



R & E Grant Application 13 Biennium

**Project #:
13-059**

Wizard Falls Electrical Upgrade:Phase 1

Project Information

R&E Project Request: \$69,477.00
Match Funding: \$5,800.00
Total Project: \$75,277.00
Start Date: 5/1/2014
End Date: 8/1/2014
Project Email: doug.curtis@state.or.us
Project Biennium: 13 Biennium
Organization: ODFW - Wizard Falls Hatchery

Applicant Information

Name: Doug Curtis
Address: pob 130
 Camp Sherman, OR 97730
Telephone: 541-595-6611
Fax: 541-595-1038
Email: doug.curtis@state.or.us

Past Recommended or Completed Projects

Number	Name	Status
11-091	Wizard Falls Circular Starting Ponds	Approved
11-151	Phase 2: Wizard Falls starter & reuse supply ponds	Completed

Project Summary

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

Activity Type: Hatchery Maintenance - ODFW
Summary: The current electrical infrastructure at Wizard Falls Hatchery(WFH) is original and was designed to meet the requirements of the facility in 1946. The technological demands of a modern and expanded production facility in 2013 and beyond can not be adequately supplied. This necessary update requires a new main distribution panel/pad mount,trenching/backfill, and associated materials/labor.
Objectives: The primary objective of this proposal is to update critical electrical components to meet the current and future load demands at the WFH. Specifically this objective ensures a safe and reliable electrical supply, supporting a modern hatchery that far exceeds the intent or capacity of the original infrastructure.

Fishery Benefits:	With the support of R&E funding WFH has undergone an extensive restoration. Two phases of modern and efficient culturing systems have been completed with resulting performance beyond expectations. The production capacity for the facility is expanded by nearly 50% and is being utilized to its fullest potential. The resulting success's of these production increases has necessitated the need to update the facilities supporting infrastructure. This updated enhancement will allow staff the ability to culture high volumes of quality fish to support the broad range of fisheries generated by WFH.
Watershed Benefits:	The WFH has multiple functions that have direct watershed benefits throughout Oregon. The primary would be the grow out operations of over 2.5 million fish that will be stocked for either recreational fisheries or reintroduction efforts throughout eight watersheds. As demand for these fish has increased so have the efficiencies at WFH. In order to continue to meet current and future demands supporting infrastructure has to be updated/upgraded.
Current Situation:	The modern electrical demands at WFH have exceeded the capacity of the current infrastructure. The current infrastructure was part of the original 1946 construction. The voltages supplied throughout the facility are below building codes as well as equipment manufacturers specifications. At this point the hatchery power system is unsafe and the opportunity for future production increases is restricted. Additionally, WFH's service provider is ready to provide a nearly one million dollar primary service replacement that is not compatible with existing infrastructure.
Alternatives:	Engineering staff from ODFW in conjunction with private professional electricians have thoroughly reviewed myriad alternative scenarios and have concluded there are no viable alternatives that address the short, intermediate, and long term objectives for WFH.
Designer:	ODFW engineering staff in conjunction with privately contracted electricians.
Methods:	The method of comparing modern requirements for electrical infrastructure, as measured by standards of the industry, versus the original existing infrastructure has been applied. The procedure has been expert comparison of the current electrical supply versus the current and future electrical demand. References are available upon request.
Inspector:	Certified electrical inspectors with Jefferson County
Funding Elements:	R&E funds are being considered as funding for all portions of this restoration.
Partners:	No
Existing Plan:	No
Affected Contacted:	Yes
Affected Supportive:	Yes

Affected Comments: This project is in conjunction with a nearly one million dollar upgrade provided by WFH's electrical provider. Additionally the USFS has been in consultation and continues to finalize the remaining elements of WFH's special use permitting process.

