
PART I - ADMINISTRATIVE

Section 1. General administrative information

Title of project

Acquire And Conserve Priority Bull Trout Habitat In Trestle Creek Watershed

BPA project number: 20007

Contract renewal date (mm/yyyy): **Multiple actions?**

Business name of agency, institution or organization requesting funding

River Network

Business acronym (if appropriate)

Proposal contact person or principal investigator:

Name	Hugh Zackheim
Mailing Address	River Network, 44 N. Last Chance Gulch
City, ST Zip	Helena, MT 59601
Phone	(406) 442-4777
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Email address	montanazac@aol.com

NPPC Program Measure Number(s) which this project addresses

10.5, 10.5A.5

FWS/NMFS Biological Opinion Number(s) which this project addresses

Bull Trout Biological Opinion (Listing: "Threatened")

Other planning document references

1. Lake Pend Oreille Key Watershed: Bull Trout Problem Assessment
 2. Idaho Bull Trout Conservation Plan
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Short description

Purchase conservation easements and/or fee interests on 800 acres of private land in the watershed of Trestle Creek, a crucial bull trout spawning and rearing stream in the Lake Pend Oreille Basin, Bonner County, Idaho

Target species

Bull trout

Section 2. Sorting and evaluation

Subbasin
Pend Oreille

Evaluation Process Sort

CBFWA caucus	Special evaluation process	ISRP project type
Mark one or more caucus	If your project fits either of these processes, mark one or both	Mark one or more categories
<input type="checkbox"/> Anadromous fish <input checked="" type="checkbox"/> Resident fish <input type="checkbox"/> Wildlife	<input type="checkbox"/> Multi-year (milestone-based evaluation) <input type="checkbox"/> Watershed project evaluation	<input type="checkbox"/> Watershed councils/model watersheds <input type="checkbox"/> Information dissemination <input type="checkbox"/> Operation & maintenance <input type="checkbox"/> New construction <input type="checkbox"/> Research & monitoring <input checked="" type="checkbox"/> Implementation & management <input type="checkbox"/> Wildlife habitat acquisitions

Section 3. Relationships to other Bonneville projects

Umbrella / sub-proposal relationships. List umbrella project first.

Project #	Project title/description

Other dependent or critically-related projects

Project #	Project title/description	Nature of relationship

Section 4. Objectives, tasks and schedules

Past accomplishments

Year	Accomplishment	Met biological objectives?

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Objectives and tasks

Obj 1,2,3	Objective	Task a,b,c	Task
1	Establish property-specific conservation objectives for the private lands in the Trestle Creek watershed	a	Develop land ownership data base and maps
		b	Coordinate with Idaho Dept. of Fish & Game and Forest Service to identify priority conservation properties and to determine desired land-use/ownership outcomes
2	Negotiate conservation acquisitions	a	Determine properties for sale, contract for appraisal information and enter negotiations with landowners
		b	For not-for-sale properties, inform landowners about conservation easements as a financial incentive to participate in bull trout conservation
		c	Contract for appraisal information and negotiate conservation easements with interested landowners, in cooperation w/IDFG
3	Secure adequate funding to carry out the acquisition projects	a	Seek additional acquisition funding as necessary to supplement BPA dollars. Potential partners include Washington Water Power (through WWP hydro relicensing/mitigation program), Forest Service, National Fish & Wildlife Foundation and State of Idaho
4	Secure permanent protection for approximately 500 acres of private land in the Trestle Creek watershed through conservation easements and fee acquisitions	a	Complete FY2000 conservation acquisitions by closing the purchases of fee lands and conservation easements
		b	Transfer purchased lands to Forest Service and transfer conservation easements to IDFG or private land trust
5	Secure permanent protection as much as possible of the remaining	a	Complete FY2001 conservation acquisitions by closing the purchases

	500 acres of unprotected private land in the Trestle Creek watershed through conservation easements and fee acquisitions		of fee lands and conservation easements
		b	Transfer purchased lands to Forest Service and transfer conservation easements to IDFG or private land trust

Objective schedules and costs

Obj #	Start date mm/yyyy	End date mm/yyyy	Measureable biological objective(s)	Milestone	FY2000 Cost %
1	1/1999	6/1999			0.00%
2	6/1999	6/2000			20.00%
3	3/1999	12/1999			0.00%
4	1/2000	9/2000	50% of Trestle Creek private land conserved		80.00%
5	10/2000	9/2001	Remaining Trestle Cr. projects concluded		0.00%
				Total	100.00%

Schedule constraints

There are strong indications of landowner interest in participating in a program of conservation acquisitions (some fee and some easement). However, participation will be on a willing-seller basis, so conservation acreage targets might not be achieved.

