R-5

OCT 1 6 2006

AP 207-346

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 2 PAGES)**

Sections I and II must accompany your application
THE FIRST 2 PAGES ARE NOT THE PLACE TO DESCRIBE YOUR PROJECT IN DETAIL

Name of project: Mill Creek Push-Up Dam Elimination

OWEB dollars requested: $13,950.00 **Total cost of project:** $20,400

Project location:

This project occurs at (check one): ☒ **A single site** ☐ **Multiple sites**

Upper Grande Ronde
Watershed(s)

Union
County or counties

T3S R40E Sec. 23
Township, Range, Section(s)

Longitude, Latitude (if available)

Applicant: Union SWCD

Official Contact (if different): Sarah Hendrickson

Email: sarah.hendrickson@oacd.org Phone: 541-963-0724 Fax: 541-963-4201

Street: 10507 N. McAlister Rd City: La Grande Zip: 97850

Technical Contact (if different): Steve Hogge

Email: steve.hogge@oacd.org Phone: 541-963-0724 Fax: 541-963-4201

Landowner (see Instructions): Ron Warnock

Fiscal Officer (if different): **Affiliation:**

Email: Phone: Fax:

Street: City: Zip:

Section II
PROJECT INFORMATION

1. **Abstract:**
Every year irrigators on the McNeil Ditch construct a push up dam in Mill Creek upstream of Cove to divert water for cherry orchards and pastures. This dam blocks juvenile steelhead passage, and creates temporary and long-term water quality problems. Eliminating the push up dam will allow access to just under 2 miles of stream with high quality habitat and will protect water quality. We plan to install three v-weirs to step up the grade to the point of the diversion. The weirs will meet ODFW passage criteria, which is no more than a 6-inch rise. The owners will install a head gate, and they will install 800 feet of 8-inch pipe to prevent seepage loss from the earthen delivery ditch. The pipe will begin below the existing fish screen located on the ditch. The landowner and the SWCD are the partners in this project. OWEB funds will be used to pay for final engineering design and construction inspection, 3 v-weirs, excavation, mobilization, rock for bank protection around the new structures, and grant administration.

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
Ron Warnock (land owner)	$4,050	$2,400	x		$6,450
					$
					$
					$
Total Estimated Funds (add all amounts in the far-right Column):					$6,450

5. **Have any conditions been placed on other funds that may affect project completion?**
☐ Yes ☒ No

If yes, explain:

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

☒ *Project Maps: 1) Provide a vicinity map showing township, range, and section (TRS), and the project location. 2) On a USGS 7.5 min. topo quad map, or on an aerial photo showing TRS, locate the extent of your project and site-specific activities. **Provide maps on 8½" x 11"** pages and include a legend.

☒ *Preliminary Project Designs: Provide sufficient detail to allow a reasonable evaluation of the proposal and of the effect of the project on the site. The preliminary design should include reference to appropriate standards and guidelines.

☒ *Photographs: Provide photographs to 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.

Section III
SPECIFIC RESTORATION 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 "fixing" the problem and measuring for success.

Answer the questions in 12-pt type size, single spaced, on single-sided 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.**

R1. Contextual Overview

Provide a brief contextual overview of where the project will be implemented. Describe the key watershed issues. Describe the key water quality, water quantity, species, habitat, and resource management issues (physical or social) that are limiting conditions. Also briefly describe the process used to identify and prioritize restoration issues. DO NOT describe the project here; you will do so in question #R3.

Mill Creek is a small stream that begins in the mountains above the town of Cove, Oregon. It flows through town, and eventually joins Catherine Creek in the agricultural lands in the eastern part of the Grande Ronde valley. According to ODFW data (http://www.streamnet.org/), summer steelhead, a federally listed species, use the lower 8.55 miles of Mill Creek for spawning and rearing. Water quality and habitat in the upper reaches of this stream are excellent. For example, DEQ data shows that Mill Creek along its upper reaches meets the state's temperature criteria, and temperature is a critical factor for cold-water fish such as steelhead. Mill Creek is an unusual stream because the water temperature criterion is rarely achieved anywhere in this basin.

Passage barriers, such as the McNeil Ditch push up dam that is the subject of this proposal, are limiting fish production in this stream. They are affecting the ability of juvenile fish rearing here to freely use the available high quality habitat. The Union SWCD has identified eliminating push up dams and improving diversions on small tributaries such as Mill Creek as a priority activity. Several years ago, they installed a fish friendly diversion for the Caldwell Ditch downstream from the current project. The SWCD plans to continue identifying poorly constructed diversion structures and improving them with cooperative landowners on Mill Creek and other nearby tributaries such as Little Creek, the neighboring drainage.

R2. Problems to Be Addressed

Use a table similar to the example below to provide site-specific information for the project: a) The specific problem(s) you are addressing; and b) the *root* cause(s) of the problem(s). DO NOT describe the project here; you will do so in question #R3.

Specific Problem(s)	Root Cause(s) of the Problem
Juvenile steelhead passage blocked	Annual construction of push up dam
Water quality degraded	Construction equipment in channel causes short-term turbidity and long-term channel and bank instability

R3. Project Description

Use a table similar to the example below to describe the proposed action. The degree of detail should match the project complexity and technical difficulty to allow for full evaluation of the technical viability. For projects involving multiple sites, be sure to identify them separately, as appropriate. See the Application Instructions for definitions of "measurable objectives" and "practices," and as well as for helpful examples.

Specific Problem(s) (Repeat from #R2)	Measurable Objectives	Proposed Practices, Detailed Descriptions, and Root Causes
Juvenile steelhead passage blocked	Provide for upstream fish passage to just under 2 miles of good quality spawning and rearing habitat	1) We plan to install 3 v-weirs below the diversion point to step up the grade so that the water level at the diversion will be about 18-inches. The weirs will be installed to meet an ODFW fish passage criterion, which allows no more than a 6-inch rise. We will use 18 to 36 – inch rock to construct the weirs. They will be about 50 feet apart, and will span the creek, which averages about 12 feet in width in the project area. 2) A head gate will also be installed at the diversion site, and a small concrete wall will be constructed around the head-works. Approximately 30 cubic yards of rock will be placed around the new structures to help stabilize the bank, and structures, and eliminate erosion. 3) The first 800 feet of open ditch will be piped with 8-inch pvc. This pipe will begin below the existing fish screen that is on the ditch. The current earthen ditch loses about 50 percent of the diverted water in this short stretch. Piping this ditch will require less water to be diverted from Mill Creek, thus leaving more water in the stream. Using an 8-inch pipe will ensure the users will not be able to take more than their allowable water right. The owner does not want to participate in the conserved water program, but does want to help reduce inefficient water diversions. He is willing to pay for the pipe and install it himself. Piping the ditch is an integral part of improving the diversion and provides ample watershed benefit.

