



# 2006 (7<sup>TH</sup>) SALMON APPLICATION FORMS

**IN-STREAM HABITAT**

18e

JUNE 19, 2006

FOR USE IN 2006 GRANT CYCLE ONLY

***Salmon Recovery Funding  
Board Mission Statement:***

The Board will support salmon recovery by funding habitat protection and restoration projects, and related programs and activities that produce sustainable and measurable benefits for the fish and their habitat.

**Salmon Recovery Funding  
Board Members**

*William Ruckelshaus (Chair), Seattle*

*Frank "Larry" Cassidy, Jr., Vancouver*

*Joe Ryan, Seattle*

*David Troutt, Dupont*

*Steve Tharinger, Clallam County*

*Mark Clark, Executive Director, Conservation Commission  
Designee: Stu Trefry*

*Jay Manning, Director, Dept. of Ecology  
Designee: Dick Wallace*

*Jeff Koenings, Director, Dept. of Fish & Wildlife  
Designee: Tim Smith*

*Doug Sutherland, Commissioner, Dept. of Natural  
Resources  
Designee: Craig Partridge*

*Doug MacDonald, Secretary, Dept. of Transportation  
Designee: Megan White*

**IAC Director**

*Laura E. Johnson*

## Salmon Recovery Program – In-Stream Habitat Application Materials Checklist

**Application Materials must be submitted for each project on the lead entity list.**

Available in PRISM		Item	Section
Attach		Application Authorization Memorandum	
		General Application Information	Section 1
		Applicant / Organization Information	Section 2
		Project Contact Information	Section 3
		Goal and Objective	Section 4
		Short Description of Project	Section 5
		Summary of Funding Request and Match Contribution	Section 6
		Property Acquisition Cost Estimate	Section 7
		Restoration Cost Estimate	Section 8
		Application Questionnaire	Section 9
		Work Site Information	Section 10
		Permits	Section 11
		Salmonid Species Information	Section 12
		Habitat Factors Addressed	Section 13
Attach		Evaluation Proposal	Section 14
Attach		Project Partnership Contribution Form	Section 15
Attach		Landowner Willingness Form	Section 16
Attach		Maps (general vicinity & work site)	Applicant Creates
Attach		Project Photos	Applicant Creates
Attach		Long-Term Stewardship Plan	Applicant Creates
Attach		Project Partnership Contribution Form	Applicant Creates
Attach		Other Materials (optional)	Applicant Creates

** - Items with a check mark can be entered directly into PRISM. Items marked "Attach" can be attached as document in PRISM, however if this is not possible, documents can be mailed to the IAC Office.**

## Application Authorization Memorandum

**Each organization submitting a project must complete this form.**

**TO:** Salmon Recovery Funding Board (SRFB)  
PO Box 40917  
Olympia, Washington 98504-0917

**THROUGH:** Yakama Nation  
*(lead entity name)*

**FROM:** John Jorgensen  
*(applicant name)*

Through the lead entity identified above, the SRFB is hereby requested to consider this application for financial assistance for the Salmon Recovery project(s) described below and to grant funding from such State and Federal sources as may be available. This application is prepared with knowledge of and in compliance with SRFB's policies and procedures. Further, we agree to cooperate with the SRFB by furnishing such additional information as may be necessary to execute a SRFB Project Agreement and to adhere to all appropriate state and federal statutes governing grant monies under the Project Agreement. We are aware that the grant, if approved, is paid on a reimbursement basis. We agree that all application materials, including photos, slides, site drawings, maps, etc., become the property of IAC/SRFB and may be used by IAC/SRFB for education, information, or other non-commercial purposes in publications, presentations or on the IAC/SRFB web site.

**Project Name(s):** **Hancock Springs Restoration Project**

\_\_\_\_\_  
(Attach list  
if necessary) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I/we certify that to the best of our knowledge, the data in this application is true and correct. In addition, I/we certify that the matching resources identified in the grant are committed to the above project. I/we acknowledge responsibility for supporting all non-cash commitments and donations should they not materialize.

**Authorized Representative:** \_\_\_\_\_  
*(signature)* *(date)*

Printed Name and Title: \_\_\_\_\_

**1. General Application Information**  
(ENTER ON PRISM TAB 1)

Project Name Hancock Springs Restoration Project

Project Type (check one)

- Restoration only** (In-stream Habitat)  
 **Combined** (acquisition and restoration)

**2. Applicant / Organization Information**  
(ENTER ON PRISM TAB 1 – SEARCH FOR ORGANIZATION)

Organization Name Yakama Nation

Organization Type (check one)

- |  |   |  |
|--|---|--|
| <input type="checkbox"/> City/Town             | <input type="checkbox"/> County                           | <input type="checkbox"/> Private Landowner       |
| <input type="checkbox"/> Conservation District | <input checked="" type="checkbox"/> Native American Tribe | <input type="checkbox"/> Non-profit Organization |
| <input type="checkbox"/> RFEG                  | <input type="checkbox"/> Special Purpose District         | <input type="checkbox"/> State Agency            |

Organization Address

Address 10 Piney Wood Road

City/Town Twisp

State, Zip WA 98856

Telephone # (509) 996-3122

FAX # (509) 996-4226

Internet e-mail address john@mid-columbia-coho.net

Website URL

**3. Project Contact Information**

Complete one for each contact.  
(ENTER ON PRISM TAB 1 – SEARCH FOR PERSON)

Mr.  Ms. Title

First Name John

Last Name Jorgensen

Primary Contact OR  Alternate Contact

Contact Mailing Address

Address 10 Piney Wood Road

Work Telephone # (509)996-3122

City/Town Twisp

FAX #: (509) 996-4226

State, Zip WA 98856

Internet e-mail address

john@mid-columbia-coho.net

**4a. Goal and Objective and Measurements  
In-Stream Habitat (Restoration projects only)**

**Select one goal and one objective that best fits your project and respond all to the measurements for that goal and objective.  
(ENTER GOAL AND OBJECTIVE ON PRISM TAB 2; SAVE, THEN  
ENTER MEASUREMENT RESPONSES ON PRISM TAB 6)**

<p><b>Goal:</b> The goal of the project is to connect isolated freshwater instream habitat to increase the range and distribution of salmon.</p> <p><b>Objective:</b> The objective of the project is to increase access to (freshwater in-stream ???) side channels, oxbows, and other channels.</p>	<input checked="" type="checkbox"/>
<p><b>Measurement:</b> Amount of artificial wetland area created? [Acres of artificial wetland proposed to be created and actually created from an area not formerly a wetland.]</p>	_____ Acres
<p><b>Measurement:</b> Amount of wetland area of invasive species treated? [The acreage of invasive species proposed for treatment and actually treated in the wetland project. The proposed project area may only be a portion of an existing wetland such as removing an area of purple loosestrife.]</p>	_____ Acres
<p><b>Measurement:</b> Amount of wetland area treated? [Acres of wetland proposed for treatment and actually treated. Note: Include acres of invasive species proposed for treatment or treated.]</p>	_____ Acres
<p><b>Measurement:</b> Average stream width, in feet, upstream of barrier. [Report the average width of the stream upstream from the barrier.]</p>	_____ Average width in feet
<p><b>Measurement:</b> Length of stream section treated (one side only)</p>	_____ Miles
<p><b>Measurement:</b> Length of streambank treated for stabilization (If both sides, add lengths)</p>	
<p><b>Measurement:</b> Percent rearing habitat opened up? [Report the percent of rearing habitat that is being opened up as a result of this project.]</p>	_____ % Rearing
<p><b>Measurement:</b> Percent spawning habitat opened up? [Report the percent of spawning habitat that is being opened up as a result of this project.]</p>	_____ % Spawning
<p><b>Goal:</b> The goal of the project is to improve instream morphology and habitat in salmon bearing streams.</p>	<b>XX</b> <input checked="" type="checkbox"/>

<p><b>Objective:</b> The objective of the project is to increase instream cover, spawning, and resting areas.</p>	
<p><b>Measurement:</b> Length of instream habitat treated, except for bank stabilization? [This refers to meander miles of instream habitat treatments, except for bank stabilization treatments. Count actual stream length treated.]</p>	<p>__0.67__ Miles</p>
<p><b>Measurement:</b> Length of stream bank protected through land acquisition/easement/lease (If both sides add lengths)</p>	<p>_____ Miles</p>
<p><b>Measurement:</b> Length of stream section treated (one side only)</p>	<p>__0.85__ Miles</p>
<p><b>Measurement:</b> Length of streambank treated for stabilization? [The number of miles of streambank stabilization treatment. Add length treated on both sides when both sides are stabilized. Add one side when one side is treated.]</p>	<p>__0.7__ Miles</p>
<p><b>Goal:</b> The goal of the project is to protect and restore freshwater instream channel meander migration patterns.</p> <p><b>Objective:</b> The objective of the project is to protect and restore flood plain meander functions, sediment transport functions, dissipation, and water storage.</p>	<p><input checked="" type="checkbox"/></p>
<p><b>Measurement:</b> Amount of estuarine/freshwater area created? [Acres of artificial estuary proposed for creation and actually created from an area not formerly saline.]</p>	<p>_____ Acres</p>
<p><b>Measurement:</b> Amount of estuarine/freshwater area of invasive species treated? [The acreage of invasive species proposed for treatment and actually treated in an estuary. A treatment may only be for a portion of an estuary such as removal of Spartina.]</p>	<p>_____ Acres</p>
<p><b>Measurement:</b> Amount of estuarine/freshwater area treated? [Acres of estuary proposed for treatment and actually treated. Note: Include creation of estuarine wetlands.]</p>	<p>_____ Acres</p>
<p><b>Measurement:</b> Average stream width, in feet, upstream of barrier [Report the average width of the stream upstream from the barrier.]</p>	<p>_____ Average width in feet</p>
<p><b>Measurement:</b> Length of instream habitat treated, except for bank stabilization. (One side only)</p>	<p>_____ Miles</p>
<p><b>Measurement:</b> Length of stream section treated (one side only)</p>	<p>_____ Miles</p>

<b>Measurement:</b>	Length of stream bank protected through land acquisition/easement/lease (If both sides add lengths)	_____ Miles
<b>Measurement:</b>	Length of streambank treated for stabilization. (If both sides, add lengths)	_____ Miles
<b>Measurement:</b>	Percent rearing habitat opened up? [Report the percent of rearing habitat that is being opened up as a result of this project.]	_____ % Rearing
<b>Measurement:</b>	Percent spawning habitat opened up? [Report the percent of spawning habitat that is being opened up as a result of this project.]	_____ % Spawning

## 4b. Goal and Objective and Measurements In-Stream Habitat (Combination projects only)

Select one goal and one objective that best fits your project and respond all to the measurements for that goal and objective.