Completion date

FY 2001

Section 5. Budget

FY99 project budget (BPA obligated):

FY2000 budget by line item

Item	Note	% of total	FY2000
Personnel	1/6 time of River Network's Northern Rockies Office director	%3	8,500
Fringe benefits	calculated at 22%	%1	1,870
Supplies, materials, non-expendable property		%0	
Operations & maintenance		%0	
Capital acquisitions or	Purchase of land and conservation	%90	250,000

improvements (e.g. land, buildings, major equip.)	easements		
NEPA costs		%0	
Construction-related support		%0	
PIT tags	# of tags:	%0	
Travel		%1	3,000
Indirect costs		%0	
Subcontractor	Property appraisals	%4	10,000
Subcontractor	Land ownership research & mapping	%1	3,000
Other		%0	
TOTAL BPA FY2000 BUDGET REQUEST			\$276,370

Cost sharing

Organization	Item or service provided	% total project cost (incl. BPA)	Amount (\$)
National Fish & Wildlife Foundation	Capital funds for land/easement acquisitions (requested)	%21	100,000
Washington Water Power	Capital funds for land/easement acquisitions (to be requested)	%21	100,000
		%0	
		%0	
Total project cost (including BPA portion)			\$476,370

Outyear costs

	FY2001	FY02	FY03	FY04
Total budget	\$475,000			

Section 6. References

Watershed?	Reference
<input checked="" type="checkbox"/>	Panhandle Bull Trout Technical Advisory Team. 1998. Lake Pend Oreille key watershed: bull trout problem assessment (June 1998 draft). Lake Pend Oreille Watershed Advisory Group and Idaho Division of Environmental Quality, Boise, Idaho.
<input checked="" type="checkbox"/>	USDA Forest Service. 1993. Trestle Creek watershed improvement environmental assessment. Idaho Panhandle National Forest, Sandpoint RD, Sandpoint, Idaho.

<input type="checkbox"/>	State of Idaho. 1997. Bull trout conservation plan. Idaho Division of Environmental Quality, Boise, Idaho.
<input type="checkbox"/>	Horner, N., et al. 1997. Panhandle regional fisheries management investigations -- job performance report; federal aid in fisheries restoration. Idaho Dept. of Fish & Game, Boise, Idaho.
<input type="checkbox"/>	Idaho FPA. 1994. Site-specific forestry best management practices for Trestle Creek watershed. Idaho Forest Practices Act rules, Idaho Dept. of Lands, Boise, Idaho.

PART II - NARRATIVE

Section 7. Abstract

Trestle Creek is recognized as one of the most important bull trout spawning streams in the Pacific Northwest, hosting an annual run of 500-1,000 fish, representing 30-50% of the adult spawners from Lake Pend Oreille. A comprehensive bull trout “problem assessment” cited residential development as the primary threat to the integrity of the Trestle Creek watershed and its continued suitability for bull trout. River Network proposes to undertake a targeted program for purchasing fee title and conservation easements to prevent subdivision and development of private lands in the Trestle Creek watershed. River Network will coordinate with the Idaho Department of Fish & Game and the Forest Service to identify the key private inholdings and establish property-specific conservation objectives. River Network anticipates completing about 500 acres of conservation acquisitions in FY2000, and the remaining acquisitions in FY2001. Three factors suggest a high probability of success for this project: (1) private lands comprise only about 1,000 acres in this primarily national forest drainage; (2) numbers of private landowners are limited (about 25); and (3) Trestle Creek landowners are supportive of bull trout conservation. Results will be evaluated through quarterly meetings with IDFG, comparing conservation acreage achieved with targets. Overall, this project will secure crucial habitat for the threatened bull trout and thus meet the objectives of the Columbia Basin Fish and Wildlife Program (Section 10.5 – Bull Trout Mitigation) which directs that, after studies and evaluations, “on-the-ground projects [should be] identified and implemented as soon as possible to address the needs of this species.”

