



R & E Grant Application 23-25 Biennium

Project #: 23-017

Siletz River Basin pHOS Study

Project Information

Requested Cycle: 23-2
R&E Project Request: \$167,045
Other Funding: \$12,000
Total Project: \$179,045
Spending Start Date: 1/1/2024
Spending End Date: 5/15/2025
Project Start Date: 1/1/2024
Project End Date: 5/15/2027
Organization: Oregon Department of Fish and Wildlife

Applicant Information

Name: Dylan OKeefe
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Newport, OR 97341
Telephone: 541-812-8687
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Past Recommended or Completed Projects

This applicant has no previous projects that match criteria.

Authorized Agent

Name: john spangler
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Salem, OR 97303
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Email: john.j.spangler@state.or.us

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: Weyerhaeuser
Affiliation: Industrial Timber

Name: Confederated Tribes of Siletz Indians
Affiliation: Tribal (Siletz)

Name: US Forest Service
Affiliation: Federal

Name: Cedar Creek Tribal Land
Affiliation: Tribal (Siletz)

Name: Lincoln County
Affiliation: County

Name: Oregon Department of State Lands
Affiliation: State

Name: Manulife Investment Management
Affiliation: Industrial Timber

Site Description

Street Address, nearest intersection, or other descriptive location.

The project will occur basin wide throughout the Siletz Basin. The Spawning ground survey site locations were randomly generated by the OASIS project. The sites are spread throughout the entirety of the Siletz Basin including Schooner and Drift creek on either Forest Service Land, Tribal Land, Industrial Timberland, County property, or in some cases private landowner property (see LO contacts and attached map). In the event one of these random sites is on private land we will follow standard LO contact procedures prior to the season start to gain access to the sites. Given the nature of land owner contacts, securing access prior to the start of funding is inconducive, however OASIS and the Midcoast district have long standing agreements with most of the private Land Owners and can organize access agreements immediately upon funding approval. For trapping activities we will have traps operating at Siletz Falls, Palmer Creek, Cedar Creek, Rock Creek and Schooner Creek. Siletz Falls is located on RM 64.5 on Weyerhaeuser land with a long standing access approval. Palmer Creek trap is located approximately 1/2 mile up Palmer creek also on Weyerhaeuser land. Cedar Creek trap is located behind the Cedar Creek Quarry on Siletz Tribal land as well as Rock Creek trap. We will also have several snorkel survey locations throughout the Siletz gorge as conditions allow.

Directions to the site from the nearest highway junction.

See attached map for locations of Spawning Ground surveys located throughout the Siletz

Basin. Most sites can be accessed from the major HWY intersections of 101 and 229, or 229 and HWY 20.

Trapping locations:

From the intersection of HWY 229 and HWY 410 (E. Logsden RD) traveling East 7.7 miles, take a left onto Moonshine Park Rd in 3.5 miles continue onto the Gorge Service road for 13.4 miles, pass through the gate and down to Siletz Falls trap

From the intersection of HWY 229 and HWY 410 (E. Logsden RD) traveling East 7.7 miles, take a left onto Moonshine Park Rd in 3.5 miles continue onto the Gorge Service road for 1 mile, take a left over wild cat bridge. Take a left after the bridge and continue on for 1 mile, pass through the gate to Palmer Creek trap.

From the intersection of HWY 101 and HWY 229 traveling South east for 15.4 miles and take a left on Cedar Creek Quarry rd. Travel north for 1.1 miles and park and hike 1/4 of a mile to trapping site.

From the intersection of HWY 101 and S Drift Creek road travel north east for 1.5 miles and take a left onto S Anderson Cr Rd. Travel north for 1.1 miles and take a right onto S Schooner Creek Rd and travel 4.5 miles to NF 1783, park and walk into trapping site.

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 public will not have access to the trapping sites, or the SGS sites that are on private land. Within the legal angling boundary, angler access will remain under permanent regulation access.

