



National Science Foundation

**GREEN BANK**  
OBSERVATORY



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## **Consulting Parties Meeting**

**Section 106 of the National Historic Preservation Act**

**Green Bank Science Center  
June 28, 2018, 3:00—5:00 pm**



# Public Meeting Overview

- Introductions
- Status/process update
- Summary of Historic Properties at GBO
- Discussion of Draft Programmatic Agreement
- Next Steps

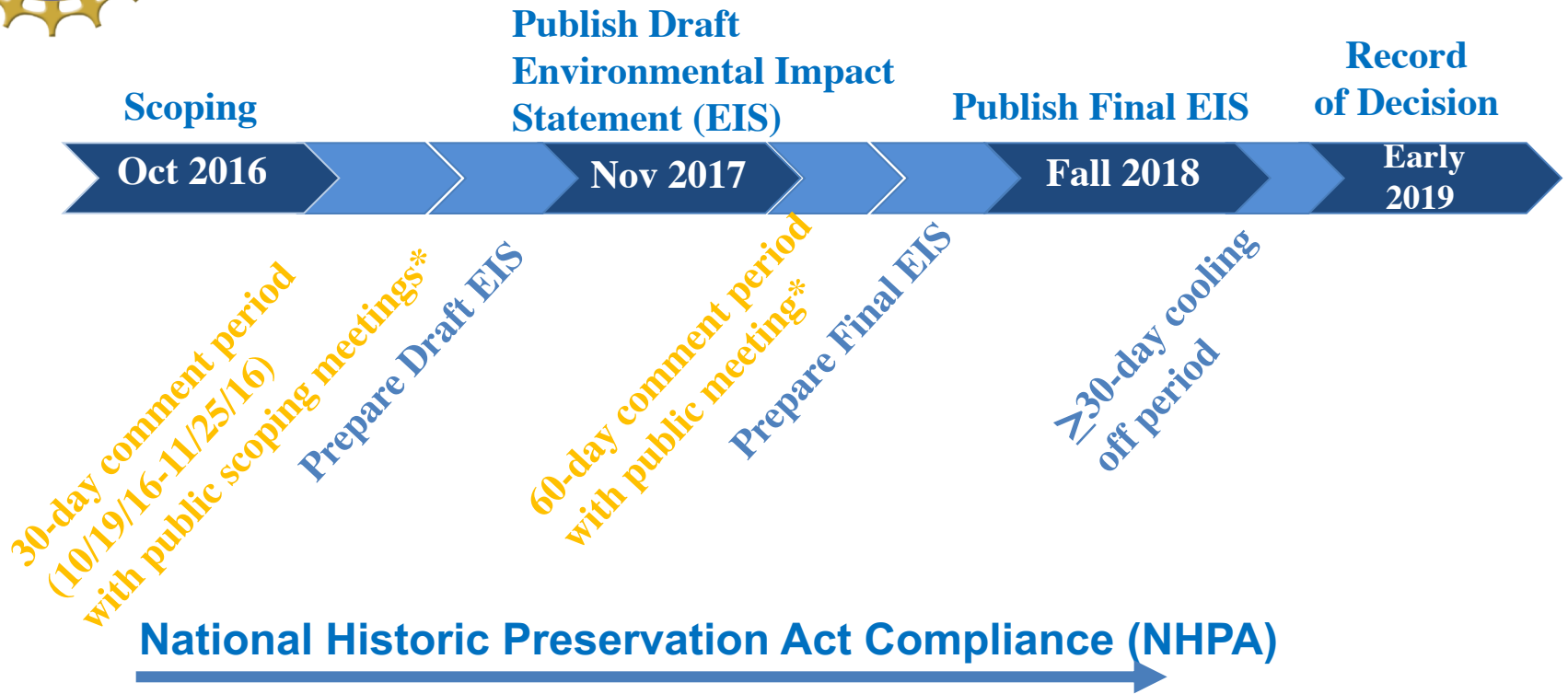


# Introductions

<b>Representative</b>	<b>Role</b>
<b>National Science Foundation: Federal Agency</b>	
<i><b>Harshal Gupta</b></i>	Program Director for Green Bank Obs.
<i><b>Elizabeth Pentecost</b></i>	Project Management Administrator
<i><b>Caroline Blanco</b></i>	Assistant General Counsel/Federal Preservation Officer
<i><b>Kristen Hamilton</b></i>	Environmental Compliance Officer
<i><b>Karen Pearce</b></i>	Senior Legislative Affairs Specialist
<b>CH2M HILL/JACOBS: Environmental Contractor</b>	
<i><b>Lori Price</b></i>	Senior Cultural Resources Consultant
<i><b>Jessica Wobig</b></i>	Cultural Resources Specialist



# Environmental Review Schedule



**Endangered Species Act Compliance (completed March 2017)**

*\*All comments on cultural resources received during the scoping and DEIS public comment periods are also being considered during the NHPA process.*



# Alternatives Evaluated in the DEIS

**Preferred Alternative\***

- A. Collaboration with interested parties for continued science- and education-focused operations with reduced NSF funding**
- B. Collaboration with interested parties for operation as a technology and education park
- C. Mothballing of facilities
- D. Demolition and site restoration
- No-Action: Continued NSF investment for science-focused operations

*\*Note that the viability of the Preferred Alternative is dependent on the availability of qualified collaborations determined through a parallel NSF process.*



# Section 106 of the National Historic Preservation Act

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 historic properties\*.

