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OCT 13 2006

Type the information for Sections I and II **USING ONLY** the pages provided (or reproduce the pages on your computer **using the spacing and layout shown, NOT TO EXCEED 3 PAGES**)

**Sections I and II must accompany your application  
THE FIRST 3 PAGES ARE NOT THE PLACE TO DESCRIBE YOUR PROJECT IN DETAIL**

**Name of project:** Wallowa Mountains Bull Trout Redd Monitoring for 2007-2008

**OWEB dollars requested:** \$24,374.00

**Total cost of project:** \$57,454.00

**Project location:**

**This project occurs at (check one):**  A single site

Multiple sites

Grande Ronde and Imnaha  
Watershed(s)

Wallowa  
County or counties

N/A  
Township, Range, Section(s)

Longitude, Latitude (if available)

**Applicant:**

Grande Ronde Model Watershed

**Official Contact (if different):** Coby Menton

Email: coby@grmw.org

Phone: 541 426-0389 Fax: 541 962-1585

Street: 1114 J Ave.

City: La Grande Zip: 97850

**Technical Contact (if different):** Gretchen Sausen, USFWS, La Grande Field Office

Email: gretchen\_sausen@fws.gov

Phone: 541 962-8695 Fax: 541 962-8581

**Landowner (see Instructions):** Wallowa-Whitman National Forest, and multiple private landowners (on the Lostine River).

**Fiscal Officer (if different):** Mary Estes

**Affiliation:** GRMW

Email: mary@grmw.org

Phone: 541 663-0570 Fax: 541 962-1585

**Section II**  
**PROJECT INFORMATION**

1. **Abstract.** In the space provided, and in 150 words or fewer, state 1) the problem, 2) the proposed solution, 3) other partners involved, and 4) how OWEB funds will be used.

Bull trout were listed as threatened under the Endangered Species Act in 1998 due to declining populations. The USFWS recommends monitoring populations in subbasins where little is known including the Grande Ronde and Imnaha subbasins (USFWS 2002).

Spawning survey data is important for determining relative abundance and distribution trends in bull trout populations. A minimum of 15 years is needed for determining bull trout population trends (Maxwell 1999). To date, seven years of bull trout spawning data have been collected in the project area.

Solution: Continue surveying 305 miles of bull trout spawning habitat per year within the Grande Ronde and Imnaha Subbasins.

Partners: ODF&W, USFWS, USFS, Nez Perce Tribe, among others.

Request \$24,374 of OWEB funding to support efforts in 2007 and 2008. Funding will support: contracting the Nez Perce Tribe and other local experienced bull trout surveyors; contracting a horse packer for backcountry access; and purchasing survey equipment.

2. **Was this application submitted previously?**  Yes  No  
If yes, what was the application number?
3. **Is this project a continuation of a previously OWEB-funded project(s)?**  Yes  No  
If yes, what was the application(s) number?

4. **Project Partners.** In the table below, show all anticipated funding sources (do not include OWEB) and indicate by checking in the appropriate box the nature of their contribution. Be sure to provide a dollar amount or value for each funding source. If participation is in-kind, briefly describe the nature of the contribution in the first Column.

Funding Source (if in-kind, briefly describe the nature of the contribution)	Cash (X)	In-Kind (X)	Secured (X)	Pending (X)	Amount/Value
Oregon Department of Fish and Wildlife (labor)		\$9,000	x		\$9,000
Wallowa-Whitman National Forest (labor)		\$9,000	x		\$9,000
U.S. Fish and Wildlife Service (labor)		\$13,000	x		\$13,000
Nez Perce Tribe (supplies)		\$1,080	x		\$1,080
Anderson-Perry (labor)		\$500		x	\$500
Volunteers (labor)		\$500		x	\$500
					\$
<b>Total Estimated Funds (add all amounts in the far-right Column):</b>					<b>\$33,080</b>

5. **Have any conditions been placed on other funds that may affect project completion?**

Yes       No

**If yes, explain:**

\* The next three questions are required for federal reporting purposes. OWEB receives a portion of its funds from the federal government and is required to report how its grantees will use those funds. Please respond as applicable.

\*6. **Does the monitoring project answer questions directly related to salmon recovery and/or sustainability of healthy salmon stocks?**

Yes       No

\*7. **Is the project a part of an existing monitoring plan/strategy for the watershed?**

Yes       No

If yes, provide name and date of the plan and reference sites(s) or elements of the plan related to the project:

1) Grande Ronde River and Imnaha River Subbasin Plans (Nowak et al. 2004; EcoVista 2004). The Grande Ronde has within the implementation plan a need to describe status and trends in adult abundance and productivity for all focal populations (which includes bull trout) in the Grande Ronde Subbasin. The Imnaha Subbasin Implementation Plan recommends the continued collection of bull trout abundance and distribution data.

2) Grande Ronde River and Imnaha-Snake Rivers Bull trout Draft Recovery Unit Plans (USFWS 2002). Priority number 1: Continue to survey for bull trout and manage local populations to maintain long-term viability.

\*8. **Report the stream miles and/or acres that will be monitored or assessed under this monitoring application.**

The total miles for the project will be approximately 610 stream miles, 305 stream miles per year (this is a two year project).

9. **Identify the type of monitoring proposed (check all that apply; see Instructions for descriptions).**

<input type="checkbox"/> Baseline	<input type="checkbox"/> Implementation	<input checked="" type="checkbox"/> Status and Trend
<input type="checkbox"/> Effectiveness	<input type="checkbox"/> Other:	

10. **Identify the parameters that will be measured (check all that apply; see Instructions for descriptions).**

<input checked="" type="checkbox"/> Fish presence/absence/abundance/distribution survey(s)	<input checked="" type="checkbox"/> Spawning surveys
<input type="checkbox"/> Instream habitat surveys	<input type="checkbox"/> Upland vegetation
<input type="checkbox"/> Macroinvertebrates	<input type="checkbox"/> Water quality
<input type="checkbox"/> Noxious weeds	<input type="checkbox"/> Water quantity
<input type="checkbox"/> Riparian vegetation	<input type="checkbox"/> Other:

**If you checked Water Quality above, exactly which parameters will you be monitoring (check all that apply):**

<input type="checkbox"/> Bacteria	<input type="checkbox"/> pH	<input type="checkbox"/> Temperature
<input type="checkbox"/> Dissolved Oxygen	<input type="checkbox"/> Pesticides	<input type="checkbox"/> Toxics
<input type="checkbox"/> Nitrates	<input type="checkbox"/> Phosphorus	<input type="checkbox"/> Turbidity
<input type="checkbox"/> Heavy Metals (name):		<input type="checkbox"/> Nutrients (name):
<input type="checkbox"/> Other (explain):		

**If you checked Riparian or Upland Vegetation above, exactly which parameters will you be monitoring (check all that apply):**

<input type="checkbox"/> Canopy cover	<input type="checkbox"/> Invasive species presence/absence	<input type="checkbox"/> Plant survival
<input type="checkbox"/> Percent cover		<input type="checkbox"/> Other (explain):

**11. What is the format in which the data will be stored (check all that apply)?**

<input checked="" type="checkbox"/> Spreadsheet	<input type="checkbox"/> Database	<input type="checkbox"/> GIS layers
<input checked="" type="checkbox"/> Other (name): Annual Report		

**Attachments — Complete and attach to the back of your application:**

- \*Photographs:** Provide photographs if they will aid in understanding the situation. If color photos are necessary to convey information important for application review, supply 25 copies of each photo. **Note: If your project is funded, pre-project photos will be required in the final report.**
- Letters of Support** from project partners or others, as appropriate.

