National Park Service
U.S. Department of the Interior

Natural Resource Stewardship and Science

NPS Identified Areas of High Potential for Resource Conflict

Resource Condition Maps

ON THE COVER

Upper Left - Desert tortoise with telemetry radio attached to its carapace, Zion National Park. Credit NPS Photo
Upper Right - Landscape view of cryptobiotic soil at Canyonlands National Park. Credit NPS Photo
Center - Eureka Dunes, Death Valley Wilderness, Death Valley National Park. Credit J. Cipra, NRSS Office of Outreach and Education
Middle Right - Flooded dunes, White Sands National Monument. Credit D. Bustos, White Sands National Monument
Lower Left - Cavalry Barracks, Fort Bowie National Historic Site. Credit NPS Photo - K. Gonzales
Lower Right - Chaco Observatory with star trails, Chaco Culture National Historic Park. Credit NPS Photo

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Introduction

This document contains descriptions of the standard resource data layers (also referred to as Resource Conditions) used by NPS to determine potential conflicts with NPS-administered resources (see document Explanation of Resource Conflict Analysis and NPS-Identified Areas of High Potential for Resource Conflict) and area-specific maps depicting the proposed solar energy program lands and natural, visual and cultural resource conditions. The resource condition descriptions provide context for the application of these layers. Each statement provides a brief overview of the resource of concern, available data and source utilized, and utility of information for determining areas of high potential for resource conflict. Each resource condition layer displays the resource setting and the proposed Solar Energy Program lands, including variance and proposed SEZs. It is important to note that the data output represented by each layer is not a representation of resource impact; rather the key resource data layers represent a regional level representation of resource conditions. The information only provides an indication of potential for site-specific and/or cumulative development impacts and the need for further documentation for verifying the potential conflict. For some NPS units, additional, locally available information also applied to assist the determination of areas having a high potential for resource conflict is referenced in the area-specific narratives (see document NPS Identified Areas of High Potential for Resource Conflict – Area Specific). All digital information generated to produce the standard map layers contained in the following pages is available on the GIS Shapefiles page and on the NPS data store at https://irma.nps.gov/App/Reference/Profile/2175854

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Resource Condition Layer Context Statements

Wind Erodibility (Soils)
Resources of concern: Soils that are less resistant to blowing wind are more likely to contribute to airborne particulate loading, and the cumulative increased disturbance of these soils is likely to produce increased local and regional windblown dust. Increased windblown dust from disturbed arid soils is an air quality concern in terms of the $PM_{2.5}$ and PM_{10} health-based standards, as well as its contribution to regional visibility impairment. Cumulative windblown dust, both local and regional, has been found to be a significant contributor to visibility impairment on the 20% worst visibility days in Class I areas in the six state study area (reference is in specific Air Quality comments). The cumulative disturbance of soils susceptible to wind erosion could increase downwind particulate concentrations and contribute to visibility impairment in Class I areas, including national parks in the six state study area. The NPS is concerned with the development of variance lands for solar energy because: a) site controls may be successful at the project level, but less than fully successful for cumulative dust minimization over broad geographic areas; b) there will be increased surface disturbance and dust emissions due to expansion into roadless, pristine areas; and c) projects located in high wind areas will exacerbate a growing problem of airborne particulate pollution in protected airsheds of downwind national parks. Available data/source: The NRCS classifies the sensitivity of soils to wind erosion on the basis of the properties of the soil surface layer. There is a close correlation between soil blowing and the size and durability of surface clodiness, fragments, organic matter, and the calcareous reaction. (NSSH, part 618.72). The most sensitive soils are Wind Erodibility Groups 1 and 2 (NSSH, part 618.16, revised March 2008). These data are found at: *NRCS STATSGO Soil Data*. Wind Erosion sensitive soil criteria were obtained from BLM Rapid Ecological Assessments for the Mojave Basin and Range. High wind erosion potential occurs at locations with Wind erosion groups (WEG) 1 and 2. WEGs were derived from the whole soil, surface layer and all components. NRCS STATSGO Database May/2011 Sources: Natural Resources Conservation Service, United States Department of Agriculture. U.S. General Soil Map (STATSGO2). Available online at http://soildatamart.nrcs.usda.gov. Accessed May/2011 NPS utilized STATSGO (general soil) map coverage of 1:250,000 to ensure consistent data available for the six-state study area. Minimum map unit size delineation for these maps is 2,500 acres. More detailed 1:24,000 scale SSURGO coverage is not available for all areas of concern to NPS. Utility of information for determining areas of high potential for resource conflict: The NPS obtained NRCS STATSGO geospatial data and generated polygons for wind erodibility groups (WEG) 1 and 2 within 25-miles of NPS units. These areas were overlaid with variance and Solar Energy Zone areas and evaluated against the location of downwind national park areas. The NPS applied conservative assumptions that cumulative effects of utility-scale solar energy development on variance lands and within SEZs may not be fully mitigated. Park resource managers were provided the results of the GIS-analysis to assist them in identifying areas of high potential for resource conflict in light of airshed values and the potential for direct and indirect impacts from utility-scale solar development.

Water Erodibility (Soils)

Resources of concern:

Erosion factors are used to predict the erodibility of soils and its tolerance to erosion when subject to certain kinds of construction activities and land uses. Sensitive soils are those which are extremely susceptible to impact and difficult to restore and reclaim, including those with high erosion potential. Soils that are susceptible to altered water erosion rates would negatively impact stream channels, water quantity and quality, riparian community dynamics, as well as other affects to habitat needs of aquatic species. The NPS is concerned that site controls may be less than fully successful for minimizing soil erosion risk due to access to previously undisturbed lands. Site-specific and cumulative affects to resources need to be avoided which may result from increased water erosion rates.

Available data/source:

Water erosion sensitive soil criteria were obtained from BLM's Rapid Ecological Assessments (REA) for the Mojave Basin and Range. Two data sources were used to derive soils prone to water erodibility: NRCS' STATSGO K Factor, and Slope derived from seamless 30 m digital elevation models (DEM).

In combining details of soil K-factors and slope, high water erosion potential occurs at locations with:

KW<0.20 & Slope > 40 or,

KW 0.20 - 0.36 & Slope > 35 or,

KW > 0.36 & Slope > 25.

For this process, K factor was derived from the whole soil, surface layers and all components. Sources: Natural Resources Conservation Service, United States Department of Agriculture. U.S. General Soil Map (STATSGO2). Available online at http://soildatamart.nrcs.usda.gov. Accessed May, 2011

NPS utilized the STATSGO (general soil) map coverage of 1:250,000 to ensure consistent data available for the six-state study area. The minimum map unit size delineation for these maps is 2,500 acres. More detailed 1:24,000 scale SSURGO soil map coverage is not available for all areas of concern to NPS.

Utility of information for determining areas of high potential for resource conflict:

Based on NRCS recommendations for calculating erosion potential and adopted BLM REA criteria, the water erosion potential of a given soil map unit was calculated as the product of the "K" factor, or the "soil erodibility index" and the percent slope. The NPS obtained NRCS STATSGO geospatial data and seamless digital elevation models for the analyses. Polygons depicting high water erosion potential areas were within 25-miles surrounding NPS units. These areas were then overlayed with variance and Solar Energy Zone areas and evaluated against their location relative to national park areas. The NPS applied conservative assumptions that cumulative affects of utility-scale solar energy development on variance lands and within SEZs may not be fully mitigated. Park resource managers were provided the results of the GIS-analysis to assist them in identifying areas of high potential for resource conflict in light of sensitive soil areas and the potential for direct and indirect impacts from utility-scale solar development.

Wetlands
Resources of concern: Wetlands, both jurisdictional and non-jurisdictional, are susceptible to impacts from solar energy development through changes in hydrologic regimes. This can result in wetland dewatering, hydroperiod changes, increased sedimentation, loss of connectivity to water sources, loss of obligate and facultative wetland vegetation species, drying of plant communities (e.g., conversion of wetland to upland), encroachment of exotic species, drying and oxidation (loss) of organic soils (peats, mucks), and damage to fish and invertebrate communities. The cumulative disturbance of wetlands would reduce biological diversity of species, including endemic, rare, threatened or endangered species in national parks. Such damages or losses can adversely affect the wetland-related visitor enjoyment and recreational opportunities for which parks were established, such as hiking, photography, wildlife viewing, boating, and fishing. The NPS is concerned with the development of variance lands for solar energy because: a) site controls may be successful at the project level but less than fully successful for cumulative impacts to wetlands over the desert environments of the six-state area, b) there will be increased sediment loading due to expansion into roadless, pristine areas, c) cumulative loss of hydrologic functions and ecological processes will exacerbate loss of endemic, rare, threatened or endangered species in national parks, and d) visitor enjoyment and recreational opportunities may be degraded or lost. Available data/source: U.S. Fish and Wildlife Service National Wetlands Inventory layer for the six-state Solar PEIS project area. From USFWS' Data limitations and uses documentation www.fws.gov/wetlands/Data/Limitations.html: The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery with limited ground truthing. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis. The minimum mapping unit is approximately one acre, so smaller wetlands are unlikely to be mapped. The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems. Wetlands or other mapped features may have changed since the date of the imagery and/or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site. Exclusions - Certain wetland habitats are excluded from the national mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include wetlands within heavily forested areas or sites with very steep slopes or overhangs. By policy, the Service also excludes certain types of "farmed wetlands" as may be defined by the Food Security Act or that do not coincide with the Cowardin et al. definition. Contact the Service's Regional Wetland Coordinator for additional information on what types of farmed wetlands are included on wetland maps. Precautions - Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory.

There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Maps prepared for the PEIS review depict USFWS National Wetlands Inventory Data with a 500 meter buffer applied to the wetlands data.

Date of information varies by location

Sources:
USFWS National Wetlands Inventory (NWI): http://wetlands.fws.gov

Utility of information for determining areas of high potential for resource conflict:
The NPS obtained USFWS NWI geospatial data and generated data with 500 meter buffer areas. These areas were overlaid with variance and Solar Energy Zone areas and evaluated against the location of national park areas and potentially sensitive park resources. The NPS applied conservative assumptions that cumulative effects of utility-scale solar energy development on variance lands and within SEZs may not be fully mitigated. Park resource managers were provided the results of the GIS-analysis to assist them in identifying areas of high potential for resource conflict in light of wetland values and the potential for direct and indirect impacts from utility-scale solar development.

Note about available NWI data: Several park units are in areas where the NWI inventories have not yet occurred (e.g., Arches, Canyonlands, and Glen Canyon). In these cases, the prepared NWI maps leave the impression there are no wetlands within the vicinity of a number of park units. As a Bureau we know there are wetlands in these areas, including those associated with seeps, springs, and riverine systems. Development proposed in areas where wetlands have not been delineated would need to be surveyed.

Upstream Watersheds
<u>Resources of concern:</u> Provision of fresh water is a key ecosystem service provided by many parks, and flowing water directly connects water resources inside and outside park boundaries. Landscape-scale activities beyond park boundaries can particularly affect water resources and the ability of parks to manage and protect these resources. Park upstream watersheds are potentially threatened by a number of landscape-level factors related to park-watershed geometry, land use development, habitat conversion, resource extraction, and deposition. In the majority of cases where parks do not directly control most of their watersheds, both physical and chemical stressors originating beyond park boundaries will likely affect water resources inside park boundaries. Watershed environmental factors potentially affected through site-based development include: sedimentation, nutrient enrichment, contaminant pollution, hydrological alteration, riparian clearing or canopy opening, and loss of large woody debris. The NPS is concerned that site controls occurring in parks' upstream watersheds may not address downstream impacts and implications. <u>Available data/source</u>: The process used ArcGIS Spatial Analysis Hydrology tools to delineate watersheds using 30 meter digital elevation model-derived flow accumulation and flow direction rasters and National Hydrography Dataset flowlines. Upstream watersheds were calculated for streams intersecting NPS park boundaries at calculated pour-points. These pour-points are snapped to the NHD flow accumulation raster then watersheds are delineated using the flow direction raster. Watersheds are subsequently converted to polygons and are joined to the source park boundary to provide park-level attributes. Data Sources utilized, include: National Hydrography Dataset – NHDPlus: <u>http://www.horizon-systems.com/NHDPlus/NHDPlusV1_home.php</u> Upstream Watershed SOP for NPScape: <u>https://irma.nps.gov/Reference.mvc/Profile?Code=2173077</u> NPS Administrative Boundaries (9/2010): <u>https://irma.nps.gov/Reference.mvc/Profile?Code=2170522</u> <u>Utility of information fordetermining areas of high potential for resource conflict</u>: Calculated upstream watershed polygons were intersected on variance lands and Solar Energy Zones to determine if any development of utility-scale solar facilities could potentially impact watershed environmental conditions. Park resource managers were provided the results of the GIS-analysis to assist them in identifying areas of high potential for resource conflict in light of upstream watershed values and the potential for direct and indirect impacts from utility-scale solar development.

Protected Areas

Resources of concern:

Proximity to adjacent lands with special protection designations (i.e., those lands managed to protect and preserve biodiversity) is an important measure for assessing a number of environmental conditions. Adjacent conservation lands provide a measure of resource protection from stressors on species that may move between parks and adjacent special areas, enhance visitor experiences and recreation opportunities, and ecological buffering capacity from trans-boundary impacts of external land developments. These conservation benefits are threatened by intervening development that may reduce naturalness, diminish roadless areas, increase landscape permeability, disrupt wetlands, influence habitat connectivity, and alter hydrological regimes of adjacent protected lands. The NPS is concerned that site controls occurring in intervening development areas that exhibit desirable connection with adjacent protection areas may not protect against degradations in connected landscapes.

Available data and sources utilized:

The protected areas map is derived from Protected Areas Database of the United States (PAD-US) version 1.2.
Polygons with one of two status values are displayed:
GAP Status 1: managed for biodiversity – disturbance events proceed or a mimicked
GAP Status 2: managed for biodiversity – disturbance events are mimicked

NPS administration boundary polygons were obtained from the NPS Land Resource Division in late 2011.
Protected Areas Database of the United States (PAD-US) version 1.2 (April, 2011): http://www.protectedlands.net/padus/

Database was developed by the PAD-US Technical Working Group. The group is a consortium of non-government and government researchers including representatives from the Conservation Biology Institute, the Nature Conservancy, NatureServe, the National Geographic Society, Applied Geographics, Inc., IUCN, Bureau of Land Management, USDA Forest Service, Virginia Department of Conservation, USGS GAP Analysis Program, and the US Geological Survey

Identified protected areas data set may not capture all protected areas.

Utility of information for determining areas of high potential for resource conflict:

Protected area polygons were intersected with variance lands and Solar Energy Zones to determine if any development of utility-scale solar facilities could potentially impact parks and adjacent protected areas. Proximity of development to adjacent protected areas increases the probability of trans-boundary impacts from intervening developed areas, where land currently absent of a development occurs. Park resource managers were provided the results of the GIS-analysis to assist them in identifying areas of high potential for resource conflict in light of adjacent protected area lands and the potential for direct and indirect impacts from utility-scale solar development.

Land Ownership
Resources of concern: The type and proximity of adjacent lands is an important measure for assessing environmental objectives in the vicinity of park units and collaboratively pursuing opportunities for maintenance of properly functioning natural landscapes. Land ownership data provides an indication of the potential for complementary regional landscape management and protection measures and key stakeholders in securing such measures. This information is generally applied at local, land-use planning levels. The NPS is concerned that availability of variance lands should be identified through local, land-use processes that incorporate detailed assessment of regional landscapes and address multiple stakeholder interests. The programmatic opening of vast tracts of public lands as variance lands, before local land-use assessment and planning processes are accomplished, places cumulative stressors on the landscape without benefit of adequate stakeholder analysis and input. Land ownership data may be paired with other landscape level information to evaluate the potential changes in cultural landscapes, habitat connectivity, habitat quality, wildlife migration and landscape fragmentation. Available data and sources utilized: The land ownership map is derived from the Protected Areas Database of the United States (PAD-US) version 1.2. NPS-sourced polygons were updated from the NPS Land Resource Division in late 2010. NPS administration boundary polygons were obtained from the NPS Land Resource Division in late 2011. Protected Areas Database of the United States (PAD-US) version 1.2 (April, 2011): http://www.protectedlands.net/padus/ Database was developed by the PAD-US Technical Working Group. The group is a consortium of non-government and government researchers including representatives from the Conservation Biology Institute, the Nature Conservancy, NatureServe, the National Geographic Society, Applied Geographics, Inc., IUCN, Bureau of Land Management, USDA Forest Service, Virginia Department of Conservation, USGS GAP Analysis Program, and the US Geological Survey Identified land areas may not capture all land ownership data. Utility of information for determining areas of high potential for resource conflict: Land ownership polygons were intersected with variance lands and Solar Energy Zones to determine if any development of utility-scale solar facilities could potentially impact parks and adjacent protected areas. Proximity of development to adjacent land management units increases the probability of multiple stakeholder interests in transboundary impacts from intervening developed areas, particularly where land currently absent of a development occurs. Park resource managers were provided the results of the GIS-analysis to assist them in identifying areas of high potential for resource conflict in light of the significance of adjacent landownership to park-managed natural and cultural resource values and the potential for direct and indirect impacts from utility-scale solar development.