(ENTER GOAL AND OBJECTIVE ON PRISM TAB 2; SAVE, THEN  
ENTER MEASUREMENT RESPONSES ON PRISM TAB 6)

<p><b>Goal:</b> The goal of the project is to protect and connect isolated habitat to increase the range and distribution of salmon.</p>	
<p><b>Objective:</b> The objective of the project is to protect and increase access to side channels, oxbows, and other channels.</p>	<input checked="" type="checkbox"/>
<p><b>Measurement:</b> Amount of artificial wetland area created? [Acres of artificial wetland proposed to be created and actually created from an area not formerly a wetland.]</p>	_____ Acres
<p><b>Measurement:</b> Amount of wetland area of invasive species treated? [The acreage of invasive species proposed for treatment and actually treated in the wetland project. The proposed project area may only be a portion of an existing wetland such as removing an area of purple loosestrife.]</p>	_____ Acres
<p><b>Measurement:</b> Amount of wetland area treated? [Acres of wetland proposed for treatment and actually treated. Note: Include acres of invasive species proposed for treatment or treated.]</p>	_____ Acres
<p><b>Measurement:</b> Average stream width, in feet, upstream of barrier. [Report the average width of the stream upstream from the barrier.]</p>	_____ Average width in feet
<p><b>Measurement:</b> Length of stream bank protected through land acquisition/easement/lease. (If both sides, add lengths)</p>	_____ Miles
<p><b>Measurement:</b> Length of stream section treated (one side only)</p>	_____ Miles
<p><b>Measurement:</b> Percent rearing habitat opened up? [Report the percent of rearing habitat that is being opened up as a result of this project.]</p>	_____ % Rearing
<p><b>Measurement:</b> Percent spawning habitat opened up? [Report the percent of spawning habitat that is being opened up as a result of this project.]</p>	_____ % Spawning
<p><b>Goal:</b> The goal of the project is to protect and improve instream morphology and habitat in salmon bearing streams.</p>	<input checked="" type="checkbox"/>

<b>Objective:</b> The objective of the project is to protect and increase instream cover, spawning, and resting areas.	
<b>Measurement:</b> Length of instream habitat treated, except for bank stabilization? [This refers to meander miles of instream habitat treatments, except for bank stabilization treatments. Count actual stream length treated.]	_____ Miles
<b>Measurement:</b> Length of stream bank protected through land acquisition/easement/lease. (If both sides, add lengths).	_____ Miles
<b>Measurement:</b> Length of stream section treated (one side only)	_____ Miles
<b>Measurement:</b> Length of streambank treated for stabilization? [The number of miles of streambank stabilization treatment. Add length treated on both sides when both sides are stabilized. Add one side when one side is treated.]	_____ Miles
<b>Goal: The goal of the project is to protect and restore channel meander migration patterns.</b>	
<b>Objective:</b> The objective of the project is to protect and restore the flood plain meander functions, sediment transport functions, dissipation, and water storage.	<input checked="" type="checkbox"/>
<b>Measurement:</b> Amount of estuarine/freshwater area created? [Acres of artificial estuary proposed for creation and actually created from an area not formerly saline.]	_____ Acres
<b>Measurement:</b> Amount of estuarine/freshwater area of invasive species treated? [The acreage of invasive species proposed for treatment and actually treated in an estuary. A treatment may only be for a portion of an estuary such as removal of Spartina.]	_____ Acres
<b>Measurement:</b> Amount of estuarine/freshwater area treated? [Acres of estuary proposed for treatment and actually treated. Note: Include creation of estuarine wetlands.]	_____ Acres
<b>Measurement:</b> Average stream width, in feet, upstream of barrier [Report the average width of the stream upstream from the barrier.]	_____ Average width in feet
<b>Measurement:</b> Length of stream bank protected through land acquisition/easement/lease. (If both sides, add lengths).	_____ Miles

<p><b>Measurement:</b> Length of stream section treated (one side only)</p>	<p>_____ Miles</p>
<p><b>Measurement:</b> Percent rearing habitat opened up? [Report the percent of rearing habitat that is being opened up as a result of this project.]</p>	<p>_____ % Rearing</p>
<p><b>Measurement:</b> Percent spawning habitat opened up? [Report the percent of spawning habitat that is being opened up as a result of this project.]</p>	<p>_____ % Spawning</p>

## 5. Short Description of Project

**Describe project, what will be done, and what the anticipated benefits**

**will be in 1500 characters or less.**

**(ENTER ON PRISM TAB 2)**

**NOTE:** Many audiences, including the SRFB, SRFB's Review Panel, media, legislators, and the public who may inquire about your project use this description. Provide as clear, succinct and descriptive an overview of your project as possible – many will read these 1-2 paragraphs!

The description should state what is proposed. Identify the specific problems that will be addressed by this project, and why it is important to do at this time. Describe how, and to what extent, the project will protect, restore or address salmon habitat. Describe the general location, geographic scope, and targeted species/stock. This short description should be the summary of the detailed proposal set out under Evaluation Proposal, with particular emphasis on questions I-IV.

*The database limits this space to 1500 characters (including spaces); any excess text will be deleted.*

The Hancock Springs Restoration Project is expected to benefit ESA-listed Upper Columbia steelhead, spring Chinook and bull trout. Funds are being requested to complete work along 3520 feet (0.67 miles) of stream in the middle and lower sections of the Hancock Springs restoration site. Hancock Springs is located in the Methow subbasin in North Central Washington, approximately 8 miles west of Winthrop. It flows into the Methow River approximately 1 mile downstream from the Weeman Bridge. This area of the Methow River has the highest spawning density of ESA listed spring Chinook and steelhead in the basin and nearby tributaries have ample populations of bull trout. Hancock Creek has unique hydrologic conditions that are very favorable to salmonids. Cool summer temperatures, warm winter temperatures, high fall flows, and accessible rearing and spawning environments add to its potential as critical salmonid habitat. The Hancock Springs Restoration Project proposes a systematic approach to recover natural stream processes to benefit anadromous fish. Fence has been constructed to manage livestock and deer. Native vegetation will be planted, degraded banks will be reformed, instream structures will be constructed and brook trout populations will be decreased to address the limiting factors.

## 6. Summary of Funding Request and Match Contribution

Remember to update this section whenever changes  
are made to your cost estimates.  
(ENTER ON PRISM TAB 3)

### TOTAL PROJECT COST (A + B)

(Sponsor Match & SRFB Contribution)

\$287,017.00\_\_\_\_\_

### A. Sponsor Match Contribution (15% minimum is required for match)

Appropriation/Cash	\$ _____
Bonds - Council	\$ _____
Bonds - Voter	\$ _____
Cash Donations	\$ _____
Conservation Futures	\$ _____
Donations	
Donated Equipment	\$ _____
Donated Labor	\$ 16,000.00_____
Donated Land	\$ _____
Donated Materials	\$ 24,666.00_____
Donated Property Interest	\$ _____
Force Account	
Force Acct - Equipment	\$ _____
Force Acct - Labor	\$ _____
Force Acct - Material	\$ _____
Grants*	
Grant - Federal	\$ 118,000.00_____
Grant - Local	\$ _____
Grant - Private	\$ _____
Grant - State	\$ _____

### Total Sponsor Match Contribution

\$158,666.00\_\_\_\_\_

15% Minimum Match Required  
of A. TOTAL PROJECT COST

### B. SRFB Contribution (grant request)

\$128,351.00\_\_\_\_\_

\$5,000 Minimum Request

**\*Note, be sure to identify the name and type of any matching grant in the Application Questionnaire Section.**

**Note: The Total Project Cost must equal the totals  
from the following Cost Estimate Sections.**

## 7. Property Acquisition Cost Estimate

ACQUISITION includes the purchase of land in fee title, or lesser interests such as conservation easements or other property rights. Conservation easements must be in perpetuity. The acquisition policy is set out in Manual #3, located on IAC Web Page <http://www.iac.wa.gov/srfb/docs.htm>. Use this form for combination (acquisition and restoration) projects only. **(ENTER ON PRISM TAB 4)**

	Property	Property	Property	Total Properties
<b>Property Name</b>				Leave shaded
<b>Date to be Acquired</b>				areas blank
<b>Acreage to be Acquired</b>				
<b>VALUE DETERMINATION TYPE</b>	<b>(Check one for each property)</b>			
Appraised/reviewed value	⑤	⑤	⑤	
Estimate of value	⑤	⑤	⑤	
Letter of opinion	⑤	⑤	⑤	
<b>PURCHASE TYPE</b>	<b>(Check one for each property)</b>			
Fee ownership (land/improvements)	⑤	⑤	⑤	
Less than fee ownership	⑤	⑤	⑤	
<b>ACQUISITION COST ITEMS</b>	<b>(Complete all that apply)</b>			
Applicable taxes				
Appraisal and review				
Baseline inventory				
Closing				
Demolition				
Easement – access				
Easement – conservation				
Easement – other				
Easement – trail				
Fencing				
Hazardous substances assessment				
Improvements & structures				
Land				
Noxious weed control				
Recording fees				
Relocation				
Rights – agriculture				
Rights – development				
Rights – mineral				
Rights – other				
Rights – timber				
Rights – water				
Signing				
Survey				
Title reports/insurance				
Wetland delineation				
<b>Column Sub-Total</b>				
<b>Admin Costs (5% of Sub-Total)</b>				
<b>TOTAL ACQUISITION COSTS</b>				

## 8. Restoration Cost Estimate In-Stream Habitat

IN-STREAM HABITAT includes those freshwater items that affect or enhance fish habitat below the ordinary high water mark of the water body. Items include work conducted on or next to the channel, bed, bank, and floodplain by adding or removing rocks, gravel, or woody debris. Other items necessary to complete the project may include livestock fencing, water conveyance, and plant removal and control.

