AI **212-6036** N

Received By OWEB
OCT 17 2011

OWEB Grant Cycle Date

Type in the information for Sections I and II.

Name of project: Smith Diversion Dam Fish Passage

OWEB funds requested: $20,250.00 **Total cost of project:** $30,250.00

Project location:

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

Watershed Name(s)	County or Counties
Walla Walla	Umatilla

Township, Range, Section(s) (e.g., T1N, R5E, S12)	Longitude, Latitude (e.g., -123.789, 45.613) (required for federal/state reporting)	Watershed code(s) – Please note the 10-digit hydrologic unit code, previously 5th Field HUC
T5N, R35E, S46	118.383, 45.938	1707010208

Applicant	**Project Manager**
Name: Brian Wolcott	**Name:** Wendy Harris
Organization: Walla Walla Basin Watershed Council	**Organization:** Walla Walla Basin Watershed Council
Address: 810 S. Main St. Milton-Freewater, OR	**Address:** 810 S. Main St. Milton-Freewater, OR
97862	97862
Phone: 541-938-2170	**Phone:** 541-938-2170
Fax: 541-938-2170	**Fax:** 541-938-2170
Email: brian.wolcott@wwbwc.org	**Email:** wendy.harris@wwbwc.org

Fiscal Agent	**Landowner(s)**
Name: Chris Sheets	☒ **Public: Agency:** Milton-Freewater Water Control District
Organization: Walla Walla Basin Watershed Council	☐ **Private: Name(s):**
Address: 810 S. Main St. Milton-Freewater, OR	
97862	
Phone: 541-938-2170	
Fax: 541-938-2170	
Email: chris.sheets@wwbwc.org	

CERTIFICATION:

I certify that this application is a true and accurate representation of the proposed work for watershed restoration and that I am authorized to sign as the Applicant or Co-Applicant. By the following signature, the Applicant certifies that they are aware of the requirements (***see Application Instructions***) of an OWEB grant and are prepared to implement the project if awarded.

Applicant Signature: BRWolcott Date: 10/6/2011

Print Name: Brian Wolcott Title: Coordinator

Co-Applicant Signature: _____ Date: _____

Print Name: _____ Agency: _____

Section II
PROJECT INFORMATION

1. **Abstract.** In approximately 200 words, 1) identify the project location, 2) state the watershed issue or problem to be addressed, 3) the proposed solution including the area or other measurable units to be treated, 4) any proposed effectiveness monitoring, and 5) how OWEB funds will be used.
The Smith berm fish passage project is located on the Walla Walla River as it flows past the town of Milton-Freewater. A riverbed headcut has migrated up to and stopped at a concrete structure that has served as a grade control stabilization and irrigation diversion structure for over 50 years. The headcut has become increasingly deeper, and after the January 2011 high water event, created a 1.75 foot jump for migrating ESA listed steelhead, spring chinook, redband trout and ESA listed fluvial bull trout. A small low flow channel along the left bank is providing marginal passage but needs to be reinforced to maintain its existance as a passage route. OWEB funds for this project will fund the design, and cost share the materials and labor needed to notch the concrete structure and install a roughened channel for approximately 500 feet to ensure fish passage at this location. ODFW and CTUIR staff will assist with design input and monitoring fish passage post construction.

2. **Has this project or any element of this project, ever been submitted in a previous application(s) to OWEB?** ☐ Yes ☒ No

   If yes, what was the application number(s)?

3. **Is this project, or any element of this project, a continuation of a previously funded OWEB restoration project(s)?** ☐ Yes ☒ No

   If yes, what was the grant number(s)?

4. **Is this project a result of a previously funded OWEB Technical Assistance project (s)?** ☐ Yes ☒ No

   If yes, what was the grant number(s)?

5. **Does this application propose a grant for a property in which OWEB previously invested funds for purchase of fee title or a conservation easement; or is OWEB currently considering an acquisition grant for this property?** ☐ Yes ☒ No

   If yes, what is the grant number(s)?

6. **Project Partners.** Show all anticipated funding sources, and indicate the dollar value for cash or in-kind contributions. Be sure to provide a dollar value for each funding source. If the funding source is providing in-kind contributions, briefly describe the nature of the contribution in the Funding Source Column. Check the appropriate box to denote if the funding status is secured or pending. In the Amount/Value Column, provide a total dollar amount or value for each funding source.

Funding Source Name the Partner and what their contribution is.	Cash	In-Kind	Secured (x)	Pending (x)	Amount/Value
OWEB	$20,250.00	$	☐	☒	$20,250.00
Landowner(s) or other partners:	$	$	☐	☐	$
Confederated Tribes of the Umatilla Indian Reservation	$10,000.00	$	☒	☐	$10,000.00
	$	$	☐	☐	$
	$	$	☐	☐	$
	$	$	☐	☐	$
	$	$	☐	☐	$
	$	$	☐	☐	$

	$	$	☐	☐	$
	$	$	☐	☐	$
	$	$	☐	☐	$
	$	$	☐	☐	$
Total Estimated Funds (add all amounts in the far-right Column):					*$30,250.00

* The total should equal the total cost of the project on page 1 of the application.

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

   If yes, explain:

8. **Are you requesting OWEB funds for Effectiveness Monitoring?** ☐ Yes ☒ No

   If you check "Yes", follow the instructions in Question R17

9. **Are you requesting OWEB funds for Plant Establishment?** ☐ Yes ☒ No

   If you check "Yes", follow the instructions in Question R18

Section III
SPECIFIC RESTORATION PROJECT ACTIVITY

These essay questions and their answers are designed to guide you and reviewers through a logical process of understanding and identifying the problem to "fixing" the problem and measuring for success. **Refer to the Application Instructions for clarification and helpful examples.**

You may use the application form to respond to the questions, using additional sheets of paper as necessary **OR** answer the questions on separate pages. Be sure to include the question numbers and text of the questions before you begin typing your answers to assist the reviewers in evaluating your application.

Use 8½" x 11" paper. A double-sided application and materials are optional except for oversize maps and designs or multiple sets for reviewers. All materials should be **single-spaced** wherever possible, **unstapled** and **unbound**, except for sets of maps/photos/designs (see Page 1 of the application instructions for assembling multiples for reviewers). Use a 12-pt type size to answer the questions and a 10-pt type size for the tables. Use bullets where appropriate. Use **bold face** and *italics* for emphasis only. Do not use color highlights for text emphasis or in tables as the highlight turns black when the application is scanned. If the project involves multiple sites, be specific for each.

R1. Contextual Overview

Provide the location and significance of the project including why that location was chosen and a brief explanation of the history of the issues leading to the project. Describe the project in the context of the landscape including the key water quality, water quantity, species, habitat, land use and resource management issues (physical or social) that are proposed to be addressed in that watershed. **See the Application Instructions for clarification.**

The Walla Walla River supports mid-Columbia River summer steelhead and bull trout, both listed as threatened species under the endangered Species Act. Mid-Columbia River spring Chinook salmon have been reintroduced to the Walla Walla River. The project location at Walla Walla river mile 44.9, typically has between 300 – 1000 non-hatchery steelhead adults and up to 400 chinook adults migrating upstream in Winter and spring. Over 400 bull trout of varying age classes also migrate up and down past this location. (based on Nursery Bridge fish ladder counts conducted by ODFW and CTUIR since the early 1990s). This reach of the Walla Walla River is also spawning and rearing habitat for summer steelhead, reintroduced spring Chinook salmon, redband trout, and rearing habitat for bull trout. The fish passage barrier is a necessary grade control component of the seven mile municipal levee constructed by the U.S Army Corps of Engineers in 1951 to protect the community of Milton-Freewater from flooding. The as-constructed drawings from 1951show the concrete structure as being a five feet tall concrete sill built at river channel bottom grade and spanning the active river channel and tying into the flood control levee on the left bank of the river. The grade control berm also functioned as an irrigation ditch diversion dam up until 2003 when the location was abandoned as a diversion site and irrigators were switched to other water sources. The riverbed downstream of the berm has been gradually eroding until last year when a significant headcut event carved out approximately 1- 2 feet of the riverbed for 5000 feet. The headcut was arrested by the berm, preventing further damage to the levee and preventing potential damage to the $2,000,000 fish passage facility less than a mile upstream at the Little Walla Walla River diversion. This site has been identified as a fish passage priority during lower flows by the CTUIR Walla Walla Fisheries Monitoring program and ODFW. This project will improve low flow fish passage in the Walla Walla River, and will potentially creat side channel habitat.

