R & E Grant Application 15-17 Biennium

Project #: 15-013

Alsea River Winter Steelhead Research Project

Project Information

Requested Cycle:	15-2
R&E Project Request:	$39,000
Other Funding:	$31,700
Total Project:	$70,700
Spending Start Date:	11/1/2015
Spending End Date:	6/30/2016
Project Start Date:	3/30/2012
Project End Date:	6/30/2016
Organization:	ODFW - Newport

Applicant Information

Name:	Derek Wilson
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Past Recommended or Completed Projects

This applicant has no previous projects that match criteria.

Location Information

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.

This project entails conducting a winter steelhead creel survey along the Alsea River at multiple public access points.

Directions to the site from the nearest highway junction.

The Alsea River runs east to west along Hwy 34 between Waldport and the town of Alsea.

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

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:

Forest
Rural residential

Project Location

General Project Location.

County:	Lincoln and Benton
Town/City:	Alsea
ODFW Dist:	Mid Coast Fish District
Stream/Lake/Estuary Name:	Alsea River
Sub-basin:	NA
Tributary of:	NA

Specific Project Location.

Latitude	Longitude
NA	NA

Project Summary

Project Summary

Please provide a couple sentence summary of the proposal.

This proposal will complete the third and final year of a R&E funded creel survey and monitoring program designed to 1) assess the Alsea River winter steelhead brood stock programs and 2) collect information for managers to maximize angler benefits and minimize straying from the Alsea River hatchery steelhead programs.

Overall Project Goals

Describe the primary goals or outcomes of the entire project, including elements not requesting

funding from R&E.

Compare the two brood stocks used in the Alsea River by release strategies, run timing, return rates, stray rates, run composition and contribution to the angler.

Use creel and trap return data to estimate out of basin hatchery winter steelhead strays and potential sources of such strays.

Utilize the information collected from this study to assist with assessing other Mid Coast hatchery steelhead programs to maximize harvest but remain within conservation bounds.

Report the findings of this study in a manner that will provide valuable information to other coastal hatchery winter steelhead program managers.

Primary objectives of R&E funding

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

Conduct a statistical creel to estimate angler harvest of two Alsea River winter steelhead brood stocks, temporally and spatially.

Conduct a statistical creel to estimate angler harvest of out of basin hatchery winter steelhead and potentially identify source of strays.

Current Situation/Justification

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

Starting in spring of 2012, there have been three consecutive years of hatchery steelhead smolt releases from within and adjacent to the Alsea River. These annual releases have consisted of five individually identifiable smolt release groups by utilizing a combination of adipose fin clips, maxillary clips and/or the presence of a snout wire tag. This was followed up by the initiation of a creel survey and extensive adult steelhead trap monitoring program started during the 2013/14 adult steelhead return. We are currently in the second consecutive year of creel and adult trap monitoring. The R&E program has provided funding for three years of smolt wire tagging costs and for two years of creel survey (currently in year two of creel). A final year of creel survey is necessary to complete the full study design to account for annual variability.

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.

This study is directly related to recreational fisheries and management actions, specifically towards hatchery winter steelhead programs in the Mid Coast Fish District. Recreational anglers will benefit from this study as the information gained will inform managers on production and release strategies that will assist in providing a more quality and sustainable fishery, optimize angler benefits, and likely retain and/or recruit anglers into the local fisheries.

As an example from the first year of creel survey, we have found that the angler harvest rate is 3:1 for wild brood stock vs. the traditional hatchery brood stock and that the overall run timing of the wild brood stock is more protracted through the season. Also the first year of creel and trap monitoring have shown a higher smolt to adult return rate from the wild brood stock vs. the traditional hatchery brood stock.

Additionally, the information gained from this study will likely provide valuable information that other managers can utilize when assessing or addressing concerns from their specific hatchery winter steelhead programs.

Percent benefit split between Commercial and Recreational anglers:

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

This project has been identified as an ODFW priority for:

Local/watershed
Basin/regional

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.

