

# WESTERN NATIVE TROUT INITIATIVE

# **Application for WNTI Funding**

Application Deadline: 5 pm Mountain time October 25, 2017 Application not to exceed 10 pages total (including the 3 page cover sheet)

# **Cover Sheet**

## **Applicant Information**

Lead Applicant Organization or Entity: McKenzi	e Watershed Alliance
Contact Person Name: Jared Weybright	Address: PO Box 70166
City, State, Zip: Springfield, OR 97475	Email: jared@mckenziewc.org
Telephone: 458-201-8150	Website Address: www.mckenziewc.org

### **Project Information**

Project Title: Lower South Fork McKenzie River Floodplain Enhancement Project Phase I Project Location State: Oregon County: Lane Nearest Town: Blue River Congressional District of Project: Oregon US Congressional District 4 Watershed/Stream/Lake: McKenzie River Sub-basin/South Fork McKenzie River Watershed WNTI Native Trout and Char Species/sub-species Benefitted by Project: bull trout, coastal cutthroat trout and resident rainbow trout Total Project Budget: \$1,211,312 Total Amount Requested: \$23,135 Total Matching Funds or In-Kind Support: \$1,188,177 Total Matching Funds or In-Kind Support Secured: \$1,088,374 Project Map Coordinates (decimal degrees) Lat: 44.159995 Long: -122.285606 Project Start Date: 3/1/18 Project Completion Date: 12/31/18 Is there a monitoring plan following Partnership guidelines? Yes X No If multiyear project, is there a breakdown of tasks, accomplishments, and budget by year in distinct phases? Yes No -- This is multi-phase project, but Phase I is a single year --Land Ownership (public or private or Tribal; if public, specify managing agency): U.S. Forest Service If project is located on private land, please attach a letter of support from landowner (template below) In which USFWS Region is the project located? (1, 2, 6, 7, 8) \_\_\_\_1

Region 1: Idaho, Oregon, Washington Region 2: New Mexico, Arizona Region 6: Montana, Colorado, Utah, Wyoming Region 7: Alaska Region 8: California, Nevada Is your project currently listed in the U.S. Fish and Wildlife FONS system? No Please indicate FONS Project Number (if applicable): Note: Many previously submitted, but unfunded projects have been placed in the Fishery Operational Needs System (FONS). Please check with your local U.S. Fish and Wildlife Service Office if you are unsure about the question.

## Sponsoring Professional (state, federal, or tribal agency resource manager)

Name: Patricia Wilson	
Title: McKenzie River District Ranger	
Affiliation: US Forest Service, Willamette National	Forest
Signature (required): For Shame Kamingh	
Mailing Address: 57600 McKenzie Hwy, McKenzie	
Phone: 541-822-7200	Email: pawilson@fs.fed.us

WNTI Funds Requested:	\$23,135
Total Matching Contributions (cash and in-kind):	\$1,188,177
Match ratio (WNTI:Partners)	1:50
Total Project Cost:	\$ <u>1,211,312</u>

Partner Contribution Detail (List and briefly describe the project partners and their financial contributions.)

Partner	Cash	In-Kind
U.S Forest Service, Willamette National Forest (secured). Cash contribution sourced from retained receipts generated on the McKenzie River Ranger District.	\$65,000	
U.S Forest Service, Willamette National Forest (secured). Personnel cost and commercial value of large wood used in project.		\$300,000
U.S Forest Service, Mt. Hood National Forest (secured). Cash contribution sourced from retained receipts generated on the Mt. Hood National Forest.	\$400,000	
Oregon Watershed Enhancement Board (secured grant through McKenzie Watershed Alliance)	\$323,374	
National Fish and Wildlife Foundation Bring Back the Natives Program (pending). Application submitted by the McKenzie Watershed Alliance in September 2017.	\$99,803	
Budget Totals	\$888,177	\$300,000

Note: NFHP funds granted to project applicants are processed through the U.S. Fish and Wildlife Service Regional Offices. <u>These are federal funds</u>, <u>administered on</u> <u>WNTI's behalf through a federal agency</u>. Grants are paid on a reimbursable basis. A project agreement will be completed with successful applicants through interactions with USFWS regional and/or local staff.