Water quality degraded	Improving water quality.	Eliminating the push up dam will improve bank and channel stability there by reducing sediment delivery to the stream. Eliminating equipment operating in the stream will stop the pulse of turbidity and sediment during the annual construction of the push up dam.

R4. Other Related Plans/Efforts

a) Explain how the project complements other efforts under way or completed in the watershed; b) Explain how the project implements a local area plan (e.g., watershed assessment/action plan, TMDL, agricultural water quality plan). Provide the name and date of the plan(s), and where and how the plan(s) identifies as a priority the problem(s), which the project proposes to address; and c) Explain whether the project implements a regional plan (e.g., ESA Recovery Plan, Coastal Coho Assessment, OWEB Basin Priority Plan, NWPCC Subbasin Plan, Groundwater Management Area). Provide the name and where and how the plan identifies as a priority the problem(s), which the project proposes to address. (See the Application Instructions for helpful links to various regional plans).

a) Eliminating the push up dam on the McNeil Ditch compliments the diversion structure installed by the SWCD several years ago for the Caldwell Ditch just downstream. b) This project conforms to the Upper Grande Ronde Agricultural Water Quality Plan (1999), which encourages the elimination of push up dams to protect water quality. The Grande Ronde Sub basin Plan (2004) lists sedimentation as the number one concern in the basin. It also lists habitat fragmentation as an important factor in fish species decline.

R5. Project Design

a) Identify who will do the project design and include their qualifications and experience; b) Describe how project planning and design take into consideration extreme events (e.g., floods, fire, drought, etc.) known to be of concern in the area that have the potential to impact your project; and c) provide a brief description of design alternatives considered and the reasons for choosing the one(s) proposed.

a) Layne Lindley, retired NRCS engineer, will design the project and provide construction inspection. Layne has close to 40 years of engineering experience and has worked on numerous diversion structures similar to the Warnock Diversion. b) The planned weirs will be designed to withstand 25-year flood events. c) The one design alternative considered was similar to the diversion structure the SWCD installed down stream from the Warnock Diversion several years ago. This structure was made of steel and concrete, and included a fish ladder. While this project has worked, the weir design is considered more fish friendly.

R6. Proposed Project Schedule

Use a table similar to the example below to show the anticipated schedule for the project. See the Application Instructions for clarification and an example.

Project Stage and Phases	Date	Description
Pre-Implementation	**Spring 2006**	**Preliminary survey and design already completed**

	Spring 2007 **Summer 2007**	**Final Design** **Permmitting process**
Implementation	**Fall 2007**	**Construction activities will conform to ODFW work windows**
Project Completion	**Fall 2007**	

R7. Project Monitoring

YOU DO NOT NEED TO FILL OUT THIS SECTION IF YOU ARE NOT PLANNING ON DOING MONITORING ABOVE AND BEYOND WHAT IS REQUIRED BY OWEB GRANT AGREEMETNS (See R9).

If requesting funding to perform monitoring of this project above and beyond what is required as a part of OWEB grant agreements (See R9) use the table similar to the example below to show: a) measurable objectives (repeat from #R3) b) type of monitoring (see instructions for definitions); c) what will be monitored; d) the frequency and duration of monitoring; e) protocols to be used; and f) who will monitor (name, affiliation, phone number). Relate each monitoring activity to the objectives shown in #R3. Also provide a brief statement as to why it is important to monitor this restoration project above and beyond what is required in the OWEB project completion report and post- implementation status report (see R9). See the Application Instructions for clarification and an example.

Measurable Objectives (Repeat from #R3)	Type of Monitoring	Monitor for What?	Frequency and Duration of Monitoring	Protocols to be used	Who Will Monitor? (name, affiliation, phone)

R8. Educational/Public Awareness Opportunities

Explain whether and how you will educate and raise public awareness about the project (e.g., install a project partner sign, write an article for the local paper, lead a site tour for local citizens). See the Application Instructions for clarification of eligible education and outreach costs.

The SWCD produces an annual newsletter that is distributed to 12,000 Union County residents. The Mill Creek Push Up Dam Elimination Project will be featured in one of the articles in the newsletter.

R9. Project Completion and Post-Implementation Status Reports

Use a table similar to the example below to indicate who will inspect and sign off on the completed project, as well as submit the Project Completion Report (Exhibit C) and required Post-Implementation Status Reports (Schedule D). Identify that person's affiliation and provide contact information for that person.

Name of Person Who Will....	Agency/Organization and Address	Telephone Number	Email Address
Inspect and sign off on the project	**Layne Lindley, engineer, Union SWCD**	**541-963-0724**	
Submit the *Project Completion Report*	**Steve Hogge, technician, Union SWCD**	**541-963-0724**	**steve.hogge@oacd.org**

R10. Project Maintenance

Use a table similar to the example below to document how the project will be maintained over time. State who will maintain the project. Identify their affiliation and provide contact information.

Name of Person Agency/Organization and Addresses	Telephone Number Email Address	What will be done and for how long?
Ron Warnock, land owner	**541-568-4681**	**Routine maintenance for 10 years**

