

WESTERN NATIVE TROUT INITIATIVE

Application for WNTI Funding

Application Deadline: 5 pm Mountain time October 7, 2016 Application not to exceed 10 pages total (including the 3 page cover sheet)

Cover Sheet

Applicant Information

Lead Applicant Organization or Entity:Turner Endangered Species Fund, LLC (TESF)Contact Person Name:Carter KruseCity, State, Zip:Bozeman, MT 59718Telephone:(406) 556-8508Website Address:www.tesf.org

Project Information

Project Title: North Fork Spanish Creek Westslope Cutthroat Trout Restoration Project Location State: Montana County: Gallatin Nearest Town: Bozeman Congressional District of Project: 1 Watershed/Stream/Lake: Spanish Creek Watershed; North Fork Spanish Creek Sub-watershed (100200080401); North Fork Spanish Creek & tributaries; Chiquita & Big Brother Lakes WNTI native trout and char species/sub-species Benefitted by Project: Westslope Cutthroat Trout Total Project Budget: \$239,700 Total Amount Requested: **\$15,000** Total Matching Funds or In-Kind Support Secured: **\$90,000** Project Map Coordinates (decimal degrees) Lat: 45.462942 Long: -111.418055 Project Start Date: August 2017 Project Completion Date: September/October 2017 Is there a monitoring plan following Partnership guidelines? (Yes) No Current agreements are in place addressing partnership responsibilities.

If multiyear project, is there a breakdown of tasks, accomplishments, and budget by year in distinct phases? Yes **(No)**

The overall restoration project (Phases I-V) is a multi-year project, but Fish Barrier Construction (Phase II) to which these funds would be applied is scheduled for 2017.

Land Ownership (public or private; if public, specify managing agency): While Ownership in the overall project area is mixed (see Project Area Map below), the proposed fish movement barrier to which these funds would be applied is located on private land owned by Turner Enterprises, Inc.

Is there a letter of support from the State or Federal fish and wildlife agency or Tribal government? See attached letters of support from Montana Fish, Wildlife and Parks and Custer Gallatin National Forest.

In which USFWS Region is the project located? (1, 2, 6, 7, 8) **6**

Region 1: Idaho. Oregon. Washington Region 2: New Mexico, Arizona Region 6: Montana, Colorado, Utah, Wyoming Region 7: Alaska Region 8: California, Nevada Is your project currently listed in the U.S. Fish and Wildlife FONS system? (Yes) / No Please indicate FONS Project Number (if applicable): 61310-2017-061 Note: Many previously submitted, but unfunded projects have been placed in the Fishery Operational Needs System (FONS). Please check with your local U.S. Fish and Wildlife Service Office if you are unsure about the question.

Sponsoring Professional (federal, state, or tribal agency resource manager)

Name: Dave Moser Title: Area Fisheries Manager, Region 3 Affiliation: Montana Fish Wildlife and Parks

Signature (required) Much

Mailing Address: 1400 South 19th Ave., Bozeman, MT 59718 Phone: (406) 994-6939 Email: davemoser@mt.gov

WNTI Funds Requested:	\$15,000
Total Matching Contributions (cash and in-kind):	\$224,700
Match ratio (WNTI:Partner)	1:15
Total Project Cost (Barrier Only):	\$239,700

Partner Contribution Detail (List and briefly describe the project partners and their financial contributions.) The following list of contributions are for the barrier construction only (Phase II). If requested, an overall budget including Phase I (planning), Phase III (treatment), Phase IV (restocking) and Phase V (monitoring) can be submitted.

Partner	Cash	In-Kind
Montana Future Fisheries Grant Program - State	\$60,000 (Secured)	-
National Fish and Wildlife Foundation (Bring Back the Natives)	\$90,000 (Applied for)	-
Turner Enterprises, Inc Private	\$20,000 (Secured) \$25,000 (Promised)	-
Custer Gallatin National Forest - Federal	\$10,000 (Secured) \$15,000 (Promised)	-
Montana Trout Unlimited - Private	\$4,700 (Pending)	-
Western Native Trout Initiative – Federal	\$15,000 (Applying for)	-
Budget Totals	\$239,700	-

Note: NFHP funds granted to project applicants are processed through the U.S. Fish and Wildlife Service Regional Offices. These are federal funds, administered on WNTI's behalf through a federal agency. Grants are paid on a reimbursable basis. A FWS project agreement will be completed with successful applicants through interactions with FWS regional and/or local staff.