#### Project Partners (list all project partners and contact information)

Partner Organization: USFS, Willamette National Forest, McKenzie River Ranger District Contact Name: Kate Meyer **Position: Fisheries Biologist** Email: kmmeyer@fs.fed.us Telephone: 541-822-7230

Partner Organization: McKenzie Watershed Alliance Contact Name: Jared Weybright Email: jared@mckenziewc.org

Position: Executive Director Telephone: 458-201-8150

Partner Organization: Oregon Department of Fish and Wildlife Contact Name: Kelly Reis Position: Assistant District Fish Biologist Email: kelly.e.reis@state.or.us Telephone: 541-726-3515 ext. 29

Partner Organization: Springfield Public Schools WELL Project Contact Name: Stephanie Lawless Email: stephanie.lawless@springfield.k12.or.us

Partner Organization: McKenzie High School Contact Name: Lane Tompkins Email: ltompkins@mckenzie.k12.or.us

Partner Organization: Contact Name: Email:

Partner Organization: Contact Name: Email:

Partner Organization: Contact Name: Email:

## Project Components (select all that apply)

- Riparian or In-Stream Habitat Restoration
- □ Barrier Removal or Construction
- U Watershed or Population Assessment
- □ In-Stream Flow Acquisition Planning

#### Anticipated Outcomes (fill in values applicable to project)

1.1 # Stream Miles Restored or Enhanced

- 3.1 # Stream Miles Reconnected/Reopened (side channels)
- # Acres of Lake/Wetlands Restored/Enhanced

1 # Barriers Removed or Constructed

191 #acres of floodplain enhanced (connectivity/large wood)

75 #number of individuals reached by an educational program,

Position: Project Coordinator Telephone: 541-744-4140

Position: Principal Telephone: 541-822-3313

Position: Telephone:

Position: Telephone:

Position: Telephone:

Watershed Connectivity

- Monitoring
- Education/outreach
- Watershed Planning
  - \_\_\_\_\_ # Watersheds or Rivers Assessed
  - # Stream Miles Assessed
  - \_\_\_\_\_ # Populations Assessed

# **Project Narrative**

# Please use 12 pt. font, single line spacing, and standard margins. This portion of your application should not exceed 7 pages.

I. Project Summary - a one paragraph description of what tasks will be accomplished.

The South Fork McKenzie River Floodplain Enhancement Project Phase I (Project) will restore a functioning channel network and floodplain under modified flow, sediment and wood supply regimes by: removing levees, riprap and fill; aggrading the incised mainstem channel; augmenting large wood throughout the floodplain; decommissioning roads and removal of road crossings and developing sediment and large wood augmentation plans. The Project will take place on public lands owned and managed by the U.S. Forest Service (USFS) within the lower 1.1 miles and 191 acres of floodplain on the South Fork McKenzie River (South Fork), a tributary to the McKenzie River in western Oregon. The Project will benefit multiple native species including WNTI focal species bull trout, coastal cutthroat trout, and resident rainbow trout. Partners include the Willamette National Forest (WNF), McKenzie Watershed Alliance (MWA), Oregon Department of Fish and Wildlife (ODFW) and U.S. Army Corps of Engineers (USACE).

**II. Problem the Project Addresses -** A description of why the project is important to the resource and which WNTI and NFHP objectives and strategic priorities will be met. What are the major factors limiting the healthy function of the watershed/habitat? Describe how your proposed project addresses the causes of degradation rather than the symptoms, and how your project addresses species recovery needs or other species conservation needs. Describe how the project is important to the long-term persistence of the species.

The South Fork is the largest tributary to the McKenzie River, located within the Willamette River Basin in western Oregon (*see Context Map via attachment link <u>http://www.mckenziewc.org/wpcontent/uploads/2017/10/2018-South-Fork-McKenzie-River-Attachments.pdf</u>). The South Fork's relatively constrained glacial valley opens into a wide alluvial floodplain over the lower four miles where the South Fork meets the McKenzie River (<i>Attachment link Photo 1*). This wide floodplain was historically a complex, multi-thread, low-gradient depositional zone for much of the sediment, wood, and nutrients coming out of the South Fork watershed. These conditions created diverse habitat needed to support spring Chinook salmon, bull trout, Pacific lamprey, rainbow and cutthroat trout, and other native species. The construction of the USACE-operated Cougar Dam, the placement of levees, riprap and fill within the floodplain below the dam (*Attachment link Photo 2*), riparian logging throughout the floodplain, and the removal of wood from river channels through "stream cleaning" programs significantly altered the lower South Fork. Land use practices have impaired natural processes, degraded habitat quality and limited habitat availability for native fish by:

- reducing longitudinal, lateral and vertical connectivity (Attachment link Photos 2 & 3),
- reducing wood supply and storage,
- increasing transport capacity,
- decreasing the quality and quantity of off-channel and high-flow refuge habitat (*Attachment link Photos 3 & 4*),
- reducing the frequency of deep pools and amount of complex cover (Attachment link Photo 5),
- reducing pond/wetland formation, and
- reducing primary and secondary production.

