



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-19-FA-0102
Project Title	Improving Resilience for the Rio Grande Coupled Human-Natural System: Analyzing Evapotranspiration Dynamics in the Rio Grande/Río Bravo Basin
Recipient	University of Oklahoma
Anticipated Federal Amount	\$67,764
Cost Share	\$0
Total Anticipated Award Amount	\$67,764
New Award or Continuation?	New award
Anticipated Period of Performance	4/1/2019 through 3/31/2020
Award Instrument	Cooperative Agreement
CFDA # and Title	15.820 National Climate Adaptation Science Center/Climate Adaptation Science Centers
USGS Point of Contact	Carolyn Enquist, Acting Director, Email: cenquist@usgs.gov Michael Langston, Deputy Director, South Central Climate Adaptation Science Center, Phone: (405)334-7164, Email: mlangston@usgs.gov

OVERVIEW

This project will estimate evapotranspiration across the Rio Grande/Bravo basin (RGB), including temporal and geographic variations due to changes in land cover, temperature, and precipitation, using values from the literature and a standardized reference equation for calculating evapotranspiration. These estimates will be incorporated into a unique systems model, developed in earlier phases of this project, that integrates social and environmental impacts on the hydrology of the river. The model will then be used to calculate evapotranspiration for the entire RGB, which is currently not available. The resulting model and its output will be important features of a planned 2020 Rio Grande/Rio Bravo Forum.

RECIPIENT INVOLVEMENT

The recipient involvement includes development of (1) a geospatial database of crop coefficients and drivers of change in ET across the RGB; (2) a parameterized and validated simulation model for calculating the effects of land/water management on crop patterns, streamflow, and water availability in the RGB; and (3) maps of ET in the RGB displaying change in ET over space and time under different land cover, temperature, and precipitation settings. All project results will be made publicly available through the USGS data portal. These findings will enable better comprehension of the variations in hydrological processes (specifically agricultural water consumption) over space and time in this diverse watershed and to help address water scarcity in the region.

USGS INVOLVEMENT

Substantial involvement on the part of 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:

- Working closely with the project team to ensure that their work is disseminated to local resource manager in the Rio Grande Basin
- Connecting other modelers at sister agencies and organizations with the research team to disseminate their methods, unique data set, and findings.
- Working with the research team during the project to ensure their final product will be useful for the 2020 Rio Grande Forum.

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:

(6) Unique Qualifications

Single Source Justification Description:

This research team is uniquely qualified to complete this work because they developed the model that this project will refine. This highly specialized team has developed a novel and unique method for combining both social and physical parameters into a single systems model. They worked with other modeling teams, local managers and international treaty organizations to assemble a significant and previously non-existent data set that makes their work not only outstanding, but unique and difficult to reproduce.

STATUTORY AUTHORITY

Consolidated Appropriations Act of 2008, Div. F, Title I, P.L. 110-161, and
USGS Unique Authority cited at 43 U.S.C. 36d (Federal, State and academic partners)

§ 36d. Cooperative agreements: Notwithstanding the provisions of the Federal Grant and Cooperative Agreement Act of 1977 (31 U.S.C. 6301–6308), the United States Geological Survey is authorized to continue existing, and on and after November 10, 2003, to enter into new 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.