910-1035

S Section IV

WATERSHED RESTORATION BUDGET

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

	A	B	C	D	E	F
Itemize projected costs under each of the following categories.	**Unit Number** (e.g., # of hours)	**Unit Cost** (e.g., hourly rate)	**In-Kind Match**	**Cash Match Funds**	**OWEB Funds**	**Total Costs** (add columns C, D, E)
PRE-IMPLEMENTATION. Must occur *after* the OWEB grant agreement has been fully executed, unless it is a city or county charge for processing the Land Use form. OWEB funds will be disbursed only upon receipt of all required permits and licenses.						
PROJECT MANAGEMENT. Includes *staff or contractors* who coordinate project implementation. Line items should identify who will be responsible for project management and their affiliation.						
IN-HOUSE PERSONNEL. Includes *only* applicant employee costs and the portion of their time devoted to this project.						
Final Design	60 hrs	$50/hr			$3,000	$3,000
Construction Inspection	10 hrs	$45/hr			$450	$450
Permits	40 hrs	$25/hr			$1,000	$1,000
CONTRACTED SERVICES. Labor, supplies, and materials to be provided by non-*staff* for project implementation.						
V-weirs (consruction and materials combined)	3	$2,000			$6,000	$6,000
Trenching and pipe installation	800 feet	$3/ft	$2,400			$2,400
Excavation for headgate and structure	200 CY	$3.5			$700	$700
Mobilization	LS	$800			$800	$800
TRAVEL. Mileage, per diem, lodging, etc. Must use current State of Oregon rate.						
SUPPLIES/MATERIALS. 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.						
Concrete for headgate	LS	$1,000		$500	$500	$1,000
8-inch pvc pipe	800 feet	$3.50/ft		$2,800		$2,800
Rock for bank protection around new structures	30 CY	$15/CY			$450	$450
Headgate	1	$750		$750		$750
EDUCATION/OUTREACH. Refers to informational and promotional activities associated with the project. Interpretive signage is an eligible cost to OWEB under this category only.						
EQUIPMENT. Refers to items with a useful life of generally 2 years or more. List only equipment costing **$250 or more per unit.**						
SUBTOTALS			$2,400	$4,050	$12,900	$19,350
POST-IMPLEMENTATION STATUS REPORTING. Costs associated with Exhibit D reporting requirements.						
Union SWCD (1 year)	10 hrs/yr	$25/hr			$250	$250
EFFECTIVENESS MONITORING. Eligible costs include those associated with producing reports required by OWEB (film, film developing, copy costs, and data collection and analysis, etc.). **Baseline monitoring is a line item expense under the Pre-Implementation budget category.** New Exhibit E (currently under development).						
	/yr					
	/yr					
FISCAL ADMINISTRATION. Not to exceed 10% of Subtotal 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 (Exhibit C) for the grant.						
Union SWCD (Admin and final report)	6.2%				$800	
TOTALS			$2,400	$4,050	$13,950	$20,400

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, or contact your local OWEB regional program representative (contact information available in the instructions to this application).

Project Name: Mill Creek Push Up Dam Elimination___ Applicant: Union SWCD _____

Match Funding Source	Type (√ one)	Status (√ one)*	Dollar Value	Match Funding Source Signature/Date*
Ron Warnock (landowner)	x cash x in kind	☐ secured ☐ pending	$6,450_____	Ronald D Warnock 10-13-06
	☐ cash ☐ in kind	☐ secured ☐ pending	$_____	
	☐ cash ☐ in kind	☐ secured ☐ pending	$_____	
	☐ cash ☐ in kind	☐ secured ☐ pending	$_____	
	☐ cash ☐ in kind	☐ secured ☐ pending	$_____	
	☐ cash ☐ in kind	☐ secured ☐ pending	$_____	
	☐ cash ☐ in kind	☐ secured ☐ pending	$_____	
	☐ cash ☐ in kind	☐ secured ☐ pending	$_____	

* **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: Union SWCD _____

Project Name: Mill Creek Push Up Dam Elimination _____

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
_____ Plan Amendment
_____ Other
_____ Development Permit
_____ Zone Change

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

_____ * Signature of Local Official

10/12/06 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)

x 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.

Applicant Signature _____ Date _____

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 Russell D Wamsley Date 10-13-16

Landowner Signature _____ Date _____

Landowner Signature _____ Date _____

Landowner Signature _____ Date _____

Landowner Signature _____ Date _____

Landowner Signature _____ Date _____

LEGAL REQUIREMENTS FORM

AGREEMENTS:

I/we, Union SWCD

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 $_____. The total cost of the project is $_____, 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, monitoring, and maintenance;
- 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, and subsequent periodic reports as required in the Grant Agreement, on the project's performance;
- Resolve any and all outstanding issues from previous grants with OWEB.
- Agree that educational products and monitoring information resulting from projects are public domain;
- Complete the Oregon Watershed Restoration Reporting form; and
- Certify that the work to be accomplished will comply with the *Oregon Aquatic Habitat Restoration and Enhancement Guidelines*.

Signed: Sarah Hendrickson Date: 10/12/06

Print Name: Sarah Hendrickson

Title: District Manager

RESTORATION METRICS FORM

OWEB receives a portion of its funds from the federal government and is required to report how its grantees have used those funds. Complete both sections of the form below as they apply to your project. The information you provide is used for federal reporting purposes.

Section 1 Project Overview

Answer all six questions below, even if you have answered a similar question in a previous section in the grant application.

1. Land Use Setting: CHECK ONE BOX ONLY.

☐ **Urban/Suburban/Exurban** *(Projects located within urban growth boundaries or rural residential areas)*	☒ **Rural** *(Projects located outside urban growth boundaries or rural residential areas.)*

2. Dominant Watershed Setting: CHECK ONE BOX ONLY. Example: Your project involves managing erosion in the upland area with some erosion control extended to the riparian area. Because most of the work is to occur in the upland area, you would check only the Upland box below.

☐ **Estuary** *(where freshwater meets and mixes with saltwater of ocean tides.)*	☐ **Riparian** *(adjacent to a water body, within the active floodplain.)*
☒ **Instream** *(below the ordinary high-water mark or within the active channel — includes fish passage.)*	☐ **Upland** *(above the floodplain.)*
	☐ **Groundwater** *(Projects that recharge groundwater or primarily affect the subsurface water table.)*
☐ **Wetland** *(areas inundated or saturated by surface or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated conditions.*	

3. Total Acres Treated: _____ **Total Stream Miles Treated:** 2 +

4. Project Priority Identification: Name the primary watershed/subbasin plan or assessment in which this project type is identified as a priority. **See Application Section III, question #R4.**

Upper GRande Ronde Agricultural Water Quality Management Plan 1999

5. Project Limiting Factor(s): Watershed and/or habitat limiting factor(s) identified in the above plan addressed by the project. Check as many boxes as apply. **See Application Section III, question #R1.**

☒ Bank stability	☐ Nutrients	☒ Stream complexity
☒ Channel morphology	☐ Off-channel habitat	☐ Substrate conditions
☐ Estuarine habitat	☐ Over-wintering habitat	☒ Summer habitat
☒ Excessive sediment/erosion	☒ Rearing habitat	☐ Unscreened water diversions
☐ Exotic species	☐ Reduced habitat capacity	☐ Upland habitat diversity
☒ Fish passage	☐ Riparian habitat	☐ Water quantity
☐ Floodplain connectivity	☐ Shade	☒ Water quality
☐ Large wood	☐ Spawning habitat	☐ Water temperature
☐ Other (explain):		☐ Wetland habitat

6. Project Monitoring: Identify the type of monitoring. Check as many boxes as apply. **See Application Section III, question #R7.**

☐ Fish presence/absence/abundance/distribution survey(s)	☐ Riparian vegetation (Presence/Absence)
☐ Instream Habitat surveys	☐ Spawning surveys
☐ Macroinvertebrates	☐ Upland vegetation (Presence/Absence)
☐ Noxious weed (Presence/Absence)	☐ Water quality
☐ Photo points	☐ Water quantity
☐ Other (explain):	

Section 2 Project Activities

Provide values for each Project Activity applicable to your application. Leave blank any Project Activity or metric line that is not appropriate to your application. All data are pre-project and are therefore proposed, not completed.