Section 8. Project description

a. Technical and/or scientific background

The Lake Pend Oreille system has historically supported one of the Pacific Northwest’s healthiest bull trout populations, both in terms of fish numbers and individual fish size. The world record bull trout, weighing 32 pounds, was caught in the lake, and fish in the 15- to 20-pound range are not unusual for this system. However, with the advent of significant environmental changes in the LPO basin over the last half century, including altered hydrology, species introductions, and land-uses related to

roadbuilding, logging and mining along tributary streams, the long-term health of the bull trout population has become an issue of concern. Declines of bull trout spawning populations have been documented in the Pack River, East Fork of Lightning Creek, Porcupine Creek and other watersheds, and these declines appear largely attributable to habitat degradation, including altered stream channels, unnaturally high bedload movement, sedimentation, and loss of woody debris recruitment. The recent listing of the bull trout as a threatened species under the Endangered Species Act has focused additional attention on the future of bull trout in the region.

Trestle Creek, a tributary entering the northeast portion of Lake Pend Oreille, has consistently remained the most important producer of bull trout in the system. During the past 15 years, redd counts have ranged from 134 to 304, indicating a spawning population of 500 to 1,000 adult fish (Horner et al 1997). The most recent data, a fish census conducted under the auspices of the Idaho Department of Fish & Game, yielded an estimate of 1,100 adult bull trout entering Trestle Creek during the 1998 fall spawning season.

In recognition of the importance of the Trestle Creek watershed – and its susceptibility to adverse changes through land uses – the Trestle Creek Local Working Committee developed and adopted site-specific forestry best management practices under the Idaho Forest Practices Act (Idaho FPA 1994). In 1995, the Forest Service completed a comprehensive Trestle Creek watershed restoration project that was designed to mitigate the potential adverse watershed impacts from decades of road construction and logging (USDA Forest Service 1993). This project is considered to have significantly reduced threats to bull trout habitat in the upper watershed (Panhandle Bull Trout Technical Advisory Team 1998).

Through the Idaho Bull Trout Conservation Plan (State of Idaho 1997), Trestle Creek was designated as one of 59 key state watersheds for bull trout. This designation provided the impetus for the detailed evaluation of Trestle Creek included in the Lake Pend Oreille Key Watershed Bull Trout Problem Assessment (Panhandle Bull Trout Technical Advisory Team 1998). While rating Trestle Creek's bull trout population as having the highest probability of persistence of any stream in the Lake Pend Oreille watershed, the assessment also notes that bull trout have highly specific habitat requirements and high sensitivity to human-induced disturbance. Actions that alter flow regime, water quality, stream substrate, riparian habitat, recruitment of large woody debris, and the seclusion of spawning grounds can have devastating impacts on bull trout habitat and populations.

In this context, it is clear that future land uses in the Trestle Creek watershed will determine the future of its bull trout. The Bull Trout Problem Assessment localizes this concern to the lower watershed, stating, "Development of the lower watershed, which brings additional impermeable surfaces, increased stormwater runoff, stream channel alterations for access and property protection, and vegetation removal in riparian areas is currently the most significant threat to bull trout" (page 29). The report also cites concerns over illegal harvest of spawning bull trout, often a secondary effect of real estate development.

Based on this research and analysis, River Network proposes to target the private lands in the lower watershed for a systematic program of habitat acquisition and conservation purchases, as an essential step to securing the future of the exceptional bull trout population in Trestle Creek. Specifically, River Network proposes to acquire over a

two-year period conservation easements and/or fee title to approximately 800 of the 1,000 acres of private land in the Trestle Creek drainage. Fee lands will be transferred to the Forest Service, and conservation easements will be transferred to the Idaho Department of Fish & Game or a land trust acceptable to IDFG. Overall, these proposed acquisitions will result in permanent conservation management of now-vulnerable lands, and should mark a significant step in securing the future of the bull trout population of Trestle Creek.