Project Schedule/Participants/Funding

Activity	Date	Participants
Contract administration	4/25/2014	ODFW/ Wizard Falls Staff
Construction begins/permit aquired	4/26/2014	Contracted electrical Co.
Inspection	5/24/2014	Jefferson County
completion off construction	5/24/2014	Contracted Electrical Co.
Landscaping and reconstruction	6/10/2013	Wizard Falls Staff

Affected Species: Atlantic Salmon
 Brook Trout
 Bull Trout
 Chinook Salmon
 Cutthroat Trout
 Kokanee Salmon
 Rainbow Trout
 Steelhead

Project Permits

Name	Issued By	Secured?	Date Secured	Date Expected
electrical service upgrade	Jefferson county	No	1/1/0001	5/1/2014

Project Monitoring

Organization	Address	Activity	Frequency
Jefferson County	Madras, OR	permit compliance check	code

Project Maintenance

Organization	Address	Activity	Frequency
ODFW	POB 130 Camp Sherman, OR 97730	Maintenance	none required

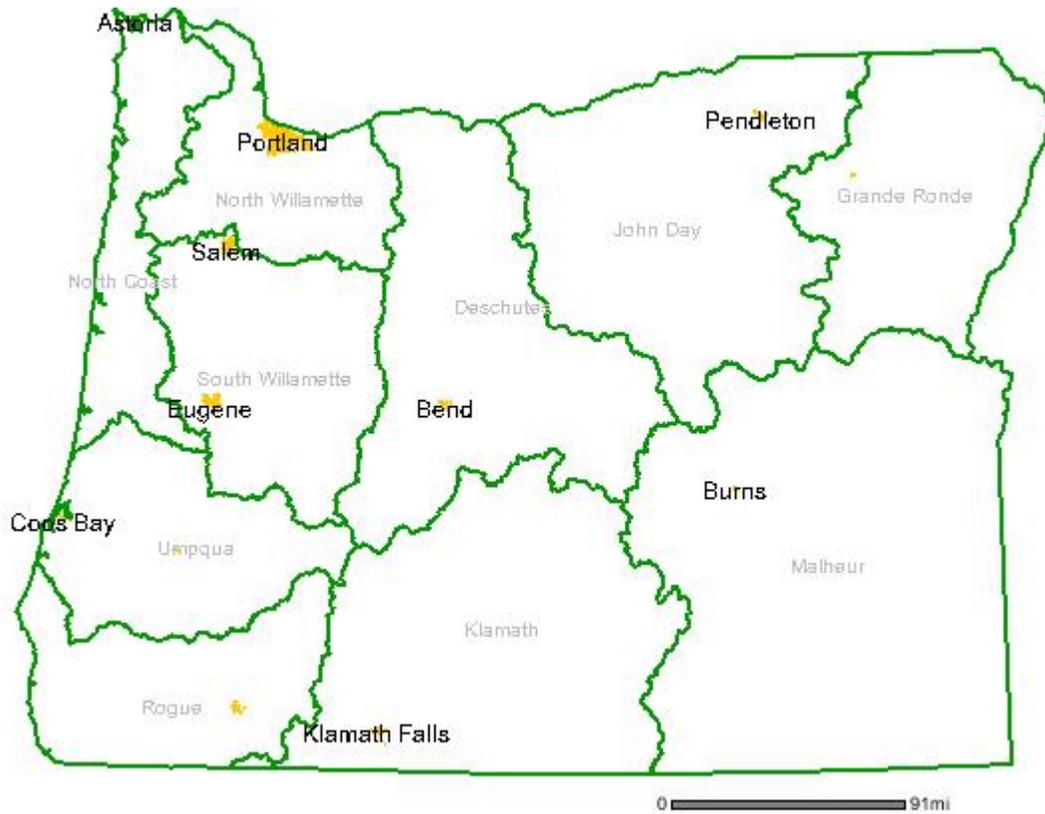
Project Match Funding

Funding Source	Cash	In-Kind	Other	Description	Total	Secured?	Conditions?	Comments
R&E Request	\$69,477.00	\$0.00	\$0.00		\$69,477.00	No	No	
ODFW	\$0.00	\$2,800.00	\$3,000.00	ODFW deferred maintenance dollars	\$5,800.00	No	Yes	
				Total Match Funding:	\$75,277.00			