R2. Problems to be Addressed

Provide information specific to 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.** You may add narrative in addition to the table.

Specific Problem(s)	Root Cause(s) of the Problem
Fish Passage Barrier	Diversion Dam/ grade control structure
Lack of habitat complexity	Channelization for flood control

R3. Project Description

Using the table below, provide a description of the project that describes the restoration activities to occur (e.g., direct flow, remove 36" culvert, construct free spanning bridge, place 12 three log clusters between RM 44 and 52, etc.), including a description of the methodologies (e.g., juniper – burning or cutting; tree release – manual or herbicide; etc.) and the equipment planned for use. In addition, describe any Project Management functions/ activities necessary to implement the project (e.g., acquire permits or landowner approval; solicit bids, award contracts, etc.). The degree of detail should match the project complexity and technical difficulty to allow for full evaluation of technical viability. For projects involving multiple sites, be sure to identify and describe them separately, as appropriate. **This is not the place to describe the benefits of the project, but rather the specific elements of the proposed project.** You may add narrative in addition to the table.

Project Element	Proposed Action
Restoration Activity	
Design fish passage project	Hired engineering firm will work with WWBWC, permitting agencies, and Corps of Engineers flood control staff to develop a design that will pass fish and low flows and will not reduce or imperil the flood protection functions of the levee
Construct fish passage route	- If necessary and permittable, a low flow fish passage notch will be cut into the concrete diversion structure (the conceptual design proposes a 1 foot deep notch approximately 3 feet wide at two locations in the proximity of the left bank of the river, with one notch in line with an existing secondary channel and the other notch along the edge of an existing gravel bar). Rock ranging in size from 6 foot down to 2 foot will be placed in the excavated river bed to create two roughened channel above and below the notches to reduce grade issues for migratory fish. - The secondary channel will be enhanced with minor deepening and pool creation.
Add rows as needed	
Project Management Activity	
Permitting	- Necessary in stream work permits (Removal/Fill, 404, biological opinions will be obtained from the permitting agencies
Add rows as needed	

R4. Project Objectives

What are the proposed project objectives? Provide specific objectives based on the location, size and significance of the project and provide information on how the objectives could be evaluated. The measurements should be able to be reported to document successful implementation. **See the Application Instructions for the distinction between project objectives and achievement of goals.**

Project Element	Specific Objectives	Measure for Evaluation
Fish Passage	Fish Passage	Fish are able to migrate past site at all flows
Habitat Complexity	Diversify habitat for fish cover, juvenile fish rearing	Fish presence sampling

R5. Project Design

a) Provide a list of qualifications and experience you will require for the project designer. If a project design has been completed, identify the designer and what qualifications and experience they have.

The project requires experience and skills in water resource engineering, fluvial geomorphology, hydraulic modeling, and fisheries biology. The designer(s) will be expected to develop a project that will withstand a 100-year flood and be maintenance-free while meeting state and federal fish passage standards.

The WWBWC will solicit input on the project from ODFW CTUIR, NOAA , USFWS staff. GeoEngineers, Inc. has been chosen as the design firm based on their assessment work of the Milton-Freewater Levee and recent completion of the designs for the Lampson Levee Setback project.

GeoEngineers multidisciplinary team includes a full range of expertise necessary to provide a holistic design approach. Our team of ecohydraulic experts has a proven history in designing and optimizing appropriate, sustainable, environmentally sensitive stream and habitat restoration projects. We have a 30-year record of delivering innovative solutions for our clients. With more than 30,000 projects completed in Oregon, Idaho and Washington, we are one the most successful environmental and geotechnical engineering firms in the region. Our team includes top-notch fisheries science and experts in engineering and modeling, process geomorphology, stream restoration, sediment transport analysis, permitting and project planning, design and geotechnical engineering.

Jeff Fealko, PE, Senior Water Resources / Design Engineer

Jeff is a senior water resources design engineer, specializing in natural channel design, modeling existing and proposed conditions and developing alternative analyzes and conceptual plans, material quantities and associated costs. Jeff is immersed in river restoration/enhancement projects, which include stream channel design; fish passage; hydrologic and hydraulic modeling; habitat design, sediment transport, hydraulic design of culverts; gravity and pressurized water line design; floodplain/ floodway modeling; stormwater; civil engineering design; and construction inspection. His technical background and computer modeling proficiency continue to open up new and exciting doors in the world of water resources and river restoration. In addition, his background and history in true hard civil design and construction inspection has facilitated the process between concept and final construction design. As a lifelong fisherman, his knowledge of rivers, fish and fish habitat is an invaluable asset and a continual instrument utilized within his engineering toolbox.

Jason Scott, FP-C, Associate Fisheries Scientist

Jason is a professional biologist with over 18 years of experience providing expertise in aquatic ecology. Over his career, Jason has completed hundreds of habitat inventories, over 60 aquatic habitat restoration projects and nearly 150 stream/watershed assessments; including award-winning work. Jason brings a unique perspective on native salmonids gained from his work on isolated resident populations of bull trout in Montana, Idaho, and Washington to anadromous migrations of steelhead, Chinook and coho throughout the Columbia, Rogue, and Klamath basins. Jason has helped develop Habitat Suitability Criteria (HSC) and assembled an extensive library of habitat related literature. Further, he has developed study designs, collected data, and managed ecological research projects, which include application of PHABSIM models that resulted in WUA estimates then prescriptions to improve habitat based on those results. Jason has worked for and with a wide range of tribes, government agencies, private non-profit organizations, and private-sector clients in a scientifically collaborative environment. Jason genuinely cares about the health of our natural resources and applies a results oriented approach to his projects.

Mike Homza, PE, Associate Water Resources / Design Engineer

Mike is a civil engineer with more than 26 years of experience in the planning, analysis, and design of water resource projects. He has been the lead design engineer for over 40 significant stream/river restoration projects throughout the United State. In addition, he has analyzed over 450 streams and rivers throughout the Pacific Northwest and Columbia Basin for a wide range of projects including habitat enhancement, flood mitigation, bridge design and scour mitigation. Mike specializes in developing and analyzing enhancement design alternatives in terms of their costs and benefits to ensure our projects are practical, geomorphically/ecologically appropriate and economical. His ability to look at the benefits and challenges of design alternatives will be crucial throughout this project. In the past five years, Mike's projects have won a total of 15 awards from numerous professional societies, agencies and conservation groups.

Leif Embertson, PE, Water Resource Engineer

Leif is a river engineer with truly unique experience in and knowledge of riverine and aquatic environments emanating from education, training, project experience, and extensive personal interest in the field. His combined technical and personal experience produces deep understanding of the fluidity, variability and complexity of long-term processes within aquatic systems. Leif's applications of hydrology, hydraulics, floodplain analysis, geomorphology, bridge hydraulics, scour analysis, river restoration, and civil engineering design have served many clients well on projects across the western United States. He was the engineer-of-record for a recent ACEC award-winning project on the

Entiat River that improved fish habitat and passage, quickly progressing from project kickoff to analysis, design, full PS&E, permitting, and construction—all within six months. Leif is both a practitioner and instructor in hydraulic modeling. His analyses and designs use complex 1- and 2-Dimensional hydraulic modeling applying a suite of available programs informed by his personal experiences and expertise in fluvial geomorphology, hydrology, stream stability analysis, sediment transport analysis and stable channel design.

b) Describe the design criteria used or proposed and how those criteria take into consideration natural events and conditions (e.g., culvert design to 100-year flood event, wood placement to readjust with higher than bankfull flows, cultivation to retain at least 75% stubble, 4-strand fence to allow for wildlife passage, etc.).

