

## NOTICE OF INTENT (NOI) TO AWARD

**THIS FUNDING ANNOUNCEMENT IS NOT A REQUEST FOR APPLICATIONS. THIS ANNOUNCEMENT IS TO PROVIDE PUBLIC NOTICE OF RECLAMATION'S INTENTION TO FUND THE FOLLOWING PROJECT ACTIVITIES WITHOUT FULL AND OPEN COMPETITION.**

ABSTRACT	
<b>Funding Announcement</b>	NOI R10AS20019
<b>Project Title</b>	Western Pond Turtles Study on the Trinity River
<b>Recipient</b>	Humboldt State University Department of Biological Sciences Humboldt State University 1 Harpst Street Arcata, CA 95521
<b>Principle Investigator (if applicable)</b>	Leah Sloan
<b>Total Anticipated Award Amount</b>	Fiscal Year 2010 - \$35,460.00 (estimated) Total Amount of Agreement \$58,404.00
<b>Cost Share</b>	N/A
<b>New Award or Continuation?</b>	New Award
<b>Anticipated Length of Agreement</b>	Approximately 2.5 Years
<b>Anticipated Period of Performance</b>	Date of execution through December 31, 2012
<b>Award Instrument</b>	Cooperative Agreement
<b>Statutory Authority</b>	Public Law 102-575, Title 34 Central Valley Project Improvement Act of 1992, Section 3406(b)(1) and Section 3407(e)
<b>CFDA Number &amp; Title</b>	15.512 - Central Valley Project Improvement Act, Title XXXIV
<b>Single Source Justification Criteria Cited</b>	Department of Interior Policy (505 DM 2) (2)
<b>Reclamation Point of Contact</b>	Judy A. Hudson, Contract Specialist Email: <a href="mailto:jhudson@usbr.gov">jhudson@usbr.gov</a>

## OVERVIEW

The December 19, 2000 Record of Decision (ROD) for the Trinity River Mainstem Fishery Restoration Environmental Impact Statement/Impact Report directed the Department of Interior to undertake an innovative and system-oriented approach to recovering the River's anadromous fish populations. The Trinity River Restoration Program (TRRP) was established to restore the attributes found in natural alluvial river systems on a managed river downstream of a dam. A combination of mechanical rehabilitation, a naturalized flow release schedule, and adaptive environmental assessment and management will be used to reverse the impacts caused by decades of flow diversion on one of California's most significant rivers. In addition to recovery of naturally-spawning anadromous fish populations in the Trinity River, the TRRP also presents a unique opportunity to advance scientific understanding of alluvial river systems and the recovery processes of natural systems for broader application.

The Western Pond Turtle, *Actinemys marmorata*, is the only extant California native freshwater turtle. Populations have declined throughout most of its range for a variety of reasons including, introduced competitors and predators, habitat alteration from agriculture and livestock, urbanization, water course alterations, and dams. Many of these factors principally affect hatchlings, leading to adult-biased populations. As a result of these threats and population declines, Western Pond Turtles are listed as Species of Special Concern in California, Endangered Species in Washington, and Sensitive-Critical Species in Oregon.

The mainstem of the Trinity River was dammed in 1963; this caused numerous habitat alterations including channelization of the flow, decreased water temperature, and the filling of deep pools with sediment. All of these alterations decreased the quality of the river habitat for turtles. Consequently, alternative warm and relatively deep aquatic habitats, such as ponds and wetlands adjacent to the river, are thought to be extremely important. However, in the Trinity River system the use of such alternative habitats has been only briefly studied. In order for the TRRP to work in and around these important wetland habitats and to construct additional habitat for turtle use, better information on how these turtles utilize existing off channel wetlands is essential.

## RECIPIENT INVOLVEMENT

*Under this cooperative agreement Humboldt State University shall complete the following tasks:*

### **Task 1 – Overall -**

The Recipient shall monitor, via radio telemetry, habitat use and movement of Western Pond Turtles among a series of ponds and wetlands adjacent to the Trinity River at Lowden Meadow, near Weaverville, California. Monitoring shall commence in the spring of 2010 and continue until the fall of 2011.

Activities will include, but are not limited to, attaching radio transmitters on to up to 24 turtles, locating turtles every other day (3 times/week) within one (1) m<sup>2</sup> when on land or to within a habitat type when in the water (i.e., within cattails), quantifying pond variables up to one (1) time each season and determining prevalence of other organisms (bullfrogs, fish, macroinvertebrates) up to one (1) time in the summer of 2010.

In the fall of 2010 the Trinity River Restoration Program will implement a rehabilitation project in the nearby Trinity River, in which at least one (1) of the existing ponds will be connected to the river to make a side channel. In addition, new ponds and wetlands will be created during this restoration project. The Recipient shall monitor the movements of turtles subsequent to this project to determine if they colonize the new habitat within one (1) year.

