Grant Application

Sally Compton

OWF

Email : info@thinkwildco.org Application ID : A72CS150 Custom Ref. -

Application Start Date: 2024-01-02 20:55:19 Application Completed Date: 2024-01-26 22:41:28

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

yes

1.Y.1 What was the name of the project?

Beaver Behavior & Habitat Monitoring and Analysis

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

no

3 Title of your proposed project

Riparian Restoration at Collier Memorial Park

4 Name of your organization

Think Wild

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

Maureen Thompson

7 organization mailing address

Please enter full address with city, state & zip

62410 Erickson Road, Bend OR, 97701

8 your phone number or that of the Project Manager

541-699-1606

9 your email address or that of the Project Manager

maureen@thinkwildco.org

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

Dr. Maureen Thompson, BWO Program Manager, holds a PhD in ecology from The University of New South Wales and has worked for government agencies, nonprofits, and consultancies in the US and abroad. Between 2021-2023 she successfully managed a grant-funded environmental research project valued at \$166,000 as a project manager at the University of New South Wales. She currently oversees multiple grants and deliverables through the Beaver Works Oregon program, including oversight of an Oregon Watershed Enhancement Board grant valued at \$280,000 approaching successful completion.

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

Instagram: @thinkwildco and @beaverworksoregon Facebook: @thinkwildco and @beaverworksor

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

- Instagram

- Facebook
- Twitter
- 13 what is the total estimated cost of your project?

37688

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.

5000

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?

Riparian Habitat

17 what is the location of your proposed project?

Collier Memorial State Park Road, Chiloquin, 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

Outside of but tributary to COA 138

19 what is the anticipated start date of your project?

Day/Month/Year

20 what is the anticipated end date of your project?

24-06-2024

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

yes

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

Fiona Noonan

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

Supplies (fencing, fencing ties, t-posts, food and snacks for volunteers and staff, drill bits, gas for auger, chalk, enclosure signage, sandwich board, trash cans), Equipment (satellite phone, cement pounding stakes, sledge hammers, ear protectors, drill), Staff mileage (2 roundtrips, .67 mileage IRS rate, 4 staff), Contract personnel to conduct GIS and site survey

24 provide us a brief summary of your proposed project

Think Wild is a wildlife center in Bend, Oregon with the mission to inspire the High Desert community to care for and protect native wildlife through restoration, education, and rehabilitation. Think Wild began its Beaver Works program in 2019 to promote the success of beavers and native wildlife in Oregon's high desert. The relationship between loss of riparian habitat and beaver occupancy is a negative feedback loop. Since many riparian areas are impaired due to anthropogenic stressors, they no longer support the conditions beavers need to survive. To address the factors limiting their success in tandem, Beaver Works has been engaged in efforts to create the habitat conditions and human tolerance necessary to support beaver populations through 1)habitat restoration, 2) outreach, and 3) conflict mitigation. Our program works to establish stream reaches with adequate food, water, sediment, and construction building materials, as well as human tolerance for beavers to establish and thrive. To achieve this, we collaborate with local watershed councils, agencies, and landholders to identify, consult on, and plan habitat restoration projects. We then take volunteer groups out to the worksites to implement and monitor the projects by spending a weekend - planting, camping, and learning about beaver habitat and co-existence. Within Collier Memorial State Park in Chiloguin, Beaver Works has already initiated 2 planting sites which include multiple exclosures along the banks of the Williamson River and 1 site on Spring Creek, with successful evidence of resulting beaver activity. Further restoration at additional sites throughout the park will mitigate anthropogenic stressors and provide the conditions beavers need to survive, such as plants for food and building material. We propose riparian restoration through volunteer-engaged native planting of volunteer-harvested vegetative starts at Collier Memorial State Park along the west bank of the Williamson River in 2024. The selected sites have high potential for habitat improvement. This section of the Williamson River has evidence of historic beaver habitat use. For both sites, we intend to plant a collective 1,200-1,400 unrooted cuttings of native cottonwood and willow in the spring of 2024. Plants are selected to promote native wildlife habitat and prevent erosion and will be protected with browse enclosures to ensure successful establishment against human and wildlife early-stage disturbance. This project team will consist of two Think Wild staff members, a beaver habitat restoration intern, and our trained volunteers. Think Wild will conduct planting, fence maintenance, and monitoring post-project implementation through scheduled site visits and photo-monitoring, estimated at 3x/year for three years. We recommend these measures based on a literature review of research and guidance documents relevant to the area, our knowledge of the elements of the Oregon Conservation Strategy, our experience with riparian habitat restoration in the East Cascades, our familiarity with the site, and discussions with agency personnel regarding other obligations and aims in the vicinity. Funding for this proposal would make possible one chapter of our ongoing partnership with the Oregon Parks and Recreation Department and our long-term investment in watershed-scale volunteer-engaged restoration.