Design criteria will take into consideration fish passage velocities and fish jumping capabilities. Channel stability, and no floodplain rise will also be shown as the project is located within a municipal flood control levee. The project will be designed to withstand a 100 year flood event, utilizing the HEC-RAS hydraulic modeling, Lidar, and topographical surveys which have been recently completed.

R6. Design Alternatives

Were alternative designs or solutions considered? (check one) **X Yes** ☐ **No**

If yes, explain why the design or approach proposed was chosen. If no, explain why alternative approaches were not explored.

There has been discussion about removing the old diversion dam; however its function as a grade control structure is critical for flood control function and for stabilizing a large fish passage structure less than a mile upstream.

R7. Proposed Project Schedule

Use the table below to show the anticipated schedule for the project. Add or change the list of project elements to fit your project. **See the Application Instructions for clarification and an example.**

There will be an attempt to fast track this project as the site is an increasingly worsening fish passage barrier. The goal is completion by the end of September 2012, however permitting delays may necessitate construction in summer 2013.

Project Elements	Start Date	End Date	Description
Engage community and technical support	July 2011	October 2011	Present issue, photos, site tours with technical staff from agencies and community members
Complete conceptual designs	Sept 2011	Oct 2011	Conceptual designs completed
Complete designs	November 2011	June 2011	Complete designs, hydraulic analysis, and costings
Permit Applications	May 2011	July 2012	Will try to complete permitting in time for summer 2012 in stream work window, if not successful then construct in summer 2013
Bid Solicitation	July 2012	July 2012	Bids requested from contractors
Contracting	July 2012	July 2012	Contractor selected, contract developed
Materials Acquisition	August 2012	August 2012	Rock purchased and stockpiled
Construction	August 2012	September 2012	Minimal Clearing of vegetation to expose work area, excavation, concrete cutting, rock placement
Project Inspection	September	September	By engineers and state fish biologist

	2012	2012	
Post Project Implementation Review	October 2012	August 2013	Design, permitting, and construction costs will be compared with estimates, channel stability and fish passage at site will be observed
Project Maintenance	August 2013	August 2013	Maintenance is unlikely to be needed, but if required will occur during instream work window, July 1- September 30
Add rows as needed			

R8. Salmon/Steelhead Populations Targeted and Expected Benefits to Salmon/Steelhead

The information provided will be used by OWEB to better meet federal and state reporting requirements. Completion of this section is required but will not be used to evaluate this application for funding.

☐ This project is **NOT** specifically designed to benefit salmon or steelhead.

► **If you check this box, STOP here and GO TO Question R9.**

Targeted Salmon/Steelhead Populations: Select one or more of the salmon ESUs (Evolutionary Significant Unit) or steelhead DPSs (Distinct Population Segment) that the project will address/benefit. For species where the ESU/DPS name is not known or determined, use the species name with unidentified ESU (e.g., Chinook salmon – unidentified ESU). Additional information on the designation and location of the salmon/steelhead populations can be found at http://www.nwr.noaa.gov/ESA-Salmon-Listings/Salmon-Populations/Maps/Index.cfm.

	Chinook Salmon (*Oncorhynchus tshawytscha*)		**Coho Salmon** (*O. kisutch*)
☐	Deschutes River summer/fall-run ESU	☐	Lower Columbia River ESU
☐	Lower Columbia River ESU	☐	Oregon Coast ESU
X	Mid-Columbia River spring-run ESU	☐	Southern Oregon/Northern California ESU
☐	Oregon Coast ESU	☐	unidentified ESU
☐	Snake River Fall-run ESU		**Steelhead** (*O. mykiss*)
☐	Snake River Spring/Summer-run ESU	☐	Klamath Mountains Province DPS
☐	Southern Oregon and Northern California Coastal ESU	☐	Lower Columbia River DPS
☐	Upper Klamath-Trinity Rivers ESU	X	Middle Columbia River DPS
☐	Upper Willamette River ESU	☐	Oregon Coast DPS
☐	unidentified ESU	☐	Snake River Basin DPS
	Chum Salmon (*O. keta*)	☐	Washington Coast DPS (SW Washington)
☐	Columbia River ESU	☐	Upper Willamette River DPS
☐	Pacific Coast ESU	☐	Steelhead/Trout unidentified DPS
☐	unidentified ESU		

Expected Benefits: Write a brief description of the goals and purpose of the project and how it is expected to benefit salmon/steelhead or salmon/steelhead habitat. This answer should be no longer than 2000 characters, which is approximately 330 words. **See Application Instructions for examples and ideas on how to calculate the number of words or characters in your answer.**

Steelhead, Chinook salmon, bull trout, and redband trout will have improved fish passage at low flows once this project is complete. There is also the potential to increase side channel habitat for juvenile salmon and steelhead rearing. Both these improvements will increase spawning success and juvenile survival.

R9. Project Relationship to Regional Priorities

Explain whether the project implements a regional plan (e.g., ESA Recovery Plan, Coastal Coho Assessment, NWPCC Subbasin Plan, Groundwater Management Area). Specifically identify the relationship between the proposed project and the OWEB Basin Priorities. Priorities can be found on the OWEB website at: www.oregon.gov/OWEB/restoration_priorities.shtml. **(See the Application Instructions for helpful links to various regional plans.)**

This project implements fish passage a priority action in the following plans:

- 2004 Walla Walla Subbasin Plan – passage is an imminent threat to ESA –Threatened steelhead and bull trout in this EDT priority reach. Chinook salmon passage is also a priority.
- 2003 Walla Walla Basin Watershed Council Strategic Action Plan – Address passage barriers and assist landowners in avoiding ESA "take" liability
- 2002 Draft Bull Trout Recovery Plan - Passage issues are priority one
- 2005 Walla Walla River Temperature TMDL (Oregon portion) – measures that improve channel stability and reduce sedimentation are one of three tools to reduce temperature in the Walla Walla River. The other two being shade and increased streamflow
  2009 Mid-Columbia Steelhead Recovery Plan – Address passage barriers

R10. List each component or activity of the project that requires a permit(s) and/or license(s) from a local, state or federal agency or governing body.

Use the table provided to list the activities and permit(s)/license(s) including the entity issuing the permit(s)/license(s). Every project will vary in the number and types of permits and licenses needed. In Column 1 and in separate rows, list the project activities requiring a permit or license. In Column 2, provide the name of the permit or license. In Column 3, provide the name of the entity issuing the permit or license. **See Application Instructions pages 9-11 for clarification and examples before completing the table.**

Project Activity Requiring a Permit/License	Permit or License Name	Entity Issuing Permit or License
Instream Construction	Removal/Fill Permit	Oregon Dept. of State Lands
Instream Construction	Removal/Fill 404 permit	US Army Corps of Engineers
Work in ESA Stream	Biological Opinion	USFWS
Work in ESA Stream	Biological Opinion	NOAA Fisheries
Add rows as needed		

We will try for a Programmatic Exemption with USFWS and NOAA, but may need to get a Biological opinion from both agencies.

R11. Project Relationship to Watershed Processes and Functions

The restoration and protection of natural watershed process is the foundation of achieving watershed health. Since natural watershed processes have been eliminated, altered or reduced in many areas, habitat restoration activities are the primary method for reintroducing the necessary functions to watersheds that have been altered due to past management practices and/or disturbance events. Restoration activities are intended to address the watershed functions necessary to support natural processes that are indicative of healthy watersheds. This includes, but is not limited to improving water quality, water quantity, habitat complexity, flood plain interaction, vegetation structure, and species diversity.

OWEB wants to be able to track how restoration projects are addressing watershed process and function. Please check all the boxes below that apply to your restoration project. You may add narrative in addition to checking the boxes.