Critical Habitat
Resources of concern: The representation of designated critical habitat areas for Threatened and Endangered species (T&E) is useful for determining the most critical areas for habitat connectivity. These habitats are often designated for their role as feeding or breeding areas at key points of the organism's life histories. A key element in the determination of vulnerability of these T&E species is the assessment of connectivity among their critical habitats, including connectivity between park boundaries and the critical habitats. Facility development within these areas will reduce resilience of populations within parks. Additional indicators of habitat intactness, including naturalness index, roadless area and landscape permeability factors, are applied to determine potential for conflict with critical habitat. The NPS is concerned that site controls for solar energy facilities occurring in important connectivity areas may not protect against degradations in connected habitats. There are also administrative and management considerations that are brought to attention through the critical habitat analysis, such as increased landscape fragmentation that could heighten the risk to sensitive species. Available data/source: The critical habitat map is derived from U.S. Fish and Wildlife Service Threatened and Endangered Species Final Critical Habitat Designations data base, maintained by the USFWS Endangered Species Division. The data source utilized for this map is: U.S. Fish & Wildlife Service Critical Habitat Portal http://criticalhabitat.fws.gov/crithab/ - Download August 3rd, 2011 Utility of information for determining areas of high potential for resource conflict: Although solar energy facilities would not be located in critical habitat areas (designated and proposed) under the proposed Solar Energy Program, the representation of critical habitat areas, in combination with naturalness index, roadless area and landscape permeability data, superimposed with variance lands and Solar Energy Zones enables a determination of the relative intactness of critical habitat corridors and isolation of protected species populations. Identification of the critical habitats provides some directionality to connectivity analyses for select species, or groups of species associated through habitat needs to the T&E species. The development of utility-scale solar facilities within important habitat connectivity corridors could potentially impact these species within NPS units. The presence of PEIS lands within proximity of critical habitats, adds to the multiple lines of evidence of other landscape-level data relating to important connectivity areas for these habitats, including roadless natural areas and landscape permeability, increasing confidence in the likelihood of impacts to protected species. The goal of such pairings was to evaluate how the critical habitats might change if neighboring utility-scale solar energy development were to occur. In these evaluations, critical habitat would be used as a surrogate for relative changes that might be expected with park-managed resources.

Roadless Natural Areas

Resources of concern:

Distance from roads as well as roadless areas are important measures for assessing a number of environmental conditions. Road metrics provide a measure of stressors on species that may move in and out of national park units and surrounding lands, such as direct mortality and behavioral changes (opportunities to cross roads, predator-prey relations). Areas with roads also provide conduits for invasive species, increased noise, light and chemical pollution, and affect soil erosion. Roadless areas also serve as a landscape pattern metric that relates to the size, shape, and frequency of habitat patches, as well as influencing the connectivity of natural areas. The NPS is concerned that site controls occurring in current roadless areas that exhibit desirable habitat qualities may not protect against degradations in connected landscapes. There are also administrative and cultural resource management considerations that are brought to attention through the roadless areas; increased access to the landscape could result in unauthorized access to park resources and heighten the risk to sensitive cultural resources as a result of vandalism.

Available data/source:

The process for deriving roadless areas replicates a Standard Operation Procedure outlined by the National Park Service Inventory and Monitoring Program's landscape dynamics project (NPScape). Roadless areas were calculated from an existing commercially-available transportation dataset (ESRI's Street Map, 2005). A Euclidean distance raster was calculated with a 30 M cell size snapped to an accompanying National Land Cover Database (NLCD, 2006) land cover raster. Cells greater than 500M from an existing road feature were selected, identified as "roadless" and then converted to polygon features. The NLCD land cover raster was re-classified into Converted vs. Natural land cover categories; converted classes are defined as Developed, Pasture/Hay, and Cultivated Crops. Polygons reflected converted land cover classes were then used to "erase" roadless area polygons to derive a final roadless natural areas dataset.

Data Sources utilized in the analysis include:
ESRI Streets layer; ESRI Map and Data DVD, dated 2005
Road Metric SOP for NPScape: https://irma.nps.gov/Reference.mvc/Profile?Code=2166959
National Land Cover Dataset (2006): http://www.mrlc.gov/nlcd2006.php
Landover Metric SOP for NPScape: https://irma.nps.gov/Reference.mvc/Profile?Code=2166956

Utility of information for determining areas of high potential for resource conflict:

Calculated roadless area polygons were intersected with variance lands and Solar Energy Zones to determine if any development of utility-scale solar facilities could potentially impact large tracts of land currently absent of a dissecting transportation network. Park resource managers were provided the results of the GIS-analysis to assist them in identifying areas of high potential for resource conflict in light of the significance of roadless natural areas to park-managed natural and cultural resource values, and the potential for direct and indirect impacts from utility-scale solar development.

Naturalness Index

Resources of concern:

The 'naturalness' index is predominantly a function of land cover type, housing density, roads, traffic volume, and to a lesser extent it also considers canopy cover and slope. Strictly speaking, the naturalness index data address the 'naturalness' of a landscape as a resource. In addition, the index may be used to evaluate the effects of anthropogenic development or disturbance on naturalness. For example, the naturalness of an area inside a park or protected area that presently has a high index value will decline if it is within 270 m of the new development, or within 1 km of a new road associated with the development. These thresholds reflect key parameters of the model used to estimate the naturalness index (Theobald et al., in press). As a result, the naturalness index is useful in situations where a park or other management unit is concerned with whether or how planned utility-scale solar energy development near its boundaries (< 1 km) might impact or erode the naturalness (integrity, intactness) of habitats inside its boundaries. The index may also be used with other landscape indices including land ownership, roadless areas, and viewsheds to evaluate whether development stressors threaten cultural resource landscapes.

Available data/source:

A number of data sources were utilized in the model to derive the naturalness index. Range of values resulting from the model are scaled from 0 to 1, where lower values are less natural and increasing values are more natural.

Sources utilized in the analysis and references include:
National Land Cover Dataset (2001 retrofit): http://www.mrlc.gov/nlcd2001.php
Housing Density: Theobald, D. 2005. Landscape patterns of exurban growth in the USA from 1980 to 2010. Ecology and Society 10(1):32
Roads: ESRI Streets, 2006, ESRI Maps and Data DVD.
Highway Traffic Volume: USDOT National Transportation Database 2007 CD.
Theobald (2010). Estimating natural landscape changes from 1992 to 2030 in the conterminous US. Landscape Ecology (25:999-1011).

Utility of information for determining areas of high potential for resource conflict:

The naturalness index raster was superimposed with variance lands and Solar Energy Zones to determine if any development of utility-scale solar facilities could potentially impact landscapes which according to modeled results indicate a high-degree of intact naturalness. NPS units having PEIS lands within proximity of their administration areas paired the naturalness index with other landscape-level data relating to important resources, including but not limited to roadless natural areas and critical habitats of species. The goal of such pairings was to evaluate how the underlying naturalness of the resources might change if neighboring utility-scale solar energy development were to occur. The naturalness index was also paired with other landscape indices to evaluate potential risks to cultural resources. In these evaluations, naturalness would be used as a surrogate for relative changes that might be expected with park-managed resources.

Landscape Permeability

Resources of concern:

The landscape permeability data are derived from the naturalness index (Theobald et al., 2012). Landscape permeability data are invaluable for evaluating possible connectivity post hoc among other resources. For example, the landscape permeability data might be used to evaluate connectivity between two patches of critical habitat or roadless natural areas, and how that connectivity might be altered by some intervening utility-scale solar energy development or related disturbances. The landscape permeability data are especially useful in situations where a park or other management unit is concerned with whether or how an anthropogenic, landscape-level disturbance might impact or disrupt connectivity of critical resources. The index may also be used with other landscape indices including land ownership, roadless areas, and viewsheds to evaluate whether development stressors threaten cultural resource landscapes.

Available data/source:

Landscape permeability measures depicting both local park unit and national level connectivity corridors were extracted for the six-state PEIS study area. Raw landscape permeability average flow accumulation values across the 30 model iterations were: 1) filtered using a three cell radius, 2) normalized using a log2 transformation, 3) converted to integer data type, and 4) all values less than seven were reclassified to -9999. Permeability values across the contiguous US range between 7 and 22; higher permeability values signify greater connectivity.

References to the datasets and modeling include:

Theobald D., Reed S., Fields, K., and Soule, M. (2012). Connecting natural landscapes using a landscape permeability model to prioritize conservation activities in the US. Conservation Letters (0:1-11).

Theobald (2010). Estimating natural landscape changes from 1992 to 2030 in the conterminous US. Landscape Ecology (25:999-1011).

Utility of information for determining areas of high potential for resource conflict:

The landscape permeability raster was superimposed with variance lands and Solar Energy Zones to determine if any development of utility-scale solar facilities could potentially impact landscapes which according to modeled results possess a high-degree of natural connectedness. NPS units having PEIS lands within proximity of their administration areas paired landscape permeability in relation to major habitats or land cover types, critical habitats of species, locations or movements of known species populations, genetic or molecular data on population structure, and other measures of landscape pattern (e.g., core habitat patches).. The goal of such pairings was to evaluate how the underlying connectivity of the resources might change if neighboring utility-scale solar energy development were to occur. The landscape permeability data was also paired with other landscape indices to evaluate potential risks to cultural resources.

Nighttime Lights

Resources of concern:

The NPS manages natural lightscapes for the benefit of both humans and ecosystems with a variety of tools. The quality of the night sky is an important resource, both due to its value to human aesthetics and the broader role it plans as a component of the natural habitat. As artificial light is added to a natural night sky via atmospheric scattering, the sky background becomes brighter and the contrast with natural features is reduced. At night, lights are usually seen from much greater distances than the attendant facilities are seen during the day. Even when directly screened by terrain, skyglow can still be seen as the light scatters and diffuses through the atmosphere. The NPS is concerned that development of utility-scale facilities occurring in variance areas without systematic analysis of nighttime light conditions may lead to unintended cumulative visual resource impacts and alteration of the natural light patterns found in the ecosystem.

Available data and sources utilized:

Composite images of nighttime lights are generated using the Defense Mapping Satellite Program – Operational Linescan System (DMSP-OLS) Nighttime Lights Time Series (version 4) to produce global cloud-free at 1-arc second resolution. The digital number values represent cleaned up average visibility values for cities, towns, and other sites including gas flares. The dataset does not include fires or other ephemeral events. Background noise areas are replaced with zero values. The DMSP sensor is not sensitive enough to register the widely scattered artificial light in the atmosphere; the light sources depicted in the images are the result of direct ground reflectance and a small amount of scattering in the vicinity of the light sources. Thus while this satellite imagery adequately captures the location and relative intensity of the light sources, it does not necessarily convey the extent of visible light in the atmosphere. Areas of the imagery shown as darker areas and those areas further from large light sources are predicted to have a darker and higher quality night sky condition.

Source data is found at Defense Meteorological Satellite Program: http://www.ngdc.noaa.gov/dmsp/dmsp.html

Utility of information for determining areas of high potential for resource conflict:

Images of cloud-free nighttime lights were generated for the 53 NPS units that are potentially impacted by the development of solar facilities within SEZs and variance lands within and beyond the 25-mile Area of Interest. The images were intersected with variance lands and Solar Energy Zones to determine if these lands fall within darker or lighter nighttime areas surrounding the park.

These images enable the NPS to gain a sense of the amount of artificial lighting in the external areas surrounding parks and augment ground-based measurements. The maps suggest that in many cases, dark night sky conditions extend well beyond 25 miles from the park. The analysis specifies existing skyglow conditions and where potential increases in artificial nighttime lights may occur coincident with solar development on variance lands. NPS units having PEIS lands within proximity of their administration areas identified as having darker nighttime light conditions need to be protected from the potential cumulative development of these lands for solar energy.

Viewshed

Resources of concern:

For many parks, scenic views that extend beyond park boundaries are an important component of the visitor experience. The expanse of these views is often inspirational and iconic of the American spirit and often an important reason why people visit parks. The type, form and contemplated density of utility-scale solar development in the west pose a broad range of unique impacts to these shared scenic landscapes, including alteration of vegetation and landform, release of fine dust, generation of optic effects (e.g., glint and glare), and light pollution. The NPS is concerned that shared scenic landscapes associated with variance lands and SEZs could be lost to this and future generations if their presence and value is not accounted for and protected under the solar energy program ultimately adopted by the BLM. Both site-specific and cumulative impacts of multiple facilities must be addressed via rigorous visual resource analyses to determine if the siting of utility-scale solar facilities near park boundaries and special status areas is in the public interest.

Available data and sources utilized:

In order to identify specific scenic views that extend beyond park boundaries, the NPS conducted a geographic information system (GIS)-based viewshed analysis that generated maps using individual park-identified Key Observation Points (KOPs). The KOPs delineated "visible/not visible" areas in a park to 25-miles beyond park boundaries. The intent of this "line of sight" analysis was to determine 1) which lands outside parks could be seen from these KOPs, and 2) the extent of the acreage of these lands. Note: This was not a definitive analysis and additional work is needed before it would be appropriate to authorize utility-scale solar facilities in proximity to NPS managed areas.

The GIS effort used traditional and composite viewshed analyses. Traditional viewshed analyses evaluate the visibility of locations in a binary manner (i.e., Visible/Not Visible) across an area of interest (AOI) from a single, defined observation point (e.g., the KOP). The AOI is the area for which the viewshed analysis is being performed. In order to correspond to the Draft Solar PEIS, the AOI for the NPS analysis consisted of a 25-mile area surrounding each of the 53 parks. A sample point is a location within the AOI that could potentially be visible from the KOP. For the purposes of this analysis, the sample point was a potential location of a solar energy facility.

Composite viewshed analyses combine the "seen areas" of multiple viewsheds that may be calculated from more than one KOP. A visible value in a composite viewshed implies that at least one of the sample points is visible from, at minimum, one of the KOPs. In this manner, the number of visible KOPs is recorded on a cell-by-cell basis across the AOI. Composite viewsheds are a quick way to synthesize multiple viewsheds into a single map, thus giving a cursory overview of the land areas visible from a park looking out beyond its boundary. In the case of this analysis, identified areas outside a park were visible from at least one of the KOPs.

In order to conduct these types of analyses, the following GIS data was used:

- National Elevation Dataset (NED) 30 meter digital elevation model
- Park defined KOPs
- National Register of Historic Places (Derived from a database of locations within park units)
- Spatially Balanced Sample Points - "Out - In" (ArcGIS - Theobald et al. 2007) https://irma.nps.gov/App/Reference/Profile/2176278

Utility of the derived information for determining areas of high potential for resource conflict:

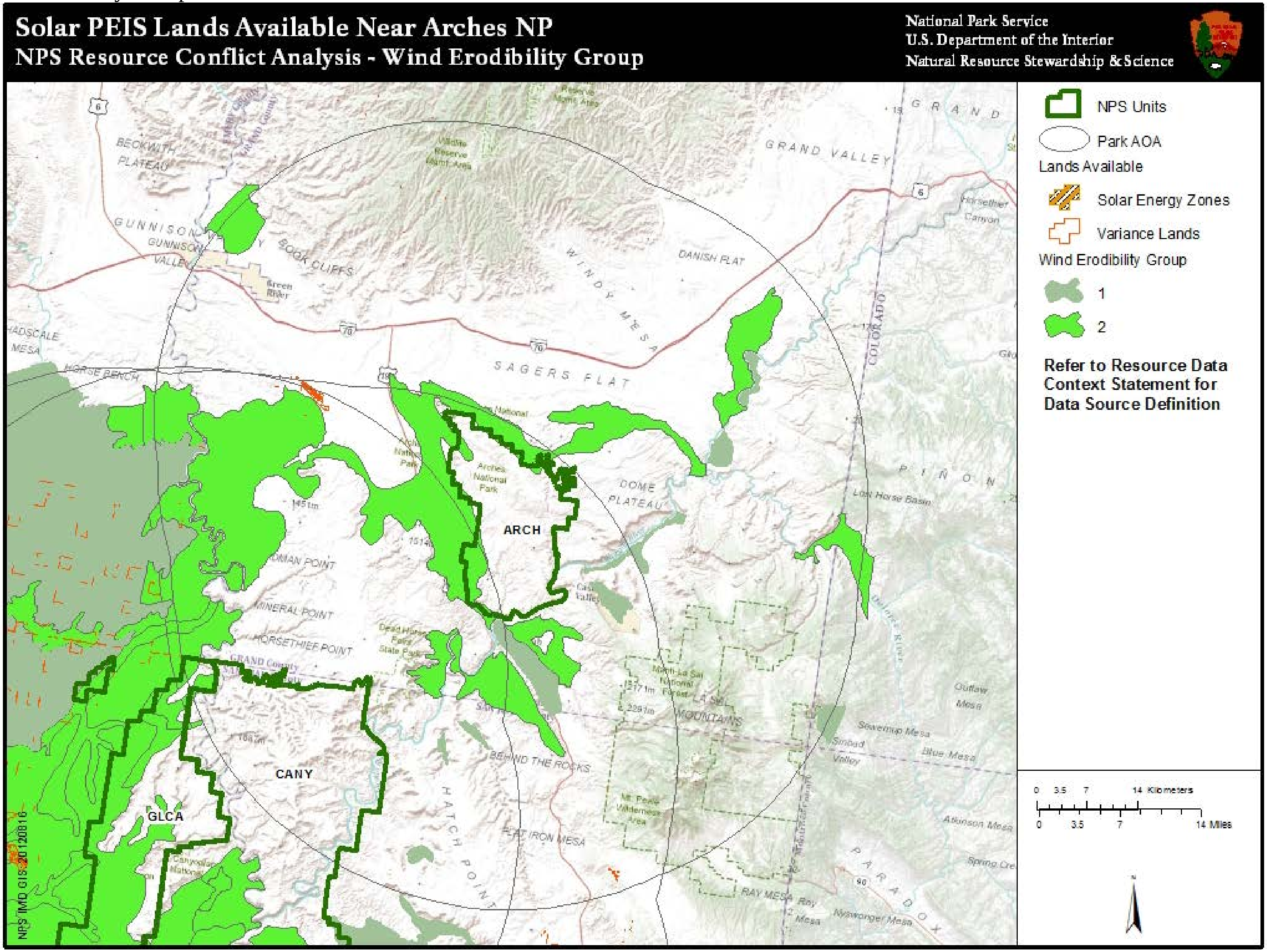
Information on individual KOPs was collected from the 53 park units identified as being potentially impacted by the development of solar facilities within SEZs and variance lands. The number of KOPs provided by each park varied, dependent on available information that could be accessed in a short amount of time. The KOPs used in the GIS analyses represent an initial attempt at identifying important viewpoints within the individual park units. Viewshed polygons were intersected with variance lands and Solar Energy Zones to determine if these lands fall within park viewsheds.