**Complete only items that apply to your project.**  
**TOTAL COST must include the SRFB and Sponsor's Match Contribution.**  
*Use only whole dollar amounts.*  
**(ENTER ON PRISM TAB 5)**

Item	Unit	Qty.	Total Cost	Description Needed	Description (60 characters max.)
Bank stabilization	Linear ft	2960	54000	Describe	This includes, logs, hay bails and seed mats and installation
Carcass placement	Linear ft		0	Describe	
Channel connectivity	Linear ft		0	Optional	
Channel reconfiguration	Linear ft	2810	75000	Describe	Includes materials and installation of wiers(logs and hay bails)
Complex log jams	Each		0	Optional	
Deflectors/barbs	Each		0	Optional	
Dike removal/setback	Linear ft		0	Optional	
Livestock fencing	Linear ft	6280	32666	Material	Deer and livestock fence
Log control (weir)	Each		0	Optional	
Off-channel habitat	Acres		0	Describe	
Permits	Lump sum		0	Optional	
Plant removal/control	Acres		0	Optional	
Riparian plant installation	Sq ft	79200	5000	Describe	Installation of riparian plants
Riparian plant materials	Each	1,570	2,494	Describe species	200 Ponderosa Pine, 100 cottonwood, 100 water birch, 120 red osier, 150 alder) = \$1172.50 and 800 cuttings at \$.89 = \$712
Rock control (weir)	Each		0	Optional	
Roughened channel	Linear ft		0	Describe	
Signage	Each		0	Describe	
Site maintenance	Lump sum		15000	Describe	Includes fence repair and removal, irrigating new plants
Spawning gravel placement	Sq yds		0	Optional	
Wetland restoration	Acres		0	Describe	
Woody debris placement	Each	70	60000	Describe	Includes LWD transport and installation
<b>Sales Tax</b>					
<b>Sub-Total</b>					

<b>Architecture, Engineering, &amp; Admin. (30% of Sub-Total)</b>					
<b>TOTAL COSTS</b>			<b>\$287,017</b>		

Purchase of equipment is not an allowable cost.

## 9. Application Questionnaire

All applicants must answer the following questions.  
(ENTER ON PRISM TAB 8)

Could we add additional questions?

Do you have a preliminary design? If so please attach in PRISM

### Cost Efficiencies

For any grants listed in the Summary of Funding Request and Match Contribution Section, are there any restrictions on the use of these grant funds? When and how long will the grant funds be available to this project? Are your matching funds considered state or federal dollars?

There are no restrictions on the PCSRF funds. We are currently operating on Pacific Coastal Salmon Recovery Funds, and \$118,000 will be available for 2006-2007. These funds are considered federal dollars.

Describe the type of donated labor (skilled and unskilled), donated equipment, and donated materials that will be used for this project, identified in the Summary of Funding Request and Match Contribution Section.

Project partners include the Yakama Nation, the US Bureau of Reclamation (Reclamation), Pacific Coastal Salmon Recovery Fund (PCSRF) and the US Fish and Wildlife Service (USFWS). The Yakama Nation provides the Project Manager and implementation staff. Reclamation provided a thalweg survey (donated labor) for an estimated cost-share of \$16,000. PCSRF provided partial funding (\$118,000) for project work in 2006 through 2007. USFWS has provided \$25,000 for fencing materials.

Logs were free from USFS land using thinned wood from a tree cutting permit. If Douglas fir and pine were not available, the cost to provide wood for the Hancock Springs project would be at least \$10,000 for the 8-10" logs.

### Land Ownership

What type of landowner currently owns the property? (Federal, Local, Private, State or Tribal.)

Private

What is the current land use of the site, and its history? Describe past human uses and salmon habitat functions.

The history of uncontrolled livestock use significantly degraded the salmonid habitat at Hancock Springs. This resulted in a wide, shallow channel with unstable banks, minimal riparian vegetation, high silt concentrations and a loss of pool habitat (Figure 2). In the Methow Limiting Factors Analysis report, Andonaegui (2000) described Hancock Creek as having no riparian cover in the upper reach above the culvert at Wolf Creek County road, the substrate was highly embedded, there was a low pool:riffle ratio and brook trout were present. She recommended improving grazing management on Hancock Creek and stated that when full fish passage was restored, Hancock Creek would offer excellent salmonid rearing habitat year-round. The Draft Upper Columbia Salmon Recovery Plan (UCSRB 2006a) identifies the Wolf/Hancock Creek Assessment Unit as a Category 2 based on ratings from the Biological Strategy (UCRTT 2003). In addition, the Salmon Recovery Plan recommends increasing "habitat diversity and quantity by restoring riparian habitat, reconnecting side channels and floodplains (where feasible), and adding large woody debris and

instream structures between river mile 1 and the spring in Hancock Creek”. Two subbasin-wide programmatic actions identified in the Methow Implementation Schedule (UCSRB 2006b) are addressed by the Hancock Springs Restoration project including sediment reduction through riparian restoration and brook trout population reduction. A fence was constructed in June 2006 along Hancock Creek to exclude cattle and deer from the riparian areas. Native riparian vegetation will be planted to establish a naturally functioning riparian zone. These riparian restoration actions are expected to reduce sediment inputs. In addition, Yakama Nation staff will electrofish the upper, middle and lower sections of Hancock Creek and euthanize all captured brook trout, which should decrease the brook trout population. The Hancock Springs Restoration Project, which began in 2005, is addressing all of these limiting factors. In addition, several other projects have been implemented at the Hancock Springs Restoration Project sites. Historically, there was a surface water diversion that came out of the spring. In 2002, the Natural Resources Conservation Service (NRCS) assisted the landowner in converting the surface water diversion to a well. Around the Fall of 2003, the Yakama Nation replaced the culvert at Wolf Creek Road to facilitate fish passage. In addition, the Methow Conservancy recently established an easement on 410 acres between Wolf Creek Road and the Methow River, in the “lower section” of Hancock Springs (Figures 4 and 5). The Methow Salmon Recovery Foundation and the Bureau of Reclamation are proposing the Fender Mill Floodplain project, which is located along the Methow River between the Weeman Bridge and Hancock Creek.

**Worksite Location Data**

What are the geographic coordinates of the work site(s) (in degrees, minutes and seconds)? [If you do not have them, you may leave this question blank.]

What is the township/range/section of the work site(s)?

T35N R20E S15

In what county(s) is the work site(s) located? In what city, if applicable?

The Hancock Springs Restoration project is located in Okanogan County, approximately 8 miles west of the town of Winthrop.

In what Water Resource Inventory Area(s) (WRIA) is the work site located? (Provide WRIA name and WRIA number.)

WRIA 48, Methow Subbasin

Is the work site on a stream and/or other waterbody? If yes, name the stream and/or waterbody. If the stream is a tributary of a larger stream, also name the larger stream. If you know the river mile, list it here.

Hancock Springs is the source for Hancock Creek, which flows in near RM 60 of the Methow River. Hancock Springs is approximately 1 mile downstream from the Weeman Bridge.

Is your work site(s) located within estuarine or saltwater habitat? If so, name it. How close is it to fresh water systems? Name any other estuary or habitat adjacent to this site.

N/A

Is the work site(s) located within a park, wildlife refuge, natural area preserve, or other recreation or habitat site? If yes, name the area.

N/A

### **9b. Application Questionnaire**

**Combination restoration and acquisition projects must answer the following question.**

Will the property proposed for acquisition involve future restoration? If yes, explain how and when restoration will occur.

### **9c. Application Questionnaire**

**Non-profit organizations must answer the following questions.**

Is your organization registered as a non-profit with the Washington Secretary of State? If so, what is your Unified Business Identifier (UBI) number?

What date was your organization created?

How long has your organization been involved in salmon and habitat conservation?

## **10. Work Site Information** **(ENTER ON PRISM TAB 9)**

Driving Directions (provide directions that will enable staff to locate the project):

From Wenatchee, take Interstate 97 north for approximately 60 miles. Turn west onto Highway 153 and follow this approximately 50 miles to Winthrop. Be aware while driving through this area, there are many motor vehicle accidents each year involving deer. Continue west on Highway 153/20 approximately 8 miles west of Winthrop. Go over the Weeman Bridge and continue for approximately 1.0 mile and turn left (~south) onto Cum Road. Follow it for approximately 1.5 miles to where a large barn is located and turn left into the dirt road. This is the upper section of the Hancock Springs Restoration Project and the source of Hancock springs.

Current Landowner(s) of the site (name and address). Remember to complete the Landowner Willingness Form.

The landowner, Ryan Allison of Hancock Springs LLC, is supportive of the Hancock Springs Restoration Project and has signed an agreement providing the Yakama Nation with access to the property. His mailing address is 4335 Island Crest Way, Mercer Island, Washington 98040.

