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	
Funding Announcement	BOR-MP-18-N037
Project Title	Enhanced Acoustic Tagging, Analysis, and Real-Time Monitoring of Wild and Hatchery Salmonids in the Sacramento River Valley
Recipient	University of California, Santa Cruz (UCSC)
Principal Investigator / Program Manager	Dr. Eric Danner, Principal Investigator (PI)
Anticipated Federal Amount	Mod 0001: $942,265.00 / Total Estimated Amt: $1,987,654.00
Anticipated Non-Federal Amount	$0.00
New Award or Continuation?	Continuation
Anticipated Period of Performance	December 1, 2017 through December 1, 2020
Award Instrument	Cooperative Agreement
Statutory Authority	Public Law 102-575, Central Valley Improvement Act (CVPIA), Section 3406(b)(16) and Section 3407(e)
CFDA # and Title	15.512— Central Valley Project Improvement Act
Single Source Justification Criteria Cited	**(2) Continuation / (4) Unique Qualifications**
Reclamation Point of Contact	Oliver (Towns) Burgess / Megan Bryant

OVERVIEW

Recent law, Water Infrastructure Improvement for the Nation (WIIN) Act, focuses on enhanced monitoring of ESA-listed species in the Sacramento River and Bay-Delta to provide stakeholders

and agencies improved information regarding their status and their interaction with the Central Valley Project (CVP) and State Water Project (SWP) operations.

There is a well-documented need for improved detection and associated modeling of salmon migration and survival in the Central Valley. These monitoring efforts can provide critical information on juvenile salmonid distribution and survival, which inform biologists and managers interpretations of the exposure and intensity of CVP and SWP water operation risks on tagged populations in Central Valley rivers and the Bay-Delta. Understanding salmon survival and migration dynamics in the Delta and its tributaries is critical to the recovery of ESA-listed species, and sport and commercial fisheries management. For example, estimating the population size of endangered Sacramento River Winter-run Chinook (SRWRC) as they enter and exit the Delta is considered critical for informing Delta water management actions (IEP SAG 2013). "The use of real-time acoustic receivers that immediately transmit acoustic tagged (AT) fish detections needs to be included in the expanded network" (Johnson et al., in press). Tracking the fate of individual tagged fish will be accomplished with AT and used to develop estimates of survival and movement for other non-AT fish also part of that group. Population level sampling programs will use survival estimates generated by AT and applied to other mass marked (coded wire tagging) groups to develop improved capture efficiency for these sampling programs.

This modification adds $939,868.00 to the current financial assistance agreement with Reclamation, since additional appropriations have become available, to cover the monitoring of survival and movement rates as well as the entrainment of the spring-run, fall-run, and winter-run chinook salmon for Water Year 2019 in the Bay-Delta and the San Francisco Estuary. To date, the project funded with the current agreement has covered only the monitoring of survival and movement rates as well as the entrainment of the spring-run, fall-run, and winter-run chinook salmon for Water Year 2018 in the Bay-Delta and the San Francisco Estuary.

RECIPIENT INVOLVEMENT

The UCSC Principal Investigator (PI), and staff will deploy the receivers, collect wild fish, tag fish, enter the data and organize the receivers, equipment and gear for the 2019 Water Year. The UCSC staff will also be responsible for the data analysis and assisting with reports.

UCSC shall complete the following objectives and provide the following deliverables.

Objective #1: Deploy and service field monitoring acoustic telemetry stations at locations important to fish and water management

Objective #2: Implant, transport, and release acoustically tagged juvenile ESA-listed wild and hatchery juvenile salmonids

Objective #3: Support production and development of new metrics for understanding the survival, distribution, and entrainment of juvenile salmonid along the Sacramento River and its floodways, as well as, the Bay-Delta

Deliverables:

- Working draft of Acoustic Telemetry Study Plan identifying management questions of interest, methods, and analysis timeline for review through collaborative science forum
- Draft technical reports for retrospective analyses for review through collaborative science forum
- Draft technical report for 2019 adult green sturgeon population estimate
- Final technical report for 2019 adult green sturgeon population estimate
- Final technical reports for retrospective analyses
- Generate an article updating the project for IEP newsletter

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 the following:

- Contribute to the study design, selection of data applications, facilitating review and comment resolution of study plans and reports.

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
(4) UNIQUE QUALIFICATIONS

Single Source Justification Description:

Dr. Eric Danner at the University of California, Santa Cruz (UCSC) and the Cooperative Institute for Marine Ecosystems and Climate (CIMEC) staff are uniquely qualified to carry out these particular objectives of the Enhanced Acoustic Tagging, Analysis, and Real-Time Monitoring of Wild and Hatchery Salmonids in the Sacramento River Valley project, focused on preventing the extinction of a listed fish species and provide scientific information for use in recovery efforts. The UCSC departments have significant expertise in developing real-time reporting data applications, which will be further enhanced with new reporting measures in this project and are currently conducting the work under a Reclamation Financial Assistance agreement from December 2017 through November 2020. UCSC-CIMEC staff have close to a decade of experience in undertaking the field, surgical, and analytical tasks associated with this proposal. The methods they have developed are robust and efficient for understanding the status and trend of salmonids and green sturgeon in the Sacramento River and Bay-Delta.

STATUTORY AUTHORITY

Central Valley Project Improvement Act (CVPIA), Public Law 102-575, Title XXXIV Section 3406 (b)(16) and Section 3407 (e):

SECTION 3406 (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:(16) Establish, in cooperation with independent entities and the State of California, a comprehensive assessment program to monitor fish and wildlife resources in the Central Valley to assess the biological results and effectiveness of actions implemented pursuant to this subsection. 37.5 percent of the costs associated with implementation of this paragraph shall be reimbursed as main project features, 37.5 percent shall be considered a nonreimbursable Federal expenditure, and 25 percent shall be paid by the State of California.

And

SECTION 3407(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 nonprofit 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.