The Project will restore dynamic fluvial processes and improve ecological function by "re-setting" channel and floodplain elevations for full floodplain connectivity and augmenting large wood throughout the floodplain. Project design relies on modern theories supported by Cluer and Thorne (2013) – that, prior to human modification, most alluvial streams in depositional settings had channels that were anastomosing and overflowed onto their floodplains several times a year. Project restoration (*Attachment link Design Map*) will address underlying causes of habitat degradation

(floodplain levees, riprap and fill; removal of riparian trees and in-stream wood) and complement USACE-led enhancement efforts in the case where root causes cannot be directly addressed (Cougar Dam). Enhancement efforts at Cougar Dam include the installation of a temperature control tower, an adult trap and haul facility and development of an environmental flow model.

The Project is consistent with multiple WNTI goals and objectives cited within *The WNTI Plan for Strategic Action* (November 2016). The Project includes a monitoring plan (see question V.), which measures the success of improving the status of bull trout, cutthroat trout, rainbow trout and other native fish in the South Fork (Goal 1. Objective B). Baseline habitat assessment completed by the USFS identified the lower South Fork as a restoration priority (Goal 2, Objective A). The Project is consistent with local recommendations for western native trout habitat restoration, specifically, the Oregon Conservation Strategy, (Goal 2. Objective C). The Project's collaborative partnership focuses on the shared effort to increase capacity, funding opportunities, and outreach (Goal 3, Objective C).

The Project addresses numerous NFHP strategic priorities. Restoration actions address limiting factors (early rearing habitat, habitat below reservoirs, limited food source, habitat fragmentation) and conservation actions (restore aquatic habitat, provide suitable habitat complexity and collaborative partnerships) cited by the Oregon Conservation Strategy for both bull trout and coastal cutthroat trout. Pre- and post-project monitoring (see V.) identifies specific measures of success and performance targets. The experienced Project team has a proven record of accomplishment (see XI.). The Project has a well-defined budget that leverages significant secured funding (see IX. and X.). Established outreach programs will engage the local community (see VIII.).

Conservation needs identified within the *Revised Draft Recovery Plan for the Coterminous United States Population of Bull Trout (Salvelinus confluentus)* (USFWS, 2014) and *Upper Willamette River Conservation and Recovery Plan for Chinook Salmon and Steelhead* (ODFW and NMFS 2011) are addressed by the Project. Restoration actions will enhance physical habitat quality through increased retention of spawning gravels, increased access to and enhancement of off-channel habitat and high flow refuge, and increased amount of deep pools and complex cover. Increased floodplain connectivity will improve water storage and mitigate summer temperatures through improved hyporheic flow. Enhanced populations of resident trout and anadromous salmon will provide forage fish for predatory bull trout, a cited limiting factor.

The McKenzie River bull trout population is critical for the long-term persistence of the species. Based on redd counts in 2015 (USFS), the McKenzie River accounts for approximately 65% of the bull trout production in the Willamette River Basin. The McKenzie population has served as the donor population for reintroduction efforts elsewhere (Middle Fork Willamette River) in the core area. Enhanced habitat in the South Fork will directly benefit McKenzie River bull trout by increasing foraging opportunities within key habitat currently utilized by the species for foraging and rearing.

**III. Project Objectives/Supporting Documentation** - What specifically will be accomplished? How do these objectives support the goals of the WNTI Strategic Plan, existing species recovery plans and conservation strategies, watershed restoration plans, etc.? Cite relevant plans and their specific objectives and goals that the project addresses.

Partners have developed a number of objectives for the Project that will track progress toward achieving project outcomes within three categories: project implementation, outreach, and short- and long-term project effectiveness. Objectives for implementation and outreach include:

- Removal of levees, riprap and fill on approximately 13.7 acres in the South Fork floodplain.
- Aggradation of 0.55 miles of incised mainstem South Fork channel.
- Placement of 1,200 pieces of large wood on 1.1 miles and 191 acres of floodplain.
- Decommissioning of 0.13 miles of roads within the Project area.
- Removal of fill at one road channel crossing in the South Fork floodplain.

- Engage 75 students from two local school districts annually in monitoring at the Project site.
- Engage 50 citizens through two project tours at the South Fork Project site in 2018 and 2019.
- Engage 100 citizens through three public presentations in 2018 and 2019.
- Develop one scientific poster and/or presentation at a professional conference in 2019.