## 11. Permits

**Check the appropriate boxes to indicate required and/or anticipated permits.  
General permit information can be obtained at the Dept. of Ecology Permit Assistance Center  
1-800-917-0043 or on their Internet site  
<http://www.ecy.wa.gov/programs/sea/pac/index.html>.  
(ENTER ON PRISM TAB 10)**

Permits	Comments Regarding Permit Status
<input type="checkbox"/> Aquatic Lands Use Authorization <i>(Dept of Natural Resources)</i>	N/A
<input type="checkbox"/> Building Permit <i>(City/County)</i>	N/A
<input type="checkbox"/> Clear & Grade Permit <i>(City/County)</i>	N/A
<input type="checkbox"/> Cultural Assessment [Section 106] <i>(CTED-OAHP)</i>	N/A
<input type="checkbox"/> Dredge/Fill Permit [Section 10/404 or 404] <i>(US Army Corps of Engineers)</i>	
X <input checked="" type="checkbox"/> Endangered Species Act Compliance [ESA] <i>(US Fish &amp; Wildlife/NMFS)</i>	The Section 7 permit is currently being modified to include electrofishing for work in 2007 and 2008.
<input type="checkbox"/> Forest Practices Application [Forest & Fish] <i>(Dept of Natural Resources)</i>	N/A
<input type="checkbox"/> Health Permit <i>(Dept of Health/County)</i>	N/A
X <input checked="" type="checkbox"/> Hydraulics Project Approval [HPA] <i>(Dept of Fish &amp; Wildlife)</i>	The Yakama Nation has obtained a Hydraulics Permit Application (HPA) for the instream habitat restoration work.
<input type="checkbox"/> NEPA <i>(Federal Agencies)</i>	N/A
<input type="checkbox"/> SEPA <i>(Local or State Agencies)</i>	N/A
<input type="checkbox"/> Shoreline Permit	Exempt

<i>(City/County)</i>	
<input type="checkbox"/> Water Quality Certification [Section 401] <i>(County/Dept of Ecology)</i>	N/A
<input type="checkbox"/> Water Rights/Well Drilling Permit <i>(Dept of Ecology)</i>	N/A
X <input checked="" type="checkbox"/> Other Required Permits (identify)	The work does not require a US Army Corps of Engineers permit or Okanogan County permits, and so it was exempted from these processes.
<input type="checkbox"/> None – No permits Required	

## 12. Salmonid Species Information

**Identify one or more targeted Salmonid species (directly on-site, indirectly downstream or within the rearing/migration corridor) whose habitat conditions you are attempting to improve or protect. Select one Primary Species.  
(ENTER ON PRISM TAB 11)**

Salmonid Species	Species Targeted (select as many as apply)	Primary Species (select only one)
Bull Trout	X <input type="checkbox"/>	<input type="checkbox"/>
Chinook	X <input type="checkbox"/>	<input type="checkbox"/>
Chum	<input type="checkbox"/>	<input type="checkbox"/>
Coho	X <input type="checkbox"/>	<input type="checkbox"/>
Cutthroat	<input type="checkbox"/>	<input type="checkbox"/>
Pink	<input type="checkbox"/>	<input type="checkbox"/>
Sockeye	<input type="checkbox"/>	<input type="checkbox"/>
Steelhead	X <input type="checkbox"/>	X <input type="checkbox"/>

### 13a. Habitat Factors Addressed

Identify one or more Habitat Factors being addressed by this Project and select one Primary Factor.

For definitions of Habitat Factors, see Manual 18b, Appendix B.

(ENTER ON PRISM TAB 11)

Habitat Factors	Project Addresses (select as many as apply)	Primary Factor (select only one)
1. Biological Processes	X <input type="checkbox"/>	<input type="checkbox"/>
2. Channel Conditions	X <input type="checkbox"/>	X <input type="checkbox"/>
3. Estuarine and Near-shore Habitat	<input type="checkbox"/>	<input type="checkbox"/>
4. Floodplain Conditions	<input type="checkbox"/>	<input type="checkbox"/>
5. Lake Habitat	<input type="checkbox"/>	<input type="checkbox"/>
6. Loss of Access to Spawning and Rearing Habitat	<input type="checkbox"/>	<input type="checkbox"/>
7. Riparian Conditions	X <input type="checkbox"/>	<input type="checkbox"/>
8. Streambed Sediment Conditions	X <input type="checkbox"/>	<input type="checkbox"/>
9. Water Quality	X <input type="checkbox"/>	<input type="checkbox"/>
10. Water Quantity	<input type="checkbox"/>	<input type="checkbox"/>

### 13b. Species/Habitat Factors Information Sources

For **Species Information** provide the source and indicate if the species listed are directly on-site at some point in their life stage (i.e. SaSI, WDFW Stream Catalog, Stream Survey/Field Observation, Limiting Factors Distribution Maps).

For **Habitat Factors Information** list the study/report and date identifying the habitat factors for your project (i.e. SaSI, limiting factors analysis, watershed analysis, other assessments or studies).

(ENTER ON PRISM TAB 11)

Study Name	Author	Date
"Fishdist: 1:24,000 (24K) and 1:100,000 (100K) Statewide Salmonid Fish Distribution". GIS data layer. (M. Hudson, data manager). Available from Washington Department of Fish and Wildlife, 600 Capitol Way North, Olympia, Washington 98501-1091.  steelhead extend into middle site; steelhead, Chinook and bull trout use the mainstem Methow River	WDFW	2005

Field observation (snorkel): Chinook fry using lower site	Pers. comm. John Jorgensen	2006
Salmon, Steelhead and Bull Trout Habitat Limiting Factors. Water Resource Inventory Area (WRIA) 48. Final Report. Washington State Conservation Commission, Headquarters.	Andonaegui, Carmen	2000
Methow Subbasin Plan. November 2004. Portland, Oregon. Available: <a href="http://www.nwcouncil.org/fw/subbasinplanning/methow/plan/">http://www.nwcouncil.org/fw/subbasinplanning/methow/plan/</a>	Northwest Power Planning Council (NPPC)	2004
Evaluation of depletion-removal electrofishing of brook trout in small Rocky Mountain streams. NAJFM 16:332-339.	Thompson, P.D, and F.J. Rahel.	1996.
Discussion Draft (22 May 2003) A Biological Strategy to Protect and Restore Salmonid Habitat in the Upper Columbia Region. A Report to the Upper Columbia Salmon Recovery Board from the Upper Columbia Regional Technical Team	UCRTT.	2003
UCSRB Regional Recovery Plan Draft.	Upper Columbia Salmon Recovery Board.	2006a
UCSRB Regional Recovery Plan Draft Appendix M. Methow Implementation Schedule June 2006	Upper Columbia Salmon Recovery Board.	2006b

## **14. Evaluation Proposal In-Stream Habitat**

**Applicants must respond to the following items. The local citizen and technical advisory groups will use the evaluation proposal to evaluate your project. Applicants should contact their lead entity for additional information that may be required.**

***Up to eight pages may be submitted for each project evaluation proposal.***

**(SUBMIT INFORMATION VIA PRISM ATTACHMENT PROCESS OR ON PAPER)**

### **I. BACKGROUND**

Describe the fish resources, the current habitat conditions, and other current and historic factors important to understanding this project. Be specific—avoid general statements. When possible, document your sources of information by citing specific studies and reports.

Hancock Creek has unique hydrologic conditions that are very favorable to salmonids. The water flow and temperature profiles are very stable due to the spring water source. Discharge is between 10 to 20 cfs throughout the year and water temperatures stay in the mid-40s. In addition, the stream is low gradient, with an average slope of approximately 0.5%. Cool summer temperatures, warm winter temperatures, high fall flows, and accessible rearing and spawning environments are features that add to its potential as critical salmonid habitat. Yakama Nation staff have observed Chinook fry using the site as high flow refugia. WDFW fish distribution GIS data (WDFW 2005) indicates known steelhead presence within the Hancock Springs Restoration Project sites (Figure 1). The Draft Upper Columbia Salmon Recovery Plan (UCSRB 2006a) identifies the Wolf/Hancock Creek Assessment Unit as a Category 2 based on ratings from the Biological Strategy (UCRTT 2003).

The Hancock Creek Restoration Project began in 2005, when a complete thalweg survey was conducted by the Bureau of Reclamation to establish baseline conditions. This information was used to develop engineering designs for the sites (Figures 6-10). The Yakama Nation is currently constructing instream structures in the upper section. These structures include baffles (rock and log), “V” structures (rock and log), log clusters and root wads. Fence construction and repair was completed in June 2006. The fence will exclude cattle from the streambanks to reduce erosion and sediment input as well as keep cattle and deer from grazing on the newly planted vegetation. A variety of native plants were planted in the upper section of Hancock Springs in 2006 to improve riparian function. The middle and lower sections will be planted in 2007, including at least forty to fifty plants of each of the following species: water birch, red ozier dogwood, mountain alder, willow, cottonwood and Ponderosa Pine. Results from plantings in the upper section will guide plantings in the middle and lower sections.

In addition, several other projects have been implemented at the Hancock Springs Restoration Project sites. Historically, there was a surface water diversion that came out of the spring. In 2002, the Natural Resources Conservation Service (NRCS) assisted the landowner in converting the surface water diversion to a well. Around the Fall of 2003, the Yakama Nation replaced the culvert at Wolf Creek Road to facilitate fish passage. In addition, the Methow Conservancy recently established an easement on 410 acres between Wolf Creek Road and the Methow River, in the “lower section” of Hancock Springs (Figures 4 and 5). The Methow Salmon Recovery

Foundation and the Bureau of Reclamation are proposing the Fender Mill Floodplain project, which is located along the Methow River between the Weeman Bridge and Hancock Creek.

## **II. PROBLEM STATEMENT**

State the nature, source, and extent of the problem that this project will address and help solve. Address the primary causes of the problem, not just the symptoms. When possible, document your sources of information by citing specific studies and reports.

The history of uncontrolled livestock use significantly degraded the salmonid habitat at Hancock Springs. This resulted in a wide, shallow channel with unstable banks, minimal riparian vegetation, high silt concentrations and a loss of pool habitat (Figure 2). In the Methow Limiting Factors Analysis report, Andonaegui (2000) described Hancock Creek as having no riparian cover in the upper reach above the culvert at Wolf Creek County road, the substrate was highly embedded, there was a low pool:riffle ratio and brook trout were present. She recommended improving grazing management on Hancock Creek and stated that when full fish passage was restored, Hancock Creek would offer excellent salmonid rearing habitat year-round. In addition, the Salmon Recovery Plan recommends increasing “habitat diversity and quantity by restoring riparian habitat, reconnecting side channels and floodplains (where feasible), and adding large woody debris and instream structures between river mile 1 and the spring in Hancock Creek”. Two subbasin-wide programmatic actions identified in the Methow Implementation Schedule (UCSRB 2006b) are addressed by the Hancock Springs Restoration project including sediment reduction through bank reformation/stabilization, riparian restoration and brook trout population reduction. A fence was constructed in June 2006 along Hancock Creek to exclude cattle and deer from the riparian areas. Native riparian vegetation will be planted to establish a naturally functioning riparian zone. These riparian restoration actions are expected to reduce sediment inputs. In addition, Yakama Nation staff will electrofish the upper, middle and lower sections of Hancock Creek and euthanize all captured brook trout, which should decrease the brook trout population. The Hancock Springs Restoration Project, which began in 2005, is addressing all of these limiting factors. This application is requesting 8 months of funding for the Hancock Springs Restoration project, with Pacific Coastal Salmon Recovery Funds providing match in 2007 through 2008.