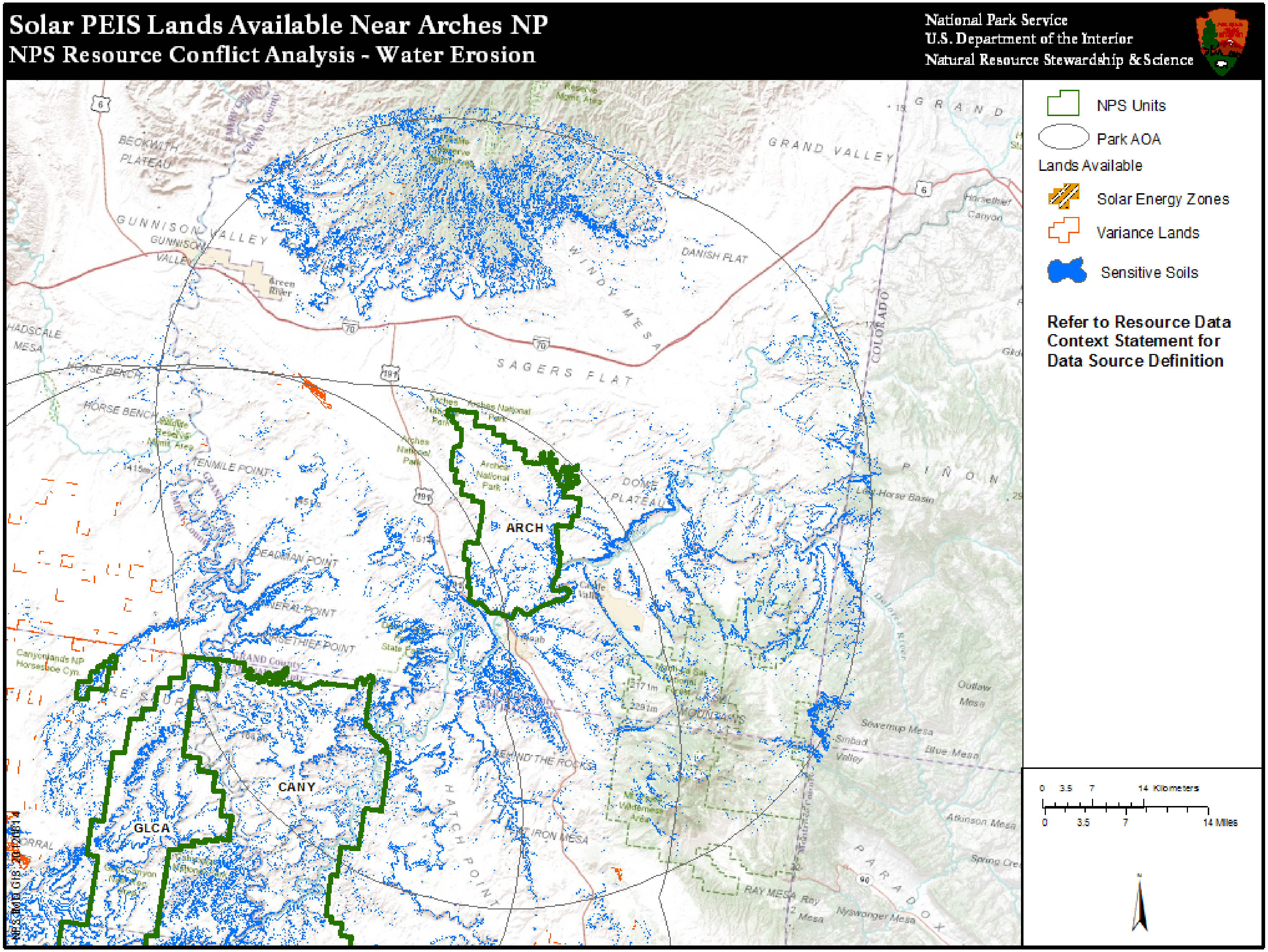
While an incomplete effort, using the composite viewshed maps the NPS gained a sense of the amount of external land visible from important locations within the identified parks. The maps confirm that visibility is possible to 25 miles and they suggest that in many cases, visibility extends beyond this distance.[1] The analysis specifies visually sensitive areas outside the parks that overlap with SEZs and variance lands included within the Supplement. Furthermore, the maps indicate locations outside the park boundaries that would be visible from more than one KOP, and therefore have increased sensitivity.

Park resource managers were provided the results of the GIS-analysis to assist them in identifying areas of high potential for resource conflict in light of park scenic resource and the potential for direct and indirect impacts from utility-scale solar development.

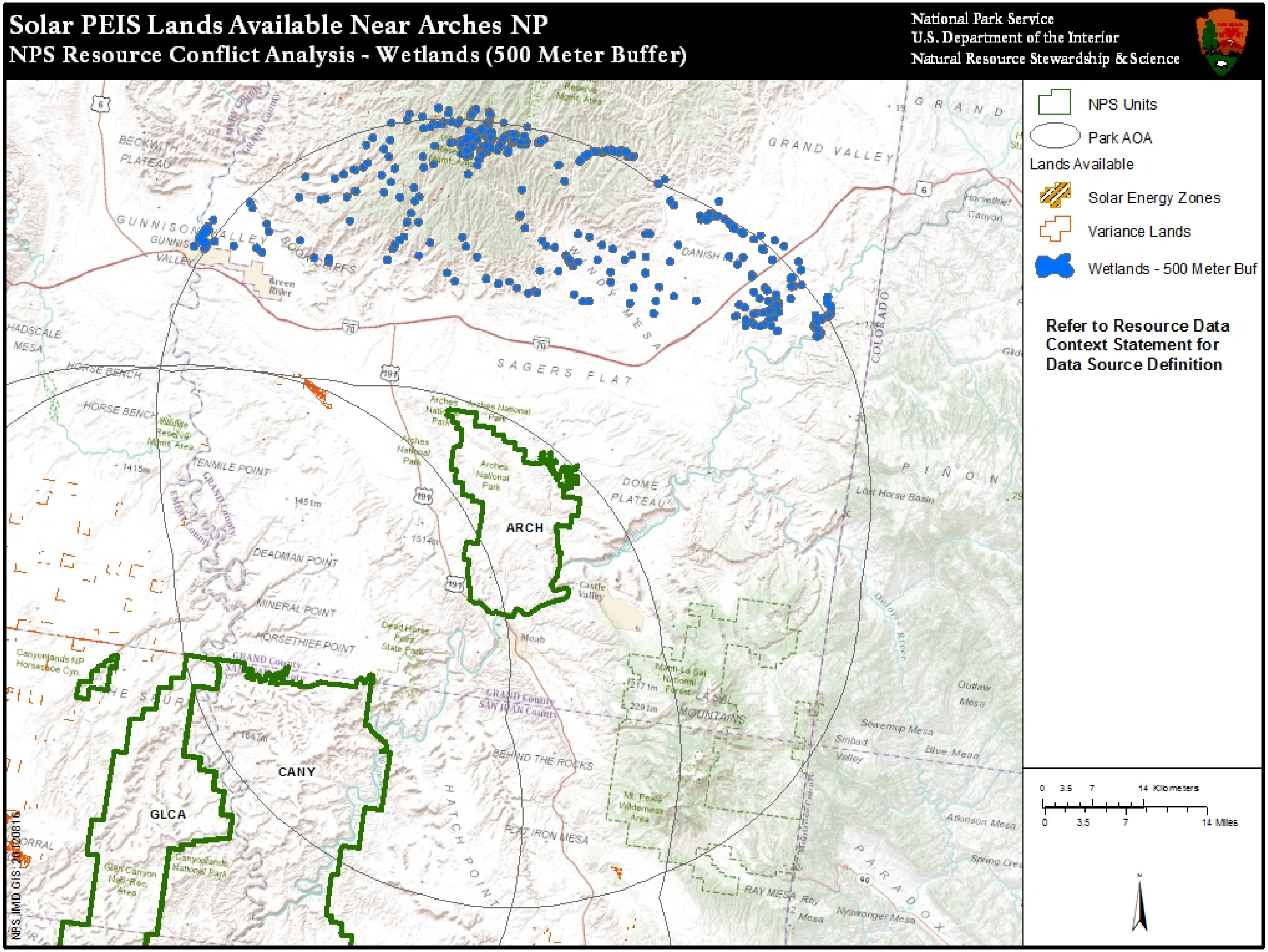
[1] Work on visibility in the air quality context puts the outer limit of visibility in the west at 140 miles with the typical range at 35 to 90 miles due to air pollution.

Area-Specific Key Resource Data Layers
Arches National Park
Wind Erodibility Group



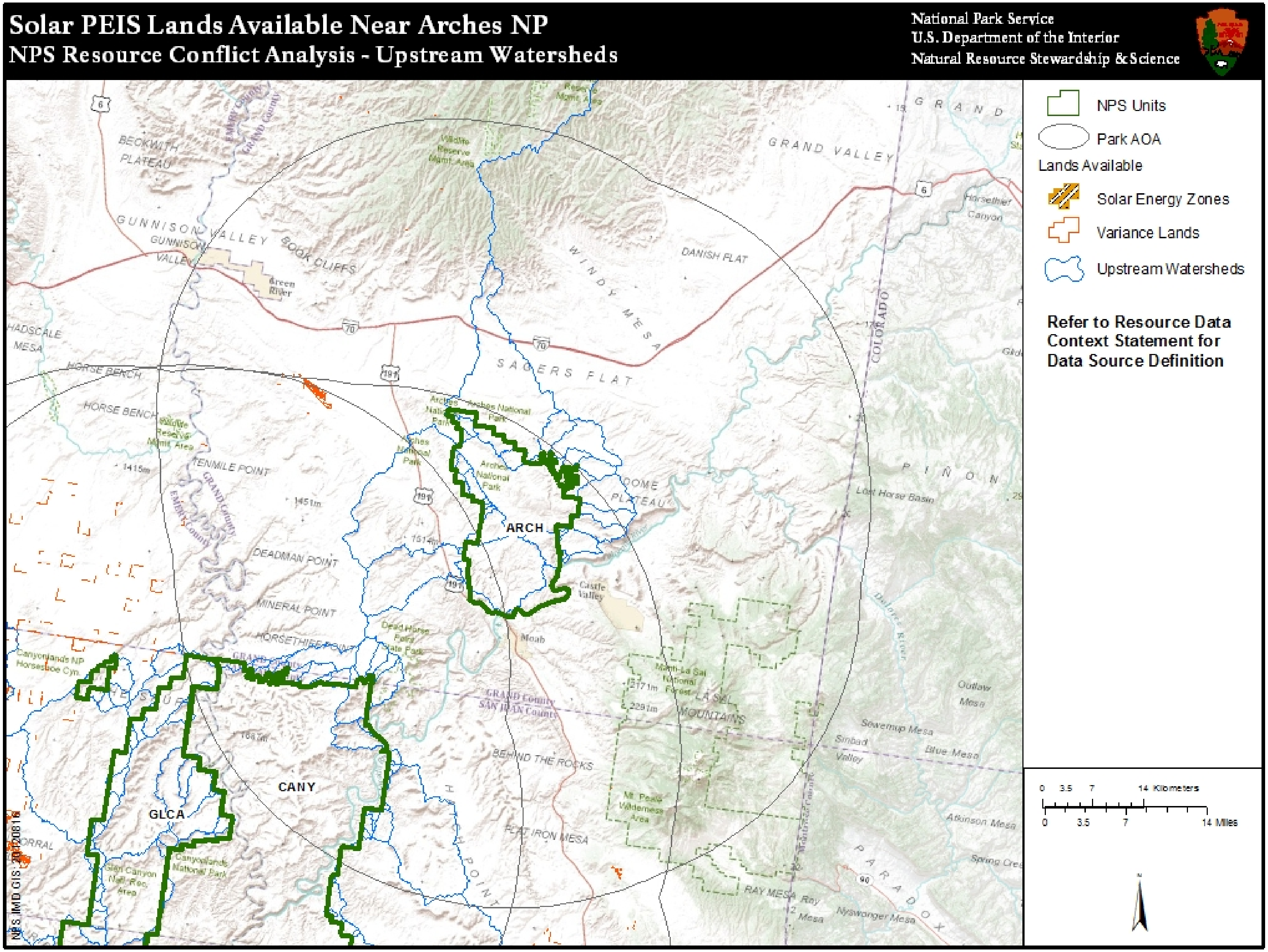

Solar PEIS Lands Available Near Arches NP
NPS Resource Conflict Analysis - Water Erosion
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Sensitive Soils
Refer to Resource Data Context Statement for Data Source Definition
ARCH
CANY
GLCA
0 3.5 7 14 Kilometers
0 3.5 7 14 Miles

