

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	09SS200036
Project Title	Riparian Habitat Establishment Model Parameter Evaluation Study
Recipient	University of California at Davis
Principle Investigator (if applicable)	Dr. James H. Richards Department of Land, Air and Water Resources
Total Anticipated Award Amount	\$143,938.00
Cost Share	None Required
New Award or Continuation?	New
Anticipated Length of Agreement	16 months
Anticipated Period of Performance	Date of Execution through July 30 th , 2010
Award Instrument	Cooperative Agreement through the Cooperative Ecosystems Studies Unit (CESU) Program
Statutory Authority	Public Law 108-361, California Water /security and Environmental Enhancement Act, Section 103
CFDA Number	15.533
Single Source Justification Criteria Cited	Justification Criterion (4) (Unique Qualifications) of the Department of Interior Single Source Policy Requirements
Reclamation Point of Contact	Maria E. Castaneda, mcastaneda@mp.usbr.gov , at (916) 978-5148

OVERVIEW

The Bureau of Reclamation, Mid pacific Regional, Division of Planning (Reclamation), intends to award a cooperative agreement with University of California at Davis (UCD) to conduct field an laboratory studies on soil-water relations of riparian vegetation (cottonwoods) to assist Reclamation in calibrating and validating the Riparian Habitat Establishment Model (RHEM). The anticipated length of the agreement is 16 months. This agreement will be awarded through the Cooperative Ecosystem Studies Unit (CESU) Program.

The riparian vegetation studies will provide new scientifically valid data for understanding the factors affecting the growth of riparian vegetation throughout North America. The data produced by this study will also be used in RHEM to perform evaluations of the potential for the riparian habitat sustainability and restoration in California's Central Valley watersheds. This modeling will also benefit of the CalFed Bay Delta Program, CVPIA and other current and future river restoration efforts throughout the western United States.

RECIPIENT INVOLVEMENT

Under this cooperative agreement UCD shall undertake and complete a field and laboratory studies needed to evaluate soil-water-nutrient relationships necessary to develop parameters for use in the RHEM computer model.

Specific Activities include:

- Rhizopod experiments to verify previous cottonwood studies
- Effects of Tube Size and Water Oxygenation on Cottonwoods
- Effects of Nitrogen Source and Atmospheric CO₂ Concentrations on Maximum Cottonwood Growth Rates
- Effects of Heat and Light Stress on Cottonwood Seedlings
- Response of Whole Plant Transpiration and Photosynthesis to Soil Water Content

UCD shall provide task reports and a final report documenting the methodologies, progress and results. Reclamation and UCD principle investigators will also prepare and submit one or more papers for publication in peer reviewed journals as well as make presentations at scientific conferences.

RECLAMATION INVOLVEMENT:

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

- Collaborating with UCD on the design of the field and laboratory experiments to insure that the study results shall provide the information necessary to calibrate and validate the RHEM model.
- Reclamation shall perform simulations of riparian vegetation to calibrate and validate RHEM based on the information provided by UCD from the field and laboratory studies.
- Reclamation shall co-author with UCD one or more publications for submission to peer reviewed scientific journals.

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

Dr. Jim Richards is an expert on soil-plant-water relations associated with agricultural and native vegetation including numerous scientific publications in this research area. His previous collaborations with Dr Tansey (Reclamation co-PI) have already yielded useful information for simulating riparian vegetation establishment. Dr. Richards is also a faculty member of the Department of Land, Air and Water Resources which has both the field and laboratory facilities

necessary to perform the scope of work. Additionally, the proximity of UCD to the Reclamation Mid Pacific regional office greatly facilitates the collaboration necessary for the successful completion of this research.

STATUTORY AUTHORITY

The authority for this agreement is set forth by Public Law 108-361: California Water Security and Environmental Enhancement Act, Section 103 Bay Delta Program, (d) Description of Activities Under Applicable Law, (6) Ecosystem Restoration, (A) In general – Activities under this paragraph consist of-, **(x) scientific evaluations and targeted research on program activities**