Fish Passage Improvement Projects: *Projects that affect or provide fish migration. For partial barriers, include total miles made accessible by the project.*

☒ Install fish passage structure *(e.g., fish ladder, fishway, etc.)*	☐ Removal of stream crossings
☐ Remove/replace culverts	☒ Removal of irrigation/push up dams
☐ Other (explain):	

1 Number of fish passage blockages removed or improved

2+ Estimated miles of stream made accessible by removal of barriers *other* than culverts

_____ Estimated miles of stream made accessible by the improvement or removal of culverts (i.e., record the miles of stream to the next barrier or the extent of fish use)

Water Quality Projects: *Projects that result in an improvement of water quality parameters.* Check all boxes that apply:

☐ Bacteria	☐ Nutrients (name):	☐ Temperature
☐ Dissolved Oxygen	☐ Pesticides	☐ Toxics
☐ Heavy Metals (name):	☐ pH	☐ Turbidity
☐ Nitrates	☐ Phosphorus	
☐ Other (explain):		

Instream Habitat Projects: *Projects that increase or improve the physical conditions within the stream environment to provide needed habitat conditions.* Check all proposed activities.

☐ Bank stabilization	☐ Channel reconfiguration	☐ Large wood placement
☐ Boulder placement	☐ Deflectors/barbs	☐ Off-channel habitat
☐ Carcass placement	☐ Floodplain connectivity	☐ Spawning gravel placement
☐ Other (explain):		☐ Weirs/grade control

_____ Pieces of wood per mile.

_____ Estimated number of miles of streambank to be stabilized (i.e., to be bioengineered or engineered to resist the erosive forces of flowing water). Add the length treated on both sides when both sides are to be stabilized; add one side when just one side is to be treated.

_____ Estimated number of miles of stream to be treated that **are not** bank stabilization. Count one side of the stream only.

Riparian Habitat Projects: *Projects above the ordinary high-water mark of the stream and within the floodplain of the stream.* Check all proposed activities for the riparian area.

☐ Beaver management	☐ Manage nutrient inputs	☐ Riparian habitat protected
☐ Conservation grazing management	☐ Manage sediment inputs	☐ Vegetation management (specify):
☐ Exclusion fencing	☐ Non-native/noxious plant control	☐ Voluntary tree retention
☐ Floodplain nurse log placement	☐ Planting riparian species	☐ Water gap development
☐ Off-stream livestock water development		
☐ Other (explain):		

_____ Estimated total acres of streambank to be treated.
_____ Estimated total acres to be planted.
_____ Estimated total acres of streambank to be treated for non-native/noxious plant species.
_____ Miles of streambank to be treated. Add the length treated on both sides when both sides are to be treated; add one side when just one side is to be treated.

Upland Habitat Projects: *Projects implemented above the floodplain.* Check all proposed activities for the upland area:

☐ Conservation tillage	☐ Reduction of fuels	☐ Sediment control basins
☐ Grazing management	☐ Reduction of nutrient inputs	☐ Terracing
☐ Non-native/noxious plant control	☐ Restore historic natural habitats	☐ Upland erosion control; planting/seeding
☐ Protect natural habitats	☐ Upland livestock water development	
☐ Vegetation management (e.g., juniper control)		
☐ Other (explain):		

_____ Estimated total acres of upland habitat to be treated for non-native/noxious species.
_____ Estimated total acres of upland habitat to be treated.

Estuarine Habitat Projects: *Projects that result in improvement or increase in the availability of estuarine habitat.* Check all proposed activities for the estuary.

☐ Dike breaching/removal	☐ Estuarine habitat creation	☐ Removal of existing fill material
☐ Estuarine channel modification	☐ Non-native/noxious plant control	☐ Tide gate modification
☐ Protection of estuarine habitat	☐ Tide gate removal	
☐ Other (explain):		

_____ Estimated total estuarine acres to be treated for non-native/noxious plant species.
_____ Estimated total acres to be reconnected to the estuary.
_____ Estimated total estuarine acres to be treated.

Wetland Habitat Projects: *Projects designed to create or improve wetland areas.* Check all proposed activities in the wetlands.

☐ Manage nutrient inputs	☐ Vegetation planting	☐ Wetland habitat enhancement
☐ Manage sediment inputs	☐ Wetland creation (from upland)	☐ Wetland protection
☐ Non-native/noxious plant control	☐ Wetland restoration (reestablishment of hydrology)	
☐ Other (explain):		

_____ Estimated total wetland acres to be treated for non-native/noxious plant species
_____ Estimated total wetland acres created
_____ Estimated total wetland acres to be treated (improvement, enhancement, restoration and planting)

Road Projects: *Projects designed to improve road impacts to watersheds.* Check all proposed activities.

☐ Road drainage system improvements	☐ Road sediment and delivery control
☐ Road obliteration/decommissioning	☐ Road surface improvement
☐ Road reconstruction	☐ Other (explain):

_____ Estimated miles of road to be treated.

Water Management Projects: *Projects designed to improve water efficiency, quantity, and timing within the watershed.* Check all proposed activities.

