



R & E Grant Application 13 Biennium

Project #:
13-056

Statewide Reward Tagging Program

Project Information

R&E Project Request: \$15,947.00
Match Funding: \$30,287.69
Total Project: \$46,234.69
Start Date: 3/15/2014
End Date: 6/30/2015
Project Email: joshua.l.mccormick@state.or.us
Project Biennium: 13 Biennium
Organization: ODFW - Salem Headquarters

Applicant Information

Name: Joshua McCormick
Address: 3406 Cherry Ave. NE
Salem, OR 97303
Telephone: 503-947-6013
Email: joshua.l.mccormick@state.or.us

Past Recommended or Completed Projects

This applicant has no previous projects that match criteria.

Project Summary

This project is part of ODFW's 25 Year Angling Plan.

Activity Type: Monitoring
Summary: This project creates an informative and cost-effective tool to better understand how recreational fisheries are performing in relation to management objectives.

Objectives: The objective of this application is to design a monitoring and evaluation tool that:
1) reduces personnel costs; 2) that can answer a suite of fishery-related questions; and 3) that can be broadly applied across fisheries and species.

Provided those objectives, we are proposing to implement a tag reward program for recreational fisheries. This grant will implement pilot studies at three waterbodies within the state of Oregon. By implementing these three projects, we expect to gain the knowledge required to broaden the scope of this program to a statewide level. If established long-term, biologists across the state can use the program for a variety of research needs with only the cost of individual tags and

rewards.

The pilot studies will be implemented at three fisheries; Wallowa Lake, Henry Hagg Lake, and Lake of the Woods. The primary objectives for these studies will be to determine the efficiency (i.e., angler catch per cost of fish stocked) of various stocks used in our catchable trout stocking program.

The objective of the reward tags are only to estimate reporting rates, and are not intended to increase participation in the fishery by rewarding anglers who catch fish.

**Fishery
Benefits:**

This program will benefit recreational fisheries primarily by providing information to guide and direct fishing opportunities. Adaptive management plays a key role in successfully managing recreational fisheries, but requires the collection of data to assess current strategies. The collection of fishery data often relies on traditional creel surveys, which require expensive investments in personnel costs. This tag reward program has the potential to collect similar metrics as a traditional creel survey without incurring the personnel costs.

In addition, a tag reward program can be easily expanded across the state to maximize the amount of benefit. This tool can be applied to any fish species that can have a visible tag safely applied. This tag reward program can benefit wild or stocked trout fisheries. Where applied to stocked trout fisheries, districts and hatcheries can partner to assess the efficacy of stocked trout fisheries and alternative stocking strategies.

An added benefit to tag reward programs is public participation and ownership in recreational fishery management. Anglers that volunteer to report tags make a very tangible contribution in providing information that helps manage Oregon's recreational fisheries. We believe this program is a great opportunity for ODFW to collaborate with license holders in actively managing Oregon fisheries.

**Watershed
Benefits:**

Fisheries management is successful when we protect the biological and physical resources while making sustainable harvest possible. As an example, projects implemented under this tag reward program have the capability to better understand recreational fishery impacts on wild fish. In addition, tag reward program can be used to better understand survival and movements of non-native species. As a result, we expect that better managed recreational fisheries can have benefits to local biological assemblies and, where applicable, subsequent watershed benefits.

**Current
Situation:**

Fishery managers statewide are lacking information regarding the performance of recreational fisheries. This chronic lack of information results in detrimental impacts to public opportunities. Without proper mechanisms to evaluate current performance, recreational fisheries are managed under the assumption that objectives are being met. Even when the assumption is to the contrary, managers have few means to test whether alternative strategies can benefit a fishery. The current situation results in fisheries being managed from assumption and anecdote instead of sound science. The department invests a significant amount of resources in hatchery production without knowing whether the public is seeing a proportional benefit. Subsequently, the management of recreational fisheries has become static, fisheries are largely underperforming, and opportunity for license holders has become reduced.

The need exists to have a more cost-effective monitoring program that can be implemented across a broader selection of fisheries. To date, determining whether fisheries are meeting objectives require traditional creel surveys, which require expensive personnel costs and are often limited to a few waterbodies. This application tests the feasibility of a tag reward program that will allow managers to obtain performance metrics, and make more proactive management decisions, on a broad array of recreational fisheries using more cost-effective means.

Alternatives: This proposal provides an alternative to traditional creel surveys. However, creel surveys may be used to address questions that tag reward programs cannot. For example, because no angler interviews are conducted, a tag reward program cannot estimate angler hours or effort. Where these metrics are important to know, and where cost-beneficial, a traditional creel survey may be a preferred option. A tag reward program could serve to access information on survival, harvest, and movements of fish at a fraction of the cost of creel surveys.

Another alternative would be operating at status quo. As mentioned above, the status quo is associated with lacking information and feedback on recreational fishery management. Without this information, managers cannot operate with confidence that fisheries are meeting objectives. Opportunities to change management strategies are often overlooked because no mechanism exists to evaluate their effectiveness.

