



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-20-FA-0017
Project Title	Creating metrics to map and classify palm vegetation
Recipient	University of Maryland
Anticipated Federal Amount	\$49,500
Cost Share	N/A
Total Anticipated Award Amount	\$49,500
New Award or Continuation?	New award
Anticipated Period of Performance	May 1, 2020 through April 30, 2021
Award Instrument	Cooperative Agreement
CFDA # and Title	15.808 – Research and Data Collection
USGS Point of Contact	Sylvia Wilson, snwilson@usgs.gov

OVERVIEW

University of Maryland will work collaboratively with USGS and colleagues in the multi institutional remote sensing group in Guatemala (GIMBUT) on enhancing mapping of the conversion of pasture lands and natural forest to palm plantations. The work will build off ongoing efforts at University of Maryland in the generation of metrics for forest and non-forest lands in Guatemala. The project will monitor the rate of growth and conversion of lands to palm plantations and also discriminate between large scale oil palm plantations and small holdings on tropical peatlands using vegetation indices of Landsat 8 and Sentinel 1 data.

RECIPIENT INVOLVEMENT

University of Maryland will create some metrics that differentiate forest from palm plantations and natural palm forest. They will use methods that combine manually interpreted samples to

optimize an algorithm that can be used in combination with existing mapping efforts in Guatemala that look at forest land, non-forest land, other lands and forest loss and gain. University of Maryland will develop the methods and the metrics to monitor land conversion to palm plantation and transfer the capacity to the GIMBUT group to implement the algorithm in the coast of Guatemala.

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:

- input and revision of the classification scheme;
- revision of the training data;
- provide the link between the GIMBUT group in Guatemala and University of Maryland for organized transfer of the methodology and results;
- together with the GIMBUT group, contribute to the accuracy assessment and area estimation of the activity's areas in the final map; and
- contribute to a scientific publication.

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
- (6) Cooperative Agreements - USGS Unique Authority cited at 43 U.S.C. 36d

Single Source Justification Description:

(4) Unique Qualifications: This work includes the development of metrics that can be used in the forest cover change methodology that the University of Maryland will develop. The University of Maryland is responsible for generating the methodology and assisting the partners to implement their forest distinction methodology in house. The maps will be developed by University of Maryland, using a methodology created within their remote sensed and statistical team; therefore, they have the unique expertise to transfer the capacity to the partners.

STATUTORY AUTHORITY

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.