Wetlands

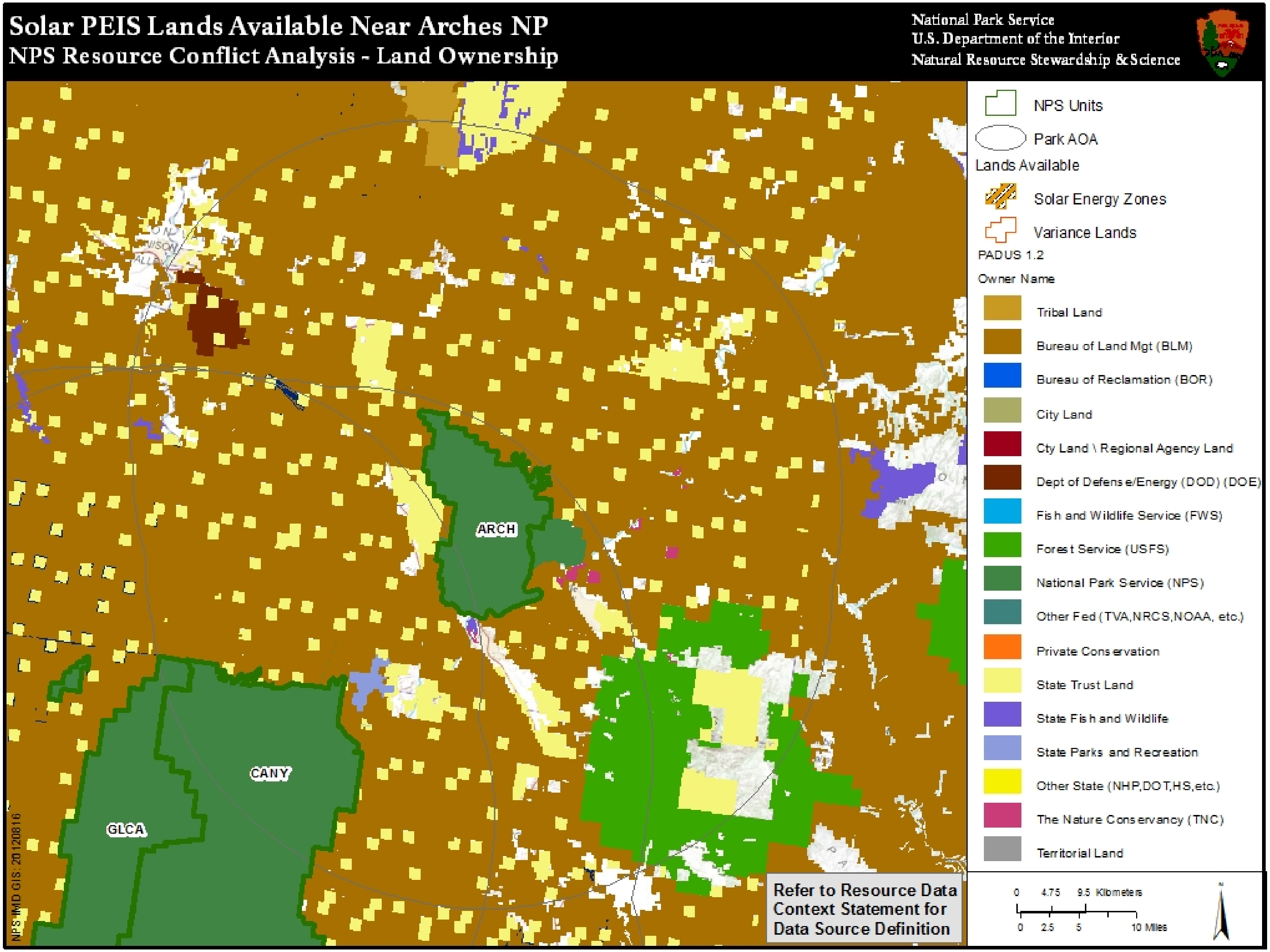


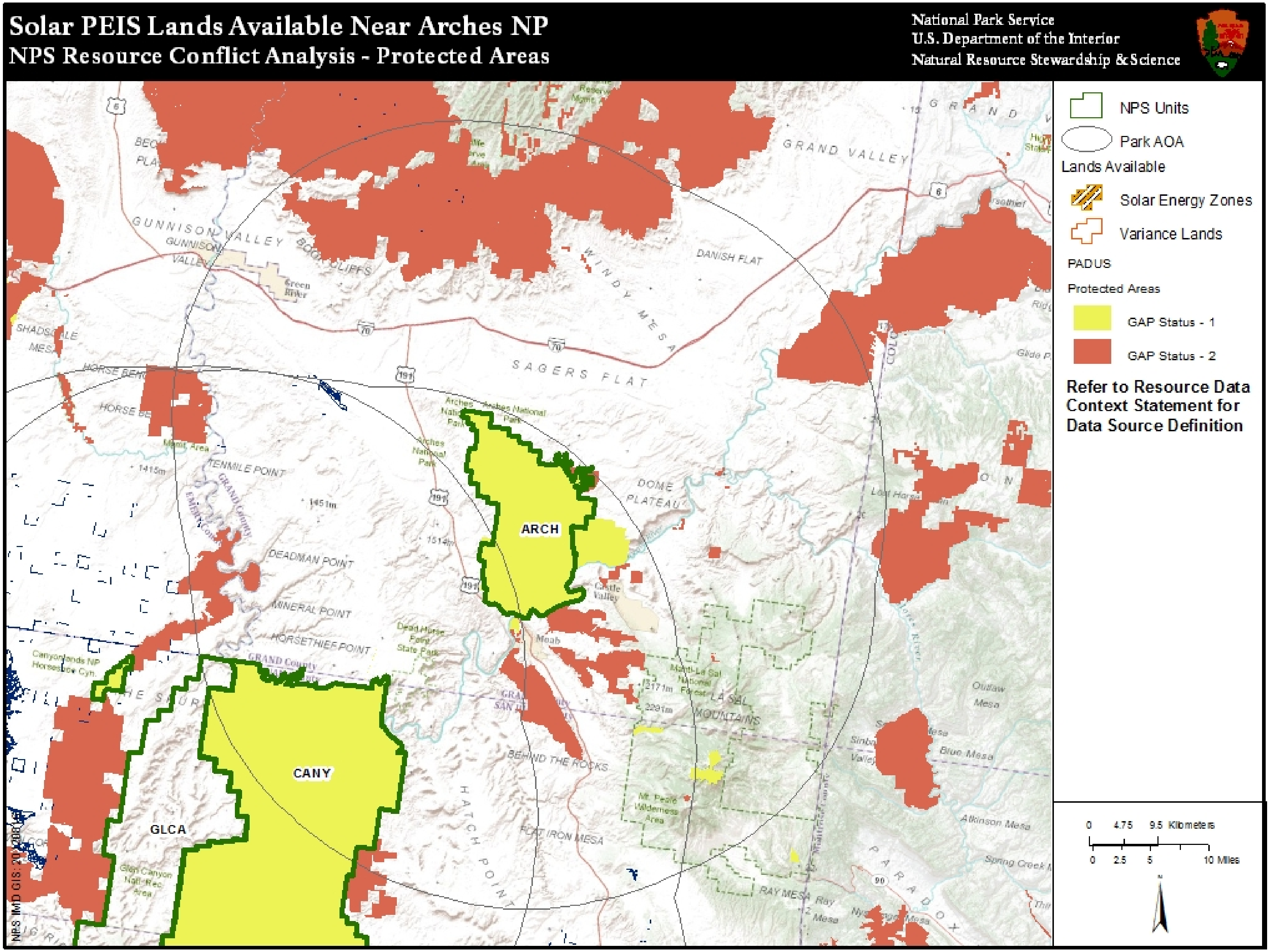
Solar PEIS Lands Available Near Arches NP
NPS Resource Conflict Analysis - Wetlands (500 Meter Buffer)
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Wetlands - 500 Meter Buf
Refer to Resource Data Context Statement for Data Source Definition
ARCH
CANY
GLCA
0 3.5 7 14 Kilometers
0 3.5 7 14 Miles

Upstream Watershed

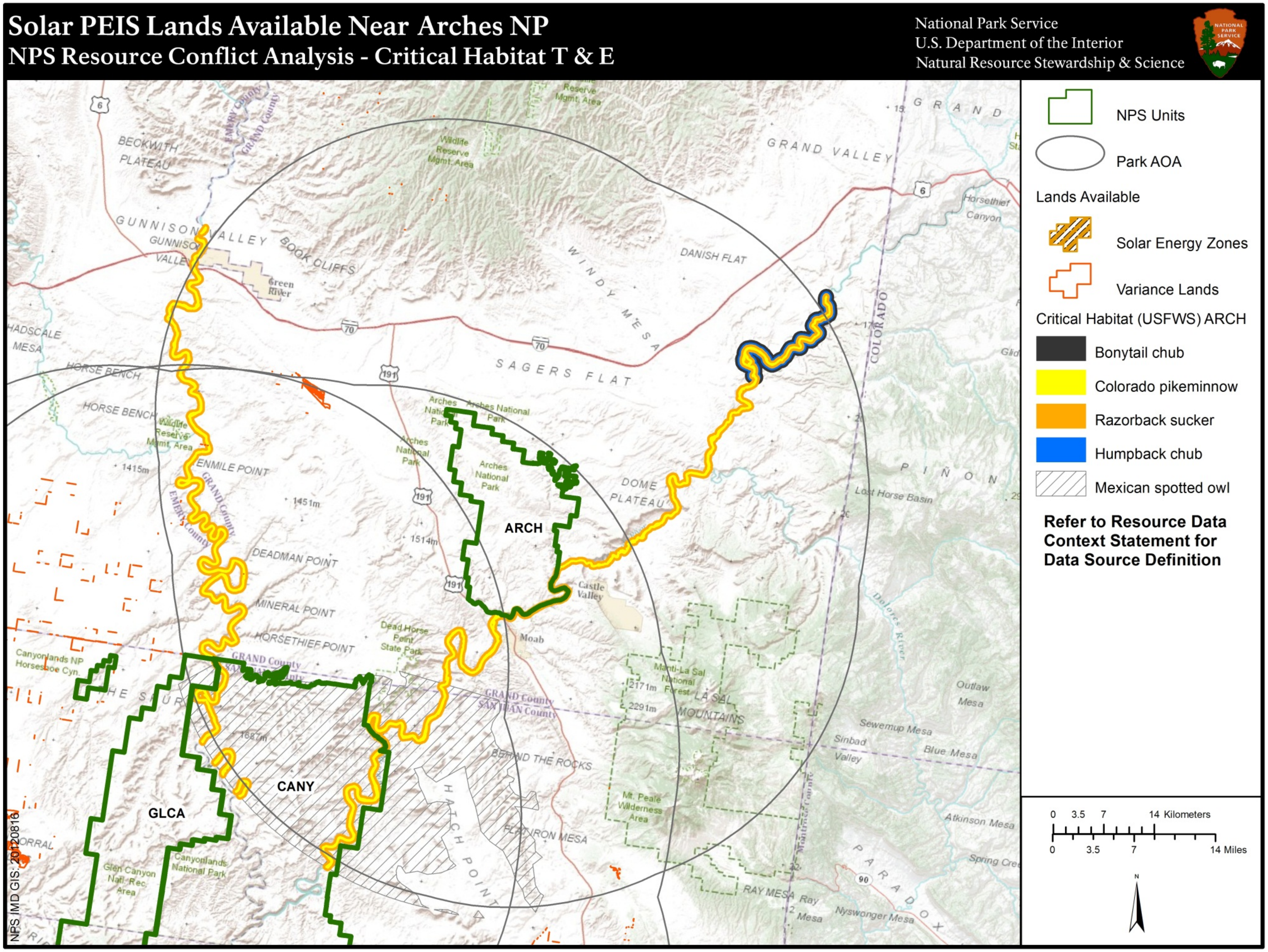


Land Ownership

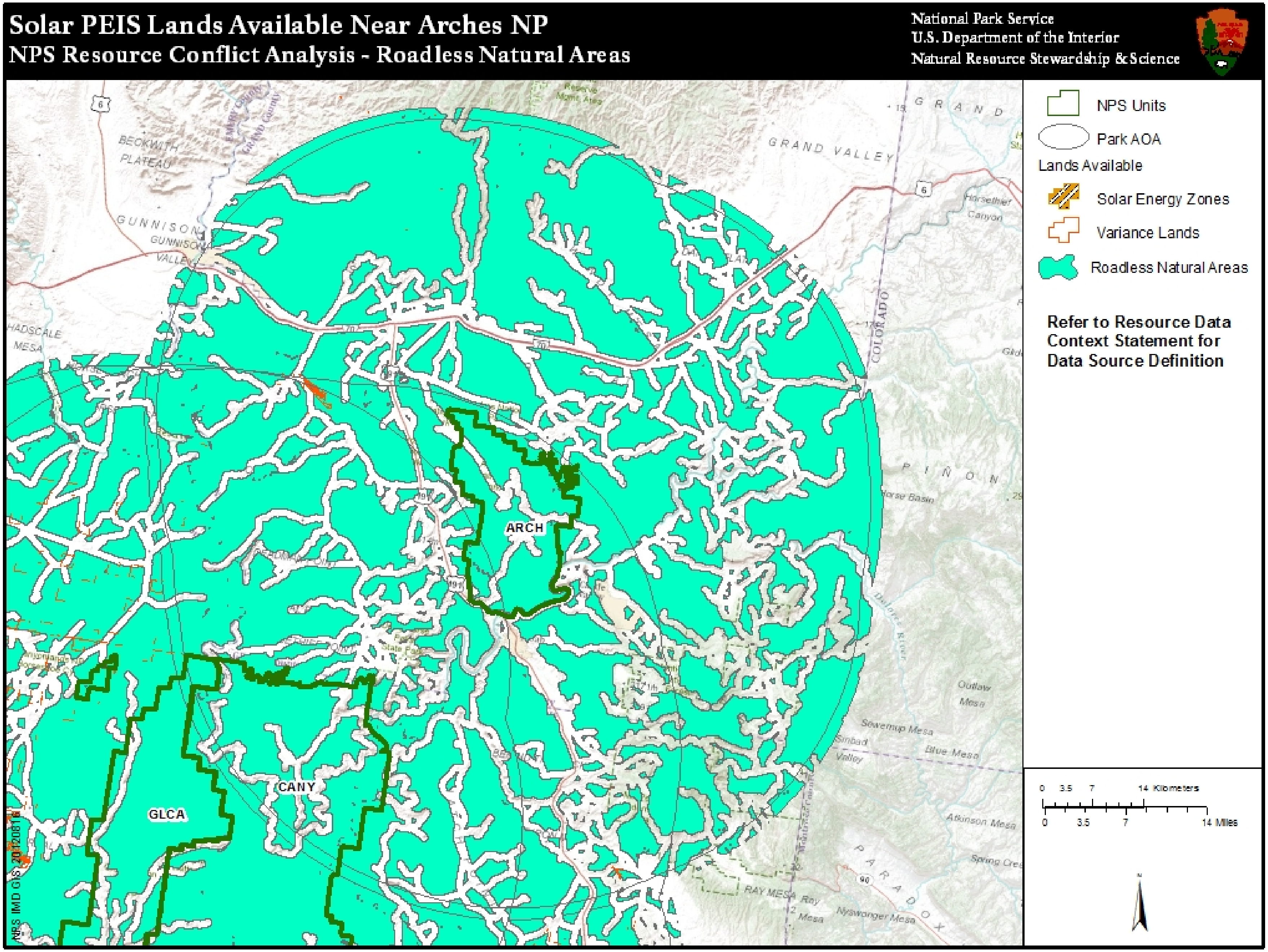


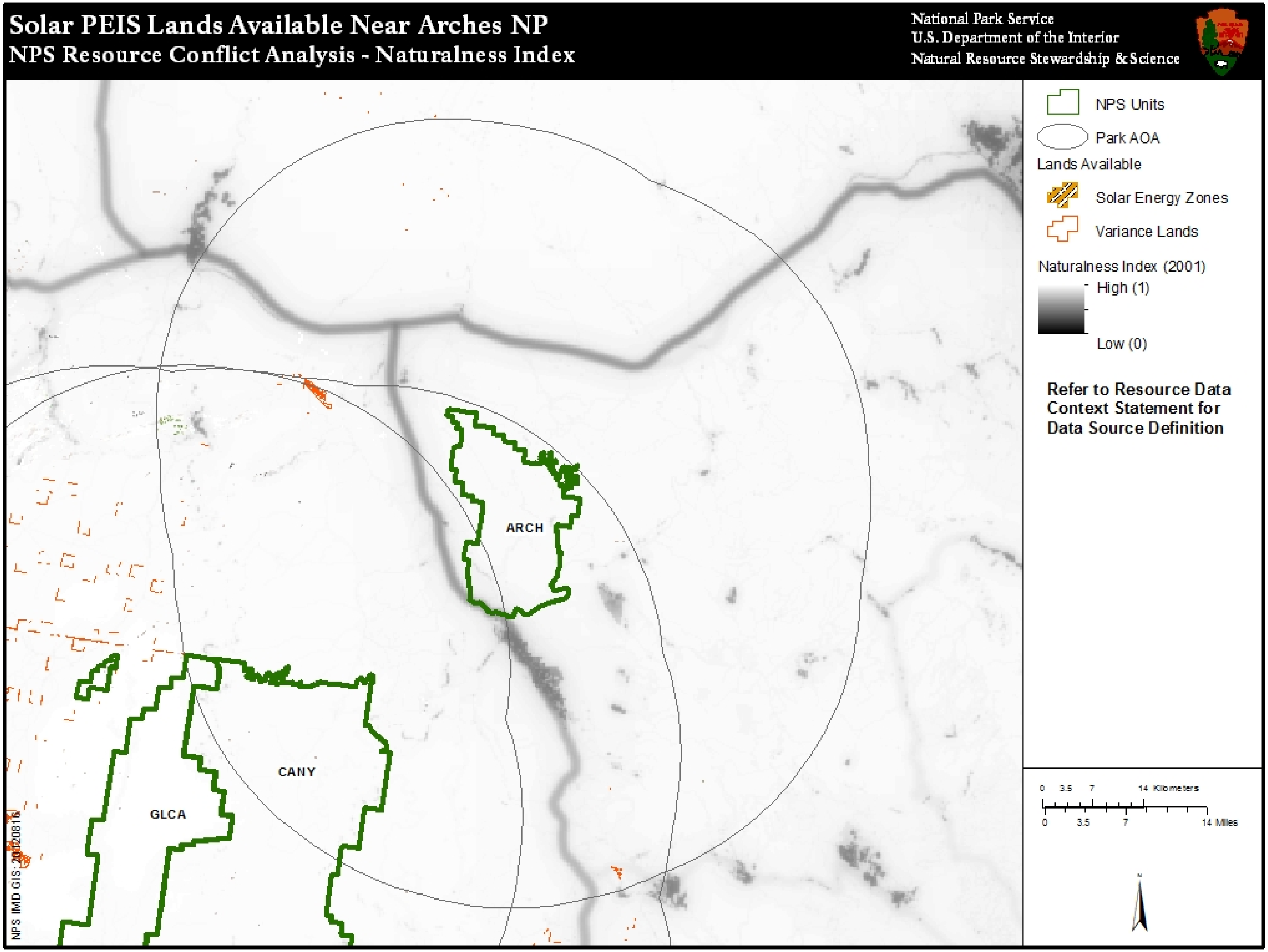

Solar PEIS Lands Available Near Arches NP
NPS Resource Conflict Analysis - Protected Areas
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
PADUS
Protected Areas
GAP Status - 1
GAP Status - 2
Refer to Resource Data Context Statement for Data Source Definition
0 4.75 9.5 Kilometers
0 2.5 5 10 Miles
ARCH
CANY
GLCA
GRAND VALLEY
GUNNISON VALLEY
BOOK CLIFFS
DANISH FLAT
WINDY MESA
SAGERS FLAT
DOME PLATEAU
TENMILE POINT
DEADMAN POINT
MINERAL POINT
HORSETHIEF POINT
BEHIND THE ROCKS
HATCH POINT
LA SAL MOUNTAINS
RAY MESA
Moab
Green River
Castle Valley
Outlaw Mesa
Blue Mesa
Atkinson Mesa
Spring Creek
Arches National Park
Dead Horse Point State Park
Manti-La Sal National Forest
Mt. Peale Wilderness Area
Glen Canyon Natl Rec Area
Canyonlands NP Horseshoe Cyn
NPS IMD GIS

