

NATIONAL SCIENCE FOUNDATION
2415 Eisenhower Avenue
Alexandria, Virginia 222314



Mr. John M. Fowler, Director
401 F Street NW, Suite 308
Washington DC 20001-2637

December 5, 2017

RE: Section 106 Consultation for the Proposed Changes to Sacramento Peak
Observatory Operations, Sunspot, New Mexico, Invitation to Participate

Dear Mr. Fowler,

The National Science Foundation (NSF) Directorate for Mathematical and Physical Sciences, Division of Astronomical Sciences has identified the need to divest several facilities from its portfolio to retain the balance of capabilities needed to deliver the best performance on the key science of the present decade and beyond. Sacramento Peak Observatory, in Sunspot, New Mexico, is one of those facilities. NSF has identified four Action Alternatives, one of which includes potential deconstruction of the facility. The decision regarding the potential changes to operations of the Arecibo Observatory in Puerto Rico is considered a federal undertaking and triggers compliance with Section 106 of the National Historic Preservation Act (NHPA). While engaging in Section 106 consultation under NHPA, NSF is simultaneously proceeding with its environmental review under the National Environmental Policy Act (NEPA) to identify potential environmental impacts associated with the proposed changes to operations. NSF is currently preparing a Draft Environmental Impact Statement (EIS) that evaluates potential environmental impacts of the following alternatives:

- **Alternative 1** – Continued science- and education-focused operations by interested parties with reduced NSF funding
- **Alternative 2** – Transition to partial operations by interested parties with reduced NSF funding
- **Alternative 3** – Mothballing of Facilities
- **Alternative 4** – Demolition and site restoration
- **No-Action Alternative** – Continued NSF investment for science- and education-focused operations

Documents and meeting materials related to the NEPA and NHPA process are posted at www.nsf.gov/AST as they become available (click on “AST Facilities- Environmental Reviews”).

The Section 106 consultation thus far has included the following communications:

Action	Date	Details
Intensive Architectural Survey at the Sacramento Peak Observatory	January 26–27, 2015	Historic built environment resources were evaluated for potential eligibility for listing in the NRHP, both individually and as a potential historic district. The evaluation included all facilities that were more than 45 years old at the time of the survey. A total of 65 architectural resources constructed in or before 1970 (and owned by NSF) were identified as extant within the APE and were evaluated for NRHP-eligibility.
Public Scoping Initiated	July 5, 2016	NOI was published in the <i>Federal Register</i> . A copy of the NOI was sent via email to potential stakeholders from federal, tribal, state, and local government agencies, as well as other organizations including universities, elected officials, and other potentially interested parties.
Public Scoping Notice	July 7, 2016	A notice of the public scoping meeting letter was mailed to the SHPO and ACHP.
NEPA Public Scoping Meeting	July 21, 2016	Public meeting held in Alamogordo, New Mexico. NSF provided an opportunity for individuals and organizations to express an interest in participating as Section 106 consulting parties. Three individuals expressed interest.
SHPO Response to the NEPA Public Scoping Letter	July 22, 2016	SHPO stated that the Alternatives have the potential to adversely affect historic

		<p>properties and that their office did not have a record of a historic building survey being conducted at the Sacramento Peak Observatory. SHPO encouraged NSF to initiate Section 106 as soon as possible and stated an interest in reviewing the DEIS.</p>
<p>Email to Potential Consulting Parties</p>	<p>July 28, 2016</p>	<p>NSF contacted the three individuals who had expressed interest in Section 106 consultation during the NEPA public scoping meetings to provide further details about the Section 106 consultation process and to confirm their consulting party status for the Proposed Action. Parties were given until August 11, 2016, to confirm their interest in consulting party participation. A response was received from one individual, Mark Klaene of the Apache Point Observatory, who requested to be a Consulting Party.</p>
<p>Initiated Section 106 Consultation with SHPO, Request Concurrence on APE and Determinations of Eligibility, Transmit Reports</p>	<p>August 24, 2016</p>	<p>NSF requested concurrence with the APE and the determination that there are two telescopes at the Sacramento Peak Observatory that are individually eligible for listing in the NRHP and that the Sacramento Peak Observatory is eligible for the NRHP as a historic district. NSF also requested concurrence that there are no known archaeological sites on the Sacramento Peak Observatory site. The letter initiated formal Section 106 consultation with the New Mexico SHPO. The package included transmittal of two reports: <i>Cultural Resources</i></p>