☐ Convert gravity diversion to pumps or infiltration galleries	☐ Irrigation systems for improved water conservation	☐ Recharge groundwater/aquifer
☐ Create off-channel flood storage	☐ Irrigation systems for improved water quality	☐ Reduce water loss in irrigation delivery
☐ Install storm water runoff treatment	☐ Protect instream flow	☐ Other (explain):

_____ Estimated amount of water (cubic feet per second) returned during the critical water period, April-October.

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 Restoration Project Activity

- ☒ All questions in this section have been answered

Section IV - Budget Page

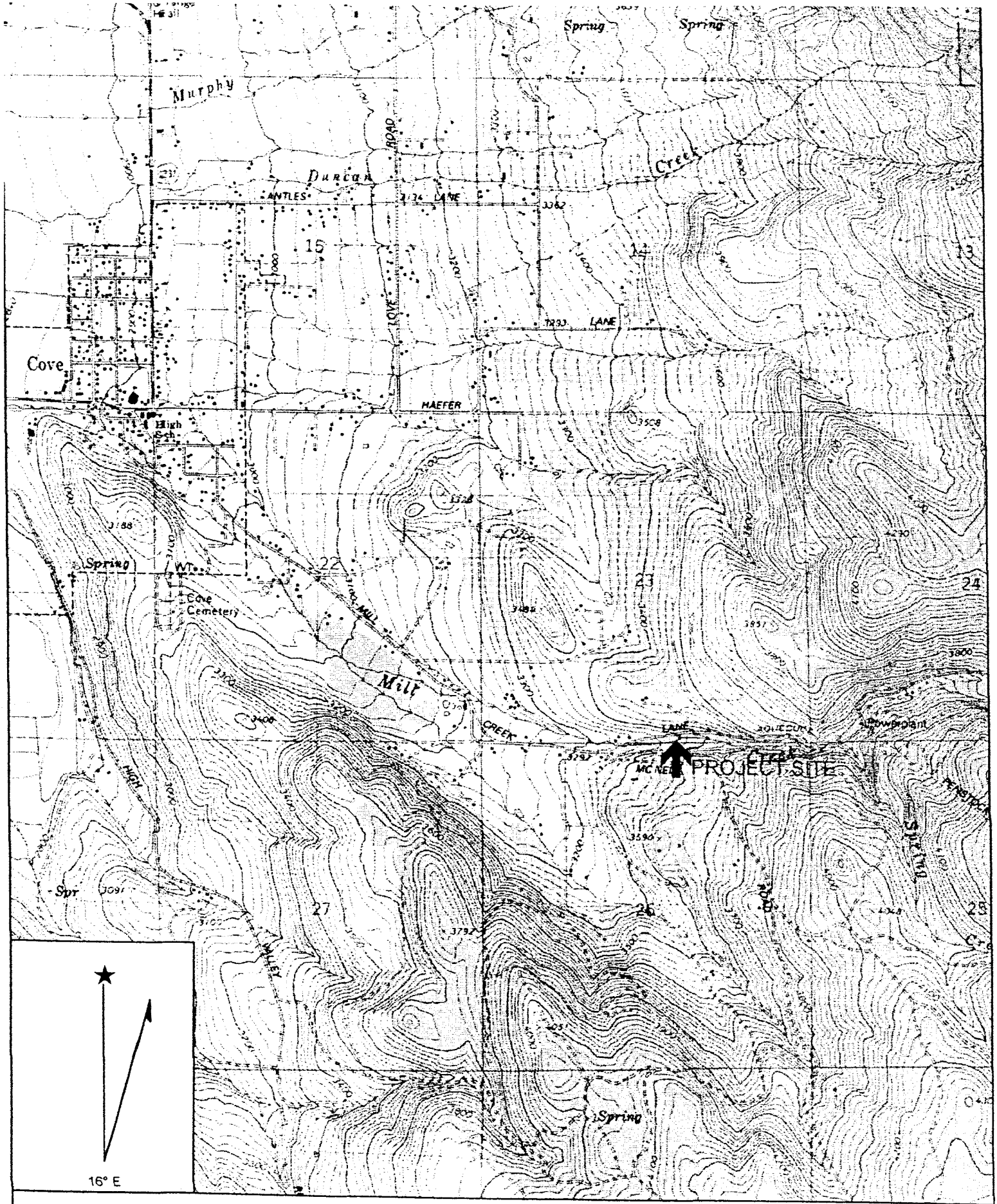
- ☒ I have read the application instructions for completing the budget page
- ☒ Columns A and B have been completed, where appropriate
- ☒ Fiscal Administration does not exceed 10% of the OWEB subtotal (subtotal row, Column E)
- ☒ The totals shown in the last row add up and are accurately reflected in 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
- ☒ Restoration Project/Activity Types form — completed, as relevant
- ☒ Restoration Metrics form — completed, as relevant

Attachments (see page 3 of the application for details)

- ☒ Project Maps
- ☒ Preliminary Project Designs
- ☒ Photographs
- ☐ Letters of Support from key project partners or others, as appropriate.