**\* IMPORTANT:** Avoid color and detail that will not photocopy clearly. Otherwise, provide 25 color copies of any maps, photos, or project designs that you want OWEB reviewers to see in color. Multiple copies must be collated and stapled into separate packets for distribution to the reviewers. This is the only exception for the use of staples.

### Section III

## SPECIFIC MONITORING PROJECT ACTIVITY

These essay questions and their answers are designed to step you and reviewers through a logical process from understanding and identifying the problem to measuring for success.

Answer the questions in 12-pt type size, single spaced, on single-sided 8½" x 11" pages. Use bullets where appropriate. Use **bold face** and *italics* for emphasis only. If the project involves multiple sites, be specific for each. **Refer to the Instructions for clarification and helpful examples.**

- M1** What is the present situation? Describe the issue or opportunity the project seeks to address.
- M2** What are you proposing to do? Supply sufficient detail to match the project's complexity and technical difficulty so that its technical viability can be evaluated.
- M3** What are the project's monitoring objectives? Tie monitoring objectives to watershed restoration objectives. If effectiveness monitoring is proposed, provide a specific hypothesis or monitoring question.
- M4** Describe in detail and provide the citation for the protocols that will be used.
- M5** Describe in detail the sampling design used to choose your sampling locations.
- M6** Describe how the information to be gathered augments existing available data.
- M7** Describe the quality control/quality assurance program for the project and who will be collecting your data.
- M8** Other than a final report to OWEB, how else will the monitoring data collected through this project be used?
- M9** What is the proposed schedule for the project?
- M10** How will the success of the project be determined?
- M11** Please provide a detailed description of project location, including location(s) where monitoring will occur. Please provide geographic coordinates and or river miles whenever possible.

**Section IV**  
**WATERSHED MONITORING BUDGET**

**IMPORTANT: Read the application instructions. Attach additional lines, if necessary**

	A	B	C	D	E	F
<i>Itemize projected costs under each of the following categories.</i>	<b>Unit Number</b> (e.g., # of hours)	<b>Unit Cost</b> (e.g., hourly rate)	<b>In-Kind Match</b>	<b>Cash Match Funds</b>	<b>OWEB Funds</b>	<b>Total Costs</b> (add columns C, D, E)
<b>PROJECT MANAGEMENT.</b> Includes <i>staff or contractors</i> who coordinate project implementation. Line items should identify who will be responsible for project management and their affiliation.						
USFWS (coordination, survey, reporting)	52 (8 hr days)	\$250 day.	\$13,000			\$13,000
ODFW (survey)	45 (8 hr days)	\$200 day	\$9,000			\$9,000
Wallowa-Whitman National Forest (survey)	36 (8 hr days)	\$250 day	\$9,000			\$9,000
Anderson Perry (survey)	2 (8 hr day)	\$250 day	\$500			\$500
Volunteers (survey)	2.5 (8 hr day)	\$200 day	\$500			\$500
<b>IN-HOUSE PERSONNEL.</b> Includes <i>only</i> applicant employee costs and the portion of their time devoted to this project.						
<b>CONTRACTED SERVICES.</b> Labor, supplies, and materials to be provided by non- <i>staff</i> for project implementation.						
Nez Perce Tribe (supplies)	1	\$1,080	\$1,080			\$1,080
Nez Perce Tribe (contracted survey time)	40 (8 hr. days)	\$229.35			\$9,174	\$9,175
Local experienced bull trout redd surveyor(s)	24 (8 hr. days)	\$200			\$4,800	\$4,800
Horse/mule packer for bull trout surveys in the backcountry	2	\$2,500			\$5,000	\$5,000
<b>TRAVEL.</b> Mileage, per diem, lodging, etc. Must use current State of Oregon rate.						
<b>SUPPLIES/MATERIALS.</b> Refers to items that typically are "used up" in the course of the project. Costs to OWEB must be directly related to on-the-ground work. Group similar supplies and materials (e.g., boulders and logs, or trees and shrubs) on the same line.						
Flagging, measuring equipment, batteries for GPS units, rite-n-rain paper, and other survey supplies	1	\$600			\$600	\$600
Survey wading gear for volunteers	4	\$300			\$1,200	\$1,200
<b>PRODUCTION.</b> Informational and promotional activities associated with the project.						

<b>EQUIPMENT.</b> Refers to items with a useful life of generally 2 years or more. List only equipment costing <b>\$250 or more per unit.</b>						
GPS units	4	\$350			\$1400	\$1,400
Water-proof camera housing for digital camera for survey reporting	1	\$200			\$200	\$200
<b>SUBTOTALS</b>			\$33,080		\$22,374	\$55,454
<b>FISCAL ADMINISTRATION.</b> Not to exceed <b>10% of Subtotal</b> of OWEB Funds. Costs associated with accounting; auditing (fiscal management); contract management (complying with the terms and conditions of the grant agreement); and fiscal reporting expenses for the OWEB project, including final report expenses (e.g., film developing) for the grant.					\$2,000 (GRMW)	\$2,000
<b>TOTALS</b>			\$33,080		\$24,374	57,454



## MATCH FUNDING FORM

Document here the match funding shown on the budget page of your grant application

**OWEB accepts all non-OWEB funds as match.** An applicant may not use *another OWEB grant* to match an OWEB grant. However, an applicant who benefits from a pass-through OWEB agreement with another state agency, by receiving either staff expertise or a grant from that state agency, may use those benefits as match for an OWEB grant. (Example: A grantee may use as match the effort provided by ODFW restoration biologists because OWEB funding for those positions is the result of a pass-through agreement).

At the time of application, match funding does not have to be *secured*, but you must show that at least 25% of match funding has been *sought*. On this form, you do not necessarily need to show authorized signatures (“secured match”), but the more match that is secured, the stronger the application. Identify the type of match (cash or in-kind), the status of the match (secured or pending), and either a dollar amount or a dollar value (based on local market rates) of the in-kind contribution.

If you have questions about whether your proposed match is eligible or not, visit our website at [http://www.oregon.gov/OWEB/GRANTS/grant\\_app\\_materials.shtml](http://www.oregon.gov/OWEB/GRANTS/grant_app_materials.shtml), or contact your local OWEB regional program representative (contact information available in the instructions to this application).

Project Name: Wallowa Mountains Bull Trout Redd Monitoring for 2007-2008

Applicant: Grande Ronde Model Watershed

Match Funding Source	Type (√ one)	Status (√ one)*	Dollar Value	Match Funding Source Signature/Date*
US Fish and Wildlife Service (USFWS)	<input type="checkbox"/> cash <input checked="" type="checkbox"/> in kind	<input checked="" type="checkbox"/> secured <input type="checkbox"/> pending	\$13,000	<i>Arthur Lauer</i> 10/6/06
Oregon Department of Fish and Wildlife (ODFW)	<input type="checkbox"/> cash <input checked="" type="checkbox"/> in kind	<input checked="" type="checkbox"/> secured <input type="checkbox"/> pending	\$9,000	<i>[Signature]</i> 10/7/06
Wallowa-Whitman National Forest (USFS)	<input type="checkbox"/> cash <input checked="" type="checkbox"/> in kind	<input checked="" type="checkbox"/> secured <input type="checkbox"/> pending	\$9,000	<i>Alan Clark</i> 10/06/06
Nez Perce Tribe (NPT)	<input type="checkbox"/> cash <input checked="" type="checkbox"/> in kind	<input checked="" type="checkbox"/> secured <input type="checkbox"/> pending	\$1,080	<i>James J. [Signature]</i> 10/06/06
Anderson Perry and Associates, Inc. (Anderson Perry)	<input type="checkbox"/> cash <input checked="" type="checkbox"/> in kind	<input type="checkbox"/> secured <input checked="" type="checkbox"/> pending	\$500	
Volunteers	<input type="checkbox"/> cash <input checked="" type="checkbox"/> in kind	<input type="checkbox"/> secured <input checked="" type="checkbox"/> pending	\$500	

\* **IMPORTANT:** If you checked the “Secured” box in the status Column for any match funding source, you must provide either the signature of an authorized representative of the match source in the final Column, or attach a letter of support from the match funding source that specifically mentions the dollar amount you show in the Dollar Value Column.



