



Small Grant Program Application 2019-2021

Application Processing Information (to be completed by the Small Grant Team Contact):

Application #: _____

Date Received: _____

Date Acted On: _____

____ Recommended

____ Denied

SGT Contact

Signature: _____

I. General Information

OWEB Funds Requested (round to nearest dollar) \$15000

Total Project Cost \$ 19830

Name of Project (five words or fewer) Wise Place - Irrigation Efficiency

Project Location (if more than one, include location/landowner information on each map)

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

Multiple sites

Watershed: Walla Walla Watershed

County or Counties: Umatilla

Township, Range, Section (e.g. T1N, R5E, S12): T6N, R35E, S35

Latitude, Longitude (e.g. 44.9429, -123.0351): 45°57'20.91"N, 118°23'49.01"W

Subbasin (10-digit hydrological unit code): 170701207

River or Creek Name (if applicable): Walla

River Mile (if applicable): 45.9

Walla River

1. **Have you previously submitted an application to OWEB, either through the regular or small grant program, for this project, or one similar to it on the same property?** Yes Grant # _____ No

If yes, explain _____

2. **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 Grant # _____ No

If yes, explain _____

II. Contact Information

Applicant Org.: Walla Walla Basin Watershed Foundation

Contact: Wendy Harris

Mailing Address: 810 S Main St, Milton Freewater, OR

Phone: 541-938-2170

Tax ID: 93-1255989

Zip: 97862

Email: wendy.harris@wwbwc.org

Landowner(s).: Sean Roloff

Landowner Address: 53677 Locust Rd, Milton Freewater, OR

Phone: 509-520-5435

Zip: 97862

Email: SRoloff27@gmail.com

Project Manager for the Grantee Org: Wendy Harris

Project Manager for the Grantee: Wendy Harris

Project Manager Address: 810 S Main St, Milton Freewater, OR

Phone: 541-938-2170

Zip: 97862

Email: wendy.harris@wwbwc.org

Payee Org.: Walla Walla Basin Watershed Foundation

Contact: Chris Sheets

Mailing Address: 810 S Main St, Milton Freewater, OR

Phone: 541-938-2170

Tax ID: 93-1255989

Zip: 97862

Email: chris.sheets@wwbwc.org

Technical Contact: Wendy Harris

Phone: 541-938-2170

Email: wendy.harris@wwbwc.org



III. Project Information

Priority Watershed Concern: the project will address — Check *One* Only.

- Instream Process & Function Riparian Process & Function Urban Impact Reduction
 Wetland Process & Function Private Road Impact Reduction Upland Process & Function
 Fish Passage Water Quantity & Quality/ Irrigation Efficiency

Small Grant Team Priority Project Type(s) addressed by the project (list specific eligible project type):
Water Quantity

1-a. Is the project consistent with the local watershed assessment or action plan?

- Yes Name primary assessment/plan Walla Walla Subbasin Plan
 No
 N/A—The watershed does not yet have an assessment or action plan

1-b. Is the project consistent with the local Agricultural Water Quality Management Area Plan?

- Yes No

1-c. Is the project consistent with any developed plan for the property (e.g., local conservation or stewardship)?

- Yes No
If yes, name the plan(s): _____

2. Describe the current watershed PROBLEM(s) you are seeking to address.

The Walla Walla River is a tributary of the Columbia River that supports ESA listed bull trout and summer steelhead and reintroduced spring Chinook salmon as well as many other fish and wildlife species. The Walla Walla River is a primary source of irrigation water for thousands of acres of farm ground in the Milton-Freewater, OR area. As is often the case, water demand is highest for both irrigation and instream needs during late spring, summer and fall. Reliance on Walla Walla River water has created an unnatural hydrograph for the system – high winter/spring flows rushing to the Columbia River and limited summer/fall flows being diverted for irrigation use. Low flows have been documented as the primary limiting factor for fish in the Walla Walla River. Irrigated agriculture around Milton-Freewater provides up to 20%+ (\$85+ million) of the area’s economic productivity.

