

Grant Application

Tory Kurtz



Email : tory@crwc.info
Application ID : A61KT132
Custom Ref. -

Application Start Date: 2023-08-08 22:25:18
Application Completed Date: 2023-08-15 00:34:59

1 Have you previously applied for a grant from the Oregon Wildlife Foundation?

no

2 Has a previously submitted grant application been denied funding support?

no

3 Title of your proposed project

Horse Heaven Creek BDA Implementation

4 Name of your organization

Crooked River Watershed Council

5 If your organization is not a 501c3 nonprofit, please identify your fiscal sponsor

If this does not apply to you, write N/A

N/A

6 Your name or the name of the Project Manager

Tory Kurtz

7 organization mailing address

Please enter full address with city, state & zip

498 SE Lynn Blvd, Prineville, Oregon 97754

8 your phone number or that of the Project Manager

541-447-8567

9 your email address or that of the Project Manager

tory@crwc.info

10 a brief biographical statement about yourself or that of the Project Manager

Tory Kurtz has a Bachelor of Science in Natural Resource management from Oregon State with an emphasis in Rangeland Management. She has over 20 years experience in natural resource management with practical solutions on balancing multiple uses in one area as well as watershed ecological approaches for prioritizing improvements for the overall watershed health. She also has over 20 years in experience in successfully leading projects to completion of various complexities with multiple facets and partnerships. She has administrated several grants and all grant components.

11 social media handles that your organization uses

Enter social handles or URLs such as instagram, facebook, twitter, youtube, etc. so that we can use to cross promote on our channels - if you do not have any, please place N/A

<https://www.facebook.com/crookedriverwatershed.council/>

12 are you are currently following Oregon Wildlife Foundation on its social media channels?

- None of these channels

13 what is the total estimated cost of your project?

45250

14 Funding that you are requesting from OWF

If you're request is for more than \$5,000, please contact Tim Greseth tim@myowf.org before submitting your application.

6500

15 what type of project are your proposing?

wildlife habitat restoration or improvement

16 will your project address an Oregon Conservation Strategy habitat or species?

yes

16.Y.1 What habitat or species is addressed?

This project will expand the health, diversity and area of riparian and wetland habitat for beaver, redband trout and other strategy species within the Blue Mountain ecoregion

17 what is the location of your proposed project?

28000 Southeast Paulina Highway, Prineville, OR, USA

18 what ecoregion and Conservation Opportunity Area (COA) is your proposed project located in?

See <https://www.compass.dfw.state.or.us/> for the information you need to answer this question

Blue Mountain Region, and adjacent to COA 173

19 what is the anticipated start date of your project?

Day/Month/Year

19-09-2023

20 what is the anticipated end date of your project?

31-10-2023

21 has a local, state or federal biologist reviewed this project?

yes

21.Y.1 What is their name and contact info?

Dirk Renner, USF&WS (dirk_renner@fws.gov), and Jefferson Jacobs, ONDA (jjacobs@onda.org)

22 have you already or will you obtain necessary permits from all requisite agencies as applicable to proposed project?

yes

23 what will the funds you are requesting be used for?

this would be a good time to review, if you haven't already done so, our grantmaking guidelines at www.myowf.org/grants

Fish and wildlife habitat restoration, BDA construction contract and materials

24 provide us a brief summary of your proposed project

This project considers 3.2 miles of Horse Heaven Creek, a redband trout stream on the Bonnieview Ranch property located in Post, Oregon. In Fall 2023 CRWC has planned to implement the foundations of a holistic riverscape restoration approach to restore stream function and natural processes, supporting beaver, fish and other native wildlife considered strategy species in the Oregon Conservation Strategy.

By submitting these photos or video I warrant that I am the legal owner of this media and grant the Foundation permission to reproduce, exhibit, or publish them for all general purposes in relation to Oregon Wildlife Foundation's work. If you have questions about photo or video submissions please refer to myowf.org/grants for guidance.