# LAND USE INFORMATION FORM

This information is needed to determine if the proposed project complies with statewide planning goals and is compatible with local comprehensive plans (ORS 197.180). The form must be submitted before OWEB releases project funds. OWEB will release project funds only if the project either is not regulated by, or is compatible with, the local comprehensive plan and zoning ordinance. If a project is regulated by the local comprehensive plan and zoning ordinance, OWEB will void grant agreements for projects the county determines to be incompatible with the local comprehensive plan and zoning ordinance. If the county requires additional local approvals for a project regulated by the local comprehensive plan and zoning ordinance, OWEB will not release project funds until these conditions are satisfied.

## 1. TO BE COMPLETED BY THE APPLICANT/GRANTEE

Applicant/Grantee Name: Grande Ronde Model Watershed

Project Name: Wallowa Mountains Bull Trout Redd Monitoring for 2007-2008.

## 2. TO BE COMPLETED BY CITY/COUNTY OR TRIBAL PLANNING OFFICIAL

Complete this section only after section 1, above, has been completed. Check the box below that applies:

- This project is not regulated by the local comprehensive plan and zoning ordinance.
- This project has been reviewed and is compatible with the local comprehensive plan and zoning ordinance.
- This project has been reviewed and is not compatible with the local comprehensive plan and zoning ordinance.
- Compatibility of this project with the local planning ordinance cannot be determined until the following local approvals are obtained:
 

_____ Conditional Use Permit	_____ Development Permit
_____ Plan Amendment	_____ Zone Change
_____ Other	

An application has \_\_\_ has not \_\_\_ been made for the local approvals checked above.

\_\_\_\_\_ \* Signature of Local Official \_\_\_\_\_ Date

Print Name: \_\_\_\_\_ Phone: \_\_\_\_\_

Title: \_\_\_\_\_ Email: \_\_\_\_\_

*\*Must be an authorized signature from your local City/County or Tribal Planning Department, regardless of which box is checked above.*



## LANDOWNER/APPLICANT CERTIFICATION

### Monitoring Information from Participating Private Lands is Public Record

OAR 695-005-0030 (4) states that "All applications that involve physical changes or monitoring on private land must include a landowner signature signifying their approval and understanding that all monitoring information obtained on their property is public record. An explanation must accompany the application if any of the information required on the application cannot be provided. The landowner's signature will be required prior to the release of the grant agreement if the application is approved for funding."


Therefore, **EITHER** the applicant must sign and date in the "For the Applicant" section below, **OR** all private landowners participating in the project must complete this form at the application stage (use additional pages, if necessary) by signing in the "For the Landowner(s)" section below.

The project will occur on (check one):

- Public land only (STOP: No need to complete the rest of the form)  
 Private land only     Public & private land (If you check either of these boxes, complete either of the boxes below)

### EITHER

**For the Applicant:** I am unable to secure all landowner signatures at this time as not all landowners have been identified at the time of application. I understand that should OWEB fund this project, that OAR 695-005-0030 (4) requires me to secure all participating landowner signatures prior to the release of an OWEB grant agreement for this project.

 \_\_\_\_\_ Date 10/11/2006 \_\_\_\_\_  
 Applicant Signature

### OR

**For the Landowner(s):** By my signature below, I certify my understanding and approval that should the Oregon Watershed Enhancement Board fund part, or all, of this proposal, that all monitoring information obtained on my property as a result of this project is public record. I understand that if I refuse to comply with the terms of this form, I will jeopardize my ability to receive OWEB compensation for my participation in this project.

Landowner Signature	Date
Landowner Signature	Date
Landowner Signature	Date
Landowner Signature	Date
Landowner Signature	Date
Landowner Signature	Date



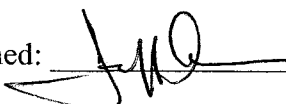
## LEGAL REQUIREMENTS FORM

### AGREEMENTS:

I/we, Grande Ronde Model Watershed  
of La Grande \_\_\_\_\_, Oregon, hereby make application for financial assistance under the terms and conditions of the Oregon Watershed Enhancement Board in the amount of \$24,374. The total cost of the project is \$57,454, as shown in Section I of the application and on the budget page.

I/we understand that if this proposal is funded, I/we will in most cases be required to:

- Sign a Grant Agreement containing the terms and conditions upon which funds will be released (work on the grant may not begin until all parties have signed the Grant Agreement);
- Submit a Cooperative Agreement between the Project Sponsor (Grantee) and the Landowner(s) addressing issues of site access, public domain information, and other relevant issues;
- Certify that the project complies with state, federal, and local regulations;
- Submit copies of all applicable permits and licenses from local, state, or federal agencies or governing bodies, or written evidence that permits and licenses are not needed;
- Submit a report at the completion of the project;
- Resolve any and all outstanding issues from previous grants with OWEB.
- Agree that educational products and monitoring information resulting from projects are public domain;
- Certify that the work to be accomplished will comply with the *Oregon Aquatic Habitat Restoration and Enhancement Guidelines*.

Signed:  Date: 10/11/2006

Print Name: Jeff Oveson

Title: Executive Director

## **OWEB Watershed Monitoring for Project: Wallowa Mountains Bull Trout Redd Monitoring for 2007-2008.**

### **Section III –M1**

On June 10, 1998, the Columbia River and Klamath River populations of bull trout (*Salvelinus confluentus*) were listed as threatened under the Endangered Species Act. Our local bull trout are considered part of the larger Columbia River population. Several local extirpations have been documented in the Pacific Northwest since listing. Earlier determinations had nominated distinct populations of bull trout in the Columbia River Basin. Region wide, bull trout distributions, abundance and habitat quality have continued to decline (USFWS 2002).

Based on the above, both the Grande Ronde River Subbasin Plan (Novak et al. 2004) and the Imnaha River Subbasin Plan (EcoVista 2004) recommend the continued collection of bull trout abundance and distribution data. In addition, the U.S. Fish and Wildlife Service in its Bull Trout Draft Recovery Plan calls for increased monitoring of important bull trout populations (USFWS 2002). The USFWS lists as its **Priority Number 1** the following; “*continuing to survey for bull trout and manage local populations to maintain long-term viability* (USFWS, 2002, pgs 78, 79 in Chapter 11 and pg. 72 in Chapter 12).

The proposed project seeks to address the repeatedly stated need for bull trout monitoring. OWEB funding for the project would support the continued survey of bull trout spawning areas in years 2007 and 2008 in the Wallowa Mountains of northeast Oregon. Without adequate funding, it has been difficult to find sufficient numbers of experienced bull trout surveyors and packers for surveys in the back-country, and to obtain adequate supplies to get the work accomplished. We are requesting OWEB funding to help accomplish the annual 305 stream miles of bull trout spawning habitat target in 2007 and 2008 (for a total survey target of 610 stream miles). We need at a minimum of 15 years of data to determine real change and assess bull trout population trends. This study is part of a larger bull trout monitoring effort that is occurring in southeast Washington and northeast Oregon (Starcevich, et al, 2005; Mendel, et al, 2006; Al-Chokhachy, et al, 2005).

