



# R & E Grant Application 17-19 Biennium

Project #: 17-012

## *Mid-Columbia District Outboard Motor Replacement*

### *Project Information*

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**Requested Cycle:** 17-2  
**R&E Project Request:** \$18,000  
**Other Funding:** \$0  
**Total Project:** \$18,000  
**Spending Start Date:** 2/1/2017  
**Spending End Date:** 6/30/2017  
**Project Start Date:** 2/1/2017  
**Project End Date:** 6/30/2017  
**Organization:** ODFW - The Dalles Field Office

### *Applicant Information*

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**Name:** Rod French  
**Address:** 3701 W. 13th St.  
The Dalles, OR 97058  
**Telephone:** 541-296-4628 x322  
**Fax:** 541-298-4993  
**Email:** rod.a.french@odfw.oregon.gov

### *Past Recommended or Completed Projects*

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This applicant has no previous projects that match criteria.

## **Location Information**

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### **Where is it?**

The project will occur on public land owned or managed by the applicant

### **Site Description**

*Street Address, nearest intersection, or other descriptive location.*

The project occurs on the Lower 100 miles of the Deschutes River.

*Directions to the site from the nearest highway junction.*

*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.*

*Dominant Land Use Type:*

### **Project Location**

*General Project Location.*

**County:** Wasco, Sherman, Jefferson

**ODFW Dist:** Deschutes

**Stream/Lake/Estuary** Deschutes River

**Name:**

**Sub-basin:** 17070105

**Tributary of:** Columbia River

*Specific Project Location.*

Latitude

Longitude

## **Project Summary**

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### **Project Summary**

*Please provide a couple sentence summary of the proposal.*

This purpose of this proposal is to replace the existing outboard motor on the sled boat that is an integral component for Deschutes River fish population abundance, and health studies. The current motor was purchased in 2007, and is nearing the end of its useful life.

### **Overall Project Goals**

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

Goals of the project that this boat and motor are used for are to describe the relative health and status of Deschutes River rainbow (redband) trout, and to estimate the annual abundance of Deschutes River fall Chinook salmon.

### **Primary objectives of R&E funding**

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

Purchase 200 horsepower, 4 stroke, jet powered, outboard motor.

The goal of the monitoring project is to estimate the total spawning escapement of fall Chinook salmon in the Deschutes River to monitor population strength and determine opportunity for sport, commercial, and tribal fisheries.

Determine the relative health and status of Deschutes River redband trout in order to monitor recreational fisheries.

### Current Situation/Justification

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

Currently the sled boat is used three days per week, from November through January on the Deschutes River from Trout Creek upstream to Pelton Reregulation Dam. This effort is a component of an annual fall Chinook population estimate conducted on the Deschutes River. The sled boat negotiates the river collecting fall Chinook carcasses, which are used as the secondary recapture effort for a mark and recapture population estimate.

Following the completion of the fall Chinook population work, the sled boat is utilized for approximately a month for work on redband trout assessing population health (growth, condition, age structure).

The current motor on the sled boat, has logged over 3,500 hours. the motor is beginning to show signs of wear, as it has required numerous small mechanical repairs. Since the work is done on whitewater sections of the Deschutes River, motor malfunction limits the ability to complete project goals, as other similar boats are not readily available. Additionally, the work occurs in relatively remote, whitewater sections, of the river, where motor failure can create safety concerns.

### Recreation and Commercial Benefit

*This project will provide benefits to:*

Recreational fisheries  
Commercial fisheries

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

Deschutes fall Chinook are used as an indicator stock for the Pacific Salmon Treaty, along with an indicator stock upriver bright stock for Columbia River Fisheries. Information generated from this project supplies escapement information necessary to guide both U.S and Canadian commercial, and sport fisheries in the ocean, Columbia River, and Deschutes Rivers. Deschutes fall Chinook are one of the largest wild stocks of upriver bright fall Chinook in the Columbia Basin. Fall Chinook support popular in-river fisheries, as ODFW has estimated over 5,200 anglers annually fish the Deschutes for fall Chinook. Information collected on redband trout are used to monitor the status of the Deschutes population. Anglers the world over, come to the Deschutes to fish for its famous redband trout. In 2016, in the months of April, May and June, anglers spent over 92,000 hours of effort fishing for trout in the Deschutes. In addition, to recreational and commercial fisheries, Deschutes River fall Chinook and redband, provide important tribal subsistence and commercial fisheries. The Deschutes supports one of the largest guided trout fisheries in the west.

