



R & E Grant Application 17-19 Biennium

Project #: 17-043

Chetco Bar Fire Juvenile Steelhead Study 2018

Project Information

Requested Cycle: 17-4
R&E Project Request: \$53,443
Other Funding: \$34,524
Total Project: \$87,967
Spending Start Date: 7/1/2018
Spending End Date: 6/30/2019
Project Start Date: 3/1/2018
Project End Date: 6/30/2019
Organization: ODFW - Gold Beach Field Office

Applicant Information

Name: steven mazur
Address: po box 642
gold beach, OR 97444
Telephone: 541-247-7605
Email: steve.j.mazur@state.or.us

Past Recommended or Completed Projects

Number	Name	Status
17-015	Arizona Pond Sediment Removal 2017	Approved

Authorized Agent

Name: Laura Green
Address: 29907 Airport Way
Gold Beach, OR 97444
Telephone: 541-247-7605
Fax: 541-247-2321
Email: laura.j.green@odfw.oregon.gov

Location Information

Where is it?

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

Landowner Information

Name: South Coast Lumber
Address: 885 Railroad St P.O. Box 670
Brookings , OR , 97415
Phone: (541) 469-2136
Email: info@socomi.com

Name: US Forest Service
Address: 29279 Ellensburg Avenue
Gold Beach, OR, 97444
Phone: (541) 247-3600

Name: City of Brookings
Address: 898 Elk Dr.
Brookings, OR, 97415
Phone: (541) 469-1159

Site Description

Street Address, nearest intersection, or other descriptive location.

The study site is within the Chetco River Watershed. The nearest city is Brookings, Oregon 97415.

Directions to the site from the nearest highway junction.

From highway 101, traveling East on N. Bank Chetco River Road or the S. Bank Chetco River Road. With permission, it may also be accessed through a network of Forest Service and Private Property/Timber Roads.

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

Limited 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.

The majority of the Chetco River Watershed is in public ownership.

Dominant Land Use Type:

Forest
Rural residential
Private timber

Project Location

General Project Location.

County: Curry
Town/City: Brookings
ODFW Dist: Rogue Watershed District-Gold Beach Field Office
Stream/Lake/Estuary Name: Chetco River
Sub-basin: Chetco
Tributary of: Pacific Ocean

Specific Project Location.

Latitude		Longitude	
42.055896		124.2687138	

Project Summary

Project Summary

Please provide a couple sentence summary of the proposal.

The Chetco Bar Fire burned a significant portion of the Chetco River Watershed in 2017. This study will assess wild winter steelhead abundance and distribution within the Chetco River Watershed and possible impacts from the fire. The data from the study will be valuable in managing winter steelhead.

Overall Project Goals

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

Monitor juvenile steelhead distribution and abundance within the Chetco River Watershed. Data collected in this study will be instrumental in managing steelhead.

Primary objectives of R&E funding

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

1. Determine 0+ and 1+ steelhead rearing densities from approximately 40 random sites from steelhead distribution database layer within the Chetco River basin.
2. Determine percentage of sites that have juvenile steelhead.
3. Analyze data collected based on KMP steelhead health goals and data collected in 1999, 2000, 2001.

Current Situation/Justification

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

Recent wildfire in the Klamath Mountain Province (KMP) may have negatively impacted steelhead habitat and could affect the future health of the population on the Chetco River and its tributaries. The objective of this study is to assess juvenile rearing densities and distribution.

In 1999, 2000 and 2001, a study was conducted that monitored adult and juvenile steelhead within the KMP. This proposed study will be modeled after that work, so that the data collected can be directly compared. The previous study determined that KMP steelhead met established health goals which addressed habitat, fry density, juvenile presence in at least 80% of sites accessible to spawning adults.

Steelhead population health has a significant impact on Curry County's economy during the winter. The fishery is enjoyed by residents and tourists alike. Attainment of all health goals would indicate that the stock was not impacted by the fire and aid in the management of the current steelhead fisheries in the Chetco River.

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.

