

Desolation Creek Natural Water Storage Project Supplemental Information

Table # 1: Local Communities

Place	Population	Med. Household Income	Cost/pupil	Graduation Rate	% below poverty	Veterans
Long Creek	195	28,125	22,194	100	19.1	45/25%
Ukiah	186	25,000	17,375	93.9	19.0	22/12%
Granite	38	4,750	NA		50.0	5/13%
Statewide	3,831,074	50,229	9,490	68.4	15.5	333,395/8.7%

(U.S. Census Factfinder and Oregon Education Report Cards)

Table # 2: CTUIR Fisheries Restoration Strategy

Confederated Tribes of Umatilla Indian Reservation: Comprehensive Subbasin Fisheries Restoration Strategy	
Strategy	Actions
Instream Flow Enhancement	Maintain hydrologic regimes
Fish Passage Improvements	Aquatic connectivity – fish
Floodplain Restoration	Aquatic connectivity – floodplain, ecologic diversity
Watershed Protection & Restoration	Maintain large landscapes
Artificial Propagation- Salmon Reintroduction	Genetic connectivity
Lamprey & Freshwater Mussel Restoration	Aquatic ecosystem diversity
Harvest Management	Sustain populations and traditional/cultural uses
Monitoring/Evaluation	Scientific information to inform resource management

Table 3: Restoration Actions:

Site Name	Description	Restoration Actions	Notes
Nophia Creek	Perennial stream of variable gradient, w/ existing road crossings	Debris dam water retention structures. Livestock exclosure fencing w/ gated water gaps at road crossings	Restoration work in low gradient areas only
Spring Creek	Perennial stream w/ natural meadows	Beaver analogue structures of posts w/ woven branchlets. Livestock exclosure fencing. 2,000 Native hardwood plantings w/ protections.	Desired future beaver colonization site
Moonshine Creek	Perennial stream of variable gradient	Livestock exclosure fencing with water	Restoration work in low gradient areas only

		gaps. Debris dam water retention structures	
Tobacco Meadow	Native meadow with two distinct springs	Livestock exclosure fence tied to existing mainstem riparian fence. 25 Hardwood plantings	
Wassen Meadow	Native meadow with intermittent incised channel	Livestock exclosure fence extension. Debris dam structures in incised channel	Existing, partial restoration grant pending with OWEB
Leke Creek	Intermittent stream heavily eroded	Debris dam water retention structures	

Project Objectives:

The central aim of the project is *Natural Water Retention* through the restoration of complex floodplain functionality in order to restore biological diversity, increase groundwater storage/recharge, manage floodwaters, develop beaver habitat, and store carbon. An effective way to influence climate change and the availability of cold water throughout the John Day basin is to reestablish the storage mechanisms typical of natural and properly functioning, healthy meadows. This will advance high-in-the-system water retention by encouraging reconnected floodplains, reducing high-energy flows in incised channels, protecting soil interstices from compaction and trampling, providing abundant native vegetation, and securing analogues for future beaver colonization. Additional benefits include job creation and learning opportunities for youth and secondary delivery of increased water volumes to downstream users.

The first order of restoration priorities was informed by recognition that the greatest complex of ecologic functionality occurs in low gradient alluvial valleys where wet meadows occur. The specific restoration activities include fencing of two critical wet meadows, development of channel spanning structures in five streams, and planting native vegetation including aspen and cottonwood with protections across six restoration areas as follows:

Specific goals & objectives:

Goal #1 (Wet Meadow Water Storage Goal): To restore degraded wet meadow ecosystems which will help protect and support cold water deliveries to the headwaters of the John Day River waterway.

Objective 1A: By the end of the 2018 field season, a minimum of 25 debris dam structures will be installed in incised channels at 1 meadow as recorded in construction work records and photo point images.

Action Item 1Ai: Engage contractor to install structures

Action Item 1Aii: Engage youth crew to 'finish' structures

Objective 1B: By no later than September of 2019, soil moisture will expand spatially and in time as indicated by soil moisture monitoring and mapping.

Action Item 1Bi: Monitor Soil Moisture

Objective 1C: Within 2 years of plant establishment and fencing, a healthy native plant community will be present in 2 wet meadow environments as recorded in planting records and survival surveys.

Action Item 1Ci: 25 cottonwood seedlings will be planted and protected at 1 site in spring of 2017 as documented in photos and purchase records.