This project will help reestablish a more natural hydrograph by reducing water withdrawals during low-flow (spring/summer/fall) time periods. The landowner, Roloff Farms, has taken the orchard out on this property during the last couple of years, but will be replanting a new orchard with a much more efficient irrigation water delivery system for the trees. Water conserved through this project will contribute to maintaining/improving instreams flows in the Walla Walla River for fish and wildlife.

3. Describe the SOLUTION(s) you are proposing to address the current problem(s). Attach a site map, color photo(s), and (if applicable) preliminary project drawings or designs.

Roloff Farms is proposing to convert 5.02 acres from flood irrigation to a more efficient pumped mainline/lateral sprinkler system for an orchard irrigated from the East Crockett ditch located north of the town of Milton-Freewater, Oregon, in Umatilla County. A filter will also be installed to assist with clogging of water lines and sprinkler heads. Water in the East Crockett ditch is diverted from the Little Walla Walla which receives its water from the Walla Walla River. The Walla Walla River is flow limited during much of the irrigation season. This project will improve irrigation efficiency during low-flow time periods and result in additional water being protected instream for ESA listed bull trout and summer steelhead and reintroduced spring Chinook.

With the assistance of OWEB and BPA funding, Roloff Farms has already converted the majority of their orchards from flood irrigation to the more efficient micro sprinklers. This project would convert the last 5.02 acres. An application has been submitted through the Conserved Water Program to protect instream the water savings from the conversion of this orchard, along with the orchards that were previously converted. The conserved water application estimates a water savings of 28.73 gpm from converting this property from flood irrigation to the more efficient sprinklers.

4. Insurance Information

If applicable, select all the activities that are part of your project (check all that apply). You will be required to submit the DAS Risk Assessment Tool for items 1-5:

- 1. Working with hazardous materials (not including materials used in the normal operation of equipment such as hydraulic fluid)
- 2. Earth moving work around the footprint of a well
- 3. Aerial application of chemicals
- 4. Transporting individuals on the water
- 5. Removal or alteration of structures that hold back water on land or instream including dams, levees, dikes, tidegates and other water control devices (this does not include temporary diversion dams used solely to divert water for irrigation)
- 6. Applicant's staff or volunteers are working with kids related to the project (DAS Risk assessment tool not required, additional insurance *is* required)
- 7. Applicant's staff are applying herbicides or pesticides (DAS Risk assessment tool not required, additional insurance *is* required)

OWEB considers these projects to carry a greater risk to the organization, organization's employees, volunteers, and the community. If boxes 1-5 are checked above, the applicant must submit the DAS Risk Assessment, <https://www.oregon.gov/das/Risk/Pages/CntrctrInsReq.aspx>, with this application. Additional information regarding the insurance policy and requirements can be found in the OWEB's Budget Categories: Definitions & Policies document available on the OWEB website.

5. Technical Guidance Source (check at least one and identify the Practice Code, or page and paragraph).

- | | |
|---|---|
| <input checked="" type="checkbox"/> NRCS Field Office Technical Guide
Practice Code <u>441</u> | <input type="checkbox"/> Guide to Placing Large Wood in Streams
Page # / Para _____ |
| <input type="checkbox"/> Oregon Road/Stream Crossing Restoration
Guide
Page # / Para _____ | <input type="checkbox"/> Forest Practices Tech Note #4
Page # / Para _____ |
| <input type="checkbox"/> Nonpoint Source Pollution Control Guidebook
Page # / Para _____ | <input type="checkbox"/> Forest Practices Tech Note #5
Page # / Para _____ |
| <input type="checkbox"/> Urban Subwatershed Restoration Manual
Page # / Para _____ | <input type="checkbox"/> Tribal Natural Resource Plans and Water Plans
(attach the relevant page or pages) |

6. Maintenance and Post-Implementation Monitoring

a) **Project maintenance is the responsibility of the landowner.** What aspects of the project will be maintained? (See application instructions.)