Dominant Land Use Type:

Forest

Project Location

General Project Location.

County: Lincoln
Town/City: Siletz
ODFW Dist: Midcoast
Stream/Lake/Estuary Name: Siletz River
Sub-basin: 12-17100204

Specific Project Location.

Latitude	Longitude
44.7189	-123.9164
44.7253	-123.9155
44.7327	-123.8420
44.7784	-123.8333
44.7858	-123.8205
44.7889	-123.8119
44.7835	-123.8347
44.8627	-123.7330
44.7649	-123.9144
44.7996	-123.9062
44.8137	-123.9721

44.8130	-123.9409
44.7345	-123.7912
44.9520	-123.9117
44.7663	-123.7595
44.7173	-123.8006
44.8192	-123.7834
44.7610	-123.9367
44.8223	-123.6962
44.6819	-123.6692
44.8047	-123.7272
44.6985	-123.6856
44.7491	-123.8546
44.6936	-123.9040
44.6839	-123.6758
44.7257	-123.7516
44.9191	-123.8989
44.7245	-123.8288
44.8293	-123.9144
44.7557	-123.9400
44.7104	-123.9405
44.7600	-123.7871
44.7325	-123.8398
44.8367	-123.9103
44.7182	-123.7697
44.8198	-123.7730
44.8129	-123.9409
44.9410	-123.9636
44.8549	-123.7467
44.7138	-123.7530
44.8049	-123.7360
44.7485	-123.909
44.9037	-123.8649
44.7604	-123.9687
44.6969	-123.9212
44.7134	-123.6566
44.7826	-123.8352
44.9099	-123.8667
44.8670	-123.8678
44.8229	-123.8086
44.8322	-123.7614
44.7176	-123.9322
44.6824	-123.6618
44.7521	-123.7929
44.7027	-123.8012
44.7149	-123.9009
44.8191	-123.7340

Project Summary

Project Summary

Please provide a couple sentence summary of the proposal.

Conduct basin pHOS study to determine pHOS levels and respond to public requests to increase the Siletz winter steelhead smolt releases above the Coastal Multispecies Conservation and Management Plan (CMP) goals with SGS and increased trapping efforts.

Overall Project Goals

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

Estimate the percent of hatchery steelhead on the spawning grounds (pHOS) and evaluate the compliance of the hatchery program with measures outlined in the CMP.

Assess the current pHOS levels in order to fulfill the adaptive management component concerns

and continue to provide information to the public concerning hatchery winter steelhead smolt releases.

Primary objectives of R&E funding

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

Hire four BSA's to be stationed at the Newport District office to conduct steelhead spawning/snorkel surveys.

Convert the fish ladder on Cedar Creek to an adult fish trap to have a lower basin trapping/data collection site, to monitor wild/hatchery ratios. This site would run in addition to Rock Creek, Siletz Falls, Mill Cr. and Schooner Traps.

The spawning surveyors will be conducting enhanced spawning surveys throughout the Siletz basin, and will be assisting in the operation of traps on Cedar Cr. (lower Siletz tributary), Rock Cr. (Siletz Tribal hatchery) and Siletz Falls trap.

Data analysis and write up would be done by the REDD Group at the ODFW research laboratory in Corvallis.

This is a two-year request with time periods from Jan 2024-May 2024 and Jan 2025 – May 2025. Another funding request would be submitted in 2025 for the 2026-27 winter steelhead seasons for a total of four years of study.

Current Situation/Justification

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

Many studies have found that hatchery produced salmon and steelhead have a poorer ability to reproduce successfully in the wild than naturally produced fish. They have also found that increasing levels of hatchery steelhead spawning in the wild causes the productivity of wild populations to decline. As a result of these various studies, scientific panels have recommended that efforts be made to keep hatchery fish from spawning with wild fish when the program's goal is to provide for harvest. The Midcoast Fish District has deemed this study a high priority to determine compliance with the CMP and to determine whether there is flexibility in modifying winter steelhead release levels in the Siletz basin. The CMP states "The proportion of hatchery winter steelhead that comprise natural spawners in the Siletz winter steelhead population areas is targeted for a level of 10% or less." Currently the Midcoast district has limited confidence in the PHOS estimate generated from strata level monitoring. Spawning ground surveys will allow us to assess the pHOS level in order to comply with the CMP.

