellent potential for habitat restoration and because of the abundance of spring water that enters the river here. Contributing to the decision to emphasize YCT management in this reach are the years of effort by natural resource agencies, landowners and angler groups including TU to build and maintain riparian corridor fences to protect the stream banks from livestock impacts. Much of this 5 mile reach has been protected with riparian corridor fences. The one section which remains unprotected includes the 0.7 mile long section of the Lanny Holbrook ranch. An attempt was made in the mid 1990s to protect this river reach with electric fence. Unfortunately elk, deer and moose frequently broke or caused electrical shorts that rendered this fence ineffective. This has allowed livestock full access to the river resulting in a channel that is wide, shallow and mud-bottomed. This Embrace-a-stream proposal is for financial assistance to build a cross-buck and rail fence along a portion of the Holbrook Ranch

While investigating this project with Mr. Holbrook we had to modify our original work plan. We had intended to build all new cross buck and pole fence along the entire length however after walking the river we have decided on a different strategy. Mr. Dick Scully with the IDF&G is applying for a matching “319” grant to augment our ability to get this project completed. SEIFF will build enough wood cross buck fence to protect half of the river bank where it is too rocky or too swampy for other construction. In the remainder of the project we will work to maintain an electric fence to buy us some time to build permanent fences. As time goes on we plan to construct a strong five strand barbed wire fence to replace the electric fence protect the river. This type of fence will be easier to put in place, cheaper to build and last at least twice as long as the cross buck fence.

Mr. Holbrook supports this project and is eager for us to build the fence. He is concerned about the damage to the stream bed and banks that the cattle can and do cause. He is committed to removing the old sections of fence ahead of us to prepare the way for our crews to build new fence.

3. Background

The Portneuf River is a southeast Idaho tributary to the Snake River. It is home to native Yellowstone cutthroat trout as well as to introduced rainbow and brown trout. Up through the 1960s the upper Portneuf River was considered one of Idaho’s best trout streams. By the mid-1980s, cumulative effects of agricultural practices changed the Portneuf River substrate from cobble-gravel to mainly fine sediment. The deterioration in the trout fishery soon followed. A series of efforts by angler groups, landowners and government, beginning in the mid-1980s have partially restored the habitat and fishery. In 1991, then Governor Cecil Andrus lead a tour of the upper Portneuf River which included representatives of the State’s Department of Water Resources, Environmental Quality, and Fish and Game, the U.S. Natural Resources Conservation Service, Caribou and Bannock county Soil and Water Conservation Districts, the Portneuf-Marsh Valley Irrigation Company and numerous owners of upper Portneuf River riparian sections. This effort lead to the initiation of many positive changes. These benefits continue to this day and occasionally additional landowners join in the overall effort of restoring the upper Portneuf River and its fishery. Such an opportunity is

now coming together on the Holbrook property and the local TU Chapter is organizing volunteers and working to obtain funds for riparian corridor fence construction and maintenance.

The Holbrook section lies within a five mile river reach that Idaho Department of Fish and Game manages for native cutthroat trout. The Department discontinued stocking hatchery trout into this reach four years ago and since that time has required catch-an-release fishing only for native cutthroat trout.

The Holbrook section currently benefits from several upriver miles of riparian corridor fences that have stabilized banks to reduce transport and deposit of sediment. The pastures along the Holbrook section are grazed by cattle and horses. These animals break down stream banks, in this way add sediment to the river substrate in the Holbrook section and create a wide, shallow channel with slow current. Erosion in this section also adds to the substrate sediment problems downstream. Grazing along the stream banks also prevents restoration of robust communities of bank stabilizing willows and sedges. This activity also prevents narrowing and deepening of the stream channel.

4. Proposal Goals and Objectives

The goal of the proposed project is to change the Holbrook section from one that damages the health of the stream to one that restores it. The objectives are to construct and maintain riparian corridor fences and to foster restoration of robust communities of native riparian vegetation through rest and plantings that will stabilize banks, stop erosion, encourage stream channel narrowing and deepening, encourage transport of substrate sediment from the section and in these ways improve salmonids habitat.

5. Work plan

The Holbrook section is a significant portion of the five-mile native cutthroat trout management reach. This section is 0.8 miles long on the west bank and 0.6 miles long on the east bank for a total of 1.3 miles of fence. A portion of the bank must be built on a rocky slope and lava rock outcropping, and the remaining section will be in an open meadow. Because of these conditions, we will build cross buck and pole fence on the rocky sections and steel post barbed wire fence in the meadows. Four livestock watering gaps will be included. Materials will be ordered soon after the funds are secured.

Time frame: Fence construction will begin in April 2008 and will be done in weekend intervals consistent with TU Chapter volunteer abilities. The project will be complete by April 2010 or sooner. Idaho Department of Fish and Game is a partner in this project and will supply trucks, trailers, tools and part of the labor. The Portneuf Chapter #720 of TU and the Southeast Region of Idaho Department of Fish and Game have worked very well together for the past decade on other riparian corridor fence projects. This partnership has been strong and consistent since initial fences were built on the upper Portneuf River in the mid-1980s by the Department and the “Friends of the Portneuf River”, an angler group that evolved into the current TU chapter. The long-term benefits of riparian corridor fence projects within the Portneuf River native cutthroat management reach was showcased in TU’s Trout Magazine, Spring 2007 edition, in an article entitled “Portneuf River, Idaho, Success on the Stream” by S.R. Kinsella.

