

OREGON



WATER RESOURCES
DEPARTMENT

2019 SOLICITATION

WATER PROJECT GRANTS AND LOANS

GRANT APPLICATION

APPLICATION DEADLINE: BY 5:00PM ON APRIL 26, 2019

Application must be received by this date and time

Send application electronically to: WRD_DL_waterprojects@oregon.gov

Mail application to:

OREGON WATER RESOURCES DEPARTMENT
Attention: Grant Program Coordinator
725 Summer Street NE, Suite A
Salem, OR 97301

APPLICATION SUBMISSION INSTRUCTIONS

1. Complete Sections I through X in the spaces provided. **Use the grant application instructions and Guidance on the Evaluation of Public Benefits when completing your application.** All resources are available at the [Water Project Grants and Loans webpage](#).
2. Taking part in a Pre-Application Conference prior to applying is **highly** recommended. The pre-application conference request form is available at the Water Project Grants and Loans, Applications, Forms and Guidance webpage. To learn more contact the Department.
3. Complete and sign the application checklist.
4. An application must be submitted on the attached form provided by the Department and may not be altered for the purpose of formatting or changing the document structure.
5. Please ensure that the Certification portion of Section II is signed with a live signature by the Applicant and, if applicable, the Co-Applicant.
6. Electronic application submission is the preferred method. You may scan a copy of the signed signature page and submit it with your application as long as both documents are included in the same email.
7. If application is submitted in hard copy - use 8 ½" x 11" single sided, unstapled pages. Provide any attachments to the application on 8 ½" x 11" single-sided, unstapled pages.
8. Contact the Department 503.986.0869 or WRD_DL_waterprojects@oregon.gov if you have any questions.

WATER PROJECT GRANTS AND LOANS APPLICATION CHECKLIST

Instructions: Use this checklist to ensure that your application is complete. An incomplete application may be deemed ineligible for further review and consideration. Checklist sections A and B must be completed and the checklist signed in order for your application to be considered complete.

Application Checklist Must Be Completed and Signed

SECTION A - Application

I. Project Information

- Project name and type(s) is complete and correct.
- The requested grant amount does not exceed 75% of the total cost of the project.

II. Applicant Information

- All applicant and co-applicant name(s) and contact information is complete and correct.
- Application is signed by Applicant/Authorized Person.
- Application is signed by Co-Applicant/Authorized Person *OR* there is no co-applicant.

Note: *If the project is awarded funding the co-applicant will be required to sign and be party to the grant agreement.*

III. Eligibility

- All questions have been addressed.
- The project addresses and instream and/or out-of-stream need.

IV. Project Summary

- Project summary does not exceed 5 sentences.

V. Project Location

- All questions have been addressed.

VI. Project Specifics

- All questions have been addressed.
- Each project task is identified and includes task schedule, description of task activities, and permits/regulatory approvals needed for the task.

VII. Public Benefits

- All questions have been addressed.
- Public benefit is identified in each of the three public benefit categories.

VIII. Project Budget

- All budget items are allowable costs as identified in the Department's Grant Budget Procedures and Allowable Cost document the OWRD Funding Opportunities Forms webpage.
- All budget task totals and addition of totals is correct.
- Key tasks listed in Project Budget (IX) match those identified in Questions 9 & 10.

IX. Match Funding Information

- Match funding table is complete.

X. Storage-Specific Project Requirements (if applicable)

- All questions have been addressed *OR* the application is not for a storage project.

SECTION B - Application Attachments

Instructions: Use this checklist to ensure required attachments are included with your application. All attachments to the application must be numbered as well as included in this list. For all attachments ensure documentation meets any criteria identified in the application instructions or Guidance on Budget Procedures and Allowable Costs. For “other” optional attachments in excess of the three spaces provided, include a supplemental list.

Required Attachments:

- Attachment 1 – Site map (Question 2)
- Attachment 2 – Property access authorization (Question 4) includes the following:
 - a) Evidence addresses all the requirements of Question 4 including awareness that monitoring information is public record for private lands.
 - b) If evidence includes landowner awareness and agreement to the proposal, documentation is from the landowner and includes current contact information.
- Attachment 3 – Documentation of matching funds (Section IX) includes the following:
 - a) Match documentation for all match fund sources listed in the match fund table.
 - b) Match fund documentation that clearly identifies the dollar amount and describes the work to be accomplished with the match.

Optional Attachments:

- Project feasibility documentation (Question 6): Attachment #
- Letters of support (Question 8): Attachment # 2
- Plans, designs, and/or engineering specifications: Attachment #
Attachment 4: Preliminary Designs: Fish Passage
Attachment 5: Pipeline Specifications
Attachment 6: Fish Screen Designs
- Secured permits and regulatory approvals needed to implement the project (Question 15): Attachment #
- Other: Flow Rates Upper Philips Ditch Attachment # 7
- Other: JSWCD Agreement Attachment # 8
- Other:
Photographs Attachment # 10

All required items within Section A and B of the application checklist are completed and all identified criteria are addressed to the best of my knowledge.

Signature of Applicant/Authorized Person:  Date: 5/3/19

Print Name: Janelle Dunlevy Title: Executive Director, Applegate Partnership, Inc.



I. Project Information

Project Name: Upper Philips Fish Passage and Irrigation Efficiency Project

Project Type: Conservation Reuse Flow Restoration and Protection
 Above-Ground Storage Below-Ground Storage
 Water Infrastructure Other: Fish Passage Project

Grant Funding Requested (must be no more than 75% of Total Cost of Project): \$ 983,290

Match Funding (must be no less than 25% of Total Project Cost): \$ 373,979

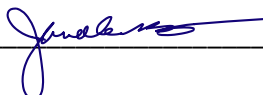
Total Cost of Project: \$ 1,357,269

II. Applicant Information

| | |
|--|---------------------------|
| Applicant Name: Applegate Partnership, Inc. | Co-Applicant Name: |
| Address: PO BOX 899 Jacksonville, OR 97530 | Address: |
| Phone: (541) 899-9982 | Phone: |
| Fax: N/A | Fax: |
| Email: janelle@apwc.info | Email: |

| | |
|--|---|
| Principle Contact: Julie Cymore (Project Manager) | Fiscal Officer: Janelle Dunlevy |
| Address: PO BOX 899 Jacksonville, OR 97530 | Address: PO BOX 899 Jacksonville, OR 97530 |
| Phone: (541) 890-9765 | Phone: (541) 899-9982 |
| Fax: N/A | Fax: N/A |
| Email: julie@apwc.info | Email: janelle@apwc.info |

Certification: I certify that this application is a true and accurate representation of the proposed work and that I am authorized to sign as the Applicant or Co-Applicant. By the following signature, the Applicant and Co-Applicant (if applicable) certify that they are aware of the requirements of an Oregon Water Resources Department funding award, have read and are aware of conditions within the example grant agreement and are prepared to implement the project, if awarded.

Signature of Applicant/Authorized Person:  Date: 5/3/19

Print Name: Janelle Dunlevy Title: Executive Director, Applegate Partnership, Inc.

III. Eligibility

Select applicant entity type for both applicant and co-applicant (if applicable).

| | | | |
|-------------------------------------|--------------------------------------|-------------------------------------|----------------------------|
| <input type="checkbox"/> | City | <input type="checkbox"/> | Oregon County |
| <input type="checkbox"/> | Port | <input type="checkbox"/> | Irrigation District |
| <input type="checkbox"/> | Drainage District | <input type="checkbox"/> | Water Improvement District |
| <input type="checkbox"/> | Water Control District | <input checked="" type="checkbox"/> | Non-Profit Organization |
| <input type="checkbox"/> | Soil and Water Conservation District | <input type="checkbox"/> | Corporation |
| <input checked="" type="checkbox"/> | Partnership | <input type="checkbox"/> | Sole Proprietorship |
| <input type="checkbox"/> | Cooperative | <input type="checkbox"/> | Indian tribe |
| <input type="checkbox"/> | State of Oregon Agency | <input type="checkbox"/> | Individual |
| <input type="checkbox"/> | Federal Agency | <input type="checkbox"/> | Other: |

To be eligible for funding a project must address an instream and/or out-of-stream water supply need and result in project implementation. Does the project address an instream and/or out-of-stream water supply need and result in project implementation? Yes No

Provide a brief, one to two paragraph description of the water supply need that the project intends to address. Please reference (and attach) supporting data or reports that document the need.

This project will address many benefits to agricultural practices, wildlife, and environmental processes. The economic benefits include local employment construction and engineering; improved agricultural production on 1 small farm and 10 properties; increased acreage of various crops; including installation of a 10-15 acre vineyard; and enhanced salmon and steelhead runs that support a \$7.2 million sport fishing industry. The environmental benefits are improved water quality; decreased water temperatures; and improved fish passage, fish screening, and instream flows for Endangered Species Act-listed and State-listed species including Coho salmon, Pacific lamprey, steelhead, and cutthroat trout in river that is DEQ-listed as limited due to water withdrawals, fish passage barriers, and temperature. This project will provide fish passage for ESA-listed species to essential rearing and cold water habitat at an ODFW Fish Passage Priority Listed dam. Social and Cultural benefits include recreational and scenic values, Improving irrigation water availability and reliability will allow the small, family farms, and local anadromous fish population recovery thereby supporting the recreational fishing industries and fish populations of cultural significance to Tribes. These values are supported by numerous local, statewide, and basin-wide priorities. Agriculture will benefit from an upgraded, reliable water source provided by a new headgate and diversion infrastructure and ditch piping for the Upper Philips Ditch Association.

Please refer to the attached letters of support and the 2013 Statewide Fish Passage Priority List (https://www.dfw.state.or.us/fish/passag/docs/2013_Statewide_Prioritization_List.pdf).

Is either the Applicant or Co-Applicant required to have a Water Management and Conservation Plan?
 Yes No

If yes, has the plan been submitted to the Water Resources Department and received approval?
 Yes No

Note: Pursuant to ORS 541.659 if an applicant is required to have a water management and conservation plan, the plan must be submitted to the Water Resources Department and receive approval prior to department acceptance of an application for a loan or grant from the account.

