

NOTICE OF INTENT 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	
Funding Announcement	R11AS20014
Project Title	Monitoring Chinook Salmon Escapement in the Upper Sacramento River Basin
Recipient	Pacific States Marine Fisheries Commission (PSMFC)
Principle Investigator/ Program Manager	Not Applicable
Anticipated Federal Amount	\$2,743,347.00
Cost Share	\$ 880,440.00
Total Anticipated Award Amount	\$3,623,787.00
New Award or Continuation?	Continuation
Anticipated Period of Performance	Date of Execution through June 30, 2016
Award Instrument	Cooperative Agreement
Statutory Authority	Public Law 102-575, Title 34, Central Valley Project Improvement Act, Section 3406 (b)(16) and Section 3407 (e)
CFDA Number and Title	15.512 Central Valley Project Improvement Act, Title XXXIV
Single Source Justification Criteria Cited	(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;
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OVERVIEW

This is an ongoing monitoring project. Adult Chinook salmon spawning escapement surveys have been conducted in the Upper Sacramento River Basin since the early 1950s.

Pacific States Marine Fisheries Commission (PSMFC) is an interstate compact established by Congress in 1947 (P.L. 232, 61 Stat. 419) and adopted by several states, including California. The purposes of the compact are to promote better utilization of fisheries and to develop a joint program of protection and prevention of physical waste in its jurisdiction. PSMFC is governed by one or more representatives from each state and is supported by annual funds provided by member states. One of the objectives of PSMFC under the compact is to facilitate research and management projects relating to interstate fisheries.

Adult winter-run and spring-run Chinook salmon escapement monitoring programs in the Central Valley produce adult abundance and trend data that is used to evaluate the performance in region-wide recovery efforts. Specifically, these data are used for the following management purposes: provide a basis for

calculating a winter-run Chinook salmon juvenile production estimate and expected juvenile production for spring-run Chinook; monitor performance standards to evaluate the success of enhancement and restoration programs and temperature compliance measures; evaluate the contribution of hatchery fish to Central Valley populations; evaluate ocean and inland harvest; develop "gravel-to-gravel" lifecycle models to evaluate the cumulative effects of management strategies.

The monitoring activities of this agreement are part of the Reasonable and Prudent Actions (RPA) described by National Marine Fisheries Service in the biological opinion (BiOp) on long-term operations of the Central Valley Project (CVP) and California State Water Project (SWP). To maintain CVP operations, Reclamation must ensure these activities occur in order to comply with the Endangered Species Act. This project satisfies Reclamation's monitoring requirements under the BiOp and continues the baseline data collection needed to continuously assess the status of the species and effects of water operations and habitat improvement projects.

The primary objective of this project is to continue to monitor the annual abundance and distribution of adult winter-run and spring-run Chinook salmon returning to spawn in the Upper Sacramento River Basin.

RECIPIENT INVOLVEMENT

Under this cooperative agreement *Pacific States Marine Fisheries Commission (PSFC)* will perform the following tasks:

Task 1. Winter-run Chinook Carcass Survey

The Sacramento River winter-run Chinook salmon carcass survey will take place in Shasta County, from Keswick Dam at river mile (RM) 301 downstream to Cottonwood Creek (RM 273), beginning on or around May 1 and continuing through about the end of August. This area includes the majority of available spawning habitat for state and federally listed endangered winter-run Chinook salmon. Staff from the PSMFC and DFG will work cooperatively with U.S. Fish and Wildlife Service staff to collect and sample carcasses.

Standard carcass survey methods will be used:

- A. Collect all carcasses observed during the surveys using a long pole with a gig attached.
- B. Tag fresh carcasses in the upper jaw, and tag non-fresh carcasses in the lower jaw if they are deemed suitable for tagging (i.e., not too decayed).
- C. Collect data, including mark status, gender, tag status, carcass condition, spawning status, fork length, and disposition, from all or a subset of carcasses handled.
- D. Collect biological samples, including head, fin tissue, and scales, from a subset of carcasses handled during the survey.
- E. Regularly conduct quality control reviews of data throughout the survey season.

Aerial redd surveys will be conducted, as feasible, on a weekly basis throughout the winter-run spawning season.

Task 2. Spring-run Chinook Escapement Surveys

In Deer, Antelope, and Mill creeks, methods involving direct counts of pre-spawning (holding) salmon or spawning redds will be used to obtain indices of abundance to assess population trends and to assess holding/spawning distributions.