Project Partners (list all project partners and contact information)

Partner Organization: Montana Fish, Wildlife and Pa Contact Name: Dave Moser Email: davemoser@mt.gov	arks (MFWP) Position: Area Fisheries Biologist Telephone: (406) 994-6939				
Partner Organization: Custer Gallatin National Forest (CGNF)					
Contact Name: Bruce Roberts Email: broberts@fs.fed.us	Position: District Fisheries Biologist Telephone: (406) 522-2544				
Partner Organization: Montana Future Fisheries Contact Name: Michelle McGree Email: broberts@fs.fed.us	Position: Habitat Restoration Program Telephone: (406) 522-2544				
Partner Organization: National Fish and Wildlife Foundation					
Contact Name: David Lawrence	Position: Aquatic Conservation				
Email: david.lawrence@nfwf.org	Telephone: (202) 595-2451				
Partner Organization: Montana Trout Unlimited Contact Name: Bruce Farling Email: bruce@montanatu.org	Position: Executive Director Telephone: (406) 543-0054				
Linan. Druceenionanatu.org	Telephone. (100) 515 0051				
Project Components (select all that apply)					

X Riparian or In-Stream Habitat Restoration

- X Barrier Removal or Construction
- □ Watershed or Population Assessment
- □ In-Stream Flow Acquisition Planning

□ Watershed Connectivity □ Monitoring

- □ Education/outreach
- □ Watershed Planning

Anticipated Outcomes (fill in values applicable to project)

17 # Stream Miles Restored or Enhanced

- ____ # Stream Miles Reconnected or Reopened
- 9 # Acres of Lake/Wetlands Restored/Enhanced
- 1 # Barriers Removed or Constructed

- ____ # Watersheds or Rivers Assessed
- ___ # Stream Miles Assessed
- ____ # Populations Assessed

____Other: (i.e. number of individuals reached by an educational program, number of presentations given, number of materials produced, etc.)

Project Narrative

I. Project Summary - a one paragraph description of what tasks will be accomplished.

Native westslope cutthroat trout will be restored to 17 miles of upper North Fork Spanish Creek in the Gallatin River sub-basin of southwestern Montana and protected with a constructed fish movement barrier. Successful implementation of this project, located predominately on public lands, will more than double the 2% of historical habitat currently occupied by native westslope cutthroat trout in the Gallatin River sub-basin, providing a large, self-sustaining population as a source of individuals for restoration elsewhere.

II. Problem the Project Addresses - A description of why the project is important to the resource and which WNTI and NFHP objectives will be met. What are the major factors limiting the healthy function of the watershed/habitat? Describe how your proposed project addresses the causes of degradation rather than the symptoms, and how your project addresses species recovery needs or other species conservation needs. Describe how the project is important to the long-term persistence of the species.

Westslope cutthroat trout are currently found in only 5% of their historically occupied habitat in the upper Missouri River. In the Gallatin River portion of their native range, wild aboriginal westslope cutthroat trout remain in low densities in only 4 of 1048 (0.5%) suitable stream miles. Introductions of westslope cutthroat trout into historically fishless or renovated streams have added another 12 miles of occupied habitat. This proposed North Fork Spanish Creek project will more than double the currently occupied habitat in the Gallatin River sub-basin and provide the only self-sustaining population large enough to provide consistent numbers of source individuals for other restoration projects.

Westslope cutthroat trout have declined primarily due to competition and hybridization with non-native salmonids and habitat degradation. We are proposing to use piscicides to remove non-native trout from the upper 17 miles of the North Fork Spanish Creek drainage. A constructed fish movement barrier will be critical to prevent reinvasion of the restored North Fork Spanish Creek westslope cutthroat trout population. This is a collaborative effort among the Custer Gallatin National Forest, Montana Fish Wildlife and Parks, and Turner Enterprises, Inc./Turner Endangered Species Fund, and 75% of the project is on accessible public lands. The project represents the last of seven native cutthroat trout restoration projects sponsored or initiated by the Turner organizations Cutthroat Trout Initiative that will ultimately lead to recovery or conservation of native cutthroat trout in over 250 miles of stream habitat.