Action Item 1Cii: 280 linear feet of protective structures will be built around seedlings planted in groups of 2-3 trees during the summer of 2017, as documented in photo points and purchase records.

Objective 1D: No later than October 31 of 2018, livestock will be fenced out of sensitive wetland areas at 6 sites, as verified by fence construction records and photo point indicators.

Action Item 1Di: Engage contractor to construct 57,939 feet of fencing

Goal #2 (Stream Water Storage Goal): To improve aquatic and riparian habitats, hydrologic processes, and stream connectivity which supports healthy waters, fish and wildlife populations, and enhances watershed health in order to sustain the local resources, and foster thriving communities.

Objective 2A: By the year, 2020, the shallow groundwater recharge will be replenished and in-stream summer base flows will result in an improved hydrography as documented in monitoring results.

Action Item 2Ai: Engage a contractor to construct a minimum of 550 debris dam structures in incised channels at 5 streams as recorded in construction work records and photo point images.

Objective 2B: By the year 2020, a functional landscape will present all the necessary habitat components to support future beaver colonization at no less than one site as documented in photo points.

Action Item 2Bi: 2,000 aspen seedlings will be planted in riparian habitat.

Action Item 2Bii: One beaver family will be transplanted to the Desolation Creek, LLC property no later than 2022.

Goal #3 (Monitoring Goal): To monitor the results of restoration work performed between 2016 and 2019 in the Desolation Creek Sub-basin.

Objective 3A: Between December 31, 2017 and December 31, 2019, maps and graphs will begin to present a record of changes occurring in the Desolation watershed, as documented in reports delivered to funders.

Action Item 3Ai: Monitoring will track the water flow, seasonal soil moisture content, and vegetation response.

Goal # 4 (Outreach Goal): To share the efforts and results of the Desolation Creek Natural Water Storage project with the public and science communities.

Objective 4A: Immediately upon project implementation, video footage will be recorded of activities as indicated by published film.

Action Item 4Ai: Contract will be let to professional film company utilizing student film crews.

Action Item 4Aii: Regular quarterly updates will be published to the NFJ DWC webpage.

The Restoration Team:

Desolation Creek, LLC Partners (Listed Alphabetically) :

Confederated Tribes of Umatilla Indian Reservation
Confederated Tribes of Warm Springs
North Fork John Day Watershed Council
Oregon Department of Fish & Wildlife
Oregon Watershed Enhancement Board
Umatilla National Forest

Desolation Creek, LLC Contractors (Listed Alphabetically):

Butter Creek LLC
Doherty Enterprises
Hand Contracting
Henslee Ranch
Precision Spray, LLC
T2
Tetra Tech
Timber Basin Contractors
Walton Ranch



ECOTRUST FOREST
MANAGEMENT

January 25, 2016

Oregon Water Resources Department
725 Summer Street
Salem, Oregon 97301

RE: Letter of Support for the Desolation Creek Natural Water Storage Project

Ecotrust Forest Management (EFM) is pleased to support the application titled, “Desolation Creek Natural Water Storage Project,” submitted to the Oregon Water Resources Department for “Water Supply Development,” by the North Fork John Day Watershed Council.

As the manager of Desolation Creek LLC which is the landowner of the Desolation Creek property, we have been working diligently to provide economic, environmental, and social benefits through our management. We have had the great fortune to work closely with committed partners who have long relationships with the land, including the Confederated Tribes of the Umatilla Indian Reservation, the ranching families who have grazed the land for multiple generations, and the North Fork John Day Watershed Council. Through these partnerships we have been able to begin providing jobs, recreational access, and habitat protection.

Funding for this project will provide the opportunity to enhance rare wet meadow areas on the property, valuable for their water retention capability, restore riparian areas along the creek through the placement of large woody debris, fencing, and analog beaver structures, and the opportunity for public education through the production of a film describing this work. Our support of this project also includes a \$33,240 funding match.

We strongly urge funding this important project which will provide vitally needed jobs and opportunity for local residents as well as enhancement, protection, and increased understanding of an important source of cold, clear water in Eastern Oregon.