Who will maintain? Landowner

What will be maintained? sprinklers, mainline & lateral pipes

How will it be maintained? Landowner will clean filter and sprinkler heads and clear water lines as needed in order to maintain proper function of the system.

of years, # of times/year As needed for 10 years

b) Post-implementation monitoring including photo points and visual inspection is *required* for small grants (Year-Two Status Report). What (if any) *additional* aspects of the project will be monitored post-implementation? (See application instructions)

Who will monitor? Wendy Harris, Walla Walla Basin Watershed Council

What will be monitored? Ensure sprinklers have been maintained and are being used properly

Site monitoring protocols? The project manager will photo monitor that materials and equipment installed under this project has reminaed in place and remains in use. In addition, the project manager will confirm each year with the Walla Walla Irrigation District Manager that less water is being delivered to project site as stated in the conserved water documentation from OWRD. A copy of the final OWRD conserved water documentation from this project will be provided to OWEB.

of years, # of times/year WWBWC will monitor site twice a year for two years.

7. Who will be responsible for writing the Year-Two Status Report?

Organization: Walla Walla Basin Watershed Foundation

Name: Wendy Harris

Zip: 97862

Mailing Address: 810 S Main St, Milton Freewater, OR

Email: wendy.harris@wwbwc.org

Phone: 541-938-2170

8. Have the required permits been obtained for the project? Yes No Not Required

If yes, what permits have been issued? (Attach copies) _____

If no, what permits must be obtained and by when? _____

9. Is this project required as a condition of a local, state, or federal permit, order, or enforcement action (e.g., a manure storage and management project required by ODA permit)?

_____ Yes No

10. 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. In the Amount/Value Column, provide a total dollar amount or value for each funding source.

Funding Source Name the partner and contribution	Cash	In-Kind	Amount/ Value
OWEB:	15000		15000
Landowner:	240	4590	4830

Total Estimated Funds (add all amounts in the far right column)			\$19830

The total should equal the total cost of the project on page 1

11. Project Budget (Word). Itemize projected costs for each budget category that apply to your project. A minimum of 25% match is required. See application instructions and additional team conditions for further guidance.

PLEASE NOTE: Budgets may be submitted in either Word or Excel formats. Documents can be found on the OWEB Forms webpage.

Fill in the amounts, rounded to the nearest dollar; do not include cents.

Expense Category	No. of Units	Unit Cost	OWEB Funds	Match Funds (In-Kind/Cash)	Description--what will be purchased and by whom/who will perform the work.
SALARIES, WAGES, AND BENEFITS. Refers to in-house staff/applicant employees for whom payroll taxes are paid. List position titles; include only costs of employees charged to this grant.					
Operations Manager	30	\$49	\$1470	\$0	
		\$0	\$0	\$0	
SUBTOTAL (1)			\$1470	\$0	
CONTRACTED SERVICES. Labor, supplies, materials and travel to be provided by non-staff for project implementation.					
Irrigation Installation	270	\$17	\$0	\$4590	
		\$0	\$0	\$0	
		\$0	\$0	\$0	
SUBTOTAL (2)			\$0	\$4590	
MATERIALS AND SUPPLIES. Refers to items purchased by or invoiced to the applicant organization, and are "used up" in the course of the project. Costs to OWEB must be directly related to the implementation of this grant.					
1-1/4" PVC 90 – SS	19	.94	18		
1-1/4" PVC Tee – SSS	2	1.08	2	\$0	
2 x 1-1/4 PVC RB – SS	3	1.12	3	\$0	
2" PVC 90 – SS	1	1.59	2	\$0	
2" x 2" x 1-1/4" PVC Tee – SSS	8	1.98	16	\$0	
3 x 2 PVC RB – SS	3	2.28	7		
3" x 3" x 1-1/4" PVC Tee – SSS	6	7.26	44		
1-1/4" 1-1/4" x 1" PVC Tee – SSS	6	1.16	7		
1-1/4" x 1" PVC RB – SS	1	.67	1		
1-1/4" Spg x 1" Insert PVC Adapter	18	1.89	34		
1" Spg x 1" Insert PVC Adapter	7	180	13		
1" PVC 90 – SS	7	.55	4		
#316R 1" Oetiker Clamp Stainless	110	.28	31		
1" Blue-stripe hose 660' roll	18	88.33	1590		
1" PVC Insert Coupler	15	.72	11		
6" x 6" x 3" PVC Tee – SSS	3	35.64	107		
3" PVC Tee – SSS	3	6.83	20		
3 x 2 PVC RB – ST	3	2.28	7		
Nelson 2" Air/Vac	3	94.52	284		
3" PVC Flanges	6	16.20	97		
Bolts/Nuts by LB	20	4.05	81		