Role of TU leaders: Long standing TU chapter leaders include Dave Whitworth, Tom Banyas, Todd Carter, David Johnson and Bud Smalley. Whitworth and Smalley are both past chapter presidents, Carter is a past Council president. These consistent volunteers in conservation efforts along with Darrell Brown, the current chapter president and numerous other TU chapter volunteers will work with Department of Fish and Game personnel to construct and maintain the corridor fence. Whitworth and Carter will order fence materials and have them delivered to the work site. Bud Smalley will coordinate with the landowner to make sure that the fence meets landowner expectations.

The Role of other Partners: The Fish and Game Department Regional Fishery Manager will provide equipment and personnel. TU and Fish and Game will seek additional partners such as non-TU anglers, Idaho State University Student Chapter of the American Fisheries Society and ISU's Environment Club.

Outreach Plan: Throughout the past 20 years of restoration of the upper Portneuf River, anglers and the Department of Fish and Game have taken the opportunity to demonstrate the benefits of the riparian corridor fences to anglers, landowners and the general public. Recently the Fish and Game Department organized a tour for a Grazing Association from the nearby Blackfoot River to demonstrate benefits and encourage similar projects on the Blackfoot River. Wilder Hatch, past-president of the King Creek Grazing Association, which is the landowner with the longest section of stream that we have fenced, participated in the tour and showed strong support for our efforts. The local TU Chapter and the Department of Fish and Game will invite the media to report on the Holbrook river section project. We will demonstrate how this project will improve water quality and benefit fish and wildlife, especially the native cutthroat trout. Fish and Game Department fish population monitoring will be used to document benefits in terms of fish density and fish size. Photo point data from adjacent projects will demonstrate the anticipated improvements in habitat. Examples of habitat improvements that have been achieved in other sections of the upper Portneuf River can be seen on the attached photos.

Project Budget

Description*	Quantity	UOM	Cost per Item	Total Cost
Rails	611	ea	\$8.50	\$5,194
Cross Bucks	370	ea	\$15.00	\$5,550
Spikes	9	box	\$60.00	\$540
Bolts	3	box	\$85.00	\$255
Washers	14	lbs	\$1.00	\$14
Nuts	4	box	\$4.00	\$16
Labor	720	hours	\$18.77	\$13,514
L. Holbrook labor	80	hours	\$18.77	\$1,501
Vehicle Mileage	4,320	miles	\$0.485	\$2,095
Truck & Trailer	6	days	\$120.00	\$720
Generator	48	hours	\$15.00	\$720
Chainsaw	6	days	\$30.00	\$180
Gas Powered Drill	6	days	\$30.00	\$180
Hand Tools	6	days	\$25.00	\$150
Meals for Volunteers	6	days	\$100.00	\$600
IDF&G app prep	10	hours	\$29.61	\$296
Total Project Budget				\$31,525
Less Trout Unlimited Grant				(\$10,000)
Total Local Contribution				\$21,525

* Buck and rail fence per mile:

There will be one cross buck every 10 feet of fence. The fence will have three rails, one above the other. At each third set of rails there will be a diagonal rail for fence stability. Therefore there will be 3.3 rails every 20 feet (with six inches overlap). There will be 3,700 feet divided by 20 feet per rail (plus overlap)=185 sets of rails. There are 3.3 rails per set so there will be $185 \times 3.3 = 611$ rails. There will be 3,700 feet of fence divided by 10 feet apart for each cross buck=370 cross-bucks. Two spikes per rail (150 spikes per box); One bolt per cross buck (120 bolts per box); One washer per bolt (26 washers per pound); One nut per bolt (100 bolts per box).

Landowner Lanny Holbrook's contribution (fence removal and site prep)

Landowner, Mr. Lanny Holbrook, and his neighbor, Mr. Stan Wisteson, are eager to see this project through. Mr. Wisteson worked with the IDF&G last summer to build fence on the east side of the river for a couple of hundred yards upstream from the road crossing. That is in the middle of this project and has provided the inspiration for Mr. Holbrook. Mr. Holbrook's property has a dilapidated non-functional electric fence on most of this river section. Given the vast size of the project and the fact that we can not get all of the fence built this spring T.U. Portneuf Chapter #720 volunteers will work with Mr. Holbrook to help return that electric fence to a functional state for this summer as a temporary measure to protect the river until we can get the rest of the permanent fence built. The electric fence has been unreliable due the deer, elk and moose that wander into it and break it down when traversing the river corridor. T.U. Portneuf Chapter #720 will assist Mr. Holbrook with maintaining the electric fence through the summer of 2008. Mr. Holbrook is also committed to removing the old fence himself as we prepare to construct the new sections. This alone is a huge undertaking because there are literally tons of old wire and fiberglass poles to remove. The total length of buck and pole fence to be built is 0.7 miles. The T.U. Portneuf Chapter #720 and the IDF&G are working on another plan to secure funds for a more permanent fence solution on the sections of meadow temporarily protected by electric fence. Mr. Holbrook has also agreed to be present and help when we construct the new fence. We are looking forward to working with him and developing what we hope to be a long lasting relationship.

Ranchers Holbrook and Wisteson have witnessed the improved water quality in the Portneuf River due to the upstream riparian corridor fences and both are eager to see this 0.75 mile section of river protected as well. Also the IDF&G is applying for an EPA "319" grant to help replace the difficult to maintain electric fence in the meadow sections.



This is a Google Earth view of the section of river that needs fence work. There are three quarters of a mile of river here with 1.5 miles of banks that need protection. Upstream from this project, where the island is in the top of the image, the river is fenced for 3.88 miles to provide protection from domestic livestock. This section is within the five mile reach of river identified by the IDF&G as critical to YCT recovery.