

NPS Geospatial Analysis of Proposed Solar Energy Program Lands



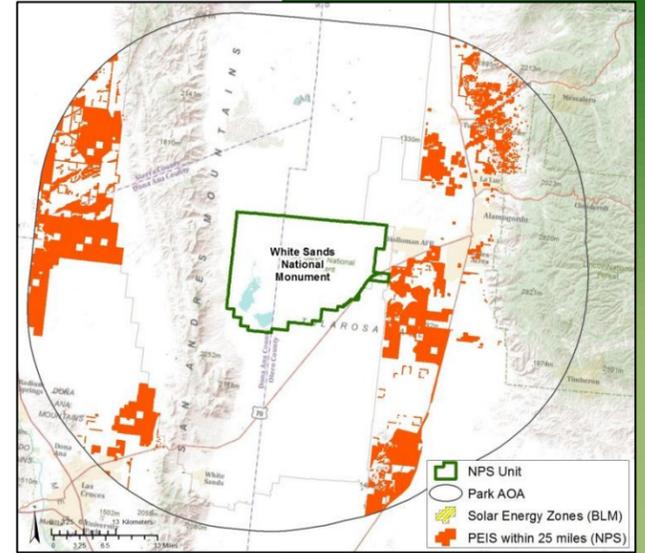
This chart describes: A) NPS analysis of resource conditions on PEIS lands adjacent to parks; and B) the determination of potential resource conflicts and recommend exclusions.

Area of Analysis (AOA)

- Identified PEIS Lands within 25 mile radius around NPS Units
- NPS Units – 53
- National Historic Trails - 6

Resource Data

- Obtained best available GIS data
- Matrix – Potential Resource Conflicts



AOA – Solar PEIS lands White Sands NM

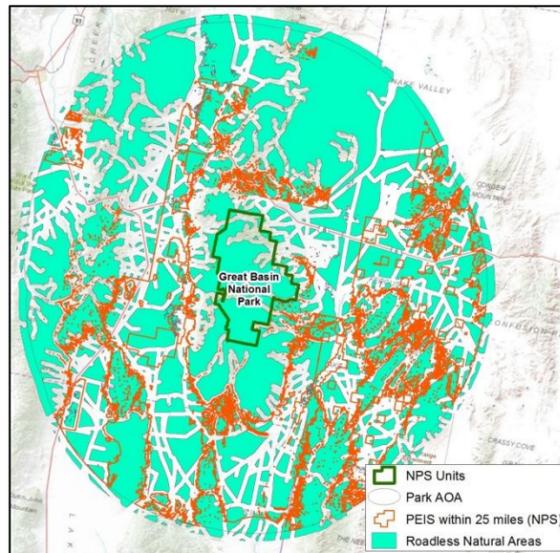
Potential Resource Conflict / Geospatial Data	Air Quality	Cultural Landscapes	Fugitive Dust	Flood Potential	Habitat Connectivity	Habitat Quality	Historic Integrity	Landscape Fragmentation	Scenic Views	Visitor Experience	Water Quantity	Water Quality	Wildlife Migration	Wildlife Mortality
Critical Habitat					X	X		X					X	
Land Ownership		X			X		X	X					X	
Landscape Permeability		X			X			X					X	X
Naturalness Index		X				X		X						
Nighttime Lights						X	X		X	X				
Protected Areas					X	X	X	X						X
Roadless Natural Areas	X	X	X		X		X	X	X				X	X
Upstream Watersheds				X							X	X		
Viewsheds		X					X		X	X				
Water Erodibility (Soils)				X	X	X					X	X		
Wetlands				X		X					X	X		
Wind Erodibility (Soils)	X		X		X	X								

Resource Matrix Appendix A

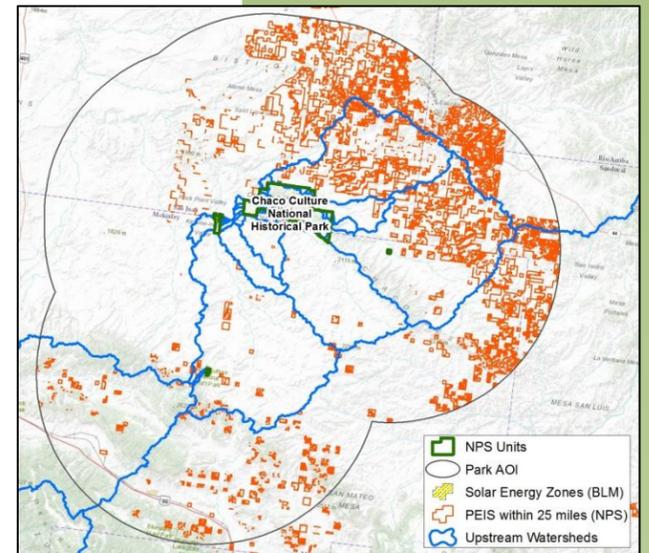
Resource Conditions

- Distributed GIS Data & Resource Maps (Appendix B)