### **Task 2 – Project Management -**

The Recipient shall prepare and submit a quarterly status report that covers: work completed, work planned, financial status, schedule, and identification of any outstanding issues. The Recipient shall conduct project management meetings with TRRP every other month. Additional meetings will be held as necessary to coordinate monitoring activities.

The Recipient shall submit the written status report to TRRP quarterly. The Recipient shall furnish one (1) electronic copy of the report in Word or PDF format with full editing privileges. The Recipient shall furnish electronic copies of all material and presentations given at meetings (within two (2) days of the meeting).

### **Task 3 – Identify the Lentic Habitat Use of Western Pond Turtles along the Trinity River -**

- a. **How do Western Pond Turtles spatially exploit a series of adjacent ponds? How much movement occurs between ponds? Do they have one “home” pond and occasionally visit others, or is there continual movement among ponds?**

Knowledge of turtles’ use of ponds and movement among ponds could help in the design of pond systems in future restoration projects. In order to design ideal pond habitat for turtles it is necessary to understand the turtle’s seasonal pond requirements. Understanding turtle movement among pools will also explain the importance of retaining connectivity between ponds.

- b. **What types of ponds are turtles most likely to utilize?**

Recipient shall measure the following factors in occupied versus unoccupied turtle habitat:

- Maximum/minimum/mean pond depth
- Maximum/minimum/mean pond temperature
- Vegetation type
- % cover
- Availability of basking sites (location of basking sites- near bank or in middle)
- Substrate
- Presence of cover objects
- Bullfrogs presence/ prevalence
- Fish presence/ prevalence
- Macro-invertebrate’s prevalence

In order to create “ideal” turtle ponds it is important to know what abiotic and biotic factors are most important in determining turtle use. Subsequently, ponds/wetlands can be created to maximize benefits to Western Pond Turtles.

- c. **Short term colonization of newly created ponds/wetlands and nesting habitat: Will there be immediate use of newly created habitat? If so, what pond/wetland and nesting habitat characteristics are the best predictors of turtle use?**

The Trinity River Restoration Program will create new wetlands and nesting areas at Lowden Meadow in the fall of 2010. Recipient shall monitor turtle colonization of these newly created habitats. In order to determine restoration success, for the turtles, it is necessary to know how and when turtles utilize newly created habitat.

**d. Where are turtles overwintering? If all turtles overwinter in ponds, is there a pond type preference?**

The turtles that live within the Trinity River mainly overwinter on land and occasionally in lentic bodies of water. In a series of agricultural ponds in Santa Rosa, CA only 31-36% of turtles overwintered on land, the rest remained within ponds. At least some of the turtles in ponds along the Trinity River overwinter within the ponds (D. Ashton and J. Bettaso, pers. comm.). It is important to know where turtles are overwintering in order to determine what habitat they need and how much of a land buffer is required around the water. In addition, if restoration projects take place in the fall or winter (when turtles are hibernating), knowing if turtles are on land or in the water is necessary if disturbance is to be minimized.

**e. What is the age structure within ponds? (compared with past research on turtles within the Trinity River)**

The age structure of any population tells something of the health of that population. A healthy population (i.e., a population that is expected to continue at the same abundance well into the future), will have more individuals in the younger age classes than in the older. A population that is decreasing in size, and that may be in danger of extinction, will have very few young individuals. Turtle populations within the mainstem of the Trinity River have an age structure dominated by adults (thus indicating a declining population). By looking at the age structure of turtles within the Lowden off channel wetlands we can determine the health of this turtle population. If turtles within the ponds have a more balanced age structure than those within the river, then this will demonstrate the necessity of pond habitat along the Trinity River and the importance of creating additional ponds. However, if juveniles are extremely scarce in ponds, this will suggest that ponds are not capable of supporting sustainable turtle populations. If this is the case, creating additional pond habitat may not be beneficial for turtles.

**RECLAMATION INVOLVEMENT:**

The project and construction of the river restoration work is directed by the TRRP in Weaverville and the work will be completed on federal (BLM managed lands). In order for HSU to perform the work, TRRP must closely coordinate with BLM to obtain permits and other support that is necessary. TRRP will also need to work with the construction contractors to ensure that earth work is done to meet the specifications identified in research.

Reclamation will also monitor the performance progress of the Recipient, review reporting requirements, ensure that project is completed and all reports are submitted and acceptable.

**SINGLE-SOURCE JUSTIFICATION**

**DEPARTMENT OF THE INTERIOR  
SINGLE SOURCE POLICY REQUIREMENTS**

Department of the Interior Policy (505 DM 2) requires a written justification which explains why competition is not practicable for each single-source award. The justification must address one or more of the following criteria as well as discussion of the program legislative history, unique capabilities of the proposed recipient, and cost-sharing contribution offered by the proposed recipient, as applicable.