Project Revenue	Cash	In-Kind	Committed / Pending
Oregon Wildlife Foundation Request	6500		Pending
US Fish & Wildlife Services - Partners for Wildlife	25000		Committed
Crooked River Watershed Council	2000	4000	Committed
Western Beavers Cooperative	0	3500	Committed
Bonnieview Ranch	4250		Committed
REVENUE	37750.00	7500.00	
		TOTAL PROJECT SUPPORT	45250.00
Project Expenses	Cash	In-Kind	Total
Construction - Northwest Youth Corps (\$20K) + CRWC Volunteer Crew In-kind and Contract PM (\$6K)	22000	4000	26000.00
Equipment Rental	1427		1427.00
Supplies - Lodgepole Pine posts (550)	3500		3500.00
Personnel Project Management	3400	3001	6401.00
Admin Costs/Management	2272		2272.00
Travel	400		400.00
Project Design/Planning paid by Landowner	4250	1000	5250.00
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
		TOTAL PROJECT EXPENSES	45250.00
Balanced budget? This cell should read "0" ---->		NET	0.00

27 upload a narrative of your proposed project

Please make sure your narrative is no more than 7 pages long, single spaced, 12 pt. font (Calibri preferred).

1 Document Uploaded

28 upload letters of support

letters of support are strongly encouraged. in particular a letter from a supervising biologist

2 Documents Uploaded

29 I understand that I am required to submit a Project Completion Report, copies of any publications or social media posts crediting the Foundation's support, and post-project pictures at the completion of my project

yes

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— Grant Application

Tory Kurtz

Application ID: **A61KT132**

Horse Heaven Creek – Post, Oregon

BDA Implementation Fall 2023

This project is the first phase of a holistic approach to improving riparian habitat conditions of a 3.2 mile stream reach of Horse Heaven Creek. The project site is situated below Horse Heaven Reservoir traveling downstream past the Hwy 380 and ultimately empties into the Crooked River, located in Crook County, Oregon.

The project site is adjacent to ODFW's newly designated (as of April 2023) priority HUC10 focus areas for beaver related restoration and beaver recovery. *(See Map 1 below, page 4)*

The project addresses Oregon Conservation Strategy habitat for the Blue Mountain Region – the basin is located adjacent to COA 173. *(See Map 2 below, page 5)*

The project site sits on a working cattle ranch – totaling approximately 20,000 acres with 30 stream miles within the Horse Heaven Creek subbasin – known as Bonnieview Ranch. The property landholder has expressed strong interest in having beavers permanently return to the basin and has been making investments and commitments toward this goal over the past 18 months – including recent enrollment into the NRCS/CREP program that will remove cattle from streamside grazing. *(See Image 1 below, page 6)*

The Crooked River Watershed Council (CRWC) and its partners seek to begin establishing significant native vegetation planting over a holistic restoration process with the long term vision to support beaver recovery while benefitting other local wildlife and fish.

The project scope considered in this grant request to Oregon Wildlife Foundation covers the foundational work necessary to establishing the components needed for long term beaver re-establishment. This process will commence Fall 2023 with the installation of 37 total hand-built log structures (primarily Beaver Dam Analogues (BDAs) with some Post Assisted Log Structures (PALs)) located within portions of the stream at 3 distinct reaches (totaling 0.8 miles).

(See Image 2 below, page 7)

Objectives

The overall restoration opportunities and objectives at Horse Heaven are manifold and multi-faceted, they can be summarized as “An increase in overall riverscape health and function, attracting successful beaver settlement and ultimately beaver managed floodplains kicked off through beaver related restoration activities”.

The more explicit objectives can be defined as:

- Objective 1 Increase abundance, diversity, and lateral extent of riparian vegetation
- Objective 2 Increase the active floodplain areas, comprised of active channels and floodplains
- Objective 3 Increase ponded and wetted areas
- Objective 4 Increase fish habitat amount and diversity, temperature diversity and stream shading

Meeting these explicit objectives above will also work to support beavers' early establishment.