Critical Habitat

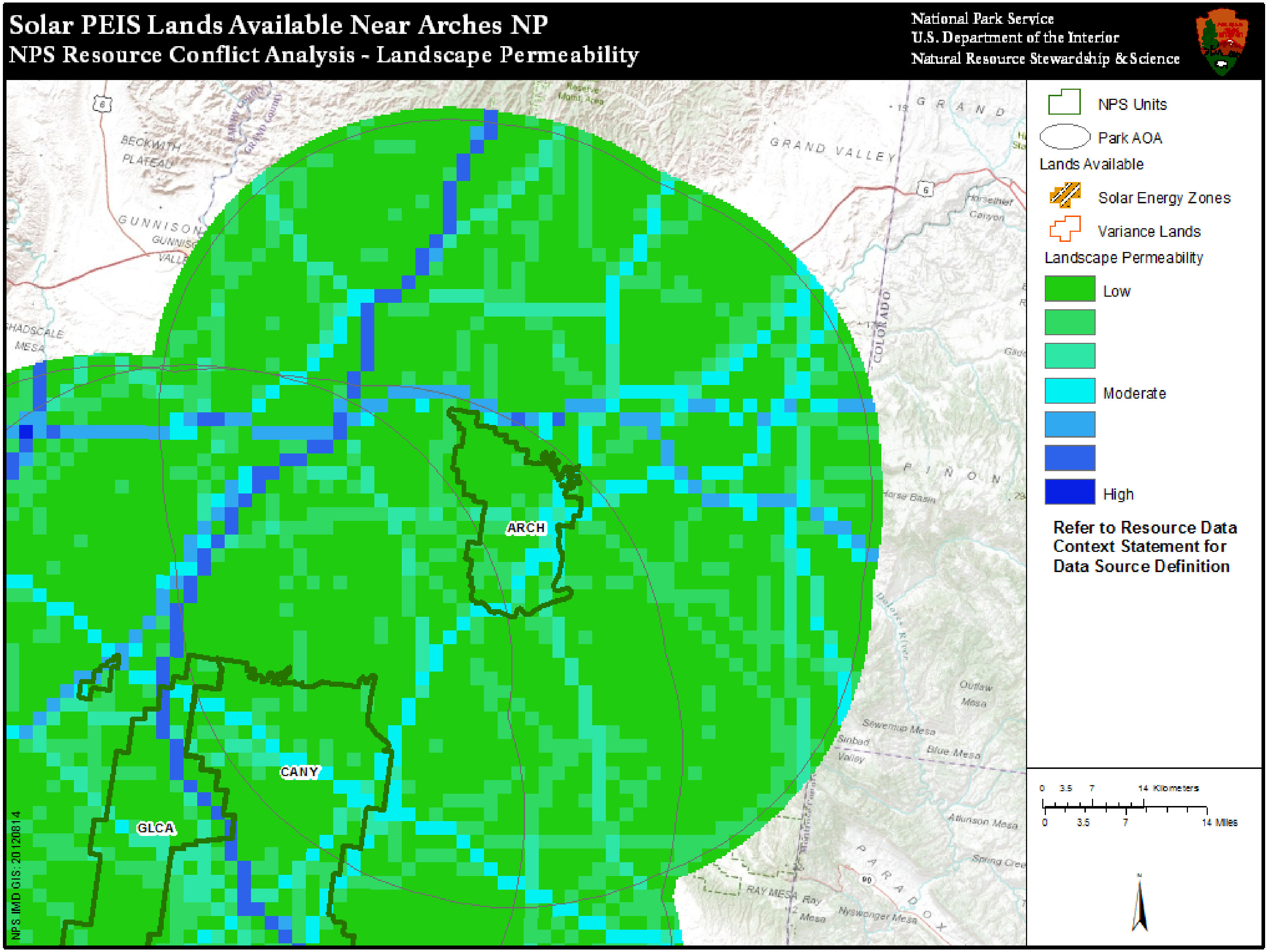


Roadless Natural Areas

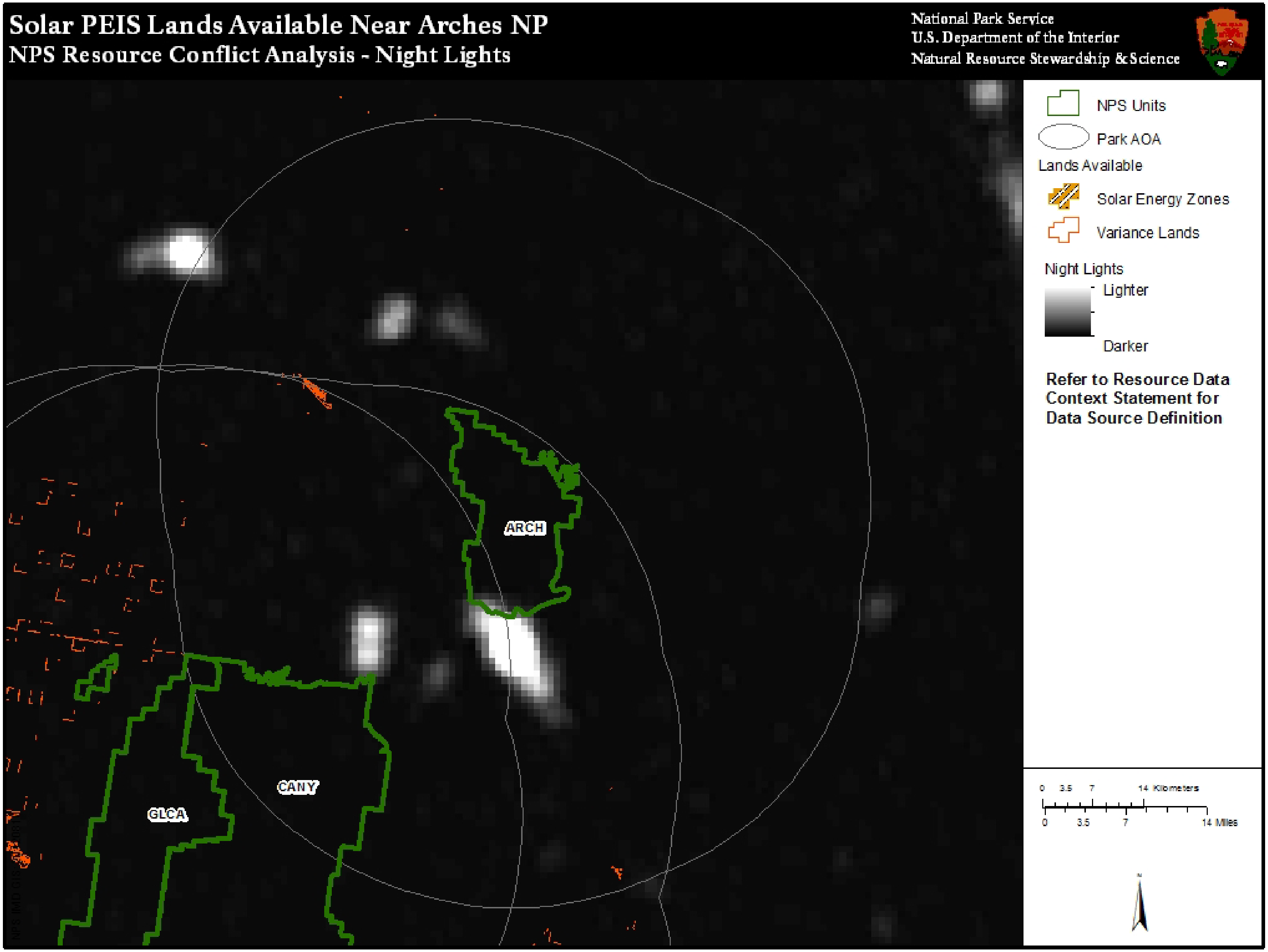


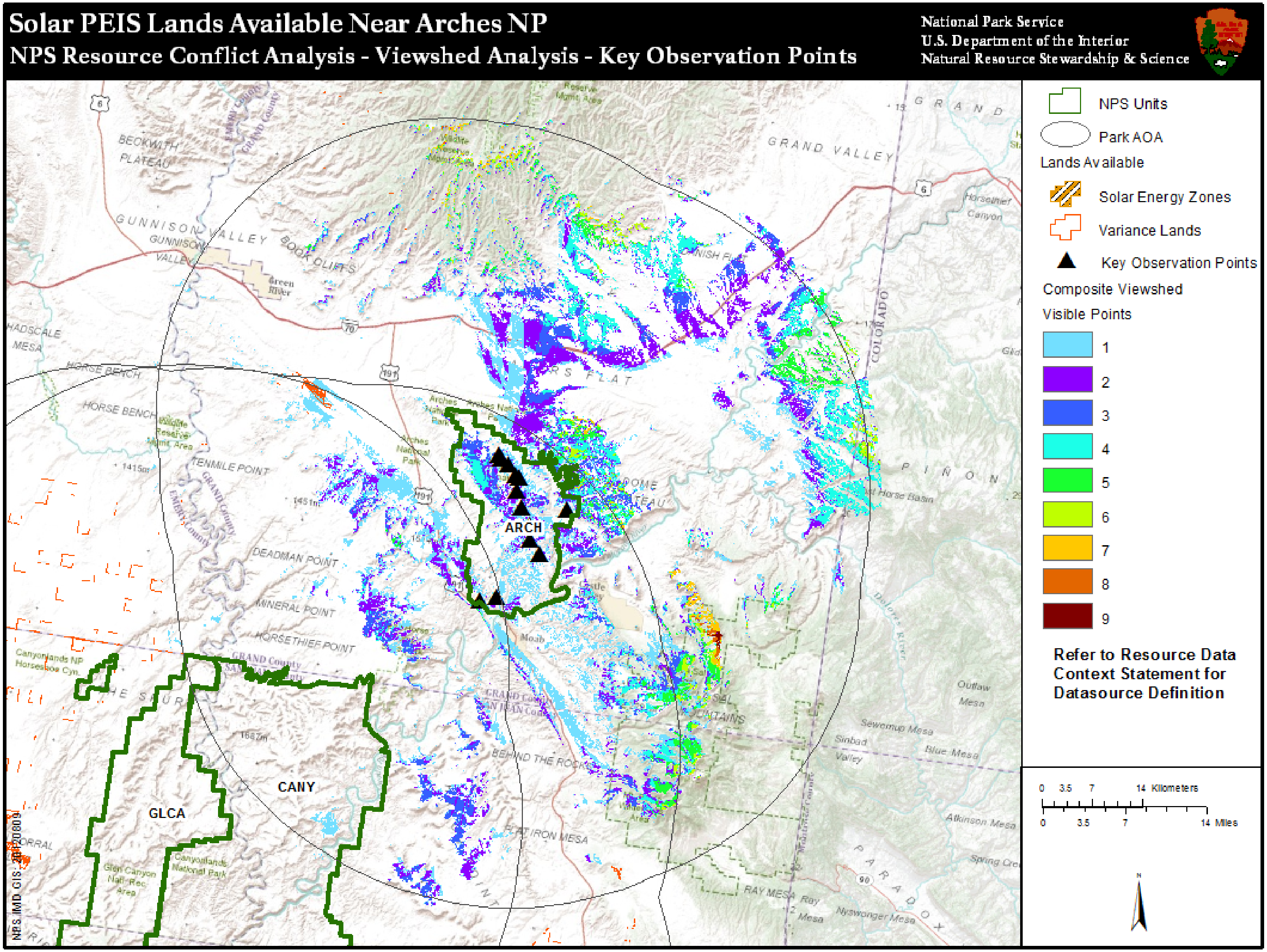

Solar PEIS Lands Available Near Arches NP
NPS Resource Conflict Analysis - Naturalness Index
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Naturalness Index (2001)
High (1)
Low (0)
Refer to Resource Data Context Statement for Data Source Definition
ARCH
CANY
GLCA
0 3.5 7 14 Kilometers
0 3.5 7 14 Miles

