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-N029
Project Title	Assessing the Impacts of Different Contact Points on Predation-Related Mortality of Juvenile Chinook Salmon in the Sacramento-San Joaquin Delta
Recipient	University of California, Santa Cruz (UCSC)
Principal Investigator / Program Manager	Dr. Cyril Michel, Principal Investigator (PI)
Anticipated Federal Amount	$2,291,630.00 / FY18: $392,819.00
Anticipated Non-Federal Amount	$0.00
New Award or Continuation?	New Award
Anticipated Period of Performance	Date of Execution through September 30, 2023
Award Instrument	Grant Agreement
Statutory Authority	Public Law 102-575, Central Valley Improvement Act (CVPIA), Section 3406(b)(1) and Section 3407(e)
CFDA # and Title	15.512— Central Valley Project Improvement Act
Single Source Justification Criteria Cited	**(4) Unique Qualifications**
Reclamation Point of Contact	Oliver (Towns) Burgess / Megan Bryant

OVERVIEW

The Central Valley Project Improvement Act (CVPIA) has led to the implementation of a Decision Support Model (DSM) to assist in the prioritization of CVPIA restoration actions. The

fall-run Chinook salmon DSM depends on a coarse-resolution salmon life-cycle model to predict the population benefits of different restoration actions and scenarios. One critical element of the life-cycle model is how to incorporate predation mortality during the juvenile rearing and outmigration portion of the salmon life-cycle. Of particular importance to potential restoration activities, is the predation mortality that occurs in proximity to, and as a result of "contact points" which are tentatively defined as physical structures (e.g. diversions, pilings) or hydrological features (e.g. scour holes, current breaks) that are the result of human alterations to the riverscape and are believed to locally increase the probability of juvenile salmon being predated upon.

Scientific disagreement exists regarding what is a predator contact point and if they can be restored in a way that increases overall juvenile salmon survival. The objective is to reduce these uncertainties with replicated field-based experiments designed to measure changes in survival following restoration or modification of predator contact points. A suite of different methodologies will be employed in concert to generate robust estimates of juvenile survival associated with potential contact points. The specific objectives are to 1) determine what physical and hydrological features warrant the designation of being a "contact point", 2) if predator contact points exist, generate estimates and the overall range of local juvenile salmon mortality rates that can be confidently attributed to the different types of contact points, and 3) determine whether restoration actions can be taken that will increase juvenile salmonid survival.

RECIPIENT INVOLVEMENT

The UCSC Principal Investigator (PI), and staff will conduct the field work, data collection, data management, analysis of acoustic data and prototyping and construction of sampling equipment. The UCSC staff will also be responsible for the data entry and assisting with reports.

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

Objective #1: Contact Point and Study Site Selection

Objective #2: Field-Based Experiments

Objective #3: Analysis and Synthesis

Objective #4: Project Management

Deliverables:

- Annual Study plans
- Final analysis and synthesis report

RECLAMATION INVOLVEMENT

No substantial involvement on the part of Reclamation is anticipated for the successful completion of the objectives to be funded by this award. It is anticipated that Reclamation's involvement will consist of standard federal stewardship responsibilities such as monitoring project performance and technical assistance at the request of the recipient.

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:

Dr. Cyril Michel at the University of California, Santa Cruz (UCSC) and the Cooperative Institute of Marine Sciences (IMS) staff are uniquely qualified to carry out these particular objectives of the Assessing the Impacts of Different Contact Points on Predation-Related Mortality of Juvenile Chinook Salmon in the Sacramento-San Joaquin Delta 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 performing numerous studies on salmon predation, which will be further enhanced with new reporting measures in this project. UCSC-IMS staff have close to a decade of experience in measuring relative predation rates as well as estimating the predator density and relative predation rates in response to changing habitats and water conditions. The methods they have developed are robust and efficient for understanding the status and trend of salmonids in the Sacramento River and Bay-Delta.

STATUTORY AUTHORITY

Central Valley Project Improvement Act (CVPIA), Public Law 102-575, Title XXXIV Section 3406 (b)(1) 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: (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

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.