



R & E Grant Application 11-13 Biennium

Project #:
11-041

Adult Salmon Holding Pond

Project Information

R&E Project Request: \$141,000.00
Match Funding: \$32,322.00
Total Project: \$173,322.00
Start Date: 7/15/2012
End Date: 11/1/2012
Project Email: spmeshke@co.clatsop.or.us
Project Biennium: 11-13 Biennium
Organization: Clatsop County Fisheries

Fiscal Officer

Name: Mike Robison
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Applicant Information

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Past Recommended or Completed Projects

This applicant has no previous projects that match criteria.

Project Summary

This project is NOT part of ODFW's 25 Year Angling Plan.

Activity Type: Hatchery Maintenance - Non-ODFW
Summary: This project will transform our current adult salmon holding pond into an updated facility with a concrete holding pond with individual holding pens. Currently Clatsop County Fisheries collects and holds its broodstock, the Select Area Bright fall Chinook salmon (SAB'S) and all returning coho

and spring Chinook in an earthen pond. This earthen pond area has no holding pens, sorting areas or ways to adequately collect and segregate fish without multiple handlings. This project will provide staff an improved area to properly sort, collect and hold returning adult salmon, while minimizing the amount of times the salmon are held by staff or project volunteers prior to spawning.

Objectives:

The object of this project is to improve our current adult salmon holding area into an area that is more efficient at holding and sorting the returning salmon to our hatchery, while providing a safer working site for staff during the spawning of the SAB fall Chinook salmon. Due to the timing of the R&E grant period and our working window this project will be completed in July through mid-September in the summer of 2012.

Fishery Benefits:

In 2011, the Clatsop County Fisheries SAFE releases from the South Fork Klaskanine site will total 700,000 Select Area Bright Chinook (SABs) and 368,000 Coho. The Youngs Bay net pens will release 600,000 spring Chinook, 700,000 SABs and 800,000 Coho salmon. The SABs released from both of these project sites are south turning (i.e. entering the ocean they turn south) and as adults they contribute to the Northern California/Oregon ocean troll and recreational fisheries. Then upon returning both the Coho and Chinook salmon contribute to the Buoy 10 sport fishery, the Lower Columbia sport and commercial fishery and then finally to the Select Area commercial gillnet fisheries. There is also a growing fall recreational fishery in upper tidewater of Youngs Bay focusing on the SABs and Coho. On average, the SAFE commercial harvest contributes 55% of the spring Chinook, 20% of the fall Chinook, and 45% of the coho to the total non-treaty Columbia River commercial landings (1993-2008). The SAB fall Chinook harvested from 1994-2001 was 33% ocean commercial, 40% SAFE, 17% Columbia River commercial, 8% Columbia River sport and only 2% escapement. This adult holding and spawning building improvement will ensure that we can still rear these large numbers of fish, which have become a significant part of the non-treaty commercial fishery, as well as a contribution to the sport fishery along the lower Columbia River.

Watershed Benefits: With the improvements to our adult salmon holding pond we will be able to properly hold and segregate the returning hatchery fish while efficiently passing wild salmon in a timely manner with minimal holding times.

Current Situation: Currently the collection of the fall Chinook and coho is carried out in an earthen pond and a small concreted-floor fish trap, located adjacent to the South Fork Klaskanine River. This pond area and the small ditch that the fish are held in is very difficult to conduct spawning operations that require the separation and sorting of fish based on the type of fish, maturity for spawning, and the holding of unused fish until spawning. Both the pond and the ditch area are difficult for county staff to work in due to the uneven and rocky to muddy bottom of these areas. Currently there is no way to properly separate and hold fish during the spawning season without multiple handlings of the fish.

During our spawning operations staff and volunteers must string a seine net across the pond and slowly crowd the salmon towards one end of the pond, while keeping the net along the bottom to prevent any fish from escaping by. The bottom of the pond area is primarily mud that is 2 to 4 inches deep, with some deeper spots. Moving the seine net along the bottom of the pond can be slow and tedious as your feet will get stuck in the mud and fish will be trying to work their way under the net as you move forward. Once the staff have crowded all of the salmon to one end of the pond they must be sorted out for spawning, holding until ripe for spawning, or removal from the pond of native stocks or coho salmon, which we do not spawn. The sorting part of the process can be very difficult as the fish are just crowded along the earthen bank where it is muddy, slippery, and very steep. This makes it very difficult for staff to grab and hand fish up to other staff members that are standing on the upper part of the bank that will take the fish for spawning or removal. During all of this sorting process the staff holding the seine net will still have to maintain the fish in the net without letting them go until all fish are sorted. The fish that are not ripe for spawning are placed over the seine net back into the pond area to only be crowded once again in a few days and checked for ripeness. During the days that we are waiting for fish to mature for spawning we will still be receiving new adult salmon arrivals into the pond. These new arrivals will mix in with the already sorted fish making it difficult to judge how many fish are really on hand and if any of the new arrivals are ready for spawning without going through the whole pond again. This is where we get into multiple handlings of the fish on hand before final disposition.