IV. Project Summary

Provide a brief, 4-5 sentence summary of the proposed project. This summary should include a brief description of the goal and scope of the project as well as summarize project implementation (i.e., planned infrastructure or activity). Please refer to the Water Project Grants and Loans Application Instructions for additional information on what to include in your project summary.

The Little Applegate River Fish Passage and Irrigation Efficiency Project will restore fish passage by creating a bypass channel around the Upper Philips Dam, install a new fish screen, and improve irrigation efficiency with a water savings of over 85% through piping 1.8 miles of irrigation ditch with 18-inch diameter PVC-pipe in order to provide water to 11 small-farms and residences in Jackson County within the Rogue River Basin. The project will improve irrigation infrastructure, improve agricultural production, allow production of additional acres, improve water quality, and enhance fish passage and instream flows for Endangered Species Act-listed and State-listed species including Coho salmon, Pacific lamprey, steelhead, and cutthroat trout. The project will dedicate conserved water instream for the benefit of aquatic species in a DEQ-listed flow-limited stream. This project is the result of a decade-long partnership between the Upper Philips Ditch Association and the Applegate Partnership and Watershed Council (APWC) and was developed in consultation with Steve and Priscilla Weaver (Landowners), Jackson County Soil Water Conservation District, OWRD, Bureau of Land Management, ODFW Fish Biologists, ODFW Fish Screens & Passage Program, Middle Rogue Steelheaders, Trout Unlimited, and Rogue Basin Partnership.

V. Project Location

Instructions: Please answer the following questions about the location of the proposed project.

1. Please provide the following information about the project location.
 - a. Latitude/Longitude (in decimal degrees): **42.154024° /-122.963619°**
 - b. County: **Jackson**
 - c. Watershed/Basin: **Little Applegate River (1710030903)/Applegate Watershed/Rogue River Basin**

2. Please attach and label, Attachment #1, a site plan map showing the following:
 - a. Project area boundaries
 - b. True north arrow
 - c. Map title and legend
 - d. Latitude and longitude of project location
 - e. Property boundaries

- f. Tax Map and Lot numbers of each property in project area boundary and listed in Question #3
- g. Surface water bodies
- h. Location of involved structures (existing or proposed)
- i. Proposed measurement locations (if applicable)

3. In the table below, identify any properties on which the project would occur and/or that would be impacted or accessed by project implementation. *Add rows as needed.*

| Tax Lot ID | Ownership Type (✓ One) | Property Owner of Record | Will ground disturbing activity occur on this land? (✓ One) | Identify the type and extent of ground disturbing activity (e.g. borings, test pits, excavation, new road construction etc.) |
|--|--|--------------------------|--|---|
| 39-2W-29-100 39-2W-29-201 | <input type="checkbox"/> Public <input checked="" type="checkbox"/> Private | Steven Weaver | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Installation of headgate bypass channel construction, installation of pipeline and related infrastructure: trenching, excavating |
| 39-2W-29-200 | <input type="checkbox"/> Public <input checked="" type="checkbox"/> Private | Michael Christian | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Installation of fish screen, construction access, grading an existing road, pipeline installation within the ditch footprint: trenching, excavating |
| 39-2W-20-200 | <input type="checkbox"/> Public <input checked="" type="checkbox"/> Private | Ida Gearon | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Installation of pipeline and related infrastructure within ditch footprint: trenching, excavating |
| 39-2W-19-1000 | <input type="checkbox"/> Public <input checked="" type="checkbox"/> Private | Erin Volheim | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Installation of pipeline and related infrastructure within ditch footprint: trenching, excavating |
| 39-2W-19-210 | <input type="checkbox"/> Public <input checked="" type="checkbox"/> Private | David Willard | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Installation of pipeline and related infrastructure within ditch footprint: trenching, excavating |
| 39-2W-20-201 2W-20-19-900 39-2W-29-300 | <input type="checkbox"/> Public <input checked="" type="checkbox"/> Private | Peter Salant | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Installation of pipeline and related infrastructure within ditch footprint: trenching, excavating |

| | | | | |
|---|--|-------------------------------|--|---|
| 39-2W-19-209 | <input type="checkbox"/> Public <input checked="" type="checkbox"/> Private | Sam Baldoni | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Installation of pipeline and related infrastructure within ditch footprint: trenching, excavating |
| 39-3W-24A-100 39-3W-24A-500 39-3W-24A-502 39-2W-19-501 39-2W-19-401 | <input type="checkbox"/> Public <input checked="" type="checkbox"/> Private | Forest Stroud | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Installation of pipeline and related infrastructure within ditch footprint: trenching, excavating |
| 39-3W-24A-101 | <input type="checkbox"/> Public <input checked="" type="checkbox"/> Private | Tim James | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Installation of pipeline and related infrastructure within ditch footprint: trenching, excavating |
| 39-2W-19-601 | <input type="checkbox"/> Public <input checked="" type="checkbox"/> Private | Donald Keberle | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Installation of pipeline and related infrastructure within ditch footprint: trenching, excavating |
| 39-2W-19-207 | <input type="checkbox"/> Public <input checked="" type="checkbox"/> Private | Sartorio Hadden Trust | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Installation of pipeline and related infrastructure within ditch footprint: trenching, excavating |
| 39-2W-19-219 | <input type="checkbox"/> Public <input checked="" type="checkbox"/> Private | David Swingley | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Installation of pipeline and related infrastructure within ditch footprint: trenching, excavating |
| 39-2W-19-300 39-2W-20-100 39-2W-19-100 | <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private | USA Bureau of Land Management | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Installation of pipeline and related infrastructure within ditch footprint: trenching, excavating |
| 39-2W-19-238 | <input type="checkbox"/> Public <input checked="" type="checkbox"/> Private | Harold Hopkins | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Installation of pipeline and related infrastructure within ditch footprint: trenching, excavating |
| 39-2W-19-218 | <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private | Beulah Langan | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Installation of pipeline and related infrastructure within ditch footprint: trenching, excavating |

4. For each property listed in Question #3, attach a [Landowner Agreement form](#). Attach Landowner Agreement form(s) and label Attachment #2.
 - a. Where a single landowner entity is the owner of record for multiple properties, one form may list the multiple properties owned by that entity.
 - b. For *public* lands attach the landowner form or other documented authorization from the federal or state government property owner allowing project implementation or documentation that demonstrates such authorization is being pursued.

Authorized legal access for the fish passage and pipeline along the ditch will be provided for by the Upper Philips Ditch Association and individual landowners. Please see attached Landowner Forms, Letters of Support, and Cooperative Agreements (Attachment 2) from the Upper Philips Ditch Association members.

Please see attached Letter of Support from the BLM, the manager of public lands involved in the project. There is a pre-FLPMA, existing in practice, unrecorded easement that allows ditch maintenance, customary practices, and activities within 50 feet of either side of the ditch. The easement allows for piping as long as the location of the ditch does not change. We expect to lay pipe within the existing ditch so it is unlikely to be necessary but BLM will update the terms of the easement if required.

VI. Project Specifics

Instructions: Please answer the following questions.

Project Description, Needs, and Goals

5. Provide additional information (building on the project summary) to further describe the proposed project and the project goal.

This proposed project will provide fish passage at Upper Philips Dam, located on the Little Applegate River in Jackson County, Oregon and provide an efficient, improved water conveyance system and fish screening along the associated ditch. The goals of the project are: 1. Provide adequate fish passage to all life stages and species at the Upper Philips Concrete Dam and Pushup Dam; 2. Provide adequate fish screening for the Upper Philips Ditch; and 3. Improve irrigation conveyance efficiency in the Upper Philips Ditch in order to conserve water quantity, improve production, improve infrastructure, improve water quality, and leave water instream; and 4. Provide outreach to water users about on farm efficiency options and dedicate water instream.

PROJECT BACKGROUND:

The Little Applegate River is an extremely important tributary of the Applegate River within the Upper Applegate Watershed, in Jackson County, providing cold water refugia and rearing habitat for juvenile salmonids and other aquatic species, and irrigation for privately owned agricultural farms. Within the past two decades, two of the oldest and lowest irrigation diversion and fish passage barriers have been removed, dedicating almost 10 cubic

feet/second instream and leaving a handful of low-head concrete structures with active water rights that need to be updated and improved for irrigation efficiency and fish passage.

Upper Philips Dam is an active water diversion structure and fish passage barrier. This dam diverts water into the Upper Philips Ditch—an open, unsealed ditch that flows southeast over 2.7 miles and currently serves 11 water users on approximately 130 acres. Upper Philips Dam is a concrete dam with a non-functioning fish ladder. In addition to the concrete structure, the water users use heavy equipment instream to create a 4-foot, channel spanning seasonal pushup dam above the concrete structure in order to gain sufficient head for water to enter the headgate. The concrete dam poses an approximately 5-foot jump during low flow conditions and is thereby an adult inhibitor and a complete barrier to juvenile aquatic species. The channel spanning pushup dam poses an additional 2-foot barrier with no downstream jump pool. The concrete and push-up dams impede adult passage and completely block juvenile passage of anadromous fish to high quality cold water rearing habitat. Upper Philips Dam is listed on the 2013 ODFW Fish Passage Priority List and will be listed on the 2018 ODFW Fish Passage Priority List.

The dams suppress overall available spawning and rearing habitat for ESA-listed threatened Southern Oregon Northern California Coastal (SONCC) Coho salmon (*Oncorhynchus kisutch*), ESA-listed species of concern Pacific lamprey (*Entosphenus tridentata*), summer and winter (Klamath Mountain Province) steelhead trout (*Oncorhynchus mykiss*) and cutthroat trout (*Oncorhynchus clarkii*). The Upper Philips concrete dam is approximately 5 miles upstream from the confluence with the Applegate River and ODFW fish presence surveys have recorded Chinook to River Mile 2, steelhead to river mile 19 and Coho to river mile 6. Approximately 22 miles of high quality steelhead habitat is present upstream of this diversion. NOAA's 2014 Final Recovery Plan for the SONCC Evolutionarily Significant Unit of Coho identifies Little Applegate River as high intrinsic potential habitat for Coho salmon. Lamprey distribution is known to at least River Mile 11.2.