3" Grayline LOBFV	3	97.79	293		
3" PVC 90 – SS	6	4.77	29		
6" PVC Pipe 160# Gasketed	960	3.86	3705		
3" PVC Pipe SCH 40	40	1.67	67		
3" 160# PVC Pipe SW	120	.92	110		
2" 160# PVC Pipe	140	.54	75		
1-1/4" 160# PVC Pipe	760	.27	205		
721 Glue GAL	1	81.39	81		
721 Glue QT	1	23.66	24		
711 Glue QT	4	24.82	99		
P70 Primer QT	2	22.06	44		
R10, acme, P2 9deg red plate #45 lt purple 2TN	480	3.59	1723		
FT2 Feedtube Assy 30"	480	1.87	898		
6" PVC Tee – SSS	1	35.64	36		
.25" x 24" Steel Stake	480	1.11	533		
6" PVC 90 – SS	2	22.68	45		
6" PVC 90 Flange	2	32.25	64		
Sontag 6"x36" with 6" flanges	1	1580.00	1340	240.00	
Misc. Parts to complete System	1	250.00	250		
SUBTOTAL (3)			\$12,000.00	\$240.00	
TRAVEL. Applicant staff mileage. For rates see: https://www.oregon.gov/oweb/manage-grant/Pages/payments-budget.aspx					
		\$0	\$0	\$0	
		\$0	\$0	\$0	
SUBTOTAL (4)			\$0	\$0	
OTHER. Land use signature costs, project permit costs, small equipment repair, commercial equipment rental.					
		\$0	\$0	\$0	
		\$0	\$0	\$0	
SUBTOTAL (5)			\$0	\$0	
MODIFIED TOTAL DIRECT COST (MTDC) (Add Subtotals 1-5)			\$0	\$0	
INDIRECT COSTS. Not to exceed 10% of Modified Total Direct Costs (MTDC). See the current Budget Categories Definitions and Policies document for eligible costs.					
Indirect Costs	Not to exceed 10% of MTDC	\$1330	\$0		
POST-GRANT					
Year-Two Status Report		\$200	\$0	(Not to exceed \$200)	
Post-Project Plant Establishment		\$0	\$0	(Not to exceed \$1,000)	
PROJECT TOTALS			\$15000	\$4830	(Not to exceed \$15,000 in OWEB funds)

We, the undersigned, attest that to the best of our knowledge the information contained in this application is true, that the proposed project is not required by a state or federal agency directive, and that the project will be completed within 24 months from the date of the team funding recommendation of the application. We understand that the submitted application is a matter of public record.

Also, should funding for this project be awarded we understand:

- 1) **We may not incur** any project expenses until all designated signatories have signed an OWEB grant agreement,
- 2) **We will be required to provide** proper accounting of project expenses, and
- 3) **We will be required to provide** necessary and normal maintenance to sustain the value of the project once it is completed.

By their signatures, the **landowner(s)** attest that they have no plans to sell their property as of the date of this application, are authorized to sign as landowner, and they agree to provide, upon prior request and at a mutually acceptable time, site access to the applicant or representatives of OWEB for a period up to two years following project completion to allow project work to be implemented, monitored, and maintained.