	Project Element	Narrative
X	Stream complexity	Creation of a side channel fish passage route will result in side channel habitat, a feature that is very limited in this channelized reach of the Walla Walla River
☐	Riparian vegetation structure	
☐	Species diversity	
☐	Vegetative ground cover	
☐	Floodplain connectivity	
X	Species migration patterns	
☐	Sediment transport	
☐	Nutrient cycling	
☐	Water quality	
☐	Water quantity	

☐	Water storage	
☐	Hydrologic cycle	
☐	Other (please describe)	

R12. Other Related Conservation Actions

a) Explain how the project complements other efforts under way or completed in the watershed. Identify other restoration, technical assistance, monitoring, assessment or outreach projects, conservation actions and ecological protection efforts in the watershed and explain how this project relates to those actions.

This project complements multiple flow restoration projects, fish passage projects, and fish habitat projects that have occurred or are occurring on the Walla Walla River upstream and downstream from this site.

b) If the project is a continuation of previously completed activities, describe the results of the previous project(s) and identify what you have learned from the implementation of similar project(s).

An OWEB Small grant in 2003 moved the last of the Smith Ditch users to a new water source, eliminating the need for the Smith irrigation ditch to take water out of the Walla Walla River. More recently, an EPA 319 funded Milton-Freewater Levee Assessment has been identifying opportunities and needs for levve setback, fish passage, channel remeanders, and grade control projects within the 7 miles of the Milton-Freewater municipal levee system. The initial topographical surveys, Lidar flight, and hydraulic modeling of the river through this reach was completed through that 319 project. There is the possibility of creating a remeander through the ¼ mile immediately below this site.

R13. Project Inspection

Identify who will inspect and sign off on the completed project.

Name of Person & Agency/Organization	*Telephone Number*	*Email Address*	*Project Element Inspected*
Brian Wolcott, WWBWC	*541-938-2170*	*brian.wolcott@wwbwc.org*	*Construction completed*
Mike Homza, GeoEngineers,inc		mhomza@geoengineers.com	*Project built as designed*
Bill Duke	*541-276-2344*	william.b.duke@state.or.us	*Confirm Fish passage criteria met*

R14. Outreach

If your project proposal includes outreach activities (e.g., a site tour for local citizens, landowner meetings, informational materials), please describe the proposed activities and products and why they are necessary for the overall success of the restoration proposal. **See the Application Instructions for clarification of eligible outreach costs.**

Regional review teams will evaluate the appropriateness of proposed outreach activities with respect to their necessity for success of the restoration project, budget, and other factors.

The project will continue to be described at WWBWC meetings, Milton-Freewater Water Control District meetings, and other public meetings. The site's proximity to town will increase the ease of conducting tours to the site before after and during construction. These outreach activities will be completed by the WWBWC coordinator utilizing OWEB Watershed Council Support funding.

R15. Project Maintenance and Reporting

Use the table below to document how the project will be maintained over time. State who will maintain the project. Identify their affiliation and provide contact information. In addition, please indicate who will conduct Post-Implementation Status Reporting following project completion.

Name of Person & Agency/Organization and Addresses	Telephone Number Email Address	What will be done and for how long?
Brian Wolcott, WWBWC	541-938-2170 brian.wolcott@wwbwc.org	fish passage route inspection, Reporting

R16. Budget Development

There are a number of assumptions used to develop any budget. This does not mean you must provide a line by line description of costs. Use this response to provide a clear understanding of what the budget estimate was based on.

a) Explain how costs were determined for the budget elements. Describe if contractor conversations, past projects or other cost figures were used for each major element of the budget. This is particularly important for lump sum elements in the budget. For project management costs describe the time and activities that would be involved.

   The budget was derived from site visits with engineer and a construction contractor, and 3 rock quotes from local quarries.

b) If there are any unusual cost factors, explain them. For example, if the fencing costs are unusually high because of steep, rocky terrain and unroaded access, this is the place to explain the cost elements on the budget page.

   No unusual cost factors are anticipated.

- **R17. Effectiveness Monitoring.** If you plan to conduct Effectiveness Monitoring beyond post-implementation status reporting and you are requesting more than $3,500 in OWEB funds to support these EM activities, complete the R17 Effectiveness Monitoring Application Insert, print it out and add after Question R16. See the R17 Effectiveness Monitoring Insert Instructions for clarification.

- **R18. Planting Activities.** If you are proposing a Riparian, Upland or Wetland Planting activities and you are requesting more than $3,500 in OWEB funds for planting activities and/or for post-planting activities that are necessary for long-term survival of the plantings, you **must** complete the R18 Planting Activities Insert, print it out and add after Question R17 or R18 as appropriate. Please see the definition of "plant establishment activities" in R18. If you are asking for $3,500 or less, you may answer the questions if you would like the reviewers to have additional information on the planting component of the project. See the R18 Planting Activities Application Insert Instructions for clarification.

Section IV
WATERSHED RESTORATION BUDGET

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

Totals automatically round to the nearest dollar

Itemize projected costs under each of the following categories.	A **Unit Number** (e.g., # of hours)	B **Unit Cost** (e.g., hourly rate)	C **In-Kind Match**	D **Cash Match Funds**	E **OWEB Funds**	F **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 not be disbursed for project components requiring permits or licenses until those permits and licenses have been received by OWEB. However, funds may be released for non-permitted project components whose implementation is not affected by the required permits.						
Design Coordination - Geo Engineers	3 hrs	150			450	450
Permitting Consult - Geo Engineers	3 hrs	135			405	405
Design - Geo Engineers	24 hrs	150			3,600	3,600
Removal Fill Permit	1 ea	250			250	250
		SUBTOTAL (1)	0	0	4,705	4,705
PROJECT MANAGEMENT. Includes actual in-house staff or contractors who coordinate project implementation. Line items should identify who will be responsible for project management and their affiliation.						
WWBWC Project Management/Permitting	90 hrs	$33			2,970	2,970
Construction Oversight - Geo Engineers	14 hrs	$150			2,100	2,100
						0
		SUBTOTAL (2)	0	0	5,070	5,070
IN-HOUSE PERSONNEL. Includes *only* actual in-house staff costs for project implementation.						
WWBWC Surveying/Mapping	24 hrs	$40			960	960
						0
		SUBTOTAL (3)	0	0	960	960
CONTRACTED SERVICES. Labor, supplies, and materials to be provided by non-*staff* for project implementation.						
5'-6' boulders w/ 2'-3' rock fill	60 cyd	$60			3,600	3,600
Mobilization	1	$791			791	791
Construction Staking	24 hrs	25			600	600
Dewatering	1	4000		4,000		4,000
Clearing/Grubbing	20	25			500	500
Rock placement	52 hrs	150		6,000	1,800	7,800
		SUBTOTAL (4)	0	10,000	7,291	17,291
TRAVEL. Mileage, per diem, lodging, etc. Must use current State of Oregon rate.						
Surveying Team	8 miles	0.51			4	4
Project Manager	40 miles	0.51			20	20
		SUBTOTAL (5)	0	0	24	24
SUPPLIES/MATERIALS. Refers to items that are "used up" in the course of the project. Costs to OWEB must be directly related to on-the-ground work.						
						0
						0
						0
		SUBTOTAL (6)	0	0	0	0
EQUIPMENT. List equipment costing **$250 or more per unit**. Useful life of equipment is for the duration of project and will be used only for this project. Identify any portable equipment (items with useful life of generally 2 years or more). Must be property of a governmental entity, tribe, watershed council, SWCD, institution of higher learning or school district						
						0
						0

	A	B	C	D	E	F
Itemize projected costs under each of the following categories.	**Unit Number**	**Unit Cost**	**In-Kind Match**	**Cash Match Funds**	**OWEB Funds**	**Total Costs**
	(e.g., # of hours)	(e.g., hourly rate)				(add columns C, D, E)
		SUBTOTAL (7)	0	0	0	0
OUTREACH. Refers to informational and promotional activities associated with the project.						
						0
						0
		SUBTOTAL (8)	0	0	0	0
[Add all subtotals, (1-8) above]		**CATEGORY TOTALS (9)**	0	10,000	18,050	28,050