Subsequent beaver activities (doing-what-beavers-do) will 'intensify' the effects above through beavers' ever presence, constant, and inherently 'adaptive management' activities attending to and maintaining their home-base reach / territory (within the 'active floodplain' areas).

Over years the effects of beaver establishment can be observed in progressive stages with increasingly dynamic, biologically rich steps of sediment accumulation, increased dam building that increases water levels and then expansion of the riparian vegetation 'green zone'.

Beaver Establishment – An Overview

Early 1800's trapper and settler historical accounts from the Upper Crooked River basin suggest that beavers likely thrived throughout most tributaries of the Horse Heaven Creek system – with potentially 1 to 2 beaver families for every one stream mile in many places. It's conceivable that historically this 3.4 mile stream section of Lower Horse Heaven, was able to support 5 to 7 distinct beaver families. Averaging ~6 beavers per family back then, could put the total numbers at 30 to 40 beavers.

Currently, there is believed to be one beaver. The remains of a freshly killed beaver were found the project area in a January 2023 visit, likely a mountain lion predation as the beaver traveled away from ponded 'escape cover' to harvest food.

Present day, this lower section of Horse Heaven Creek possesses many of the favorable conditions that beavers need to succeed, including:

- stream geomorphology that is wide with room laterally to 'move around' and support a wide, safe 'green zone' of harvestable vegetation,
- a stream gradient that averages 1.12%, that isn't too steep (beavers prefer < 3% grade steepness), and
- a base water flow throughout the year.

Horse Heaven Creek also feeds into the Crooked River, where beaver, and their activities, are commonly sighted within the main stem as well as nearby adjacent tributaries.

Beavers though, have not been able to establish in this system in a persistent way.

Based on regular site visits, stream surveys and trail camera monitoring over the past 1.5 years, here are the conditions that appear to be missing:

- insufficient vegetation/food within a safe access zone 50' from streamside,
- a lack of muddy sediment for dam and den building, and
- a lack of large woody structure that supports dam and den building strength.

Altogether these components above must be addressed for beavers to have a meaningful chance of re-establishing permanently and propagating offspring over time into further sections of the Horse Heaven Creek system.

A goal for long term beaver establishment through the actions recommended in this report would be 3 to 5 beaver families able to successfully establish, survive and thrive. Progeny would

disperse upstream in the Horse Heaven Creek basin and adjacent tributaries and settle where habitat conditions exist.

Project Planning and Implementation Fall 2023

Working with the USF&WS Partners for Wildlife program, the property landholder and the Western Beavers Cooperative, CRWC has planned and organized the implementation of the 37 structures and plans to contract with Northwest Youth Corps for implementation of 80% of the BDA construction services. Community volunteer crews organized by CRWC and Western Beavers Cooperative will provide 20% of the labor required, with softer activities to include willow harvest, transport and weaving within the stream structures.

Bodie Brown and Tory Kurtz of the Crooked River Watershed Council, and Reese Mercer of Western Beavers Cooperative, will be project managing the start to finish project implementation.

Further guidance for the project implementation and construction will be provided by Dirk Renner, Wildlife Biologist of USF&WS, and Jefferson Jacobs a trained Wildlife Biologist and the Riparian Restoration Manager for the Oregon Natural Desert Association.

Construction will follow all appropriate protocols identified in the Low-Tech Process-Based Restoration of Riverscapes manual. These structures will be built from natural materials sourced locally, and are not meant to be permanent.