In Deer Creek and Antelope Creek, underwater snorkel counts will be made to collect data to assess abundance, holding distribution, and biological condition. Snorkel counts have been used consistently since 1989. To make annual data comparable between years, the creek will be surveyed during the same Julian week each year using consistent sampling reaches. In each creek, the entire known spring-run Chinook holding habitat is divided 2 to 4 mile reaches. A team of up to 3 experienced observers, wearing a mask and snorkel, float in a downstream direction and count holding adult salmon.

Due to the abundance of salmon, it is not feasible to classify salmon to age class. All pool, glide and deep riffle habitat is surveyed. The maximum number of salmon observed per habitat unit is reported. In cases where observers obtain conflicting counts, the habitat unit is re-surveyed. Each creek is surveyed once per season to avoid excess harassment to holding salmon. Surveys will be conducted in August and September after the adult immigration period but before adult salmon leave the holding habitats to initiate spawning activity. Deer Creek has a total of 53 km (33 miles) of holding habitat and Antelope Creek has a total of 23 km (14 miles) of holding habitat. Spawning surveys are completed from late September thru mid-October. The same reaches used for the snorkel surveys are walked and complete redds and carcasses are counted. All carcasses are identified to sex, checked for spawning success and tags and otoliths collected. Experience has proven that scales are too embedded to make collections viable. Average holding fish to redd ratios are used for making the Mill Creek redd count expansion (see below).

In Mill Creek, redd counts will be conducted, standardized by conducting counts during the same Julian week annually. The 43.2 km (27 miles) of spawning habitat will be separated into reaches 2 to 4 miles in length. Surveys will be conducted the first two weeks in October, after the peak of spawning but before redds blend into surrounding substrate. The creek will be walked in a downstream direction by a team of two experienced observers wading in the water on opposite sides of the creek. The highest elevation spawning areas are surveyed first and the surveys progress downstream. The redd survey is a one-time pass. Each redd encountered must exhibit a complete pit and tail-spill to be counted and reported. Practice redds are recorded but not used for the redd count expansion. All carcasses encountered are processed as described above.

Task 3. (Optional task pending availability of funding) Fall-run and Late-fall-run Chinook Escapement Surveys

In the mainstem Sacramento River, fall and late fall-run Chinook salmon carcass surveys will take place in Shasta County, from Keswick Dam at river mile (RM) 301 downstream to Princeton. This area includes the majority of available spawning habitat for fall and late fall-run Chinook salmon. The surveys collect both mark-recapture data and biological data from all observed carcasses.

In-tributary fall-run Chinook surveys, including Clear, Mill and Deer Creek(s) weekly surveys will be made beginning one week after the commencement of spawning activities. These surveys will continue until all fish are spawned out. In each tributary the known fall-run Chinook spawning habitat will be surveyed, including 4.2 miles of Clear Creek, and 4.5 miles of Mill Creek, and 6.2 miles of Deer Creek.

Video monitoring stations will be used to monitor fall-run Chinook escapement into Battle, Cow, Cottonwood, and Bear creeks. Video monitoring stations use an overhead camera and partial weir to video salmon passing unrestricted under the camera area. Each station uses a partial weir to funnel the fish to an opening in the weir where fish pass over a white plate which allows video reviewers to count fish 24-hours each day. Video stations are typically installed in late August and are removed in early December, or prior to the start of major flooding.

RECLAMATION INVOLVEMENT:

Reclamation anticipates substantial involvement for the successful completion of the tasks to be funded by this award. In particular, Reclamation will be responsible for the following:

Participate with PSMFC to develop survey timing and methods and to survey reaches,

Review and provide feedback on draft reports for incorporation into final reports,

Report results of monitoring activities at required water operations biological opinion review events,

Utilize the boats obtained under this agreement, when available, for upper Sacramento River fishery and restoration monitoring activities, and

Use the information obtained to design salmonid habitat restoration projects in the upper Sacramento River basin.

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 on the following criteria:

(2) Continuation –

Pacific States Marine Fisheries Commission (PSMFC) has been conducting activities in partnership with the California Department of Fish and Game (and funded by DFG) for a number of years. The staffs of the two organizations have been formed specifically to meet the requirements of the activity. PSMFC staff is skilled in the completion of the required tasks.

PSMFC has previous experience working with Reclamation on another agreement for the purpose of implementation of the Constant Fractional Marking program for production releases of fall-run Chinook salmon at Coleman National Fish Hatchery and Nimbus Hatchery, to evaluate the various aspects of the hatchery programs on salmon recovery.

PSMFC non-participation in this project would have a significant adverse effect on the continuity of the activity.

STATUTORY AUTHORITY

SECTION 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:

(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.

SECTION 3407 – RESTORATION FUND.

(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.