	A	B	C	D	E	F
Itemize projected costs under each of the following categories.	**Unit Number**	**Unit Cost**	**In-Kind Match**	**Cash Match Funds**	**OWEB Funds**	**Total Costs**
	(e.g., # of hours)	(e.g., hourly rate)				(add columns C, D, E)

FISCAL ADMINISTRATION *Totals automatically round to the nearest dollar

FISCAL ADMIN. Not to exceed **10% of Category Totals (9) Funds**. Compute by multiplying by 0.10 or less. 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.					
Administration				1,800	1,800
					0
SUBTOTAL (10)	0	0		1,800	1,800
POST-IMPLEMENTATION STATUS REPORTING. Costs associated with annual reporting requirements typically required for each grant **(see Application Instructions).**					
Monitoring Reports 2 /yr	200			400	400
					0
SUBTOTAL (11)	0	0		400	400
[Add the two Subtotals (10 & 11)] TOTAL (12)	0	0		2,200	2,200

RESTORATION BUDGET TOTAL *Totals automatically round to the nearest dollar

RESTORATION BUDGET TOTAL (13) **[Add Category Totals (9) and Fiscal/PISR Total (12) from above]**	0	10,000	20,250	30,250

EFFECTIVENESS MONITORING BUDGET TOTAL

EFFECTIVENESS MONITORING BUDGET TOTAL (14) **This only applies if you are doing Effectiveness Monitoring; see Application Instructions and R17. Transfer Budget Total (11) from the Effectiveness Monitoring Budget Insert.**	0	0	0	0

PLANT ESTABLISHMENT BUDGET TOTAL

PLANT ESTABLISHMENT BUDGET TOTAL (15) **This only applies if you are doing a planting project; see Application Instructions and R18. Transfer Budget Total (9) from the Plant Establishment Budget Insert.**	0	0	0	0

PROJECT BUDGET TOTAL *Totals automatically round to the nearest dollar

PROJECT BUDGET TOTAL **[Add (13), (14), AND (15) as applicable]**	0	10,000	20,250	30,250

ATTACHMENT A

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 for OWEB funds requested 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. In the table below, the match may be identified as Effectiveness Monitoring (EM), Plant Establishment (PE) or Other (OTHER) Dollar Value. **If you are not requesting funds from OWEB to support effectiveness monitoring or plant establishment, disregard the EM column or the PE column and use only the OTHER column.**

EFFECTIVENESS MONITORING (EM): If you are requesting more than $3,500 in OWEB funds to support Effectiveness Monitoring activities as part of a Watershed Restoration Grant Application and filling out information for Question R17, you must include matching funds which will be used as match for the effectiveness monitoring portion of the project. This is identified in the table below as EM Dollar Value.

PLANT ESTABLISHMENT (PE): If you are requesting more than $3,500 in OWEB funds to support Plant Establishment as part of a Watershed Restoration Grant Application and filling out information for Question R18, you must include matching funds which will be used as match for the Plant Establishment portion of the application. This is identified in the match form table as the PE Dollar Value.

If you have questions about whether your proposed match is eligible or not, visit our website at 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: Smith Diversion Dam Fish Passage

Applicant: Walla Walla Watershed Council

Match Funding Source	Type (√ one)	Status (√ one)**	EM Dollar Value	PE Dollar Value	OTHER Dollar Value	Match Fundigg Source Signature/Date**
Confederated Tribes of the Umatilla Ind. Res.	☒ cash ☐ in kind	☐ secured ☒ pending			$10,000	10/13/201
	☐ 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 EM, PE or OTHER Dollar Value Column(s).

ATTACHMENT B

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 does not have to be completed and signed at the time of application. The completed and signed 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: Walla Walla Basin Watershed Council

Project Name: Smith Diversion Dam Fish Passage

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 X been made for the local approvals checked above.

THIS FORM WILL BE COMPLETED AND SUBMITTED TO UMATILLA COUNTY ONCE WE HAVE A DESIGN AND DEMONSTRATION OF NO FLOODPLAIN ELEVATION RISE. BRIAN WOLCOTT, WWBWC

* Signature of Local Official _____ Date _____

Print Name: BRIAN WOLCOTT Phone: _____

Title: DIRECTOR - WALLA WALLA BASIN WATERSHED COUNCIL Email: _____

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

ATTACHMENT C

PUBLIC RECORD CERTIFICATION

Oregon Administrative Rule 695-005-0030(4) states that "All applications that involve physical changes or monitoring on private land must include certification from the applicant that the applicant has informed all landowners involved of the existence of the application and has also advised all landowners that all monitoring information obtained on their property is public record. If contact with all landowners was not possible at the time of application, explain why."

INSTRUCTIONS: **All applicants must complete Part One. In Part One, if you check the first box, skip Part Two and sign and date in the signature box below. If you check the second box, you must complete Part Two and sign and date in the signature box below.**

PART ONE

☐ Public land only (STOP: go to signature box and complete)

☒ Private land only, or a mix of public and private land (complete Part Two and sign and date in the signature box)

PART TWO

☐ I certify that I have informed all participating private landowners involved in the project of the existence of the application, and I have advised all of them that all monitoring information obtained on their property is public record. The following is a complete list of all participating private landowners.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

☒ I certify that contact with all participating private landowners was not possible at the time of application for the following reasons: When a design is complete we will be able to show the Corps of Engineers, the Milton-Freewater Flood Control District, and Bill Lewis, the proposed construction project and will then submit this signed form.

Furthermore, I understand that should this project be awarded, I will be required by the terms of the OWEB grant agreement to secure cooperative landowner agreements with all participating private landowners prior to expending Board funds on a property.

APPLICANT/CO-APPLICANT SIGNATURE

Applicant Signature	Date
Print Name: BRIAN R. WOLCOTT	Title
Co-Applicant Signature	Date
Print Name	Agency

ATTACHMENT D

RESTORATION METRICS FORM

OWEB receives a portion of its funds from the federal government and is required to report how its grantees have used both federal and state funds. The information you provide in the following form will be used for federal and state reporting purposes.

Please complete all portions of the form below as they apply to your project and submit all pages (do not exclude any pages). Please provide specific values, do not enter values like "2-3" or "<100". Enter your best approximation of what the project will accomplish.

If you have any questions, please contact Cecilia Noyes, OWEB Performance Analyst/Reporting Specialist at 503-986-0204 or cecilia.noyes@state.or.us .

Section 1 - Project Overview

Answer all five 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 soil conditions.*	

3. **Total Acres Treated:**____ **Total Stream Miles Treated:**0.1 *(**do not include** upstream stream miles made accessible to fish with passage improvements)*

4. **Project Identified in Plan or Watershed Assessment:** List the primary watershed/subbasin plan(s) or assessment(s) in which this project type is identified as a priority. The plans identified in Section III, question #R9 should include the plans or assessments listed below. Attach additional page, if needed.

Title	Author(s)	Date
Mid Columbia Steelhead Recovery Plan	NOAA Fisheries/ODFW	2009

5. Project Monitoring: All OWEB funded restoration projects require post-implementation status reporting including photo point monitoring. Please indicate below: 1) the location of the monitoring activities relative to the project, including photo point locations, 2) whether effectiveness monitoring is planned, and 3) whether additional monitoring will be conducted for this project.

5.1) Identify the location for the planned monitoring activities relative to the restoration project location. Check as many boxes as apply.

☒ Onsite	☒ Downstream	☒ Upstream	☐ Upslope

5.2) ☒ Effectiveness monitoring will be conducted for this project, this can be selected regardless of whether the effectiveness monitoring is funded by OWEB (refer to definition of effectiveness monitoring in the Application Instructions under R16).