## **III. PROJECT OBJECTIVES**

List the project’s objectives. Objectives are statements of specific outcomes that typically can be measured or quantified over time. Objectives are more specific than goals (visions of the desired future condition) and less specific than tasks (the specific steps that would be taken to accomplish each of the objectives). For example, the objectives of an in-stream habitat project might be to increase channel complexity, to provide cover, to capture sediment, to reduce erosion, to create pools, and to reconnect side-channels or floodplain. Explain how achieving the objectives will address and help solve the problem identified in II above.

The Hancock Springs Restoration Project will address the limiting factors by changing the land management (construct fence), reestablishing bank formation and reducing erosion (installation of hay bales and seed- impregnated sediment mats), restoring a functioning riparian zone (plant native vegetation), improving juvenile passage by modifying barriers (reed canary grass mixed in with beaver dams as well as cattle crossings), decreasing competition (brook trout) and increasing habitat complexity (instream structures).

The Hancock Springs Restoration Project proposes a systematic approach to recover natural stream processes and biological conditions to benefit anadromous fish. Fence has been constructed in the upper and middle sections (Figures 4 and 5) to manage livestock and deer. Severely degraded banks will be built by the utilization of logs, hay bales and seed-impregnated sediment mats. A functioning riparian zone will be established by planting native vegetation. Instream structures were hand-placed in the upper section in 2006 (Figure 3). Instream structures will be constructed in the middle and lower sections to increase the pool:riffle ratio, decrease the width:depth ratio, and focus the flow to flush out sediment and expose spawning gravels. Improved juvenile passage to the upper sections will be accomplished through modifications to beaver dams which are choked with reed canary grass. Cattle crossings (of which most have been improved) will also be modified to allow for juvenile passage. Brook trout populations will be decreased using a two-pass electrofishing effort in 2007 and a one-pass electrofishing effort in 2008. These efforts will improve the habitat characteristics that favor salmonid production.

#### **IV. PROJECT APPROACH**

- ω Briefly describe the geographic setting of the project (marine nearshore, estuary, main stem, tributary, etc) and the life cycle stage(s) affected.

Hancock Springs is the source for Hancock Creek, which is a tributary to the Methow River approximately 1 mile downstream of the Weeman Bridge. Spawning, rearing, over-wintering habitat and migration all occur in the mainstem Methow River. Juvenile Chinook and steelhead have been observed in the beaver ponds in the lower site. Adult steelhead and spring Chinook have been observed spawning in the Methow River, near the mouth of Hancock Creek.

- ω List the individuals and methods used to identify the project and its location.

Several factors influenced the selection of the Hancock Springs Restoration Project. Juvenile rearing habitat is limited in the upper Methow subbasin due to dewatering. The off-channel habitat in the Hancock Springs lower site, the spring's steady flow conditions, and the high spawning density in this area of the Methow River biologically justify restoring the spring site. In addition, several other projects have been implemented at the Hancock Springs Restoration Project sites. Planning documents (Andonaegui 2000, UCSRB 2006a, UCSRB 2006b, UCRTT 2003) helped identify the site. Skip Stoneseifer with USFWS helped identify the project.

- ω Describe the consequences of not conducting this project at this time. For acquisition projects, also describe the current level and imminence of risk to habitat.

Work has already started on this project and funds are needed to complete the work. If funds are not obtained at this time, matching funds from Pacific Coastal Salmon Recovery Fund will not be available during the next funding cycle.

- ω If project includes an acquisition element, then briefly describe the extent to which habitat to be acquired is currently fully functioning and/or needs restoration; the timeframe in which responses or improvements in habitat functioning are expected; and the continuity of the proposed acquisition with other protected or functioning habitat in the reach.

N/A

- ω Describe the project design and how it will be implemented.

A complete thalweg survey was conducted by Reclamation in 2005 to establish baseline conditions. This information was used to develop engineering designs for the sites (Figures 6-10). Dave Smith of S.P. Cramer assisted in design and placement of instream structures. All structures in the upper and middle sections (Figures 4-5) will be placed by hand due to the sensitive nature of the riparian wetlands surrounding these sites. A crane will be used from the road to place large woody debris in the lower section (Figures 4-5; Figure 10). Funding is being requested to conduct work in the middle and lower sections (0.67 miles of stream).

The work instructions cover all field activities associated with restoration of Hancock Springs for 2007 through 2008, as well as work that will be completed in 2006. These activities include 1) planting native vegetation, 2) installing instream and bank reclamation structures, 3) reducing the brook trout population using electrofishing.

### **Reestablish stream banks**

Banks within the upper 2 sections are significantly degraded due to uncontrolled livestock use. A channel has already been clearly defined through the installation of log and rock weirs. To promote bank stabilization and riparian growth, a combination of logs, hay bales and seed impregnated sediment mats will be utilized to redefine the banks within the upper and middle sections.

### **Plant native vegetation**

Fence construction and repair was completed in June 2006. This involved fence repair (850 feet), construction of fence to exclude cattle (960 feet) and construction of deer fence (3,280 feet) for a total cost of \$24,666. The fence will exclude cattle from the streambanks to reduce erosion and sediment input as well as keep cattle and deer from grazing on the newly planted vegetation.

A variety of native plants were planted in the upper section of Hancock Springs in 2006 to improve riparian function. The middle and lower sections will be planted in 2007, including at least forty to fifty plants of each of the following species: water birch, red ozier dogwood, mountain alder, willow, cottonwood and Ponderosa Pine. Results from plantings in the upper section will guide plantings in the middle and lower sections.

- Trees and shrubs will be planted throughout the riparian zone.
- Ponderosa Pine seedlings will be planted outside the riparian area and will be spaced to mimic the natural spacing of Ponderosa Pines in the immediate area. Natural spacing will be inferred from existing Ponderosa Pine trees and stumps. The overall number of Ponderosa Pines will be adjusted downward if natural spacing indicates that less Ponderosa Pine was present at the site.

### **Installation of instream structures**

The Yakama Nation is currently constructing instream structures in the upper section. These structures include baffles (rock and log), "V" structures (rock and log), log clusters and root wads. The following list includes the approximate amount of large woody debris that will be added to each section:

- Logs for upper section: 60 logs, 6 to 12 inch diameter, 10 to 15 feet long (1300 feet long),
- Root wads for upper section: 20 root wads (4-10 feet long).
- Logs for middle section (V structures and log clusters): 100 logs, 4 to 12 inch diameter, 6 to 15 feet long (2000 feet long).
- Root wads for middle section: 60 root wads (4 to 10 feet long).

- Logs for lower section: 10 (4 to 10 feet long).
- Root wads for lower section: 10 (4 to 10 feet long).

***Add large woody debris (root wads and logs) to the middle section***

NOTE: Each cluster of large woody debris will consist of logs or root wads, or a combination of each.

- Stage large woody debris to facilitate placement of wood into stream.
- Place large woody debris into the stream channel. Large woody debris should be resting on the bottom, and against the bank (Figure 9). Alternate banks to the extent practical when placing large woody debris.

***Add large woody debris to the lower section***

NOTE: This portion of the work will require a boom truck.

- Stage large woody debris as indicated in Figure 10.

**Improving juvenile passage**

Until recently, juvenile passage was limited due to barriers (cattle crossings, beaver dams reinforced with invasive reed canary grass, and inadequately sized culvert). Most cattle crossings, (culvert 2003) and beaver dams have been modified to allow passage. Remaining barriers (one beaver dam and one cattle crossing) will be modified in 2007 to allow for full passage into the upper spring.

**Reduce the brook trout population using electrofishing.**

Two-pass depletion-removal electrofishing will be used in 2007, followed by a single electrofishing pass in 2008, to determine fish densities (number/100m<sup>2</sup>) in 2007 and to euthanize brook trout in 2007 and 2008. Thompson and Rahel (1996) felt this method would be an effective means of population control for unwanted trout species in small streams. The Yakama Nation staff recognize that electrofishing can potentially cause fish stress, injury or death. Therefore, we intend to use low-frequency currents and use a two-pass, rather than a three-pass, effort when electrofishing to minimize potential impacts to listed species. Unlike poisons such as rotenone, the advantages of electrofishing include the ability to target specific species and little risk outside the area of use.

- Fish Hancock Springs (mouth to source) once in 2007 and once in 2008 using electrofishing gear. A minimum of two people are required, three or more is preferred.
  - Remove fish individually
  - Record species. If species is known, photograph
  - Anesthetize fish in solution of MS-222
  - Revive fish and release downstream out of worksite
- Captured brook trout are to be euthanized. All other fish are to be identified to species level, then returned to Hancock Springs.

The following is a suggested list of supplies and equipment needed to perform this work instruction. The following items have already been purchased:

- Waterproof field notebooks and mechanical pencils
- Auto level and stadia
- Sledge hammers, shovels, picks, log tongs

- Leather gloves
- Safety glasses
- Waders, boots
- Heavy pliers
- Come alongs
- Wire chokers
- Tree planting equipment
- Flow meter
- Chainsaws
- Generators
- ½ inch drills for rebar
- Winch for pickup

- Explain how the project's cost estimates were determined.

Salaries and fringe benefits are for two full-time biologists, one technician and a part-time bookkeeper for 8 months. Fringe benefits are calculated at 22% of salaries. Travel expenses include mileage and rental for 2 pickup trucks. Office supplies include paper, ink, faxes and pens needed to conduct business and produce a final report. Supplies and equipment include items such as shovels, hand tools and monitoring supplies. The Yakama Nation has purchased most of the supplies and equipment for Hancock Springs through PCSRF funding. The funding for supplies and equipment that is being requested through this proposal is to pay for any unforeseen needs. Materials include rootwads and native plants for the restoration work. Plant costs vary according to root stock vs. potted plants. In areas outside the deer fence, older potted plants will be used to mitigate for deer browse. Survival rates haven't been determined from the 2006 plantings, therefore the number of each plant type (potted plants vs. cuttings) may change when we apply adaptive management. The current estimate for plant costs include: large potted plants (gallon) are \$4.75 (100 plants) = \$475, potted plants at \$1.95 (200 Ponderosa Pine, 100 cottonwood, 100 water birch, 120 red osier, 150 alder) = \$1172.50 and 800 cuttings at \$.89 = \$712. USFWS paid for the fence materials. Contracted services will be required to move rootwads and logs. Although actual time with each piece of equipment may vary, we've estimated the contract with Boulder Creek Contracting to be the following: excavator at 15 hours (\$95/hour) = \$1,425, dump truck at 15 hours (\$85/hour) = \$1,275, backhoe at 15 hours (\$70/hour) = \$1,050, and boom truck for 15 hours (\$70/hour) = \$1,050, for a total of \$4,800. The Bureau of Reclamation provided the site survey. Funding is not being requested for capital equipment. Administrative Costs (17.52%) are for establishing the contract and other administrative costs. The remaining project costs are being funded through PCSRF.