## **OWEB Watershed Monitoring for Project: Wallowa Mountains Bull Trout Redd Monitoring for 2007-2008**

### **Section III –M2**

We are proposing to survey approximately 305 miles of bull trout spawning index areas in the Bear, Lostine, Big Sheep, and Imnaha watersheds in 2007 and 2008 (for a total survey target of 610 stream miles). Surveys are conducted in September and October. Typically, each stream is monitored twice, once in mid September and a second time in early October. Surveys are conducted utilizing experienced bull trout surveyors paired up with inexperienced surveyors. Dependent on the length of the stream surveyed, 2-12 surveyors walk the stream spawning areas and identify new and old bull trout nests in the gravel (redds). Bull trout redds are identified, recorded, and flagged. Bull trout presence on or near redds is documented. Bull trout redds are also measured to distinguish between life history types (resident or fluvial).

The USFWS (La Grande Field Office) coordinates the bull trout surveys, analysis and reporting of the data in cooperation with the above agencies. Post data collection, the bull trout spawning data for the above project will be summarized and past years data will be compared to data collected and a report will be completed and provided to OWEB and our partners. [The summary and report will include information on survey history (survey locations and survey frequency), timing of bull trout spawning, total number of redds, the redd size (area), and number and size of fish observed during surveys].

## **OWEB Watershed Monitoring for Project: Wallowa Mountains Bull Trout Redd Monitoring for 2007-2008**

### **Section III –M3**

The current vision for the Grande Ronde and Imnaha subbasins is stated in their respective subbasin plans (EcoVista 2004; Novak et al. 2004). The most familiar expression of a vision is in terms of a goal statement. The common long-term goal for the Imnaha and Grande Ronde subbasins is *to restore and/or maintain the health and function of the ecosystem to ensure continued viability of important populations*. After establishing management goals, managers and researchers develop objectives that define progress towards achievement of those goals and would provide a measurable definition of attainment (Krueger and Decker 1993). The following monitoring objectives were formulated to help meet the goal stated above as it relates to the Grande Ronde and Imnaha bull trout populations.

**Objective 1.** Establish long term relative abundance and trend data sets for bull trout populations in the selected streams.

**Objective 2.** Establish spawning distributions for bull trout populations in the selected streams.

**Objective 3.** Coordinate information sharing regarding bull trout among interested co-managers and partners.

These objectives not only relate to the respective subbasin plans but also to watershed restoration projects. Managers work cooperatively in the effort to restore healthy ecosystems in the Imnaha and Grande Ronde subbasins. Thus, within the context of bull trout recovery, a synergistic relationship exists between this proposed monitoring project and numerous ongoing projects and endeavors in the subbasins. Managers recognize the necessary connection between species recovery and habitat. Habitat condition is thought to be a limiting factor influencing bull trout abundance in the Grande Ronde subbasin (Novak et al. 2004). Many efforts are directed towards local habitat conditions in the Grande Ronde and Imnaha systems. These efforts relate directly to this proposed project in that they influence the quality of the aquatic habitat inhabited by listed bull trout populations.

Hypotheses about the effectiveness of habitat restoration in terms of their impact on fish populations can only be tested by monitoring the trend and status of the populations of interest. Monitoring a sensitive species like bull trout is intuitive because bull trout are a good indicator of watershed quality.

## **OWEB Watershed Monitoring for Project: Wallowa Mountains Bull Trout Redd Monitoring for 2007-2008**

### **Section III –M4**

Estimates of relative abundance and trend are required to determine the status of populations, monitor changes in population size, and evaluate the effectiveness of recovery strategies. Redd counts typically have been used to monitor bull trout abundance and evaluate population trends (Rieman and Myers 1997). Counting redds is a relatively inexpensive and un-intrusive method of monitoring and is thought to provide an indirect measure of the spawning population (Sankovich et al. 2003).

Therefore we will use standard redd counting protocols to accomplish Objectives 1 and 2. Protocols and methodology are widely described in the literature (Bonar et al. 1997; Bellerud, et al, 1997; Dunham et al. 2001). Spawning ground surveys are conducted from late-September to mid October. Surveys are conducted on foot in a downstream direction with one or more surveyors. We pair inexperienced bull trout redd surveyors with experienced surveyors to minimize variability in redd counts. Surveyors record the number of redds observed, number of live adults observed and measure the size of redds. Typically spawning areas are visited twice at the end of spawning season to provide accurate trend data for index spawning areas. The spawning locations (upstream and downstream endpoints) are documented using GPS.

Redds are distinguished as single excavated depressions in the streambed believed to be dug by a single female bull trout. Whether streambed depressions were created by excavation is evident from the gravel pile at the tail end of the redd and differences in the color of the gravel substrate. Gravel from a redd appears lighter in color than undisturbed gravel. In some cases it is difficult to distinguish individual redds because of high redd density. In these cases, we attempt to count each depression. In some cases it is necessary to use professional judgment to estimate the number of redds in areas where excavations overlap.

## **OWEB Watershed Monitoring for Project: Wallowa Mountains Bull Trout Redd Monitoring for 2007-2008**

### **Section III –M5**

The proposed project can best be described as “status monitoring”. Status monitoring describes existing conditions and provides evidence of trend over time. The USFWS Bull Trout Draft Recovery Plan (2002) calls for status monitoring to document progress toward recovery of listed populations. Repeated measurements are taken over time to quantify change and track trends. This type of monitoring will provide information regarding bull trout in the Wallowa Mountains of northeast Oregon.

The current study design was developed over multiple years. Information on bull trout distribution in the local watersheds has occurred through habitat and fish distribution surveys conducted by ODFW and the Forest Service. We initially conducted pilot-type surveys to determine where spawning populations were located, when the fish were spawning, and where we could survey consistently over many years and have bull trout spawning data that would give us useful trend data.

We originally selected a location on the Lostine in 1997 where we had documented bull trout spawning, a short ¼ mile reach near Turkey Flat campground within the Forest (upper Lostine River). Currently, we conduct bull trout redd monitoring at accessible index areas on both Forest and private lands along the Lostine River. These index areas are within known bull trout spawning areas and total 10-12 miles of stream. In 1988 we surveyed several miles of the Imnaha but in recent years have found that the greatest spawning densities are in the upper watershed, so due to limited budget and experienced personnel we concentrate on the Upper Imnaha River. Other watersheds we partially survey include Big Sheep, Lick, and Bear Creeks. We limit our surveys in these streams to short index areas due to locations of accessible spawning habitat and limited experienced personnel available to conduct the surveys. We had surveyed Hurricane Creek, Little Sheep, McCully Creek, and Deer Creek in the past but have not continued due to a combination of factors including; lack of sufficient spawning habitat, access concerns, and limited budget and experienced personnel to conduct the surveys

Each year the coordinator and partners discuss locations to continue or quit monitoring due to what the data is telling us and what we think should be the priority areas relative to budget and personnel available to conduct the surveys.