III. Project Objectives/Supporting Documentation - What specifically will be accomplished? How do these objectives support the goals of the WNTI Strategic Plan, existing species recovery plans and conservation strategies, watershed restoration plans, etc.? If possible cite relevant plans and their specific objectives and goals that the project addresses.

This project would meet Goals # 1 and # 2 of the National Fish Habitat Partnership Action Plan (NFHAP 2nd Edition, 2012) on pg. 3 and Strategic Action # 2 on pg. 14. The project will "protect and maintain intact and healthy aquatic systems." The National Forest portion of the North Fork Spanish Creek drainage lies entirely within the boundaries of the Madison Inventoried Roadless Area and Lee Metcalf Wilderness Area and contains both healthy and intact aquatic systems minus native WCT. The proposed project will also "prevent further degradation of fish habitats that have been adversely affected" by preventing the future expansion of non-native trout into the headwaters. If fully funded by all parties, national and local support will be mobilized and focused on achieving fish habitat conservation goals.

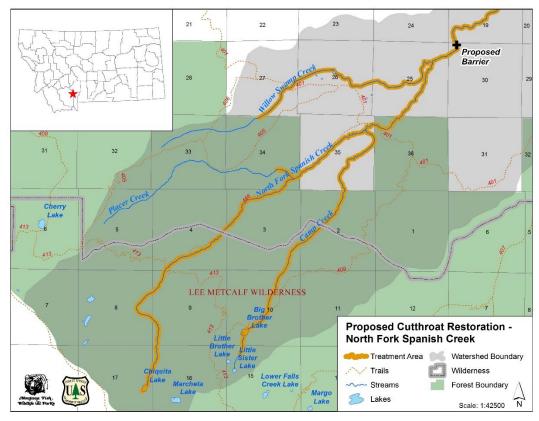
This proposed project meets Goals #1, #2, #3, and #4 of the Western Native Trout Initiative, A Plan for Strategic Action (2008). The project would a) restore native westslope cutthroat trout population to the North Fork Spanish Creek drainage thus improving the range-wide status of this sub-species; b) protect and enhance a watershed that has intact and functioning habitat; c) implement a collaboratively planned and funded project that includes federal, state, and private entities; and d) provide a native fishery accessible to the public that provides education, immersion, and outreach opportunities. It is the intention of all partners to share and report our work including data, lessons learned, results and accomplishments, including presenting at professional meetings.

IV. Project Methodology - Describe what you are planning to do. Multi-year projects **must** be broken into distinct phases with measurable tasks and accomplishments broken down by year, what year(s) the funding you seek will cover, and how other years of the project will be funded. How will the project be completed, and who is responsible for actually doing the work? **Attach photos and map of the project area if possible.**

The overall project has been broken in to five distinct phases (See Project Timeline below). This proposal addresses only Phase II (Barrier Construction). The proposed barrier site is located on private land owned by TEI (see attached picture and project area map). Turner Enterprises, Inc. has funded the engineering design and will contract and oversee logistics of barrier construction. A Forest Service engineering/hydrologist provided oversight throughout the design process and will assist with engineering oversight during construction. Upon the completion of Phase II, the TEI, MFWP, and the CGNF will collaborate on implementation of Phases III, IV and V (e.g., removal of non-natives and restocking of westslope cutthroat trout).



Proposed Barrier Location



Project Area Map

V. Project Monitoring/Evaluation of Success - How will the success of the project be assessed, and who is responsible for long-term maintenance and monitoring? Has an evaluation/monitoring plan been completed? The benefit(s) should be quantifiable; that is, you can measure or count the amount of habitat and/or species benefited, or the result of your project.

The final engineering design will be stamped by a professional engineer. State of Montana (SPA 310, Stream Alteration) and Army Corps of Engineers (404 wetlands) permits will be obtained prior to barrier construction. Turner Enterprises, Inc. and CGNF will provide construction oversight and inspections. Turner Enterprises, Inc. and MFWP will develop a long-term contract for barrier maintenance.

Regarding the overall project, gillnets, backpacking electrofishing, and eDNA testing will be used to insure all non-native trout are removed before restocking the stream above the barrier with native WCT. Montana Fish, Wildlife and Parks plans to monitor the recovery of both headwater lakes. Turner Enterprises, Inc. plans to monitor the recovery of the streams in three already established long-term population monitoring reaches.