Project objectives support the goals 1, 2 and 3 of *The WNTI Plan for Strategic Action* (November 2016) by restoring habitat for native trout populations, monitoring populations, and developing collaborative approaches and partnerships among public agencies and stakeholders (see II.). Objectives address key limiting factors cited in the *Revised Draft Recovery Plan for the Coterminous United States Population of Bull Trout* (Salvelinus confluentus) (USFWS, 2014) by enhancing habitat for salmon and other native forage fish. The Oregon Conservation Strategy (Strategy) is a statewide strategy that seeks to maintain healthy fish and wildlife populations by conserving and restoring habitat and protecting and enhancing at-risk species. The Project supports the goals of the Strategy by addressing limiting factors and conservation needs cited for bull trout, coastal cutthroat, and spring Chinook salmon. The *McKenzie River Sub-basin Strategic Action Plan for Aquatic and Riparian Conservation and Restoration* (MWC, 2016) cites aquatic restoration in the lower South Fork as a priority action item for the McKenzie River Sub-basin.

**IV. Project Methodology** - Describe what you are planning to do. Multi-year projects **must** be broken into distinct phases with measurable tasks and accomplishments broken down by year, what year(s) the funding you seek will cover, and how other years of the project will be funded. How will the project be completed, and who is responsible for actually doing the work? Attach photos and **map of the project area if possible.** 

Project methodology will address underlying causes of habitat degradation and complement enhancement efforts in the case (Cougar Dam) where root causes cannot be directly addressed by;

- removing levees, riprap, and fill, and aggrading the incised mainstem South Fork channel,
- augmenting large wood,
- · decommissioning roads and removal of road crossings, and
- developing a long-term sediment and large wood augmentation plan.

Contracted labor, supervised by WNF and MWA personnel, will complete restoration actions. Heavy equipment (excavators and bulldozers) operating in the floodplain and stream channel (postcompletion of dewatering and fish salvage actions) will complete fill removal and channel aggradation. A combination of helicopter and ground-based equipment (yarders and excavators) will complete large wood placement. A truck-based yarder will pull over an additional 11 live streamside trees in areas inaccessible to the excavator. These large diameter trees, with root wads and full length intact, will act as "key pieces" and aid in the retention of large wood within the system. Heavy equipment will decommission an existing road and remove associated road crossing in the floodplain upon completion of fill removal, channel aggradation, and large wood augmentation. Partners recognize the challenges that the presence of Cougar Dam presents to sustaining downstream floodplain function and habitat development. In order to address this concern, the Project managers will develop long-term large wood and sediment augmentation plans over a 3-5 year period following Phase I implementation. Monitoring (transect and bathymetric LiDAR), including the collection of wood and sediment retention data, will inform the development of these plans.

Restoration actions will take place in the Phase I area (*Attachment link Design Map*) during 2018 (see VII.). Partners will seek phases II and III funding from a variety of local, state and federal sources in 2018 and 2019. The expectation is that Phase II implementation will begin in 2020 and Phase III in 2022. The WNF will assume the lead on the completion of post-project monitoring and the development of sediment and large wood augmentation plan in 2018. Outreach activities have begun and will continue through 2018 and beyond.

**V. Project Monitoring/Evaluation of Success** - How will the success of the project be assessed, and who is responsible for long-term maintenance and monitoring? Has an evaluation/monitoring plan been completed? The benefit(s) should be quantifiable; that is, you can measure or count the amount of habitat and/or species benefited, or the result of your project.

The recent implementation of large-scale "process-based" restoration projects that turn an incised, single-thread channel into a complex multi-thread system has led to the realization that new monitoring strategies are needed to understand and track the complex geomorphic and ecological changes. WNF project managers have collaborated with multiple partners including researchers at the USFS Pacific Northwest (PNW) Research Station and colleagues from the Siuslaw and Deschutes National Forests to develop a monitoring plan that tracks changes to physical habitat, surface and sub-surface flow and temperature, and aquatic biota. The Project monitoring plan outlined in Table 1 is the result of this collaborative effort. Due to the emphasis on changes to the geomorphic template of the restored river reach, bathymetric LiDAR will be a critical component of the monitoring plan, providing both an inventory and comparison data set. LIDAR data will document changes in sediment storage, channel migration/avulsion, elevation, and diversity/frequency of geomorphic features (pools, bars, islands, complex channel network) over time. Twenty-one transects (five within the Phase I project area) have been established perpendicular to the center of the valley throughout the Project area. Each transect will include a groundwater well equipped with piezometers and staff gages.