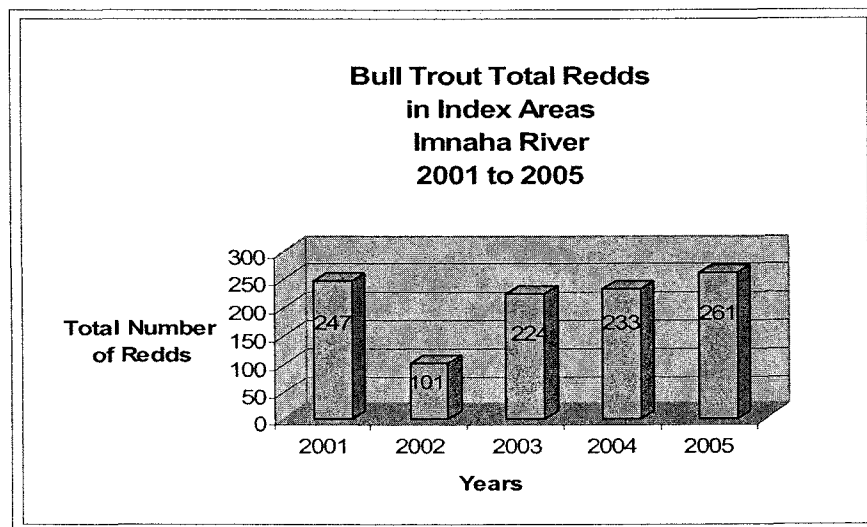
## **OWEB Watershed Monitoring for Project: Wallowa Mountains Bull Trout Redd Monitoring for 2007-2008**

### **Section III –M6**

A monitoring program, such as described in this proposal, will result in the collection of extremely valuable data given society's monetary investment and interest in the watersheds inhabited by bull trout in the Wallowa Mountains. Hence, the volume and complexity of information gathered through the monitoring activities will need to be compiled and organized in a systematic manner. It will involve archiving monitoring data, integrating data from different co-manager M&E activities, and making the data accessible in local and regional databases.

This proposed project is part of a larger bull trout monitoring effort that is occurring in southeast Washington and northeast Oregon as well as within the Pacific Northwest, Canada, Nevada, Idaho, and Montana. Other bull trout data sets are concurrently being developed. In addition, data collected by this project will be compatible with past spawning ground survey information as well as weir data, telemetry data, and future abundance data. When combined, the data becomes more powerful and informative for fisheries managers.

The table below is an example of existing data that will be augmented by new data in 2006 and the data collected with OWEB funding in 2007 and 2008. Overtime (at a minimum 15 years), a population trend can be determined.



## **OWEB Watershed Monitoring for Project: Wallowa Mountains Bull Trout Redd Monitoring for 2007-2008**

### **Section III –M7**

1. Experienced Surveyors paired with inexperienced: Using experienced bull trout redd surveyors when conducting surveys helps control the quality of data collected. We use experienced surveyors from the U.S. Fish and Wildlife, Oregon Department of Fish and Wildlife (ODFW), the Nez Perce Tribe (NPT) and the U.S. Forest Service. The project coordinator attends annual bull trout conferences and incorporates information learned from these sessions as well as bull trout literature and contacts with bull trout experts to increase quality when monitoring bull trout populations. The Nez Perce Tribe also conducts annual spawning ground survey training workshops for its fisheries personnel. All NPT survey staff attend this annual training to ensure consistency and quality of monitoring data. The survey workshops consist of classroom presentations by regional experts, discussions of methodology, redd identification and associated survey detail. There is also a streamside session for the staff to gain practical experience in real world conditions. This annual effort helps assure quality information will result from the proposed project.
2. Surveys typically conducted twice or at a minimum at end of spawning season: Sampling is duplicated, typically once in mid September followed by a survey in early to mid October to be consistent in our methodology and obtain quality data.
3. Field notes stored in hard copy files and data entered into computer: Field data is stored in files and saved on computer files and within reports.
4. Data analyzed and report written with internal peer review: Bull trout data is entered into the computer, analyzed, and a report written. Peer review within the USFWS occurs.
5. Information sharing and Peer review: Bull trout data is shared with interested partners. If any errors found in the report or summary tables from public, the data summary tables and/or report is updated to reflect these changes.

**OWEB Watershed Monitoring for Project: Wallowa Mountains Bull Trout Redd Monitoring for 2007-2008**

**Section III –M8**

Currently the data collected from the bull trout redd monitoring is summarized by the coordinator and provided to interested partners including ODFW, USFS, NPT, USFWS, Utah State University, and others. Presently, there is no central clearing house for the bull trout data collected in the Imnaha/Snake and Grande Ronde Recovery Unit areas. We will continue to share this data with others who are interested (including interested landowners)

**OWEB Watershed Monitoring for Project: Wallowa Mountains Bull Trout Redd Monitoring for 2007-2008**

**Section III –M9**

Proposed Schedule for 2007 and 2008:

March – April: Project coordinator (USFWS) contacts potential contractors and initiates paper work to contract experienced surveyors and packer for the 2007 and 2008 seasons. The coordinator helps determine survey equipment needs for the next 2 seasons and the equipment is purchased.

May-August: Coordinator schedules surveys with partners and confirm contracts are approved and in place.

September-October: Conduct bull trout spawning surveys with partners.

October: Post spawning surveys the contractors are paid for their services through the GRMW.

November-December: Coordinator summarizes the bull trout data and reports this data to OWEB, GRMW, project partners, and others whom request the data.

**OWEB Watershed Monitoring for Project: Wallowa Mountains Bull Trout Redd Monitoring for 2007-2008**

**Section III –M10**

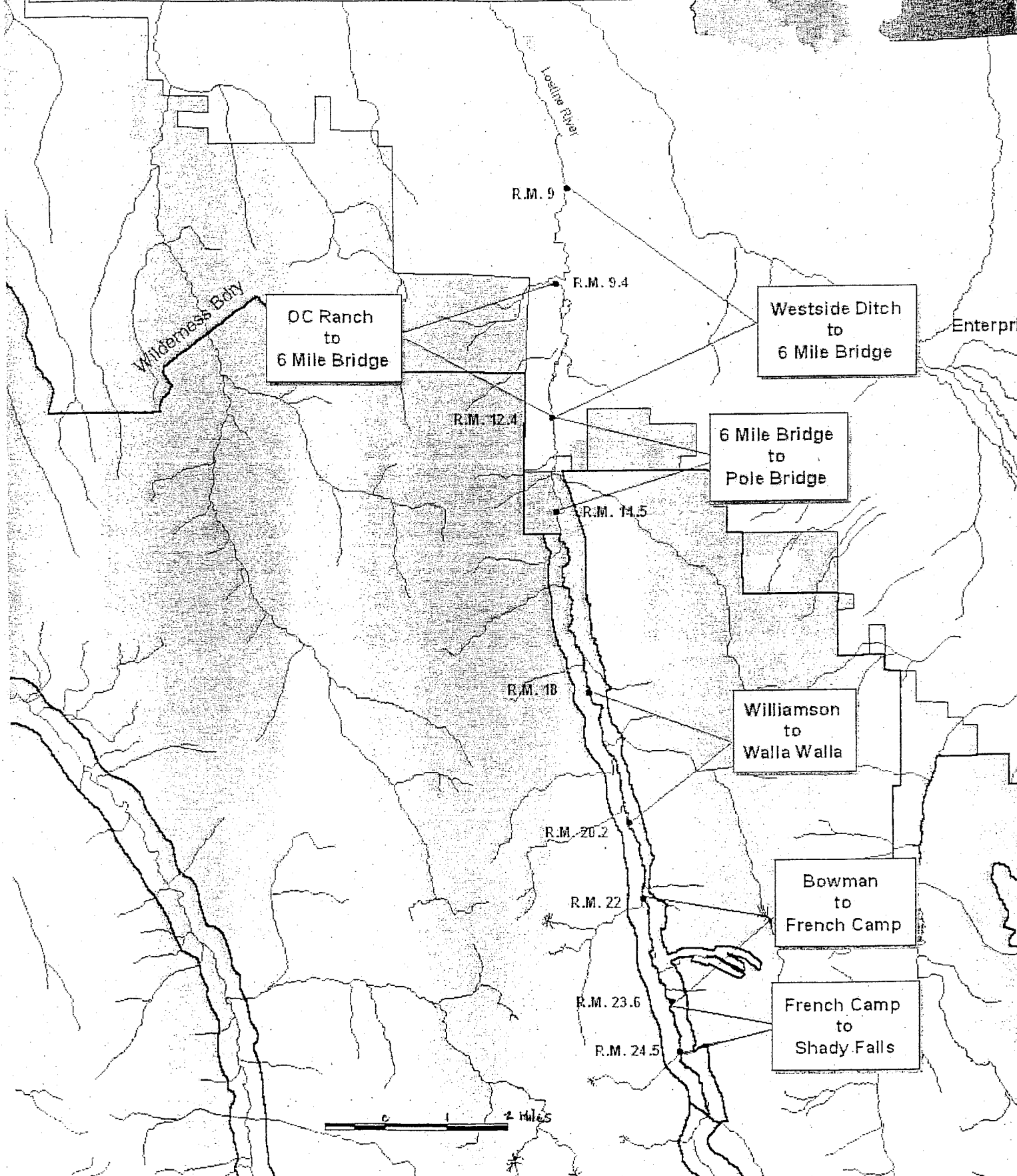
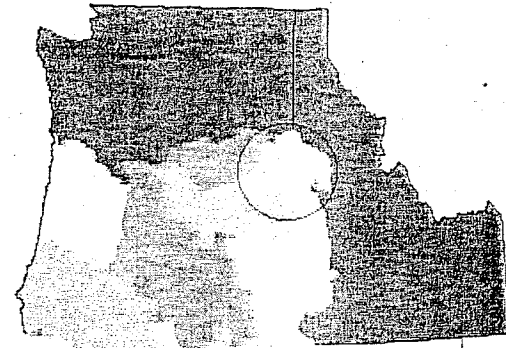
We will successfully conduct the project if we accomplish the three project objectives as stated on the M3 page. The success of our project will also be measured by completing our intended survey of 305 stream miles, hiring a packer for us to survey in the backcountry, utilizing experienced personnel, and having supplies to get the work accomplished. The OWEB funding will allow us to accomplish this goal.