Landscape Permeability

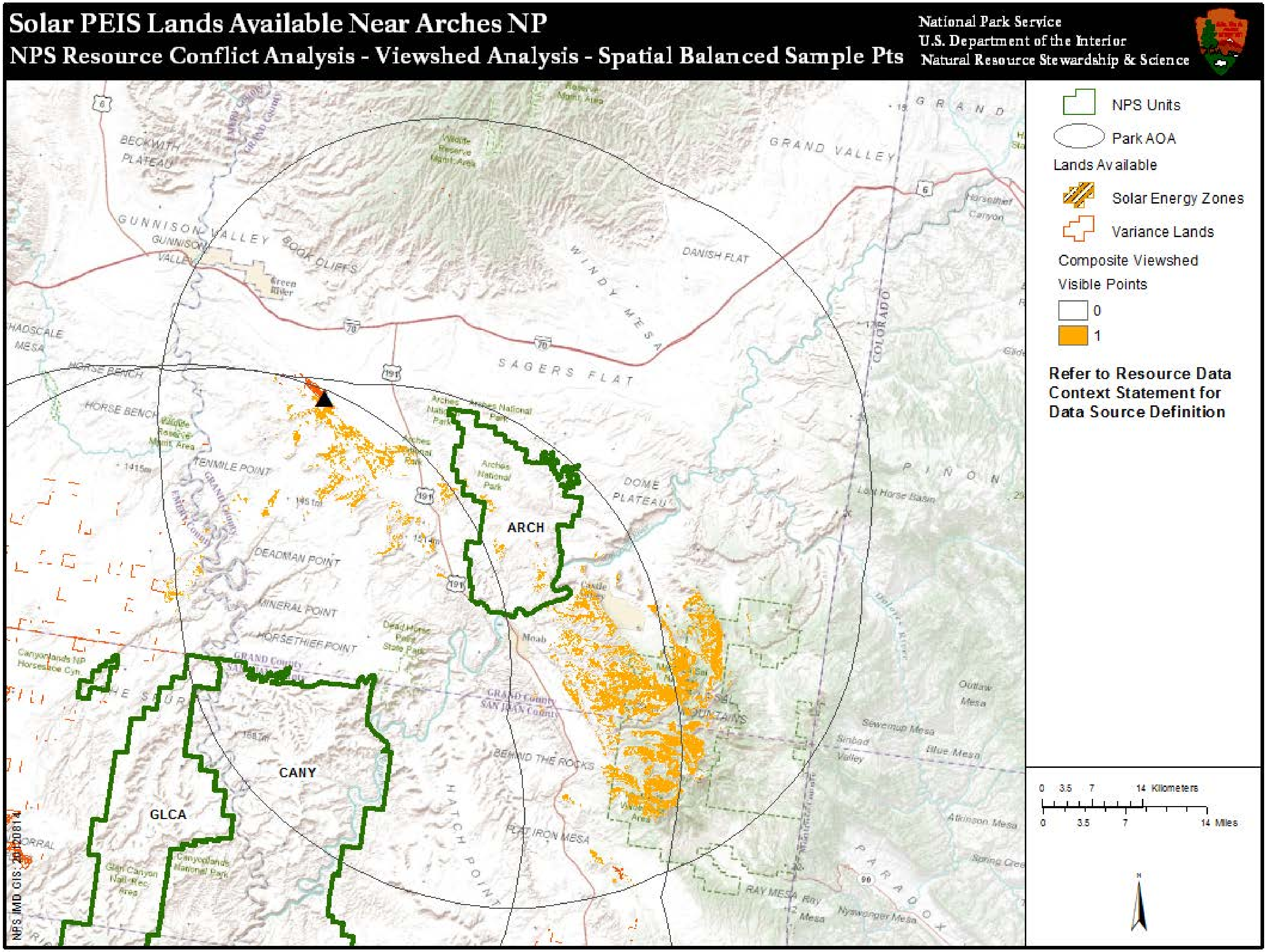


Nighttime Lights

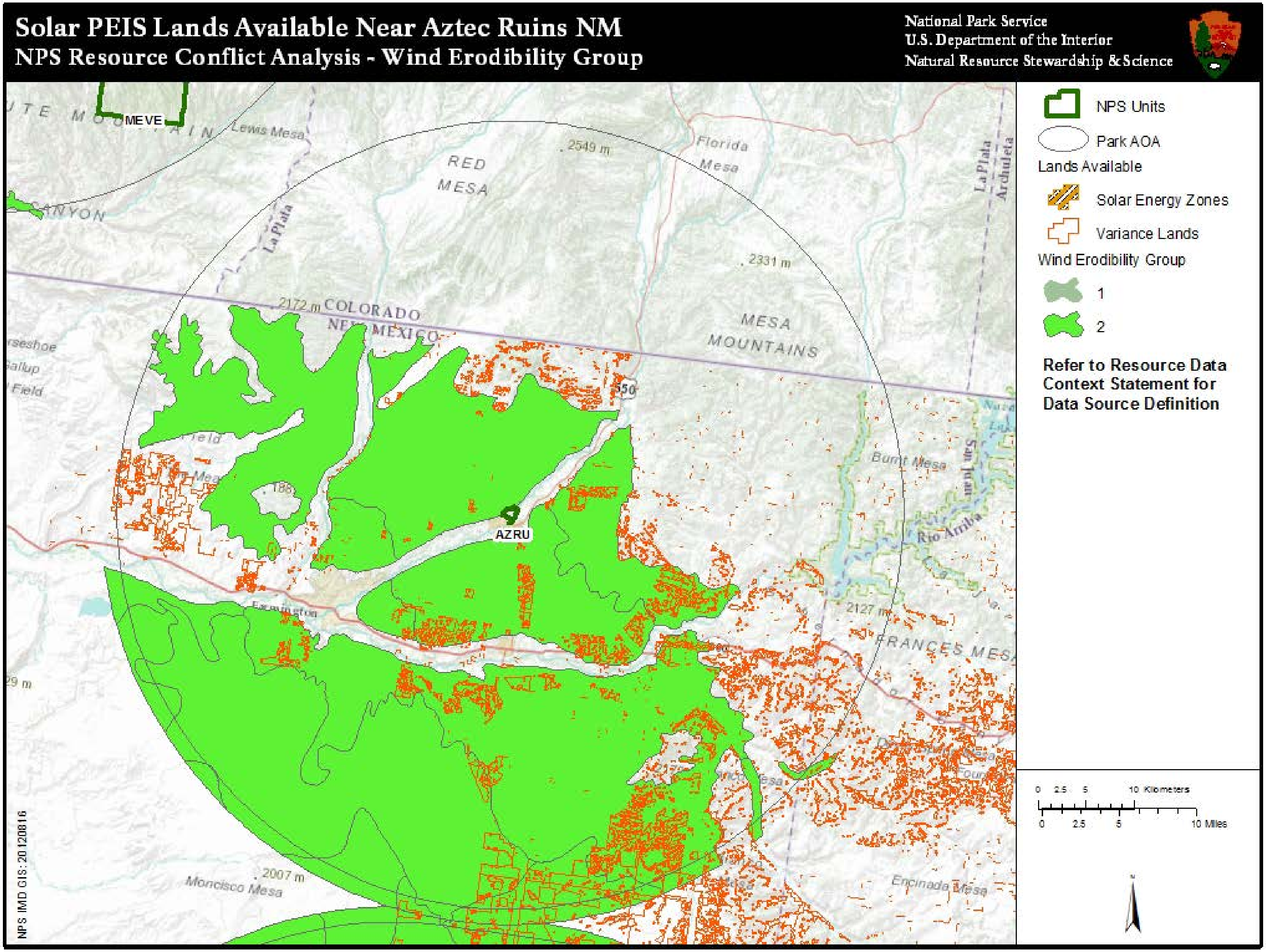


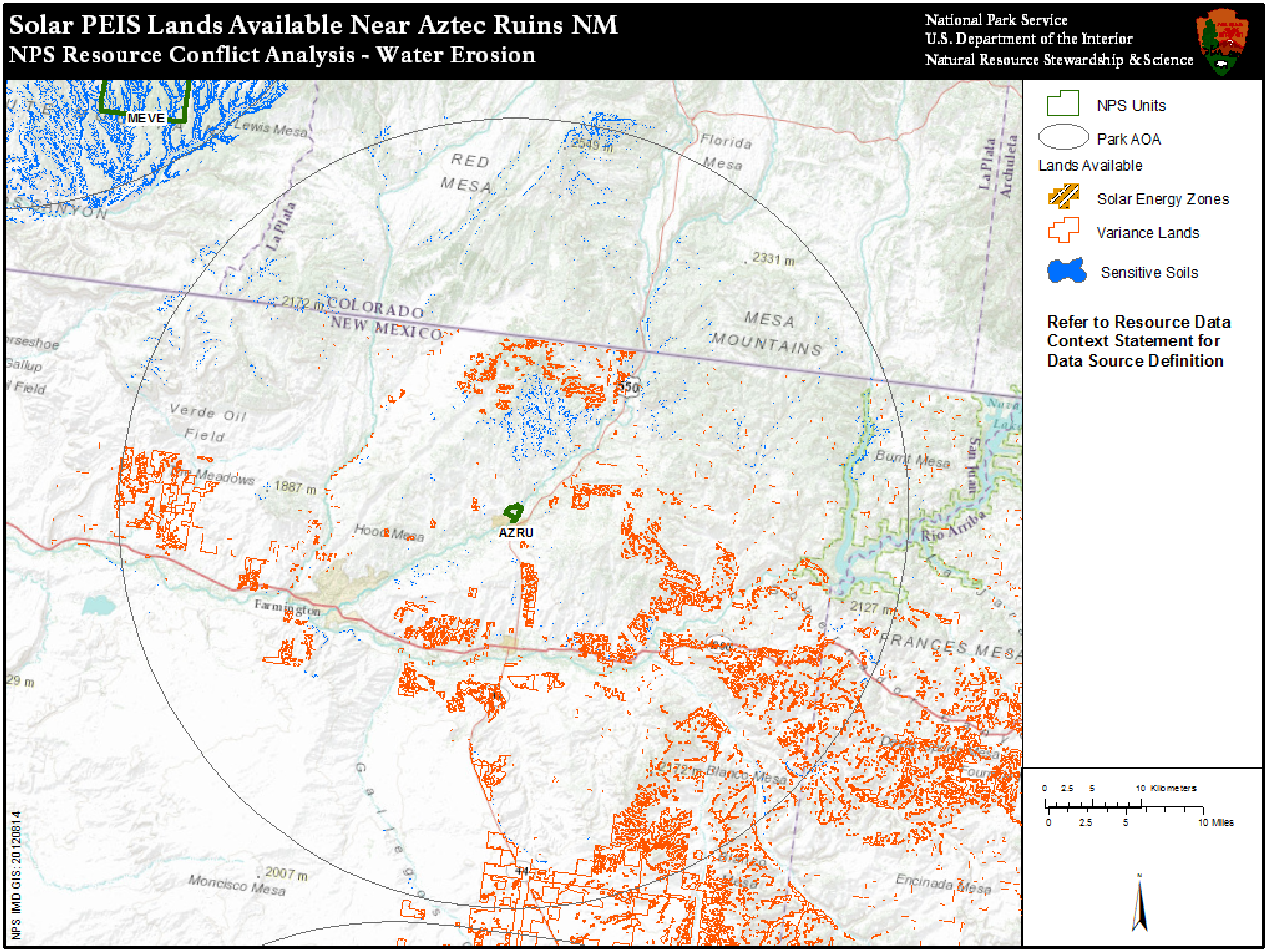


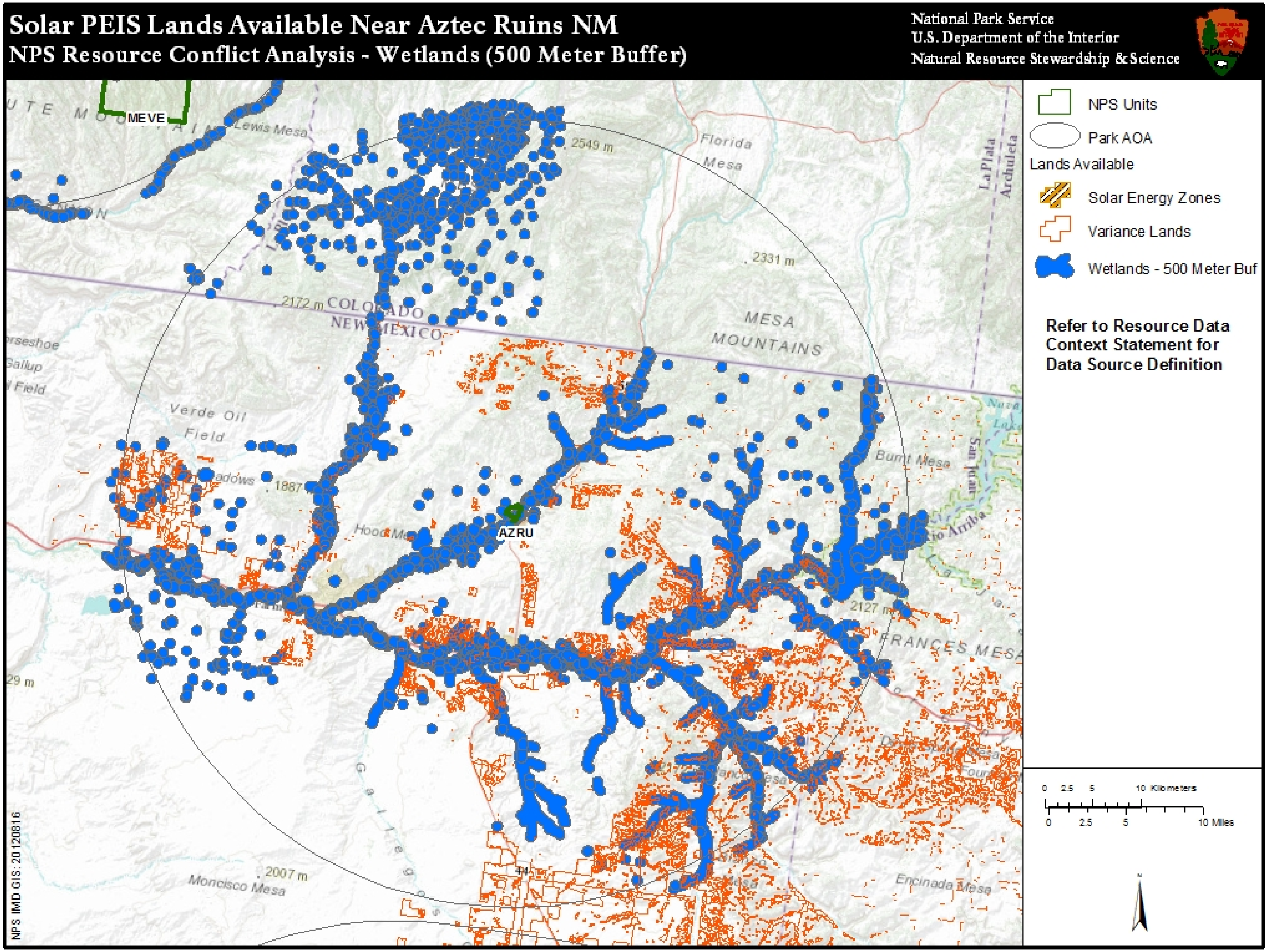
Solar PEIS Lands Available Near Arches NP
NPS Resource Conflict Analysis - Viewshed Analysis - Key Observation Points
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Key Observation Points
Composite Viewshed
Visible Points
1
2
3
4
5
6
7
8
9
Refer to Resource Data Context Statement for Datasource Definition
0 3.5 7 14 Kilometers
0 3.5 7 14 Miles
ARCH
CANY
GLCA



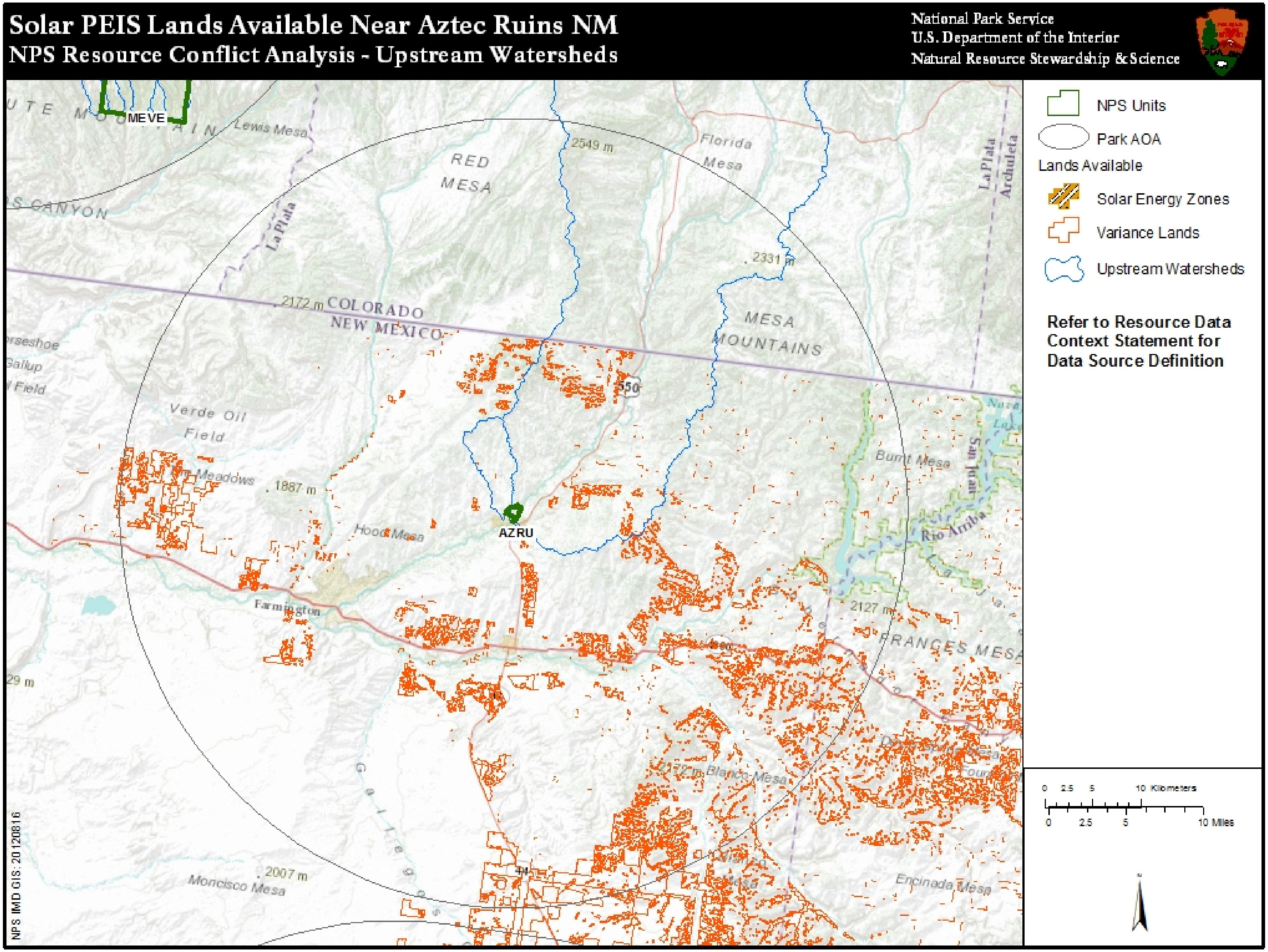
Solar PEIS Lands Available Near Arches NP
NPS Resource Conflict Analysis - Viewshed Analysis - Spatial Balanced Sample Pts
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Composite Viewshed
Visible Points
0
1
Refer to Resource Data Context Statement for Data Source Definition
ARCH
CANY
GLCA
0 3.5 7 14 Kilometers
0 3.5 7 14 Miles

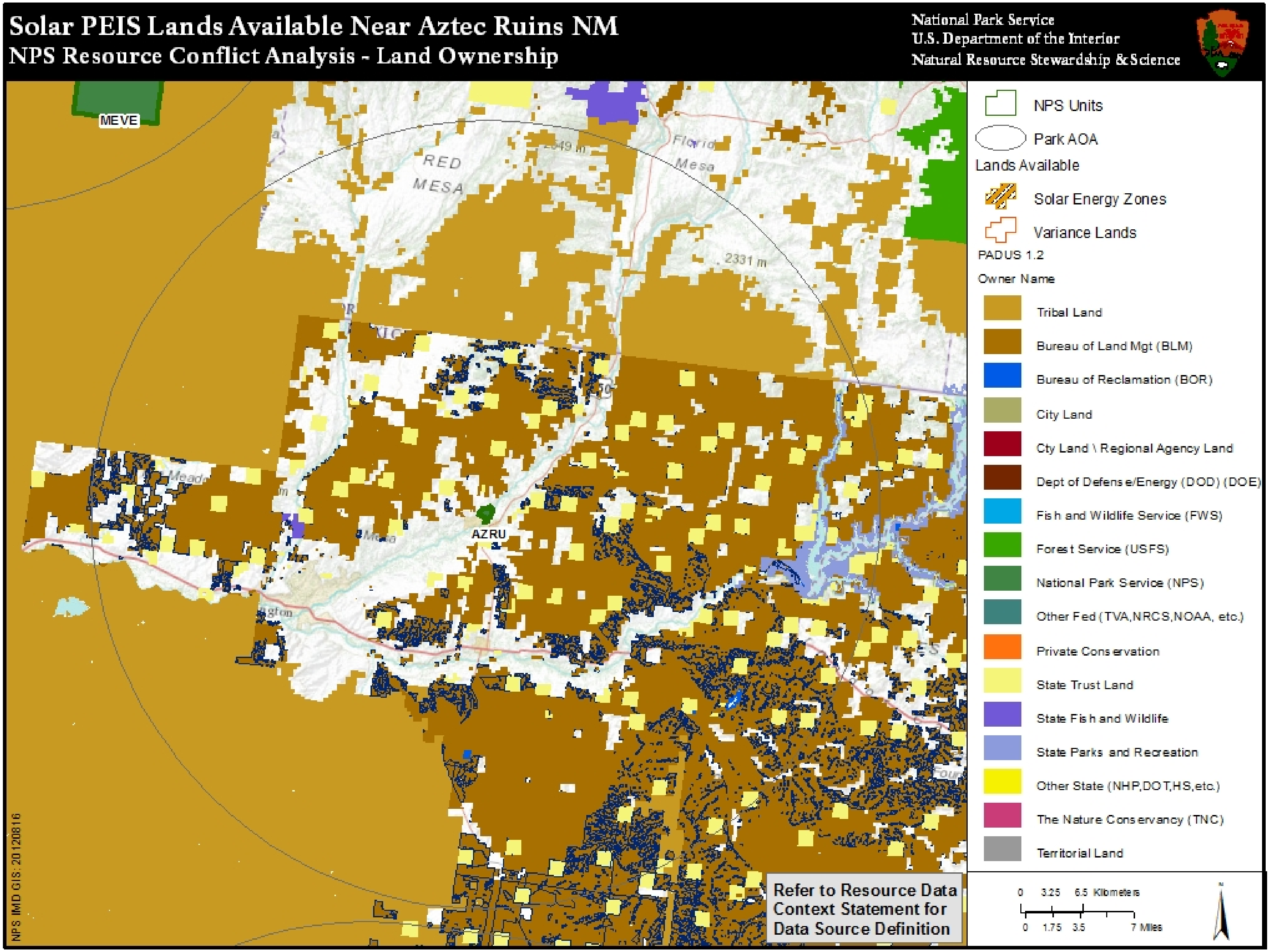

Solar PEIS Lands Available Near Aztec Ruins NM
NPS Resource Conflict Analysis - Wind Erodibility Group
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Wind Erodibility Group
1
2
Refer to Resource Data Context Statement for Data Source Definition
MEVE
AZRU
COLORADO
NEW MEXICO
RED MESA
MESA MOUNTAINS
FRANCES MESA
Florida Mesa
Lewis Mesa
Burnt Mesa
Moncisco Mesa
Encinada Mesa
Farmington
La Plata
Archuleta
San Juan
Rio Arriba
2549 m
2331 m
2172 m
2127 m
2007 m
550
0 2.5 5 10 Kilometers
0 2.5 5 10 Miles
NPS IMD GIS: 20120816


