



**File Code:** 1950-1

**Date:** Feb. 2022

Dear Planning Participant,

The Methow Valley Ranger District of the Okanogan-Wenatchee National Forest proposes Aquatic/Watershed Restoration Treatments in the following locations on National Forest Land (See Figure 1). The Project is the Twisp Aquatic Restoration Project (TARP). This project is covered under the 2019 Pacific Northwest Aquatic Restoration Environmental Assessment and Decision Notice (“PNW Aquatic Restoration EA”), which documents the need for and effects of the actions proposed in this project. The PWN Aquatic Restoration EA contains several design features that will apply to this project. The EA and Decision Notice are available at: <http://www.fs.usda.gov/goto/twisp-restoration>

The PNW Aquatic Restoration Decision Notice provides for pre-project notification and public review through a 20-day comment period that begins when the Forest Service sends interested parties the attached pre-project notification report (Figure 2) at least 60 days prior to planned project implementation. Interested parties are allowed 20 days to provide site-specific comments on project design and effects to communities, species, and the environment. Forest Service staff have 40 days to review and respond to comments. The potential for significance will be reviewed during the project identification, compliance, notification and public review process for this project (PNW Aquatic Restoration EA, pages 16-19). If the responsible official finds that the project may have the potential to trigger significance at the local level, the project would not be pursued under this decision. The project could then be modified so that it meets the test for non-significance or considered in further analysis as required by the National Environmental Policy Act.

### **LWD Placement**

The MVRD, in partnership with other groups, proposes to increase instream channel complexity in the Twisp River, Little Bridge Creek and Poorman Creek drainages. Bull trout, steelhead, and/or spring chinook spawn and rear in these water bodies. Recent aquatic habitat surveys identified small to large sized wood levels are below desired amounts in certain reaches where spawning and rear occurs. Instream wood is the primary agent to create spawning habitat and to form pools for rearing in the project area streams. Past riparian harvest has limited the potential for natural wood recruitment. Accordingly, there is a need to add wood to increase pool habitat, fish cover, and spawning gravel in the Twisp Restoration Project area.

The desired amount of large wood for project area fish streams is set from a report by Fox and Bolton (2007), which studied natural streams on the east slopes of the Cascade Mountains. From this source and considering similar streams on the district in un-managed or wilderness areas, the

desired density of wood greater than 6 inches diameter is up to 565 pieces per mile. The table below defines the locations where the wood treatments would occur.

The proposed treatment is to fell dead and live trees from along the stream banks and adjacent floodplain, fly in wood, and construct engineered log jams in key locations in the below reaches. All onsite wood would be individually identified for use and directionally fell by hand and chainsaw or moved and placed by helicopter or excavator in key locations to interact with the channels. Trees will only be selected from fully stocked stands as determined by the Project Silviculturist to ensure stream shade and future recruitment are not affected. Dead trees would be targeted, but live trees in high concentration areas would be selected as well. Tree species include Douglas fir, spruce, and ponderosa pine. Detailed map and plan-sets of all LWD actions available in project record at links on website:

<http://www.fs.usda.gov/goto/twisp-restoration>

Stream	Reach	Proposed Treatment	Length (mi)	# and size of trees
Twisp River	From RM 11.5 to 12.2 and 16 to 26	Place small to large diameter wood into the river, floodplain, and side channel habitat. Placement would occur with hand falling riverside trees, helicopter, excavator, and cable yarder and occur as loose placement, log jams, and anchored in engineered log jams (ELJ). Trees would come from stream banks, designated harvest units, and equipment access routes, as well as off Forest.	10	up to 4,300 trees $\geq$ 6 inches diameter dbh and $\geq$ 6 feet in length
Little Bridge Creek	From RM 0.5 to RM 6.8	Place small to large diameter wood into Little Bridge Creek by hand falling streamside trees and with helicopter. Trees would come from stream banks and equipment access routes as well as off Forest.	6.3	up to 1,050 trees $\geq$ 6 inches diameter dbh and $\geq$ 6 feet in length
Poorman Creek	From RM 1.7 to RM 4.2	Hand fall live and dead small to large sized conifers into the creek from along the banks.	2.5	up to 80 trees $>$ 6 inches diameter dbh and $>$ 10 feet in length

## **Beaver Enhancement**

### *Project:*

Beaver can help restore many aspects of a heavily managed watershed. The goal for this project is to increase base flows by creating natural water storage with beavers. Beaver dams impound water in ponds and pools, and these impoundments slow the flow of the stream, which holds the water within the stream reach for longer periods and can increase base flows.