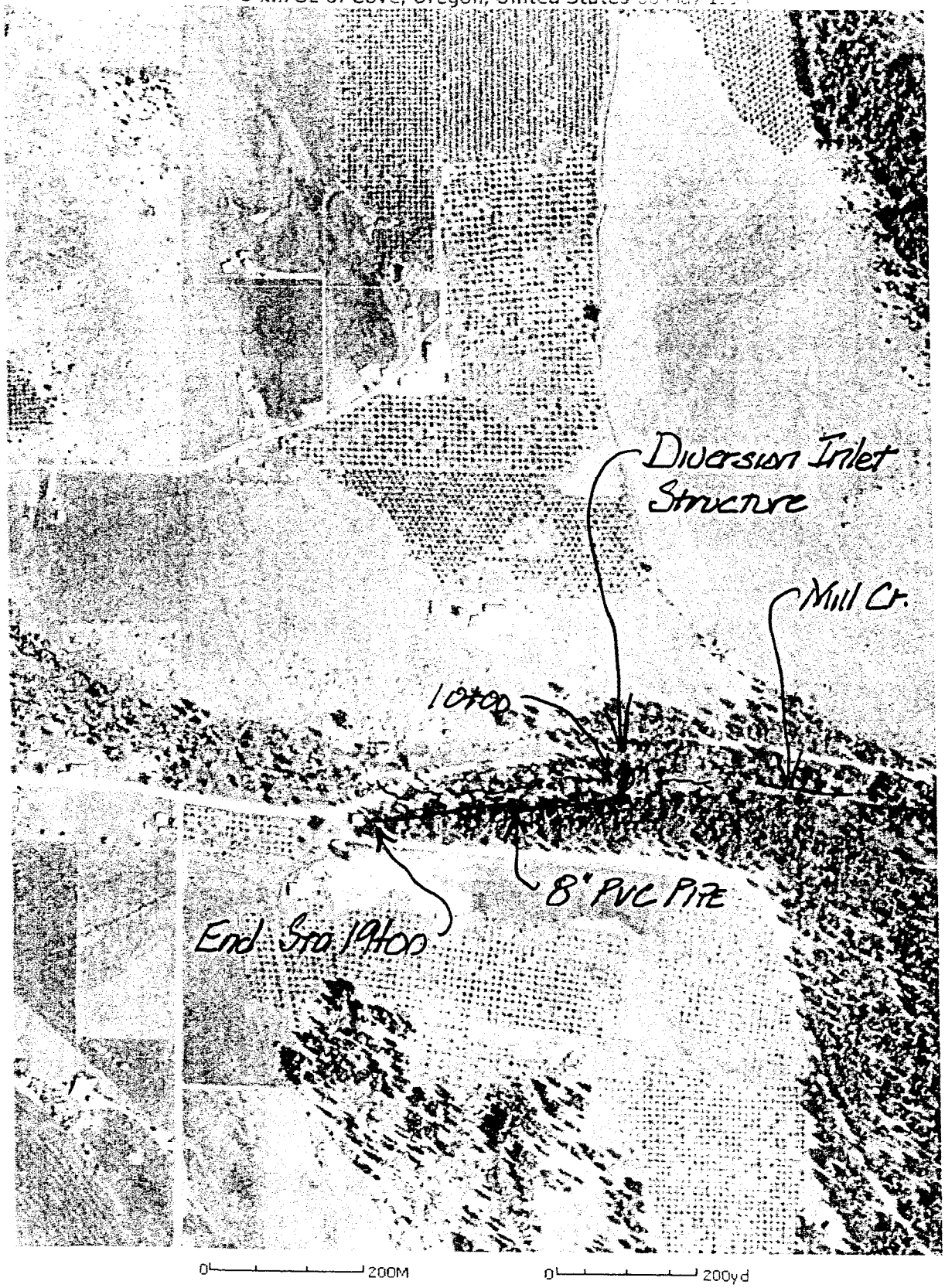


Name: COVE
Date: 10/13/2006
Scale: 1 inch equals 2000 feet

Location: 045.2886443° N 117.7857940° W
Caption: Mill Creek Push-Up Dam Elimination