According to the Little Applegate River Watershed Management Plan, impeded access to habitat due to barriers have contributed to a decline in fish populations in the watershed. Additionally, summer low flow conditions reduce habitat connectivity, resulting in mortality. Partial barriers cause migratory delay and in combination with excessive energy expenditures, result in reduced fecundity especially when there are numerous barriers to cross according to the Little Applegate River Watershed Management Plan. The Watershed Health Factors Analysis prepared by the Rogue Basin Coordinating Council for OWEB states that barriers are a top priority for the overall Applegate Basin (page 10) and indicates that barriers are limiting for the Little Applegate River (page 16). The 2014 Final Recovery Plan for SONCC Coho also states that the "Middle Rogue-Applegate population is at high risk of extinction" (page 1331).

The Little Applegate River is listed by the ODEQ as water quality limited due to Flow Modification and Temperature. The affected beneficial uses include anadromous fish passage, Salmonid fish rearing, Salmonid fish spawning, Salmonid fish rearing, and Resident fish and aquatic life. Summer water temperatures are high enough to be considered deleterious to fish according to the Little Applegate Watershed Analysis.

The current headgate is not functional and water enters the ditch year-round. The structure is not adequate to control the volume of water entering the ditch during irrigation season, nor

to stop water from running in the ditch during the rest of the year. The 2.7 mile long open, unsealed Upper Philips Ditch has significant water loss through seepage and evaporation. Even if the water users divert the maximum allowable rate, the water users along the lower 0.7 miles (30%) of the ditch have difficulty getting their full allotment (even with rotations proposed). As illustrated in Attachment 7, measurements taken by the Jackson County Watermaster indicate that at a diversion rate of 2 cfs, irrigation water losses through seepage totals 100% within the first 1.8 miles of the ditch. This requires irrigators to divert larger volumes of water from the Little Applegate River than would be necessary to irrigate the lands at the place of use, because a majority of the water is lost in the first 2/3 of the ditch. See Attachments 1 and 7.

The excessive water loss within the ditch which has caused an inability of water users to receive their full allotment has put undue economic hardship on water users on small farms in the lower 0.7 ditch miles. It has limited production and they have hired consultants to research other ways to receive water, which have resulted in no other options other than trucking water or piping the ditch.

The current irrigation system requires a minimum of yearly maintenance of the ditch and yearly installation of the pushup dam instream. Seepage from the unlined ditch causes overly saturated areas downslope, which can lead to ditch failure—a concern for several landowners whose residence is in close proximity to the ditch.

The Little Applegate River has been a focus for work completed since the late 1990's including riparian restoration, dam removal, irrigation efficiency, water right dedication in-stream, and measuring device installation. Two major barriers below the Upper Philips Dam have been removed in conjunction with the dedication of 10 cfs of one of the most senior water rights in-stream. Riparian restoration has occurred upstream and downstream of this project site. The OWRD and APWC completed a significant point of diversion measuring device project for six locations which includes 3 measuring devices on Upper Philips Dam and Ditch. Over the last 15 years, over \$2.2 million dollars have been spent on habitat improvement projects.

PROPOSED SOLUTION:

This proposed project contains three components: improving the irrigation delivery system along Upper Philips Ditch through piping, upgrading the current headgate and fish screen, and improvement of fish passage at the associated dam site through creation of a bypass channel. The goals of the project are to provide access and screening for Endangered Species Act-listed Coho, Pacific lamprey, steelhead, and cutthroat trout and to provide the water users of Upper Philips Ditch with an efficient, improved water delivery system that will efficiently deliver water to users along Upper Philips Ditch; improve production; improve water delivery to the lower 0.7 mile of the ditch, thus allowing 31 acres to receive their full allotment; improve water quality by reducing ditch runoff; and encourage conserved water to be dedicated water instream. Efficient conveyance would allow the irrigators to reduce the rate and volume of water diverted, thereby leaving water instream.

Cascade Stream Solutions has developed fish passage designs for a bypass channel and instream large wood that would replace the need for a pushup dam, with funding under the OWEB TA Grant # 215-2033-11631. The resulting project designs address adult and juvenile

salmonid and lamprey passage, while also addressing water user concerns including bank stabilization and conveyance irrigation needs. This project would implement the developed designs and 22 miles of habitat will be made more accessible for adult and juvenile steelhead, resident cutthroat. Pacific lamprey will also benefit from improved passage at this site. At least several miles will be made more accessible to lampreys; however, upstream lamprey distribution in the Little Applegate is not exactly known. Improving passage at this site is supported by the previous barrier removals and instream water dedications from removal of the Buck and Jones Dam in 2006 and Farmer's Ditch Dam in 2012. These completed projects add value to any additional work proposed for the Little Applegate River.

This grant proposal requests funding to implement a pipeline in the Upper Philips Ditch. The cost estimate for piping the entire ditch was \$1.6 million so sections of the ditch were prioritized by need. This option has been developed in consultation with OWRD and JSWCD staff. Under this proposal, priority areas 1, 2, 3, and part of 4 (Map 2) will be piped for a total of 1.8 miles (Map 4). Priority areas are characterized by being the areas with the most severe water loss. These sections have a water loss of up to 100% or 0% efficiency. Priority 2 area is located just below the dam site and in close proximity to a residence. Piping this section of 0.18 miles will save 25% of the water, reduce siltation and clogging of the ditch by vegetation, and allow for water to travel down the ditch and through the reach with the highest efficiency of 15% (Priority 4).

Upon completion of the pipeline, the quantity and rate of water that the Upper Philips Ditch Association will divert from Little Applegate River will be reduced. The APWC will facilitate the process of legal protection of the conserved water with the water users. This will permanently dedicate 75% of the conserved water instream under the Allocation of Conserved Water program. The goal for the amount would be at least 0.5 cfs however a minimum of 0.25 cfs will be dedicated regardless of the amount of conserved water. This number has been determined to be attainable and ecologically significant in late summer when flows are low (2-6 cfs). Members have signed agreements to dedicate a minimum of 0.25 cfs. Currently there are 3 flume locations for manual measurements along the ditch. These would be replaced or augmented with an ultrasonic flow meter or similar flow meter located near the fish screen and point of diversion. The final measuring device and location will be determined based on consultation with the Jackson County Watermaster; it will be located behind the fish screen. There is a streamflow gauge located at the mouth of the Little Applegate River, thereby the instream amount can be measured and protected from the point of diversion downstream for at least 5 miles. This gauge allows the Watermaster or private citizens to monitor instream flows remotely in real-time (http://apps.wrd.state.or.us/apps/sw/hydro_near_real_time/display_hydro_graph.aspx?station_nbr=14365500). Additionally, the need for increased summer streamflows due to water withdrawals is evidenced by the listing of the river by the ODEQ, and the seniority of the majority of the water rights would give any dedicated water high ecological value. APWC, in partnership with the Jackson County Watermaster, Trout Unlimited, and JSWCD are currently coordinating further outreach to water users about on-farm efficiency options.

6. Provide evidence to demonstrate project feasibility. This may include the results of a feasibility study. Attach the results of the study or other evidence, as necessary.

The project designs were developed under the OWEB Technical Assistance Grant (215-2033-11631) awarded to the APWC and from project designs developed by the Jackson County Soil Water Conservation District and Jackson County OWRD, in partnership with Upper Philips Ditch Association members and the Applegate Partnership and Watershed Council. Additional project partners include the U.S. Forest Service, Bureau of Land Management, Rogue Basin Partnership, Laird Norton Foundation, Middle Rogue Steelheaders, and American Rivers. Cascade Stream Solutions was contracted to complete site surveys and preliminary design alternatives, and preferred alternative designs were developed in collaboration with participating landowners, water users, ODFW, and NOAA fish passage engineers (See Attachment 4). Joey Howard, P.E. of Cascade Stream Solutions has designed many fish passage projects in northern California and southern Oregon including several recent projects in the Rogue basin for both dams and culverts. He is also a local Rogue Valley resident and is thus easily accessible. Please see attached Project Designs.

During development of the designs, baseline data was collected including stream longitudinal profile (minimum of 400' upstream and downstream of each dam), stored sediment assessment, cross-sections for hydraulic modeling, geomorphic assessment, riparian conditions assessment, assess impact to existing infrastructure assessment and risk analysis of potential channel adjustments. Fish passage was assessed for various species and life stages by hydrologic analysis of flow rates and velocities for each site under different flow scenarios (i.e. low summer flow, winter high flow) to assess fish passage conditions. Current water rights, water use, and water needs were assessed. Two alternatives for fish passage and preliminary construction cost estimates were developed. Alternatives were assessed by landowners, Upper Philips Ditch Association, and the Technical Team including ODFW, OWRD, NOAA Fisheries, American Rivers, BLM, and USFS prior to selection of the final designs.

Jackson County Soil Water Conservation District (JSWCD) has developed preliminary conveyance engineering, diversion rate measurements, compiled water right data, and current irrigation conveyance efficiency calculations in conjunction with the Jackson County Watermaster over the last 7 years (Attachments 5 and 7). Although supported by the water users, economic constraints have limited the ability of the Upper Philips Ditch Association to implement the designs. This funding proposal is an opportunity to provide support for conveyance improvement.

Fish screen designs for the current water diversion rate of 2 cfs were successfully developed and implemented in 2001 at Upper Philips Ditch. This project will modify the current fish screen in order to accommodate the full water right diversion rate of 4.043 cfs. This component of the project is identical to the one successfully completed by ODFW Fish Screen Shop and Upper Philips Ditch Association at this site previously.

The Applegate Partnership Watershed Council has a 25-year long history of developing and implementing projects throughout the Applegate watershed. The APWC staff have over 20

years of experience with designing, managing, fiscal administration, contracting, and implementation of fish passage, irrigation efficiency, and stream restoration projects. We have worked with the Upper Philips Ditch Association on two successful recent projects: measuring device installation through the Significant POD Program and fish passage improvement at Lower Philips Dam.

7. Describe partnerships and collaborative efforts associated with the planning or implementation of this project. Include a description of how parties of diverse interests worked, or will work together to achieve a common goal.