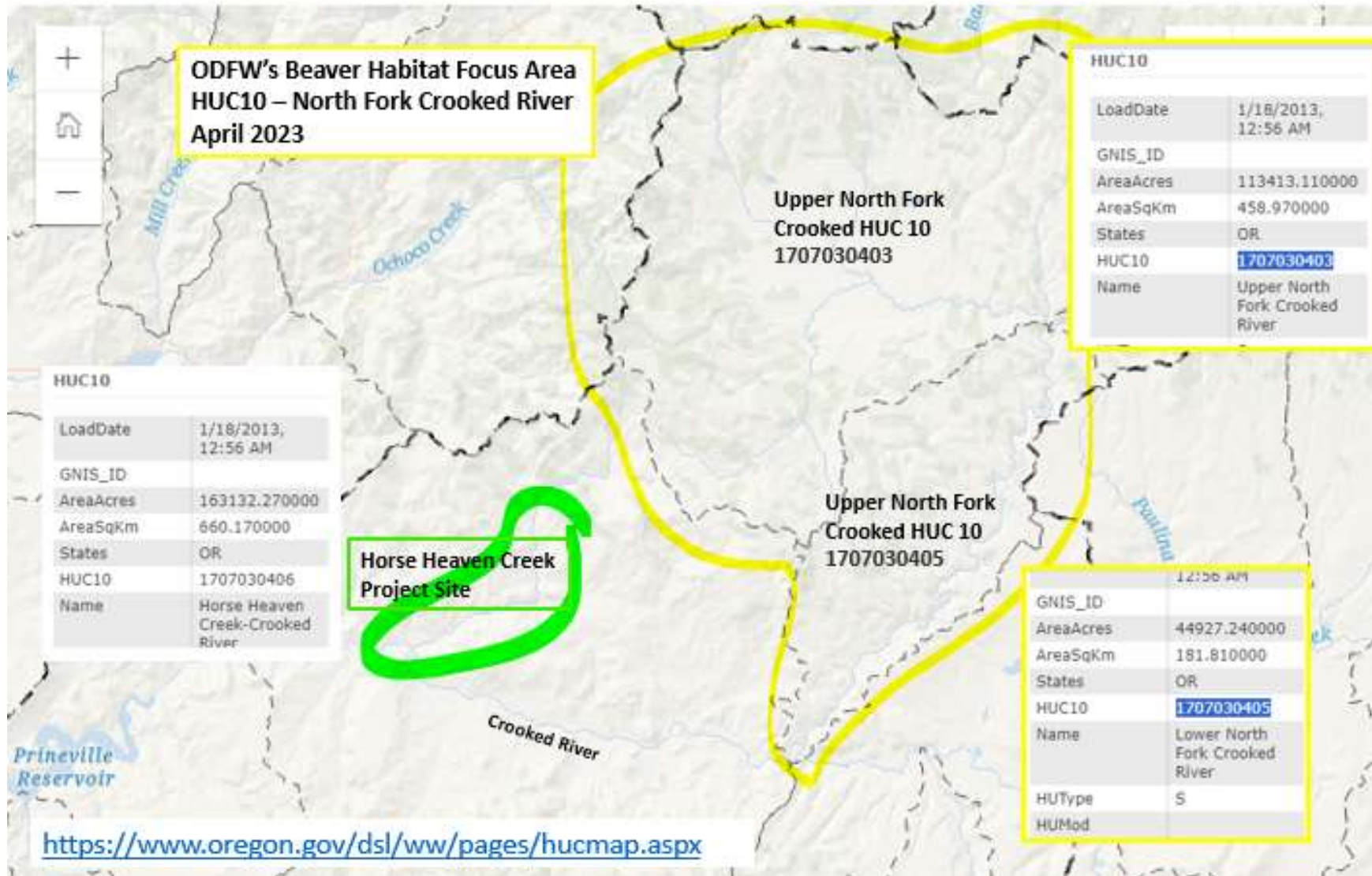
Structures will be implemented by small hand crews. Crews will access structure installation points readily by existing vehicle pathways either by foot, side-by-side, ATV or small pickup trucks.

Funding Request from Oregon Wildlife Foundation

This grant application seeks \$6,500 expressly toward: 1) a \$3,000 gap in funding to contract with the Northwest Youth Corps, and 2) \$3,500 toward the purchased materials with transport of 550 Lodgepole Pine posts – a key component of the BDA construction.