Designer:

This tag reward program proposal has been adopted from Idaho Fish and Game's (IDFG) Tag-You're-It program.

ODFW staff will design and manage the database and design and create advertising for the project.

Methods: Tag reward programs rely on voluntary reporting of visibly-tagged fish by the angling public. A key component of this program is the inclusion of monetary reward tags to encourage reporting and estimate reporting rates of non-reward tags. Reporting rates are then applied to provide estimates of catch within a given treatment group. Once reporting rates are established, they can be used to estimate harvest in fisheries without the use of reward tags. Tag reward studies have the ability to assess harvest, survival, natural and fishing mortality, growth, and migration of various recreational fish species.

For the pilot studies we will tag approximately 5% of all stocked trout with non-reward floy tags. If all anglers voluntarily returned the floy tags from fish they harvested, this would give us an estimate of total harvest. This would be a naive estimate however, because we know that not every angler is going to return the non-reward tags. As a result, we will also tag a small amount (4% of total tagged fish) with \$50 reward tags. We will assume that every angler who catches a fish with a reward tag will return it to collect their reward. This will allow us to estimate the reporting rate of non-reward tags and consequently, provide an estimate of total catch. If reporting rates are similar among fisheries with reward tags, they may be applied to other fisheries without the use of reward tags, only non-reward tags. This will allow us to generate total catch estimates on fisheries in the future for only the cost of non-reward floy tags (\$.55/tag) and the cost of tagging the fish.

This tag reward program proposal has been adopted from Idaho Fish and Game's (IDFG) Tag-You're-It program. This program has been highly successful, and has demonstrated benefits on a wide array of fisheries in the state of Idaho. The project sponsors have consulted with IDFG staff on this proposal for Oregon, and are actively utilizing their experience and knowledge. The Idaho Tag-You're It program was recently awarded the American Fisheries Society's Fisheries Administration Section Award in the Research and Surveys Category.

Inspector:

Funding Elements: We are requesting funds required to implement a tag reward study at three pilot projects in Oregon. Specifically, R&E funds will be used to purchase the tags, associated rewards, and materials and signage to advertise the program.

Partners: Yes

The project sponsors are representing an internal ODFW partnership focused on improving recreational fisheries in lake and reservoirs. The partnership was created and supported by ODFW Fish Division. The partnership to carry out the pilot projects involves ODFW Fish Districts, Hatcheries, and Fish Division. If funded, this project will require voluntary reporting of tags by the angling public; therefore if implemented the project will be a direct partnership between ODFW and public constituents.

Existing Plan: Yes

This proposal compliments and follows guidance provided in the ODFW 25 year recreational angling enhancement plan (25 year plan). As described in the plan, successful active management requires planning, prioritization, implementation, and evaluation to provide successful, diverse, and cost-effective angling opportunities. This proposal is well aligned with several strategies outlaid to meet the fishery directives of “Enhance, develop, and promote diverse and productive recreational fishing opportunities that are consistent with the conservation needs of native species; provide balanced economic and social benefits; and connect Oregonians with fish, water and the outdoors”.

The 25 year plan directs ODFW to actively manage fisheries to provide recreational angling opportunities. As identified above, there is a statewide lack of recreational fishery evaluations because personnel costs are expensive and labor-intensive methods limits the scope of each project. This in turn limits the amount of confident, active management strategies. The 25 year plan directs the department to use all “available tools and resources to actively manage recreational angling to provide maximum sustainable opportunities for the public in accordance with the Department mission, statues, rules, and policies”. We believe our proposed program will help fill the existing information gap in using cost-efficient means.

The 25 year plan specifically identifies the need to implement ‘well-designed monitoring programs’ to determine if harvest regulations are appropriate. We are confident this program can help address relevant management questions, including harvest and survival of stocked and wild fisheries. In addition, we believe this proposal compliments the directive to “use the best science available to assess fish populations, provide for maximum sustainable catch, and respond to angler preferences”. We acknowledge a tag reward program has limitations and is not appropriate for all fishery evaluations; however, we believe this proposal addresses a critical gap in an innovative and cost-effective manner. We are further supported by the successful implementation of this concept in Idaho, and the accolades it received.

Affected Contacted: Yes

Affected Supportive: Yes

Affected Comments: In general, this proposal to test a cost-effective method that conducts broadly-applied fishery monitoring has the support of ODFW Fish Division. Each district carrying out the ground-level implementation of pilot projects volunteered research questions of interest and are partners in this study. Each hatchery that raises fish for each pilot study has been notified of the district's plans and are in support. If funded; there will be a public outreach period prior to implementation and we expect, due to the nature of the program, local stakeholders will be supportive.