## **OWEB Watershed Monitoring for Project: Wallowa Mountains Bull Trout Redd Monitoring for 2007-2008**

### **Section III –M11**

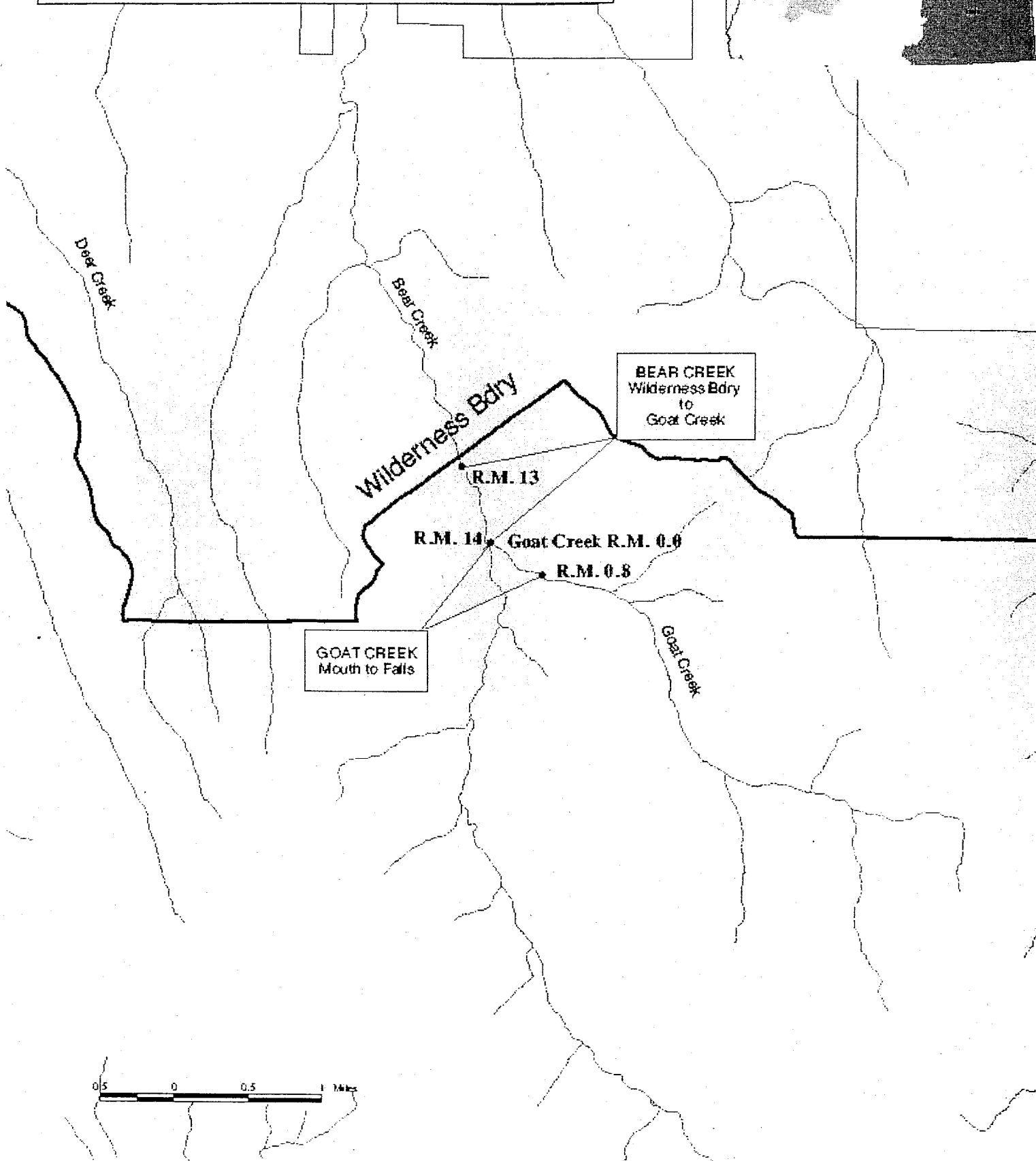
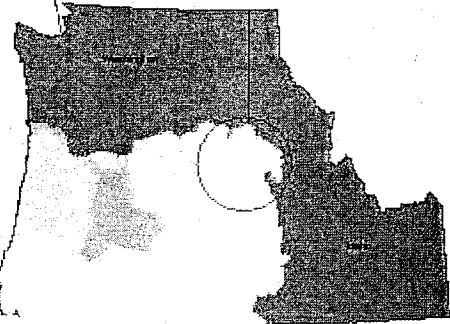
Monitoring will occur on the Upper Imnaha River including Indian Crossing on the Imnaha River to the N.F., the NF Imnaha River, SF Imnaha River from N.F. to Cliff Creek, and Cliff Creek. Monitoring within the Big Sheep Watershed will occur along Big Sheep from the 39 rd to the diversion (1.9 miles). Lick Creek will be monitored for bull trout redd counts from the meadow below the 39 rd to Quartz Creek. The Lostine River will be monitored from Shady Campground to Bowman Trailhead, Walla Walla to Williamson Campgrounds, Pole Bridge to the county bridge, and Lundquist bridge to Lostine River Ranch. Bear Creek will be surveyed on Goat Creek (Bear Cr confluence to upstream 0.8 miles) and on Bear Creek from Goat Creek confluence to downstream approximately 1.0 miles. A total of approximately 305 total miles of stream will be monitored for bull trout redds in 2007 and 2008 on the above mentioned streams. Exact locations and river miles may be adjusted due to access priorities, budget, and experienced surveyors. Refer to the maps provided for stream locations and river miles.

