

NATIONAL PARK SERVICE
FINANCIAL ASSISTANCE: NOTICE OF INTENT TO AWARD

This announcement is not a request for applications.

This announcement is to provide public notice of the National Park Service’s intention to award a task agreement under a previously competed or single source justified master cooperative agreement.

ABSTRACT	
Funding Announcement Number	P17AS00479
Project Title	Quantifying the effects of the 2016 Coyote Fire on fuel loading and forest structure in Guadalupe Mountains National Park
Recipient	Wesleyan University
Anticipated Federal Funding	\$30,000
Anticipated Period of Performance	7/20/2017-12/31/2018
Award Instrument	Task Agreement
Statutory Authority	54 U.S.C. §101702(a)
CFDA # and Title	15.944
Point of Contact	Katie Gaertner Katie_gaertner@nps.gov

BACKGROUND AND OBJECTIVES

Cooperative Agreement Number P17AC00919 was entered into by and between the Department of the Interior, National Park Service, (NPS), and Wesleyan University (hereafter referred to as ‘Recipient’) for the purpose of providing increased understanding of recent wildfire characteristics and of changes in vegetation and fuel patterns in relation to the May 2016 Coyote Fire in Guadalupe Mountains National Park (GUMO). Unless otherwise specified herein, the terms and conditions as stated in the Cooperative Agreement will apply to this Task Agreement.

STATEMENT OF WORK

On May 7th, 2016, a lightning strike ignited the northwest portion of GUMO near Coyote Peak. The Coyote Fire burned as a low to moderate severity surface fire for approximately two months across most of the high elevation mixed conifer forest in the park. While fuel loads at GUMO were high prior to this fire, the low to moderate intensity of the fire across the landscape was serendipitous, and fire managers at GUMO referred to this fire as a “good burn.” Thus, the Coyote Fire served as a natural fuel reduction treatment that reached almost the entire upland mixed conifer forest in the park.

The Coyote Fire burned through a network of permanent ($n = 73$) forest and fuels inventory plots that were established prior to the fire event by Poulos in 2009 and 13 NPS FIREMON plots that have already been resampled after the fire (in October, 2016).

The objectives of this task agreement are to use existing vegetation data and collect new data to: 1) evaluate the effects of low- to moderate-severity wildfire on the horizontal and vertical distribution of fuels across the GUMO landscape; 2) target future fuel reduction treatment implementation activities such as thinning and/or prescribed fire by identifying key locations where the Coyote Fire has resulted in new dead and down fuel load inputs that are in need of active fuels management; and 3) evaluate the relationships among fire severity, tree mortality, and dead and down fuel loading.

Information transfer to the public and other land managers will be a major component of this project.

The Coyote Fire was the first major fire in over a century in the Guadalupe Mountains. Public, private, and non-governmental organizations that manage Sky Island ranges such as the Guadalupe Mountains are concerned with fire and vegetation trends could directly use the information provided by this project to further their understanding of these systems and achieve their organizational goals. Results from this collaboration will be submitted for publication in a peer-reviewed scientific journal and will be presented at national and regional scientific conferences. These outreach activities provide opportunities for the scientific community to benefit from the research results by advancing knowledge about Sky Island fire ecology. Wesleyan University offers courses in forest ecology, conservation, and environmental science, and results from this project will be used in curriculum development to train the next generation of forest scientists, land managers, and policy makers. Wesleyan students will also be engaged in the project as field assistants in the post-fire data collection effort and data analysis.

RECIPIENT AGREES TO:

1. Use existing pre-fire vegetation, fire behavior (dNBR), and topography data to develop a predictive model that identifies the key characteristics influencing changes in forest stand structure and fuel loadings across the GUMO landscape.
2. Return to the existing vegetation plot network to sample post-fire live and dead and downed fuel loads to characterize changes in landscape-scale fuel load patterns after the Coyote Fire.
3. Submit a peer-reviewed journal article for publication in a scientific journal.
4. Produce a written report of the project activities with sufficient detail of data collection methods and data summaries to allow for the data to be used in other collaborations in the future and for the development of recommendations for fire management planning for GUMO.
5. Provide spatial and tabular data generated by the project to GUMO in mutually agreed upon standard formats.
6. Work cooperatively with NPS to translate the results of the project into forms that will increase land management, scientific, and public audience understanding of fire, climate, the landscape of the Sky Islands, and use of science in fire management

NATIONAL PARK SERVICE AGREES TO:

1. Work with the Recipient throughout the project to provide existing NPS data to be incorporated into the analysis products and to review analysis methods and reports.
2. Provide input into the project to ensure that data and analysis products are compatible with past efforts and will adequately address fire management needs at GUMO.
3. Provide assistance for the collection of field data as necessary to support the project.
4. Provide reimbursement of project costs in accordance with approved budget.
5. Analyze the effects of this project to ensure National Environmental Policy Act (NEPA) compliance, propose necessary mitigations, and process a NPS research permit for the project activities.
6. Work cooperatively with Wesleyan University to translate the results of the project into forms that will increase land management, scientific, and public audience understanding of fire, climate, the landscape of the Sky Islands, and use of science in fire management