MAP 1 – Oregon Department of Fish and Wildlife (new) Priority Beaver Habitat Focus Area (HUC10)

(the Horse Heaven Creek basin is adjacent)



MAP 2 – Oregon Conservation Strategy – Conservation Opportunity Area 173
(the Horse Heaven Creek basin is adjacent)

CONSERVATION OPPORTUNITY AREAS   

To view COAs in a list or grid format, select one of the viewing option icons (next to the map pin) on the top right hand side of the screen.

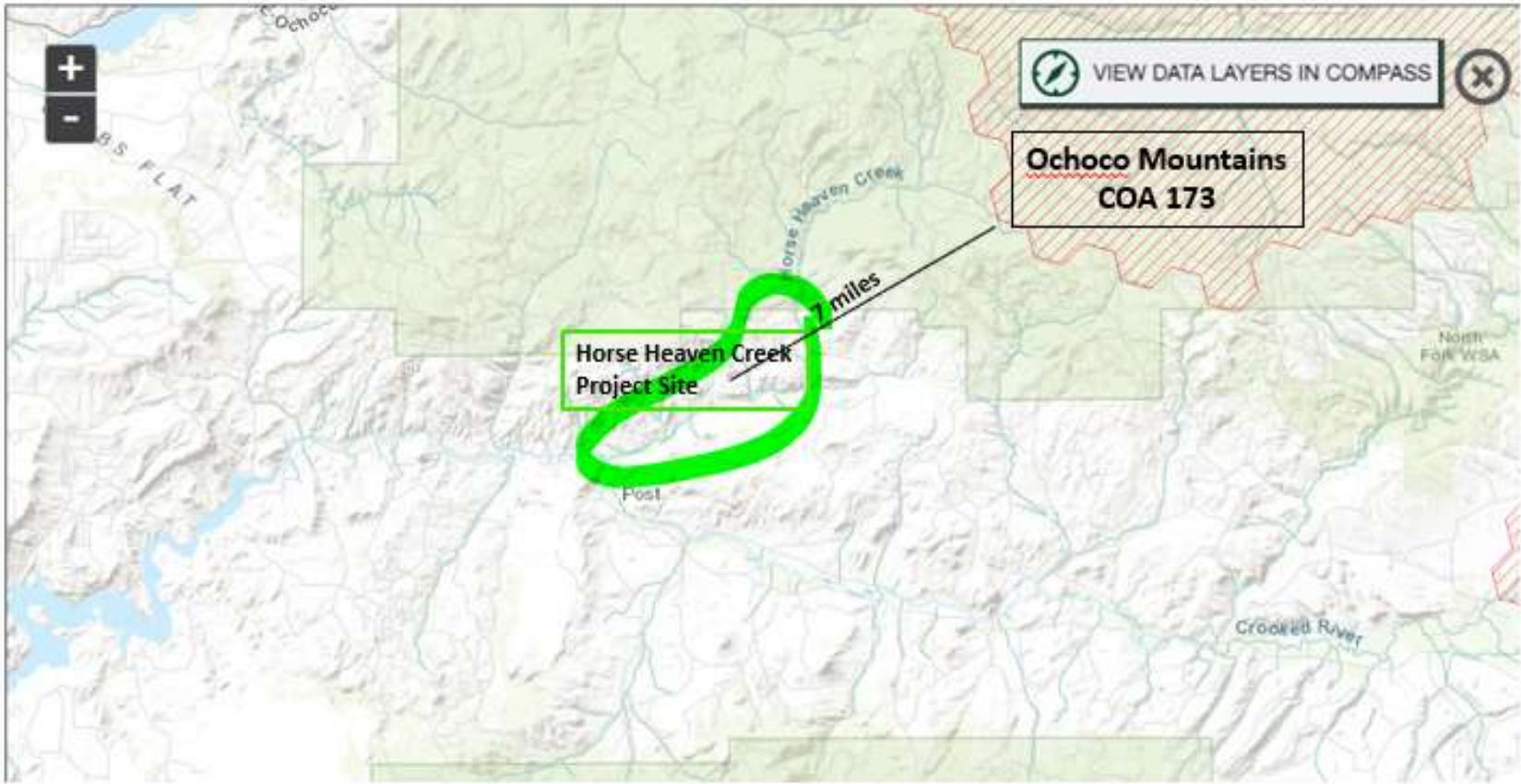


IMAGE 1 - Bonnieview Ranch (Treatment Reach 3)
(Working cattle ranch, livestock will be removed streamside)

