



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-0364
Project Title	Analysis and Visualization of Climate Information to Support US Fish & Wildlife Service Species Status Assessments
Recipient	North Carolina State University
Anticipated Federal Amount	\$184,420
Cost Share	\$0
Total Anticipated Award Amount	\$386,000
New Award or Continuation?	NEW
Anticipated Period of Performance	October 1, 2019 – September 30, 2021
Award Instrument	Cooperative Agreement
CFDA # and Title	15.820 – National Climate Change and Wildlife Science Center
USGS Point of Contact	<u>USGS Program Officer:</u> Ryan Boyles, Deputy Director, Southeast Climate Adaptation Science Center, rboyles@usgs.gov <u>USGS Grants Specialist:</u> Maylily (May) Son Le, Grants Specialist, mle@usgs.gov

OVERVIEW

This project will develop and test the efficacy of using a web-based collection of maps and data layers for interpreting climate vulnerability of wildlife and their habitats. Each map product will focus on the most relevant climate and ecology metrics that predict species viability for a location, and include explanatory and interpretive materials. Regular input from US Fish and Wildlife Service scientists will ensure the information is accessible, useful, and usable. The efficacy will be tested by implementing eye-tracking evaluations, surveys, and feedback sessions and iteratively applying these findings to the design and development of the tool. This web-based framework will help US Fish and Wildlife Service scientists in the Southeast US obtain, understand, and apply the climate information they need, thus enhancing the accuracy, quality, and scientific rigor of Species Status Assessments.

This project will produce a web-based collection of regional maps of past and current climate conditions relevant to species' biology and principal habitat, and a range of possible future outcomes from climate models. Technical documents and scientific manuscripts will be produced that communicate the results of user testing and information learned on how to design maps and environmental data visualization to better support Species Status Assessments.

RECIPIENT INVOLVEMENT

North Carolina State University (NCSU) will:

- Assess stakeholder needs;
- Analyze existing research on interpretation of climate data;
- Develop new visualizations;
- Test the efficacy of visualizations through tester feedback and eye-tracking;
- Develop and maintain for 2 years the resulting web tool; and
- Summarize results in a technical publication.

USGS INVOLVEMENT

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

- USGS Project Officers serve as co-investigators, will guide the exploration of climate sensitivities for targeted species and provide guidance on visualization of the climate variables.

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 - Recipient is uniquely qualified to perform the activities described above based upon a variety of demonstrable factors such as location, voluntary support capacity, cost-sharing ability, and technical expertise. The recipient has extensive experience designing and evaluating climate data visualization products and working with natural resource managers, so they are uniquely qualified to further develop products and applications that will address the needs of resource managers under this project.

STATUTORY AUTHORITY

Consolidated Appropriations Act of 2008, Div. F, Title I, P.L. 110-161

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.