Significant cost savings are occurring on this project because the Yakama Nation staff use hand tools (~\$2,500) instead of a backhoe, which costs \$70/hour. Logs were free from USFS land using thinned wood from a tree cutting permit. If Douglas fir and pine were not available, the cost to provide wood for the Hancock Springs project would be at least \$10,000 for the 8-10" logs. Boulder Creek is contracted to remove logs from USFS lands and stumps from a private landowner and transport the wood to the Hancock Springs site.

- Describe other approaches and opportunities that were considered to achieve the project's objectives.

We considered using heavy equipment to place the rootwads and logs in the upper and middle sections. However, the riparian wetland adjacent to Hancock Creek is very wet. Heavy equipment

would have disturbed the site too much. Therefore, we chose to place the rootwads, logs and rocks by hand.

- List project partners. When appropriate, include a letter from each participating partner briefly outlining its role and contribution to the project. (See Section 15 for a sample format.)

Project partners include the Yakama Nation, the US Bureau of Reclamation (Reclamation), Pacific Coastal Salmon Recovery Fund (PCSRF) and the US Fish and Wildlife Service (USFWS). The Yakama Nation provides the Project Manager and implementation staff. Reclamation provided a thalweg survey for an estimated cost-share of \$16,000. PCSRF provided partial funding (\$118,000) for project work in 2006 through 2007. USFWS has provided \$25,000 for fencing materials.

- List all landowner names. Include a signed form from each landowner acknowledging their property is proposed for SRFB funding consideration. (See Section 16 for a sample format.)

The landowner, Ryan Allison of Hancock Springs LLC., is supportive of the Hancock Springs Restoration Project and has signed an agreement providing the Yakama Nation with access to the property. The signed landowner agreement is attached.

- Describe the long-term stewardship and maintenance obligations of the project. Projects should be consistent with habitat forming processes in the watershed, requiring reduced up-keep and long-term maintenance over time.

Fences will be maintained by the Yakama Nation for 10 years (through 2016). Vegetation monitoring will occur at least once per year for 10 years.

- When known, identify the staff, consultants, and subcontractors that will be designing and implementing the project, including their names, qualifications, roles and responsibilities. If not yet known, describe the selection process.

### **Staff**

John Jorgensen, Fish Biologist II

John Jorgensen has a Bachelor of Science degree in Fisheries from Montana State University. He has been working in fisheries since 1993. He has been the project manager for the Hancock Springs Restoration Project since 2003, when he helped replace the culvert under Wolf Creek Road to facilitate fish passage for all fish species at all life stages.

Rick Alford, Fish Biologist I

Rick has a Bachelor of Science degree in Fisheries and Wildlife from the University of Illinois. He has been working in fisheries since 1995. He has been working on the Hancock Springs Restoration Project since 2005.

Kraig Mott, Technician III

Kraig has a Bachelor of Science degree in Fisheries from Eastern Washington University. He has been working in fisheries since 2003. He has been working on the Hancock Springs Restoration Project since 2005.

**Contractors**

Boulder Creek Contracting (heavy equipment to move logs and stumps). Boulder Creek Contracting does a substantial amount of the instream construction work in the Methow Valley. SP Cramer helped design the project in 2005.

## V. TASKS AND TIME SCHEDULE

List and describe the major tasks and time schedule you will use to complete the project. Describe your experience managing this type of project.

Item/Milestone	Outcome	Target Date (Month/Year)
Begin Hancock Springs Restoration Project		2005
		2005
		2005
		2005
Obtain HPA and Section 7 permit	HPA and Section 7 permit	2005
Plant vegetation in upper section	Shade, cover and streambank stability	Spring 2006
Construct instream structures in upper section	Decreased width:depth ratio and increased channel complexity	Spring – Fall 2006
Install fence	Exclude deer and cattle from grazing on newly planted riparian vegetation	6/2006
Obtain permits for electroshocking	Section 7 and WDFW sampling permit	2006
Plant vegetation in middle and lower sections	Shade, cover and streambank stability	Spring 2007
Construct instream structures in the middle and lower sections	Decreased width:depth ratio and increased channel complexity	Spring – Fall 2007
Electroshock	Decrease brook trout abundance	2007
Electroshock	Decrease brook trout abundance	2008
Fence maintenance as needed	Ensure cattle and deer are excluded from the riparian areas	2007 - 2016

John Jorgensen manages all of the fisheries and project work for the Yakama Nation in the Methow subbasin, including the Hancock Springs Restoration Project since 2005, Douglas PUD spring Chinook monitoring and evaluation program from 2002-2003, and coho reintroduction program from 2003 through the present.

## VI. CONSTRAINTS AND UNCERTAINTIES

State any known constraints or uncertainties that may hinder successful completion of the project. Identify any possible problems, delays, or unanticipated expenses associated with project implementation. Explain how you will address these constraints.

Acquiring the permits took longer than expected. In addition, it has taken longer to complete the instream work by hand than what was originally anticipated.

The only known constraint that may hinder the successful completion of this project is the need for funding to finish the project and match the existing Pacific Coastal Salmon Recovery Funds. We are addressing this constraint by applying for SRFB and Tributary funding.

## 15. Project Partner Contribution Form



## 15. Landowner Willingness Form

### Landowner Information:

Name of Landowner: Hancock Springs, LLC

### Landowner Contact Information:

Mr.       Ms.      Title

First Name: RYAN      Last Name: Allison

Contact Mailing Address: 4335 Island Crest Way  
Mercer Island, WA  
98040

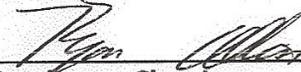
Contact E-Mail Address: ryan@awinestore.com

### Property Address or Location:

I certify that RYAN Allison is the legal owner of property described in this grant

(landowner or organization)

application to the Salmon Recovery Funding Board (SRFB). I am aware the project is being proposed on said property. My signature authorizes the applicant listed below to seek funding for project implementation, however, does not represent authorization of project implementation.

  
Landowner Signature

7/17/06  
Date

### Project Applicant Information

#### Project Name:

#### Project Applicant Contact Information:

Mr.       Ms.      Title

First Name: John      Last Name: Jorgenson

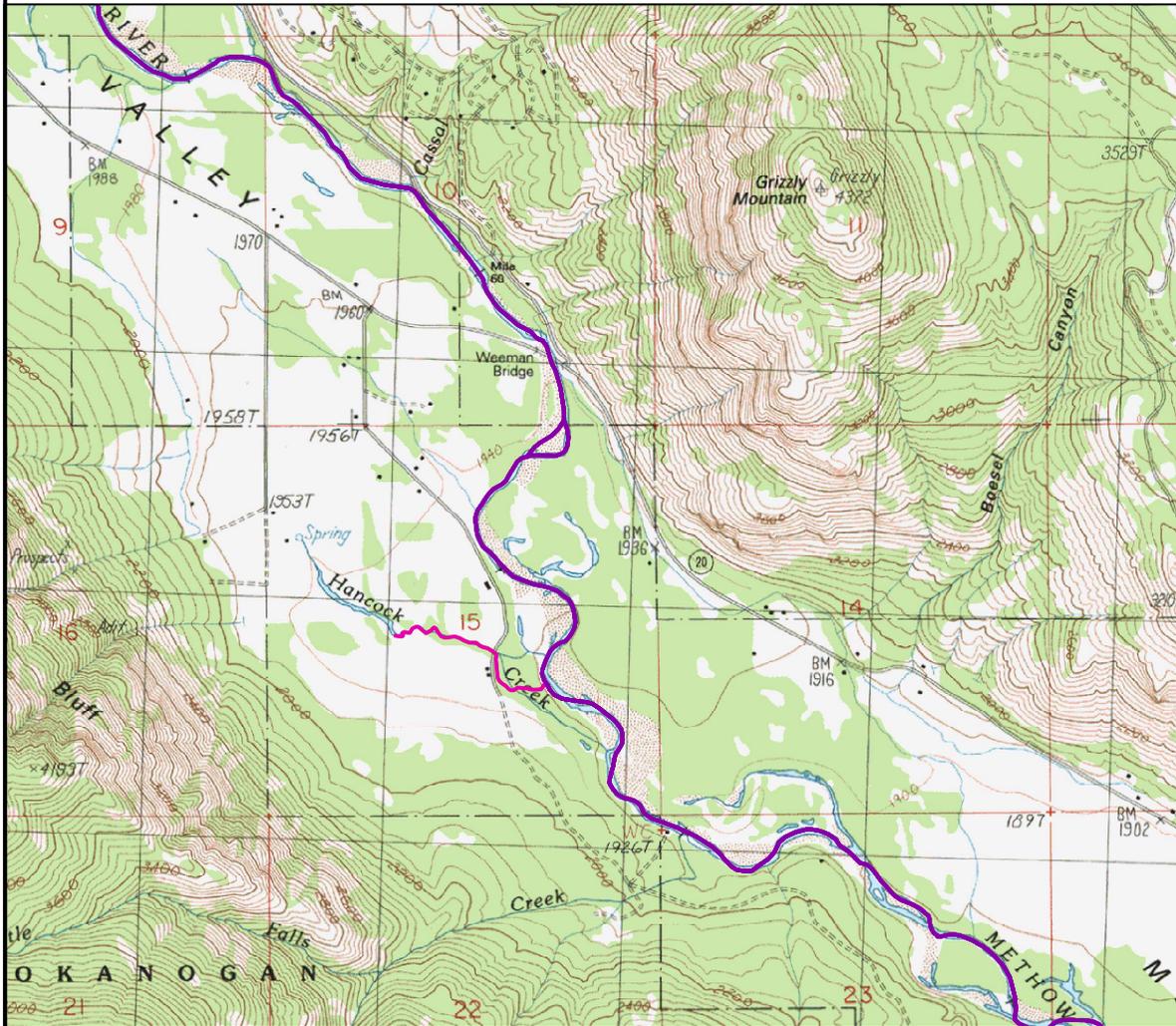
Contact Mailing Address: 10 Piney Woods Road Twisp WA 98856

Contact E-Mail Address: John@mid-columbia-coho.net

Lead Entity Organization: Yakama Nation

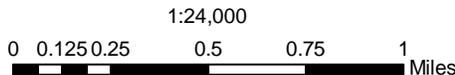
# Methow Subbasin

## Hancock Springs Restoration Project



### Legend

- Steelhead presence
- Steelhead, spring Chinook and bull trout presence



Map Date: July 11, 2006

Location: Hancock Springs Restoration Project is located approximately 8 miles west of Winthrop. Hancock Creek flows into the Methow River approximately 1 mile south of the Weeman Bridge.