Very truly yours,

Ecotrust Forest Management

Bettina von Hagen, CEO

Oregon

Kate Brown, Governor



October 9, 2015

Department of Fish and Wildlife
John Day Field Office
PO Box 9
John Day, OR 97845
Voice: 541-575-1167
Fax: 541-575-0948
<http://www.dfw.state.or.us>



OREGON WATER RESOURCES DEPARTMENT

Attention: Jon Unger, Water Resources Grant
Administrator
725 Summer Street NE, Suite A
Salem, OR 97301

Subject: Desolation Creek Natural Water Storage Project

To Whom It May Concern:

Representatives of the Oregon Department of Fish and Wildlife (ODFW) have discussed the project proposal for the Desolation Creek Water Storage that the North Fork John Day Watershed Council (Council) plans to conduct.

The project area is located along Desolation Creek a tributary to the North Fork John Day River near the town of Dale, OR. Desolation Creek provides very good habitat for Mid-C summer steelhead (threatened), bull trout (threatened), and spring Chinook along with many other resident fish. Base stream flows however are very low in this section and are possibly limiting fish production, especially for spring Chinook adults that depend on deep cool pools for summer holding until they spawn in late August.

Water storage projects will help increase base flows benefiting the fish species present with possible lower water temperatures. The combination of council proposed projects will aid the restoration of stream channels, riparian areas, and wet meadows associated with Desolation Creek. The council will work closely with ODFW to meet fish passage design criteria for the proposed instream structure.

I have found the staff to be very dedicated in implementing restoration projects and I highly recommend considering funding for the project.

Thank you,

Brent Smith
Assistant John Day District Fish Biologist



Date: 01/25/2016

Oregon Water Resources Department
725 Summer Street NE, Suite A
Salem, OR 97301

Dear OWRD,

I am writing in support of a grant application submitted by the North Fork John Day Watershed Council (NFJD WC) to implement a wet meadow restoration project in the Upper North Fork John Day Basin along the tributaries of Desolation Creek. The North Fork John Day Ranger District has partnered with the NFJD WC and Desolation Creek LLC to implement restoration projects in the Desolation Creek area.

The Desolation Creek Watershed contains federally listed Mid-Columbia River steelhead and Columbia River bull trout and also supports population of chinook salmon and redband trout. This watershed is one of the Umatilla National Forest's highest priority watersheds for restoration. Springs and wet meadows within the Desolation Creek area provide cold water to Desolation Creek and its tributaries and provides unique wildlife habitat in the area. This project will improve water quality and restore riparian and wetland habitats.

This project compliments the North Fork John Day Ranger District's present and future restoration efforts in the Desolation Creek area, which includes vegetation management treatments, aspen and wet meadow restoration, improving fish habitat, and improving grazing management.

The North Fork John Day Watershed Council has a reputation for implementing quality restoration work on and off National Forest Lands. I support this project and hope you will consider this project to improve water quality and wetland habitat in the Desolation Creek area. Please contact me at 541.427.5316 or Range Management Specialist Brad Lathrop at 541.427.5366 if you have any questions regarding this letter of support.

Sincerely,

Ian Reid
North Fork John Day District Ranger

cc: SO





ECOTRUST FOREST
MANAGEMENT

January 25, 2016

Oregon Water Resources Department
725 Summer Street
Salem, Oregon 97301

RE: Landowner Agreement - Desolation Creek Natural Water Storage Project

Ecotrust Forest Management, as the manager of Desolation Creek LLC, the landowner of the Desolation Creek property, acknowledges that we are aware and agree to the proposed "Desolation Creek Natural Water Storage Project." We will be a partner in the project and have committed to providing matching funding to ensure its success.

Very truly yours,

Ecotrust Forest Management

A handwritten signature in black ink that reads "Bettina v. Hagen". The signature is fluid and cursive, with a long horizontal flourish at the end.

Bettina von Hagen, CEO

Elaine Eisenbraun

To: karen.m.quigley@state.or.us
Cc: Marty Eisenbraun (marty@desolationcreek.com); Valeen Madden
Subject: Project in North Fork John Day
Attachments: DesolationAreaInterestTribalLandsRequest.pdf

Dear Ms. Quigley,

I am facilitating water conservation projects in the Desolation Creek sub-watershed of the North Fork John Day River. As an ongoing project, we have been working very closely with the Fisheries Department of the Confederated Tribes of the Umatilla Indian Reservation. In addition, the Confederated Tribes of Warm Springs have attended meetings and contributed funding to acquire lidar flight data over the area. To date, much of the Desolation Creek mainstem is being fenced to prevent excess levels of grazing in the riparian area. Also, numerous wet meadows have been fenced, with stock water troughs placed adjacent to meadows to protect the water flow systems. A comprehensive assessment of the hydrologic system is underway, contracted by the Umatilla Tribes and designed by Tetra Tech.