5.3) Will this project conduct monitoring activities beyond the required post-implementation status reporting and photo point monitoring?

☒ Yes ☐ No If you answer yes, select the monitoring activities below, if you answer no proceed to Section 2.

Check all proposed monitoring activities

☒ Adult Fish presence/absence/abundance/distribution survey(s)	☐ Spawning surveys
☒ Juvenile Fish presence/absence/abundance/distribution survey(s)	☐ Upland vegetation (Presence/Absence)
☐ Instream Habitat surveys	☐ Water quality
☐ Macroinvertebrates	☐ Water quantity
☐ Noxious weed (Presence/Absence)	☒ Other (explain): Fish Passage jump criteria
☐ Riparian vegetation (Presence/Absence)	

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 entered in this form should be what you* ***plan*** *to do with the project. Data about* ***completed*** *projects will be reported at the end of the project to the Oregon Watershed Restoration Inventory (OWRI).*

For each activity type where you enter metrics, ***estimate*** *the percentage of the total cost of the project (OWEB and all other funding sources, shown on page 1 of this application) that applies to the activity. The sum of all of the activity cost percentages should equal 100%. Please distribute all administrative, project management and other general project costs among the various project activities when estimating percentages.*

Example*: A project will remove a fish passage barrier, place large boulders instream, and plant a riparian buffer. You would enter the appropriate metrics into the Fish Passage, Instream Habitat, and Riparian Habitat activity sections of this form. Then, estimate the percentage of the total cost of the project for each activity. For instance: 20% towards Fish Passage activities, 25% towards Instream Habitat activities, and 55% towards Riparian Habitat activities.*

Fish Screening Projects: *Projects that result in the installation or improvement of screening systems that prevent fish from passing into areas that do not support fish survival, for example into irrigation diversion channels.*

____ % Estimate the percentage of total cost of the project applied to fish screening activities

____ # Estimate the number of irrigation diversions with new screens installed (do not count diversions where existing screens are replaced)

____ cfs Estimate the cubic feet per second of flow influenced by new screen(s) installed (to nearest 0.01 cfs)

____ # Estimate the number of irrigation diversions with existing screens replaced, repaired or modified

Fish Passage Improvement: *Projects that improve fish migration by addressing a migration barrier problem.*

Complete sections A-E as they apply to the proposed project. Projects that improve fish passage at road crossings should complete both sections A (define the problem) and B (define the treatment). Non-road crossing improvements are reported in sections C and D. Section E should be completed for all fish passage improvement projects. Refer to the application instructions for additional information and examples.

A. Road Crossings – Define *Existing* Fish Passage Problem

1. Culverts hindering fish passage	____ # crossings
2. Bridges hindering fish passage	____ # crossings
3. Fords hindering fish passage	____ # crossings

B. Road Crossings – Define the Fish Passage *Improvements* to be implemented by this project

1. Culverts installed/improved - *Improvements include installing baffles inside culverts or installing/improving engineered bypasses (e.g. weirs) directly below a culvert outlet to improve passage.*	____ # crossings	____ str. mi with improved access*
2. Bridges installed/improved - *Improvements include installing/improving engineered bypasses (e.g. weirs) directly below a bridge crossing to improve passage.*	____ # crossings	____ str. mi with improved access*
3. Fords installed/improved	____ # crossings	____ str. mi with improved access*
4. Road Crossings removed and not replaced	____ # crossings	____ str. mi with improved access*

**Estimate stream miles in the main channel and tributaries made more accessible above the crossing(s) (to nearest 0.01 mile). If a barrier exists upstream, report the length made accessible up to that next upstream barrier.*

C. Fish Passage Barriers – Other than Road Crossings

1. Type(s) of barriers to be treated/removed to improve fish passage.	☒ Diversion Dam ☐ Push-up Dam ☐ Wood or Concrete Dam ☐ Weir (not associated with a road crossing) ☐ Logs ☐ Debris ☐ Tidegates Other (explain) ____

D. Fish Ladders or Engineered Bypasses (not associated with Road Crossings)

1. Fish ladders will be installed/improved	____ # fish ladders to be installed/improved
2. Engineered bypasses will be installed/improved. *This includes weirs, rock boulder step pools, and chutes constructed/roughened in bed rock. Do not count engineered bypasses located at a road crossing to improve passage at the crossing. These types of improvements should be identified above in section B as a Road Crossing Fish Passage Improvement.*	1 # engineered bypasses to be installed/improved

E. Fish Passage Summary Metrics

1. 100 % Estimate the percentage of total cost of the project applied to fish passage improvements

2. 56 mi Estimate the total stream miles that will be made more accessible in the main channel and tributaries above the project (to nearest 0.01 mile). *This metric summarizes the stream miles for all of the proposed passage improvements (defined above in Sections A-D). If a barrier exists upstream of the project, report the length made accessible up to that next upstream barrier.*

3. 1 # Estimate the total number of barriers (this includes road crossings, diversion dams, push up dams, wood or concrete dams, weirs, tidegates, etc.) to be removed or altered to improve passage.

4. ____ % Estimate the percentage of fish passage activity costs applied to tidgates. If you do not select tidegate as a type of fish passage barrier for question C.1, leave this value blank. Example: Your project will remove a tidegate. You estimated that 100% of the total project cost will apply to fish passage improvements and one quarter of the fish passage improvements costs will apply to the tidegate removal, you would report 25%.

Instream Flow: *Projects that maintain and/or increase the instream flow of water.* Irrigation improvements that are primarily designed to improve water quality should be reported under Upland – Agriculture Management Activities. Check all proposed activities.

☐ Irrigation practice improved to increase instream flows (e.g. install diversion headgate, replace open ditches with pipes)	☐ Water flow gauges installed to measure water use
☐ This project will dedicate instream flow.	☐ Other (explain): _____

_____ % Estimate the percentage of total cost of the project applied to instream flow activities

_____ mi. Estimate the miles of stream where increased flow is the result of decreased/eliminated water withdrawals

_____ cfs Estimate the increase in flow of water in the stream as a result of conservation effort (cubic feet per second)

_____ mm/dd/yyyy Initial start date of irrigation practice improvement

_____ mm/dd/yyyy Final end date of irrigation practice improvement (if improvement is permanent enter 12/31/9999)

Instream Habitat: *Projects that are designed to improve instream habitat conditions.*

Check all proposed activities.

☐ Channel reconfiguration and connectivity (e.g., creating instream pools, meanders, improving floodplain connectivity, off-channel habitat)	☐ Spawning gravel placement
☐ Channel structure - large wood placement	☐ Plant Removal/control (instream) List scientific names of plants _____
☐ Channel structure - boulder placement	☐ Beaver introduction
☐ Channel structure placement (other than large wood or boulder placements), e.g., engineered structures or deflectors, barbs, weirs, etc.	☐ Carcass or nutrient placement: ☐ salmonid carcass; ☐fish meal brick; ☐other nutrient
☐ Streambank stabilization (includes bio-engineering)	☐ Other (explain): _____

_____ % Estimate the percentage of total cost of the project applied to instream habitat activities

_____mi. Estimate the miles of stream to be treated with instream habitat treatments (to nearest 0.01 mile)

_____ % Estimate the percentage of insteam activity costs for carcass or nutrient placements. If you do not select carcass/nutrient placements as an instream habitat activity, leave this value blank. *Example: Your project will place salmon carcasses. You estimated that 25% of the total project cost will apply to instream habitat activities and one half of the instream improvements costs will apply to the carcass placement, you would report 50%.*

Riparian Habitat: *Projects above the ordinary high-water mark of the stream and within the floodplain of the stream.*

Check all proposed activities.