Following are additional points tied to the ISRP comments on important considerations for habitat restoration projects, as listed on page 9 of the Guidelines for Proposals:

- (1) The proposed acquisitions are sited appropriately in the watershed to meet bull trout habitat needs for several reasons. First, the lower watershed, particularly near the stream mouth, suffers from excessive bedload. If land development were to exacerbate this problem, bedload could form a barrier to upstream movement of bull trout. Second, the upper watershed, virtually all in Forest Service ownership, is now in relatively good shape because of the FS watershed rehabilitation program, and the agency is committed to a management approach that is responsive to bull trout habitat needs.
- (2) A focus on conservation of private lands in the lower watershed would complement the upstream restoration activities undertaken by the Forest Service.
- (3) Land acquisitions would promote the restoration of normative ecological processes within the watershed by reducing the capability of landowners to armor banks, constrain channels, harvest streamside trees or otherwise interfere with the natural dynamics of the Trestle Creek hydrological system.
- (4) This proposal generally represents a passive restoration approach, although a potential conservation easement project on private land at the mouth of Trestle Creek might incorporate vegetative rehabilitation of the stream banks.
- (5) The Forest Service is taking the primary steps to rehabilitate watershed, but there are no such steps underway among private lands in the lower watershed.
- (6) There is strong evidence from other LPO drainages that, if the stream system is allowed to unravel, bull trout populations will suffer through loss of spawning and rearing habitat.

b. Rationale and significance to Regional Programs

River Network's proposed land acquisition program in the Trestle Creek watershed will meet the objectives for bull trout conservation and mitigation provided in Section 10.5 of the Columbia Basin Fish and Wildlife Program by conserving one of the most significant bull trout spawning streams in the region. Such conservation action is consistent with the Program's directive stating that, following studies and evaluations, "on-the-ground projects [should be] identified and implemented as soon as possible to address the needs of this species." For bull trout in the Pend Oreille basin, numerous studies and evaluations have documented the importance of Trestle Creek; it is now appropriate to implement a concerted, on-the-ground habitat conservation program.

The project meets the goals of the Idaho Bull Trout Recovery Plan by helping to conserve Idaho's most significant bull trout population. The project also serves the recovery objectives of the U.S. Fish and Wildlife Service's listing of the bull trout as a threatened species.

River Network's project approach is intended to obviate the most severe threat to the bull trout, the prospect of increased residential development of private lands in the lower watershed. Fee acquisitions on behalf of the Forest Service and purchased conservation easements to be held by IDFG will preclude the haphazard real estate development, poorly engineered road construction and streamside vegetation removal that jeopardize instream habitat conditions.

Three factors suggest a high probability of success for this project: (1) private lands comprise only about 1,000 acres in this primarily national forest drainage; (2) numbers of private landowners are limited (about 25) and the private lands are concentrated in the lower watershed; and (3) based on information provided by IDFG and FS field staff and an area realtor, Trestle Creek landowners are supportive of bull trout and interested in participating in a conservation program.

Finally, it is worth noting that no agency or private organization has undertaken a comprehensive approach to private land conservation in the Trestle Creek watershed. This is understandable, given agencies' staffing and resource limitations and their wide range of other management responsibilities. But it also underscores the need for River Network's proposed project. Further, based on numerous conversations with staff of Idaho's Department of Fish & Game, Division of Environmental Quality, and Department of Lands and the Forest Service, agency officials are keenly aware of the importance of Trestle Creek and extremely supportive of this River Network proposal.

c. Relationships to other projects

Currently, the only ongoing BPA-funded fishery project in this area is IDFG's Lake Pend Oreille Fishery Recovery Project (Project # 9404700). Based on discussions with the principal investigator for that project, Melo Maiolie, there is no conflict or overlap between that project and this proposal; rather Maiolie indicated that River Network's proposed Trestle Creek conservation project would complement his efforts by benefiting bull trout, an important segment of the Pend Oreille fishery. Additionally, success of the LPO Fishery Recovery Project in recovering kokanee populations could enhance habitat conditions for bull trout by supplemental existing food sources.

d. Project history (for ongoing projects)

This is a new proposal.

e. Proposal objectives

The overall objective of the Trestle Creek bull trout habitat acquisition project is to conserve the habitat quality of one of the most significant bull trout spawning streams in the Pacific Northwest. This objective will be accomplished by securing at-risk private lands through fee purchases and conservation easements, thus eliminating the significant

threat posed to the Trestle Creek watershed by residential subdivision and other land uses inconsistent with the integrity of bull trout habitat. A corollary objective is to generate opportunities for public agencies to undertake habitat restoration projects on acquired properties, further contributing to watershed conservation.