Solar PEIS Lands Available Near Aztec Ruins NM
NPS Resource Conflict Analysis - Water Erosion
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Sensitive Soils
Refer to Resource Data Context Statement for Data Source Definition
MEVE
AZRU
COLORADO
NEW MEXICO
RED MESA
MESA MOUNTAINS
Farmington
NPS IMD GIS: 20120814

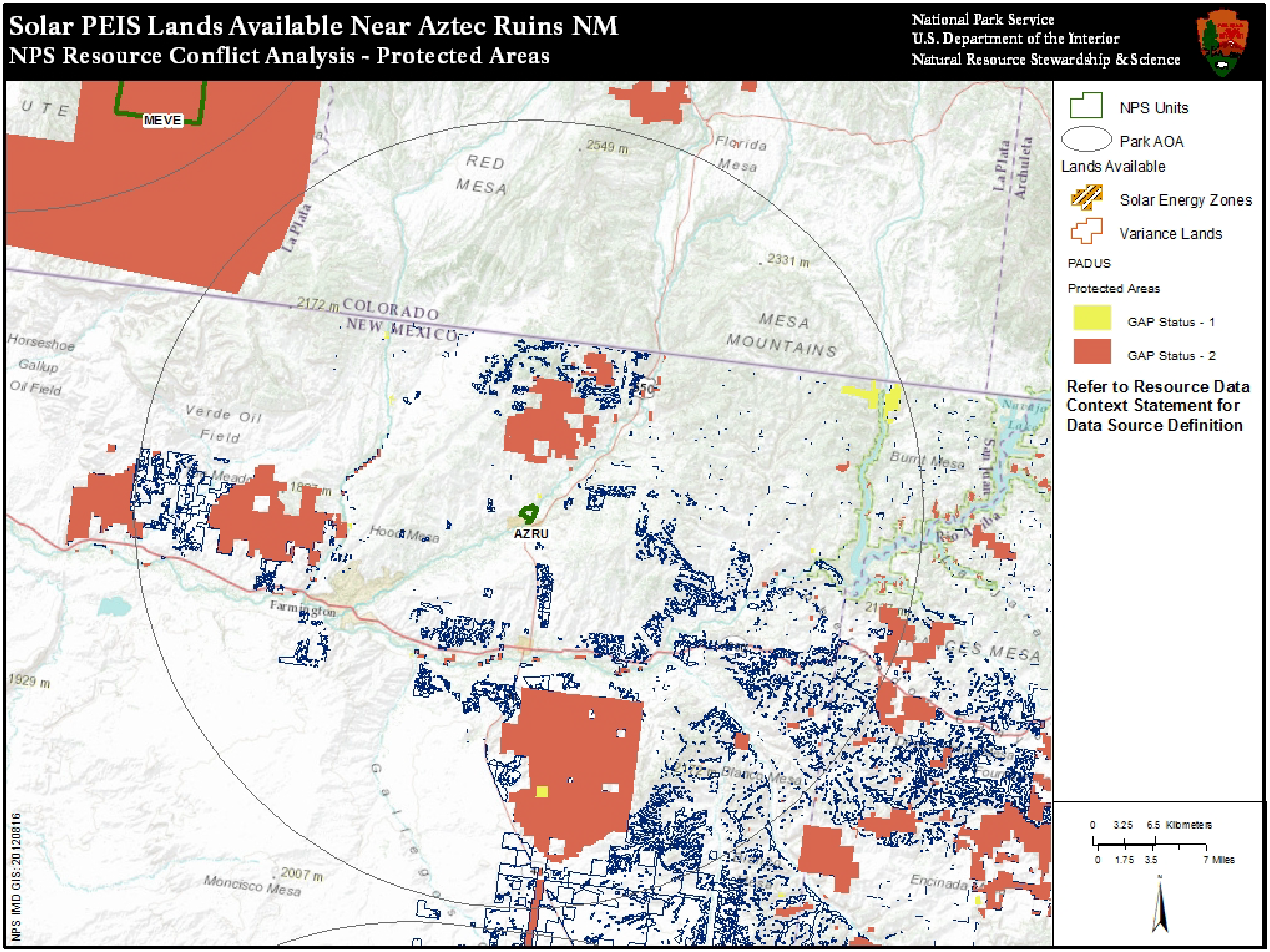

Solar PEIS Lands Available Near Aztec Ruins NM
NPS Resource Conflict Analysis - Wetlands (500 Meter Buffer)
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Wetlands - 500 Meter Buf
Refer to Resource Data Context Statement for Data Source Definition
MEVE
AZRU
COLORADO
NEW MEXICO
MESA MOUNTAINS
Florida Mesa
La Plata
Archuleta
Burnt Mesa
Moncisco Mesa
Encinada Mesa
FRANCES MESA
Verde Oil Field
NPS IMD GIS: 20120816

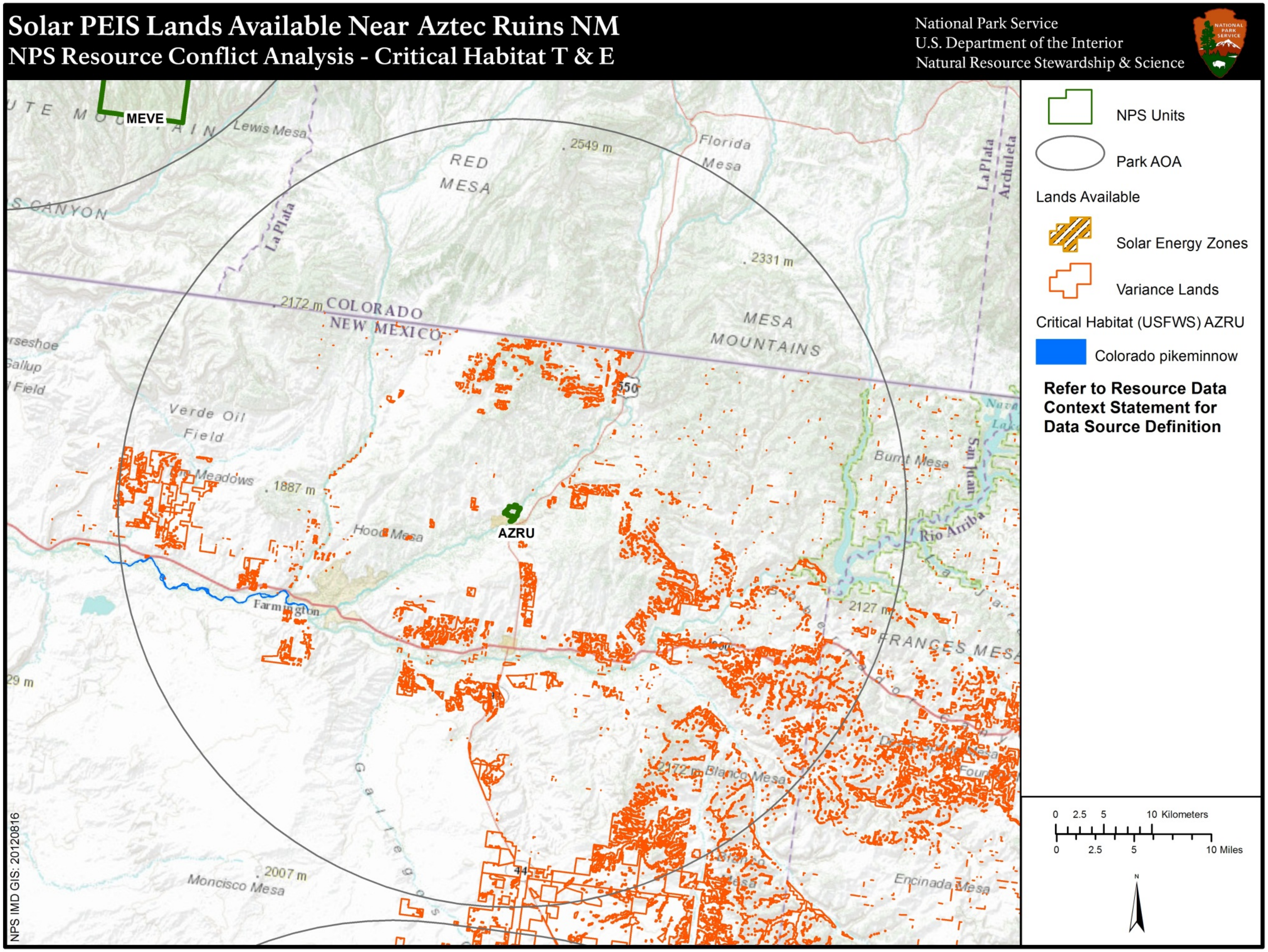
Upstream Watershed

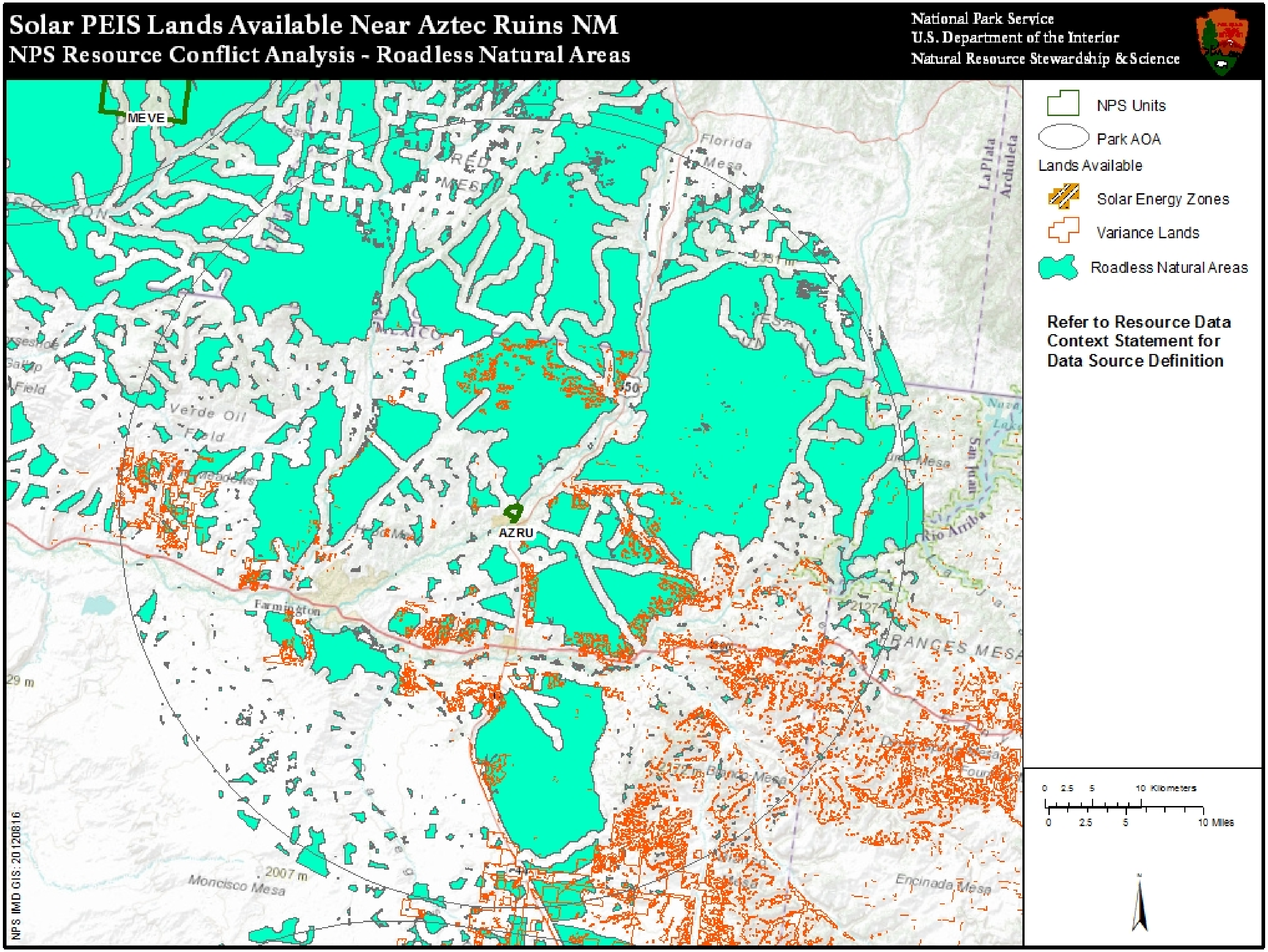


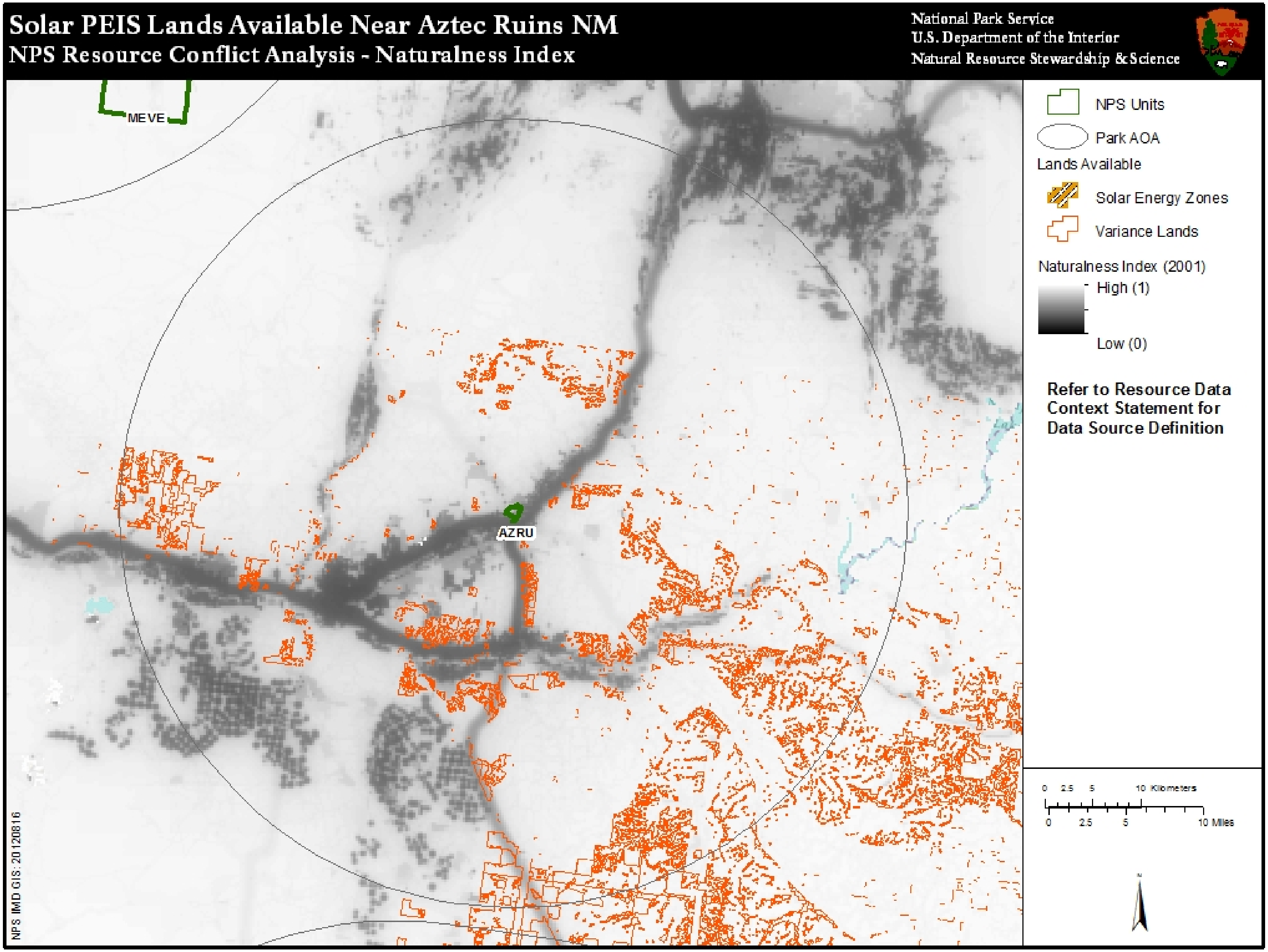

Solar PEIS Lands Available Near Aztec Ruins NM
NPS Resource Conflict Analysis - Land Ownership
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
MEVE
RED MESA
Florida Mesa
2331 m
AZRU
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
PADUS 1.2
Owner Name
Tribal Land
Bureau of Land Mgt (BLM)
Bureau of Reclamation (BOR)
City Land
Cty Land \ Regional Agency Land
Dept of Defense/Energy (DOD) (DOE)
Fish and Wildlife Service (FWS)
Forest Service (USFS)
National Park Service (NPS)
Other Fed (TVA,NRCS,NOAA, etc.)
Private Conservation
State Trust Land
State Fish and Wildlife
State Parks and Recreation
Other State (NHP,DOT,HS,etc.)
The Nature Conservancy (TNC)
Territorial Land
Refer to Resource Data Context Statement for Data Source Definition
0 3.25 6.5 Kilometers
0 1.75 3.5 7 Miles
NPS IMD GIS: 20120816