☐ Riparian planting	☐ Conservation grazing management (e.g., rotation grazing)
☐ Riparian fencing	☐ Non-native/noxious plant control
☐ Livestock exclusion (by means other than fencing)	☐ Vegetation management (e.g. prescribed burnings, stand thinning, stand conversions, silviculture)
☐ Water gap development	☐ Other (explain): _____ *Do not report livestock water developments here, report livestock water developments under upland habitat treatments.*

_____ % Estimate the percentage of total cost of the project applied to riparian habitat activities

_____ ac. Estimate the acres of riparian habitat to be planted (to nearest 0.1 acres)

_____ ac. Estimate the acres of riparian habitat to be treated for non-native/noxious weeds (to nearest 0.1 acres)

_____ ac. Estimate the total riparian acres to be treated. (to nearest 0.1 acres)

_____ mi. Estimate the miles of riparian streambank to be treated (to nearest 0.01 mi). Stream sides treated ☐ one ☐ two
(Do not double count miles if a second side is treated)

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

☐ Erosion control structures (e.g., sediment collection basins, WASCOBs)	☐ Upland Agriculture Management – (e.g., no/low-till, wind breaks, and irrigation improvements)
☐ Planting/seeding for erosion control (e.g., convert from crops to native vegetation, plant area where non-native/noxious weeds removed, grassed waterways, windbreaks, filter strips) List scientific names of plants _____	☐ Livestock Manure Management (e.g., feedlot improvements to reduce runoff , relocate/improve manure holding structures and manure piles to reduce/eliminate drainage into streams)
☐ Slope stabilization (e.g., grade stabilization, landslide reparation, terracing slopes)	☐ Livestock/Wildlife Water Developments
☐ Non-native/noxious plant control; List scientific names of plants: _____	☐ Upland Livestock Management (other than livestock water developments), e.g., grazing plans, fencing
☐ Juniper removal/control	☐ Restore Historic Upland Habitats (e.g. oak woodland, oak savannah, upland prairie restoration)
☐ Vegetation Management (other than non-native/noxious plant control or juniper removal, e.g. tree thinning, brush control, burning) List scientific names of plants: _____	☐ Other (explain): _____

_____ % Estimate the percentage of total cost of the project will apply to upland habitat activities

_____ # Estimate the number of livestock/wildlife water developments

_____ac. Estimate the acres of upland habitat to be treated for non-native/noxious plants (to nearest 0.1 acres)

_____ac. Estimate the total acres of upland habitat to be treated (do not include acres of upland habitat affected by livestock water developments (to nearest 0.1 acres)

_____ % Estimate the percentage of upland activity costs applied to Livestock Manure Management. If you do not select Livestock Manure Management as an upland habitat activity, leave this value blank. *Example: Your project will relocate a feedlot to reduce livestock manure runoff. You estimated that 33% of the total project cost will apply to upland habitat activities and one half of the upland improvements costs will apply to the feedlot relocation, you would report 50%.*

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

☐ Road drainage system and surface improvements & reconstruction	☐ Other (explain): _____
☐ Road closure, relocation, obliteration (decommissioning)	

_____ % Estimate the percentage of total cost of the project applied to road activities

_____ mi. Estimate the miles of road treated (to nearest 0.01 mile)

Urban Impact Reduction: Check all of the urban impact related activities that will be used by this project:

☐ Sewage outfall clean-up	☐ Bioswales
☐ Toxin reduction: list names of each toxic species, element or material: _____	☐ Detention Facility
☐ Pesticide reduction: list names of each pesticide: _____	☐ Other urban impact reduction (explain): _____
☐ Stormwater/wastewater modification or treatment	

Check all of the water quality limiting factors addressed by the Urban Impact Reduction activities selected above. **Do not** select limiting factors addressed by other types of restoration activities:

☐ Bacteria	☐ Pesticides	☐ Nutrients
☐ Dissolved Oxygen	☐ Toxics	☐ Sediment
☐ Heavy Metals	☐ High Temperature	☐ Other (explain): _____

_____% Estimate the percentage of total cost of the project applied to urban impact activities

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

☐ Wetland planting	☐ Artificial wetland area created from an area not formerly a wetland
☐ Non-native/noxious/invasive plant control	☐ Other (explain): _____
☐ Wetland improvement/restoration of existing or historic wetland (other than vegetation planting or removal)	

_____ % Estimate the percentage of total cost of the project applied to wetland habitat activities

_____ ac. Estimate the acres of wetland habitat to be treated for non-native/noxious/invasive plants (to nearest 0.1 acres)

_____ ac. Estimate the acres of artificial wetland created (to nearest 0.1 acres)

_____ ac. Estimate the total acres of wetland habitat (existing or historic) treated (to nearest 0.1 acres)

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

☐ Channel modification/creation (e.g., improve intertidal flow to existing estuarine habitat)	☐ Non-native/noxious plant control
☐ Dike or berm modification/removal	☐ Creation of new estuarine habitat where one did not exist previously by methods other than tidegates or dikes
☐ Removal of existing fill material	☐ Other (explain): _____
☐ Placement of fill material (for proper terrestrial function)	