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.

The Siletz River is one of the premiere fishing destinations in Oregon. It also provides habitat for a unique variety of wild fish runs throughout the entire year. The Siletz River is home to 7 anadromous salmonids. Due to run timing of the various anadromous salmonids, hatchery steelhead are the only harvest opportunity for the public during the winter months (Jan-April).

This brings many anglers seeking the opportunity to harvest hatchery steelhead. Understanding the hatchery-wild ratios of winter steelhead on the spawning grounds will allow managers to

better provide opportunity to recreational anglers in the Siletz basin for retention of hatchery steelhead. Catch of hatchery winter steelhead at the Siletz Falls trap suggests that many hatchery fish are not being harvested in the fishery and are migrating to the upper basin where they are likely to interact with wild fish. The Siletz Falls wild/hatchery ratio is ~50% wild and 50% hatchery which may not reflect what is occurring across the basin because the trap is a mainstem location. Additional steelhead spawning surveys and tributary trapping efforts would need to occur to more accurately determine a basin pHOS.

Percent benefit split between Commercial and Recreational anglers:

0 % Commercial
100 % Recreational

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

The winter steelhead fishery does not have a significant recorded impact on commercial harvest rates. This project is solely beneficial to recreational freshwater anglers.

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?

Yes

This project seeks to assess the current pHOS levels in the Siletz Basin in order to fulfill the adaptive management component concerns and continue to provide information to the public concerning hatchery winter steelhead smolt releases, and maintain compliance with the CMP's governed <10% pHOS.

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

The CMP was adopted in 2014 and set standards on allowable pHOS goals in coastal basins to help prevent wild and hatchery interactions. Furthermore the CMP also states it is difficult to measure the impact of individual hatchery programs on individual wild populations without additional monitoring or research. ODFW (2014)

Identify any plan or other document that identifies this priority.

Coastal Multi Species Plan (CMP, 2014)

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

No

The Midcoast District has partnered with the Siletz Tribe for a small STEP winter steelhead program in the basin. Depending on the results of the study there may be an opportunity to increase the Siletz Tribal release at their facility on Rock Cr.

This project is intended to benefit the following species:

Winter Steelhead

This project will benefit anglers or fishery by providing:

Angling Opportunity
Monitoring/Research

Angling Opportunity

This project will:

Improve the opportunity for anglers to catch fish (better stocked fish, trapping)
Provide or improve enforcement

This project seeks to assess the current pHOS levels in the Siletz Basin in order to fulfill the adaptive management component concerns and continue to provide information to the public concerning hatchery winter steelhead smolt releases, and maintain compliance with the CMP's governed <10% pHOS.

Monitoring/Research

This project will be used to evaluate:

Hatchery releases and/or stray rates
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

Project plans were developed with the Redd group out of the Corvallis Research Lab for the SGS/snorkel/trapping portion.

Is this study critical to fishery management decisions?