Description: The Hancock Springs Restoration Project involves: 1) constructing fence to exclude livestock and deer; 2) constructing instream structures to improve habitat complexity, cover and function; 3) removing non-native Reed Canary Grass and brook trout; 4) monitoring water quality, water quantity, invertebrate production, fish use and vegetative growth.

Disclaimer: EcoA.I.M. makes no claim as to the accuracy or current condition of the data shown on this map.



Map showing Hancock Springs Restoration Project (black) in the Methow WRIA (light gray).

**Figure 1.** Hancock Springs Restoration Project Location Map.



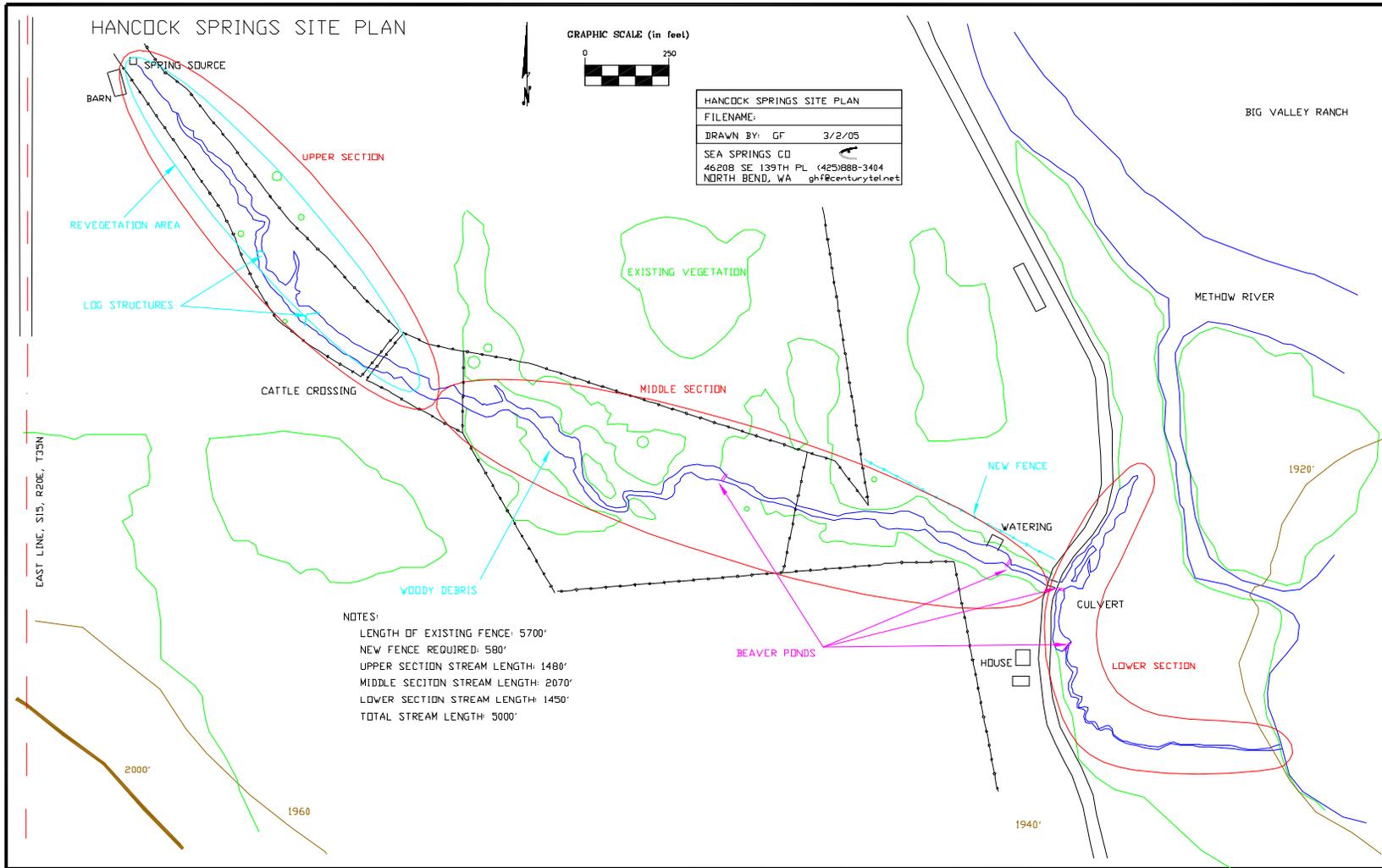
**Figure 2.** Photo of the high sedimentation and high width:depth ratio in the lower section of Hancock Creek.



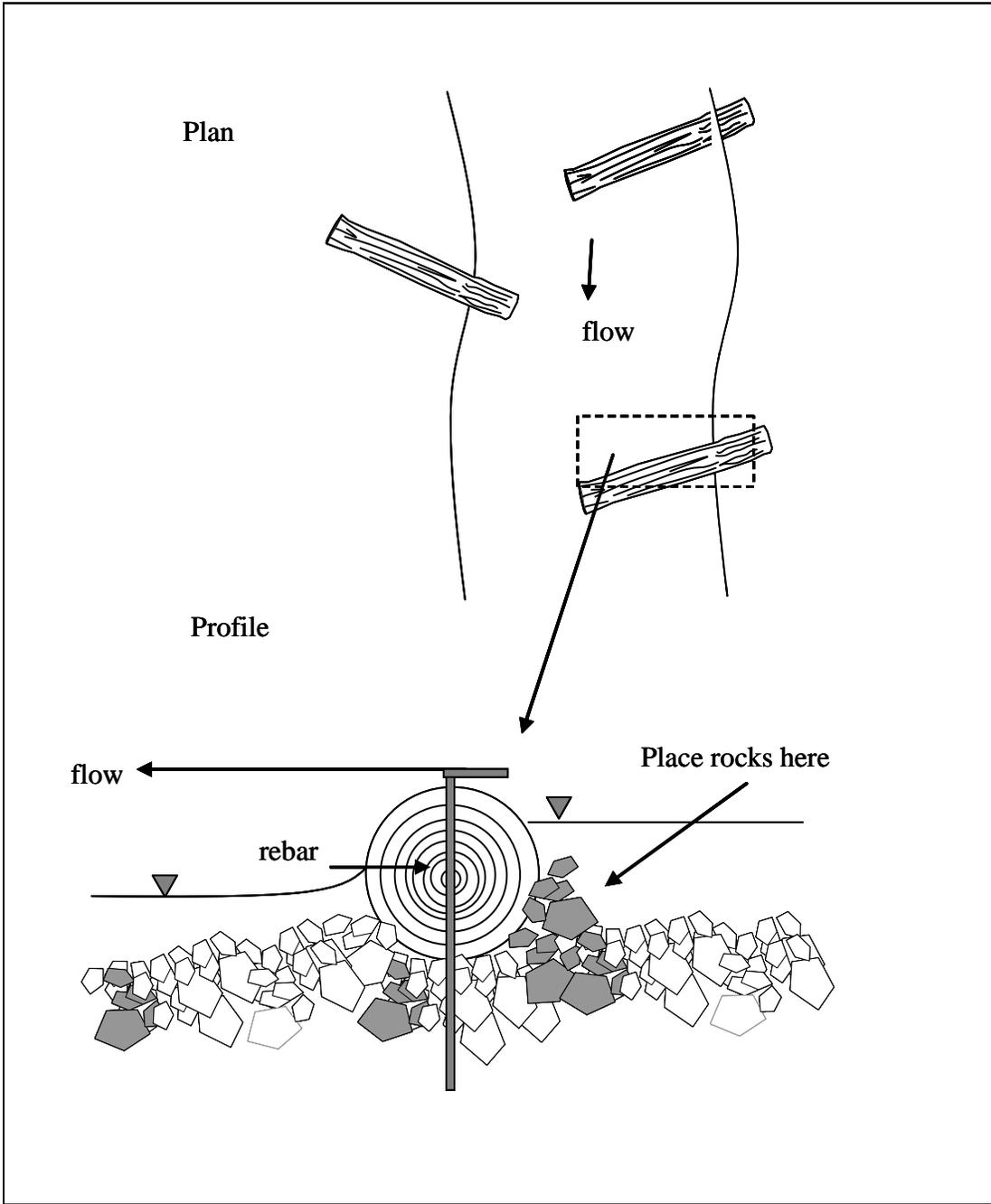
**Figure 3.** Riparian plantings and hand-placed structures in the upper section of Hancock Creek.



