



R & E Grant Application 07-09 Biennium

Project #:
07-099

Bird Netting Structure

Project Information

R&E Project Request: \$49,447.00
Match Funding: \$0.00
Total Project: \$49,447.00
Start Date: 9/30/2008
End Date: 6/30/2009
Project Email: douglas.r.armstrong@state.or.us
Project Biennium: 07-09 Biennium
Organization: ODFW - Klamath Hatchery

Applicant Information

Name: Regen Armstrong
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Chiloquin, OR 97624
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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 - ODFW

Summary: Our project, as set forth in our agency mission, will help to ensure the continued statewide trout production of wild Cranebows, wild brown trout, Lahontan cutthroats, Cape cod rainbows, and Oak Springs rainbows. However, we need to prevent predation on hatchery fish from birds (Great Blue Herons, Mergansers, Wood ducks, starlings and grackles) and animals (mink, otter and racoon). Records indicate that over the past ten years an average of 100,000 fingerlings or 10% are lost to predation on an annual basis. 2005 is the worst year on record, with a quarter million (250,000) of fish to predation. The ponds where this loss is occurring are shallow (2' deep) starting ponds. The fish in these ponds are the most vulnerable, because they are the furthest away from human activity and border the forests' edge. To ensure predation control, these ponds must be covered.

Objectives: If this R&E grant is funded hatchery staff could enclose the starter ponds

(13-19) with a heavy duty steel structure that would withstand heavy snow loads that occur at this hatchery. The steel structure will have netting hung upon it and overhead wires to prevent predation. The structure needs to be built so it is easy to maintain by staff and does not injure wildlife.

Fishery Benefits:	Hatchery staff are raising 100% of the fingerlings for restocking of Diamond Lake currently and into the future. Enclosing the ponds will help reduce shortages and insure we have the fish needed to stock Diamond Lake and other high profile fisheries like Crane Prairie and Wickiup Reservoirs. Some of the stocks in these ponds are unique to this facility and provide specialty fisheries.
Watershed Benefits:	The watersheds will benefit by receiving genetically adapted Rainbow released into Crane Prairie reservoir, while a portion will become brood stock at Fall River Hatchery. Klamath Hatchery Lahontan cutthroat provide unique fisheries at Juniper, Mann, Jump Off Joe lakes, and Paiute Reservoir; these bodies of water tend to be alkali and other stocks of fish don't survive as well as the cutthroat. The hatchery is currently the only Brown Trout propagation program in the state.
Current Situation:	At the present time the hatchery has no enclosure, but staff have tried hazing the birds with cracker shells. The birds fly out to Crooked Creek and return as soon as staff cease hazing. Staff have employed netting across the ponds, but this makes it difficult to clean the ponds and presents a safety hazard to staff. Staff have also employed scare lights (flashing bright red) which help keep the birds away, but the birds get used to them and will stand next to them while feeding.
Alternatives:	Staff examined some of the Federal hatcheries projects but they were more concerned with preventing sunburn to fish so all these projects did was provide shade. Staff are looking at what ODFW South Santiam and McKenzie hatcheries have done to prevent birds from preying on their fish. Both of these structures have been in place for more than a decade and have proven themselves very effective in eliminating fish loss from predation. The structures have also withstood battering from the elements without any structural damage.
Designer:	ODFW Engineering/ private contractor
Methods:	July 2008: waterline will be completed. We propose in October 2008 that a private contractor put up the metal pipe cage and the hatchery personnel will hang the netting on the sides and place the top wires.
Inspector:	ODFW Engineering
Funding Elements:	The pipe structure and materials will be 100% funded by R&E funds. The hatchery will supply the labor to hang the netting and string the top wire. The hatchery staff will help hang the netting and string overhead

wires.

Partners: No

Existing Plan: No

Affected Contacted: No

Affected Supportive: No

Project Schedule/Participants/Funding

This project has no Schedule/Participants/Funding.