Applicant	<u>Wendy Harris</u>	Date	<u>12/20/2019</u>
Landowner	<u>[Signature]</u>	Date	<u>12/20/19</u>
Fiscal Agent	<u>Chris Sheets</u>	Date	<u>12/20/2019</u>

Attachment Checklist

- Project location map (Required)
- Color photographs of site (Required)
- Site drawings/diagrams (if applicable)
- Juniper Checklist (if applicable)
- Cooperative agreement, if 2 or more landowners (Optional) **May be submitted in lieu of ALL Landowner signatures on Application ALL Landowners must sign the Grant Agreement**
- Racial and Ethnic Impact Statement (Required)
- Restoration Metrics form (Required)

Other materials (as required by team)

Optional Forms at time Application




(Required at the time of Request for Release of Funds, see instructions)

- Irrigation Efficiency
- Culvert/Stream Crossing
- Secured Match
- Land Use



Wise Place Irrigation Efficiency Projects

Legend

-  Flow Meter
-  Pipeline
-  Wise Place Project

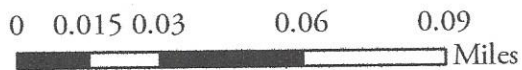




Figure 1 - Looking southwest at the northern portion of the property that has been cleared in preparation of installing new efficient sprinkler system and trees.



Figure 2 - Looking northeast at the northern portion of the property.



Figure 3 - Looking northeast at the southern portion of the property that has been cleared in preparation of installing new efficient sprinkler system and trees.

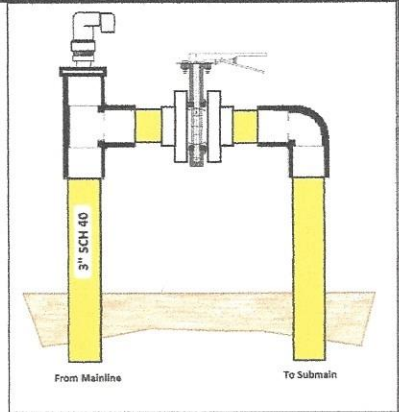


Figure 4 – Looking southwest at the well that will be tied into for the sprinkler system’s water supply. The irrigation system will be connected to the well on the northeast side of the ditch, away from the well.

ZONE 1
43.84 GPM
1.07 ACRES

ZONE 2
40.32 GPM
1 ACRE

ZONE 3
46.08 GPM
1.12 ACRES



3 [F]

TREE SPACING
16 X 8
SPINKLER SPACING
16 X 24

<ul style="list-style-type: none"> — 1" Round Hose (26mm) — 1 1/4" Schedule 40 SW PVC Pipe — 2" Class 160 IPS SW PVC Pipe — 3" Class 160 IPS SW PVC Pipe — 6" 160 psi IPS Basket PVC Pipe ⊗ Well [F] - New 6" Filter 	<ul style="list-style-type: none"> ○ 3" Fresno Butterfly Lever OP ○ 1 1/4" Flush Valve Assembly W/ 1" ARV ○ Nelson R10 Acme P2-9 #45 Lt Purple * Water Supply 	<p style="text-align: center;">Dunning Irrigation Supply</p>	<p>Designer:</p>
			<p>Date: 1/3/2019</p>
			<p>Scale: 1" = 75'</p>
		<p>File: Roloff Wise Place Design</p>	



Racial and Ethnic Impact Statement

This form is used for information purposes only and must be included with the grant application.

Chapter 600 of the 2013 Oregon Laws require applicants to include with each grant application a racial and ethnic impact statement. The statement provides information as to the disproportionate or unique impact the proposed policies or programs may have on minority persons¹ in the State of Oregon if the grant is awarded to a corporation or other legal entity other than natural persons.

1. The proposed grant project policies or programs could have a disproportionate or unique **positive** impact on the following minority persons:

Indicate all that apply:

- Women
- Persons with Disabilities
- African-Americans
- Hispanics
- Asians or Pacific Islanders
- American Indians
- Alaskan Natives

2. The proposed grant project policies or programs could have a disproportionate or unique **negative** impact on the following minority persons:

Indicate all that apply:

- Women
- Persons with Disabilities
- African-Americans
- Hispanics
- Asians or Pacific Islanders
- American Indians
- Alaskan Natives

3. The proposed grant project policies or programs **will have no** disproportionate or unique impact on minority persons.