25 upload pre-project pictures or a video

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.







Proposed restoration area Site 3 highlighted in red at 42°38'19.9"N 121°51'54.3"W



rian shelf, Hawk's Rest Camp, and evidence of fire adjacent erosion



Proposed restoration area Site 4 highlighted in red at 42°38'30.5"N 121°51'42.0"W



Riparian shelf with upland plant encroachment and historic beaver chute

26 fill out our budget form

Project Revenue	Cash	In-Kind	Committed / Pending
Oregon Wildlife Foundation Request	5000		Pending
Bella Vista Foundation	5000		Pending
Think Wild	4620	12948	Committed
US Forest Service Clarno Nursery		6000	Committed

Oregon Parks and Recreation Department	1420	2700	Committed
	0		Committed
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
REVENUE	16040.00	21648.00	
		TOTAL PROJECT SUPPORT	37688.00
Project Expenses	Cash	In-Kind	Total
Labor	8826	12700	21526.00
Contract Personnel: GIS and Site Surveying	426		426.00
Travel (mileage)	1430	2948	4378.00
Supplies, Food, and Materials	3300	0	3300.00
Equipment	1058	0	1058.00
Willow and Cottonwood starts	0	6000	6000.00
Insurance overhead	1000	0	1000.00
0	0	0	0.00
0	0	0	0.00
0	0	0	0.00
0	0	0	0.00
0	0	0	0.00
0	0	0	0.00
0	0	0	0.00
		TOTAL PROJECT EXPENSES	37688.00

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

1 Document 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

Sally Compton

Application ID: A72CS150

Collier Memorial Park Riparian Restoration Project Narrative

Overview

Think Wild is a wildlife center in Bend, Oregon with the mission to inspire the High Desert community to care for and protect native wildlife through rehabilitation, education, and conservation. Beaver Works Oregon is a program of Think Wild that was launched in 2019 to promote beaver success through beaver habitat restoration, outreach, and support services to landholders, agencies, and the public in Central and Eastern Oregon.

Riparian landscapes, particularly within the East Cascades ecoregion, are beset by environmental issues: wildfires, drought, rising water temperatures, invasive species, and a history of harmful land use practices, which threaten habitat for not only fish and wildlife but also for humans. Research supports that the presence of beavers, and their activity in streams, lead to improved habitat for fish, wildlife, and native plants, as well as increased drought, flood, and fire tolerance. However, a variety of factors limit beaver populations' success in Oregon, including suitable habitat, resource availability, drought, and public perception. The relationship between loss of healthy streambanks and beaver habitat use is a negatively reinforcing feedback loop. Addressing the limiting factors to beaver survival in an area can increase metapopulation stability by expanding the number and distribution of beaver colonies across a watershed.

To address the factors limiting their success in tandem, Beaver Works Oregon leads efforts to create the habitat conditions and human tolerance necessary to support beaver populations through 1) riparian habitat restoration, 2) outreach, and 3) conflict mitigation. Our program works to establish stream reaches with adequate food, water, sediment, and building materials, as well as human tolerance for beavers to establish and thrive. To achieve this, we collaborate with local watershed councils, agencies, and landholders to host workshops, conduct outreach, and provide technical services on humane conflict mitigation strategies. We also identify, consult on, and plan habitat restoration projects and then take volunteer groups out to the worksites to implement and monitor the projects by spending a weekend planting, camping, and learning about beaver habitat, healthy ecosystems, and working lands. We have ongoing and/or completed 20+ 13 volunteer-led wildlife habitat projects throughout the Deschutes, Crooked, and John Day River Basins that include planting willow and cottonwood starts, launching a native plant nursery, providing beaver conflict mitigation services, and installing Beaver Dam Analogs (BDAs). Addressing the cultural carrying capacity through targeted education, outreach, and open forums for discussion is a crucial element to landscape scale success, incorporated into our program design.