Project Schedule/Participants/Funding

Activity	Date	Participants
Create database, web reporting tool, hotline, and signage. Develop marketing strategy	3/1/2014	ODFW District Staff, Biometrician, I & E staff
Begin public outreach and posting signage	4/1/2014	ODFW District and I & E Staff
Mark fish at hatcheries, stock fish, begin recording tags, administer rewards as needed	5/1/2014	ODFW District, Hatchery staff, ODFW Biometrician
Analyze data and write reports/manuscripts	10/1/2014	ODFW District staff, Biometrician
Mark fish at hatcheries, stock fish, begin recording tags, administer rewards as needed	11/1/2014	ODFW District, Hatchery staff, ODFW Biometrician
Mark fish at hatcheries, stock fish, begin recording tags, administer rewards as needed	4/1/2015	ODFW District, Hatchery staff, ODFW Biometrician
Final analysis, report writing, manuscript preparation	11/1/2015	ODFW District staff, Biometrician

Affected Species: Brown Trout
Rainbow Trout
Warmwater

Project Permits

This project has no permits.

Project Monitoring

Organization	Address	Activity	Frequency
ODFW	Statewide ,	Recording reported tag information, administering rewards, maintain public signage, and public participation. The ODFW Biometrician will support tag monitoring and analysis.	As long as tagged fish are present in each fishery.

Project Maintenance

Organization	Address	Activity	Frequency
ODFW Districts	Statewide ,	Maintenance of signage and advertisements associated with each study.	As needed

Project Match Funding

Funding Source	Cash	In-Kind	Other	Description	Total	Secured?	Conditions?	Comments
R&E Request	\$15,947.00	\$0.00	\$0.00		\$15,947.00	No	No	
ODFW District, Hatchery, Biometrician	\$0.00	\$30,287.69	\$0.00		\$30,287.69	Yes	No	
				Total Match Funding:	\$46,234.69			

Project Budget

Item	Item Type	Units	Unit Cost	R&E Funds	Match Funds	Total
Floy Tags	Equipment	6540	\$0.55	\$3,597.00	\$0.00	\$3,597.00
Biometrician Time	Personnel	1	\$7,234.03	\$0.00	\$7,234.03	\$7,234.03
Klamath District Hatchery Staff Time and Supplies	Personnel	1	\$1,251.14	\$0.00	\$1,251.14	\$1,251.14
Klamath District Staff Time	Personnel	1	\$2,007.26	\$0.00	\$2,007.26	\$2,007.26
Northwest District Staff Time	Personnel	1	\$6,036.00	\$0.00	\$6,036.00	\$6,036.00
Northwest Hatchery Staff Time and Supplies	Personnel	1	\$6,826.50	\$0.00	\$6,826.50	\$6,826.50
Wallowa District Hatchery Staff Time and Supplies	Personnel	1	\$2,662.00	\$0.00	\$2,662.00	\$2,662.00
Wallowa District Staff Time	Personnel	1	\$4,270.76	\$0.00	\$4,270.76	\$4,270.76
Rewards	Supplies/Materials /Services	244	\$50.00	\$12,200.00	\$0.00	\$12,200.00
Signage	Supplies/Materials /Services	300	\$0.50	\$150.00	\$0.00	\$150.00
					Total Budget:	\$46,234.69

Project Map



Additional Files

Click a link to view that particular file.

[Map of pilot lakes for tagging](#)

[ODFW Fish Division support letter](#)

[ODFW signiture authorization](#)

[ODFW signiture authorization](#)

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.

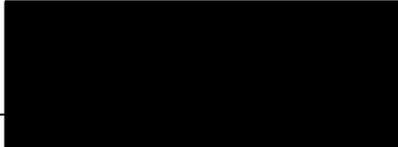
I understand that if my project is approved for funding, the following will apply:

- 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: TAG REWARD PILOT PROJECTS

Applicant: JEFF YANKE VIA 'RESERVOIR DOGS'

Date: 12/10/13

Regional Manager: 

Date: 12/10/13

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: Reward Tag Program

Applicant: Joshua McCormick

Date: 12/11/2013

Regional Manager: [Redacted]

Date: 12/11/13

12/10/13

RE: R&E Grant Application – Statewide Tag Reward Database – Pilot Studies

TO: Restoration and Enhancement Board Members

I am writing this letter to show my support for the Statewide Tag Reward Database Pilot Studies. One of the biggest problems fishery managers face in managing recreational fisheries is having the necessary information available to make sound adaptive management decisions. There are many factors that limit the ability to collect data, but the biggest is personnel costs.

When you consider the downward trend of angling participation and the challenges to recruit and retain anglers, it is critically important that a more cost-effective monitoring program be implemented across a broader selection of fisheries so that fishery managers have performance metrics to make proactive management decisions that provide increased opportunity.

The tag reward program for recreational fisheries is simple in concept and supports the key objectives of the 25-Year Recreational Angling Plan. If ODFW develops the product, fishery managers will see an immediate benefit in respect to collaborating with license holders in actively managing Oregon recreational fisheries.

The Fish Division supports and recommends the Restoration and Enhancement Board approves the request for funding to develop the Statewide Tag Reward Database project.

We appreciate your consideration.

Sincerely,

Richard Hargrave
Acting Fish Division Deputy Administrator, Inland Fisheries
Oregon Department of Fish & Wildlife



Henry Hagg Lake

Wallowa Lake



Lake of the Woods