The Proposed beaver enhancement (BSE) project includes reintroduction of beaver within the (TARP) area along with some active treatments to make the BSE site successful for establishing a functioning beaver habitat. BSE sites have been selected based on exhibiting suitable gradient,



presence of surface water and an identifiable stream channel, availability of forage and dam building materials, and potential for long-term success and restoration. BSE activities include, but are not limited to the following:

- 1) Beaver reintroduction: A beaver pair or family would be introduced into selected sites. This reintroduction may include the building of a small lodge and weekly monitoring of the beaver pair. Each identified site would have beaver released.
- 2) Beaver dam analogs (BDA): To help establish a successful beaver pond complex, it may be necessary to manually build a small dam to help the introduced beaver pair succeed. This includes using natural wood posts woven with local wood materials (logging slash or small branches of hardwood riparian species) to simulate a dam. BDA reaches include Little Bridge Creek, Poorman Creek and Newby Creek.

*Methods and effects:*

Beaver reintroduction would follow protocol already established by USFS beaver crew and would include transporting beaver pairs on established roads and using foot paths to reach final release locations. Multiple trips for follow up monitoring would occur. Beaver reintroduction crew might use local dead woody material to build a temporary lodge for the introduced pair. Riparian disturbance would be minimal and short term during transport of beavers and construction of.

BDAs would be constructed by driving untreated wooded posts into the streambed and floodplain using a hydraulic post driver, transported and operated by hand. Posts would be placed 0.3 – 0.5 meters apart and streambed disturbance would be minimal and highly localized. Woody material would be woven through posts by hand and would include small diameter material obtained from logging slash piles or local hardwood material trimmed from branches of healthy trees. Up to four BDAs would be constructed in a single BSE site about 100 – 200 feet apart, depending on availability of suitable construction sites.

**Road Culvert/Fish Pipe Proposal**

Five stream culverts (Table Below) within the TARP area were identified that fully or partially block fish passage. These culverts are located on Williams Creek, Cow Creek, Canyon Creek, Scaffold Camp Creek, and Little Slate Creek. Species affected include steelhead, spring chinook, bull trout, and resident trout. The proposed action would replace the barrier culverts with Aquatic Organism Passage structures that provide full access for all aquatic and riparian dependent species at all life stages. Restoring full fish passage at these sites would improve access on about six miles of suitable habitat.

Road #	Lat	Long	Stream	Tributary to
4415000	48.399050	-120.313280	Cow Creek	Little Bridge Creek
4400000	48.364880	-120.340100	Canyon Creek	Twisp River
4420000	48.350950	-120.373440	Scaffold Camp Creek	Twisp River
4400000	48.395420	-120.450680	Little Slate Creek	Twisp River
4430000	48.397010	-120.465030	Williams Creek	Twisp River

Twenty-six stream pipes (Table Below) within the TARP area were identified that are undersized and do not meet current size standards. These culverts are located throughout the project area



with most occurring on tributaries to the Twisp River. The proposed action would replace the undersized culverts pipes that meet the 100-year flow capacity, which would make the road network more storm-proofed and would reduce the risk of negative impacts to aquatic resources.

Road Number	Lat	Long	Road Number	Lat	Long
4410520	48.470833	-120.294981	4435000	48.426016	-120.514698
4415000	48.442472	-120.363298	4435000	48.427342	-120.517587
4415000	48.439654	-120.362268	4440000	48.421199	-120.496846
4415000	48.427210	-120.354787	4440000	48.439851	-120.532343
4430000	48.366383	-120.408950	4440000	48.442379	-120.537598
4415000	48.390543	-120.304746	4410000	48.434208	-120.275360
4415040	48.403039	-120.308620	4410000	48.441750	-120.279612
4400075	48.381693	-120.350740	4410300	48.446203	-120.270974
4400000	48.359798	-120.353624	4410320	48.449221	-120.268532
4400100	48.362028	-120.356458	4440000	48.415977	-120.490758
C-1090	48.355999	-120.343797	4400100	48.368096	-120.377524
4420000	48.352448	-120.384482	4400000	48.355885	-120.361470
4430110	48.370191	-120.420872	4415000	48.446684	-120.375493

### **Treatments in LSR**

A subset of the treatments listed above will occur in LSR and are subject to LSR guidelines unless otherwise granted exemptions are approved. In the Little Bridge Creek portion of the LSR, approximately 2.5 miles of LWD treatments and Beaver Dam Analogues are planned. In addition, 4 culvert replacement and one AOP are planned.

In the Twisp River portion of the LSR, approximately 10 miles of LWD treatments and Beaver Dam Analogues are planned. In addition, 17 culvert replacement and 3 AOPs are planned.