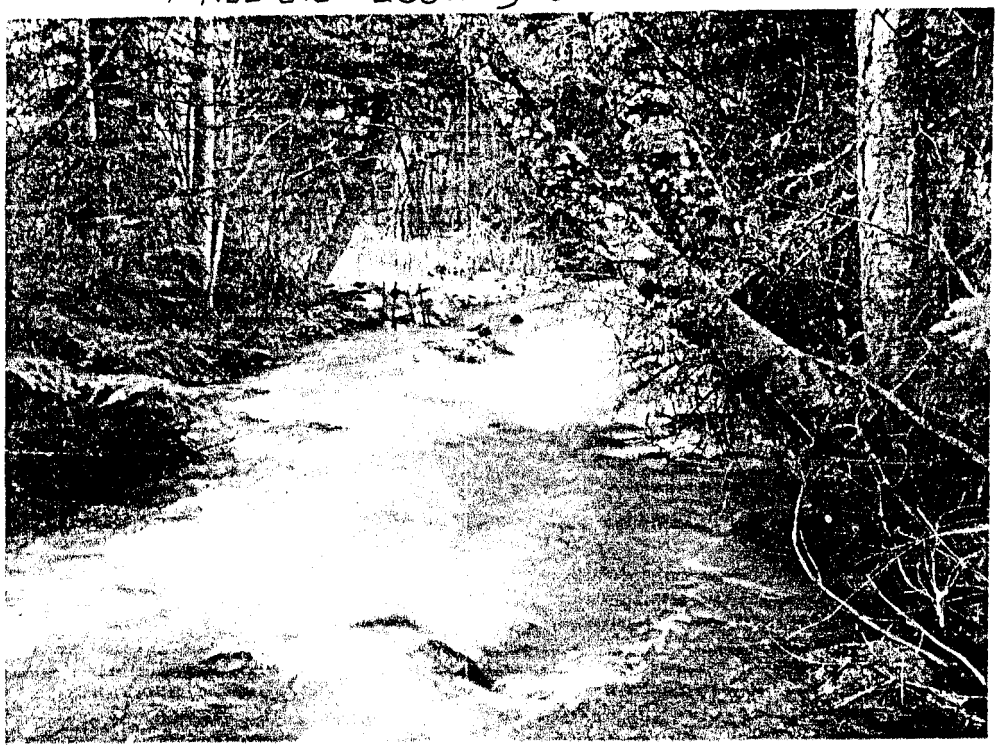
T3S R40E S23

USGS 3 km SE of Cove, Oregon, United States 06 May 1994

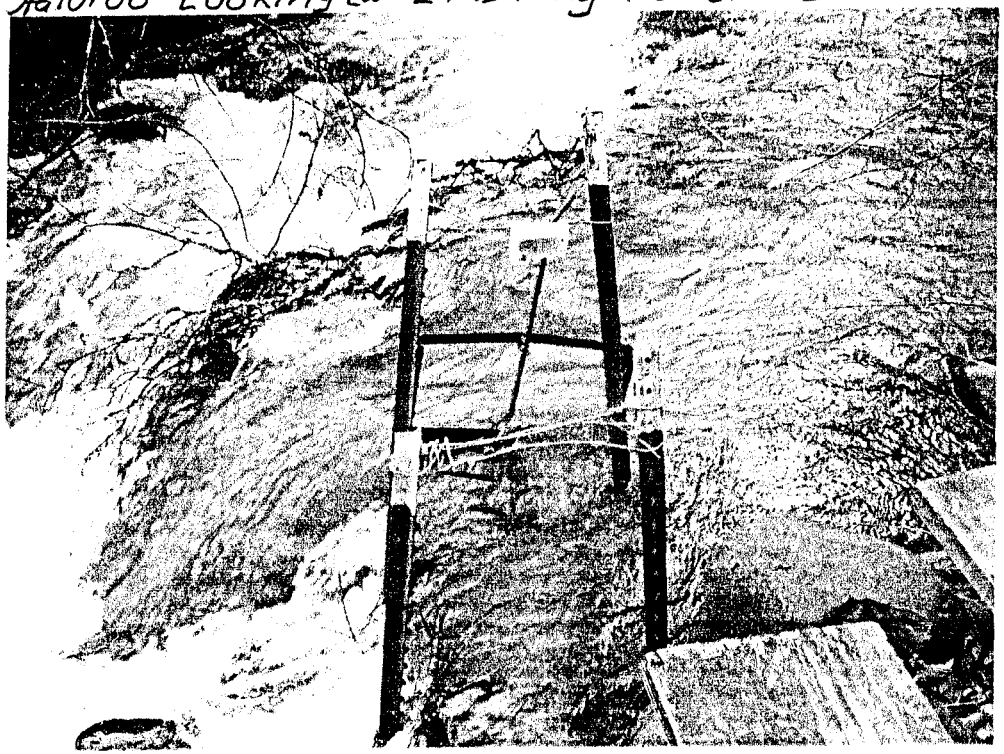


WARNOCK DIVERSION/PASSAGE
UNION COUNTY, OR

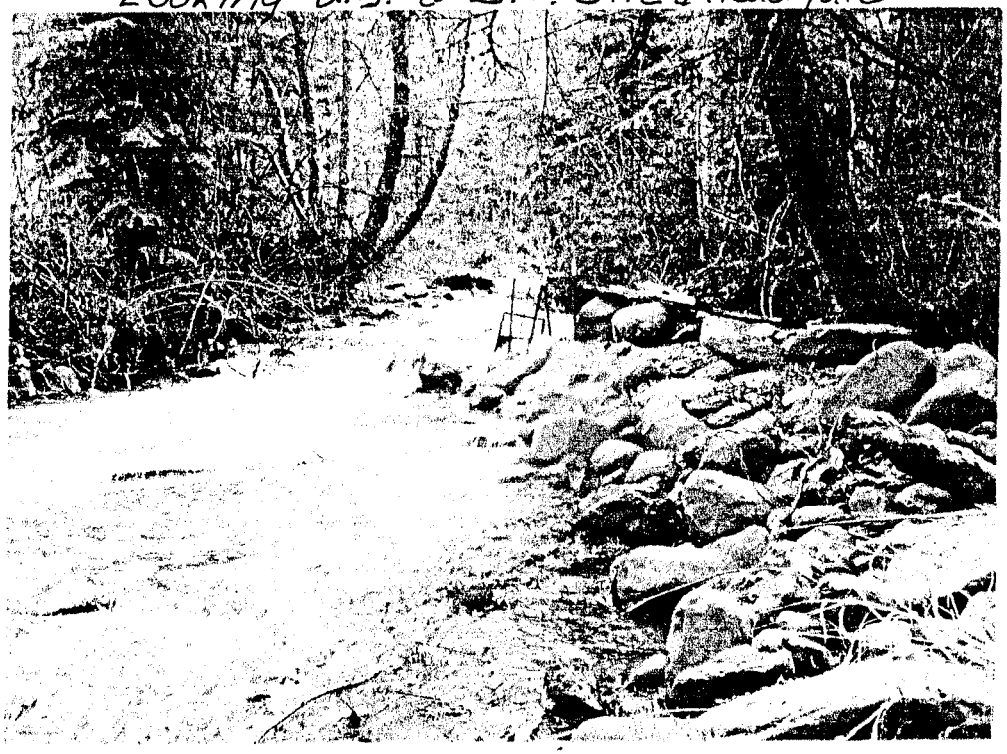
Mill CR Looking D.S. from Str Site



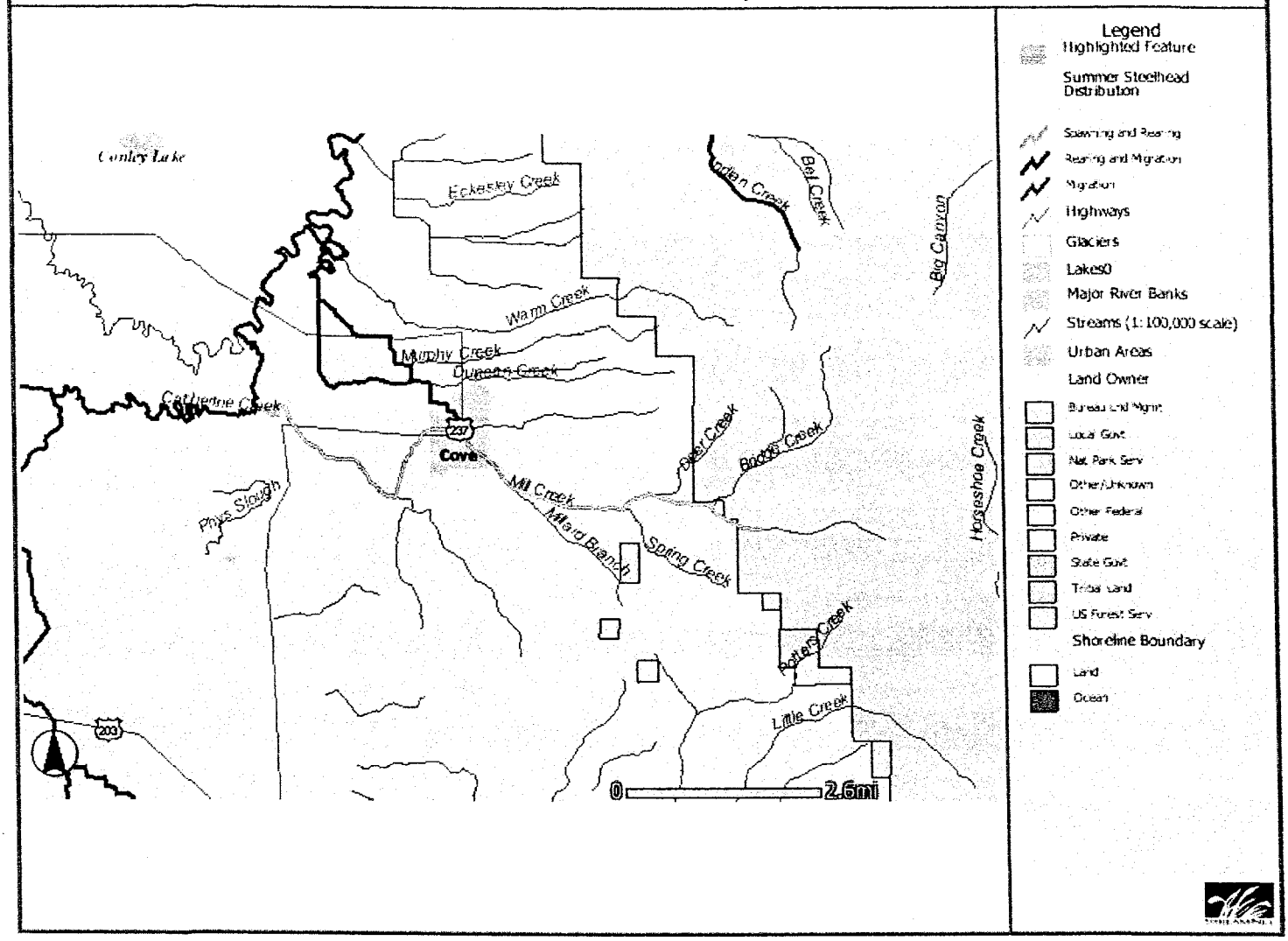
Sta 10+00 Looking @ Existing 18" CMP @ Str Site