Spring 2024 - Restoration rationale and methods

Think Wild seeks funding from the Oregon Wildlife Foundation to support beaver habitat restoration in Collier Memorial State Park in Spring/Summer 2024. Collier Memorial State Park used to be plentiful with beaver and riparian wildlife habitat prior to a large wildfire that burned

much of the area almost four years ago. Signs of wildlife activity are beginning to revive, including limited beaver activity, but there are no lodges, dens or dams present. It's likely that beaver are passing through the area but aren't repopulating due to the absence of forage and woody structure from the burn.

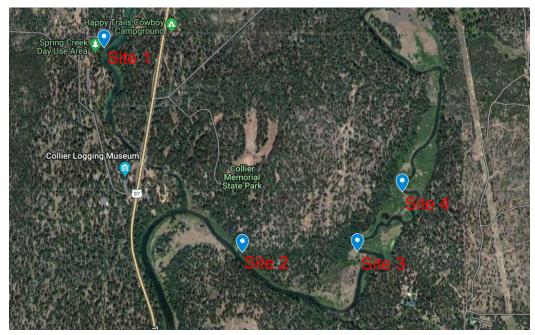
To address limiting factors to beaver repopulation in the Park and promote riparian habitat and wildlife recovery, Think Wild's Beaver Works Oregon Program has partnered with the Oregon Parks and Recreation Department to conduct stick plantings and construct temporary fencing at selected sites. We already initiated riparian restoration at 2 sites within the park in Spring 2023 (see below, sites 1 and 2) with a 50-80% success rate to date. We propose planting at two new sites along the west bank of the Williamson River for 2024 to increase connectivity, suitable habitat, and forage. These sites have high potential for habitat improvement, and there is evidence of historic beaver habitat use (i.e., beaver chews, bank channels) and current otter use. The habitat is somewhat denuded as evidenced by sparse growth of shrubs and subshrubs, and the dominance of upland colonizing plants.

This project works to improve an Oregon Conservation Strategy (OCS) Habitat, flowing water and associated riparian habitat, listed as a priority issue for the East Cascades ecoregion and crucial to the survival of many OCS bird, amphibian, fish, mammal, and invertebrate species. The Upper Klamath Watershed OCS Conservation Opportunity Area (COA 138) is downstream of our project site. Upstream improvements are an essential aspect of watershed scale and riparian habitat restoration. Our plan addresses the majority of the recommended conservation actions outlined in the OCS for this COA. Focusing investments in and around these prioritized areas can increase the likelihood of long-term success, maximize effectiveness over larger landscapes, improve funding efficiency, and promote cooperative efforts across ownership boundaries.

Additionally, the Oregon Parks and Recreation Department (OPRD) is listed in the OCS as a potential project partner for this COA, but non-profit organizations are not. Our work would broaden the community of invested stakeholders. This will increase integration across scientific disciplines and create more effective open channels for communication between practitioners, land managers, and the public. With COAs covering only 34% of Oregon's land area, restoration outside of (but with direct influence on) those critical areas is a pivotal way to increase habitat connectivity for priority species, one of the OCS aims. Our work on public lands often leads to projects on adjacent private lands, further extending the benefits through the watershed.

For this project, we propose planting a collective 1,200-1,400 unrooted cuttings of native cottonwood and willow at sites 3 and 4 along the Williamson River in the spring of 2024. Wild harvesting sticks for out-planting is a low-cost, high-success planting strategy that benefits from the co-evolution of beavers with these plants(i.e., cut branches are stimulated to grow roots and new branch limbs). The planting project would be conducted with the aid of trained volunteer crews and Think Wild staff and interns. The planting phase of the project is proposed to take place on the dates below between the hours of 8 am and 5 pm. Volunteers and staff

would camp at the park for the duration of the project, and engage up to 30-40 volunteers (dependent on repeat participation) in gaining personal value from, and adding collective value to, Collier Memorial State Park. We have plans in place to continue restoration, evaluation, and monitoring at all of these 4 sites.