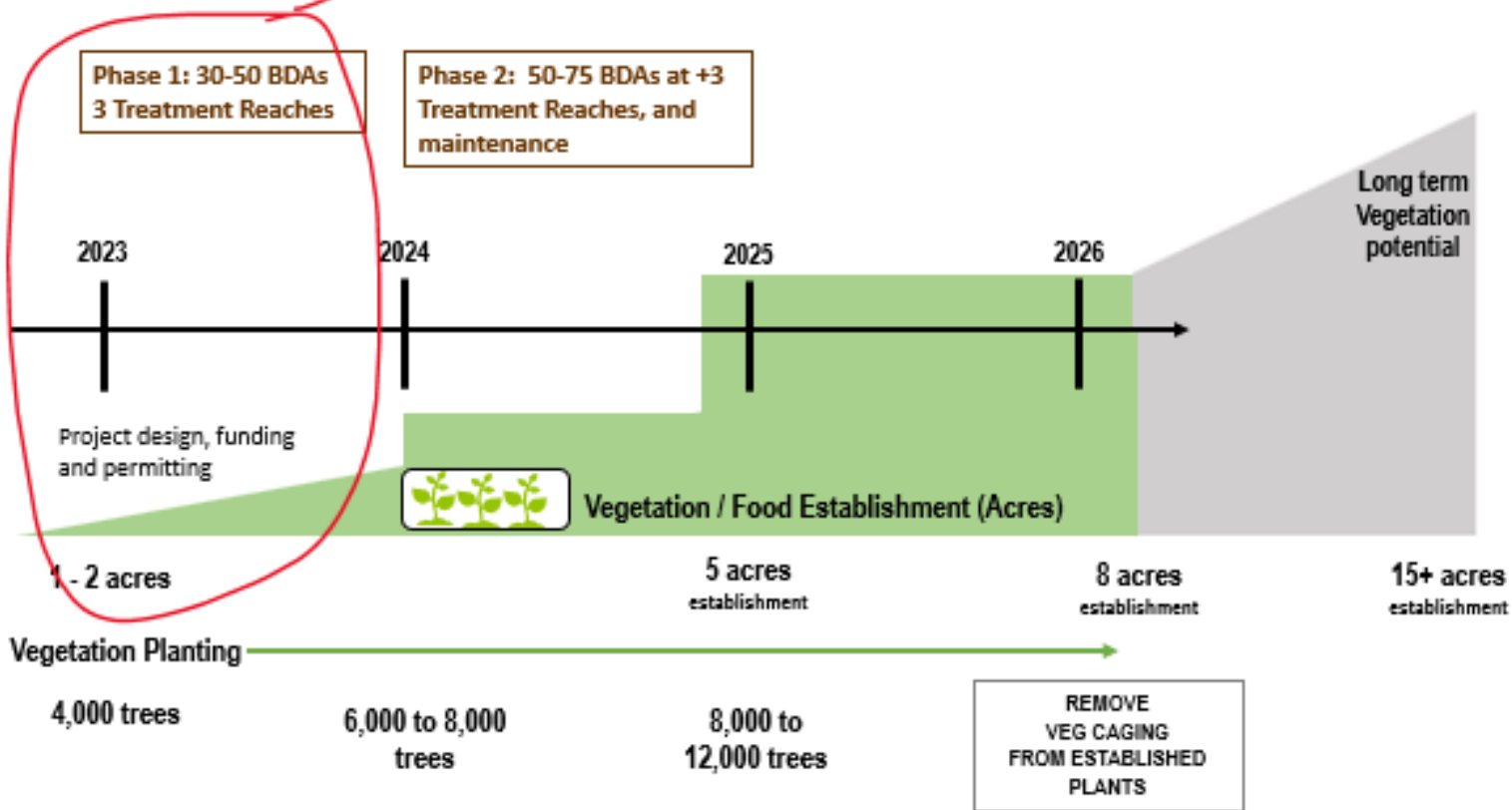


IMAGE 2 – Horse Heaven Creek Riverscape Restoration 3.2 Miles

Holistic Process Based Restoration Approach Fall 2023

Establishing Foundations with
BDA Implementation Fall 2023

PHASING OF BDA/VEGETATION TREATMENTS



August 13, 2023



Oregon Wildlife Foundation
901 SE Oak St, #103
Portland, Oregon 97214

RE: Letter of Support for Crooked River Watershed Council's Horse Heaven Creek BDA Implementation Project Fall 2023

Dear Oregon Wildlife Foundation Project Committee,

I would like to formally express support for the Oregon Wildlife Foundation grant application titled "*Horse Heaven Creek – BDA Implementation*" scheduled for this Fall 2023, led by the Crooked River Watershed Council.

In three separate site visits to the Horse Heaven Creek stream reaches where this project is located, and further in reviewing the riverscape evaluation with the BDA project design prepared this past Spring, I've acquired a good knowledge of the barriers to long term beaver establishment – most notably, a lack of native plant species that beavers depend on for their food and habitat.

This project as designed to slow water, raise water levels and reconnect floodplains will create the foundation to further beaver success. While the system currently appears to support intermittent beaver activity, I believe there is a higher potential for beaver successes by implementing these BDA structures to enhance native plant survival and abundance.

Ongoing scientific research demonstrates that the recovery of beaver on the landscape, through the enhancement and restoration of riparian ecosystems, have the ability to reduce the impacts of wildfire, drought, climate change and human development. I am committed to the success of this project and am excited about the possibilities that the future holds.

Please give this grant proposal your full consideration. If you have any questions, please contact me at (541) 330-2638, ext. 313.