*Percent benefit split between Commercial and Recreational anglers:*

40 % Commercial  
60 % Recreational

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

The Commercial benefit percentage is less, as commercial fisheries only target fall chinook, while sport fisheries also exist for fall Chinook, and no commercial fisheries exist for trout. It should be noted, however, Deschutes fall Chinook are captured in commercial fisheries in Canadian, U.S. based ocean and Columbia River fisheries, and commercial tribal fisheries.

*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.*

Pacific Salmon Treaty "utilize abundance-based framework for managing all Chinook fisheries...  
Lower Deschutes Fish Management Plan "Provide opportunity to harvest wild chinook when escapement objectives of 4,000 adults..."

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

No

*This project is intended to benefit the following species:*

Fall Chinook Salmon  
Rainbow Trout

*This project will benefit anglers or fishery by providing:*

Angling Opportunity

### Angling Opportunity

*This project will:*

Enhance natural production of fish stocks to levels that allow for recreational fishing opportunities

## **Project Description**

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### Schedule

Activity	Date	RE Funding
Collecting fall Chinook carcasses as part of Mark/Recapture population estimation.	Annually, November, December, January	No
Conducting annual trout electrofishing to determine population status.	Annually, March	No

### Permits

Permit	Secured?	Date Expected
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NMFS Section 10 - Boat electrofishing reband	Yes	
NOAA 4 d - Tagging fall Chinook first marking event at Sherars Falls Fish Trap for Mark/Recapture population estimate.	Yes	

### Project Design and Description

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

Alternatives - Few alternatives exists, as an operational boat is needed to travel upstream.

Continued repairs on the existing motor were considered, but it is unknown if repairs can keep the motor operational.

Design - Adult fall Chinook salmon escapement on the Deschutes River has been estimated annually by the ODFW in The Dalles since 1977 using Peterson mark recapture methods. Reband trout population status has been monitored by sampling representative reaches of the river since the 1970's.

Methods and procedures - Fall Chinook: The estimate is generated by initially capturing and marking several hundred fall Chinook at an adult salmon and steelhead trap at Sherars Falls (rm 43) from July through October, then using a jet boat during November and December to conduct post spawn carcass surveys from river mile 87 to 100 to recover tagged and untagged fish. Redband trout - Four representative reaches of the river are electrofished. Fish collected are sampled for age, length, weight, sex, stage of maturity, stomach and pathologically examined. Age structure, growth, condition, food consumption, and length and weight relationships are determination.

R&E funded Elements - This project is primarily funded through ODFW funds, and funds provided by the U.S. Fish and Wildlife Service. R&E has previously funded the sled boat and motor purchase.

### 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 previous motor was purchased in 2007, we estimate the this new motor will have a life expectancy of approximately 10 years based upon the current amount of use.

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

The Dalles Fishery district will provide the maintenance and needed repair of the motor.

*Will the project require ongoing maintenance?*

Yes

Necessary motor maintenance would include oil changes, water pumps, and any other necessary repairs or maintenance.

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

No

## Project Funding

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### 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":"Motor maintenance","type":"Cash","secured":"Secured","dollarValue":2000,"comments":"All annual maintenance and motor repairs."}, {"source":"USFWS Deschutes River Fish Population Studies","type":"Cash","secured":"Secured","dollarValue":125000,"comments":"Annul funding required to conduct Fish Population Studies on the Deschutes River."}, {"source":"ODFW Estimated funds for Deschutes River Fish Population Studies","type":"Cash","secured":"Secured","dollarValue":80000,"comments":"Estimated ODFW funds to conduct Fish Population Studies on the Deschutes River."}]

Other Funding Source	Type	Secured	Dollar Value	Comments
Motor maintenance	Cash	Secured	2000	All annual maintenance and motor repairs.
USFWS Deschutes River Fish Population Studies	Cash	Secured	125000	Annul funding required to conduct Fish Population Studies on the Deschutes River.
ODFW Estimated funds for Deschutes River Fish Population Studies	Cash	Secured	80000	Estimated ODFW funds to conduct Fish Population Studies on the Deschutes River.
		Total	207000	