		<i>Evaluation, National Solar Observatory (Sacramento Peak Observatory), Sunspot, New Mexico (CH2M, 2015) and the Archaeological Survey of 36 HA for AURA Inc. at the National Solar Observatory, Sunspot, Otero County, New Mexico, January 1995 (Shields, 1995).</i>
Email from USFS to NSF	September 14, 2016	USFS acknowledged that NSF would serve as the lead federal agency for the proposed undertaking and agreed to serve as a Consulting Party.
Email from SHPO to NSF regarding APE	September 15, 2016	SHPO concurred with the proposed APE and concurred that the Alternatives have the potential to adversely affect historic properties. SHPO requested that Historic Cultural Preservation Inventory (HCPI) forms be completed for the 65 architectural resources built in or before 1970.
Conference Call with SHPO and USFS	September 15, 2016	Discussed the SHPO response received earlier that day. NSF agreed to complete HCPI forms for 65 architectural resources.
Initiate Tribal Consultation	December 2, 2016	Consultation letters were sent to four tribes: Mescalero-Apache Tribe, Hopi Tribe, Pueblo of Zuni, and Nation Fort McDowell Yavapai.
Tribal Consultation	December 12, 2016	The Hopi Tribe provided the following response: "No historic properties significant to the Hopi Tribe affected."
HCPI Forms Submitted to SHPO	December 20, 2016	Per SHPO's request, NSF submitted the HCPI forms for 65 architectural resources for review via the New Mexico Cultural Resources

		Information System on December 19, 2016. The next day, NSF also transmitted hard copies of the completed HCPI Base Forms, including a cover letter requesting concurrence on NSF's determinations of eligibility.
Conference Call with USFS	January 10, 2017	NSF and USFS discussed the USFS's comments on cultural resources and determinations of eligibility. USFS requested to be copied on all future correspondence with SHPO and also requested copies of the HCPI forms. NSF provided the USFS with electronic copies of the HCPI forms.
SHPO Letter to NSF regarding a request for additional information	January 18, 2017	SHPO acknowledged receipt of the HCPI forms. Additionally, following a November 2016 site visit and discussions with USFS, SHPO determined that the Observatory's significance is as a historic district and noted that determining individual significance of any features or structures is not recommended. SHPO also noted that certain additional landscape features such as roads, open spaces, playground, wells, retaining walls, and historic archaeological foundations should be considered as elements of the historic district and recommended that NSF document these landscape features on Laboratory of Anthropology Forms and prepare an expanded historical context for the Observatory.
Conference Call with USFS	February 14, 2017	NSF discussed the APE and

		HCPI forms with USFS, in preparation for the conference call with SHPO on February 15, 2017.
Conference Call with SHPO regarding APE	February 15, 2017	NSF, USFS, and SHPO participated in a teleconference to discuss the revised proposed APE and path forward for Section 106 consultation. SHPO submitted a letter to NSF, dated March 1, 2017, to summarize the call.
Conference Call Summary from SHPO	March 1, 2017	SHPO stated that no further archaeological survey work would be required but recommended that the APE be the same as the Compound Area defined in the Land Use Agreement. SHPO requested that NSF consult with the USFS regarding revisions to the HCPI forms and documentation for the additional landscape features. SHPO also noted that an MOA will be required to resolve adverse effects.
Continued Tribal Consultation Efforts	March 1, 2017	NSF left a voicemail for the Kiowa tribe to inquire if the tribe has an interest in the Sacramento Peak Observatory area.
Conference Call with USFS	March 24, 2017	NSF discussed the APE and Section 106 consultation approach with USFS.
Conference Call with USFS	March 31, 2017	NSF discussed the HCPI forms and APE with USFS. USFS disagreed with NSF's approach for completing the HCPIs and the associated determinations of eligibility.
Conference Call with USFS	April 10, 2017	NSF discussed USFS's edits to the HCPI forms. USFS agreed that NSF's approach for the determinations of