In order for an assistance award to be made without competition, the award must satisfy one or more of the following criteria:

- (1) **Unsolicited Proposal** – The proposed award is the result of an unsolicited assistance application which represents a unique or innovative idea, method, or approach which is not the subject of a current or planned contract or assistance award, but which is deemed advantageous to the program objectives;
- (2) **Continuation** – The activity to be funded is necessary to the satisfactory completion of, or is a continuation of an activity presently being funded, and for which competition would have a significant adverse effect on the continuity or completion of the activity;
- (3) **Legislative intent** – The language in the applicable authorizing legislation or legislative history clearly indicates Congress' intent to restrict the award to a particular recipient of purpose;
- (4) **Unique Qualifications** – The applicant is uniquely qualified to perform the activity based upon a variety of demonstrable factors such as location, property ownership, voluntary support capacity, cost-sharing ability if applicable, technical expertise, or other such unique qualifications;
- (5) **Emergencies** – Program/award where there is insufficient time available (due to a compelling and unusual urgency, or substantial danger to health or safety) for adequate competitive procedures to be followed.

**Reclamation did not solicit full and open competition for this award based the following criteria:**

**(2) Continuation –**

Fish and Wildlife Service (FWS) have been working with the Trinity River Restoration Program (TRRP) on mitigation and translocation of turtles from construction/river restoration areas. Additional expertise is needed to supplement the skills that TRRP and FWS's biologists bring to the project in the form of project design and analysis as well as additional field experience.

Adding Humboldt State University (HSU) staff and a grad student will round out the crew that will continue present western pond turtle tracking and monitoring work and will also allow the team to move forward in data acquisition and assessment - to determine the types of habitat that are most frequently used and how the TRRP might emulate these in our construction activities. Because the construction is planned for summer 2010, is imperative to get all project staff (TRRP, FWS, and HSU) on the ground soon so that baseline information may be collected and so that teams may learn to efficiently coordinate, share data, and assist in the field before large equipment moves onto the site.

**(4) Unique Qualifications –**

Humboldt State University (HSU) is uniquely qualified to do this work; because, they supply the dedication and skill of a graduate student, which includes the academic support and technical expertise of the university to answer field data collection and analysis questions. Because HSU is located in Arcata, with the FWS, they can share information easily with minimum travel costs to coordinate. The project and construction of the river restoration work is directed by the TRRP from Weaverville and the work will be completed on federal, Bureau of Land Management (BLM) managed lands. Consequently, with HSU on the team, we have the unique set of partners to answer habitat restoration questions, to closely coordinate with land managers to get support for the work, and to work with the contractors that are doing construction to ensure that earth work is done to meet the specifications identified in research.

## **PROGRAM AUTHORITY**

### **Public Law 102-575, Central Valley Project Improvement Act of 1962, Title 34 Section 3406(b)(1)**

SEC. 3406. FISH, WILDLIFE AND HABITAT RESTORATION (b) FISH AND WILDLIFE RESTORATION ACTIVITIES - The Secretary, immediately upon the enactment of this title, shall operate the Central Valley Project to meet all obligations under State and Federal law, including but not limited to the Federal Endangered Species Act, 16 U.S.C. 1531, et seq., and all decisions of the California State Water Resources Control Board establishing conditions on applicable licenses and permits for the project. The Secretary, in consultation with other State and Federal agencies, Indian tribes, and affected interests, is further authorized and directed to:

b) Fish and Wildlife Restoration Activities.--The Secretary, immediately upon the enactment of this title, shall operate the Central Valley Project to meet all obligations under state and federal law, including but not limited to the federal Endangered Species Act, 16 U.S.C. s 1531, et seq., and all decisions of the California State Water Resources Control Board establishing conditions on applicable licenses and permits for the project. The Secretary, in consultation with other State and Federal agencies, Indian tribes, and affected interests, is further authorized and directed to:

(1) Develop within three years of enactment and implement a program which makes all reasonable efforts to ensure that, by the year 2002, natural production of anadromous fish in Central Valley rivers and streams will be sustainable, on a long-term basis, at levels not less than twice the average levels attained during the period of 1967-1991; Provided, That this goal shall not apply to the San Joaquin River between Friant Dam and the Mendota Pool, for which a separate program is authorized under subsection 3406(c) of this title; Provided further, That the programs and activities authorized by this section shall, when fully implemented, be deemed to meet the mitigation, protection, restoration, and enhancement purposes established by subsection 3406(a) of this title; And provided further, That in the course of developing and implementing this program the Secretary shall make all reasonable efforts consistent with the requirements of this section to address other identified adverse environmental impacts of the Central Valley Project not specifically enumerated in this section.

### **Public Law 102-575, Central Valley Project Improvement Act of 1962, Title 34 Section 3407(e)**

(e) Funding to Non-Federal Entities.--If the Secretary determines that the State of California or an agency or subdivision thereof, an Indian tribe, or a non-profit entity concerned with restoration, protection, or enhancement of fish, wildlife, habitat, or environmental values is able to assist in implementing any action authorized by this title in an efficient, timely, and cost effective manner, the Secretary is authorized to provide funding to such entity on such terms and conditions as he deems necessary to assist in implementing the identified action.