This project is the result of a long-term partnership for over 13 years between the Upper Philips Ditch Association members, JSWCD, and Applegate Partnership and Watershed Council. These entities have consulted with or have been supported by OWRD, ODFW, NOAA, BLM, Trout Unlimited, and Rogue Basin Partnership over the years to address fish passage at a second point of diversion downstream (Lower Philips Dam), install measurement devices through OWRD's Significant Point of Diversion program, install fish screens, and develop the fish passage designs proposed by this project. These past improvement projects have been funded by OWEB, OWRD, Laird Norton Foundation, and American Rivers and have benefitted from inkind technical assistance from the project partners. Project designs were developed with collaboration from the initial idea phase to the final engineering design in order to improve fish passage, improve water quality, and improve irrigation water delivery. This collaborative process is at the heart of the Applegate Partnership and Watershed Council's mission.

Improving passage at this site is supported by the previous downstream and instream water dedication and removal of the Buck and Jones Dam in 2006 and Farmer's Ditch Dam in 2012.

8. List letters of support (name and/or affiliation of sender is sufficient). Attach copies of the letters to your application.

Upper Philips Ditch Association Members (Baldoni, Christian, Hadden, James, Keberle, Salant, Stroud, Volheim, Williard (Attn 2c), Weaver (Landowners-Attn 2c), Jackson County Soil Water Conservation District, Bureau of Land Management, Jay Doyno ODFW-Fish Biologist, Rich Kilbane ODFW-Fish Screens & Passage, Middle Rogue Steelheaders, Jay Doyno Trout Unlimited, Rogue Basin Partnership (Attn 2d)

Project Tasks

9. Identify tasks necessary for the proposed project using the following format and including as many tasks as necessary to implement the project. In the event that your proposed project receives grant funding, the tasks identified will be incorporated into your grant agreement as the "Project Description."

Note: Project management and administration are common functions within specified project tasks and not a separate project task. All cost match and grant budget funds must apply to the tasks identified below. See the Budget Procedures and Allowable Costs document for more.

For each Task Address the Following:

Task number. Key Task Title

- Task schedule: The approximate dates during which the key task will be completed.
- Description of key task activities: Include specific details of the task such as task purpose, planned approach, and proposed methods.
- Permits/Regulatory Approvals Required: List any permits or regulatory approvals required to conduct the task. All permits/regulatory approvals identified must also be listed in question 15 of this application.

Task 1. Permitting/Contracting/Coordination with Partners/Water User Outreach

- **Task schedule: 5/2019-6/2020 Permits and 5/2019-12/2025**
- **Description of key task activities: Secure & Manage Permits/SHPO consultation/BLM/Partner Coordination/Contracting. APWC will complete the permit applications (USACE/DSL Joint Permit, Jackson County LUI, Floodplain Review Type 1, and Riparian Landscape Plan 1) and SHPO consultation. APWC will contract with engineering and construction firms. Local engineering and construction firms have already conducted a site visit, development of contracts are required. NOAA and ODFW consultation has already begun during the preliminary design phase and will continue. NOAA consultation may require Individual Consultation. BLM consultation has begun and will include securing additional easements as necessary and completion of NEPA by BLM. APWC will coordinate with project partners including Upper Philips Ditch Association Members, JSWCD, RBP, and Middle Rogue Steelheaders. APWC will consult with OWRD, ODFW, BLM, USFS, and Trout Unlimited. Facilitate outreach by Jackson County SWCD Staff. Provide outreach to water users on farm efficiencies and instream water dedication. Assist with evaluation of current water use and future needs. Terminate existing instream leases. Assist irrigators with Allocation of Conserved Water Program process. Evaluate irrigation efficiencies.**
- **Permits/Regulatory Approvals Required: None**

Task 2. Finalize Engineering for Fish Passage/Construct Fish Passage Bypass

- **Task schedule: 1/2020-4/2020 3/2020-10/2020 Instream Work Season**
- **Description of key task activities: Preliminary designs (65%) will be finalized to 100% for construction. No rise certification will be completed. APWC will acquire materials. APWC will manage contractors. Install erosion control. Isolate the worksite. Fish salvage. Grade and brush access road. Excavate bypass channel, install large wood, and boulders.**
- **Permits/Regulatory Approvals Required: Review and approved by ODFW, NOAA. USACE/DSL Joint Permit, DEQ 401 Certification, SHPO Clearance, ODFW, Jackson County Riparian**

Task 3. Acquire Materials for Pipeline

- **Task schedule: 4/2020-12/2020**
- **Description of key task activities: APWC will acquire materials. APWC will manage contractors.**
- **Permits/Regulatory Approvals Required: None**

Task 4. Finalize Engineering for Pipeline/Construct Pipeline

- **Task schedule:** 5/2019-12/2020
- **Description of key task activities:** The JSWCD engineer, Paul DiMaggio, PE, has already surveyed the ditch and developed preliminary designs. These will be finalized for construction as in-kind technical assistance. Trench, grade, and install pipe in ditch and associated infrastructure outside of irrigation season. Install measuring device.
- **Permits/Regulatory Approvals Required:** USACE/DSL Joint Permit, DEQ 1200C, Jackson County LUI, Floodplain Review Type 1, and Riparian Landscape Plan 1

Task 5. Finalize Engineering and Construct Fish Screening and Headgate

- **Task schedule:** 3/2020-11/2020
- **Description of key task activities:** ODFW will construct new fish screen and headgate outside of irrigation season. ODFW will manufacture and secure materials for screen.
- **Permits/Regulatory Approvals Required:** USACE/DSL Joint Permit, Jackson County LUI, Floodplain Review Type 1, and Riparian Landscape Plan 1, Approval by ODFW Screens

Task 6. Planting/Reseeding

- **Task schedule:** 11/2020-4/2021
- **Description of key task activities:** Planting and reseeded disturbed areas with native plant materials.
- **Permits/Regulatory Approvals Required:** Jackson County LUI and Riparian Landscape Plan 1

Task 7. Monitoring/Reporting/Administration

- **Task schedule:** Following construction 3 times/year for 3 years and after significant flow or rainfall events. Administration ongoing.
- **Description of key task activities:** As required by grant agreements, APWC will employ Photo Points and monitor temporary erosion control measures; ODFW will monitor for fish passage through surveys. The Upper Philips Ditch Association and OWRD will measure and report the amount of water diverted. APWC will draft reports and final reports. Grant administration activities and financial requests.
- **Permits/Regulatory Approvals Required:** None

10. Project Task Scheduling – Estimated total project duration: 2019 to 2025 (months/years)

Place an “X” in the appropriate column to indicate when each Project Task would take place. Note that successful projects generally do not receive their first reimbursement until late Q1 or early Q2 of the year after application submission. Project tasks listed must match the tasks identified in Question 9.

| Key Tasks (Add additional rows as needed) | Grant year | | | | Grant year | | | | Grant year | | | | Grant years | | | |
|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| | 2019 | | | | 2020 | | | | 2021 | | | | 2022-2025 | | | |
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| 1 Permitting/Contracting /Coordination with Partners/Water User Outreach | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 2. Finalize Engineering for Fish Passage/ Construct Fish Passage Bypass | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Acquire Materials Pipeline | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Finalize Engineering for Pipeline/Construct Pipeline | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Finalize Engineering and Construct Fish Screening and Headgate | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Planting/Reseeding | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. Monitoring/Reporting /Administration | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |

11. Describe how you propose to measure and report the water diverted and used from the proposed project. Include a proposed method, timing, frequency, and location of measurement in your proposal. If you have questions please contact the Department for more information.

Note: Funded projects are required by statute to “regularly measure and report the water diverted and used from the project” [ORS 541.692(3)].” The Department makes the final determination on the method, timing, frequency, and location of measurement. Grant funds can be used to pay for measurement and reporting expenses. If neither the existing infrastructure nor the proposed project divert water this requirement may not apply. Grant/loan funds can be used to pay for measurement and reporting expenses during the life of the grant.

Water diverted will be measured by the water users once a month during irrigation season and reported annually to the Medford OWRD Office on a Water Use and Recording Form. The Medford WRD staff will perform continuous measurements of water diverted about 2 times/month during irrigation season. APWC will work with Jackson County Watermaster to design and locate a measuring device to adequately measure the amount of water diverted. It is expected that an ultrasonic flow meter or similar flow meter located near the fish screen and point of diversion will be the best option.

12. Provide suggestions for interim and long-term project performance benchmarks.

Interim benchmarks include:

- **Final design fish passage, fish screen, headgate, and conveyance infrastructure.**
- **Necessary permits are secured.**

- **Materials are secured.**
- **Contract with construction entities is secured.**
- **Fish passage, fish screening, headgate, and conveyance efficiency designs have been implemented.**
- **Replanting as necessary is complete.**
- **Site monitoring is complete.**
- **Final Report is submitted.**

Long-term benchmarks include:

- **Access to upstream fish habitat for all aquatic species and life stages is not impeded by Upper Philips Dam. Pushup dam is eliminated.**
- **Increased survival rates of juvenile fish due to access to cold water rearing habitat.**
- **Ditch adequately provides fish screening.**
- **Ditch supplies water in adequate quantities to the lowest member of the Upper Philips Ditch Association.**
- **Diversion structures and Ditch conveyance efficiencies have allowed the Upper Philips Ditch Association to leave conserved water instream. The amount and rate of diversion is lower than prior to the project.**
- **Ditch seepage and water loses are greatly reduced or eliminated.**
- **Upper Philips Ditch Association members can fully irrigate acreage within their associated water rights.**
- **Upper Philips Ditch Association members have benefitted economically from increased production, ease of use, and water reliability.**

13. Describe any issues, unknowns, or conditions that may affect the completion of the key tasks or project. If applicable, describe any measures planned to mitigate them.

Fire restrictions may limit the use of equipment. The installation of the pipeline is scheduled to occur outside of irrigation season and outside of fire restriction thereby limiting the construction days available during these regulated periods. On past projects APWC has petitioned ODFW to grant an extension of the instream work season in order to complete projects that were stalled due to fire regulations. The extensions are based on Fall Chinook salmon migration in the river at the end of the in-water work period. This project site is not likely to affect fall Chinook in late September.