Winter steelhead provide an important recreational fishery in Curry County for both residents and non-residents. The Chetco River winter steelhead fishery runs from December to March and is heavily fished by guided and non-guided anglers. The Chetco River is one of just a few rivers in Oregon where anglers can keep wild steelhead from a healthy and sustainable population. Monitoring the health of the wild steelhead population will help managers maintain this fishery opportunity.

Percent benefit split between Commercial and Recreational anglers:

0 % Commercial

100 % Recreational

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

There is no commercial fishery for steelhead in the Chetco River or Ocean.

This project has been identified as an ODFW priority for:

Local/watershed

Basin/regional

Statewide

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

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

Identify any plan or other document that identifies this priority.

The need to monitor the fire's effects on juvenile steelhead and their habitat in the Chetco River Watershed was identified in the Governor's Chetco Bar Fire Recovery Council report.

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

No

This project is intended to benefit the following species:

Winter Steelhead

This project will benefit anglers or fishery by providing:

Monitoring/Research

Monitoring/Research

This project will be used to evaluate:

Population composition (i.e age, species, survival, size, or genetics)

Habitat (i.e structure, passage, water quality)
Distribution (i.e. presence, absence, abundance)

Has this project been reviewed or developed by an individual with appropriate qualifications (i.e ODFW biometrician, research professor)?

Yes

Rogue Watershed District Fish Biologists; ODFW Western Oregon Rearing Project

Is this study critical to fishery management decisions?

Yes

What is the current health of the Chetco River winter steelhead population?

Yes

Results from the study will be used when crafting a steelhead conservation plan to guide fishery managers.

Is there a plan to repeat this monitoring or research in the future?

Yes

This project was first implemented 1999-2001. To ensure data continuity, this study is replicating the first study, but only focuses on the Chetco River. The data collected by these projects will be used to compare to any future projects as funding becomes available.

Will the data be reported or published?

Yes

A final report will be completed. Data will be used in developing a steelhead conservation plan.

Project Description

Schedule

Activity	Date	RE Funding
Project funding	March 2018	No
Project design	April 2018	No
Obtain 4d scientific take permit	April 2018	No
Secure all equipment	June 2018	Yes
Hire field crew	June 2018	Yes
Complete all selected sites	September 2018	Yes
Final report	November 2018	Yes

Permits

Permit	Secured?	Date Expected
NOAA 4(d) Research take permit	No	April 2018

Project Design and Description

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

In 1999, ODFW developed six population health goals for steelhead in the Klamath Mountain Province (KMP) of southwestern Oregon. A study was conducted over three years (1999-2001) that addressed these health goals; determining the sample sizes required to characterize densities of juvenile steelhead in the KMP streams and determining whether densities of juvenile steelhead differ between streams in the Rogue River Basin as compared to other coastal streams in the KMP.

The project will follow The Oregon Plan for Salmon and Watersheds; Population Health Goals

and Assessment Methods for Steelhead in the Klamath Mountains Province; Report Number: OPSW-ODFW-2002-08. The objectives are to estimate juvenile steelhead density and distribution in the Chetco River Watershed and to determine if the population continues to meet all health goals.

Three seasonal employees will conduct fieldwork July through September of 2018. The crew will be supervised by the Assistant District Fish Biologist based out of the Oregon Department of Fish and Wildlife Gold Beach office. The study will be modeled after previous work done in the KMP, but will specifically address juvenile steelhead in the Chetco River Watershed. Steelhead densities will be estimated at 40 randomly selected sites from the Chetco River's steelhead distribution layer. Sampling will begin in the smallest streams first. Progressively larger streams will be sampled during the season as flows drop. Sampling will be from only those sites on public lands or where landowner permission has been obtained.

To estimate juvenile steelhead density, four riffles (fast water habitats), and four pools or glides (slow water habitats) will be sampled for each site. Block nets will be placed at the upper and lower ends of each habitat unit to be electrofished. Samplers will follow NMFS guidelines for use of electrofishing gear and fish handling. Electrofishing will start at the lower end of the lowest sampling unit and proceed upstream. Fish counts for each unit will be estimated with the two pass method. Stunned fish from each pass are placed in separate buckets of water. The fork length to the nearest .1cm will be measured from each fish after the completion of every two passes. Subyearlings will be separated from age 1+ fish based on length.

