R & E Grant Application 25-27 Biennium

Project #: 25-008

Internships: Invasive Fish Removal and Monitoring

Project Information

Requested Cycle:	25-1
R&E Project Request:	$32,016
Other Funding:	$52,540
Total Project:	$84,556
Spending Start Date:	7/1/2025
Spending End Date:	11/1/2026
Project Start Date:	7/1/2025
Project End Date:	11/1/2026
Organization:	Oregon State University Cascades

Applicant Information

Name:	Jennifer Luke
Address:	61374 Parrell Road Bend, OR 97702
Telephone:	541-388-6350 x225
Email:	jennifer.a.luke@odfw.oregon.gov

Past Recommended or Completed Projects

Number	Name	Status
17-016	Youth Angling and Acclimation Pond Phase 2	Approved

Authorized Agent

Name:	Matt Shinderman
Address:	Office of Sponsored Programs B308 Kerr Administration Bldg Corvallis, OR 97331-2140
Telephone:	541-737-4933
Email:	matt.shinderman@osucascades.edu

Location Information

Where is it?

The project will occur on public land owned or managed by another party

Landowner Information

Name:	USFS - Deschutes
Address:	63095 Deschutes Mkt Rd BEND, Oregon, 97701
Phone:	(541)388-5300

Site Description

Street Address, nearest intersection, or other descriptive location.

Cascade High Lakes: East and Paulina Lakes (Deschutes NF/Newberry National Volcanic Monument), Lava Lakes, South and North Twin Lakes, Crane Prairie Reservoir, Suttle Lake, Odell Lake

Directions to the site from the nearest highway junction.

Central Oregon: Hwy 97 and Century Drive

Following project completion, public anglers will be allowed the following level of access to the project site:

Full access

Please describe what leases, easements, agreements are in place to ensure angler access to the project site, and what is the length of each agreement.

Public access to all sites

Dominant Land Use Type:

Forest

Project Location

General Project Location.

County:	Deschutes
Town/City:	BEND
ODFW Dist:	Upper Deschutes (Lava to BillyChinook)
Stream/Lake/Estuary Name:	East, Lava, Crane Prairie, Twin, Suttle
Sub-basin:	1707031
Tributary of:	Upper Deschutes River

Specific Project Location.

Latitude	Longitude

Project Summary

Project Summary

Please provide a couple sentence summary of the proposal.

East, Paulina, Lava Lakes are popular trout angling waters infested with invasive chub.

Abundant chub populations have a detrimental effect on trout and angling. Catfish have overpopulated in Crane Prairie Reservoir. Interns would work with ODFW to remove invasive fish and monitor trout and water quality in Central Oregon Lakes.

Overall Project Goals

Describe the primary goals or outcomes of the entire project, including elements not requesting funding from R&E.

Trap and remove invasive fish to improve trout and kokanee survival, condition and abundance.

Improve recreational angling.

Monitor effects of chub and bullhead removal.

Monitor lakes with past rotenone treatments (Twin Lakes).

Provide opportunity for students to gain experience in fisheries management.

Primary objectives of R&E funding

Please describe the measurable objectives for the R&E portion of the funding request.

R&E funds would provide a stipend for two students to work 11 weeks per summer, for two summers (2025-2026)
(2025 - 2026).

Funds would also be used to lease a truck for two seasons.

Students will trap and remove invasive fish and collect associated monitoring data.

Students will assist with other lake monitoring as time allows.

Current Situation/Justification

Please describe the current situation and explain why this funding is needed.