VI. Partnerships for this Project - Briefly describe the project partners' involvement in planning, implementation, and evaluation of this project. Projects that have secured matching funds or in-kind support from partners and/or involve diverse stakeholders are highly valued and encouraged.

The primary partners – MFWP, CGNF, and TEI – have an established track record of successfully working together. In 2010 these entities successfully completed the 60-mile Cherry Creek westslope cutthroat trout restoration project the project. These entities have agreed to share in all aspects of project planning and implementation. For example, MFWP is taking the lead on environmental analyses; TEI is leading barrier design and construction; CGNF is leading public outreach and overall project planning. This collaborative approach will continue through completion of all phases. Additional support is provided by Madison-Gallatin Trout Unlimited and Montana Trout Unlimited. Partial funding has been secured from Montana's Future Fisheries Program. It is anticipated that partial funding for barrier construction will be secured through the National Fish and Wildlife Foundation's Bring-Back-The-Natives Program (see Partner Contribution) in fall 2017. This project is consistent with and meets the objectives of the *Memorandum of Understanding and Conservation Agreement for Westslope Cutthroat Trout and Yellowstone Cutthroat Trout in Montana* (July 2007) signed by a diversity Montana stakeholder groups. This proposed project was identified as a restoration opportunity by several area fisheries biologists representing several state and federal agencies within the draft *Status and Conservation Needs for Westslope Cutthroat Trout in Southwest Montana*.

VII. Project Timeline - Please provide an estimated timeline for the project, including major milestones and achievements, including plans and responsible person to prepare and submit a final report with high quality digital photographs.

Phase I – Planning (2016) Phase II – Barrier Construction (2017) Phase III – Lake and Stream Treatment (2018-19) Phase IV – Restocking Native Trout (2020-2022) Phase V – Monitoring (2021-2025)

VIII. Supplemental Information

Status of Project Design and Environmental Compliance - Identify the stage of project design and when implementation is expected to occur. Identify what environmental compliance documents are needed and the status of completion for these documents.

Project scoping letters were mailed out in February 2016 to a mailing list that included local users and user groups, wilderness groups, country, state & federal governments, NGO's, tribes, and environmental and conservation groups. The same project scoping letter was also posted on MFWP's and CGNF's webpages. No substantial negative responses specific to this project were received other than the typical general comments these types of projects elicit – opposition to the use of rotenone, the removal of nonnative fish, and disruption of recreation in the watershed. All these comments have been previously and successfully addressed for similar projects. Montana Fish, Wildlife and Parks is currently drafting an Environmental Assessment (EA)as required by the Montana Environmental Policy Act (MEPA) for the project. The EA will be written to National Environmental Policy Act (NEPA) standards in order to address project components requiring Federal authorization, such as wilderness pesticide use. The Forest Service has drafted their Minimum Requirements Decision Guide (MRDG) workbook for prohibited wilderness uses such pesticide application, helicopter use, etc. The Forest Service will be signing a Decision Notice (DN), Finding of No Significant Impact (FONSI) and Pesticide Use Permit (PUP) for their portion of the project. State and Federal authorizing documents are scheduled to be signed in early December 2016. Once final barrier design is complete, TEI will apply for all necessary barrier construction permits (e.g., federal 404, and state 310 and 318 permits)

Species Present - List all species (including non-WNTI species) that will directly benefit or be affected by your project, and how. Include special status designations if applicable—ESA status, species of special concern, etc.

Native westslope cutthroat trout (sensitive species; species of greatest conservation need), mottled sculpin, and fluvial arctic grayling (sensitive species; species of greatest conservation need), would benefit. Non-native rainbow trout, eastern brook trout, and Yellowstone cutthroat trout would be removed with rotenone.

Outreach/Education - Describe any outreach or education efforts associated with this project, including public workshops, tours, signs, newsletters, scientific journal articles, scientific conference presentations, educational forums, etc.