SMART Objectives	Metric	Methods
Primary Response (River Processes)		
Increase sediment storage, channel migration/avulsion, and diversity/frequency of geomorphic features by 25% within 5 years of project completion.	Change in depositional features	<ul> <li>Geomorphic change detection using bathymetric LiDAR and/or aerial photogrammetry;</li> <li>Transect analysis to track changes in channel locations, elevations, and dimensions and geomorphic features (pools, riffles, bars, islands, wetlands);</li> </ul>
Increase wood abundance by at least 1000% and retain at least 90% of project wood within project reach within 5 years of project completion.	Abundance/ proportion retained	<ul> <li>Transect analysis that includes wood counts and size classes.</li> </ul>
Decrease the average annual depth to water on the floodplain by at least 25% in at least 50% of monitoring wells within 2 years of project completion.	Water table height	<ul> <li>Groundwater wells w/piezometers and staff gages for surface water;</li> <li>Photo point monitoring</li> </ul>
Increase area of floodplain inundation and secondary channel habitat during annual peak flow (approx. 4,000 cfs) and during base flow (approx. 300 cfs) by at least 50% within 2 years of project completion	Wetted area	<ul> <li>Use water table and surface water elevation data to model floodplain inundation at peak flow (River Bathymetry Toolkit);</li> <li>Transect analysis that tracks wetted area of base flow;</li> </ul>
Secondary Response (Habitat Characteristics and	l Water Quality)	
Increase substrate size class diversity in wetted channels at base flow by 25% within 2 years of project completion.	Substrate size class distribution	• Analysis that measures substrate size class and distribution along each transect of wetted areas at base flow
Increase diversity of water velocities by 25% within 2 years of project completion	Velocity class distribution	• Analysis that measures velocity class and distribution along each transect of wetted areas at base flow
Increase area of cold water refugia (<13.90 C/570 F) during summer low flow periods (August/September) by 25% within 2 years of project completion.	Temperature of channel types	• Transect analysis that measures temperature distribution along each transect of wetted areas at base flow
Tertiary Response (Biological Community)	1	

Table 1. Lower South Fork McKenzie River Floodplain Enhancement Phase I Monitoring Plan

Increase spring Chinook salmon redd abundance within the project area by 25% within 5 years of project completion	Redd abundance	Full census redd survey	
Increase species richness, occupancy, and abundance of fish and amphibians by 10% within 3 years of project completion.	Occupancy, species richness, abundance.	• eDNA sampling for fish and amphibians at monthly intervals to document changes in species richness, occupancy, and abundance	
Increase macroinvertebrate taxa richness (i.e. diversity) by 10% within 3 years of project completion.	Species richness by habitat type	Standard macroinvertebrate sampling techniques     and lab analysis; tied to transects	

**VI. Partnerships for this Project** - Briefly describe the project partners' involvement in planning, implementation, and evaluation of this project. Projects that have secured matching funds or in-kind support from partners and/or involve diverse stakeholders are highly valued and encouraged.

The WNF and MWA have collaborated on Project development since 2014 (see VII.). Project development has included a broad range of partners (USACE, ODFW, Eugene Water & Electric Board, NOAA, NMFS, and USFWS) engaged through a stakeholder engagement process. These stakeholders have evaluated and informed project design, timelines, and logistical planning aspects of the Project. Partners, including researchers from the USFS Pacific Northwest Research Station, Siuslaw National Forest, and Deschutes National Forest have collaborated on the development of Project objectives and monitoring protocol (see V.). Partners have secured a total of \$1,088,374 in cash and in-kind match toward implementation in 2018. An additional \$99,803 is currently pending.

**VII. Project Timeline** - Please provide an estimated timeline for the project, including major milestones and achievements, including plans and responsible person to prepare and submit a final report with high quality digital photographs.

Project planning began in 2014, and a Design Report (http://www.mckenziewc.org/wp-

content/uploads/2016/05/DESIGN-REPORT Lower-South-Fork-Floodplain-Enhancement-

<u>Project Final.pdf</u>) completed in 2016. Project implementation will take place through a multi-phased process over the course of five years (2018-2022), with Phase I planned for 2018, Phase II occurring in 2019 or 2020 and Phase III in 2021 or 2022. Phase I timeline milestones include:

- implementation of outreach in fall 2017
- completion of baseline monitoring in spring 2018
- harvest, transport, and staging of large wood by June 2018
- helicopter delivery of large wood to South Fork floodplain in early July 2018
- berm removal, channel aggradation, placement of large wood by mid-August 2018
- decommissioning of floodplain road and removal of road crossing by August 2018
- placement of whole streamside trees in fall 2018
- implementation of monitoring in fall 2018

The MWA and Jared Weybright will be responsible for the submission of a final report to WNTI.

# VIII. Supplemental Information

**Status of Project Design and Environmental Compliance -** Identify the stage of project design and when implementation is expected to occur. Identify what environmental compliance documents are needed and the status of completion for these documents.

Phase I Project design is complete and implementation is expected to occur starting in June 2018 and be completed by spring 2019. The USFS began NEPA planning and development in 2017 and is expected to be complete in spring 2018. Project partners have been continually consulting with US Fish and Wildlife Service on the Project and anticipate completion of ESA Consultation by May 2018. The USFS will provide State Scenic Waterway Notification to the Oregon State Parks and Wild and Scenic River Section 7 Notification to the USFS in early 2018. Based on prior consultation, the Project will require an individual Fill/Removal permit from the US Army Corps of Engineers (USACE) and the Oregon Department of State Lands. The USFS will submit applications in late 2017. A 401 Water Quality Certification through the Oregon Department of Environmental Quality will concur with the timing of the USACE permitting process.