East, Paulina and Lava Lakes are popular destinations because of trout and kokanee fishing, campgrounds, resorts and aesthetics. When chub populations are elevated trout and kokanee are negatively impacted. These lakes have the potential to provide excellent "blue ribbon" trout fishing. After 10 years of chub removal and monitoring in East Lake, data shows chub removal by trap netting is an effective way to improve trout growth rates. Angler reports have been positive and ODFW doesn't receive as many complaints from anglers about poor fishing or "I only catch chub." Chub removal likely improves water quality by reducing algae blooms. In 2023-2024, twenty thousand pounds of chub were removed from East Lake, and 10,000 lbs from Lava Lake. Since 15-30% of adult chub are caught in the nets, there will always be chub present in the lakes and periodic removal efforts will be necessary to maintain a quality fishery. The priority for this internship is chub removal, but when time allows, interns will work on other lakes to remove and monitor invasives. These water bodies could include Crane Prairie Reservoir, North and South Twin, Suttle, Davis, Odell Lakes and the Upper Deschutes River slough.

Recreation and Commercial Benefit

This project will provide benefits to:

Recreational fisheries

Explain how this project will contribute to current (and/or potential) fishing opportunities, access, or fisheries management.

East, Paulina, Lava Lakes have been popular destinations because of the fishing.

When chub populations are high, trout and water quality are negatively impacted. Removing spawning chub on a regular basis retains a good to excellent trout fishery. Other Central Oregon, angling lakes affected by invasive fish are Crane Prairie, North & South Twin, Davis, and Odell.

Percent benefit split between Commercial and Recreational anglers:

0 % Commercial
100 % Recreational

Please explain, or justify, how the percentage split was determined:

100% Recreation fishery. There are no commercial fisheries on these lakes, although they are used heavily for guided fishing trips by licensed/permitted guide services.

This project has been identified as an ODFW priority for:

Local/watershed
Statewide

Does this project directly support implementation of the ODFW Strategic Plan and/or current Fish Division priorities?

Yes
Goal 2 of the ODFW strategic plan; "increase participation in fishing," and 'increase and maintain
satisfaction with work we do." By removing chub in these popular waterbodies, trout fishing improves.

Please briefly explain when this was identified as a priority and what process or workgroup was used to identified this as an ODFW priority.

Anglers, resort owners and ODFW initiated the chub removal project. A working group was formed in 2009
with resort owners, local fishing club representatives, OSU Cascades and ODFW to develop a strategy to control chub.

Identify any plan or other document that identifies this priority.

Is this project part of an approved Salmon-Trout Enhancement Program (STEP) activity?

Yes
Yes, the STEP biologist will oversee interns and volunteers for this project.

This project is intended to benefit the following species:

Other Fish Species
kokanee salmon
Rainbow Trout

This project will benefit anglers or fishery by providing:

Angling Opportunity

Angling Opportunity

This project will:

Improve the opportunity for anglers to catch fish (better stocked fish, trapping)
Restore a degraded fishery

Project Description

Schedule

Activity	Date	RE Funding
Interview candidates for OSU Sponsored Program Internships	April 2025, 2026	No
Interns and ODFW staff training and preparation	June 2025, 2026	No
Interns and ODFW staff set 10-12 trap nets in lakes	June - August 2025, 2026	No
Net are checked regularly, invasive fish removed and hauled to dumpsite. Trout measured, weighed and released.	June-August 2025, 2026	No
Zooplankton samples are taken from various lakes that have invasive fish.	June- August 2025, 2026	No
Catfish trapping and removal in Crane Prairie, North and South Twin	June- August 2025, 2026	No
Data entry, data and lab analysis, summary report	August 2025, 2026	No
Remove nets from lakes, clean and repair all equipment	August 2025, 2026	No

Permits

Permit	Secured?	Date Expected
Special use permit - USFS - disposal sites for invasive fish	No	

Project Design and Description

Please describe in detail the methods or approach that will be used to achieve the project objectives.

The purpose of this project and internship is to remove invasive chub from East, Paulina and Lava Lakes and improve the trout fishery for recreational angling. If time permits, the interns will trap and remove invasives from other water bodies. Interns and ODFW staff will monitor the fishery and collect biological data on trout, zooplankton and invasive fish. Interns will be responsible for trapping chub using fyke nets. Duties require driving a boat, setting large nets, emptying nets, lifting barrels of chub, and hauling chub or bullhead to disposal sites. Loads of chub will vary from 100-2000 pounds a day. Trout and kokanee are weighed and measured and released unharmed.