A fire suppression trailer and equipment will be on site and in accordance with the applicable level of fire danger when this project is implemented.

Permits and Regulatory Approvals

14. List all water rights associated with the proposed project tasks. List permit/certificate/ transfer numbers, as applicable, current holder, and associated tax lot. *Note: For all existing water uses, include any and all water right authorizations that allow water use under the current project. Add rows as needed.*

| Permit/Cert/Transfer Number | Current Holder/Patron | Tax Lot ID |
|------------------------------------|------------------------------|-------------------|
| 86646 5317 60845 | Baldoni Samuel/Sharon | 39-2W-19-209 |
| 86646 50142 | Christian Michael J/Sara L | 39-2W-29-200 |
| 86646 5317 | Hopkins Harold H/Franceen | 39-2W-19-219 |

| | | |
|------------------|--------------------------------|---------------|
| 86646 5317 | Hopkins Harold H/Franceen | 39-2W-19-238 |
| 38957 48963 | James Timothy | 39-3W-24A-101 |
| 86646 5317 60845 | Keberle Donald F Trustee Et Al | 39-2W-19-601 |
| 5317 | Langan Beulah | 39-2W-19-218 |
| 86646 | Salant Peter N Trustee Et Al | 39-2W-20-201 |
| 86646 | Salant Peter N Trustee Et Al | 39-2W-19-900 |
| 86646 50142 | Salant Peter N Trustee Et Al | 39-2W-29-300 |
| 86646 5317 60845 | Sartorio James Paul Trustee | 39-2W-19-207 |
| 38957 | Stroud Forest | 39-2W-19-401 |
| 86646 S 44509 | Stroud Forest | 39-2W-19-501 |
| 38957 | Stroud Forest | 39-3W-24A-100 |
| 38957 48963 | Stroud Forest | 39-3W-24A-500 |
| 38957 48963 | Stroud Forest | 39-3W-24A-502 |
| 86646 5317 | Volheim Erin Et Al | 39-2W-19-1000 |
| 86646 5317 60845 | Willard David Arthur Trustee | 39-2W-19-210 |

15. In the table below, provide a list of any permits and regulatory approvals needed to implement the project and indicate the status of each in the table below. Please submit copies of any secured permits/approvals or describe efforts in securing necessary permits/approvals, including current status. If no permits or regulatory approvals are required, please provide an explanation. *Add rows as needed.*

The APWC has discussed and will be further pursuing the project’s eligibility to fall under one or more of the Bureau of Land Management’s programmatic permits ARBO II. The APWC and BLM have worked as partners on a number of successfully implemented projects where we were able to have BLM apply for instream permits and conduct all SHPO requirements. This partnership would eliminate the need for some permits but the eligibility will need to be determined and finalized.

Listed are the permits that would be required otherwise. BLM will likely complete the NEPA and SHPO review as in-kind technical assistance.

| Permit/ Regulatory Approval | Status and Efforts To Date |
|--|--|
| Joint USACE/DSL Fill/Removal Permit | In communication with USACE/DSL, NOAA Fisheries, and ODEQ. Not yet submitted but application is expected to be completed by funding decision date. We will be able to apply for this permit as soon as funding is secured. |
| Jackson County Riparian Ordinance Permit | The APWC has a rolling Jackson County Riparian Restoration Permit. We will add this project site to this permit as soon as funding is secured. |
| Jackson County No Rise Certification | The engineer will complete this certification when funding is available for the preparation of the report for the permits. We will be able to apply for this permit as soon as funding is secured. |
| SHPO Review | Based on USACE Fill/Removal Permit application. We hope to work with BLM on SHPO clearance. If not this is a funding limited action and will await secured funding. |
| NOAA Consultation | NOAA Consultation began in 2014 and is ongoing. This will require individual |

| | |
|----------------------------|--|
| | consultation that will commence once the final designs are completed, pending funding. |
| ODFW Fish Passage Approval | Consultation began in 2014; preliminary approval (see Attachment 2d). Consultation is ongoing and will be finalized once the final designs are completed, pending funding. |

VII. Public Benefits

Instructions: Describe how the project would provide public benefits in each of the three public benefit categories identified below. In your responses, describe current conditions and anticipated project outcomes and benefits. Describe how the project outcomes will contribute to each anticipated public benefit. Descriptions should be quantitative when possible. Applications will be scored and ranked solely based on the descriptions of the economic, environmental, and social/cultural public benefits and the likelihood of the project achieving the claimed benefits. More specifically, the evaluation will be based on the change in conditions expected to result from the project as demonstrated in the application.

Please see the Guidance on the Evaluation of Public Benefits document, on the OWRD Funding Opportunities Forms webpage, for definitions of each public benefit and a description of how the public benefits will be evaluated. Applications that do not demonstrate public benefit in each of the three categories (economic, environmental, social/cultural) will be deemed incomplete.

Leave blank any public benefits that are not applicable to the proposed project.

16. Economic Benefits – ORS 541.673(2)

a. Job creation or retention:

This project will sustain jobs for local citizens of Jackson County. It will require finalized engineering and construction oversight valued at \$20,000 and provided by the local, Ashland based firm Cascade Stream Solutions. Construction will require contracting with two additional companies based in Jackson County and will fund at least 5 weeks of fulltime employment for 3 employees, valued at \$270,000. It will provide funding for 2 work months for the APWC staff to manage the project who are local residents of Jackson County with an office in Ruch, Oregon. Materials will be purchased locally and are valued at \$706,000. Net revenue from increased production and production of higher value crops on 31 acres will provide work for local citizens on farms and for the local restaurants who are supplied by these farms.

Rogue River salmon and steelhead runs support annually a \$7.2 million sport fishing industry as well as the related tourism industry. Many local families and other families across Southern Oregon depend on these resources including approximately 75 licensed fishing guide companies locally. The Little Applegate River is the primary producer of steelhead in the Applegate Subbasin, this project will support the widely popular, local recreational steelhead fishery.

b. Increases in economic activity:

Currently, even if the water users divert the maximum allowable rate, the water users along the lower 0.7 miles (30%) of the ditch have difficulty getting their full allotment (even with rotations proposed). The excessive water loss within the ditch which has caused an inability of water users to receive their full allotment has put undue economic hardship on water users on small farms in the lower 0.7 ditch miles. It has limited production and they have hired consultants to research other ways to receive water, which have resulted in no other options other than trucking water or piping the ditch.

The proposed pipeline will deliver their full allotment of water. Increased production and production of higher value crops on 31 acres will provide work for local citizens on farms and for the local restaurants who are supplied by these farms and increased net revenue. These farms produce cattle and goats, hay, and diverse crops that can supply local restaurants and farmer's markets. One farm, Salant Family Ranch (<https://salantfamilyranch.wordpress.com/>). The Salant Family Ranch raises local, natural, Grass-Fed and Grain-Finished beef, raised on their Family Ranch which supplies local residents and restaurants, Rogue Valley Farm to School, and Rogue Valley Farmer's Markets. Part of the pipeline will be on public resource lands managed by the BLM. Following improvements in water availability and reliability, water users expect to increase production on 31 acres and raise higher value crops (vineyard/cannabis) on 10-15 acres. Gross return/year was valued at pasture \$200/acre and hay at \$500/acre. Vineyards can yield \$5,000/acre, hemp \$100,000/acre, and cannabis \$1,000,000/acre.

This project will sustain jobs for local citizens of Jackson County. It will require finalized engineering and construction oversight valued at \$20,000 and provided by the local, Ashland based firm Cascade Stream Solutions. Construction will require contracting with two additional companies based in Jackson County and will fund at least 5 weeks of fulltime employment for 3 employees, valued at \$270,000. It will provide funding for 3 work months for the APWC staff to manage the project who are local residents of Jackson County with an office in Ruch, Oregon. Materials will be purchased locally and are valued at \$440,000. Net revenue from increased production and production of higher value crops on 31 acres will provide work for local citizens on farms and for the local restaurants who are supplied by these farms.

This project will support fish production for the Rogue River salmon and steelhead runs that support annually a \$7.2 million sport fishing industry as well as the related tourism industry including 75 licensed fishing guide companies locally.

c. Increases in efficiency or innovation:

This project will increase irrigation efficiency on the 1.8 miles of Upper Philips Ditch. The proposed construction will install an efficient, improved water delivery system that will deliver water to users along Upper Philips Ditch; improve production; improve water delivery to the lower 0.7 mile of the ditch, thus allowing an additional 31 acres to receive their full allotment; improve water quality by reducing ditch runoff; and 0.25-0.5 cfs of conserved water to be dedicated water instream. . This number has been determined to be attainable and ecologically significant in late summer when flows are low (2-6 cfs). Efficient conveyance would allow the irrigators to reduce the rate and volume of water diverted, thereby leaving water instream. Additionally, the pipeline infrastructure will allow for the opportunity for

further on-farm efficiencies in the future. It is estimated that 90-180 ac-ft of water per year will be conserved.

- d. Enhancement of infrastructure, farmland, public resource lands, industrial lands, commercial lands or lands having other key uses:

This proposed project contains three components: improving the irrigation delivery system along Upper Philips Ditch through piping, upgrading the current headgate and fish screen, and improvement of fish passage at the associated dam site through creation of a bypass channel. The goals of the project are to provide access and screening for Endangered Species Act-listed Coho, Pacific lamprey, steelhead, and cutthroat trout and to provide the water users of Upper Philips Ditch with an efficient, improved water delivery system that will efficiently deliver water to users along Upper Philips Ditch; improve production; improve water delivery to the lower 0.7 mile of the ditch, thus allowing an additional 31 acres to receive their full allotment; improve water quality by reducing ditch runoff; and conserved water to be dedicated water instream. Efficient conveyance would allow the irrigators to reduce the rate and volume of water diverted, thereby leaving water instream.