### **Riparian Harvest unit for Large Wood additions**

A small ~20-acre unit in the Little Bridge Creek area will be utilized to provide additional wood for LWD additions. The unit will follow all applicable design criteria (DCs) and best management practices (BMPs) and the prescription will be to ensure a fully stocked healthy stand remains after treatment. The logs will be transported by helicopter or truck to selected areas within the TARP area.

### **Additional Actions**

Road maintenance will occur, and small access roads will be utilized for accomplishing restoration activities. All routes that are used will be decommissioned if they are not a system road or put into the maintenance level the Forest Plan currently provides for them. All applicable DCs and BMPs will be utilized. Staging areas for large wood will also be utilized and they will be rehabilitated when finished. See project record for detailed maps and plan sets of all proposed activities.



This project is within the Okanogan National Forest Land and Resource Management Plan (Forest Plan) as amended by The Northwest Forest Plan (NWFP). The NWFP includes the Aquatic Conservation Strategy (ACS), which strives to maintain and restore ecosystem health at watershed and landscape scales to protect habitat for fish and other riparian-dependent species and resources and restore currently degraded habitats (USDA and USDI 1994b: B-91). Most of the project area lies within the Riparian Reserves, as designated by the NWFP. Actions proposed in this project are consistent with standards and guidelines of both the Northwest Forest Plan and the ACS.

### **Further Information**

If you would like to meet with Forest Service personnel regarding these projects, please contact Lance George ([robert.george@usda.gov](mailto:robert.george@usda.gov)) (360)-503-9782 or District Ranger Chris Furr at (509) 996-4027 ([chris.furr@usda.gov](mailto:chris.furr@usda.gov)). If you wish to respond to these proposals, comments can be sent directly to Lance at the email address above or to the district office (address in heading). Comments must be received within 20 days of receiving this letter.

Thank you for your interest in the management of the Okanogan-Wenatchee National Forest.

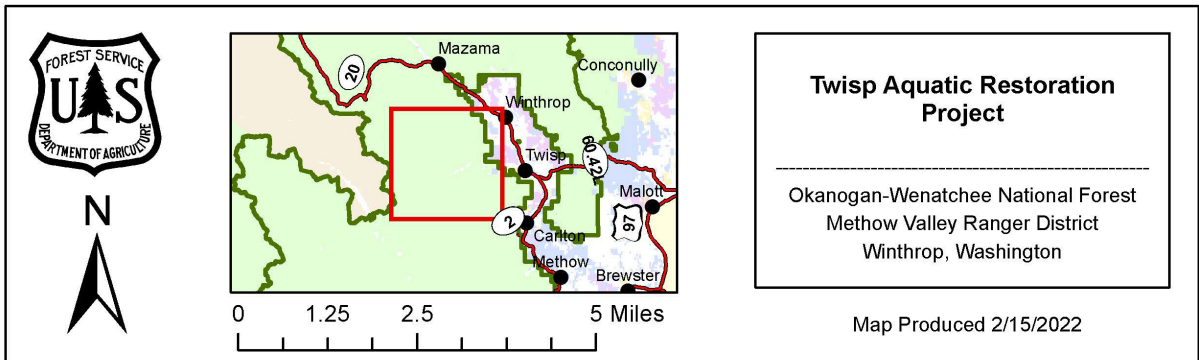
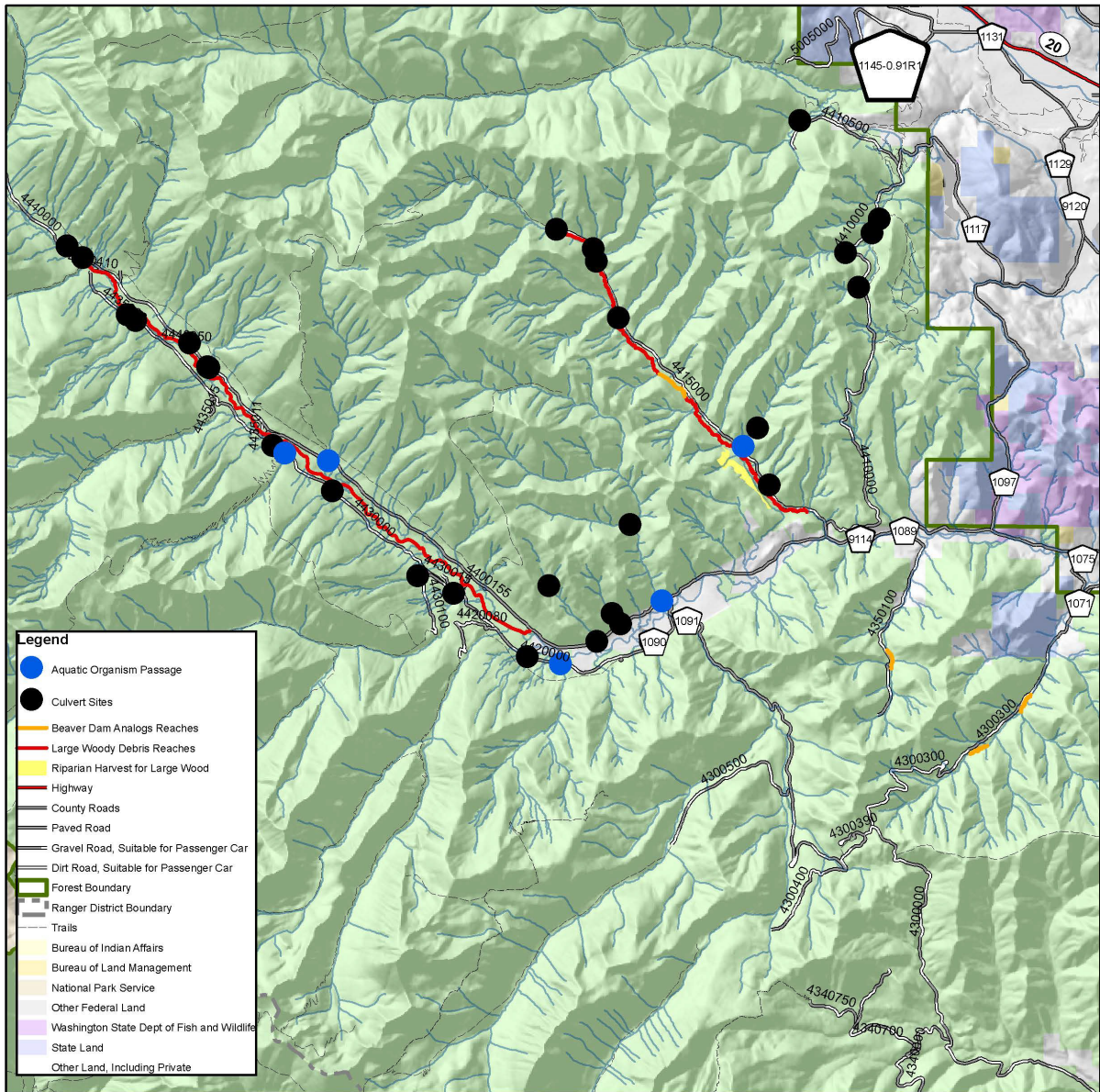
Sincerely,