The annual production goal is for 1.5 million SAB fall Chinook eggs. The salmon eggs that are collected must be protected from direct sunlight and exposure to water or extreme weather conditions. This can be very difficult with the normal weather conditions found during the spawning season in mid-October into November. We have a very small area that allows for the

sorting and staging of female and male salmon during the spawning procedure. The newly proposed project will provide us an adult holding pond that will allow for the proper sorting and spawning of our SAB broodstock and the removal of unused fish such as coho. The drawings that are attached for this project do show a new spawning shed building, but this part of the project is not being funded by this R&E grant project. R&E will only be funding the holding pond and sorting pens part of the project. The spawned and sorted fish are placed into totes and transferred to the North Fork Klaskanine Hatchery freezer for use in local stream enrichment programs. The current spawning area is graveled and the forklift is very limited in its travel and frequently gets stuck moving fish totes around during the operations. The new concrete pond area will provide us a large concrete pad to use the forklift for loading fish totes onto a truck for shipment.

During the 2010 spawning season we collected and spawned a total of 308 male and 408 female SAB Chinook. We also collected and killed 902 coho salmon and passed 8 wild coho salmon upstream past our diversion weir.

With the recent ODFW hatchery reform on the lower Columbia River, ODFW has reprogrammed approximately 2.1 million tule fall Chinook for release from ODFW's Klaskanine Hatchery site with the first release in 2010. With this new release program on the adjacent fork of the Klaskanine River we would expect to find some of these tule Chinook straying to our hatchery site during the fall returns, which will only compound our sorting efforts with the current site infrastructure. The adult salmon holding pond improvements outlined in this project will allow us to more efficiently sort the unwanted stocks for removal, while allowing us to hold fish that are needed for our program.

This project would build a concrete holding pond that is 25' wide by 85' long and 4' feet deep that would follow the footprint of our existing holding pond area. This new holding pond area would have four 10' X 10' aluminum holding pens for sorting and holding the returning SAB's for spawning.

Alternatives: To continue our current spawning procedures that are less effective, labor intensive, and time consuming and that require multiple handling of the returning fish.

Designer: Stricker Engineering, a local engineering contractor, designed the holding pond project using concepts and dimensions from other local ODFW hatchery holding facilities.

Methods: This project will be advertised and contracted by following the County's procurement and contracting guidelines. The winning contractor will be contracted using the County's standard Construction Contract document.

Clatsop County Fisheries has researched the permitting process through the County's Planning Department and has been advised that we only need a Development and Building permit issued by their office due to our project location and zoning. Clatsop County Fisheries will apply for these permits prior to construction of the project. The planned construction period will be during July through mid-September. This work period coincides with our water rights permit when we have no water rights for our hatchery, so the ponds will be dry for the summer period.

Inspector: Clatsop County Fisheries Manager Steve Meshke, with assistance from Stricker Engineering, will oversee and monitor the construction process, as well as construction inspections by the County Building Inspector.

Funding Elements: The R&E grant funds will be used for the construction contract services of the adult salmon holding pond. Clatsop County Fisheries has provided matching funds with the funding of the design phase of the project by Stricker Engineering. This project will include costs for administrative overhead and for the inspection processes during the construction period. Those costs, in addition to staff time involved in assisting the contractors during construction, assembly of holding pens, and design contracting will be listed under matching funds.

The attached construction drawings do show a new spawning building, but this building will not be built with this R&E grant project request.

Partners: No

Existing Plan: No

Affected Contacted: No

Affected Supportive: No

Project Schedule/Participants/Funding

Activity	Date	Participants
Put project out for bid process following Clatsop County's Procurement Rules	4/2/2012	Clatsop County Fisheries
Award contract for construction of holding pond	5/1/2012	Clatsop County Fisheries
Begin site work and construction of holding pond	7/2/2012	Hired Contractor
Complete construction of project.	9/14/2012	Hired Contractor
Assembly and installation of holding pens in adult salmon holding area.	9/1/2012	Clatsop County Fisheries

Affected Species:

Chinook Salmon
Chum Salmon
Coho Salmon
Cutthroat trout
Steelhead

Project Permits

Name	Issued By	Secured?	Date Secured	Date Expected
Clatsop County Development Permit	Clatsop County Planning Department	No	1/1/0001	6/1/2012

Project Monitoring

Organization	Address	Activity	Frequency
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Clatsop County Fisheries	2001 Marine Drive, Room 253 Astoria, OR 97103	Construction Inspections	As needed or required by County Building Inspector
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Project Maintenance