**Species Present** - List all species (including non-WNTI species) that will directly benefit or be affected by your project, and how. Include special status designations if applicable—ESA status, species of special concern, etc.

The Project will benefit multiple native fish species including ESA-listed Threatened spring Chinook salmon and bull trout; USFWS species of concern and Oregon State sensitive species coastal cutthroat trout; rainbow trout; Pacific lamprey, Western brook lamprey, sculpin species and other native fish.

**Outreach/Education** - Describe any outreach or education efforts associated with this project, including public workshops, tours, signs, newsletters, scientific journal articles, scientific conference presentations, educational forums, etc.

An established program (Watershed Action Teams for Restoration, Enhancement, and Stewardship – WATERS) with Springfield Public Schools (SPS) and McKenzie School District (MSD) will help raise awareness and understanding of watershed restoration efforts in the McKenzie River Sub-basin. The WATERS program will involve approximately 75 youth annually through participation in monitoring activities (stream surveys and water quality monitoring) and engage the local community through public presentations. Cooperative outreach activities such as presentations and project tours targeting specific interest groups and public audiences coordinated among Project partners will build support for watershed restoration and conservation measures in general and works toward the development of future voluntary projects. Partners will conduct outreach to professional colleagues within the USFS, other public agencies, watershed councils, and land trusts through at least one presentation at a professional conference. The MWA will feature an article, and its fiscal sponsors, in its annual newsletter (distribution of over 5,000), and on a variety of social media platforms. Taken together these outreach activities present an opportunity for a multi-layered approach to public outreach, dissemination of project data and promotion of the restoration design approach.

Category	WNTI	Partner Match	Total
a. Personnel	N/A	\$158,580	\$158,580
b. Travel	\$535	\$2,350	\$2,885
c. Equipment*	\$o	\$0	\$0
d. Supplies	\$0	\$200,000	\$200,000
e. Contractual	\$22,600	\$759,340	\$781,940
f. Construction	<b>\$</b> 0	\$0	\$0
g. Other	\$0	\$67,907	\$67,907
TOTAL	\$23,135	\$1,188,177	\$1,211,312

**IX. Budget** 

\*Equipment is any individual item over \$5,000. Even if an item is tangible, nonexpendable, and having a useful life of more than one year, items costing less than \$5,000 should be placed under the Supplies category.

**X. Budget Narrative** – For supplies and contractual, provide some detail. Explain budget categories and amounts listed above as needed. If a multiyear project, please provide a budget breakdown by year (e.g., Phase 1 - 2018, Phase 2 - 2019).

Travel costs account for 10 round-trips to the South Fork from Springfield, Oregon, a distance of 100 miles billed at the Oregon State travel reimbursement rate of \$0.535/mile. Requested WNTI funding for travel reflect time associated with streamside tree pulling contractor oversight. Requested WNTI funding for Contractual costs accounts for 11 live streamside pull trees at \$1,600 per tree with an additional \$5,000 in mobilization fees, for a total of \$22,600. Unit cost for streamside pull trees is more expensive than historic cost due to the long distance from roadways and additional rigging

expense. Supply cost reflects in-kind value of commercial trees used in the Project. Cost documented in the "Other" category accounts for MWA administration expenses associated with match funding.

## XI. Project Staff - List names and relevant qualifications of project staff.

WNF and MWA staffs will manage the Project cooperatively. Kate Meyer, District Fisheries Biologist, WNF will act as the Project co-manager responsible for design, partnership coordination, permitting, implementation, monitoring, and outreach. Ms. Meyer has been a fish biologist on the McKenzie River Ranger District, WNF for over ten years where she has developed, designed, and implemented multiple aquatic restoration projects focused on the reestablishment of large wood and connectivity. Nick Grant, District Hydrologist, WNF, will co-manage the development and implementation of project monitoring and assist with project development, design, and implementation. Mr. Grant has six years' experience with design and implementation of long-term collaborative environmental monitoring projects at the Hubbard Brook Experimental Forest in New Hampshire. Jared Weybright, Executive Director, MWA, will serve as the Project co-manager responsible for funding development. partnership coordination, contract management, implementation, and outreach. Mr. Weybright has designed and implemented a variety of voluntary watershed enhancement and education projects in partnership with both private landowners and public agencies since 2006. Multiple USFS and MWA staff members will support project managers. Johan Hogervorst, Forest Hydrologist, WNF with over 20 years' experience in restoration design and implementation will assist with design, partner coordination, and funding. Paul Powers, Fisheries Biologist, Deschutes National Forest is the leader in the design and implementation of process-based restoration, specializing in floodplain reconnection and will provide support during implementation and monitoring. Jennifer Weber Project Coordinator, MWA has five years' experience in cooperative education and restoration projects and will assist with contract management and outreach coordination.