Much of the work to has been funded by OWEB, the Umatilla Tribes (BPA), and ODFW (BPA). Currently we are applying for grant dollars from the Oregon Water Resources Department, and they request communication to you, in order to identify if the appropriate Tribes have been contacted.

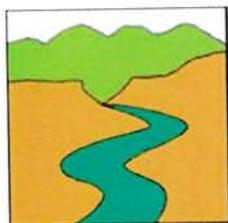
I am attaching a map of the area of interest in PDF format, and two links to more detailed topo maps of the area, in hopes that you can define all the ceded lands in this area.

http://data.fs.usda.gov/geodata/rastergateway/data/44118/fstopo/445211845_The_Cockscomb_FSTopo.pdf
http://data.fs.usda.gov/geodata/rastergateway/data/44118/fstopo/445211852_Dale_FSTopo.pdf

I sincerely thank you for any help that you might provide.

Elaine Eisenbraun

Executive Director
North Fork John Day Watershed Council
541-421-3018
541-620-2389 (cell)
elaine@nfjdw.org



**North Fork John Day
Watershed Council**

P.O. Box 444
Long Creek, Oregon 97856

Elaine Eisenbraun

From: Quigley Karen M <karen.m.quigley@state.or.us>
Sent: Monday, December 28, 2015 3:06 PM
To: Elaine Eisenbraun
Subject: RE: Project in North Fork John Day

Hello Elaine,

Thanks for your inquiry.

The Oregon Tribes that should consider contacting are the Umatilla and Warm Springs. You may also want to touch base with the Burns Paiute to see if they have any issues/interests in the area.

Happy New Year.

Karen

Karen Quigley, Executive Director

karen.m.quigley@state.or.us



Legislative Commission on Indian Services

Valeen Madden

From: Amy Charette <amy.charette@ctwsbnr.org>
Sent: Wednesday, January 20, 2016 4:31 PM
To: Valeen Madden
Subject: Re: OWRD Water Project Proposal- Desolation Creek, LLC

Hi Valeen

Thanks for sharing your proposal, the Goals and Objectives look in line with the limiting factors for the area. Increasing wet meadow and stream/floodplain storage is important for flow, temperature, and fish habitat in the John Day Basin. Meadow restoration is a target action for the North Fork John Day Sub basin in the Tribes John Day Basin Watershed Restoration Strategy, 2015

It would be good to see more detail for the channel spawning structures, and I would suggest that beaver dam analogs might be a good solution for most of the work instream and just large wood placed in the meadows will be sufficient for those areas as well