_____ % Estimate the percentage of total cost of the project applied to estuarine habitat activities

_____ ac. Estimate the acres of estuarine habitat to be treated for non-native/noxious plants (to nearest 0.1 acres)

_____ ac. Estimate the total acres of estuarine habitat (existing or historic) to be treated (to nearest 0.1 acres)

Smith Diversion Dam Fish Passage

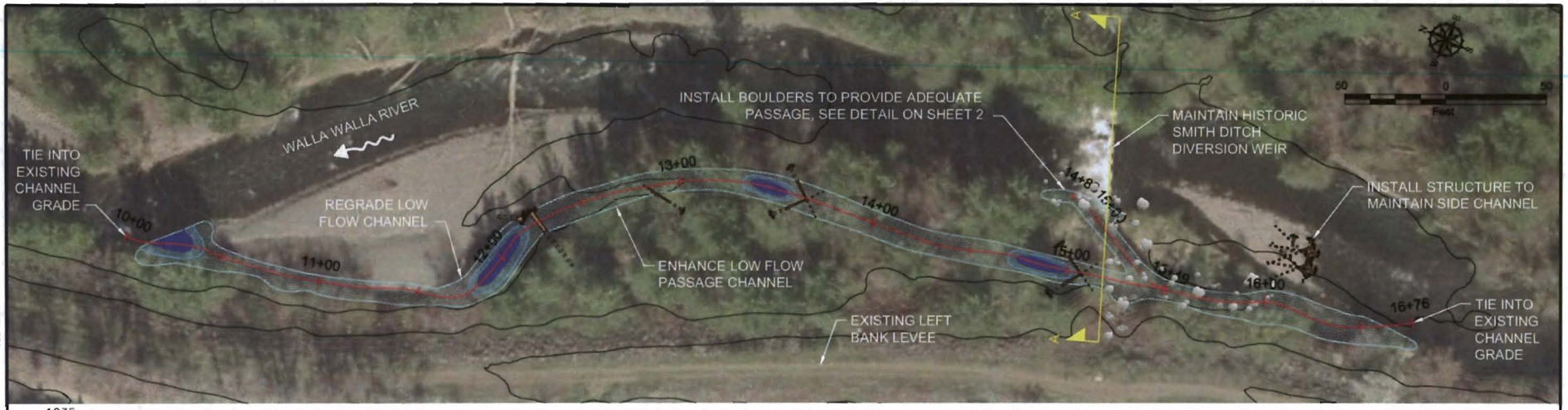
Legend

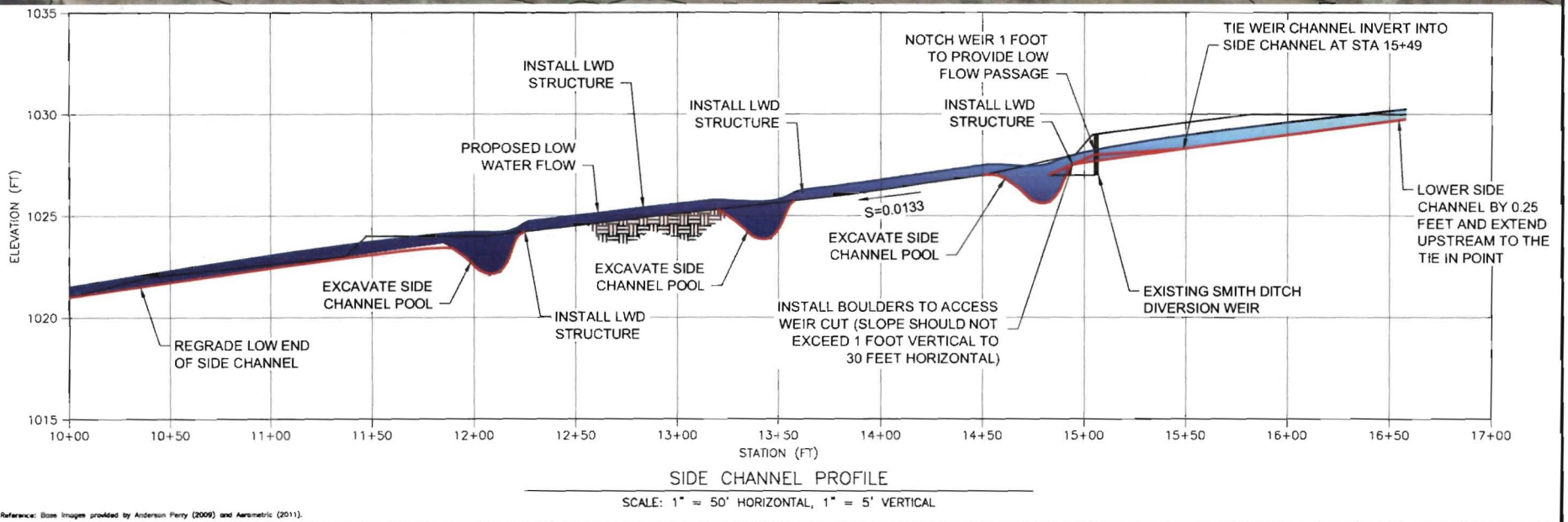
- Major Cities
- Lakes and Reservoirs

0 80 160 240 m.

Scale: 1:2,822

Map center: 1851111, 1533452





SIDE CHANNEL PROFILE

SCALE: 1" = 50' HORIZONTAL, 1" = 5' VERTICAL

Reference: Base images provided by Anderson Perry (2009) and Aerometric (2011).

Revision No:	Date:	Description:	Initials:
		CONCEPTUAL	
		Not For Construction.	

Designed: AM
Drawn: MGF
Checked: MKH
Date: 09/26/11
Project No: 18764-002-00

Alternatives Analysis and Conceptual Design
Walla Walla River
Milton-Freewater, Oregon

Walla Walla River Basin
Watershed Council and Partners

GeoEngineers
1525 South David Lane
Boise, Idaho 83705

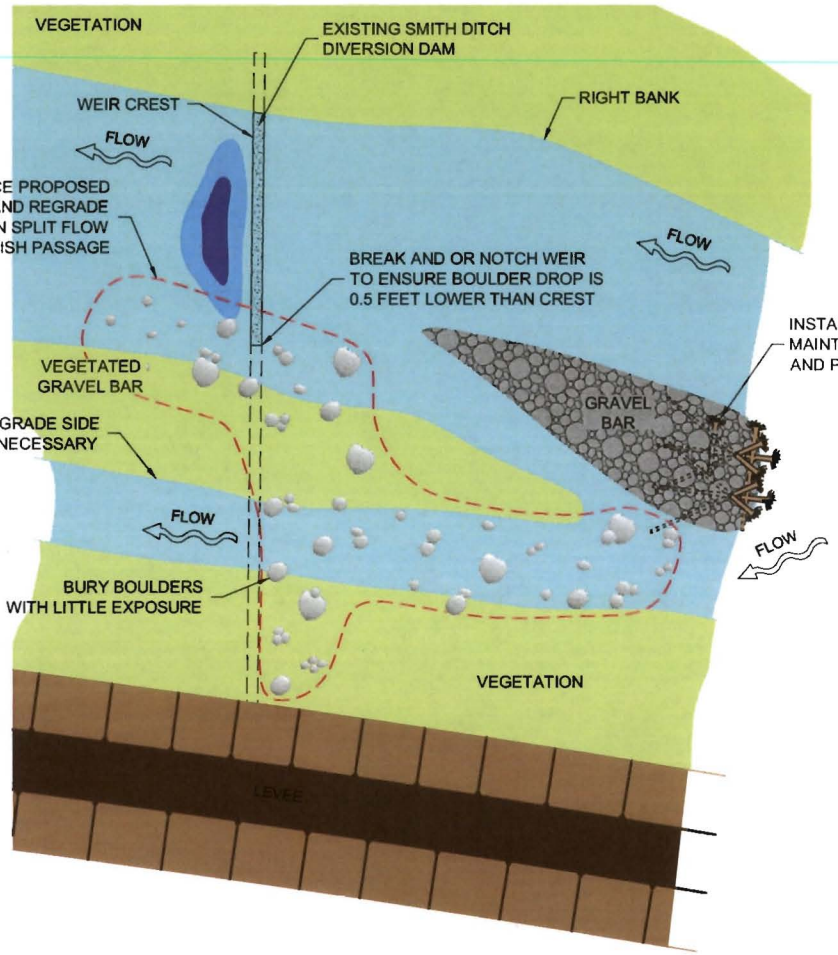
Smith Ditch Diverson Plan and Profile

Alternatives Analysis and Conceptual Design
Walla Walla River

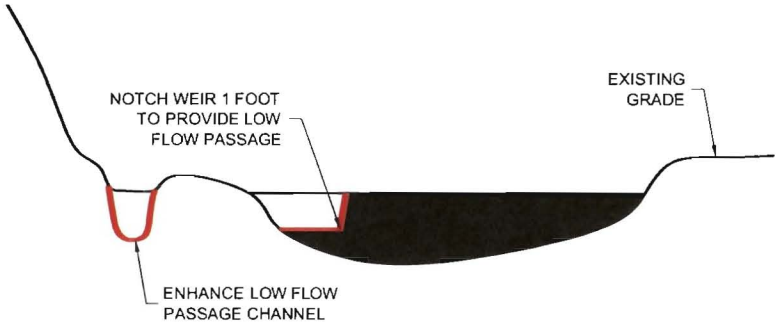
Figure 1

JDL MGF

P:\18\18764002\00\CAD\DWG\18764002-Smith Ditch-1.dwg17.AB.Smith Ditch F2 modified on Oct 10, 2011 - 3:01pm



CONCEPTUAL PLAN
NOT TO SCALE



CROSS SECTION A-A'
NOT TO SCALE

Reference: Base Images provided by Anderson Perry (2009) and Aerometric (2011).

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Smith Ditch Diverson Conceptual Plan
Alternatives Analysis and Conceptual Design
Walla Walla River

Figure 2

Brian Wolcott

From: William Duke [william.b.duke@state.or.us]
Sent: Friday, October 14, 2011 10:28 AM
To: Brian Wolcott

Brian,

The Oregon Department of Fish and Wildlife supports the efforts of the Walla Walla Basin Watetershed Council in seeking solutions to address fish passage concerns at the old Smith Ditch grade control/ diversion structure. This structure was identified as a potential fish passage barrier in the fall of 2010, the site continues to be monitored by the Umatilla/Walla Walla Fish Passage Operations project and others to asses fish passage concerns at the site. Since the problem was identified down cutting of stream channel has continued, resulting in jump heights in excess of two feet; well above the State of Oregon's passage criteria of six inches for juvenile fish and one foot for adult fish. This site poses significant risk to Federally listed species, Middle Columbia Summer Steelhead and Bull trout as well as numerous native fish species.

Bill Duke
Umatilla District Fish Biologist
Oregon Department of Fish and Wildlife
John Day Watershed District Office
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