R & E Grant Application 21-23 Biennium

Project #: 21-001

2021-23 Hatchery Maintenance Bundle

Project Information

Requested Cycle:	21-2
R&E Project Request:	$1,920,000
Other Funding:	$21,205,000
Total Project:	$23,125,000
Spending Start Date:	7/1/2021
Spending End Date:	6/30/2023
Project Start Date:	7/1/2021
Project End Date:	6/30/2023
Organization:	ODFW - Salem Headquarters

Applicant Information

Name:	Scott Patterson
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Past Recommended or Completed Projects

Number	Name	Status
17-002	Hatchery Maintenance Bundle 2017-19	Approved
17-058	Small hatchery projects bundle 2018	Approved

Authorized Agent

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Email:	Scott.D.Patterson@odfw.oregon.gov

Location Information

Where is it?

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

Site Description

Street Address, nearest intersection, or other descriptive location.

Alsea Hatchery: 29050 Fish Hatchery Road, Alsea, OR 97324
Clackamas Hatchery: 24500 S Entrance Road, Estacada, OR 97023
Klamath Falls Hatchery: 46161 Highway 62, Chiloquin, OR 27624
Rock Creek Hatchery: PO Box 197, Idleyld Park, OR 97447
Wizard Falls Hatchery: PO Box 130, Camp Sherman, OR 97730

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.

ODFW will provide access to anglers as long as the property is in state ownership.

Dominant Land Use Type:

Forest

Project Location

General Project Location.

County:	Marion
Town/City:	Alsea, Clackamas, Klamath Falls, Rock Creek
ODFW Dist:	Spangler
Stream/Lake/Estuary Name:	Alsea, Clackamas, Klamath, Umpqua
Sub-basin:	several
Tributary of:	Alsea, Clackamas, Klamath, Umpqua

Specific Project Location.

Latitude	Longitude
44.4228	-123.5658
45.2961	-122.3603
42.6514	-121.9464
43.3353	-123.0014
44.5233	-121.6314

Project Summary

Project Summary

Please provide a couple sentence summary of the proposal.

Alsea intake road bank stabilization

Clackamas Hatchery power hydro generation
Klamath Falls Hatchery building rebuild due to fire, spending might include construction, green energy, and/or water treatments
Rock Creek Hatchery building rebuild due to fire, spending might include construction, green energy, and/or water treatments

Overall Project Goals

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

1. Alsea-design and stabilize the road to intake to access screen and water flows for hatchery production.

2. Clackamas Hatchery-Generate power to off-set utility costs to PGE for water use.

3. Klamath Falls-Rebuild and modernize hatchery building lost in wildfires. Insurance reimbursement may not cover entire costs or modernizations.

4. Rock Creek-Rebuild and modernize hatchery building lost in wildfires. Insurance reimbursement may not cover entire costs or modernizations.

5. Paulina Lake outlet structure for screening and brood collection

Primary objectives of R&E funding

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

Improve safety at Alsea Hatchery

Improve cost effectiveness

Make fishing better in the Klamath watershed by rebuilding K. Fall Hatchery building with modern equipment and capacity for spring Chinook reintroduction efforts

Make fishing better in the Umpqua watershed by rebuilding hatchery building with modern equipment including expanded water treatment

Improve safety, brood collection, and fish survival in the Paulina outlet screen structure.

Current Situation/Justification

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

1. Alsea Hatchery access road to the intake is severely undercut. widening the road was not feasible. 2. Clackamas Hatchery currently pays $56,000/yr for hatchery water. Hydrogen power generation is expected to off set cost by 50,000/yr.
3/4. Oregon wildfires severely damaged Klamath Falls and Rock Creek hatcheries. Insurance funding is expected to cover 90 to 95% of the costs to replace structures rebuilt in place and in kind; however, the insurance funds are not expect to cover cost to improve, modernize, or provide green elements to the infrastructure, e.g., water treatments, solar energy, among others. Estimated cost to replace infrastructure at Rock Creek is in excess of $16 million and Klamath Falls $5 million. Insurance reimbursement amounts are still unknown. 5. Improve survival of fish collected in Paulina Lake

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.

K. Falls spring Chinook reintroduction
Rock Creek full production for the Umpqua (alternative sites can maintain about 60% capacity)
Alsea improve staff safety to adjust water flows at the intake which provides a more secure rearing environment for fish
Clackamas reduces operational cost of production

Percent benefit split between Commercial and Recreational anglers:

10 % Commercial
90 % Recreational

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

Salmon production was assumed split 50:50 between recreation and commercial fishing. If 20% of the hatchery production is salmon, this would project a 10% benefit to commercial anglers and 90% to recreation. Steelhead and trout was assume 100% recreational anglers.

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?

Yes
Successful completion of these projects will allow implementation of individual Fish Division HGMPs, harvest, opportunity, and reintroduction objectives.

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

Alsea road failure was identified in 2020 due to river under cut 0f the road ~7 feet. Clackamas hatchery hydro unit was identified in 2017 after the intake and pipeline structure was completed in 2020. Rock Creek and Klamath was rebuild was prioritized after 2020 wildfires.

Identify any plan or other document that identifies this priority.