Organization	Address	Activity	Frequency
Clatsop County Fisheries	2001 Marine Drive, Room 253 Astoria, OR 97103	Maintenance required to maintain building and pond area	As required

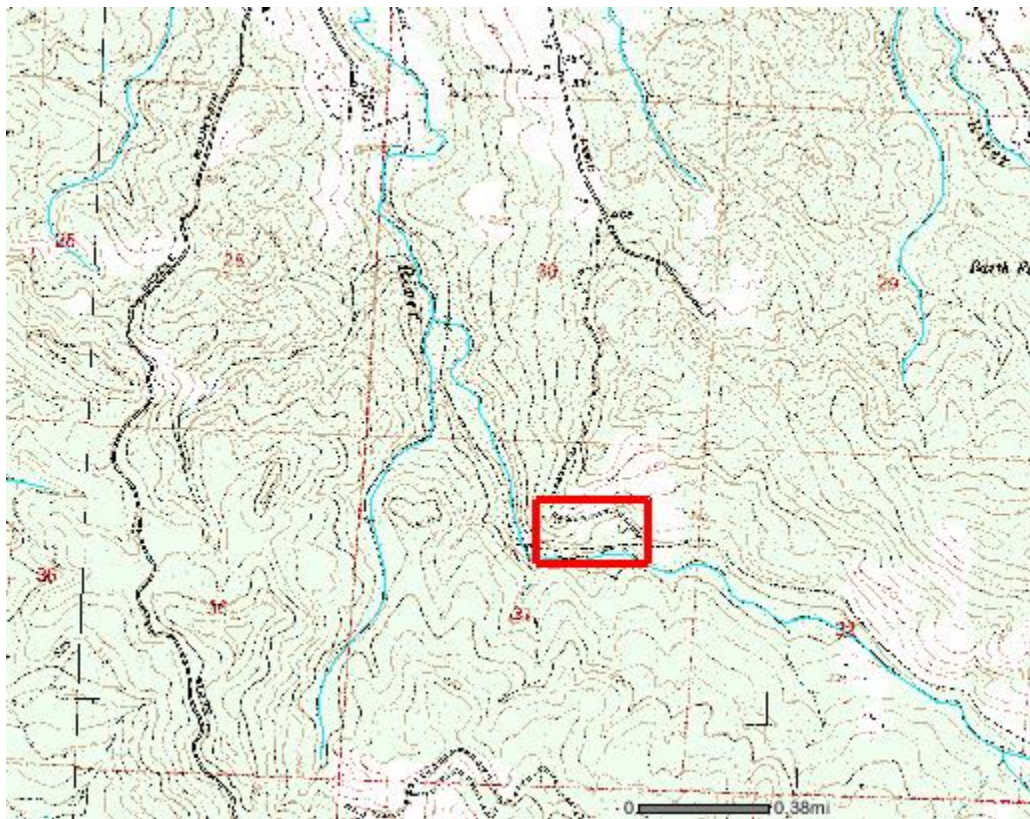
Project Match Funding

Funding Source	Cash	In-Kind	Other	Description	Total	Secured?	Conditions?	Comments
R&E Request	\$141,000.00	\$0.00	\$0.00		\$141,000.00	No	No	
Clatsop County Fisheries	\$10,000.00	\$0.00	\$0.00	Cash match for construction of holding pond	\$10,000.00	Yes	No	
Clatsop County Fisheries	\$0.00	\$15,722.00	\$0.00	Labor to perform bids, staff time for assisting in construction, install of holding pens	\$15,722.00	Yes	No	
Clatsop County Fisheries	\$6,600.00	\$0.00	\$0.00	completed contracted services for the design and engineering of project	\$6,600.00	Yes	No	
				Total Match Funding:	\$173,322.00			

Project Budget

Item	Item Type	Units	Unit Cost	R&E Funds	Match Funds	Total
Grant administration	Administration	2	\$1,311.00	\$0.00	\$2,622.00	\$2,622.00
Adult holding pond construction	Contracted Services	1	\$151,000.00	\$141,000.00	\$10,000.00	\$151,000.00
Staff time	Personnel	4	\$3,275.00	\$0.00	\$13,100.00	\$13,100.00
Engineering Design Contract	Supplies/Materials /Services	1	\$6,600.00	\$0.00	\$6,600.00	\$6,600.00
					Total Budget:	\$173,322.00

Project Map



Additional Files

Click a link to view that particular file.

[Detail Drawing](#)

[Fiscal Authorization Page](#)

[Local ODFW Biologist Letter of Support](#)

[Project site photos](#)

[Site Plan Drawing](#)

[Site Plan Elevation View](#)