SITE OVERVIEW - showing sites 1 and 2 (initiated in 2023) and the proposed sites for 2024 (sites 3 and 4)

<u>Site 3</u>

This site has high potential for habitat improvement. It is remote enough that, barring long-term trail access changes, restoration efforts will be minimally impacted by human activity. Site 3 on the west bank is highlighted in the map below as a potential planting site. There is evidence of beaver habitat use and historic occupation. The habitat is somewhat denuded as evidenced by sparse growth of shrubs and subshrubs and undercut bank.

We recommend this site be planted with around 600 unrooted cuttings of native cottonwood and willow in the spring of 2024. Plantings will be protected with browse enclosures to ensure successful establishment against human and wildlife early-stage disturbance. We will add approved signage to the habitat restoration area indicating the purpose. The nearby Camp Hawks's Rest will add to the volunteer experience as a staging and rest area. Permission to use the park's restricted access gravel road within 800 feet of this site will allow easy transport of materials and reduce the barrier to involvement for volunteers.



Proposed restoration area Site 3 highlighted in red at 42°38'19.9"N 121°51'54.3"W



Riparian shelf, Hawk's Rest Camp, and evidence of fire adjacent erosion

<u>Site 4</u>

This site has high potential for habitat improvement. It is remote enough that, barring long-term trail access changes, restoration efforts will not be impacted by human activity. One area on the west bank is highlighted in the map below as a potential planting site. There is evidence of beaver habitat use (i.e., beaver chute). The habitat is somewhat denuded as evidenced by sparse growth of shrubs and subshrubs, upland colonizing plants, and bank erosion.

We recommend this site be planted with around 600 unrooted cuttings of native cottonwood and willow in the spring of 2024. Plantings will be protected with browse enclosures to ensure successful establishment against human and wildlife early-stage disturbance. We will add approved signage to the habitat restoration area indicating the purpose. Permission to use the park's restricted access gravel road within 600 feet of this site will allow easy transport of materials and reduce the barrier to involvement for volunteers.



Proposed restoration area Site 4 highlighted in red at 42°38'30.5"N 121°51'42.0"W



Riparian shelf with upland plant encroachment and historic beaver chute

Site 1 Report

The spring plantings are leafing out, but competing against forbs and grass (see photos below). The creation of the exclosure has condensed foot traffic closer to the bank. Our camera trap monitoring revealed a beaver visiting the exclosure, within days of planting, to harvest Willow. So this site has already demonstrated its utility to beaver as a food source.



Overview with evidence of bankside trail

Beaver pulling up willow stick from the edge of the enclosure

Site 2 Report

The spring plantings are leafing out, with a variable success rate affected by competition from grasses and forbs, sandy soils, and gopher activity (see photos below). The importance of healthy bank habitat is underscored by the fire on private land, in transitional ownership, across the bank.



Site 2 exclosures

ESTIMATED COSTS

We estimate the total project cost for spring plants, materials, and planning, implementing, and post-planting maintenance and monitoring at \$37,688. Through grant subsidy and volunteer labor, Think Wild is able to provide \$27,688 in-kind. We are seeking \$5,000 from the Oregon Wildlife Fund to cover the costs of installation and monitoring supplies and travel for spring 2024. This endorsement will close the gap between the amount asked of our project partner,OPRD, and the budget they have to allow this project to proceed.

OWF funding would allow us to complete Phase 2 of this project. This proposal focuses only on the costs of Phase 2 of this project: spring 2024 planting. We have preparations for subsequent planting in the fall of 2024, and monitoring through 2027 not covered in this budget narrative.

Discussion

As we face the climate crisis, nature-based solutions are proving critical to sustain ecosystem services while promoting resilience and adaptation. According to the Oregon Conservation Strategy, increasing demands for year-round recreational activity in this region has the potential to negatively impact wildlife habitat, including erosion and denuded plant communities due to sanctioned trails. Successful implementation of dual solutions requires integration across scientific disciplines and effective communication between practitioners, land managers, and the public. Restoration engaging volunteers within Collier Memorial State Park leverages change at the crux of one of the major conservation issues facing the East Cascades ecoregion (habitat loss due to recreational overuse). Funding this project will create an opportunity for habitat improvements paired with positively impactful recreation.