Yes

The primary management decision is to determine a confident pHOS rate in the Siletz Basin, to determine compliance with the Coastal Multi Species Plan and to determine whether there is flexibility in modifying winter steelhead release levels in the Siletz basin. If pHOS levels are under the CMP identified 10% threshold the district would have flexibility to increase the release to improve the harvest opportunity for recreational anglers, if above the threshold a review of release strategies would be conducted. The CMP states "The proportion of hatchery winter steelhead that comprise natural spawners in the Siletz winter steelhead population areas is targeted for a level of 10% or less for the majority of the wild spawning areas. Targets of less than 30% and 60% for significant and less significant spawning areas, respectively, within a four-mile radius of the hatchery or release site are also allowed if these sites skew the population-wide rate in any given year." Currently the Midcoast district has limited confidence in percent of hatchery steelhead on the spawning grounds and interbreeding with wild steelhead based on strata level monitoring. Management of wild and hatchery steelhead in the Siletz Basin is governed by the CMP which identifies the above stated target pHOS of 10% or less (9 year running average) for hatchery winter steelhead. Catch of hatchery winter steelhead at the Siletz Falls trap suggests that many hatchery fish are not being harvested in the fishery and are migrating to the upper basin where they are likely to interact with wild fish. The Siletz Falls wild/hatchery ratio is ~50% wild and 50% hatchery which may not reflect what is occurring across the basin. Additional steelhead spawning surveys and tributary trapping efforts would need to occur to more accurately determine a basin pHOS. Spawning ground surveys will allow us to assess the pHOS level in order to comply with the CMP governed 10%. This project seeks to assess the current pHOS levels in order to fulfill the adaptive management component concerns and continue to provide information to the public concerning hatchery winter steelhead smolt releases.

Yes

This project seeks to assess the current pHOS levels in order to fulfill the adaptive management component concerns and continue to provide information to the public concerning the hatchery winter steelhead fishery. Results of the project will directly inform revisions to the CMP in 2026, and may provide an opportunity to increase the primary ODFW release or the Siletz Tribal

release at their facility on Rock Cr.

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

Yes

This will be a two-year request with time periods from Jan 2024-May 2024 and Jan 2025 – May 2025. A second funding request would be submitted in 2025 for the 2026-27 winter steelhead seasons for a total of four years of study. The need for four years is to average data over the time period and eliminate the annual variability and to assess the steelhead fishery over a full life cycle. The first two years of project findings are set to coincide with the CMP revisions in 2026-2027. Once the data is analyzed and summarized another monitoring period will not be necessary for the foreseeable future.

Will the data be reported or published?

Yes

Yes the data will be published in an informational report.

Project Description

Schedule

Activity	Date	RE Funding
Basin-wide Spawning Ground Surveys	January-May 2024/2025	Yes
Siletz Falls/Schooner Cr trap check 2-3 (district employees)	Year round	No
Cedar Creek Falls trap check 2-3 times per week	January - May 2024/2025	Yes
Rock Creek trap check 2-3 times per week (Tribal employees)	January - May 2024/2025	No
Data entry and analysis weekly/monthly and summary report yearly/bi-yearly	January - May 2024/2025	No

Permits

Permit	Secured?	Date Expected
	No	

Project Design and Description

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

As outlined by the CMP, the current ODFW Hatchery program releases ~50,000 smolts from the Palmer Creek acclimation site located near the upper boat ramp on the Siletz River. Current CMP limits on winter steelhead pHOS in the Siletz basin is 10% with only Siletz Falls trap data to inform changes in steelhead management. Most recent ratios of wild and hatchery winter steelhead are averaging ~50%/50% hatchery to wild fish at the falls. This single trapping site may not clearly be representing what is occurring throughout the Siletz basin. This project would allow us to get an accurate winter steelhead pHOS estimate relative to the CMP limit of 10% on the Siletz basin. Once the pHOS level is determined District managers would be able to better address public requests for an increase in smolt releases; and be able to provide confident supporting data. In order to meet our objective of hiring four employees (seasonal BSAs) for four and a half months (per year) and purchase necessary equipment for the most efficient monitoring and pHOS estimation techniques we plan to: Acquire appropriate levels of funding through this grant, work with ODFW HR staff to work through the hiring process, interview candidates and ultimately hire four seasonal employees by January 1, 2023. Seasonal employees will run from January 1- May 15 2024 in order to effectively cover the entirety of the

spawning season. Surveyor work will be overseen by district staff in Newport. They will conduct between 35-45 surveys on a two week rotation as their primary work load with supplemental snorkel surveys as conditions allow. SGS surveyors will supplement their schedule with additional trap support. Cedar creek, Palmer Creek, and Rock Cr checks will be coordinated with district staff to cover the week as needed, and to supplement work when survey schedule gets blown out due to characteristically high winter flows. All four staff members will also be able to participate in trapping activities at the Siletz Falls trap however this trap will continue to be run primarily by permanent district staff.