Project Budget

Item	Item Type	Units	Unit Cost	R&E Funds	Match Funds	Total
Design cost, drawings	Contracted Services	1	\$5,000.00	\$5,000.00	\$0.00	\$5,000.00
labor	Personnel	80	\$35.00	\$0.00	\$2,800.00	\$2,800.00
concrete pad mount	Supplies/Materials /Services	1	\$2,500.00	\$2,500.00	\$0.00	\$2,500.00
Main distribution panel	Supplies/Materials /Services	1	\$24,000.00	\$24,000.00	\$0.00	\$24,000.00
Materials and labor	Supplies/Materials /Services	1	\$26,232.00	\$26,232.00	\$0.00	\$26,232.00
permits	Supplies/Materials /Services	1	\$6,745.00	\$6,745.00	\$0.00	\$6,745.00
reconstruction materials	Supplies/Materials /Services	1	\$3,000.00	\$0.00	\$3,000.00	\$3,000.00
Trenching/Backfill	Supplies/Materials /Services	1	\$5,000.00	\$5,000.00	\$0.00	\$5,000.00
					Total Budget:	\$75,277.00

Project Map



Additional Files

Click a link to view that particular file.

[engineering email](#)

[map of wizard falls](#)

[Scott Patterson Letter](#)

[signature page](#)

Signature Authorization Page

I hereby make an application for financial assistance under the terms and conditions of the R&E Program as described in my project application.

I understand that if my project is approved for funding, the following will apply:

- All project sponsors must sign a grant agreement containing the terms and conditions on which funding will be released.
- Project expenses which occur before the grant agreement is signed or after the expiration date will not be paid by the R&E Program.
- Copies of all necessary permits must be submitted to the R&E Program.
- Project sponsors must certify compliance with local, state, and federal regulations and laws.
- Landowner, monitoring and maintenance agreements must be submitted to the R&E Program.
- Regular progress reports may be required, and at the end of each project a Completion Report must be submitted.
- Educational products resulting from projects are public domain.
- All information submitted to either party under this application is subject to the federal Freedom of Information Act.

Project: Wizard Falls Electrical Upgrade Phase 1

Applicant: Doug Curtis

Date: December 13, 2013

Regional Hatchery Coordinator: _____

Date: December 13, 2013

Kevin Herkamp

From: Perry A Baker
Sent: Tuesday, December 17, 2013 10:24 AM
To: Kevin Herkamp
Cc: Scott Patterson
Subject: Wizard Falls

