

# RECLAMATION

*Managing Water in the West*

U.S. Department of the Interior  
Bureau of Reclamation

## NOTICE OF INTENT TO AWARD

This Funding Announcement is not a request for applications. This announcement is to provide public notice of the Bureau of Reclamation's intention to fund the following project activities without full and open competition.

ABSTRACT	
<b>Funding Announcement</b>	<b>R12SS11011</b>
<b>Project Title</b>	South Fork Boise River Hydrodynamic Modeling Project
<b>Recipient</b>	University of Idaho ( U of I)
<b>Principal Investigator / Program Manager</b>	Daniele Tonina Center for Ecohydraulics Research University of Idaho P.O. Box 443020 Moscow ID 83844-3020 208-364-6194 <a href="mailto:dtonina@uidaho.edu">dtonina@uidaho.edu</a>
<b>Anticipated Federal Amount</b>	\$333,698 (FY 2012: \$141,519; FY 2013: \$98,480; FY 2014: \$46,492; FY 2015: \$47,204)
<b>Cost Share</b>	Not required
<b>Total Anticipated Award Amount</b>	\$333,698
<b>New Award or Continuation?</b>	New Award
<b>Anticipated Period of Performance</b>	October 2012- October 2015
<b>Award Instrument</b>	Cooperative Agreement
<b>Statutory Authority</b>	<b>Fish and Wildlife Coordination Act</b> , 16 U.S.C. § 661 et seq. (1958), as delegated to Reclamation under Departmental Manual 255 DM 1.
<b>CFDA # and Title</b>	15.517 Fish and Wildlife Coordination Act
<b>Single Source Justification Criteria Cited</b>	(4) Unique Qualifications
<b>Reclamation Point of Contact</b>	Ms. Melinda Ritacco Financial Assistance Specialist, PN-3713 Pacific Northwest Regional Office 1150 N Curtis Road, Suite 100 Boise, ID 83706-1234 Phone 208-378-5103 Email: <a href="mailto:mrhitacco@usbr.gov">mrhitacco@usbr.gov</a>

## **OVERVIEW**

The Boise River basin watershed covers 5,700 km in southwestern Idaho and is drained by three sub-basins: the North Fork Boise River, Middle Fork Boise River, and the South Fork Boise River. Water in the Boise River basin is regulated by three federal reservoirs, Lucky Peak, Anderson Ranch and Arrowrock. These reservoirs are managed primarily for flood control, irrigation and recreation.

Stream flows in the South Fork Boise River (SFBR) between Anderson Ranch Dam and Arrowrock Reservoir are controlled by water releases from Anderson Ranch Dam. Anderson Ranch Dam and reservoir are owned and operated by Reclamation for the purposes of irrigation, flood control and hydropower generation. Generally water is drafted from the bottom of Anderson Ranch Dam from the hypolimnion zone, discharging water that is cold but consistent in temperature. The hydrograph and water temperature vary from the natural condition but the effect of the current water management operations on fish behavior is relatively unknown.

Topographical data of the SFBR between the Anderson Ranch and Arrowrock Reservoir (approximately 28 river miles) were collected in 2007 with an Experimental Advanced Airborne Research Lidar (EAARL) sensor. The EAARL sensor is a narrow-beam in the green light wavelength lidar capable of surveying submerged terrestrial topography.

Bull trout are known to use the SFBR for overwintering and rearing. Therefore, to better understand the migratory habits of the bull trout, it is Reclamation's intent to enter into a Cooperative Agreement with U of I to assist in the development of hydrologic flow models and a temperature model. U of I will use the EAARL data that was collected in 2007 to create the models which later can be used to help identify ramping rates that may cause stranding pools, and also be used to run several ramping scenarios to understand the impact of reservoir operation on movements of bull trout in the SFBR during increased and decreased discharge releases from Anderson Ranch Dam. The models will evaluate the physical factors that may limit production of bull trout in the SFBR.

Understanding the effects of water releases from Anderson Ranch, tributary flows and water temperature on the SFBR may help to improve Reclamation's understanding of the survival and movements of bull trout within the Boise basin.

## **RECIPIENT INVOLVEMENT**

U of I will utilize the EAARL data collected in 2007 to develop the necessary code to interface with the hydrologic flow models and a temperature model. In addition, improved processing techniques and interfacing codes will be researched as part of this project to make EAARL more commercially viable.