This project will enhance infrastructure on farmland by improving the point of diversion and headgate and installing 1.8 miles of pipeline. The pipeline would serve local farms that employ local citizens. These farms produce cattle and goats, hay, and diverse crops that can supply local restaurants and farmer's markets. One farm, Salant Family Ranch (<https://salantfamilyranch.wordpress.com/>). The Salant Family Ranch raises local, natural, Grass-Fed and Grain-Finished beef, raised on their Family Ranch which supplies local residents and restaurants, Rogue Valley Farm to School, and Rogue Valley Farmer's Markets. Part of the pipeline will be on public resource lands managed by the BLM.

Improved access for fish would allow populations to fully realize the benefits of riparian and instream restoration has occurred upstream and downstream of this project site. Over the last 15 years, over \$2.2 million dollars has been spent on habitat improvement projects. The Little Applegate River is the primary producer of steelhead in the Applegate Subbasin. This recreational fishery is valued at over \$7.2 million.

- e. Enhanced economic value associated with tourism or recreational or commercial fishing, with fisheries involving native fish of cultural significance to Indian tribes or with other economic values resulting from restoring or protecting water instream:

This project would restore access to essential habitat for ESA-listed species of concern Pacific lamprey, ESA-listed threatened Coho salmon, summer and winter steelhead, and cutthroat trout. Additionally, salmonids and Pacific lamprey are a cultural, spiritual, ceremonial, medicinal, subsistence and ecological significant species for many Tribes including the local Takelma and the Cow Creek Band of Umpqua Tribe of Indians. Passage for lamprey and salmonids are a part of the design of the fish passage improvement project because the Little Applegate River contains essential habitat for this species.

Rogue River salmon and steelhead runs support annually a \$7.2 million sport fishing industry as well as the related tourism industry. Many local families and other families across Southern Oregon depend on these resources including approximately 75 licensed fishing guide companies locally. Improved access for fish would allow populations to fully realize the benefits of riparian and instream restoration that has occurred upstream and downstream of this project site. Over the last 15 years, over \$2.2 million dollars has been spent on habitat improvement projects.

- f. Increases in irrigated land for agriculture:

Thirty-one acres of land will receive their full allotment and be able to increase production. Additionally, one landowner plans to install 10-15 acres of vineyard following piping which will allow the irrigated acres to produce a higher value crop. Currently the system does not adequately provide the water necessary for this production. This represents an increase of 21% acres that will receive access to their full water right.

17. Environmental Benefits – ORS 541.673(3)

- a. A measurable improvement in protected streamflows. Describe the legal means by which the water will be permanently dedicated instream and protected by the Oregon Water Resources Department (e.g. Allocation of Conserved Water program). *This MUST be included to receive a score for this public benefit.*

The Little Applegate River is listed by the ODEQ as water quality limited due to Flow Modification and Temperature. The affected beneficial uses include Anadromous fish passage, Salmonid fish rearing, Salmonid fish spawning, Salmonid fish rearing, and Resident fish and aquatic life. Summer water temperatures are high enough to be considered deleterious to fish according to the Little Applegate Watershed Analysis. The dedication of conserved water will increase summer flows and decrease temperatures.

This project will facilitate the dedication of 0.25-0.5 cfs of water instream under the Allocation of Conserved Water program or a direct transfer. Water users have signed agreements that will dedicate a minimum of 0.25 cfs of water instream through the Allocation of Conserved Water Program with a goal for greater savings of over 0.5 cfs, to be determined after the testing period. This amount has been determined by ODFW Biologists as an ecologically

beneficial amount, especially when summer flows reach 2-6 cfs. Water use will be measured and reported with an ultrasonic flow meter or similar flow meter. A streamflow gage is located at the mouth of the Little Applegate River, thereby the instream amount can be measured and protected from the point of diversion downstream for at least 5 miles. Additionally, very low summer flows and the seniority of the water rights increase the ecological value of this dedicated water.

Describe how the protected streamflows accomplish one or more of the following:

- (A) Supports the natural hydrograph;
- (B) Improves floodplain function;
- (C) Supports state- or federally-listed sensitive, threatened or endangered fish species;
- (D) Supports native fish species of cultural importance to Indian tribes; or
- (E) Supports riparian habitat important for wildlife:

The Little Applegate River is listed by the ODEQ as water quality limited due to Flow Modification and Temperature. The affected beneficial uses include Anadromous fish passage, Salmonid fish rearing, Salmonid fish spawning, Salmonid fish rearing, and Resident fish and aquatic life. Summer water temperatures are high enough to be considered deleterious to fish according to the Little Applegate Watershed Analysis. The dedication of conserved water will increase summer flows and decrease temperatures.

The improvement in streamflows will support the natural summer hydrograph which is severely reduced in volume in summer months due to irrigation water withdrawals. Enhancing the natural hydrograph through increased flows will improve floodplain function. Providing critical access to cold water habitat, in particular rearing habitat will support federally-listed and state-listed Pacific lamprey, salmon, steelhead, and cutthroat trout populations. Leaving water instream will support these populations as well. This project would restore access to essential habitat for Pacific lamprey, a species of concern. Additionally, salmon and Pacific lamprey are a cultural, spiritual, ceremonial, medicinal, subsistence and ecological significant species for many Tribes including the Takelma and the Cow Creek Band of Umpqua Tribe of Indians. Passage for these species are a part of the design of the fish passage improvement project because the Little Applegate River contains essential habitat for this species.

- b. A measurable improvement in groundwater levels that enhances environmental conditions in groundwater restricted areas or other areas:

Leaving 0.25-0.5cfs of water instream and piping of the ditch will allow natural recharge of the aquifer through the Little Applegate River and reduce evaporative losses currently occurring in the open ditch as well as potentially enhance groundwater recharge or base flows. The amount of conserved water will be 90-270 ac-ft/year.

- c. A measurable improvement in the quality of surface water or groundwater:

The Little Applegate River is listed by the ODEQ as water quality limited due to Flow Modification and Temperature. The affected beneficial uses include Anadromous fish passage, Salmonid fish rearing, Salmonid fish spawning, Salmonid fish rearing, and Resident

fish and aquatic life. Summer water temperatures are high enough to be considered deleterious to fish according to the Little Applegate Watershed Analysis. The dedication of conserved water will increase summer flows and decrease temperatures.

Piping the unlined, open ditch will improve water quality at the irrigation return. The conserved instream water will improve water quality in combination with previously dedicated flows by reducing water temperatures of the Little Applegate River. Installation of a new headgate will eliminate the year round flows conditions currently existing in the ditch. This modification will reduce ditch erosion and capture during high water events. Piping will reduce the introduction of sediment, bacteria, and nutrients.

The water users currently use heavy equipment instream to create a 4-foot, channel spanning seasonal pushup dam above the concrete structure in order to gain sufficient head for water to enter the headgate. This creates disturbance of the streambank and bedload. The fish passage designs will install 2 logs that will permanently raise the surface water level and replace the pushup dam thereby eliminating this disturbance. The current headgate is not functional and water enters the ditch year-round. The structure is not adequate to control the volume of water entering the ditch during irrigation season, nor to stop water from running in the ditch during the rest of the year. Installation of a headgate will reduce the water quality impacts including erosion and sedimentation.

d. Water conservation:

Current water loss through 1.8 miles proposed for piping of the 2.7 mile long ditch could be greater than 270 ac-ft of water per year. Piping of the ditch would eliminate this water loss and permanently dedicate 0.25-0.5cfs or 90-180 ac-ft/year of flow to the Little Applegate River. The reduced certificates would allow for 0.25-0.5 cfs less water diverted into the ditch. Installation of the headgate would eliminate capture of streamflow outside of the irrigation season.

*Note: Any project that conserves water and permanently dedicates at least 25% of the conserved water quantity to instream use will automatically receive a scoring bump in the environmental public benefit category with the opportunity to demonstrate additional environmental benefit to increase the score. **If awarded funding, the percentage identified below will be a condition of funding.***

Identify the portion of conserved water that will be permanently dedicated instream and protected by the Oregon Water Resources Department: 75 %

Describe the legal means by which the water will be permanently dedicated instream and protected by the Oregon Water Resources Department (e.g. Allocation of Conserved Water program):

Water would be protected through the Allocation of Conserved Water Program. Following presentations and meetings with the Jackson County Watermaster, the water users have signed agreements to participate in the Allocation of Conserved Water Program.

- e. Increased ecosystem resiliency to climate change impacts:

This project would aid in counteracting the effects of climate change on riparian and anadromous fish populations by reducing impacts of water diversions on stream ecosystems and increasing the fecundity of anadromous fish populations. The Upper Philips concrete dam is approximately 5 miles upstream from the confluence with the Applegate River and ODFW fish presence surveys have recorded Chinook to River Mile 2, steelhead to river mile 19 and Coho to river mile 6. Approximately 22 miles of high quality steelhead habitat is present upstream of this diversion. This project would provide access to this habitat. Climate change has been projected to significantly reduce salmon populations and increase water temperatures. Increased streamflows from water left instream will increase the resiliency of aquatic species and riparian vegetation to the additional stressors of climate change, provide cold water refugia, and reduce water temperature. This project provides access to cold water rearing habitat which will become increasingly important. Additionally, restoring subpopulations increases the overall population resiliency in the face of climate change.

- f. Improvements that address one or more limiting ecological factors in the project watershed:

Limiting factors in the watershed are water diversions, temperature, fish passage barriers, riparian vegetation condition, dissolved oxygen, and sediment; these limiting factors have been recognized as such by the Rogue Basin Coordinating Councils (RBCC) Watershed Health Factors Analysis (2006), the Oregon Department of Fish and Wildlife's (ODFW) 2013 Statewide Fish Passage Priority list and draft 2018 Rogue Basin Fish Passage Priority List, and the NOAA-SONC Coho 2014 Final Recovery Plan.

The Watershed Health Factors Analysis prepared by RBCC for OWEB states that barriers are a top priority for the overall Applegate Basin (page 10) and indicates that barriers are limiting for the Little Applegate River (page 16). Furthermore it states that these barriers are a top priority for ODFW's Upper Rogue District. This project will eliminate a barrier listed within the on ODFW's Statewide Fish Passage Priority list and help address the "Middle Rogue-Applegate population is at high risk of extinction", SONCC Recovery Plan, page 1331.