- Critical Habitat
- Land Ownership
- Landscape Permeability
- Naturalness Index
- Nighttime Lights
- Protected Areas
- Roadless Natural Areas
- Upstream Watersheds
- Viewsheds
- Water & Wind Erodibility (Soils)
- Wetlands



Roadless Natural Areas Great Basin NP



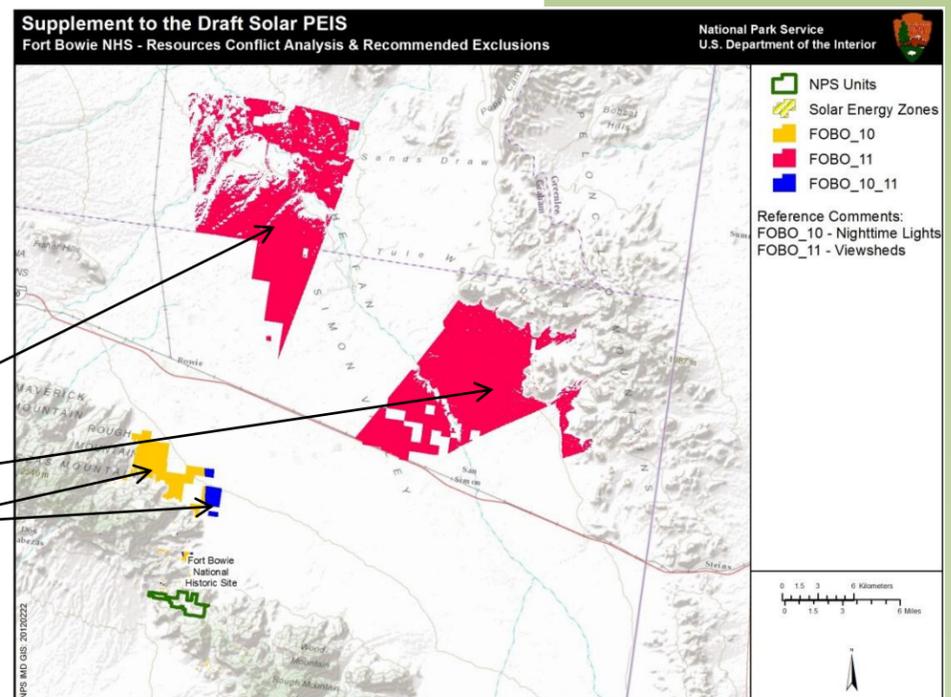
Upstream Watersheds Chaco Culture NHP

Resource Conflict Analysis

- Parks identified areas of potential resource conflicts within their AOA
- GIS polygons represent discrete single or combinations of multiple resources that reflect a high potential for conflict.

NPS_Exclusions				
PARKCODE	NIGHTTIME	VIEWSHEDS	Reference ID	Recommend
FOBO	<Null>	Yes	FOBO_11	Exclusion
FOBO	Yes	Yes	FOBO_10_11	Exclusion
FOBO	Yes	<Null>	FOBO_10	Exclusion

- Resource conflicts are annotated to reference the Spatial Reference ID provided in park narratives in Appendix A.



Resource Conflict Analysis & Recommend Exclusions – Fort Bowie NHS

Current Status

- Submitted January 27th to BLM
 - 34 NPS Units and 6 National Historic Trails requested exclusions
 - Overall NPS recommends 3.8 million acres be excluded from the Solar PEIS
- Continued discussion with BLM

Park Name: Fort Bowie NHS (FOBO)		
Resource of Concern	Spatial Reference ID #	Resource Conflict Justification
Nighttime Lights	FOBO_10	All lands 10-15 miles from the park have significant night sky values for the park. Variance lands north and south of the park for 20 miles from the park are in an area of particular dark skies too. Lands further to the northwest have night sky potential impacts for the park but lie closer in alignment with a significant light source in that direction. NPS requests areas north and south of the park be excluded, and that BLM considers the lands to the northwest of the park as acceptable to NPS if adequate light mitigation is applied.
Viewshed	FOBO_11	Narrow cones of viewshed exist to the north-northeast from the park, intersecting variance lands proposed for Solar development. These areas would be of lower priority from a viewshed sense than the lands identified below but they still maintain their value as high priority night sky lands. Two variance areas immediately west-northwest of the park lie within 1-4 miles of the park boundary and are within the viewshed from the park. We would expect potentially significant viewshed impacts from these lands, as the utility scale solar development would be a unique, large, man-made structure, with possible great reflectance potential visible by park visitors. We request those areas be excluded.

Fort Bowie NHS Exclusion Narrative