Chris W. Furr  
District Ranger

Attachment: Project Area Map, project notification report



Figure 1: Twisp Aquatic Restoration Project Area Map





## Figure 2. Pre-project notification report

Dear aquatic restoration supporter,

You are receiving this message because you have shown interest in the US Forest Service's Pacific Northwest aquatic restoration programs.

In accordance with the Pacific Northwest Regional Office's Regionwide Aquatic Restoration Environmental Assessment (EA) and Forest's aquatic restoration EAs, the Forest Service is notifying you that one or more aquatic restoration projects are being planned on a National Forest where you have expressed interest. The accompanying attachment(s) provides site specific locations and details for each project. Please read the following for directions in acquiring additional information or providing comments for this project, and thank you for your interest in aquatic restoration on National Forest System Lands.

- PLANNED ACTIVITY START DATE: The activity is scheduled for implementation no sooner than 60 days of this notification.

- PUBLIC RESPONSE PERIOD: You have 20 days to contact the Project Contact or responsible official to learn more about a project, provide relevant suggestions, or question the consistency of the project with the environmental assessment and decision notice. Public entities who claim that a project is inconsistent with the analysis in this document should identify how the project differs from environmental assessment (appendices 1 and 2 & effects described in Environmental Impacts of the Proposed Action), or is inconsistent with the relevant forest plan. A copy of the decision notice and environmental assessment can be found at [https://www.fs.usda.gov/nfs/11558/www/nepa/108207\\_FSPLT3\\_4448686.pdf](https://www.fs.usda.gov/nfs/11558/www/nepa/108207_FSPLT3_4448686.pdf)

- PROJECT CONTACT: To identify a project name and contact for restoration activities on the National Forest, please refer to the Project Reference List on page 2 of this document. Reference the attached project summary and contact the individual(s) associated with your project(s) of interest via email or phone as described below.

- FOREST RESPONSE TO YOUR INPUT: The forest service unit will reply to your input within 15 days after the public review and input period. The district ranger or other responsible official will consider the input from you and the project team and adjust the project proposal, stop the action, or proceed with the project as proposed.