Specific task-related objectives of the Trestle Creek watershed bull trout habitat acquisition project are to:

1. Establish property-specific conservation objectives for the approximately 1,000 acres of private land in the Trestle Creek watershed; map properties and prioritize acquisitions based on conservation benefits
2. Communicate with landowners about this programmatic approach to bull trout habitat conservation in Trestle Creek and the financial incentives associated with conservation transactions; negotiate conservation acquisitions with willing sellers with a target of 800 acres over two years
3. Secure adequate funding to carry out the acquisitions during FY2000 and FY2001, consistent with the following estimated total 2-year capital costs:
Fee acquisitions: 240 acres @ \$2,000/acre = \$480,000
Conservation easements: 560 acres @ \$750/acre = \$420,000
(see following #4 and #5 for annual acquisition and expenditure targets)
4. Secure permanent protection for 500 acres of private land in Trestle Creek in FY 2000 through fee acquisitions and conservation easement purchases, totaling \$450,000
5. Secure permanent protection for an additional 300 acres of private land in Trestle Creek in FY 2001 through fee acquisitions and conservation easement purchases, totaling \$450,000

Comment on measurable fish production and habitat goals: Although IDFG will continue to conduct redd counts and population estimates in Trestle Creek, it is not anticipated that such monitoring will demonstrate short-term increases in the bull trout population attributable to this project. Successful implementation of the Trestle Creek land acquisition project, however, will serve to stabilize habitat conditions in the watershed, thus avoiding the measurable habitat degradation observed in the Lightning Creek drainage and some other LPO watersheds which have resulted in drastic declines in numbers of spawning bull trout. Over the long term, conservation-oriented management on the acquired lands offers the potential for measurements to document improved habitat conditions in Trestle Creek and its tributaries.

f. Methods

Methods are listed below, correlated by number with the objectives listed in Section 4 and described in Section 8e above:

1. River Network will serve as the lead organization to develop acquisition prospects, secure independent appraisals, negotiate fee and conservation easement acquisitions with willing private landowners, and close the transactions by purchasing

lands or easements. Initial research will include development of a comprehensive land ownership data base and an ownership map of the watershed. A key component of the process will be coordination with lands program officers and biologists from both the Panhandle National Forest and the Idaho Department of Fish & Game. Through such coordination, the parties can jointly determine acquisition priorities and conservation strategies (e.g., fee or easement purchase, specific conservation easement provisions needed, land exchange opportunities, habitat restoration needs and potential funding sources, etc.).

2. River Network will contact all private landowners in the Trestle Creek watershed and explore conservation options and associated financial incentives. Acquisition opportunities will then be prioritized, and appraisal work begun. River Network will maintain contact with landowners and agency staff through all stages of developing and negotiating acquisition proposals. Purchases of fee and easement interests will adhere to the principle that lands and easements may not be purchased at prices exceeding appraised value.

3. River Network will seek additional funding sources for the project, if more funds are necessary to pursue acquisition opportunities in the Trestle Creek watershed. (Please note that, as indicated in the line item budget for objective #3 in Section 4, River Network will incur all costs, including staff time, related to pursuit of additional acquisition capital; none of this effort would be funded by BPA.) Washington Water Power, through its commitment to invest funds in bull trout recovery as part of its Clark Fork hydropower re-licensing process, represents a solid potential source for additional acquisition funds. The National Fish & Wildlife Foundation, through its Bring Back the Natives fishery program, is another strong candidate, and the State of Idaho and the Forest Service are potential funders for specific acquisitions.

4.-5. River Network anticipates completing about 500 acres of conservation acquisitions in FY2000, and completing the remaining feasible acquisitions (estimated at an additional 300 acres of acquisitions from willing sellers) in FY2001. Purchased lands will be transferred to the Panhandle National Forest and conservation easements will be transferred to IDFG or to a private land trust acceptable to IDFG.