The Little Applegate River is listed by the ODEQ as water quality limited due to Flow Modification and Temperature. The affected beneficial uses include Anadromous fish passage, Salmonid fish rearing, Salmonid fish spawning, Salmonid fish rearing, and Resident fish and aquatic life. Summer water temperatures are high enough to be considered deleterious to fish according to the Little Applegate Watershed Analysis.

The designed fish passage project will remove the Upper Philips Dam from the Fish Passage Priority List by facilitating access to 22 miles of high quality steelhead habitat and 6 miles of lamprey habitat. Additionally under certain flow conditions, 1 miles of coho habitat will be accessible. Coho, steelhead, and lamprey will also benefit from 0.25 cfs instream water dedication. The dedication of conserved water will increase summer flows and decrease temperatures.

18. Social/Cultural Benefits – ORS 541.673(4)

- a. The promotion of public health and safety and of local food systems:

The Little Applegate River is listed by the ODEQ as water quality limited due to Flow Modification and Temperature. The affected beneficial uses include Anadromous fish passage, Salmonid fish rearing, Salmonid fish spawning, Salmonid fish rearing, and Resident fish and aquatic life. The dedication of conserved water will increase summer flows and decrease temperatures.

Improving irrigation water quality, availability and reliability will allow the small farm and residences to increase production on 31 acres that previously did not receive their full allotment. These farms support local restaurants, local residents, and Rogue Valley Farmer's Markets. Piping the ditch will improve water quality for application to food crops. Piping the ditch will eliminate the need to use herbicides to control algal growth in the ditch.

- b. A measurable improvement in conditions for members of minority or low-income communities, economically distressed rural communities, tribal communities or other communities traditionally underrepresented in public processes:

The Little Applegate River is a stronghold for Pacific lamprey within the Applegate Watershed. Salmonids and Pacific lamprey are a cultural, spiritual, ceremonial, medicinal, subsistence and ecological significant species for many Tribes including the local Takelma and the Cow Creek Band of Umpqua Tribe of Indians. Passage for lamprey and salmonids are a part of the design of the fish passage improvement project because the Little Applegate River contains essential habitat for this species.

- c. The promotion of recreation and scenic values:

Recreational values for this project include enhanced recreational angling opportunities downstream in areas of the Applegate and Rogue Rivers that are open to public angling. Rogue River salmon and steelhead runs support annually a \$7.2 million sport fishing industry as well as the related tourism industry. Many local families and other families across Southern Oregon depend on these resources including approximately 75 licensed fishing guide companies locally. Improved access for fish would allow populations to fully realize the benefits of riparian and instream restoration that has occurred upstream and downstream of this project site. Over the last 15 years, over \$2.2 million dollars has been spent on habitat improvement projects.

The Little Applegate River Scenic values are promoted by this project through improved streamflows, increased salmon and trout populations in the scenic Applegate Valley, a destination for local residents and tourists alike. Because this project is located in the upper Applegate Watershed this project's success will create positive recreational and scenic impacts throughout the majority of the Applegate River and the Rogue River from the Grants Pass area to Gold Beach.

- d. Contribution to the body of scientific data publicly available in this state:

The final report will be publically available on our website and on OWEB's website. This project would be an example project for the APWC to use to promote ecosystem stewardship by water users and the collaborative process through which the project was developed. We will feature an article in the local Applegater newspaper.

- e. The promotion of state or local priorities, including but not limited to the restoration and protection of native fish species of cultural significance to Indian tribes:

This project will dedicate water instream and restore access to essential habitat for salmon and Pacific lamprey. Salmon and Pacific lamprey are a cultural, spiritual, ceremonial, medicinal, subsistence and ecological significant species for many Tribes including the Cow Creek Band of Umpqua Tribe of Indians. Passage for lamprey is a part of the design of the fish passage improvement project because the Little Applegate River contains essential habitat for this species.

The Rogue Basin Partnership's Rogue River basin planning effort lists Upper Philips Dam Project as a #1 priority under the 2016 Rogue Basinwide Priority Barrier Removal Analysis.

This project's goals align with the Oregon's 2017 Integrated Water Resources Strategy by supporting the following recommended actions:

- **10.A Improve Water-Use Efficiency and Water Conservation,**
- **7.A Develop and Upgrade Water and Wastewater Infrastructure,**
- **4.C Promote Strategies That Increase/Integrate Energy and Water Savings,**
- **5.5A Plan and Prepare for Drought Resiliency,**
- **11.A Improve Watershed Health, Resiliency, and Capacity for Natural Storage,**
- **5.B Assist with Climate Change Adaptation, and Resiliency Strategies, and**
- **13. E Invest in Implementation of Water Resources Projects.**

The Oregon Lamprey Recovery Strategy states that limiting factors are reduced water quality, passage barriers, and altered flow patterns and lists improve passage as a conservation action.

This project restores passage and instream flows for State-listed Rogue SMU Coho salmon, Pacific Lamprey, summer steelhead, and coastal cutthroat trout.

As stated above the Watershed Health Factors Analysis (2006) prepared by the Rogue Basin Coordinating Council (RBCC) for OWEB states that addressing fish passage barriers are a top priority for ODFW's Upper Rogue District and ODFW has continued to include this fish passage issue on their draft 2018 Rogue Basin Fish Passage Priority list.

Little Applegate Watershed Management Plan includes the following strategies supported by this project: Assist non-federal landowners in developing more efficient irrigation practices; Install pipe in unlined ditches where feasible; Improve fish passage at all identified barriers to be consistent with stream step-pool structure; Increase summer stream flows to improve habitat connectivity and water quality, increase habitat quantity, and restore natural flow regime; Reduce water withdrawals; Reduce water use through water conservation practices,

including improving and maintaining water delivery systems; and Provide fish screen at all diversions.

Addressing fish passage at Upper Philips Dam is a statewide priority for ODFW as it is listed on the 2013 Statewide Fish Passage Priority List. The Oregon Conservation Strategy lists Passage Barriers, including dams and culverts, as a Limiting Factor for the West Cascades. It also lists for Rogue SMU, Klamath Mountains Province ESU Summer steelhead limiting factors such as Water quality; Alterations of hydrology and watershed function; Fish passage. The recommended actions are maintain momentum for restoration of fish passage throughout the Rogue watershed by continued funding of passage projects; and Restore streamflows through cooperative projects. This project addresses all of these Oregon Conservation Strategy list items.

- f. The promotion of collaborative basin planning efforts, including but not limited to efforts under Oregon's Integrated Water Resources Strategy:

This project is the result of a long-term partnership for over 13 years between the Upper Philips Ditch Association members and the Applegate Partnership and Watershed Council. This project has been developed through publically-held and noticed meetings of the Aquatic & Riparian Committee. In addition, it has been developed through a collaborative process with multiple partners including the Upper Philips Ditch Association, OWRD, ODFW, NOAA, BLM, JSWCD, Rogue Basin Partnership, Laird Norton Foundation, and American Rivers. The Board of the APWC is a diverse group of local individuals who reside within the Applegate watershed.

The Rogue Basin Partnership's collaborative Rogue River basin planning effort lists Upper Philips Dam Project as a #1 priority under the 2016 Rogue Basinwide Priority Barrier Removal Analysis. This barrier will be removed through this project.

Addressing fish passage through this project at Upper Philips Dam is a statewide priority for ODFW as it is listed on the 2013 Statewide Fish Passage Priority List. The Oregon Conservation Strategy lists Passage Barriers, including dams and culverts, as a Limiting Factor for the West Cascades. It also lists for Rogue SMU, Klamath Mountains Province ESU Summer steelhead limiting factors as Water quality; Alterations of hydrology and watershed function; Fish passage with the recommended actions are Maintain momentum for restoration of fish passage throughout the Rogue watershed by continued funding of passage projects; and Restore streamflows through cooperative projects.

This project's goals align with the Oregon's 2017 Integrated Water Resources Strategy by supporting the following recommended actions: 10.A Improve Water-Use Efficiency and Water Conservation, 7.A Develop and Upgrade Water and Wastewater Infrastructure, 4.C Promote Strategies That Increase/Integrate Energy and Water Savings, 5.5A Plan and Prepare for Drought Resiliency, 11.A Improve Watershed Health, Resiliency, and Capacity for Natural Storage, 5.B Assist with Climate Change Adaptation, and Resiliency Strategies, and 13.E Invest in Implementation of Water Resources Projects.

The Oregon Lamprey Recovery Strategy states that limiting factors are reduced water quality, passage barriers, and altered flow patterns and lists improve passage as a conservation action.

This project supports NOAA’s SONCC Coho Salmon Recovery Plan goals including SONCC-MRAR.5.1.15: Improve access Remove barriers.

Little Applegate Watershed Management Plan includes the following strategies supported by this project: Assist non-federal landowners in developing more efficient irrigation practices; Install pipe in unlined ditches where feasible; Improve fish passage at all identified barriers to be consistent with stream step-pool structure; Increase summer stream flows to improve habitat connectivity and water quality, increase habitat quantity, and restore natural flow regime; Reduce water withdrawals; Reduce water use through water conservation practices, including improving and maintaining water delivery systems; and Provide fish screen at all diversions.

VIII. Project Budget

Instructions: Please answer the following questions about the proposed project budget using the tables provided. All Loan and Other Funds must be allowable costs as described in the Department’s Grant Budget Procedures and Allowable Costs document.