A handwritten signature in black ink, appearing to read "Jefferson Jacobs".

Sincerely,

Jefferson Jacobs M. Sc.
Riparian Restoration Manager

(541) 330-2638, ext. 313
Oregon Natural Desert Association
50 SW Bond St, Suite 4 Bend, OR 97702



Oregon Wildlife Foundation
901 SE Oak St #103
Portland, OR 97214

August 14, 2023

Re: Horse Heaven Creek
Post, Oregon

Dear Oregon Wildlife Foundation Project Committee,

I am writing to formally express support for the Crooked River Watershed Council project at Horse Heaven Creek, planned for Fall 2023 to implement Long Term Process Based Restoration type structures (BDAs/PALS) designed to support riparian vegetation establishment and long term beaver success.

Western Beavers Cooperative has monitored beaver activities in the system over multiple site visits (in 2022 and 2023), documenting beaver presence in some parts of the stream – including den repair, some food harvesting and dam building – but activities have been intermittent.

Horse Heaven Creek beavers have not been reproducing, and the skull of a freshly killed beaver was found in a January 2023 visit – likely predated by mountain lion as the beaver left the safety of his/her watered ‘escape cover’ in search of food.

We consider the beavers as ‘ephmeral’ in this system due to a lack of vegetation/food sources, livestock disruption and variability of water flows within the system.

The project above will begin to address these limiting factors to successful long term beaver establishment.

Toward this effort, Western Beavers Cooperative volunteers will be contributing \$3,000 in service value to help volunteer management, and advise and guide the Crooked River Watershed Council in its planned Fall 2023 project implementation.

Please feel free to contact me with questions by email at reese@westernbeavers.org or phone 541-362-1024.

Regards,

Reese Mercer, Western Beavers Cooperative

Western Beavers Cooperative
64682 Cook Avenue, #105
Bend, Oregon 97703