If you have any questions please let me know,

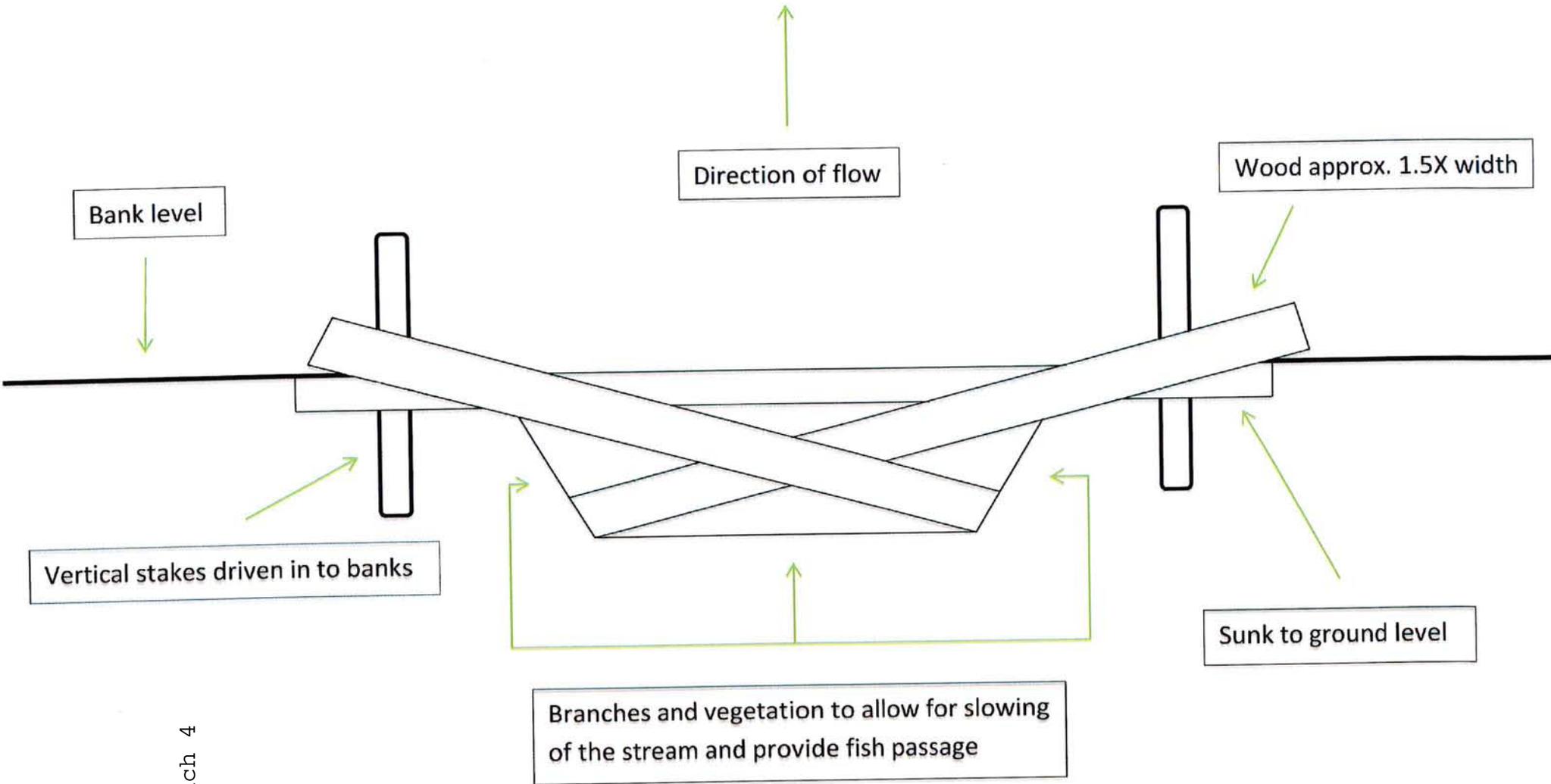
Thanks, Amy

Amy Charette
Watershed Restoration Coordinator
Confederated Tribes of the Warm Springs Reservation of Oregon
John Day Basin Office
320 W. Main Street
John Day, OR 97845
(541) 575-1868 office
(541) 620-4521 cell
amy.charette@ctwsbnr.org