If you checked numbers 1 or 2 above, on a separate sheet of paper, provide the rationale for the existence of policies or programs having a disproportionate or unique impact on minority persons in this state. Further provide evidence of consultation with representative(s) of the affected minority persons.

I HEREBY CERTIFY on this 17 day of December, 2019, the information contained on this form and any attachment is complete and accurate to the best of my knowledge.

Signature

Printed Name: Wendy Harris

Title: Operations Manager

¹ "Minority persons" are defined in SB 463 (2013 Regular Session) as women, persons with disabilities (as defined in ORS 174.107), African-Americans, Hispanics, Asians or Pacific Islanders, American Indians and Alaskan Natives.



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 Ginger Lofftus, OWEB PCSRF Reporting Assistant, at 503-986-5372 (ginger.lofftus@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: 5 Total Stream Miles Treated: 19 (do not include upstream stream miles made accessible to fish with passage improvements)

4 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.

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

- Onsite Downstream Upstream Upslope

4.2) Effectiveness monitoring will be conducted for this project. Please note that effectiveness monitoring cannot be funded with OWEB Small Grant Funds.

4.3) 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

- | | |
|---|---|
| <input type="checkbox"/> Adult Fish: presence/absence/abundance/distribution survey(s) | <input type="checkbox"/> Water quality |
| <input type="checkbox"/> Spawning surveys | <input type="checkbox"/> Macroinvertebrates |
| <input type="checkbox"/> Juvenile Fish: presence/absence/abundance/distribution survey(s) | <input type="checkbox"/> Water quantity |
| <input type="checkbox"/> Upland vegetation (Presence/Absence) | <input type="checkbox"/> Noxious weed (Presence/Absence) |
| <input type="checkbox"/> Instream Habitat surveys | <input type="checkbox"/> Photo Points |
| | <input type="checkbox"/> Riparian vegetation (Presence/Absence) |
| | <input type="checkbox"/> 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 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 in III. 9. 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.

Note: OWEB funds cannot be used for fish screening projects

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

New Fish Screens Installed

_____ # Estimate the number of **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)

Existing Screens Replaced, repaired or modified

_____ # Estimate the number of **existing** screens replaced, repaired or modified

_____ cfs Estimate the cubic feet per second of flow influenced by **existing** screen(s) screens (to nearest 0.01 cfs)

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. For projects that improve fish passage at road crossings 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.

- | | |
|---|---|
| <input type="checkbox"/> Diversion Dam | <input type="checkbox"/> Logs |
| <input type="checkbox"/> Push-up Dam | <input type="checkbox"/> Debris |
| <input type="checkbox"/> Wood or Concrete Dam | <input type="checkbox"/> Boulder/Rock Barrier (not weirs) |
| <input type="checkbox"/> Weir (not associated with a road crossing) | <input type="checkbox"/> Landslide |

Other (explain) _____

2. _____ # Estimate the total number of **non-road** crossing barriers (listed above) to be removed or altered to improve passage.

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.

_____ # engineered bypasses to be installed/improved

E. Fish Passage Summary Metrics

1. _____ % Estimate the percentage of total cost of the project applied to fish passage improvements
2. _____ 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. _____ # Estimate the total number of barriers (this includes road crossings, diversion dams, push up dams, wood or concrete dams, weirs, etc.) to be removed or altered to improve passage.

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. **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): _____

100 % Estimate the percentage of total cost of the project applied to instream flow activities

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

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

01/01/2020 mm/dd/yyyy Initial start date of irrigation practice improvement

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

_____ mm/dd/yyyy Water lease/agreement initial start date of no withdrawal

_____ mm/dd/yyyy Water lease/agreement final end date of no withdrawal (if lease/agreement 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, removal or alteration of levee or berm, removal of sediment)
- Spawning gravel placement
- Channel structure - large wood placement
- Plant Removal/control (instream) List scientific names of plants _____
- Channel structure - boulder placement
- Carcass or nutrient placement: salmonid carcass; fish meal brick; other nutrient
- Channel structure placement (**other** than large wood or boulder placements), e.g., engineered structures or deflectors, barbs, weirs, etc.
- Other (explain): _____
- Streambank stabilization through resloping and/or placing rocks, logs (e.g. revetments, gabions, barbs), or bioengineering on streambank