The permitting and environmental assessment stages of this project both require and provide opportunity for public input and education. Local media has and will continue to cover the implementation of this project. These processes have the potential to reach a significant portion of the approximately 100,000 people in Gallatin County, as well as visitors to the area. Education and outreach is a critical component of the proposed project, and will describe the conservation status of native westslope cutthroat trout and the steps that are being taken to reverse their decline. The public resource agencies (CGNF and MFWP) involved in the project will champion this work in media and electronic releases, as well as public meetings and postings. The TEI and TESF provides tours of conservation work on the Flying D Ranch, and disseminate our work to a broader audience via electronic, popular and scientific outlets. The North Fork Spanish Creek project will be a part of that outreach. Further, the relative accessibility of the project area will allow local residents and visitors to experience the project in real space and angle for westslope cutthroat trout. Biologists participating in the project will present scientific papers and agency and professional meetings.

Ľ	X. Budget
	Category
	a. Personnel

Category	WNTI	Partner Match	Total
a. Personnel			
b. Travel			
c. Equipment*			
d. Supplies			
e. Contractual (Barrier Design and		\$45,000	\$45,000
Construction Oversight)			
f. Construction (Cash)	\$15,000	\$179,700	\$194,700
g. Other			
TOTAL	\$15,000	\$224,700	\$239,700

*Equipment is any individual item over \$5,000. Even if an item is tangible, nonexpendable, and having a useful life of more than one year, items costing less than \$5,000 should be placed under the Supplies category.

X. Budget Narrative – for supplies and contractual, provide some detail. Explain budget categories and amounts listed above as needed. If a multiyear project, please provide a budget breakdown by year (e.g., Phase 1 – 2016, Phase 2 – 2017).

The overall project is phased (I-V) starting 2016. All WNTI funds would be spent only on the construction of the fish movement barrier (Phase II) which is scheduled for August 2017. Approximately \$20,000 of the budget is for engineering design (Pioneer Technical Services of Bozeman; completed by 11/15/2016), \$25,000 is for construction oversight (CGNF and Pioneer Technical Services), and \$194,700 for construction contract (earthwork, water management, forming and pouring concrete, regrading disturbed site).

XI. Project Staff - List names and relevant qualifications of project staff.

The following biologists representing TEI/TESF, CGNF, and MFWP previously worked together to implement the adjacent Cherry Creek project which successfully restored native westslope cutthroat trout to over 60 miles of stream habitat and 7 acres of lake habitat. All three have constructed multiple fish movement barriers for native fish conservation and either lead or participated in numerous rotenone projects.

Dr. Carter Kruse Director of Natural Resources Turner Enterprises, Inc. Senior Conservation Biologist Turner Endangered Species Fund LLC 18 years of professional experience; 16 years working in cutthroat trout restoration and conservation PhD in Zoology from the University of Wyoming, Laramie

<u>Dave Moser</u> Area Fisheries Biologist Montana Fish, Wildlife and Parks 20 years of professional experience; 15 years working in cutthroat trout restoration MS in Stream Ecology from Idaho State University, Pocatello

Bruce Roberts District Fisheries Biologist Custer Gallatin National Forest 28 years of professional experience; 22 years working in cutthroat trout restoration MS in Fish and Wildlife Management from Montana State University, Bozeman

XII. Optional Supporting Materials - Includes maps, photographs, letters of support, etc. Project proposals must be supported by the state and/or federal fish and wildlife management/natural resource agencies, or Tribal governments within project-area jurisdictions. Letters of support and landowner consent letters do not count toward the 10 page application limit. In addition to the <u>required</u> letter of support from the state fish and wildlife agency, and any additional letters of support from federal or Tribal fish and wildlife agencies, the project application cover sheet must include a signature and contact information for a 'sponsoring professional' from the relevant management agency.

XIII. Signature of Applicant - An original signature page must be received with the application.

I certify that the above information is true and accurate,

Signature:

Call

Print Name: Carter G. Kruse

Title: Director of Natural Resources/Senior Conservation Biologist

Organization: Turner Enterprises, Inc. and Turner Endangered Species Fund LLC

Date: October 5, 2016



JSDA United States **Department** of Agriculture

Forest Service **Custer Gallatin National Forest**

Bozeman Ranger District 3710 Fallon St., Ste C Bozeman, MT 59718 406-522-2520

File Code: 2670 Date: September 8, 2016

Western Native Trout Initiative 134 Union Blvd., Suite 665 Lakewood, CO 80228

Dear "Western Native Trout Initiative" Review Panel:

Custer Gallatin National Forest continues to play a key partner role in the conservation of native cutthroat trout in south central and southwest Montana including the proposed North Fork Spanish Creek westslope cutthroat trout project. Similar to the Cherry Creek project, the same three partners have agreed to work together to restore native westslope cutthroat trout in the nearby North Fork Spanish Creek drainage including 17 miles of connected stream habitat and nine acres of lake habitat.