River Network will meet no less than quarterly with designated staff contacts from the Panhandle NF and IDFG to review progress on land acquisitions and evaluate success in meeting acreage targets. Feedback obtained through such meetings will be used to re-prioritize efforts, if necessary, and to guide negotiations and conservation strategies.

Based on discussions with IDFG, FS officials and an area realtor, there are strong indications of landowner interest in participating in a program of conservation acquisitions. However, participation will be on a willing-seller basis, so conservation acreage targets might not be achieved if lands are not made available or if negotiations cannot be successfully concluded. Funds budgeted for capital acquisition will only be expended on the purchases of fee lands and conservation easements so, to the extent that targeted acreage may not be acquired, BPA funds will be preserved.

g. Facilities and equipment

The proposal does not request funding for facilities or equipment. River Network would supply its own vehicle, with travel costs proposed to be reimbursed by BPA as provided for in the travel section of the budget.

h. Budget

Personnel: Salary for 1/6 time for one year of the director of River Network's Northern Rockies Office, with fringe benefits calculated at 22% of salary

Capital Acquisitions: \$250,000 represents BPA's proposed share of an FY2000 acquisition program that will seek to achieve \$450,000 of acquisitions, including fee purchases and conservation easements. The BPA funds, combined with outside capital sources secured by River Network, are anticipated to preserve 500 acres in the Trestle Creek drainage in FY2000.

Travel: Costs based on travel and lodging for an estimated 6 – 8 trips from Helena to Sandpoint during the year

Contracted services:

Appraisals – 5 property appraisals @ \$2,000 each
Ownership Data Base & Mapping – Estimated cost of researching and developing ownership information and preparing ownership maps integrated with existing GIS systems

Cost sharing: See discussion of capital funding under Section 8f, Methods, objective #3.

Section 9. Key personnel

Project Manager: Hugh Zackheim

Current Position: Director, Northern Rockies Office
River Network

Tenure: June 1997 to present

Responsibilities: Identify river properties with important conservation values
Develop project approach, in cooperation with agencies and NGOs
Negotiate land acquisitions
Secure project funding
Build public support for conservation acquisitions

Time to be Allocated to BPA Project: 1/6 time

Relevant Experience: Since 1990, I have been employed in the field of land conservation, evaluating properties for their biological significance, developing

conservation strategies, drafting conservation easements, negotiating acquisitions and carrying out the technical aspects of land purchases. Among the projects that I initiated and completed are conservation easements on the Madison and Big Hole rivers, cooperative land purchases with the Bureau of Land Management on the Yellowstone River, and fee purchase of parcels now comprising the Nature Conservancy's South Fork Madison River Preserve. I have worked closely and successfully with many state and federal agency officials and western landowners representing a broad range of backgrounds and perspectives.

Recent Professional Experience:

Field Representative, The Nature Conservancy of Montana, 1990-1997
Primary Duties: Develop and negotiate conservation projects, including land acquisitions, conservation easements and government cooperative projects; draft and review legal documents related to real estate transactions; maintain a communications network with landowners, agency professionals, biologists, conservation staff; fundraise for projects; communicate my work through written and oral presentations

Resource Policy Analysts, Environmental Quality Council, State of Montana, 1983-89
Primary Duties: Conduct research and prepare policy reports on environmental issues for a standing legislative committee; draft legislation; staff House Natural Resources Committee

Education:

M.S., Wildlife Biology, 1982, University of Montana
Thesis: Ecology and Population Status of River Otters in SW Montana

B.A. in Biology, 1974, Harvard University
Honors: Magna cum Laude; Phi Beta Kappa

Section 10. Information/technology transfer

Successful implementation of a concerted private land conservation program on the Trestle Creek watershed would provide a model approach that could be applied in other small watersheds in the Lake Pend Oreille basin and elsewhere to achieve significant conservation results for bull trout, as well as other resident fish and potentially anadromous fish in headwater streams. I would be very willing to participate in workshops and/or training sessions related to this watershed-based conservation effort.

Congratulations!