## RECLAMATION INVOLVEMENT

Substantial involvement on the part Reclamation is anticipated for the successful completion of the objectives to be funded by this award. In particular, Reclamation will be responsible for continued on the ground physical data collection (water flow, temperature, water quality, etc). Reclamation will track bull trout and record movement under different flow conditions to determine bull trout presence during the year. Reclamation will provide data to the U of I to interpret and evaluate model results in relation to the bull trout movement.

## 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:

#### **(4) UNIQUE QUALIFICATIONS**

##### **Single Source Justification Description:**

Processing the EAARL data requires the use of software designed by a PhD student at U of I. This student has developed code to interface with the EAARL data for processing, and is an expert on analyzing EAARL data in order to conduct the waveform analysis of the signal. Therefore, U of I offers expertise and knowledge necessary for developing the necessary models.

The Cooperative Ecosystem Studies Units (CESU) Network is a national consortium of federal agencies, academic institutions, tribal, state, and local governments, nongovernmental conservation organizations, and other partners working together to support informed public trust resource stewardship. The CESU Network includes nearly 300 partners, including 13 federal agencies, in 17 CESUs representing biogeographic regions encompassing all 50 states and U.S. territories. The CESU Network is well positioned as a platform to support research, technical assistance, education and capacity building that is responsive to long-standing and contemporary science and resource management priorities.

The Pacific Northwest Cooperative Ecosystems Studies Unit (PNW CESU) is a cooperative venture between 17 leading academic institutions in the Pacific Northwest region, one state agency and ten federal land management and natural resource research organizations. Reclamation and U of I are partners under the PNW CESU, which is part of the CESU Network. This award will be entered into under the provisions of the PNW CESU Agreement; therefore, Reclamation and U of I are subject to all terms and conditions contained within the PNW CCECU Agreement, as well as project specific terms and conditions agreed to as outlined in the award.

#### **STATUTORY AUTHORITY**

##### **The Fish and Wildlife Coordination Act, 16 U.S.C. § 661:**

For the purpose of recognizing the vital contribution of our wildlife resources to the Nation, the increasing public interest and significance thereof due to expansion of our national economy and other factors, and to provide that wildlife conservation shall receive equal consideration and be coordinated with other features of water-resource development programs through the effectual and harmonious planning, development, maintenance, and coordination of wildlife conservation and rehabilitation for the purposes of sections 661 to 666c of this title in the United States, its Territories and possessions, the Secretary of the Interior is authorized (1) to provide assistance to, and cooperate with, Federal, State, and public or private agencies and organizations in the development, protection, rearing, and stocking of all species of wildlife, resources thereof, and their habitat, in controlling losses of the same from disease or other causes....

**As delegated to Reclamation by Departmental Manual Part 255 DM 1:**

1.1 Delegation. Subject to the exceptions in Section 1.2, the Commissioner of Reclamation (Commissioner) is delegated the authority of the Assistant Secretary – Water and Science to:

B. Take the following actions, either directly or by providing financial assistance to non-Federal parties, pursuant to the Conservation of Wild Life, Fish and Game Act of March 10, 1934 (Pub. L. 73-121; 48 Stat. 401) as amended by the Fish and Wildlife Coordination Act of August 14, 1946 (Pub. L. 85-624; 72 Stat. 563; 16 U.S.C. 661-666c); Section 5 of the Endangered Species Act of 1973, December 28, 1973 (Pub. L. 93-205; 87 Stat. 884; 16 U.S.C. 1534); and Section 7(a) of the Fish and Wildlife Coordination Act of 1956, August 8, 1956 (70 Stat. 1122; 16 U.S.C. 742f( a)), regarding the construction and/or continued operation and maintenance of any Federal reclamation project:

- (1) plan, design, and construct, including acquiring lands or interest therein as needed for
  - (a) fish passage and screening facilities at any non-Federal water diversion or storage project; or
  - (b) projects to create or improve instream habitat.
- (2) acquire or lease water or water rights from willing sellers or lessors; or
- (3) monitor and evaluate the effect of Reclamation actions on Endangered Species Act-listed species.

**END OF ANNOUNCEMENT**