Oregon Coastal Multi-Species Conservation and Management Plan, 2014. Specially parts of this study are addressed in the plan on page 56 under the "Alsea" heading, see attachment.

25 Year Angling Plan. Specifically, this project relates to the plan's directive, goals 1 and 2, and strategies C,D,E, and J.

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:

Hatchery releases and/or stray rates
Fishery contribution
Angler satisfaction/harvest (Creel)

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

Yes

This project has involved the ODFW Inland Recreational Fishery Program Biometrician during the overall project design, creel set up and during in season analysis.

Is this study critical to fishery management decisions?

Yes

The specific management questions this study is attempting to answer are: How do the two brood stocks used in the Alsea River (wild vs. traditional) compare in run timing, return rates, stray rates, run composition and contribution to the angler.

Yes

This study is specifically designed to address hatchery winter steelhead management on the

Alsea River and indirectly for other Mid Coast District winter steelhead programs. Results from the study will be used to direct changes to the Alsea River program with the desire to maximize angler benefits while staying within conservation sideboards. Results may also be used to direct changes in other Mid Coast steelhead programs that would promote higher catch rates and less straying. For example, a potential consideration for the Alsea River steelhead program may be to switch entirely to a wild brood stock as initial results suggest a much higher catch rate, a higher return / survival rate and less straying.

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

No

Will the data be reported or published?

Yes

The goal is to have this study published within the ODFW informational report series or in a professional journal.

Project Description

Schedule

Activity	Date	RE Funding
Conduct a statistical creel survey for winter steelhead on the Alsea River.	12,2015 - 3,2016	Yes
Monitor adult steelhead trapping sites within the Alsea basin and in adjacent basins.	10,2015 - 6,2016	No

Permits

Permit	Secured?	Date Expected
This project does not require a permit	No	1/1/0001

Project Design and Description

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

This project began with releasing five individually identifiable steelhead smolt release groups associated with the Alsea River and two adjacent basins (Yaquina and Siuslaw) for three consecutive years. A combination of adipose fin clips, maxillary clips and/or the presence of a blank agency wire tag, i.e. a coded wire tag but with no code, were used to identify the smolt release groups and will allow for detection of the specific release groups by visual observation and use of a metal detector thereby avoiding lethal sampling.

Each of the five identifiable smolt groups were released following the existing management strategies in place for the specified stock. The specific release groups include volitional releases from the Alsea Hatchery (60k wild brood and 20k traditional brood), scatter planting in the lower Alsea River (40k traditional brood), scatter planting into the Yaquina Basin (20k) and a combination of scatter / acclimation in the Siuslaw River (up to 85k).

Monitoring of adult returns from these releases take place at four different adult trapping facilities within the Alsea Basin. Additionally, monitoring will take place in four adult trapping facilities in adjacent basins (Yaquina and Siletz) where strays from the Alsea and other basin releases have already been documented. All steelhead collected at these facilities are checked for marks, wire tags, are enumerated and entered into the project database to assist in the analysis of return rates, stray rates and run timing.

Monitoring is also done by a specifically designed creel survey for the Alsea Basin. District staff and the ODFW Inland Fisheries Biometrician tailored an "Access Based" creel survey specifically for the Alsea River winter steelhead fishery. An access based creel is a standard creel concept that is commonly used in the world of fisheries management and within the ODFW. The creel data provides overall harvest estimates and catch rates (spatially and temporally) for the individual smolt release groups as well as for native fish and other out of basin strays. Also, scale samples are collected from all creel sampled fish to assist with assessing specific release group return rates, contribution to the angler and age composition of the specific release groups, i.e. percent of repeat spawners or ocean residency time.

The information collected by this study will be used by managers in making decisions or adjustments to specific hatchery steelhead programs on the Alsea and in adjacent basins. The information, once written into a report, will likely be useful to other coastal managers in making hatchery steelhead program decisions.

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?

This project will continue to be managed by the Mid Coast Fish District. The data and results from this three year project are anticipated to be valid into the foreseeable future and will have direct management implications to hatchery steelhead programs within the Mid Coast District.