**OWEB Watershed Monitoring Proposal**  
**Wallowa Mountains Bull Trout Redd Monitoring**  
**for 2007-2008**  
**Lostine River Survey Locations**



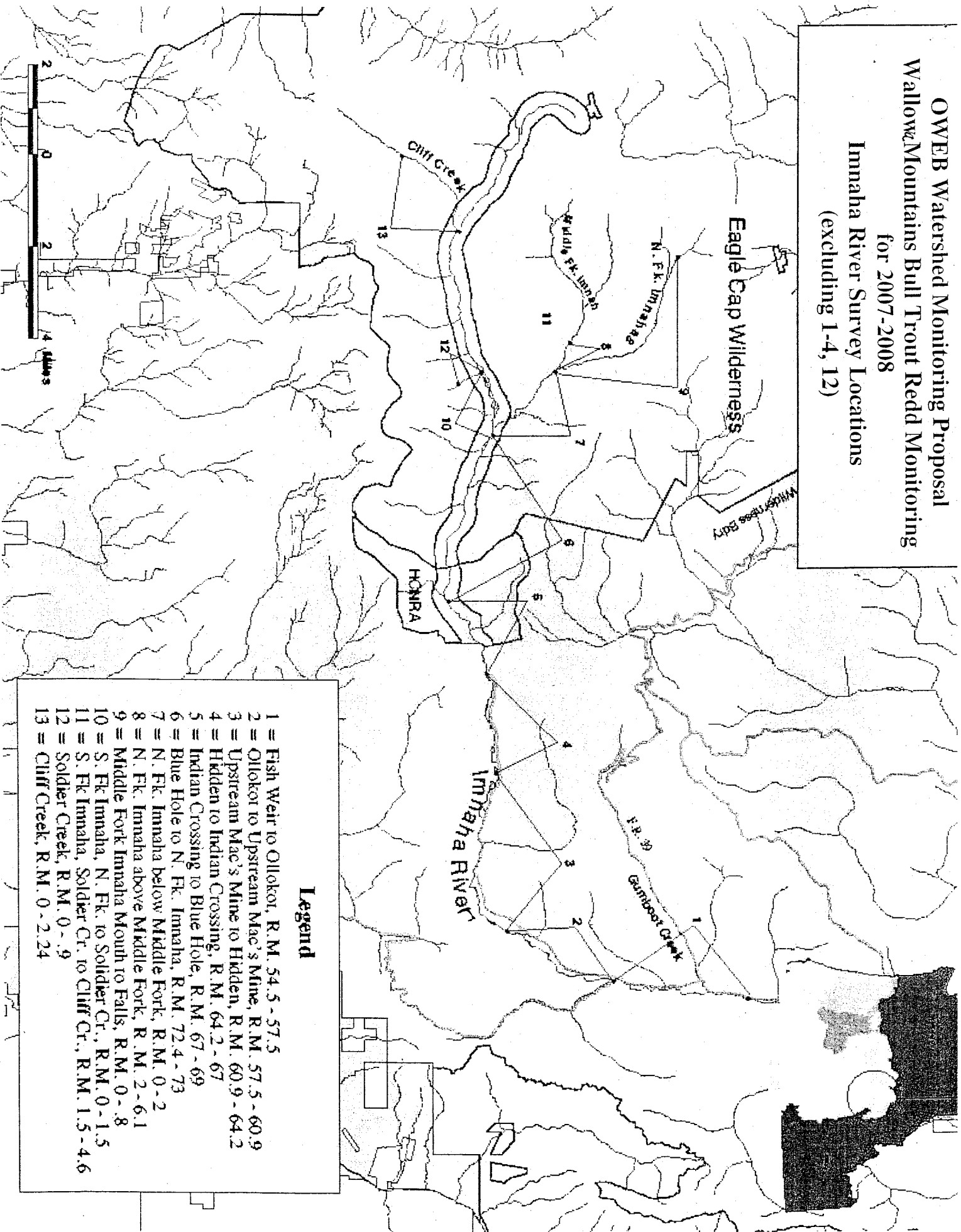
0 1 2 Miles

OWEB Watershed Monitoring Proposal  
Wallowa Mountains Bull Trout Redd Monitoring  
for 2007-2008  
Bear Creek Survey Locations



**OWEB Watershed Monitoring Proposal  
Wallowa Mountains Bull Trout Redd Monitoring  
for 2007-2008**

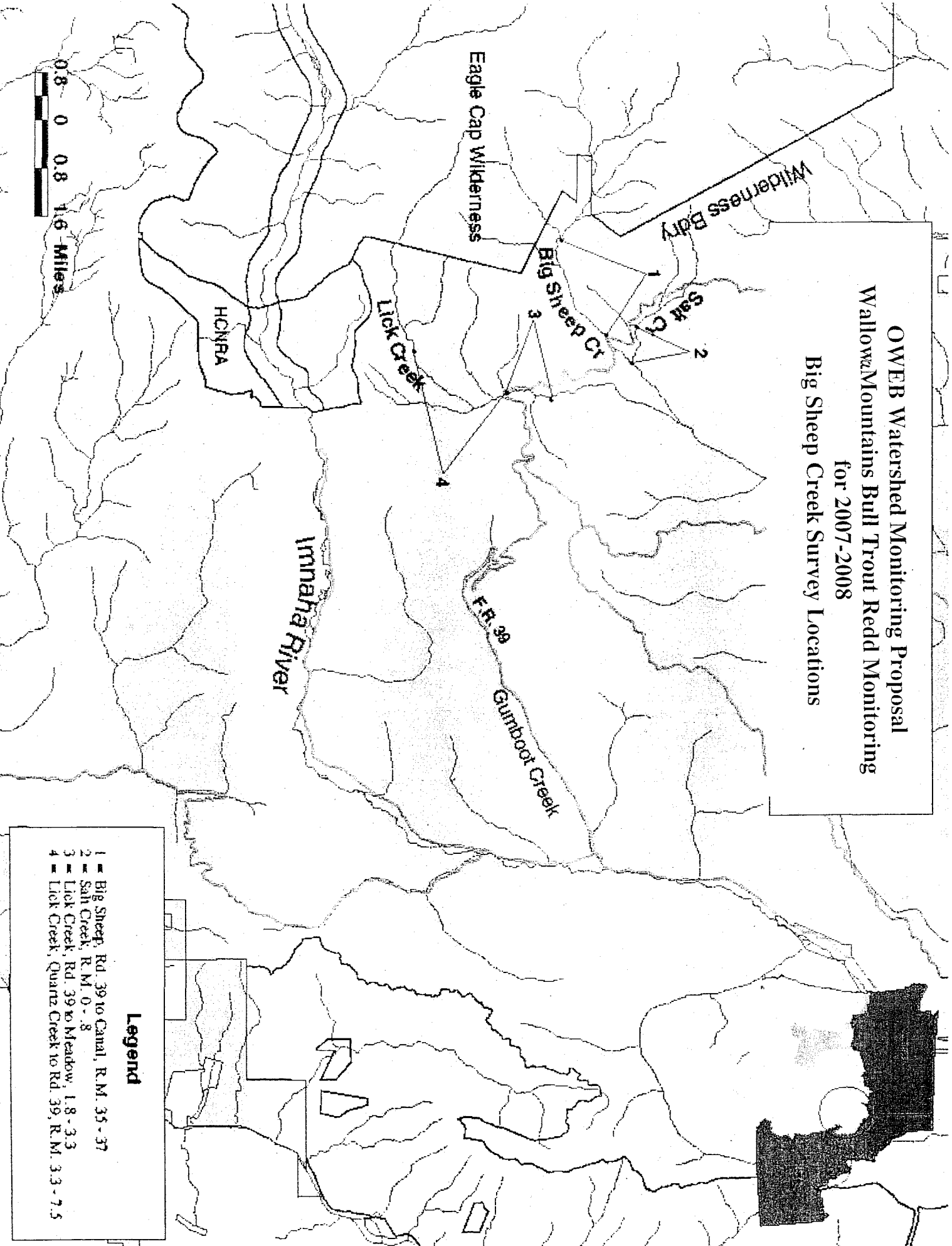
**Imnaha River Survey Locations  
(excluding 1-4, 12)**