**XII. Optional and Required Supporting Materials** - Includes maps, photographs, other letters of support, etc. Project proposals must be supported by the state and/or federal fish and wildlife management/natural resource agencies, or Tribal governments within project-area jurisdictions. Letters of support and landowner consent letters do not count toward the 10 page application limit. In addition to the <u>required</u> letter of support from the state fish and wildlife agency, and any additional letters of support from federal or Tribal fish and wildlife agencies, the project application cover sheet must include a signature and contact information for a 'sponsoring professional' from the relevant management agency.

A letter of support from ODFW, and WNF are included. Photo and map attachments are included via a link to the McKenzie Watershed Council (the MWA is the fiscal sponsor) website, <a href="http://www.mckenziewc.org/wp-content/uploads/2017/10/2018-South-Fork-McKenzie-River-Attachments.pdf">http://www.mckenziewc.org/wp-content/uploads/2017/10/2018-South-Fork-McKenzie-River-Attachments.pdf</a>

XIII. Signature of Applicant - An original signature page must be received with the application.

# I certify that the above information is true and accurate,

Print Name: Jared Weybright

Title: Executive Director

Organization: McKenzie Watershed Alliance

Date: 10/20/2017

#### Landowner Consent Template

I, \_\_\_\_\_\_\_as [one of] the owner[s] of the property (street, location), agree to participate in the project being proposed and/or consent to the ((( restoration project, inspection, appraisal, and/or survey))) of the property being considered for funding by the Western Native Trout Initiative. I agree to allow members of the (((Blank Organization))), NFHP Program representatives, and associated partners or their designated staff to inspect the property at any mutually agreeable time for the purposes of this proposal. I understand I shall be notified in advance of all inspection visits. I also understand that the project being proposed may not happen if the application does not meet the needs or qualifications of the National Fish Habitat Plan and is subject to availability of funds and ranking priority.

Dated: \_\_\_\_\_ By: \_\_\_\_\_



10/24/2017

Therese Thompson Western Native Trout Initiative 134 Union Boulevard, Ste. 665 Lakewood, CO 80228

Dear Ms. Thompson:

Re: Support for Lower South Fork McKenzie River Floodplain Enhancement Project Phase I

I am writing in support of funding Phase I of the Lower South Fork McKenzie River Floodplain Enhancement Project in Oregon's McKenzie River basin. This large-scale, well-coordinated and well-communicated project is designed to restore channel and floodplain function for the South Fork McKenzie River downstream of Cougar Dam. The confluence area of the South Fork McKenzie River enters a productive and dynamic reach of the McKenzie River where project outcomes will benefit the mainstem McKenzie River and its fish populations as well. Project staff have been planning and communicating with partners since 2014, and I am excited to share my enthusiasm for the proposed work.

The McKenzie River basin is home to a biologically important bull trout population, as well as coastal cutthroat trout and rainbow trout populations. Other salmonids present include whitefish and spring Chinook salmon. As mentioned in the grant application, the McKenzie River basin contains the habitat for most of the bull trout known to spawn in the Willamette basin (based on recent redd count data; see grant application for reference). By addressing the causes of several impaired natural processes, the planned work will improve ecological function, promoting the creation of a diversity of habitats. These newly created habitats will directly benefit bull trout by improving foraging opportunities in the lower South Fork McKenzie, as well as provide improved spawning and rearing habitat for cutthroat and rainbow trout, and spring Chinook salmon.

The South Fork McKenzie River is the largest tributary to the McKenzie River and historically supported a dynamic and wide alluvial floodplain in the lower reach. Construction of Cougar Dam, as well as the addition of levees, riprap and floodplain fill downstream of the dam, have all contributed to reduced floodplain function. Project plans to remove floodplain fill while also aggrading the main channel, and placement of a significant amount of large wood in the floodplain will help restore function and support habitat formation. Additionally, planned development of a sediment and large wood augmentation plan is a key component following Phase I to ensure continued success. Benefits to bull, cutthroat, and rainbow trout, not to mention spring Chinook salmon, whitefish, lamprey and other native species, are anticipated following the project, based on increased floodplain inundation frequency and improved channel and habitat complexity.

The thoughtful approach demonstrated by project developers, as well as a track record of strong communication with partners and previous successes, make me completely confident in project success. The amount of funding secured to date is impressive and speaks to the comprehensive approach of project planners. Not only do I encourage you to fund this proposal in its entirety, but I hope you are able to get out on site and see this exciting project for yourself.