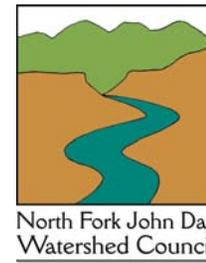
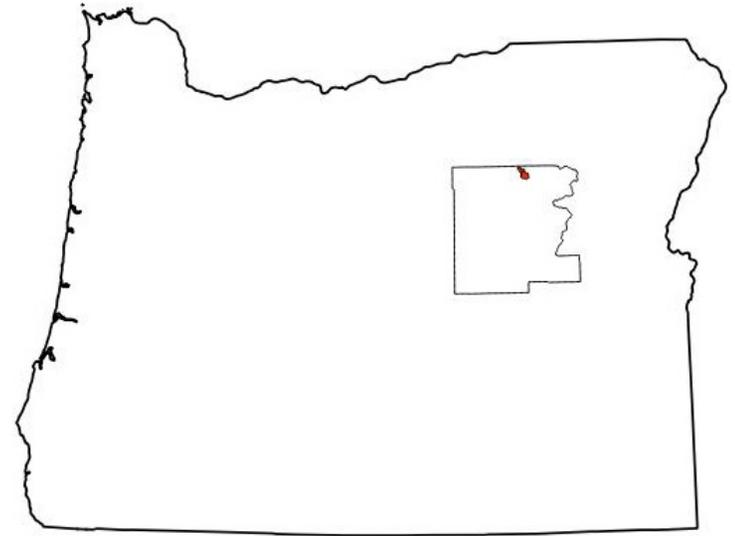
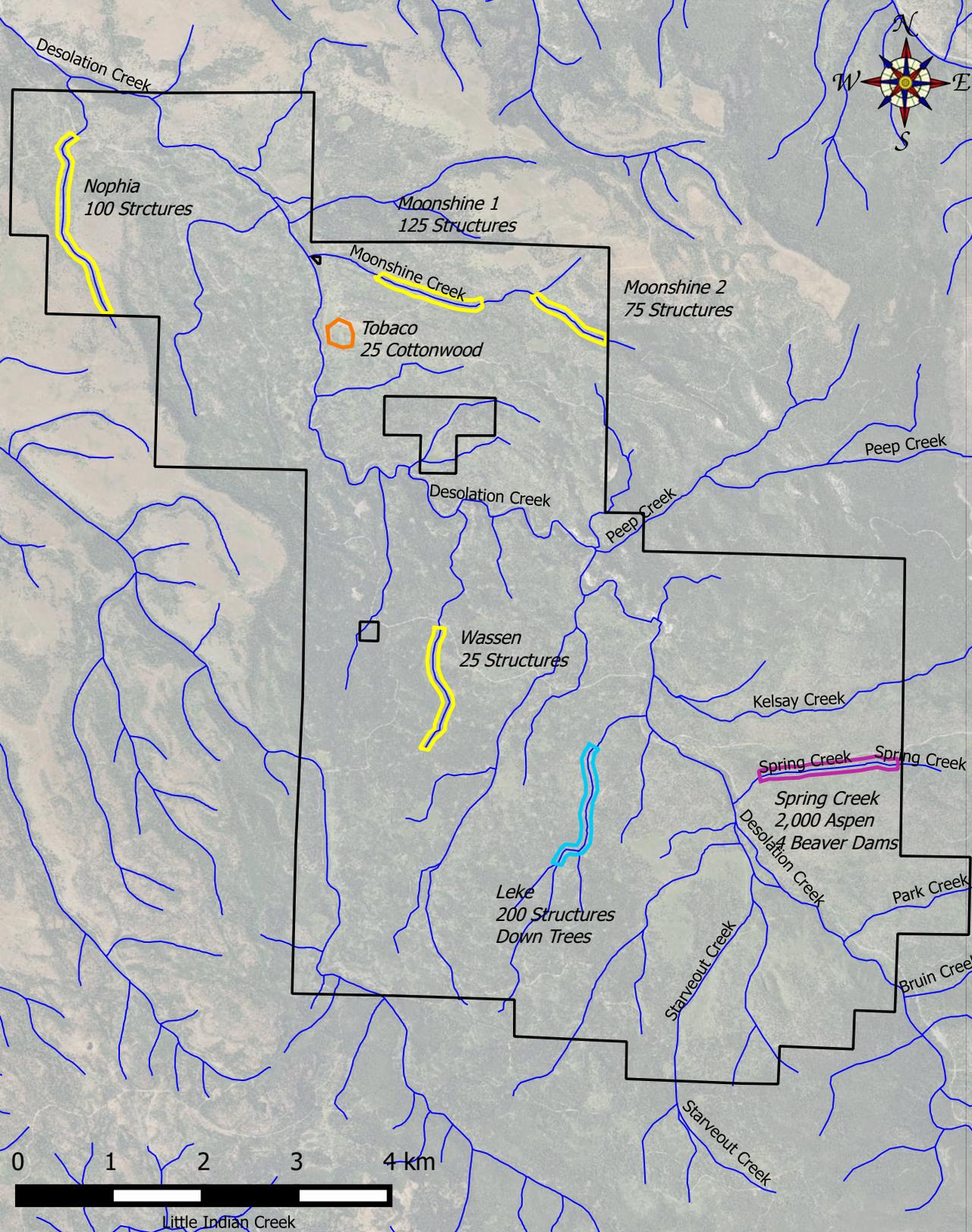


<http://wsfish.org/>

Small Woody Debris Dam Design for: Desolation Creek Natural Water Storage Project



Desolation Creek Natural Water Storage Project



Prepared by: North Fork John Day WC
 Date: 12/31/2015
 Address: 691 Hwy 395 North
 Long Creek, Or 97856

Legend

- Desolation Creek, LLC Property
- Activities: Structures & Down Trees
- Activities: Beaver Dams, Fencing & Hardwoods
- Activities: Structures & Fence
- Activities: Fencing & Hardwoods
- Desolation Streams

