



*National Science Foundation*

# **SACRAMENTO PEAK**

## **OBSERVATORY**



NSF Environmental Impact Statement and Section 106 Consultation for Proposed Changes to Sacramento Peak Operations

# Scoping Meeting

New Mexico Museum of Space History, Alamogordo, NM, 6:00 - 8:00 PM

# Sacramento Peak Observatory Environmental Impact Statement (EIS) Scoping Meeting: *Overview*

- Introduction of team members
- Background information
- The preliminary proposed alternatives and resource areas to be studied
- The EIS process
- Public Comments



# The Role of NSF

- The National Science Foundation (NSF) is the federal steward for ground based astronomy and solar physics.
- NSF provides funding for national and international telescopes and facilities and provides funding for research grants that allow individuals and groups to conduct specific science investigations.



# Ground-based solar astronomy

- The Sacramento Peak Observatory is operated by the National Solar Observatory (NSO) through a cooperative agreement with the Association of Universities for Research in Astronomy, Inc. (AURA).
- In fiscal year (FY) 2016, the NSF provided ~\$2.1M to operate Sacramento Peak Observatory.
- NSF funding for Sacramento Peak Observatory is through the Division of Astronomical Sciences (AST).
- The NSO and AURA are currently constructing the Daniel K. Inouye Solar Telescope (DKIST; formerly known as ATST) on Haleakala, Maui, Hawaii funded by the NSF.



# The future of NSF facilities

- Over the past decade NSF has received advice from external review committees.
- The 2010 decadal survey: *New Worlds, New Horizons in Astronomy and Astrophysics* stated:

“NSF-Astronomy should complete its next senior review ... so as to determine which, if any, facilities NSF-AST should cease to support in order to release funds for (1) the construction and ongoing operation of new telescopes and instruments and (2) the science analysis needed to capitalize on the results from existing and future facilities.”



# Solar facility recommendations

- The 2010 report's recommended review of the AST portfolio was carried out in 2012.
  - 2012 Portfolio Review: *Advancing Astronomy in the Coming Decade: Opportunities and Challenges*
- Regarding the Sacramento Peak Observatory the 2012 review stated:

“AST and NSO should plan for the continued use of the Dunn Solar Telescope (DST) as a world-class scientific observatory, supporting the solar physics community, **to within two years of ATST first light**, as well as utilize it as a test bed for development of critical ATST instrumentation.”



# NSF plans moving forward

- Given previous community recommendations combined with current budget constraints, NSF has a need to reduce funding levels for a number of its astronomical telescopes and facilities.
- The NSF is initiating the EIS/Section 106 consultation process for the Sacramento Peak Observatory.



# EIS/Section 106 Consultation

- The **purpose of the EIS** is to evaluate potential effects of proposed changes to operations at Sacramento Peak Observatory in Sunspot, New Mexico.
- The **purpose of the EIS scoping process** is to seek public input regarding relevant issues that will influence the scope of the environmental analysis, including identifying viable alternatives to be analyzed.
- The **Section 106 consultation process** requires federal agencies to consult with interested parties and the State Historic Preservation Officer regarding potential effects of their proposed actions on significant historic properties.





# EIS Preliminary Proposed Alternatives

- Continued NSF investment for science-focused operations (No-Action Alternative);
- Transition to full operations with interested parties for solar astronomy research;
- Transition to partial operations with interested parties, and decommissioning or mothballing of facilities not proposed to be used;
- Mothballing of facilities limited to basic maintenance;
- Deconstruction and site restoration.



# EIS Resource Areas to Be Analyzed

- Air quality
- Biological resources
- Cultural resources
- Geological resources
- Solid waste generation
- Health and safety
- Socioeconomics
- Traffic
- Groundwater resources.



# EIS/Section 106 Process and Estimated Timeline

The EIS is a public process, and comments received during the public comment periods will be considered by NSF as part of its decision-making process

- Following the scoping period, a **Draft EIS** will be prepared (anticipated **Winter of 2016**).
  - Once released, a 45-day public comment period will occur and another public meeting will take place.
  - A Section 106 consultation meeting will also occur at this time during which any potential adverse effects on significant historic properties would be identified. If any are identified, NSF will work with Consulting Parties and the SHPO to identify measures to avoid, minimize, and/or mitigate such effects and document those measures in a Memorandum of Agreement.
- After the close of the 45-day public comment period, a **Final EIS** will be prepared (anticipated **mid-Summer of 2017**).
- A **Record of Decision** will be issued (target: **September 2017**, but subject to change).
- **No decisions have been made at this point!**