Engineering

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

No

On ODFW land or managed by ODFW staff

Project Management and Maintenance

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

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

Midcoast Assistant District biologist will be responsible for trap maintenance and oversight of the project. Equipment purchased through the R & E funds (ie. boots, waders, SGS gear etc) will be cleaned/recycled for reuse. Palmer creek trap will operate annually unless staffing levels are reduced. Cedar Cr. and Rock Cr. will run the length of the project, and Siletz Falls and Schooner Cr will continue to run indefinitely.

Will the project require ongoing maintenance?

Yes

Ongoing maintenance will be routine maintenance of the fish trapping sites.

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?

No

Other Funding Source	Type	Secured	Dollar Value	Comments
district staff	In-Kind	Secured	10000	Permanent funding for district staff to operate adult trapping site, Siletz Falls, Palmer, Schooner Cr.
Siletz Tribe	In-Kind	Pending	2000	Operation of the Rock Cr. Tribal trapping site
		Total	12000	

Budget

Item	Unit Number	Unit Cost	In-kind or non-cash contributions	Funding from other sources	R&E Funds	Total Costs
PROJECT MANAGEMENT						
ODFW Midcoast Asst. District Biologist	240	31.00	0	8000	0	8000
ODFW Midcoast District Biologist	30	65.00	0	2000	0	2000
Siletz Tribe	0	0.00	0	2000	0	2000
		SUBTOTAL	0	12000	0	12000
IN-HOUSE PERSONNEL						
ODFW BSA 1 (SGS)	1540	21.00	0	0	32340	32340
ODFW BSA 2 (SGS)	1540	21.00	0	0	32340	32340
ODFW BSA 3 (SGS)	1540	21.00	0	0	32340	32340
ODFW BSA 4 (SGS)	1540	21.00	0	0	32340	32340
		SUBTOTAL	0	0	129360	129360
CONTRACTED SERVICES						
			0	0	0	0
		SUBTOTAL	0	0	0	0
TRAVEL						
Vehicles (4 BSA)	2	650.00	0	0	7000	7000
Fuel for 4 Vehicles (in cost per mile)	32900	0.65	0	0	21385	21385
		SUBTOTAL	0	0	28385	28385
SUPPLIES/MATERIALS						
Uniform Allowance (4 BSAs)	0	0.00	0	0	500	500
PDA (Galaxy Tab A) (4 BSAs)	0	0.00	0	0	300	300
Misc Uniform equipment (waders, boots, gloves etc; 4 BSA)	0	0.00	0	0	5000	5000
		SUBTOTAL	0	0	5800	5800
EDUCATION/OUTREACH						
			0	0	0	0
		SUBTOTAL	0	0	0	0
EQUIPMENT						
Cedar Creek fish ladder Fyke and grates	0	0.00	0	0	2500	2500
Rock Creek fish trap resistance board weir	0	0.00	0	0	1000	1000
		SUBTOTAL	0	0	3500	3500
FISCAL ADMINISTRATION						
			0	0	0	0
		SUBTOTAL	0	0	0	0
		BUDGET TOTAL	0	12000	167045	179045

Internal Review Results

Review Score: 1.1 out of 3

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

Summary of Review Team Comments

The review team thought the total ask seems to be pretty high for this project, along with concerns about the timing of the project and if it's possible to get it going in time to collect data in 2024. There were also concerns about how this will benefit the angler?