Thank-you for your consideration and do not hesitate to contact me if you would like to visit further on my support for this project.

Sincerely Elly te

Kelly Reis Assistant District Fish Biologist, South Willamette Watershed District

cc: Jeff Ziller, District Fish Biologist, ODFW South Willamette Watershed District



#### **Department of Fish and Wildlife**

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File Code: 2500 Date: October 23, 2017

Therese Thompson, Project Coordinator Western Native Trout Initiative 134 Union Boulevard Suite 665 Lakewood, CO 80228

Dear Therese and members of the Western Native Trout Initiative Steering Committee,

The Willamette National Forest would like to register its support for the McKenzie Watershed Alliance's application to the Western Native Trout Initiative for the South Fork McKenzie River Floodplain Enhancement Project. We are both a federal land manager and co-project leader with the Alliance for work on about 200 acres of floodplain in the South Fork McKenzie River confluence area. In addition, we will be supporting the restoration work with pledged Stewardship funding (\$465,000 in 2018), in-kind technical expertise, and large woody material. This large-scale floodplain enhancement project will take place in multiple phases over the next several years. The Alliance's application is seeking funding for implementation of Phase I in 2018.

We designated the South Fork project a Tier I project in our program of work in fiscal years 2017 and 2018. Managers have dedicated funding to specialists' time to complete NEPA and design, as well as making plans to provide approximately 3,000 whole trees with root wads from National Forest lands to support this large-scale restoration effort (\$1.5 million estimated value). This is the largest watershed restoration project the Willamette National Forest has undertaken, and we are committed to working with a strong and established partnership to accomplish it. In addition to the financial and technical assistance given to the South Fork project mentioned above, the Forest Service has made the following investments in the South Fork project:

Activities to date	Cost
Design - Field survey and design by a Forest Service Enterprise Team (T.E.A.M.s), the Region 6 Restoration Assistance Team and employees at both the District and Forest levels.	\$79,000
NEPA/project planning/field surveys for entire project area	\$207,000
Pre-project invasive weed treatment	\$95,700
Seed collection/grow out	\$22,600
Project Re-vegetation Plan Development - completed by the Region 6 Restoration Service Team	\$15,000
Total:	\$419,300

We are pursuing a larger process-based restoration design that will lead to recovery and resilience for a suite of species, both terrestrial and aquatic. We are currently speaking with research professionals, both inside and outside our agency, to monitor effects to biology, geomorphology, and hydrology at this site after restoration. Any help that WNTI can provide through this grant to support the on-the-ground implementation of this project would match several other large-scale funding sources that the partnership has applied for in the last year [Oregon Watershed Enhancement Board (OWEB), internal USFS, etc.] and anticipates that it will be finalized soon. OWEB's Willamette Technical Review Team recently ranked the Alliance's spring 2017 application to OWEB as the top funding priority in the Willamette Basin. The OWEB Board will make a final funding recommendation in October 2017. These OWEB funds will provide the Western Native Trout Initiative the 1:1 non-federal match needed for the application.



Finally, we want reviewers to know that the Forest Service is deeply invested in the collaborative nature of both this project and several others in the McKenzie River Sub-basin of the Willamette River Basin. In 2017, aided by WNTI funds, we worked closely with the McKenzie Watershed Alliance to complete additional tree tipping for a 35-acre floodplain restoration project in the lower 1.5 miles of Deer Creek, a tributary to the upper McKenzie River on National Forest lands.

One of our goals at this highly degraded site was to recover spring Chinook spawning, given that no spawning has been observed at this location since 1993. Using similar restoration techniques as will be used at the South Fork project, the partnership worked with a contractor to remove berm material, reconnect floodplain channels and surfaces and add 475 pieces of large wood (many with root wads) to the newly shaped floodplain and channels of the project area. Early results after fall and winter storms were very encouraging, and during September 2017 we observed spring Chinook spawning in Deer Creek for the first time in 24 years. We have been showing this work to several funders and partners to give them a vision for what we can do as a partnership in the South Fork McKenzie River. Additionally, our partnership won the American Fisheries Society Western Division Riparian Challenge award for 2017 for excellence in riparian management for the Deer Creek Floodplain Enhancement Project.

Thank you for reviewing our partnership's application and feel free to contact Kate Meyer, our Forest Service lead on the South Fork project at (541) 822-7230 if there are additional questions about our involvement. She would also be your contact for a tour of the Deer Creek project, should any reviewers wish to review our design concept and approach.

Sincerely

Shane Hammith

Patricia Wilson, Acting District Ranger, McKenzie River Ranger District