Habitat parameters will be measured after completion of electrofishing. Only habitat that was electrofished should be measured. The length of a habitat unit will be measured directly from the lowest blocknet to the blocknet at the top to the nearest 0.1 m. Maximum depth and approximate mean width will also be measured, both to the nearest 0.1m.

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?

The funds will cover three months of monitoring in 2018. All equipment purchased will be stored at the Gold Beach office for future projects. Data will be valid indefinitely. However, in order to manage the fishery, the study should be repeated at least once every 10 years.

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

All field equipment will be managed by ODFW and repairs/maintenance will be the responsibility of ODFW.

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

Baseline data was collected in 1999-2001. The population health goals were literature reviewed.

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?

[{"source":"ODFW","type":"In-Kind","secured":"Secured","dollarValue":0,"comments":"Some equipment, materials and staff have already been secured for this project. "}]

Other Funding Source	Type	Secured	Dollar Value	Comments
ODFW	In-Kind	Secured	0	Some equipment, materials and staff have already been secured for this project.
		Total	0	

Budget

Item	Unit Number	Unit Cost	In-kind or non-cash contributions	Funding from other sources	R&E Funds	Total Costs
PROJECT MANAGEMENT						
NRS2-Project Leader (Step 2 for 3 months)	3	6405.00	19216	0	0	19216
		SUBTOTAL	19216	0	0	19216
IN-HOUSE PERSONNEL						
EBA (Step 5 for 3.5 Months)	0	4944.00	0	0	17304	17304
EBA (Step 5 for 3 Months)	3	4944.00	0	0	14832	14832
EBA (Step 5 for 3 Months)	3	4944.00	0	0	14832	14832
		SUBTOTAL	0	0	46968	46968
CONTRACTED SERVICES						
			0	0	0	0
		SUBTOTAL	0	0	0	0
TRAVEL						
1-DAS Vehicle (3 months@ \$500)	1	1500.00	0	0	1500	1500
Per Diem	3	500.00	0	0	1500	1500
		SUBTOTAL	0	0	3000	3000
SUPPLIES/MATERIALS						
camping/backpacking (pack, single person tent, sleeping bag, water filter)	3	600.00	1800	0	0	1800
Sampling Supplies	1	1275.00	0	0	1275	1275
		SUBTOTAL	1800	0	1275	3075
EDUCATION/OUTREACH						
			0	0	0	0
		SUBTOTAL	0	0	0	0
EQUIPMENT						
Electroshocker supplies (2 Lithium Batteries)	1	2000.00	0	0	2000	2000
Handheld GPS unit	1	500.00	500	0	0	500
Multi-battery charger	1	1008.00	1008	0	0	1008
Backpack Electroshockers	2	5000.00	10000	0	0	10000
Phone/Service	1	500.00	500	0	0	500
Tablet	1	500.00	500	0	0	500
Electroshocker Battery Adapter	4	50.00	0	0	200	200
Electroshocker Supplies (2 extra wands)	1	0.00	1000	0	0	1000
		SUBTOTAL	13508	0	2200	15708
FISCAL ADMINISTRATION						
			0	0	0	0
		SUBTOTAL	0	0	0	0
		BUDGET TOTAL	34524	0	53443	87967

Additional Files

Budget Information

Maps

[Chetco Bar Fire and Steelhead Distribution Map](#)

This map depicts steelhead distribution where the Chetco Bar Fire burned within the Chetco Watershed.

Photos

Design Information

Management Plans and Supporting Documents

[Chetco Bar Fire memo to Governor Kate Brown](#)

Initial Findings of Needs & Impacts from Chetco Bar Fire

[Racial and Ethnic Impact Statement](#)

Racial and Ethnic Impact Statement

Permits and Reviews

Partnerships

Public Comment

Administrative Documents

[Signature Authorization Page](#)

Signature Authorization

Completion Report

A completion report has not been submitted for this project.