



NOTICE OF INTENT TO AWARD

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

ABSTRACT	
Funding Announcement	USGS-17-FA-0280
Project Title	Groundwater Exploration and Assessment in the Republic of Costa Rica
Recipient	New Mexico State University
Anticipated Federal Amount	\$625,000
Cost Share	N/A
Total Anticipated Award Amount	\$625,000
New Award or Continuation?	New Award
Anticipated Period of Performance	Two Years
Award Instrument	Cooperative Agreement
CFDA # and Title	15.808
USGS Point of Contact	Saud Amer, samer@usgs.gov

OVERVIEW

Costa Rica is experiencing drought in populated areas of the country, in particular the northwestern part of the country. A cooperative agreement will be established with New Mexico State University (NMSU) to conduct a detailed economic assessment of groundwater development and use for the Republic of Costa Rica. This project is designed to provide country-wide groundwater exploration and assessment in Costa Rica. The cooperators will work together sharing data and information in the areas of remote sensing, hydrogeologic and economic assessment of groundwater development and use, capacity building, and technology transfer. This project furthers the application of remotely sensed groundwater exploration (WATEX) to identify potential water resources in Costa Rica.

RECIPIENT INVOLVEMENT

In this research, the Recipient will:

- Apply the Water Exploration Remote Sensing Tool (WATEX) to reveal areas of potential groundwater wells in Costa Rica, and
- Build on the WATEX analysis and findings, in conjunction with a country-wide hydrogeology assessment of Costa Rica, to conduct a detailed economic analysis of the sustainable economic use patterns of two high-priority basins identified by the WATEX and the hydrogeologic analysis.

USGS INVOLVEMENT

Substantial involvement on the part USGS is anticipated for the successful completion of the objectives to be funded by this award. In particular, USGS will be responsible for the following:

- Assist with remote sensing analysis, introduce the remote sensing tool for water exploration (WATEX), and coordinate with Costa Rican partners assessment strategies using geospatial hydrologic analysis, algorithm development, preparing written reports and online data dissemination;
- Identify, acquire, process, and interpret remotely sensed data from several satellites including Landsat, orbital radar and Shuttle Radar Terrain Mission (SRTM) to delineate areas of interest and classify each site and sub-site for potential water resources;
- Acquire ancillary data, including rainfall, topographical maps, and geologic, seismic, geomorphologic and hydrogeologic data to help interpret the remotely sensed data.
- Calibrate and validate the interpretation of the remotely sensed data by collecting field data;
- Coordinate NMSU research activities with Costa Rican partners, and;
- Monitor performance by NMSU.

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.
- (6) Cooperative Agreements - USGS Unique Authority cited at 43 U.S.C. 36d (Federal, State, and academic partners) or DOI Authority cited at 43 U.S.C. 1457b (not-for-profit organizations).

USGS did not solicit full and open competition for this award based the following criteria:

- (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.

Single Source Justification Description:

NMSU is a land-grant university serving the educational needs of New Mexico’s diverse population through comprehensive programs of education, research, extension education, and public service. NMSU serves as a leader in research in areas of natural resource sustainability and is recognized on a global level for their hydrogeological research and groundwater assessment programs of study.

NMSU is uniquely qualified to perform the required services for this project. NMSU has the unique combination of hydrogeology expertise and water quality expertise required for this project and has extensive groundwater research experience within the Central American region specifically within Costa Rica. The NMSU carries a worldwide respect in their hydrogeological research and groundwater assessment programs of study.

STATUTORY AUTHORITY

22 U.S.C. Section 2357 and 43 U.S.C. Section 36d, which authorizes the USGS to enter into cooperative agreements directed towards a particular cooperator, in support of joint research and data collection activities with Federal, State, and academic partners funded by appropriations herein, including those that provide for space in cooperator facilities.