Affected Species:

Brown Trout
Cutthroat
Rainbow Trout

Project Permits

Name	Issued By	Secured?	Date Secured	Date Expected
Contractor will obtain.	Klamath County	No	1/1/0001	1/1/0001

Project Monitoring

Organization	Address	Activity	Frequency
ODFW Klamath Hatchery	46161 Hwy 62 Chiloquin, OR 97624	Manage construction of net frame	Regen Armstrong will monitor contractors progress

Project Maintenance

Organization	Address	Activity	Frequency
ODFW- Klamath Hatchery	46161 Hwy 62 Chiloquin, OR 97624	Hatchery crew will check daily to make sure no birds are stuck in the structure and check net and poles.	Daily check on birds caught in netting, weekly to monthly on net integrity and poles.

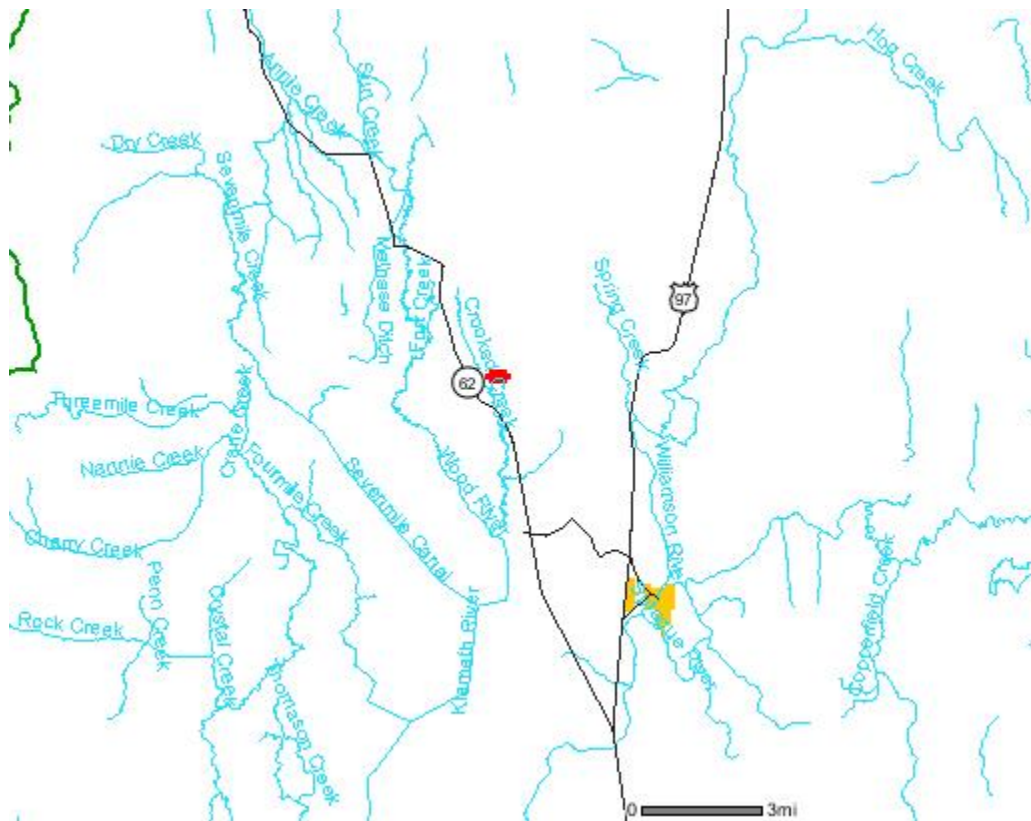
Project Match Funding

Funding Source	Cash	In-Kind	Other	Description	Total	Secured?	Conditions?	Comments
R&E Request	\$49,447.00	\$0.00	\$0.00		\$49,447.00	No	No	
				Total Match Funding:	\$49,447.00			

Project Budget

Item	Item Type	Units	Unit Cost	R&E Funds	Match Funds	Total
costs to build bird netting structure	Contracted Services	1	\$49,447.00	\$49,447.00	\$0.00	\$49,447.00
					Total Budget:	\$49,447.00

Project Map



Additional Files

Click a link to view that particular file.

[Bird Netting Structure at South Santiam Hatchery](#)

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[Drawings & Notes](#)

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