Desolation Creek Natural Water Storage Project



Photo 1



Photo 2

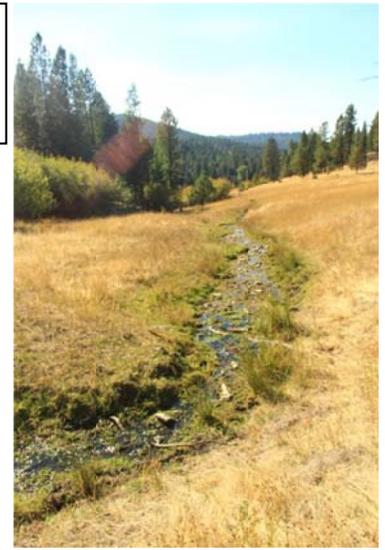


Photo 3



Photo 4



Photo 5



Photo 6



Photo 7



Photo 8



Photo 9

**Confederated Tribes of the
Umatilla Indian Reservation**

DNR Fish & Wildlife Programs



46411 Timine Way
Pendleton, OR 97801

www.ctuir.org

email: info@ctuir.org

Phone 541-276-3447

January 22, 2016

RECEIVED BY OWRD

JAN 25 2016

SALEM, OR

ODWR
John Unger
725 Summer Street, Suite A
Salem, OR 97301

Dear Mr. Unger;

The Confederated Tribes of the Umatilla Indian Reservation (CTUIR) urge you to support the North Fork John Day Watershed Council's (NFJWC) 2015 Water Supply Development Account Loan and Grant Application for the Desolation Creek Natural Water Storage Project. The NFJWC functions as one of the primary partnering entities in the North Fork John Day basin for public and private landowners interested in improving land management practices and restoring or improving habitat for listed and non-listed aquatic and terrestrial wildlife.

The CTUIR recently entered into a conservation agreement for a period of 15 years with Desolation Creek LLC whereby the two parties have agreed to implement a suite of actions to address physical and biological processes and in turn improve habitat for fish and wildlife on their Desolation Creek property. Under the conservation agreement the CTUIR and its collaborators will be using a process driven approach to develop a list of prioritized restoration actions through an assessment of their property while incorporating prioritized actions identified on adjacent public land. The resulting action plan will create a scientifically defensible approach to habitat restoration throughout the watershed.

For the CTUIR this process driven approach was established through their Umatilla River Vision which identifies key Touchstones (Hydrology, Connectivity, Geomorphology, Aquatic Biota, and Riparian Vegetation) for resource management and restoration. This document is the mechanism under which the CTUIR works to support their First Foods of Water, Salmon, Deer, Couse, and Huckleberry integral to tribal culture. That is, supporting the First Foods supports the tribal culture. Recovering processes tied to extensive meadow habitats in Desolation Creek supports all the First Foods within the immediate meadows and/or within the Desolation Creek watershed. The NFJWC's approach of working in these areas now will jump start their recovery and complement more intensive and extensive efforts on Desolation Creek and larger tributaries in the near future.

The CTUIR is currently funding the Desolation Creek Geomorphic Assessment and Action Plan and collaborating with the NFJWC, Desolation Creek LLC, Umatilla National Forest, Oregon Department of Fish and Wildlife, and the Confederated Tribes of the Warm Springs Indian Reservation in its completion. The CTUIR will also contribute to this application through \$2,000 in fencing materials and securing cultural resource clearance for fencing and in-stream structures.

Please contact John Zakrajsek (NF John Day Habitat Biologist) at 541-427-7943 with any additional questions about CTUIR's support for this proposal and fisheries habitat work within the NF John Day Basin.

Sincerely,

Gary A. James
Fisheries Program Manager



ECOTRUST FOREST
MANAGEMENT

January 25, 2016

Oregon Water Resources Department
725 Summer Street
Salem, Oregon 97301

RE: Landowner Agreement - Desolation Creek Natural Water Storage Project

Ecotrust Forest Management, as the manager of Desolation Creek LLC, the landowner of the Desolation Creek property, acknowledges that we agree to the proposed “Desolation Creek Natural Water Storage Project” and we are aware that monitoring information is public record. We will be a partner in the project and have committed to providing matching funding to ensure its success.

Very truly yours,

Ecotrust Forest Management

Bettina von Hagen, CEO