Looking U.S. @ Str. Site & Headgate

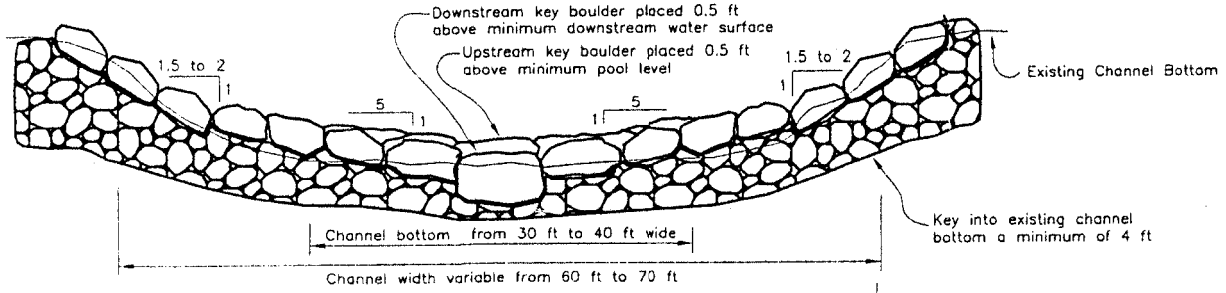


Fish Distribution Map



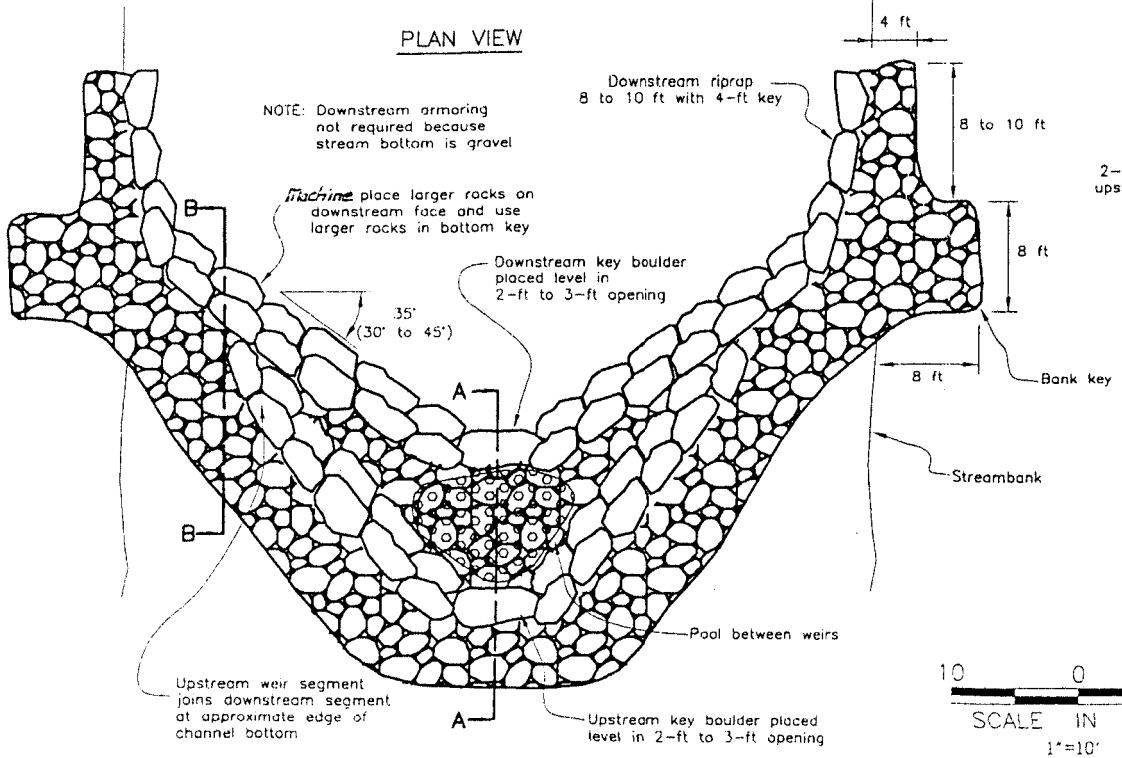
CROSS SECTION
(looking upstream)

NOTE: Key boulders to be largest boulders with flat surfaces placed approximately level on top forming a 2-ft to 3-ft opening

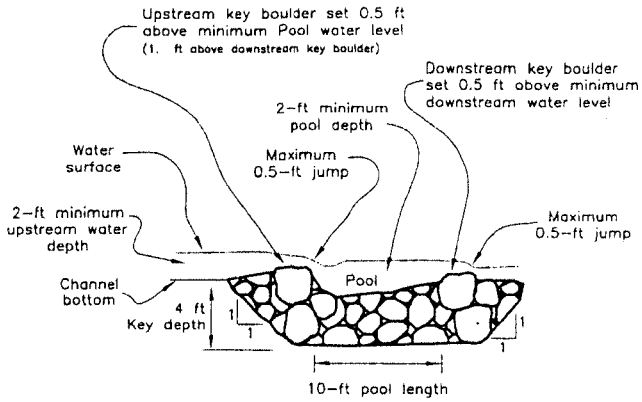


Rock Gradation	
Size (in)	% passing (dry-wt basis)
48	100
36	50 - 75
24	40 - 60
18	30 - 45
12	15 - 30
6	0 - 15

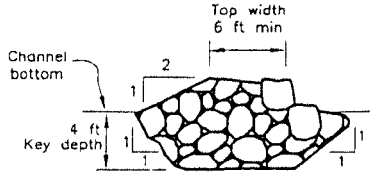
PLAN VIEW

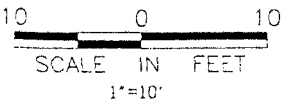


SECTION A-A



SECTION B-B





DETAILS

NORTH POWDER RIVER ROCK WEIR
Two-stage weir
BAKER COUNTY, OREGON

USDA NRCS Natural Resources Conservation Service

Designed J.Busch, A.Bahn, P.Pedone DATE 2-01
Drawn J. Busch 2-01
Checked A. Bahn
Approved
Title

File Name: Powder Rock Weir1
Drawing Number: XXXXXX
SHEET NO. OF