



**National Park Service
U.S. Department of the Interior**

NOTICE OF INTENT TO AWARD

This Funding Announcement is not a request for applications. This announcement is to provide public notice of the National Park Service (NPS)'s intention to fund a Task Agreement against an existing Master Agreement.

ABSTRACT	
Funding Announcement	NPS-NOIP15AC01364
Project Title	National Park Service- Monitoring channel change and sediment dynamics within Big Bend National Park, 2016.
Recipient	Utah State University
Total Anticipated Award Amount	\$86,462
Cost Share	<i>None Required</i>
Anticipated Length of Agreement	Through June 30, 2017
Anticipated Period of Performance	Through June 30, 2017
Award Instrument	Cooperative Agreement (task award)
Statutory Authority	<i>54 U.S.C. §100703, Cooperative Study Units</i>
CFDA # and Title	<i>15.945, Cooperative Research & Training Programs</i>
Point of Contact	Katie Gaertner, Grants Management Specialist

OVERVIEW, RECIPIENT AND NPS SUBSTANTIAL INVOLVEMENT

The Utah State University (USU) will collaborate with the National Park Service (NPS) to develop and test a geomorphic monitoring protocol for the Big Bend reach of the Rio Grande, survey Rio Grande cross-sections to monitor geomorphic change. Survey reaches include: 6 km upstream from Rio Grande Village, where vegetation is mechanically removed, 2.5 km upstream from Cottonwood Campground near Castolon, TX, and 1.5 km near the Solis takeout where vegetation is unmanaged, using surveys, summarize rates of channel narrowing that have occurred since a large flood in September 2008, compare rates of geomorphic change among vegetated reaches and reaches where non-native vegetation is removed, maintain pressure transducers in the three study reaches to accurately obtain water-surface measurements and water surface slopes in these reaches and calibrate 1-dimensional hydraulic models, maintain all acoustic instrumentation, automatic pump samplers, and stage sensors associated with suspended-sediment monitoring of the Rio Grande and its

tributaries. This is done with oversight by the USGS GCMRC, initiate investigation of the geomorphic history of Boquillas Canyon from the Entrance Bar (IBWC river mile 805.5) to Site 14 (IBWC river mile 788.5). Develop flow models and stage discharge relations at selected sites, deliver according to the attached schedule, progress reports and final report including description of methods, project maps, cross sections, measurements of channel width in the vegetation treatment reaches and non-treatment reach, geomorphic changes observed at monitoring cross sections in the Castolon and Rio Grande Village reaches, stage-discharge rating relations collected from the USGS gages, pressure transducers, and stage plates, the calibrated 1-dimensional hydraulic models for all three reaches, raw data, and field notes. GIS data will be provided in NAD83 datum.

Substantial involvement on the part the National Park Service (NPS) is anticipated for the successful completion of the objectives to be funded by this award. NPS staff will assist with the geomorphic monitoring protocol development and testing, BIBE will provide a technical advisor and CHDN will provide a coordinating advisor, in conjunction with the cooperator, participate in document development, provide logistical support, such as equipment and supplies including the use of a government owned vehicles and boats if considered appropriate by NPS staff

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

The cooperator is a member of an established Cooperative Ecosystem Studies Unit (CESU) network, and was awarded a Cooperative Agreement (P14AC00921) allowing USU to participate in specific tasks, and can provide the necessary activities involved in this particular task while providing an effective outcome for the National Park Service and the research and/or education project. Three members of the Cooperative Ecosystem Studies Unit (CESU) network were considered for this award and the USU was selected based on the continuation of an existing project. Additionally the PI, Jack Schmidt, is a leading expert in the field of the geomorphology of large arid rivers.