Please provide an estimated line item budget for the proposed project. Examples include: direct project specific costs, such as in-house staff salary, contractual services, travel and administrative costs. See the Department’s Budget Procedures and Allowable Costs on the OWRD Funding Opportunities Forms webpage for further guidance.

| OVERALL PROJECT BUDGET Line Items | Number of Units* (e.g. # Hours) | Unit Cost (e.g. hourly rate) | In-Kind Match | Cash Match Funds | OWRD Grant Funds | Total Cost |
|---|---------------------------------|------------------------------|-----------------|------------------|------------------|-------------------|
| Materials | 684 | 1032.37 | 15,480.00 | 85,169.00 | 605,491.00 | 706,140.00 |
| Contractual/Consulting | 1,879.50 | 274.80 | 94,027.00 | 109,620.00 | 312,834.00 | 516,481.00 |
| Salary/Wages/Benefits | | | 1,960.00 | 29,902.00 | 17,485.00 | 49,347.00 |
| <i>S/W/B: Program Staff</i> | <i>1,178.00</i> | <i>40.85</i> | <i>1,960.00</i> | <i>28,882.00</i> | <i>17,280.90</i> | <i>48,123.00</i> |
| <i>S/W/B: Crew</i> | <i>48.00</i> | <i>25.5</i> | <i>0.00</i> | <i>1,020.00</i> | <i>204.00</i> | <i>1,224.00</i> |
| Equipment | 0 | 0 | 0 | 0 | 0 | 0.00 |
| Other: Permit Fees | 10 | \$993.80 | 0 | 9,630.00 | 308 | 9,938.00 |
| Mileage | | | 1,554.00 | 760.00 | 348.00 | 2,662.00 |
| <i>Mileage, APWC</i> | <i>2,104.00</i> | <i>0.58</i> | <i>112.32</i> | <i>760.00</i> | <i>348.00</i> | <i>1,220.32</i> |
| <i>Mileage, Agency</i> | <i>2,620.00</i> | <i>0.55</i> | <i>1,441.00</i> | <i>0</i> | <i>0</i> | <i>1,441.00</i> |
| SUB-TOTAL DIRECT COSTS | | | 113,021.00 | 235,081.00 | 936,466.00 | 1,284,568.00 |
| Administrative Costs** | <10% | | 0.00 | 21,377.00 | 46,824.00 | 68,201 |
| Grant Report, Post Project | 3 | 1,000.00 | 0.00 | 3,000.00 | 0.00 | 3,000.00 |
| S/W/B: Crew Post Project Plant Establishment (3yrs) | 58.82 | 25.5 | 0.00 | 1,500.00 | 0.00 | 1,500.00 |
| Total | | | 113,021 | 260,958 | 983,290 | 1,357,269 |

Combined Match Total 373,979

* The "Unit" should be per "hour" or "day" – not per "project" or "contract." Units x Unit Costs = Total Cost

** Administrative Costs may not exceed 10% of the total funding requested from the Department

19. Identify the budget for each key task below. Key tasks identified below should be the same as the key tasks identified in Questions 9 and 10.

| Key Tasks | In-Kind Match | Cash Match Funds | OWRD Grant Funds | Total Cost |
|--|---------------|------------------|------------------|--------------|
| 1. Permitting/Contracting/ Coordination with Partners/ Water User Outreach | 14,660 | 34,006 | 5,742 | 54,408.00 |
| 2. Finalize Engineering for Fish Passage/Construct Fish Passage Bypass | 4,683 | 103,395 | 0 | 108,078.00 |
| 3. Acquire Materials (pipeline only) | 10,900 | 51,022 | 918,325 | 980,247.00 |
| 4. Finalize Engineering for Pipeline/Construct Pipeline | 20,141 | 0 | 10,152 | 30,293.00 |
| 5. Finalize Engineering and Construct Fish Screening and Headgate | 58,917 | 41,881 | 531 | 101,329.00 |
| 6. Planting/Reseeding | 3,080 | 2,272 | 0 | 5,352.00 |
| 7. Monitoring/Reporting/ Fiscal Admin <5% | 640 | 28382 | 48540 | 77,562 |
| Total | 113,021.00 | 260,958.00 | 983,290.00 | 1,357,269.00 |

**Admin Costs are not included in this total calculation. Post Project Grant Reports and Plant Establishment are included in these calculations

IX. Match Funding

Instructions: Fill out the table below and attach the appropriate documentation for both secured and pending match (add rows as needed). Label the documentation as Attachment #3. Applications requesting grant funds must demonstrate match that at a minimum equals 25% of total project cost.

For secured funding, you must attach a letter of support from the match funding source that specifically mentions the dollar amount identified for this project and as shown in the "Amount/Dollar Value" column in the table below and describes the work to be accomplished through the match.

For pending resources, you must attach other written documentation showing a request for the matching funds must accompany the application or documentation must identify the date on which a future funding application will be submitted, identify the funding program, and provide evidence that the project is eligible for the funding program identified.

| Match Funding Source (if in-kind, briefly describe the nature of the contribution) | Type (<input checked="" type="checkbox"/> One) | Status (<input checked="" type="checkbox"/> One) | Amount/ Dollar Value | Date Match Funds Available (Month/Year) |
|--|---|---|-----------------------------|---|
| APWC Fish Passage Program | <input type="checkbox"/> cash <input checked="" type="checkbox"/> in-kind | <input checked="" type="checkbox"/> secured <input type="checkbox"/> pending | 2,916 | 4/2019 |
| Jackson County Soil Water Conservation District Technical Assistance, Outreach | <input type="checkbox"/> cash <input checked="" type="checkbox"/> in-kind | <input checked="" type="checkbox"/> secured <input type="checkbox"/> pending | 8,700 | 4/2019 |
| Jackson County Soil Water Conservation District Technical Assistance, Engineering | <input type="checkbox"/> cash <input checked="" type="checkbox"/> in-kind | <input checked="" type="checkbox"/> secured <input type="checkbox"/> pending | 10,000 | 4/2019 |
| Landowner Match: Labor, Water measurement, Logs/Root wads, Materials | <input type="checkbox"/> cash <input checked="" type="checkbox"/> in-kind | <input checked="" type="checkbox"/> secured <input type="checkbox"/> pending | 13,040 | 4/2019 |
| Bureau of Land Management: NEPA, SHPO clearance, permitting, seed | <input type="checkbox"/> cash <input checked="" type="checkbox"/> in-kind | <input checked="" type="checkbox"/> secured <input type="checkbox"/> pending | 13,400 | 2/2019 |
| ODFW-District Fish Biologists | <input type="checkbox"/> cash <input checked="" type="checkbox"/> in-kind | <input checked="" type="checkbox"/> secured <input type="checkbox"/> pending | 675 | 4/2019 |
| ODFW-Engineering | <input type="checkbox"/> cash <input checked="" type="checkbox"/> in-kind | <input checked="" type="checkbox"/> secured <input type="checkbox"/> pending | 13,000 | 4/2019 |
| ODFW-Screens & Passage Labor & Construction | <input type="checkbox"/> cash <input checked="" type="checkbox"/> in-kind | <input checked="" type="checkbox"/> secured <input type="checkbox"/> pending | 45,920 | 4/2019 |
| Rogue Basin Partnership-Permitting, Contracting | <input type="checkbox"/> cash <input checked="" type="checkbox"/> in-kind | <input checked="" type="checkbox"/> secured <input type="checkbox"/> pending | 2,100 | 4/2019 |
| Middle Rogue Steelheaders: volunteer planting | <input checked="" type="checkbox"/> cash <input checked="" type="checkbox"/> in-kind | <input checked="" type="checkbox"/> secured <input type="checkbox"/> pending | 900 | 12/2019 |
| USFS Permitting Assistance | <input type="checkbox"/> cash <input checked="" type="checkbox"/> in-kind | <input checked="" type="checkbox"/> secured <input type="checkbox"/> pending | 800 | 4/2019 |
| Trout Unlimited-Instream Water Dedication | <input type="checkbox"/> cash <input checked="" type="checkbox"/> in-kind | <input checked="" type="checkbox"/> secured <input type="checkbox"/> pending | 800 | 4/2019 |
| Cascade Stream Services Engineering | <input type="checkbox"/> cash <input checked="" type="checkbox"/> in-kind | <input checked="" type="checkbox"/> secured <input type="checkbox"/> pending | 770 | 4/2019 |
| ODFW R&E Grant (applied 2/2019) | <input checked="" type="checkbox"/> cash <input type="checkbox"/> in-kind | <input type="checkbox"/> secured <input checked="" type="checkbox"/> pending | 48,816 | 11/2019 |
| Oregon Watershed Enhancement Board Grant-Restoration-Applied 4/25/19 | <input checked="" type="checkbox"/> cash <input type="checkbox"/> in-kind | <input type="checkbox"/> secured <input checked="" type="checkbox"/> pending | 212,142 | 11/2019 |

In-Kind Match Total: \$113,021

Cash Match Total: \$260,958

Total Match: \$373,979

X. Storage-Specific Project Requirements (if not a storage project skip this section)

Instructions: If your proposal is for a storage project that will divert water under an existing or new storage water right permit or limited license, answer questions 22 through 24 in this section. If your proposal is for above-ground storage, also answer question 25 and 26. All other projects can skip this section of the application.

20. Identify Storage Project Type: Above-Ground Below-Ground

21. Indicate the capacity of the storage project and any new-developed water below:

- a. What will be the *total* capacity of the storage project in acre-feet after project implementation?
- b. What will be the volume of the *newly-developed* water in acre-feet?

22. Answer the following “Yes/No” questions about the storage project.

- a. Will the project divert more than 500 acre-feet of surface water annually?
Yes No
- b. Will the project impound surface water on a perennial stream? Yes No
- c. Will the project divert water from a stream that supports sensitive, threatened or endangered species? Yes No

If you answered “yes” to **any** of the questions above, (a), (b), or (c), the project will need a *Seasonally Varying Flow (SVF) Prescription*, determining the duration, timing, frequency and volume of flows (including ecological base flow), necessary for protection and maintenance of biological, ecological, and physical functions outside of the official irrigation season. The Department will establish the SVF prescription after funding is awarded, for more information about what this requirement entails, please contact Water Development Coordinator, Rachel LovellFord at (503) 986-0941.

23. **For Above-Ground Storage Only:** If you answered “yes” to Question 23 (a), (b), or (c) above, your proposed project is above-ground storage, **and you are requesting grant funding then a minimum of 25% of the newly developed water must be dedicated to instream use. This is separate from the SVF Prescription.**

Please identify the percentage of stored water to be dedicated to instream use.

 %

*Note: Any storage project dedicating at least 25% of stored water to instream use will automatically receive a scoring bump in the environmental public benefit category. **If awarded funding, the percentage identified below will be a condition of funding.***