		eligibility was sufficient for Section 106 purposes. NSF agreed to add the name of relevant architects to the HCPI forms where appropriate.
Revised HCPI Forms Submitted via NMCRIS	April 27, 2017	Following additional coordination with USFS and SHPO, the HCPI forms were revised to include additional information regarding the primary architects for the site. The revised forms were resubmitted to the SHPO via NMCRIS.
Continued Tribal Consultation Efforts	April 27, 2017	NSF sent an email to the Kiowa tribe to inquire if they have an interest in the Observatory area and if they would like to receive copies of the DEIS and/or be involved during the Section 106 consultation process.
Revised HCPI Forms Submitted to USFS	April 28, 2017	NSF sent electronic versions of the revised HCPI forms to the USFS along with the draft cover letter to SHPO, for reference and review.
NSF Letter to SHPO regarding revised APE and Determination of Eligibility	June 29, 2017	NSF requested SHPO concurrence on the revised APE and the determination that the Sacramento Peak Observatory is eligible for the NRHP as a historic district, containing 63 contributing resources, including two individually eligible telescopes.
Email from NSF to SHPO regarding request for concurrence	June 29, 2017	NSF contacted SHPO by email to confirm that the request for concurrence on the APE and NRHP eligibility was received.
Continued Tribal Consultation Efforts	May 18, 2017	NSF called the Zuni, Mescalero Apache, and Yavapai tribes to inquire if

		they were interested in participating in consultation efforts described in the December 2, 2016 consultation letter. Pueblo of Zuni provided email address and requested to be provided any updates. Voicemails were left for the Mescalero Apache and Yavapai tribes.
Concurrence from SHPO on Determinations of Eligibility	July 11, 2017	SHPO concurred that the Sacramento Peak Observatory is eligible for the NRHP as a historic district with 63 contributing resources, including two individually eligible telescopes. SHPO requested that heliport landing area should be included as a contributing resource and that a HCPI form should be completed to document the resource. SHPO did not concur with the proposed APE, but recommended that it be defined as the larger Compound Area (also referred to as the overall property limits) identified in the NSF and USFS land use agreement.
Assessment of Effects Submitted to SHPO, USFS, and APO	October 31, 2017	NSF sent email and hard copies of the Assessment of Effects to SHPO, USFS, and APO for review.

We are attaching, in Enclosure 2, copies of the above correspondence. Also note that SHPO letters and the Assessment of Effects are posted on the NSF public website referenced above.

Per 36 CFR 800.11, we would like to formally invite your participation in this Section 106 process and invite your early review of the enclosed preliminary draft PA. The regulations also specify documentation requirements, which we believe are fully addressed in the enclosed

Proposed Changes to Sacramento Peak Observatory Operations: Historic Properties Assessment of Effects (Assessment of Effects), as described below:

1. Description of undertaking - please see *Section 1.1, Definition of Proposed Undertaking, Section 1.2, Proposed Alternatives Background, and Section 1.3, Proposed Alternatives Description* in the enclosed Assessment of Effects, with the APE described in *Section 1.4*
2. Description of steps taken to identify historic properties - please see *Section 1.4, Area of Potential Effects, and Section 1.5, Methodology* in the enclosed Assessment of Effects
3. Description of historic properties - please see *Section 2, Identified Historic Properties*, in the enclosed Assessment of Effects
4. Undertakings effect on historic properties (adverse) - please see *Section 3, Assessment of Effects*, in the enclosed Assessment of Effects
5. Explanation of why the effects are adverse - please see *Section 3, Assessment of Effects*, in the enclosed Assessment of Effects
6. Copies or summaries of views provided by the public and consulting parties - please see Enclosure 2 for SHPO letters and Enclosure 3 for comments relating to cultural resources that were submitted during the scoping period (one comment was submitted), as well as any responses from tribes.

I will follow up with your office shortly to discuss your anticipated participation. If you have any questions, please contact me by phone at 703-292-4592 or by email at cblanco@nsf.gov. We look forward to further consultation with you on this proposed undertaking.

Regards,



Caroline M. Blanco
Federal Preservation Officer
Assistant General Counsel
Office of the General Counsel

Cc (via email): Ms. Charlene Vaughn, ACHP
Ms. Susan M. Pierce, Deputy West Virginia SHPO

Enclosures:

- (1) *Proposed Changes to Sacramento Peak Observatory Operations: Historic Properties Assessment of Effects*
- (2) *Consultation record*
- (3) *Scoping comments relating to cultural resources (1) and correspondence with tribes*