Specific Review Team Comments

- Feels like more justification is needed as to why this study is needed now.
- CMP implementation is not a function of the R&E program. Results will have minimal positive impacts to the angler.
- It seems that project costs could be reduced by dividing up the basin and stationing two BSAs in Corvallis and two in Lincoln City. This may reduce travel associated costs and improved efficiency in collecting data.
- This type of evaluation is called for in the CMP. Will facilitate adaptive management to allow for hatchery releases to augment harvest, while protecting wild fish.
- The budget seems inflated in some areas (e.g., misc. supplies).
- This is a big ask for RE funds that will likely be needed for multiple years, current budgets may not be able to accommodate such a large project this biennium.
- Need to better understand the timing of the project. Will the project be able to be started in time to capture data related to the early part of the run in 2024?
- Also recommend adding Winter Steelhead to the title so it is more descriptive of the project.
- The proposal should go into more detail about the management actions that could occur if pHOS is below target and if pHOS is above target. It talks about changes in release numbers, but I didn't see much about changes to release strategies or removal options at trapping facilities.
- The proposal should better describe how the SGS data and trapping data would be combined (or if they will be combined) to develop the pHOS estimate and provide more specifics on how the pHOS data would be used in conjunction with the eCreel data to inform the assessment and adaptive management.
- I just want to acknowledge the difficulty of determining pHOS using spawning surveys. pHOS on the spawning surveys will be based on visual observations of intact or clipped adipose fins. Even with increased survey effort, observations may be low in a given year depending on spawner abundance and survey conditions. Another reason for a multi-year effort.
- The CMP pHOS targets are set at the population scale but, for the most part, resource constraints have not allowed for population-scale estimates. Our current monitoring provides estimates at a stratum scale, and these estimates do not account for the degree of temporal and spatial overlap of hatchery and wild spawners. Intensification of survey effort could help to do that in the Siletz

population provided that observations of known mark status are distributed throughout the basin.

- Too much money for transport, needs to be trimmed.
- Delays in obtaining funding have pushed this into some degree of misalignment with the CMP 12-year assessment, but most of these 12-year assessments have taken quite a while to put together. The CMP assessment will start after the 2026 returns but I suspect we'd be pretty deep into 2027 before an assessment is complete.
- This has been a high priority for the District for several years as they are getting a lot of high-level pressure for increased releases of hatchery StW with little data to support or refute claims that pHOS is below 10%.

Specific Review Team Questions

What are "adaptive management component concerns"?

Local anglers would like to have the Siletz stw hatchery release increased for improved harvest opportunities. However, the CMP pHOS limit is 10% or less. Having a clear picture of the pHOS level in the Siletz will allow us to either increase the hatchery smolt release level if pHOS is under the 10% threshold or review current release strategies to improve hatchery harvest.

CMP uses a 9-year running average for pHOS. How will this address that?

This project will give an indication of current pHOS levels for two years prior to CMP revisions and four years after the project is completed. The REDD group is currently considering options to incorporate the trap catches into the overall pHOS study. A potential outcome may be a calibration of pHOS levels in the Siletz to trap catches at Siletz Falls.

How will information be used in 2026 CMP review if the study will continue to 2027? Wouldn't additional monitoring be needed to reach a 9-year average? What other data would be used to assess that?

Two years of information will give an indication of the pHOS level and be beneficial in conservation plan revisions. The REDD group is currently considering options to incorporate the trap catches into the overall pHOS study. A potential outcome may be a calibration of pHOS levels in the Siletz to trap catches at Siletz Falls.

Why does the Palmer Creek trap have an end date?

modified to continual operation unless staffing is reduced.

If a possible outcome is pHOS is too high, what would be the strategy for dealing with that? Should be up front with this if it could be used as a tool to reduce hatchery production. Or would other strategies be applied (different release locations, higher bag limit, etc)?

If pHOS values are above the 10% threshold the district would look at other options to reduce pHOS instead of reducing the current 50,000 smolt release.

What are the actions to reduce pHOS if the numbers are found to be too high?

more aggressive hatchery removal at trapping sites or acclimate smolts for longer than two weeks.

It sounded like hatchery releases might be increased if pHOS was found to be OK, otherwise release numbers would stay the same?

correct

Are there options for actions to reduce pHOS, not just monitoring/evaluating pHOS?