**Legend**

- 1 = Fish Weir to Ollokot, R. M. 54.5 - 57.5
- 2 = Ollokot to Upstream Mac's Mine, R. M. 57.5 - 60.9
- 3 = Upstream Mac's Mine to Hidden, R. M. 60.9 - 64.2
- 4 = Hidden to Indian Crossing, R. M. 64.2 - 67
- 5 = Indian Crossing to Blue Hole, R. M. 67 - 69
- 6 = Blue Hole to N. Fk. Imnaha, R. M. 72.4 - 73
- 7 = N. Fk. Imnaha below Middle Fork, R. M. 0 - 2
- 8 = N. Fk. Imnaha above Middle Fork, R. M. 2 - 6.1
- 9 = Middle Fork Imnaha Mouth to Falls, R. M. 0 - .8
- 10 = S. Fk Imnaha, N. Fk. to Soldier Cr., R. M. 0 - 1.5
- 11 = S. Fk Imnaha, Soldier Cr. to Cliff Cr., R. M. 1.5 - 4.6
- 12 = Soldier Creek, R. M. 0 - .9
- 13 = Cliff Creek, R. M. 0 - 2.24

**OWEB Watershed Monitoring Proposal**  
**Wallowa Mountains Bull Trout Redd Monitoring**  
 for 2007-2008  
**Big Sheep Creek Survey Locations**



**Legend**

- 1 - Big Sheep, Rd. 39 to Canal, R. M. 35 - 37
- 2 - Salt Creek, R. M. 0 - 8
- 3 - Lick Creek, Rd. 39 to Meadow, 1.8 - 3.3
- 4 - Lick Creek, Quartz Creek to Rd. 39, R. M. 3.3 - 7.5

**OWEB Watershed Monitoring Proposal**  
**Wallowa Mountains Bull Trout Redd Monitoring for 2007-2008**

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- Mendel, G., M. Gembala, J. Trump, and C. Fulton. 2006. Baseline Assessment of Salmonids in Tributaries of the Snake and Grande Ronde Rivers in Southeast Washington. 2005 Annual Report. Washington Department of Fish and Wildlife, Dayton, WA.
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# Nez Perce Tribe



## Department of Fisheries Resources Management

Administration • Enforcement • Habitat/Watershed • Harvest • Production • Research • Resident Fish

104 Lolo St. • P.O. Box 365 • Lapwai, Idaho 83540

Phone: (208) 843-7320 • Fax: (208) 843-7322

September 29, 2006

OCT 02 2006

### Oregon Watershed Enhancement Board (OWEB)

775 Summer Street NE, Suite 360

Salem, OR 97301-1290

Re: Wallowa Mountains Bull Trout Monitoring Proposal

To Whom It May Concern:

On behalf of the Nez Perce Tribe Department of Fisheries Resources Management, I would like to take this opportunity to express support for the US Fish and Wildlife Service's *Wallowa Mountains Bull Trout Monitoring* project. The Nez Perce Tribe is a co-manager of the fisheries resources in northeast Oregon. Since time immemorial, the Nez Perce Tribe lived, fished, hunted and gathered along the banks of Wallowa County streams. These resources, including bull trout, continue to be important to Nez Perce culture.

Together, with our co-managers, we are vitally interested in the status of these ESA listed populations of bull trout in the Grande Ronde and Imnaha subbasins. Because of their sensitivity to water quality and habitat degradation, bull trout are truly an indicator of healthy watersheds. The recently developed subbasin plans for both Grande Ronde and Imnaha subbasins included bull trout as a priority focal species. The plans call for monitoring the status, trend, abundance and spawning distribution of bull trout. These subbasin plans, co-authored by the Nez Perce Tribe, are endorsed by the Northwest Power and Conservation Council as well as the Independent Scientific Review Panel.

Monitoring activities have long been recognized as important elements of natural resource management. The monitoring objectives and protocols found in the proposal are consistent with well established and accepted scientific methods and will provide society with extremely valuable data about bull trout as a species and the watersheds that support it. Therefore, this proposal will translate the concepts of the subbasin plans and the intentions of fisheries managers into actions.

The Department fully supports this bull trout monitoring project. It will continue the collaborative efforts of the tribal, federal, and state co-managers, and the Grande Ronde Model Watershed in Northeast Oregon. Should you have questions or comments, please do not hesitate to contact Jay Hesse, Research Director at 208-843-7145 ext 3552.

Sincerely,

David B. Johnson  
Program Manager

Department of Fisheries Resources Management



# Oregon

Theodore R. Kulongoski, Governor

## Department of Fish and Wildlife

Enterprise Field Office  
65495 Alder Slope Road  
Enterprise, OR 97828  
Voice (541) 426-3279  
FAX (541) 426-3055  
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September 29, 2006

Dear Oregon Watershed Enhancement Board,

Oregon Department of Fish and Wildlife field staff participates extensively in Northeast Oregon bull trout spawning surveys. These surveys provide a means to better understand bull trout population status and trend across our basins. Prior to the focus provided by ESA listing of bull trout in 1998, efforts to assess population status were intermittent. Since that time a concerted effort to obtain data from a number of Northeast Oregon streams on the amount, distribution and timing of spawning has resulted in development of a data set that will provide a baseline for determining status and trend of populations into the future, if continued.

I support the proposal by Grande Ronde Model Watershed for funding to maintain the survey effort for in 2007-08.

Sincerely,

Bradley J. Smith  
District Fish Biologist  
Oregon Department of Fish and Wildlife



# APPLICATION CHECKLIST

**Instructions:** Use this form as an important cross-check to ensure that your application is complete. An incomplete application will jeopardize your application's review. After you have checked all the boxes, return the checklist with your completed application.

## General

- Only one copy of the application is included with the packet (other applications should be sent separately)
- The application and attachments are on 8 ½ x 11" paper
- The application and attachments are single-sided and single-spaced
- The application and attachments are not stapled or bound (sets of color photos and color maps excepted; see check box immediately below)
- Where color photos or color maps are provided, I have included 25 copies of each, and if there are multiple sets, they are collated and stapled (no other documents or attachments are stapled).

## Section I – Applicant Information

- All questions in this section have been answered
- The OWEB Dollars Requested and the Total Project Cost mirror the totals shown on the budget page
- The project location is complete
- All contact information — for the applicant and fiscal agent — is complete and current

## Section II – Project Information

- All questions in this section have been answered

## Section III – Specific Monitoring Project Activity

- All questions in this section have been answered

## Section IV - Budget Page

- I have read the application instructions for completing the budget page
- Columns A and B have been completed, where appropriate
- Fiscal Administration does not exceed 10% of the OWEB subtotal (subtotal row, Column E)
- The totals shown in the last row add up and are accurately reflected in Section I of the application

## Required Forms

- Match Funding form -- show that at least 25% match has been sought (authorized signatures are not required at the application stage, but are strongly encouraged)
- Land Use form (required only for applications involving on-the-ground activities to ensure compatibility with the local comprehensive plans and zoning ordinances) — completed as relevant, signed, and dated by local official
- Landowner/Applicant Certification form – completed, signed, and dated by all participating landowners
- Legal Requirements form – completed, signed, and dated by the applicant

## Attachments (see page 3 of the application for details)

- Photographs
- Letters of Support from project partners or others, as appropriate (please limit to three or fewer)