HGMP

CMP

Reintroduction plan

Disaster emergency rebuilding directive

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

Yes
All the hatcheries provide eggs to various STEP volunteer activities

This project is intended to benefit the following species:

Fall Chinook Salmon
Other Species
kokanee
Spring Chinook Salmon
Coho Salmon

Winter Steelhead
Summer Steelhead
Cutthroat Trout
Rainbow Trout

This project will benefit anglers or fishery by providing:

Angling Opportunity
Hatcheries/Propagation/Liberation

Angling Opportunity

This project will:

Improve the opportunity for anglers to catch fish (better stocked fish, trapping)
Provide new opportunity for anglers to catch fish (new pond, more fish to stock more areas, new species)
Enhance natural production of fish stocks to levels that allow for recreational fishing opportunities
Restore a degraded fishery

Hatcheries/Propagation/Liberation

Hatchery Name:

Alsea, Clackamas, Klamath Falls, Rock Creek, Wizard Falls

This is a:

State hatchery

As a result of this request hatchery production will:

Increase

This project will:

Address a need identified on the ODFW Hatchery Maintenance Priority list
Reduce the impacts of hatchery operations (i.e. reduce disease, stray rates or interbreeding)
Restore, rehabilitate, modify, or replace existing production/acclimation facilities
Restore, rehabilitate, modify, or replace existing liberation equipment
Add new or upgrade production/acclimation facilities/capacity.
Add new or upgrade liberation equipment
Improve safety of hatchery operations
Improve staff efficiency of hatchery operations
Improve energy efficiency of hatchery operations
Improve effectiveness of hatchery operations (i.e. improve survival or return to angler)

Fish produced at this facility are for:

Sport harvest
Commercial harvest
Mitigation
Conservation

Project Description

Schedule

Activity	Date	RE Funding

1. Alsea bank/road stabilization design	July 2021	Yes
2. Implement/construct Alsea stabilization project	Augst/September 2021 or 22	Yes
3. Clackamas hydro unit installation	Jan - June 2022	Yes
4. Klamath Falls Hatchery rebuild	Jan 2022 to June 2023	Yes
5. Rock Creek Hatchery rebuild	June 2022 to June 2021	Yes
6. Paulina Lake outlet structure to improve screening and collect brood	July-Sept 2022	Yes

Permits

Permit	Secured?	Date Expected
Alsea bank stabilization project will require an in-stream permit. Spangler is working on the submittal.	No	July 2021
Klamath Falls hatch house will require a building permit	No	July 2021
Rock Creek hatch house will require a building permit.	No	December 2021

Project Design and Description

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

Alsea project we looked at simply widening the road; however, the effort would destabilize the hillside increasing the risk of landslides. Clackamas hydro electrical generation was include in the original pipeline project design; however, due to total project costs the hydro unit install was delayed. Its possible Oregon Energy Trust program will subsidize the project costs. For Klamath Falls and Rock Creek we will work through the agency DAS insurance reimbursement protocols. Costs above state insurance will be sent to FEMA for reimbursements. Amounts are unknown, as well as, modernization efforts to the hatcheries. Money might be used for equipment replacement or new equipment such as larger drum filters, UV treatment, and recirculation pumps.

Engineering

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

Yes
On ODFW land or managed by ODFW staff
Part of an ODFW program like STEP

Project Management and Maintenance

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

Alsea stream stabilization is expect to survive a 75 year flood event, the Clackamas hydro unit 25 years, and the hatchery building will be design for a minimum of 50 year life expectancy.

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

All projects will be maintained by ODFW staff.

Will the project require ongoing maintenance?

Yes
Alsea-minor maintenance, but would expect some level of vegetation control. Clackamas-I expect a dedicated account to be set-up for the Clackamas hydro unit revenue. The account can be used for maintenance and payments to PGE for water use. Hatchery building, there will be ongoing building maintenance, roof repairs, and ground maintenance for the life of the structures,

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

na

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

No

na

Other Funding Source	Type	Secured	Dollar Value	Comments
Alsea bank stabilization	In-Kind	Pending	5000	Hatchery staff and project oversite
Clackamas hydro	Cash	Pending	100000	Energy Trust cash reimbursement
Klamath Falls Hatch house	Cash	Pending	5000000	Up to $5,000,000 DAS and FEMA insurance reimbursements
Klamath Falls Hatch house	In-Kind	Pending	50000	ODFW Engineering design and oversite
Rock Creek Hatch House	Cash	Pending	16000000	Up to $16,000,000 DAS and FEMA insurance reimbursements
Rock Creek Hatch House	In-Kind	Pending	50000	ODFW Engineering design and oversite
		Total	21205000	

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						
Alsea bank stabilization design	1	60000.00	0	0	60000	60000
Alsea stabilization implementation/construction	1	200000.00	5000	0	200000	205000
Clackamas hydro unit	1	225000.00	0	100000	200000	300000
Clackamas hydro electrical transfer panel	1	125000.00	0	0	125000	125000
Clackamas hydro contractors install	500	250.00	0	0	125000	125000
Klamath Falls Hatch House	1	500000.00	50000	5000000	500000	5550000
Rock Creek Hatch House	1	700000.00	50000	16000000	650000	16700000
Paulina screening and adult collections	1	60000.00	0	0	60000	60000
		SUBTOTAL	105000	21100000	1920000	23125000
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						
			0	0	0	0
		SUBTOTAL	0	0	0	0
FISCAL ADMINISTRATION						
			0	0	0	0
		SUBTOTAL	0	0	0	0
		BUDGET TOTAL	105000	21100000	1920000	23125000

Additional Files

Budget Information

Alsea design	*estimate*

Maps

Photos

Alsea road undercut	*picture*
Klamath Hatchery	*Hatch House on fire*
Rock Creek	*Fire damage 1*
Rock Creek	*Fire damage 2*

Design Information

Clackamas hydro	*proposal*
Clackamas hydro	*hydro unit*
Klamath Hatchery layout	*Hatch house diagram/KF and RR*

Management Plans and Supporting Documents

Klamath Hatchery	*Hatchery fire assessment*

Permits and Reviews

Partnerships

Public Comment

Administrative Documents

signature form	*approval*

Completion Report

A completion report has not been submitted for this project.