1. Initiate Section 106 consultation
2. Identify Area of Potential Effects (APE) and historic properties within the APE
3. Assess whether there are adverse effects
4. Resolve any adverse effects

*\*Historic properties are defined as those that are eligible for inclusion in or listed in the National Register of Historic Places (NRHP).*





# NRHP-Eligible Historic District

Green Bank Observatory (GBO) is an NRHP-eligible Historic District under Criteria A and C, and Criteria Consideration G

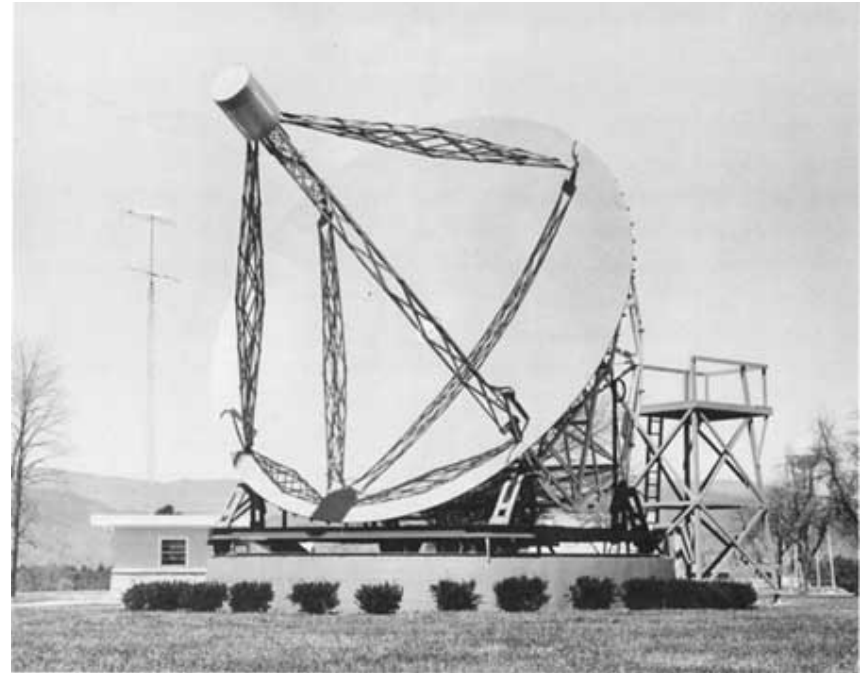
- Historic District has a total of 44 contributing resources including:
  - One National Historical Landmark
    - Reber Radio Telescope
  - Four telescope instruments that are also individually eligible for the NRHP
    - Interferometer Range
    - 40-foot Telescope
    - 43-meter Telescope
    - Green Bank Telescope (GBT)

An adverse effect was determined due to the potential demolition of NRHP-eligible resources under some Alternatives.



# Reber Radio Telescope

- Built by Grote Reber in 1937
- First parabolic antenna for radio astronomy
- Located at the entrance to GBO in 1959-60
- NRHP listed 1972
- National Historic Landmark 1986



Reber Radio Telescope at Green Bank, 1962  
Image Used Courtesy of National Radio Astronomy Observatory





# NRHP-Eligible Telescopes

## Individually Significant



Images clockwise from top left: Green Bank Interferometer, 40-foot Telescope, GBT (2.3-acre collecting dish), 43-meter Telescope

- Built 1958 to 2000
- Associated with the early history of radio astronomy in the U.S. and subsequent discoveries
- Demonstrate significant engineering and design



# GBO Historic District

## Contributing Resources

- Built 1958 to 2000
- Associated with the early history of radio astronomy in the U.S. and subsequent discoveries.
- Collection of administrative structures, residential buildings, and radio astronomy equipment, includes several mid-19<sup>th</sup> to early 20<sup>th</sup> century dwellings.



Images Left Row from Top: Calibration Horn, Ewen-Purcell Horn, Hannah House. Images Right Row from Top: Karl Guthe Jansky Replica Antenna, 45-foot Telescope, Administrative Building Type.



# Draft Programmatic Agreement

- Purpose: to determine appropriate measures to cover a range of potential outcomes
- Contents:
  - Whereas Clauses
  - Stipulations- Preservation Principles
  - Stipulations- General Provisions
  - Signatory Pages



# What's Next?

- 30-day public comment period (through July 14<sup>th</sup>)
- NSF to address comments in next version of PA
- Once finalized, NSF will distribute PA for signatures



Thank you for your  
participation!



Information and materials are posted at:

[www.nsf.gov/AST](http://www.nsf.gov/AST)

*Click on “AST Facilities- Environmental Reviews”*

NSF Point of Contact:

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