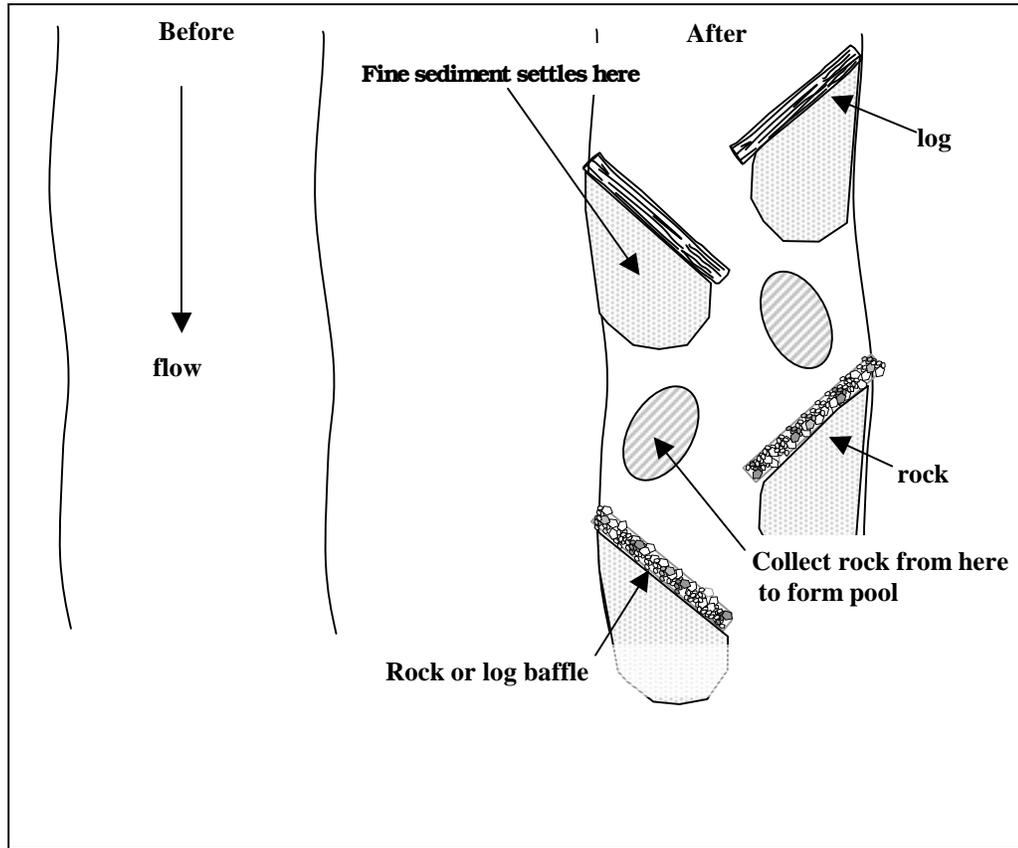
**Figure 4.** Site Plan with Aerial Photo.



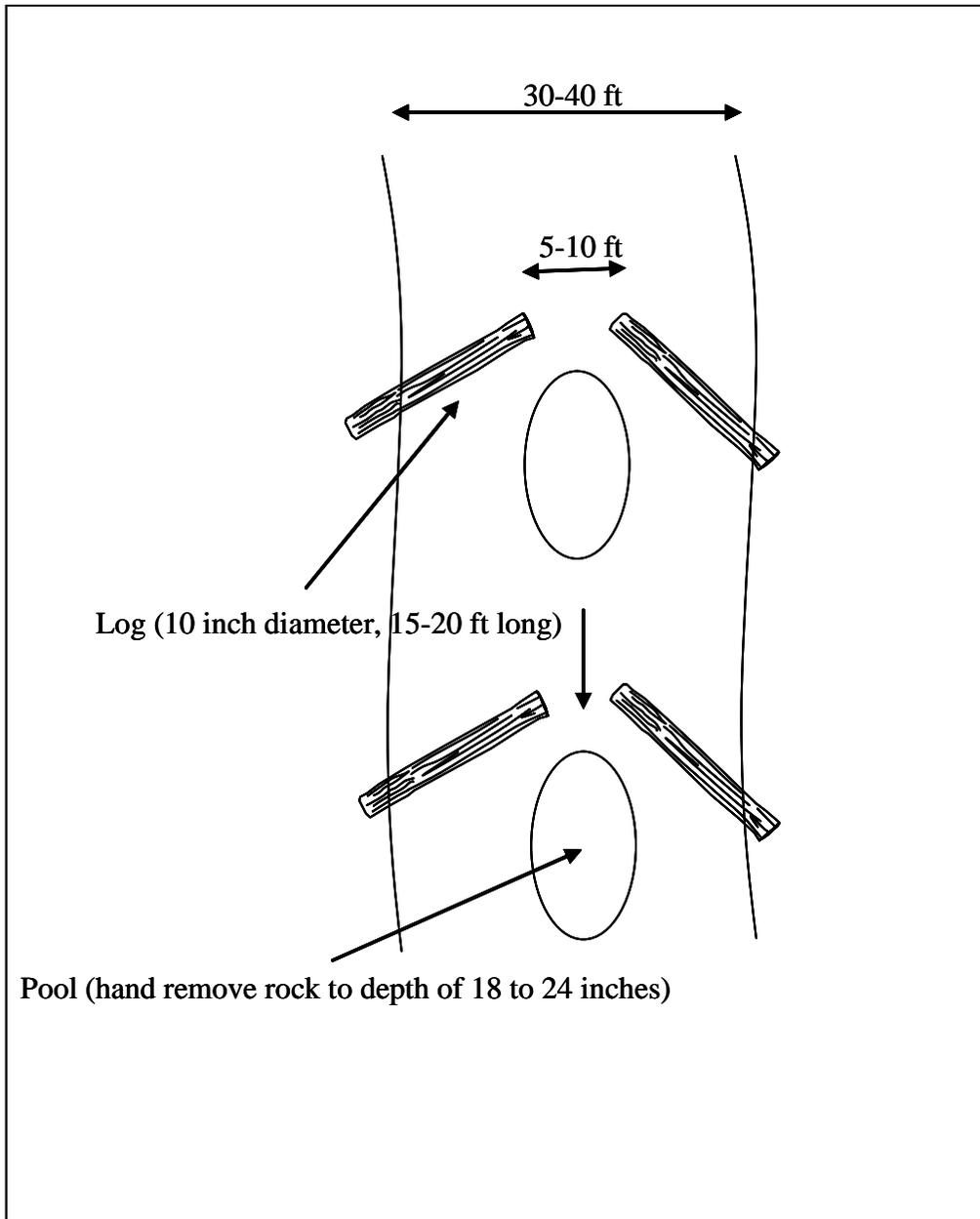
**Figure 5.** General locations of stream channel modifications.



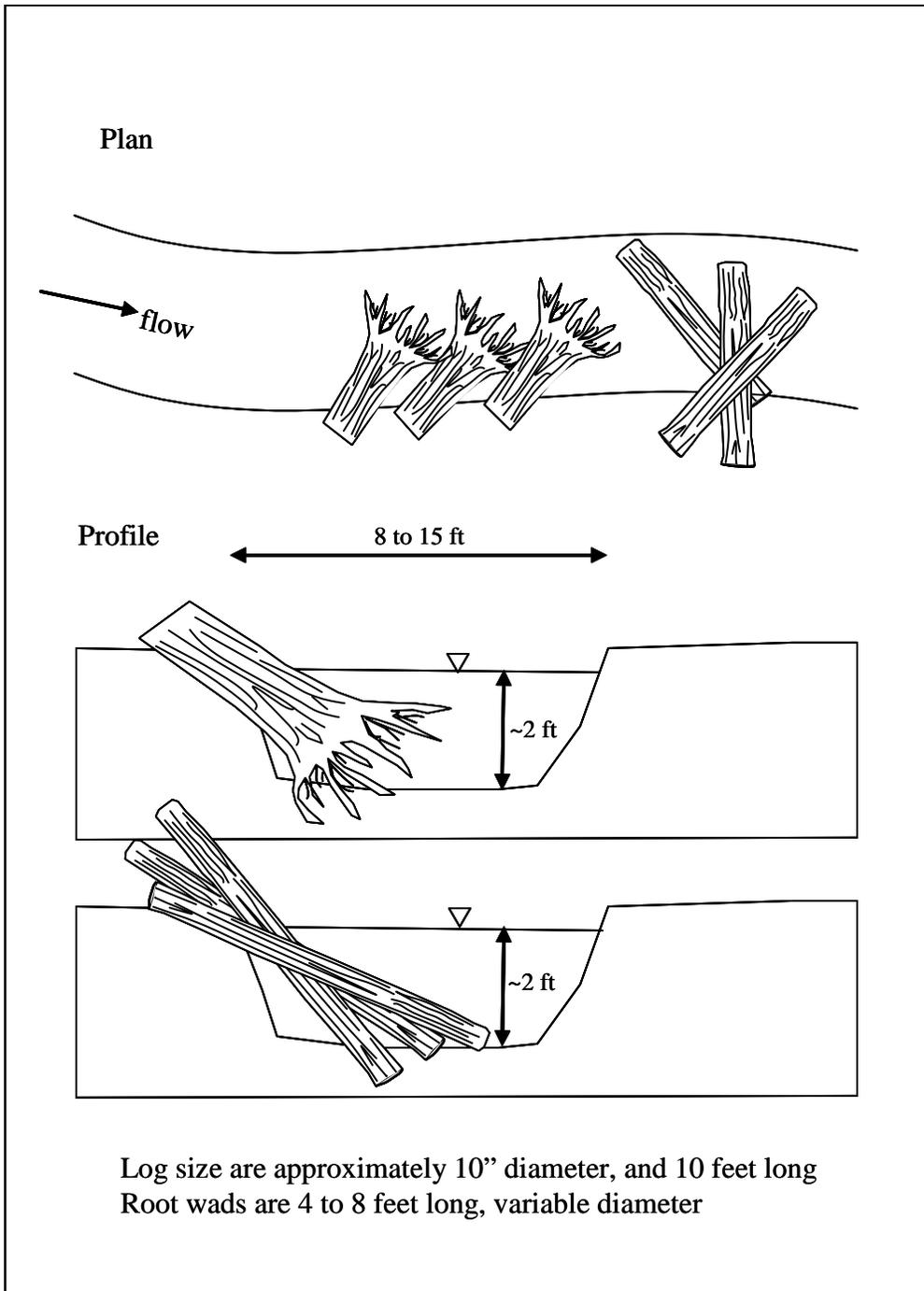
**Figure 6.** Details of baffle placement using logs. Rebar is optional.



**Figure 7.** Placement of log or rock baffles in upper section of Hancock Springs.



**Figure 8.** “V” structure placement in the upper section.



**Figure 9.** Placement of LWD in the middle section.