This project benefits from significant in-kind contributions from Think Wild and makes possible OPRD's investment in sound, cost-effective public land restoration upstream of the Upper Klamath Watershed COA. Funding commitments to interdisciplinary projects will determine the speed and extent of recovery and shape the longer- term health of both human and wildlife communities. Through private, public, and philanthropic partnerships, like the one facilitated here, public understanding of and approval for watershed-scale impacts increases.



January 5, 2024

Oregon Wildlife Foundation 2337 NW New York St, #201C Portland, OR 97210

RE: Letter of support for Beaver Works Oregon restoration projects at Collier Memorial State Park

Dear Oregon Wildlife Foundation Board,

I am writing to express Oregon Parks and Recreation Department's ("OPRD") support for the Think Wild | Beaver Works Oregon ("Beaver Works") program providing volunteer-engaged habitat plantings within the tributaries of Upper Klamath Lake. Riparian areas provide critical ecosystem services: cooling streams through shading, filtering surface and ground water, and otherwise acting as an interface between uplands and waterways. Landscapes benefit when beavers dam up small creeks and rivers, storing water that both creates wetlands and meadow-like habitats and helps sequester atmospheric carbon. Beaver ponds, which are also natural fire breaks, hold water that benefits fish, amphibians, aquatic invertebrates, and other wildlife. Evidence exists of historic beaver presence throughout the Klamath watershed, but their presence is currently patchy. OPRD has promoted restoration of beaver habitat within Collier Memorial State Park in Chiloquin, in partnership with Beaver Works, with evidence of resulting beaver activity at one existing restoration site. Further restoration at additional sites throughout the park will mitigate anthropogenic stressors and provide the conditions beaver need to survive, such as plants for food and building material.

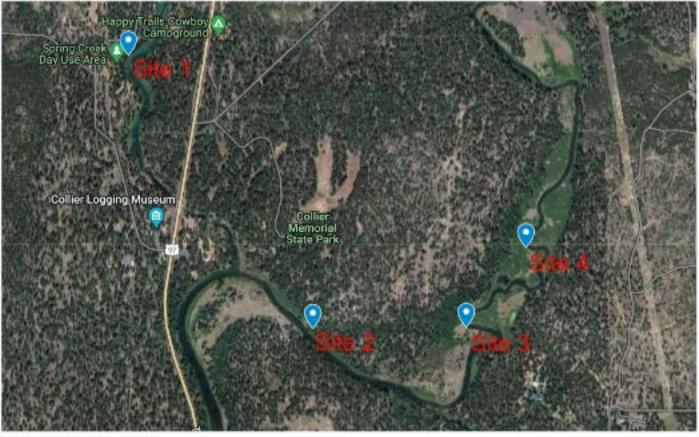
As we face the climate crisis, nature-based solutions are proving critical to sustain ecosystem services while promoting resilience and adaptation. Successful implementation of these solutions requires meaningful integration across scientific disciplines and effective communication between practitioners, land managers, and the public. Funding commitments to projects like this one will determine the speed and depth of recovery and shape the longer-term health of our communities. Through private, public, and philanthropic partnerships, like the one facilitated by Beaver Works, public approval for projects increases. This will be essential to overcome existing perils for beaver, which can often stem from public misunderstandings of their role on the landscape.

We look forward to continuing the relationship between OPRD and Beaver Works, and I recommend funding of the Beaver Works' Habitat Restoration Planting at Collier Memorial State Park. Please feel free to contact me if you have any questions.

Sincerely,

iona

Fiona Noonan Mountain Region Natural Resource Specialist <u>fiona.noonan@oprd.oregon.gov</u> | 541.280.5539



SITE OVERVIEW





Riparian shelf, Hawk's Rest Camp, and evidence of fire adjacent erosion



Proposed restoration area Site 4 highlighted in red at 42°38'30.5"N 121°51'42.0"W



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