The Palmer Cr. trap has not been used since 2015 when district staffing was reduced. With

staff levels restored there would be a more aggressive approach to removing hatchery fish at trapping sites, including the Life Cycle Monitoring site on Mill Cr.

Why do four BSAs need to be stationed at Corvallis Research?

modified, the BSA's would be stationed in Newport.

This request is to fund monitoring in 2024 and 2025 to inform CMP revision in 2026 with plans to ask for funding in 2026 and 2027. I understand the desire to get information on the completed life cycle, but how will data collected in 2026 and 2027 be used to inform the 2026 CMP revision?

The final two years of the study would not be used in CMP revisions unless final revisions extend through the 2027 winter steelhead season.

Is there another way to get at information to inform pHOS? Genetic samples from out-migrating smolts?

This concept was considered but it would be very difficult to assess basin wide pHOS with genetic sampling since we would need parental samples to identify offspring. There is currently not an opportunity to identify hatchery and wild fish in a wild broodstock program without the parent lineage. Cost would also increase with sample collections and processing.

How long will it take to analyze the 2024-2025 data, and will it be ready to use in the 2026 CMP update?

All efforts would be made to use this data in the CMP revisions. Given the public desire to increasing hatchery releases on the Siletz this information would be a valuable piece to utilize during CMP discussions.

It sounds like there will be a modification to a fish ladder. Doesn't that involve ODFW engineering?

The modification is only to put in screens and a fyke. no structural modifications are proposed.

Are there other funds available to help reduce the burden on RE?

There are no other funds identified except district and Tribal staff time.

With hiring issues would we expect to be able to hire 5 people, or get 5 vehicles from DAS?

modified, ecreel has been removed to reduce costs. We would be looking to hire temporary positions from coho spawning ground surveyors that are layed off in late December or early January. The vehicle number has been reduced to two vehicles.

Are there ways to decrease cost of vehicles and or staff? Can we hire Temps vs BSA to realize some cost savings?

Costs have been decreased from 5 vehicles to 2 vehicles. It's likely that positions will be temporary positions.

Do we have the PICS available to hire that many staff members?

PICS have not been identified yet given uncertainty with funding.

In cycle 2 this money will not be available until Dec of 2023, is it expected that they will do this work in the winter of 2024 and 2025?

yes. it will be a push to get everything in place for 2024 but the district is committed to moving this project forward.

The application mentioned that 2 more years of surveys and funding would be requested if this was funded. What would the impact of only funding the first 2 years be in case the second round of surveys were not funded by the board?

ODFW would have to make decisions with only 2 years of data. This would give an indication of pHOS levels in the basin but not completed a full life cycle of winter steelhead.

If a vehicle gets 15 mpg, \$0.65 per mile for fuel equates out to gas costing \$9.75 per gallon. This

seems a little high, how was this estimated?

the cost per mile (0.65) includes fuel, tire replacement (if needed), oil changes and other maintenance necessary to keep the vehicles operational.

Could a less expensive vehicle be acquired through motor pool for BSA and creeler use?

The district will look for the most cost effective vehicle the motor pool has available. Costs were reduced when the budget was modified from 5 vehicles to 2.

Can vehicles be shared? Does each BSA need their own vehicle?

This was modified. only 2 vehicles will be needed.

Additional Files

Budget Information

Maps

[Siletz Basin SGS Map \(all sites\)](#)

[Siletz Basin SGS site list](#)

*All Siletz Spawning ground surveys throughout the basin
provided by OASIS
All Siletz Spawning ground surveys list throughout the basin
provided by OASIS*

Photos

Design Information

Management Plans and Supporting Documents

[Coastal Multi Species Plan \(ODW 2014\)](#)

CMP details allowable pHOS levels

Permits and Reviews

Partnerships

Public Comment

Administrative Documents

Completion Report

A completion report has not been submitted for this project.