



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-0052
Project Title	Research on Mapping Forest Cover Change in Three Tropical Countries
Recipient	University of Maryland
Anticipated Federal Amount	\$325,000
Cost Share	N/A
Total Anticipated Award Amount	\$325,000
New Award or Continuation?	New award
Anticipated Period of Performance	February 1, 2017 – November 30, 2017
Award Instrument	Cooperative Agreement
CFDA # and Title	15.808 – Research and Data Collection
USGS Point of Contact	Sylvia Wilson, 703-648-4809

OVERVIEW

As part of the SilvaCarbon Initiative, the University of Maryland (UMD) will work with colleagues in governmental institutions in three countries (Nepal, Cameroon, and Guatemala) on enhancing land cover and forest monitoring in support of national carbon accounting programs. This work includes the development of forest extent and change maps from 2000 to present followed by product derivation and iteration.

RECIPIENT INVOLVEMENT

UMD will create a data time series by mining the entire Landsat archive from 2000 to present, including temporal metrics used in classification and change detection. UMD will also work with the three countries to install and test the methodology. UMD will work in collaboration with country partners on processing methods that include radiometric corrections, quality assessment, time-

integrated spectral feature derivation, characterization algorithms, integration strategies, product development and iteration, sampling schemes, and methods for validation. Annual forest cover disturbance maps will be generated by UMD for the three countries.

USGS INVOLVEMENT

Substantial involvement on the part of the USGS is anticipated for the successful completion of the objectives to be funded by this award. The project will be carried out in close collaboration with USGS researchers during the development of forest extent and change maps and product derivation and iteration.

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

Single Source Justification Description:

UMD has published the first global forest cover map using a Landsat mining time series methodology. These maps are the first to document forest loss and gain using a consistent method around the globe at 30m resolution. This product allows country practitioners and scientists to analyze forest changes and monitor annual deforestation. The global map has enough detail to provide local, regional, and global information. Partners in the countries of Nepal, Cameroon, and Guatemala have looked into different methodologies using time series systems as options to apply in their own national forest monitoring systems. However, none of the other methodologies are completely operational at a national level. UMD's research consists of applying its methods at the country level in Nepal, Cameroon, and Guatemala and working with country partners to replicate the work. This cannot be done without UMD's data pre-processing and classification algorithm and the computational power and tools they are providing.

STATUTORY AUTHORITY

43 U.S.C. Section 36d 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.