_____ % 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 instream activity costs for carcass or nutrient placements. If you do not select carcass/nutrient placements as an instream 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
- Non-native/noxious plant control
- Riparian exclusion fencing
- Vegetation management (e.g. prescribed burnings, stand thinning, stand conversions, silviculture)
- Livestock exclusion by means other than fencing (includes placing obstacles to exclude livestock, people, vehicles, etc., but not for individual plant protection)
- Debris/structure removal (OWEB funds cannot be used for general trash removal)
- Water gap development (fenced livestock crossing or livestock bridge)
- 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 1 2 (Do not double count miles if a second side is treated)

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

- 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)
- Upland Livestock Management (**other** than livestock water developments), e.g., grazing plans, fencing
- Non-native/noxious plant control
List scientific names of plants: _____
- Restore Historic Upland Habitats (e.g. oak woodland, oak savannah, upland prairie restoration)
- Juniper removal/control
- Livestock/Wildlife Water Developments
- Vegetation Management (**other** than non-native/noxious plant control or juniper removal, e.g. tree thinning, brush control, burning)
List scientific names of plants: _____
- Erosion control structures not already reported under Upland Agriculture Management or Road Drainage System and Surface Improvements.
- Upland Agriculture Management (e.g., no/low-till, wind breaks, filter strips, crop rotation, terracing, water and sediment control basins, grade stabilization and irrigation improvements)
- 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 activity, leave this value blank.
Example: 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.

- Toxin reduction: list names of each toxic species, element or material: _____
- Bioswales
- Pesticide reduction: list names of each pesticide: _____
- Detention Facility
- Stormwater/wastewater modification or treatment (includes rain gardens)
- Other urban impact reduction (explain): _____

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
- Dissolved Oxygen
- Heavy Metals
- Pesticides
- Toxics
- High Temperature
- Nutrients
- Sediment
- 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
- Non-native/noxious/invasive plant control
- Artificial wetland area created from an area not formerly a wetland
- Wetland improvement/restoration of existing or historic wetland (other than vegetation planting or removal)
- Other (explain): _____

_____ % 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.

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

_____ % 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)

Section 3.

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

The information provided will be used by OWEB better to 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.

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:

https://www.westcoast.fisheries.noaa.gov/maps_data/species_population_boundaries.html

Chinook Salmon (*Oncorhynchus tshawytscha*)

- Deschutes River summer/fall-run ESU
- Lower Columbia River ESU
- Mid-Columbia River spring-run ESU
- Oregon Coast ESU
- Snake River Fall-run ESU
- Southern Oregon and Northern California Coastal ESU
- Upper Klamath-Trinity Rivers ESU
- Upper Willamette River ESU
- unidentified ESU

Chum Salmon (*O. keta*)

- Columbia River ESU
- Pacific Coast ESU
- unidentified ESU

Coho Salmon (*O. kisutch*)

- Lower Columbia River ESU
- Oregon Coast ESU
- Southern Oregon/Northern California ESU
- unidentified ESU

Steelhead (*O. mykiss*)

- Klamath Mountains Province DPS
- Snake River Spring/Summer-run ESU
- Lower Columbia River DPS
- Middle Columbia River DPS
- Oregon Coast DPS
- Snake River Basin DPS
- Washington Coast DPS (SW Washington)
- Upper Willamette River DPS
- Steelhead/Trout unidentified DPS

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. **See Application Instructions for helpful examples.**

This project will convert 5.02 acres of orchard from flood irrigation to sprinkler irrigation to improve irrigation efficiency. This irrigation improvement project will reduce the water diverted from the Walla Walla River for irrigation use. The improvement in irrigation efficiency during low flows will allow for more water to stay in the Walla Walla River for fish/environmental needs. Low flows in the Walla Walla River negatively affect bull trout, summer steelhead, and reintroduced spring Chinook.