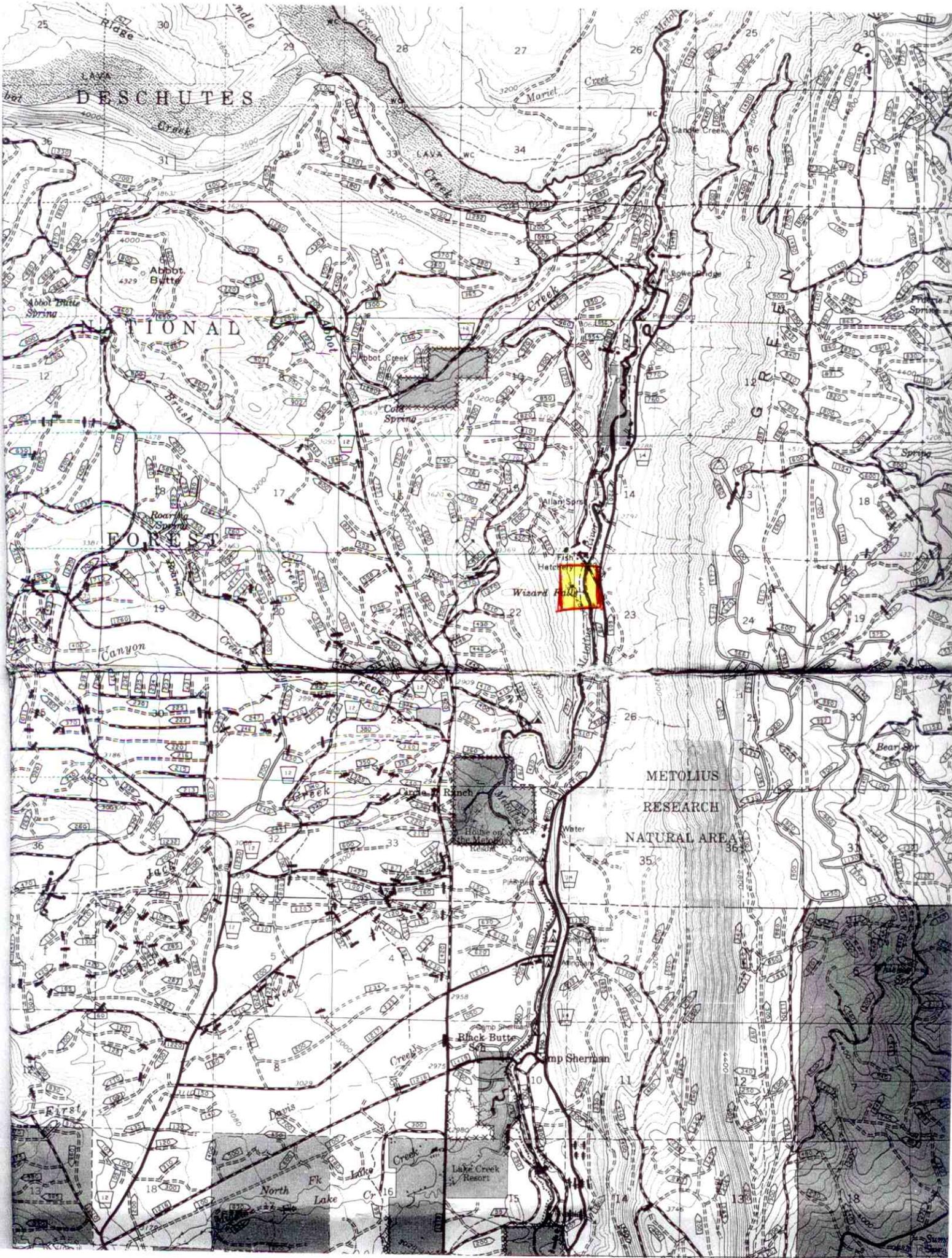
Follow Up Flag: Follow up
Flag Status: Flagged

Hey Kevin,

ODFW engineering does not have an electrical engineer on staff at the moment. I can review electrical plans but do need expertise on designing a system and putting together schematics and specifications for electrical equipment on something of this caliber. So the 5K line item would cover that.

Thanks
Perry

Perry A. Baker, PE
Project Engineer - Fish Division
4034 Fairview Industrial Dr. SE
Salem, OR 97302-1142
503.947.6241
perry.a.baker@state.or.us





Scott Patterson
ODFW, Fish Propagation Program Manager
4034 Fairview Industrial Drive SE
Salem, Oregon 97302
(503) 947-6218

December 16, 2013

Dear Bob Bumstead, Chair, R&E Board:

I am writing to express my support for the pending decision to fund the Wizard Falls electrical upgrade.

Over the past decade, the electrical power to the Metolious Residential area and hatchery has become problematic. Central Oregon Co-op has initiated an underground power line replacement project to stabilize the area power. It's scheduled for completion in early 2014. Unfortunately, the Wizard Falls Hatchery power panels, installed in the mid 1940's, will be unable to handle the new power. Priority is to install a new electrical panel.

A secondary or emerging concern is how the existing hatchery electrical lines will handle the new power. Since ODFW does not staff an electrical engineering, the request will also include a review of the hatchery electrical system (boxes, electrical lines, and fuses) to identify potential electrical risks at the hatchery. Perry Baker is the lead ODFW Engineer on the project.

Sincerely,

A solid black rectangular redaction box covering the signature of Scott D. Patterson.

Scott D. Patterson