## Budget

Item	Unit Number	Unit Cost	In-kind or non-cash contributions	Funding from other sources	R&E Funds	Total Costs
PROJECT MANAGEMENT						
			0	0	0	0
		SUBTOTAL	0	0	0	0
IN-HOUSE PERSONNEL						
			0	0	0	0
		SUBTOTAL	0	0	0	0
CONTRACTED SERVICES						
			0	0	0	0
		SUBTOTAL	0	0	0	0
TRAVEL						
			0	0	0	0
		SUBTOTAL	0	0	0	0
SUPPLIES/MATERIALS						
			0	0	0	0
		SUBTOTAL	0	0	0	0
EDUCATION/OUTREACH						
			0	0	0	0
		SUBTOTAL	0	0	0	0
EQUIPMENT						
200 Horsepower Jet Propelled Outboard Motor	1	18000.00	0	0	18000	18000
		SUBTOTAL	0	0	18000	18000
FISCAL ADMINISTRATION						
			0	0	0	0
		SUBTOTAL	0	0	0	0
		BUDGET TOTAL	0	0	18000	18000

## ***Internal Review Results***

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**Review Score:** 2 out of 3

(0 = Do Not Fund, 1 = Strengthen Proposal, 2 = Recommend, 3 = Strongly Recommend)

### ***Summary of Review Team Comments***

The review team was generally supportive of this request and felt it was important for the district to have functional equipment to operate safely. The team wanted more clarification of the proposal but could support it "as is". In general the team would like to see this type of purchase in a list so it can be compared to the needs of other districts. All nine review team members scored this at a 2.

### ***Specific Review Team Comments***

This one is hard to judge in some ways. The project is buying a motor, but it is the motor that allows the data collection. It is the data collection that provides benefits, not the purchase of the motor, but you can't get one without the other.

For boat work on this type of river (i.e. fast water, remote areas), it is imperative to have a dependable motor.

Match is all related to the project. The current proposal is only for motor purchase. Other funds to help offset the motor cost would be good.

Need to change project start and end dates to make them reflect your actual timeline.

### ***Specific Review Team Questions***

*Will there be trade in value for the old motor. Applicant should discuss why none is shown - are they planning to keep the old motor?*

Due to the high number of hours, there will be limited trade in value for the current motor. The motor will be traded in at the time of purchase. Trade in value will likely be less than \$2,000. If we can find a willing trade, this will decrease the overall purchase price.

*From the photos it appears you are purchasing a Yamaha, but there is no discussion of that in the text. Have they looked at different brands/options? The existing motor is 150hp, but the proposal seeks to replace with 200hp? Is the existing motor undersized for the task? Please describe what you want to buy and why that is the best choice.*

We are not limited to a Yamaha, although the current controls, gages, and jet drive will be best adaptable to a Yamaha, and keep the overall price down. We will be seeking a 4-stroke high performance motor, which is needed for the use of the boat. We will pursue a motor that meets the specifications, at the best available price. Exact costs of the motor are unknown, any funds remaining from the grant will be returned to R&E.

The current 150 HP Yamaha motor is undersized for the boat, and can pose safety risk in the swift waters of the Deschutes for its inability to bring a loaded boat on plane in short distance.

*Since Deschutes fall Chinook are a PST indicator stock, are there any PST funds that could cost-share on a new motor? What about any district funds?*

While Deschutes fall Chinook are a PST indicator, there is little funding available through PST. District funds are not available.

*Have you pursued other uses for the sled the other 8 months of the year, such as making it available for use by other districts?*

While the boat is used regularly for 8 months, it is on call for less regular use the other 4 months



of the year. The boat is used at variety of times throughout the year for other fish district use. It is also needed for emergency use in the event of spill, fish kill, or some other type of disaster.

*The proposal mentioned that the existing motor has undergone some repairs. What would be needed to keep it at a reliable level of function as opposed to purchasing a new one? 3500 hours may be pushing its life, but something more to weigh investment in maintenance vs replacement would be good to have. It would be helpful to better chronicle some of the maintenance issues that the motor has had though the proposal makes a good point about staff safety with respect to a motor dying on the Deschutes.*

The current motor has been maintained to the manufactures specifications throughout its lifetime. The 3,500 hours on an outboard motor is analogous to a vehicle with 150,000 to 200,000 miles. Outboard motors are seldom be rebuilt due to their aluminum components. There is unlikely any additional maintenance that can preformed on the current motor that will extend its longevity. As mentioned in the proposal motor failures on river such as the Deschutes, can pose a significant safety issue. Experienced river guides on the Deschutes typically replace their motors at 750 to 1,000 hours.

## ***Additional Files***

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Budget Information

Maps

Photos

[boat](#)

*Boat side view*

[boat and motor](#)

*Boat and motor*

[boat motor](#)

*Boat motor*

Design Information

Management Plans and Supporting Documents

[Racial and ethnic statement](#)

Permits and Reviews

Partnerships

Public Comment

Administrative Documents

[Sig Page](#)

## ***Completion Report***

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A completion report has not been submitted for this project.