Engineering

Does the project involve capital improvement, engineering, site grading or other construction?

No

Project Management and Maintenance

What is the life expectancy of R&E funded construction, structures, equipment, supplies, data or fishery?

ODFW owns and maintains all the fyke nets, boats and equipment for invasive fish removal and trout sampling.

Who is responsible for long term management, maintenance, and oversight of the project beyond what is funded by R&E.

In the years we do not remove invasive fish, ODFW will continue to monitor the chub population, trout conditions and abundance and zooplankton levels.

Will the project require ongoing maintenance?

No

Is there a plan to collect baseline data and to conduct monitoring efforts to measure the effectiveness of the project?

Yes

Yes, baseline data was collected prior to chub removal in East Lake and we continue to monitor lakes each year.

Project Funding

Funding

Have you applied for OWEB funding for this project?

No

Has this proposal, or similar proposal for this project location, previously been denied by OWEB or other funding source?

No

Other Funding Source	Type	Secured	Dollar Value	Comments
OSU Index M2224N	Cash	Secured	12000	
OSU Cascades Faculty staff: faculty supervision, student recruitment, credit evaluation	In-Kind	Pending	1540	
ODFW Staff, STEP Biologist	In-Kind	Pending	9600	
ODFW Staff, District Biologist	In-Kind	Pending	2000	
East Lake Resort boat mooring	Cash	Pending	1200	
Lava Lake Resort: volunteer time	In-Kind	Pending	3600	
boat fuel	Cash	Pending	600	
ODFW supplies: trap nets, tags, rope	Cash	Pending	20000	
ODFW Staff NRS1	Cash	Pending	2000	
		Total	52540	

Budget

Item	Unit Number	Unit Cost	In-kind or non-cash contributions	Funding from other sources	R&E Funds	Total Costs
PROJECT MANAGEMENT						
Matt Shinderman, OSU Cascades, Salary	22	70.00	1540	0	0	1540
Jennifer Luke, ODFW STEP Salary	240	40.00	9600	0	0	9600
NRS-1 ODFW M&E Salary	67	30.00	2000	0	0	2000
ODFW District Biologist, Salary	40	50.00	2000	0	0	2000
Joey Frazee, Lava Resort	120	30.00	3600	0	0	3600
		SUBTOTAL	18740	0	0	18740
IN-HOUSE PERSONNEL						
			0	0	0	0
		SUBTOTAL	0	0	0	0
CONTRACTED SERVICES						
Sponsored Program OSU Internships, (111 days (22 weeks) 25-26	1776	31968.00	0	8208	23760	31968
Sponsored Program OSU Internships, (9 days June 2025)	144	2592.00	0	2592	0	2592
		SUBTOTAL	0	10800	23760	34560
TRAVEL						
Motor Pool Truck Lease	3	1000.00	0	0	3000	3000
Truck Fuel	3	1000.00	0	0	3000	3000
		SUBTOTAL	0	0	6000	6000
SUPPLIES/MATERIALS						
Boat Fuel	1	600.00	600	0	0	600
Boat mooring-resorts	3	400.00	1200	0	0	1200
		SUBTOTAL	1800	0	0	1800
EDUCATION/OUTREACH						
			0	0	0	0
		SUBTOTAL	0	0	0	0
EQUIPMENT						
Fyke Nets	10	2000.00	20000	0	0	20000
		SUBTOTAL	20000	0	0	20000
FISCAL ADMINISTRATION						
Internship OPE (10%)	24	0.00	0	1200	2256	3456
		SUBTOTAL	0	1200	2256	3456
		BUDGET TOTAL	40540	12000	32016	84556

Additional Files

Budget Information

Maps

Photos

Design Information

Management Plans and Supporting Documents

Permits and Reviews

Partnerships

Public Comment

Administrative Documents

Signature Authorization Page

Completion Report

A completion report has not been submitted for this project.