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

Results from this study will be utilized by the Mid Coast Fish District in managing the district's hatchery winter steelhead programs. It is anticipated that a final report developed from the study will be useful for future assessment and/or in management decisions of other coastal hatchery steelhead programs.

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?

No

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":"Alsea Hatchery Trap Monitoring","type":"In-Kind","secured":"Secured","dollarValue":"9600","comments":""},{"source":"District Trap Monitoring","type":"In-Kind","secured":"Secured","dollarValue":"4800","comments":""},{"source":"LCM Trap Monitoring","type":"In-Kind","secured":"Secured","dollarValue":"2400","comments":""},{"source":"OHRC Trap Monitoring","type":"In-Kind","secured":"Secured","dollarValue":"4800","comments":""},{"source":"NRS 2 Project Management","type":"In-Kind","secured":"Secured","dollarValue":"6500","comments":""},{"source":"ODFW Biometrician (creel / analysis)","type":"In-Kind","secured":"Secured","dollarValue":"1200","comments":""},{"source":"ODFW Scale / Aging Lab","type":"In-Kind","secured":"Secured","dollarValue":"2400","comments":""}]

Other Funding Source	Type	Secured	Dollar Value	Comments
Alsea Hatchery Trap Monitoring	In-Kind	Secured	9600	
District Trap Monitoring	In-Kind	Secured	4800	
LCM Trap Monitoring	In-Kind	Secured	2400	
OHRC Trap Monitoring	In-Kind	Secured	4800	
NRS 2 Project Management	In-Kind	Secured	6500	
ODFW Biometrician (creel / analysis)	In-Kind	Secured	1200	
ODFW Scale / Aging Lab	In-Kind	Secured	2400	
		Total	31700	

Budget

Item	Unit Number	Unit Cost	In-kind or non-cash contributions	Funding from other sources	R&E Funds	Total Costs
PROJECT MANAGEMENT						
NRS 2 ODFW Assistant District Fish Biologist, Project Manager	260	25.00	6500	0	0	6500
ODFW Alsea Hatchery Trap Monitoring	480	20.00	9600	0	0	9600
ODFW Mid Coast Fish District Trap Monitoring	240	20.00	4800	0	0	4800
ODFW- LCM Trap Monitoring	120	20.00	2400	0	0	2400
ODFW - OHRC Trap Monitoring	240	20.00	4800	0	0	4800
ODFW Biometrician	40	30.00	1200	0	0	1200
ODFW Scale / Aging Lab (scale reading-analysis)	80	30.00	2400	0	0	2400
		SUBTOTAL	31700	0	0	31700
IN-HOUSE PERSONNEL						
2 Seasonal EBA Creel Survey Positions (4 months each)	8	2775.00	0	0	22200	22200
Insurance for 2 EBAs (Affordable Health Care Act Mandate)	8	1300.00	0	0	10400	10400
		SUBTOTAL	0	0	32600	32600
CONTRACTED SERVICES						
			0	0	0	0
		SUBTOTAL	0	0	0	0
TRAVEL						
2 vehicles (rental, mileage, maintenance for 4 months each)	2	2900.00	0	0	5800	5800
		SUBTOTAL	0	0	5800	5800
SUPPLIES/MATERIALS						
Field Gear (rain gear, boots, scale cards, batteries ect per creel surveyor)	2	300.00	0	0	600	600
		SUBTOTAL	0	0	600	600
EDUCATION/OUTREACH						
			0	0	0	0
		SUBTOTAL	0	0	0	0
EQUIPMENT						
			0	0	0	0
		SUBTOTAL	0	0	0	0
FISCAL ADMINISTRATION						
			0	0	0	0
		SUBTOTAL	0	0	0	0
		BUDGET TOTAL	31700	0	39000	70700

Additional Files

Budget Information

Maps

Photos

Design Information

Management Plans and Supporting Documents

Permits and Reviews

Partnerships

Public Comment

Administrative Documents

Completion Report

A completion report has not been submitted for this project.