



## 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                                 |                                                                                                                                                                              |
|------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Funding Announcement</b>              | USGS-20-FA-0073                                                                                                                                                              |
| <b>Project Title</b>                     | Predicting the effects of climate change on the spread of fire-promoting plants in Hawai'i: assessing emerging threats to rare native plants and ecosystems                  |
| <b>Recipient</b>                         | University of Hawai'i at Manoa (UH)                                                                                                                                          |
| <b>Anticipated Federal Amount</b>        | \$207,973.49                                                                                                                                                                 |
| <b>Cost Share</b>                        | \$0                                                                                                                                                                          |
| <b>Total Anticipated Award Amount</b>    | \$207,973.49                                                                                                                                                                 |
| <b>New Award or Continuation?</b>        | NEW                                                                                                                                                                          |
| <b>Anticipated Period of Performance</b> | 24 months from date of signature                                                                                                                                             |
| <b>Award Instrument</b>                  | Cooperative Agreement                                                                                                                                                        |
| <b>CFDA # and Title</b>                  | 15.820 - National Climate Adaptation Science Center/Climate Adaptation Science Centers                                                                                       |
| <b>USGS Point of Contact</b>             | Mari-Vaughn Johnson, Director, Pacific Islands Climate Adaptation Science Center, Email: mvjohnson@usgs.gov<br>Rachel Miller, Grant Specialist, Email: rachelmiller@usgs.gov |

## OVERVIEW

This project will help reduce harm caused by wildfires in Hawai'i by identifying fire-promoting invaders that can be eradicated before they spread widely, and by identifying rare native plants that are at high risk of burning in the future due to climate change, so that those plants or sites can receive special conservation attention. The project team will assemble information on the distribution and fire-promoting traits of recently naturalized or escaping plants in Hawai'i in order to generate a list of upcoming fire-promoting invaders that can be targeted for eradication and management now, before they spread widely in Hawai'i. The project team will also use modeling to predict how climate change will affect fire-promoting invasive plants and fire distributions, in relation to locations of rare and endangered native plant populations as well as cultural resources in Hawai'i. The main objective is to identify sites or rare native plant species in need of special fire management attention. The information will be

disseminated to conservation and cultural resource land managers to help implement wildfire management planning.

### **RECIPIENT INVOLVEMENT**

The UH researchers will gather, research, summarize, and distribute information to conservation and cultural resource land managers in Hawai‘i. The researchers will work with managers to co-produce final products, including: 1.) A list of potentially eradicable fire-promoting invaders with their known locations; 2.) A list of likely non-eradicable fire promoting species of highest concern, to help managers prevent their invasion into natural areas; 3.) Maps identifying areas of overlap between fire-prone plants and increased wildfire probability with climate change, and 4.) Maps identifying rare and endangered native plant populations as well as major cultural resources that are expected to be at the greatest risk from wildfire.

### **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. USGS, in particular the Pacific Islands Climate Adaptation Science Center (PI CASC) will be responsible for the following:

- Establishing best communication practices with resource managers;
- Facilitating conversations and information transfer activities within the regional CASC and the national CASC network;
- Coordinating with other related climate research projects in Hawai‘i and the Pacific Islands;
- Supporting co-production and useage of the resulting model with the Honouliuli National Monument.

### **SINGLE-SOURCE JUSTIFICATION**

| <b>DEPARTMENT OF THE INTERIOR<br/>SINGLE SOURCE POLICY REQUIREMENTS</b>                                                                                                                                                                                                                                                                                                                                                                                 |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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:<br><br>(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 on 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** – 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.

UH is uniquely qualified to perform the activities described above based on a variety of demonstrable facts, including technical expertise, established stakeholder relationships, and past project performance. UH has extensive experience in invasive species ecology and risk assessment, niche modeling theory and application, mapping and modeling fire distributions, and communicating risks and developing management plans with stakeholders. The research and work conducted under this project draws together ongoing research led by the project Principal Investigators. There is considerable support from appropriate stakeholders. This proposal team includes experts who have decades of climate, fire and invasive species management experience in the Hawaiian Islands.

**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.