Over the past two decades, the partnership of Turner Enterprises, Inc. (TEI), Montana Fish, Wildlife and Parks (MFWP) and the Custer Gallatin National Forest (CGNF) have worked sideby-side to remove non-native trout in over 60 miles of stream habitat and six acres of lake habitat within the adjacent Cherry Creek drainage. The restored westslope cutthroat trout population is currently at carrying capacity with surplus fish overflowing into the world renowned fishery of the Madison River.

This same partnership seeks to duplicate the Cherry Creek effort in the North Fork Spanish Creek. The natural topography will not allow this proposed project to restore as many miles as the Cherry Creek project but it will still be a substantial conservation success for westslope cutthroat trout. One major difference between the two projects is that surplus fish in the North Fork Spanish Creek drainage will migrate in to the world renowned Gallatin River instead of the Madison River.

Approximately 2/3 of the stream miles upstream of the proposed fish barrier are located on public land within Custer Gallatin National Forest (See attached map in application package) with the rest on private. Approximately 1/3 are located within the Spanish Peaks Unit of the Lee Metcalf Wilderness Area. Big Brother and Chiquita Lakes are also located within this same wilderness area.

Native genetically pure native westslope cutthroat trout are rare throughout the much larger Gallatin River sub-basin. Two refugia streams consisting of less than four stream miles remain within the Gallatin River sub-basin. Both of these tiny native populations have a high risk of extinction.

The good news is that by working together with MFWP, TEI and Yellowstone National Park, westslope cutthroat trout have been introduced or reintroduced into 12 additional miles of stream habitat and seven acres of lake habitat in the last decade within the Gallatin River sub-watershed.



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The proposed North Fork Spanish Creek westslope cutthroat trout restoration project would more than double these past introduction efforts.

The Bozeman Ranger District enthusiastically supports the North Fork Spanish Creek westslope cutthroat trout restoration project and plans to work together with MFWP and TEI personnel to fully fund and implement this project. We are also committed to provide long-term protection to the investments made by all.

This proposal most definitely meets the overall program goals and objectives of the "National Fish Habitat Partnership" and "Western Native Trout Initiative."

If you have any other questions regarding the Forest Services' commitment to this or other projects, please give me or my staff a call at (406) 522-2531 (<u>lstoeffler@fs.fed.us</u>) or Bruce Roberts at (406) 522-2544 (<u>broberts@fs.fed.us</u>).

Sincerely, undil the

Conclisa M. Stoeffler Bozeman District Ranger



1400 South 19th Avenue

Bozeman, MT 59718

September 20, 2016

To Western Native Trout Initiative:

Montana Fish, Wildlife and Parks fully support a proposed project to restore native westslope cutthroat trout (WCT) to the headwaters of the North Fork Spanish Creek. Native WCT have been extirpated or relegated to small headwater streams throughout Montana east of the Continental Divide. The Gallatin drainage currently holds one extant pure population of WCT in less than 2 miles of stream. WCT are the only trout native to this drainage and once thrived in over a thousand miles of stream.

The proposed project would restore WCT to 17 miles of quality stream habitat with four connected tributaries and two high mountain lakes. An upstream migration barrier is necessary to prevent the future invasion of non-native trout. Fish barriers have been used extensively with great success in other drainages in northcentral and southwest Montana to protect or restore WCT populations. This project is a collaborative effort between Turner Enterprises, the United States Forest Service, and Montana Fish, Wildlife & Parks. The project proponents have also worked together to restore WCT in Cherry Creek a tributary to the Madison River. The Cherry Creek restoration project was successful in establishing WCT in over 50 miles of stream.

We consider the proposed restoration project on North Fork Spanish Creek a priority and critical to staving off extinction of WCT in the Gallatin Basin. Any financial support for this project would be very much appreciated. Some funding has already been obtained from Future Fisheries of Montana. Project partners will continue to seek cost share monies from other funding organizations. Thanks for your time and consideration of this proposed native fish restoration project.

Sincerely,

David Moser Fisheries Biologist