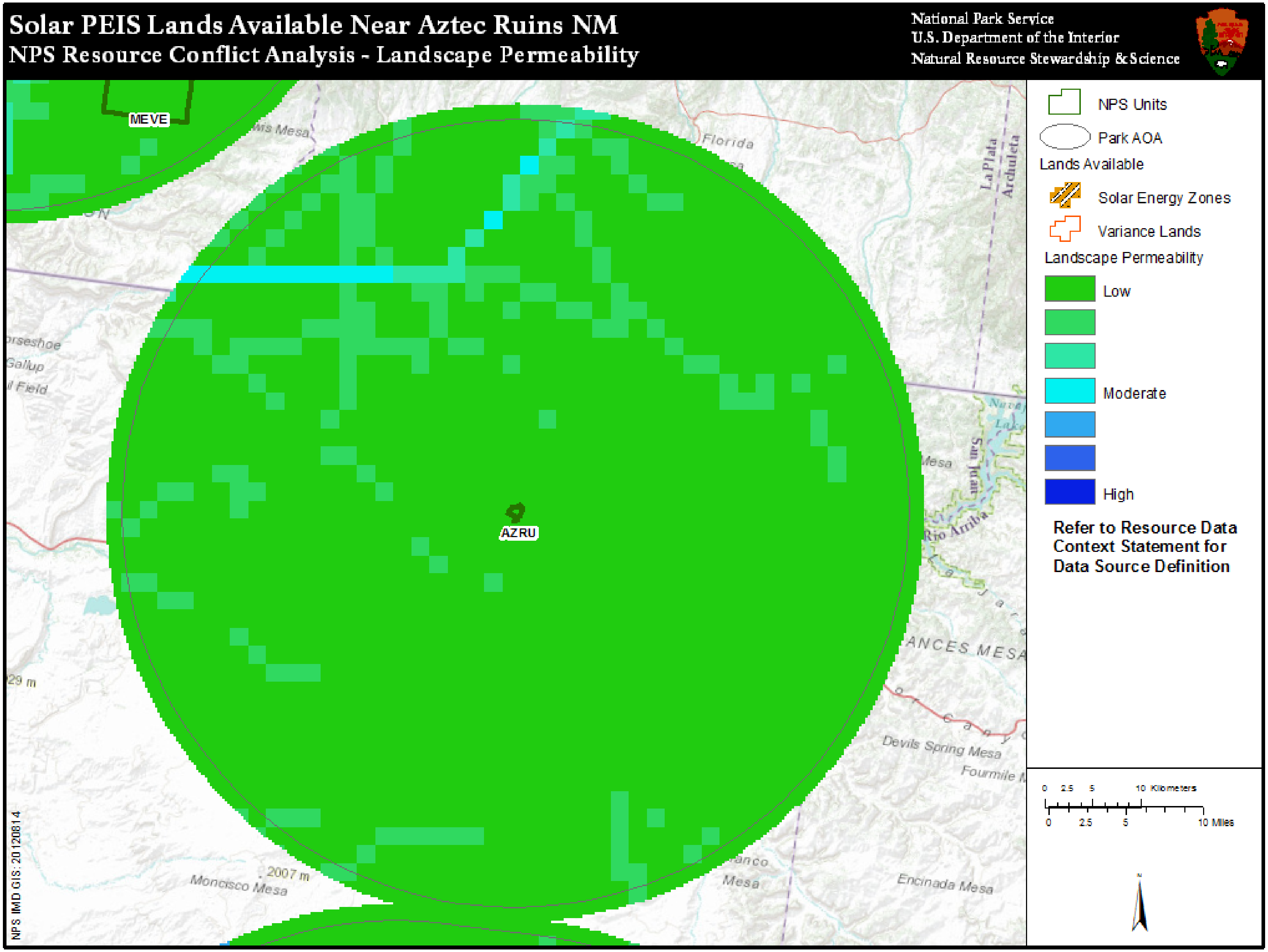
Protected Areas



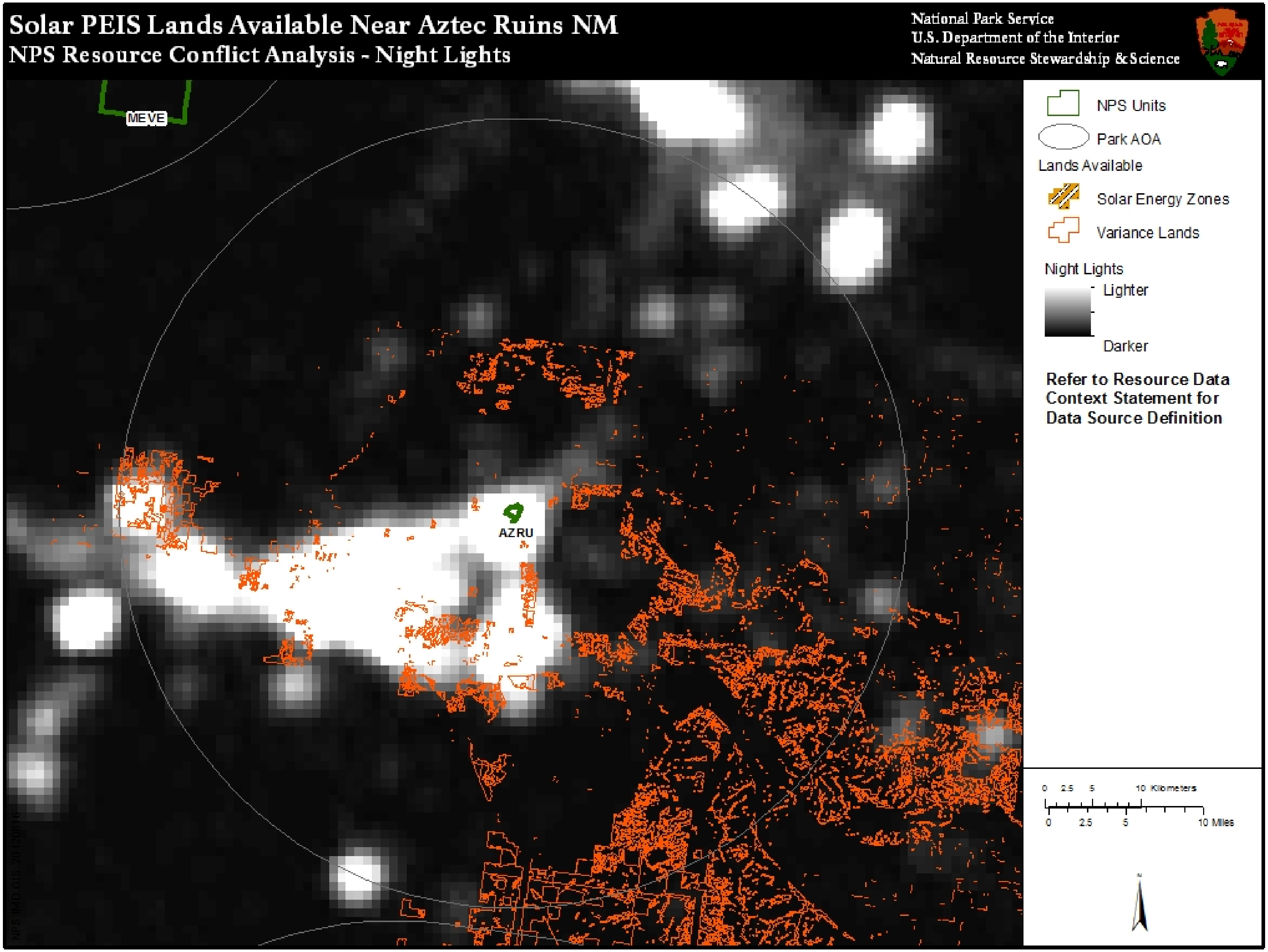

Solar PEIS Lands Available Near Aztec Ruins NM
NPS Resource Conflict Analysis - Critical Habitat T & E
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Critical Habitat (USFWS) AZRU
Colorado pikeminnow
Refer to Resource Data Context Statement for Data Source Definition
0 2.5 5 10 Kilometers
0 2.5 5 10 Miles
MEVE
AZRU
COLORADO
NEW MEXICO
Farmington
NPS IMD GIS: 20120816

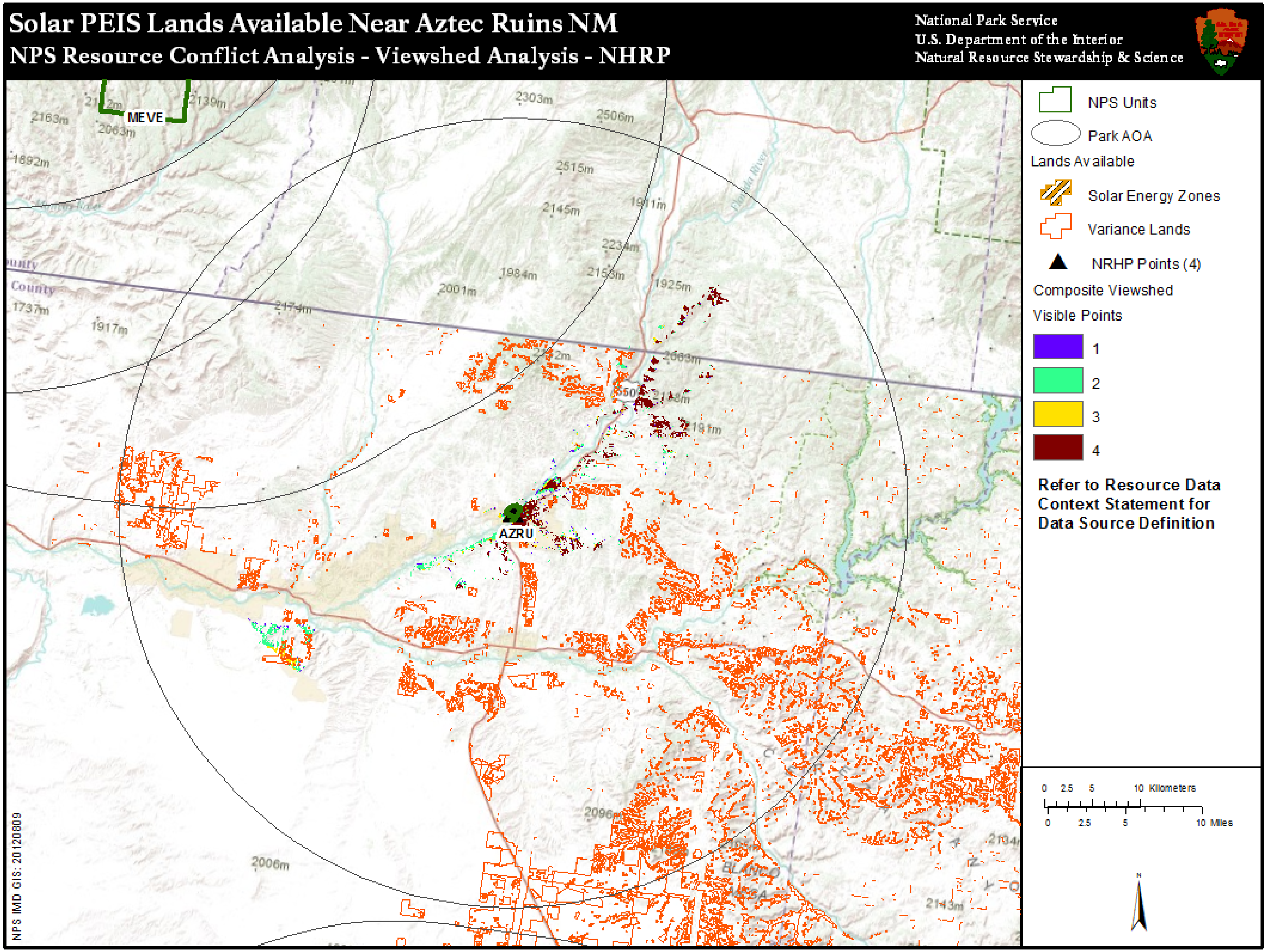

Solar PEIS Lands Available Near Aztec Ruins NM
NPS Resource Conflict Analysis - Roadless Natural Areas
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Roadless Natural Areas
Refer to Resource Data Context Statement for Data Source Definition
0 2.5 5 10 Kilometers
0 2.5 5 10 Miles
MEVE
AZRU
Farmington
NPS IMD GIS: 20120816

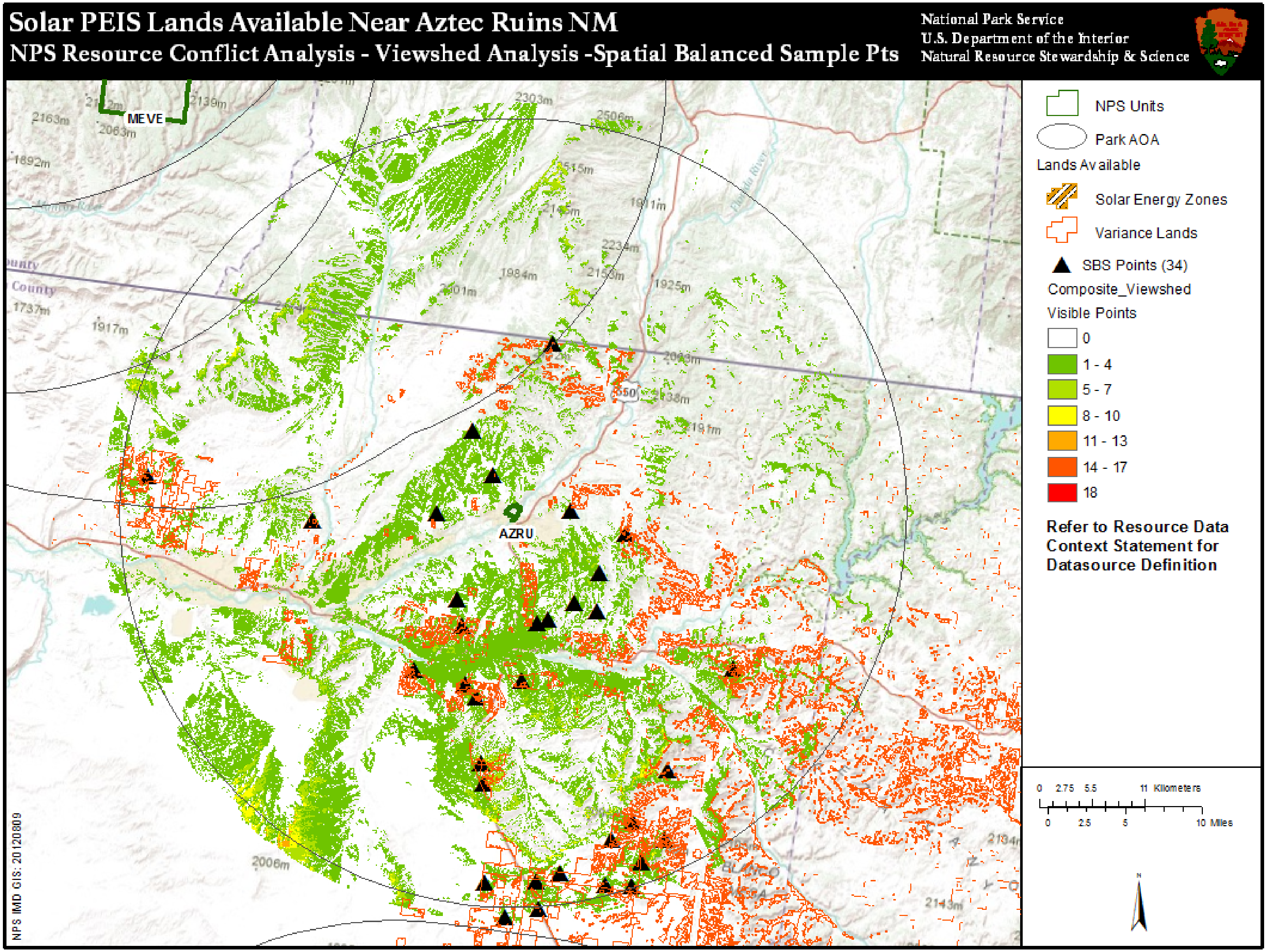

Solar PEIS Lands Available Near Aztec Ruins NM
NPS Resource Conflict Analysis - Naturalness Index
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
MEVE
AZRU
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Naturalness Index (2001)
High (1)
Low (0)
Refer to Resource Data Context Statement for Data Source Definition
0 2.5 5 10 Kilometers
0 2.5 5 10 Miles
NPS IMD GIS: 20120816


Solar PEIS Lands Available Near Aztec Ruins NM
NPS Resource Conflict Analysis - Landscape Permeability
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
MEVE
AZRU
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Landscape Permeability
Low
Moderate
High
Refer to Resource Data Context Statement for Data Source Definition
0 2.5 5 10 Kilometers
0 2.5 5 10 Miles
NPS IMD GIS: 20120814

Nighttime Lights

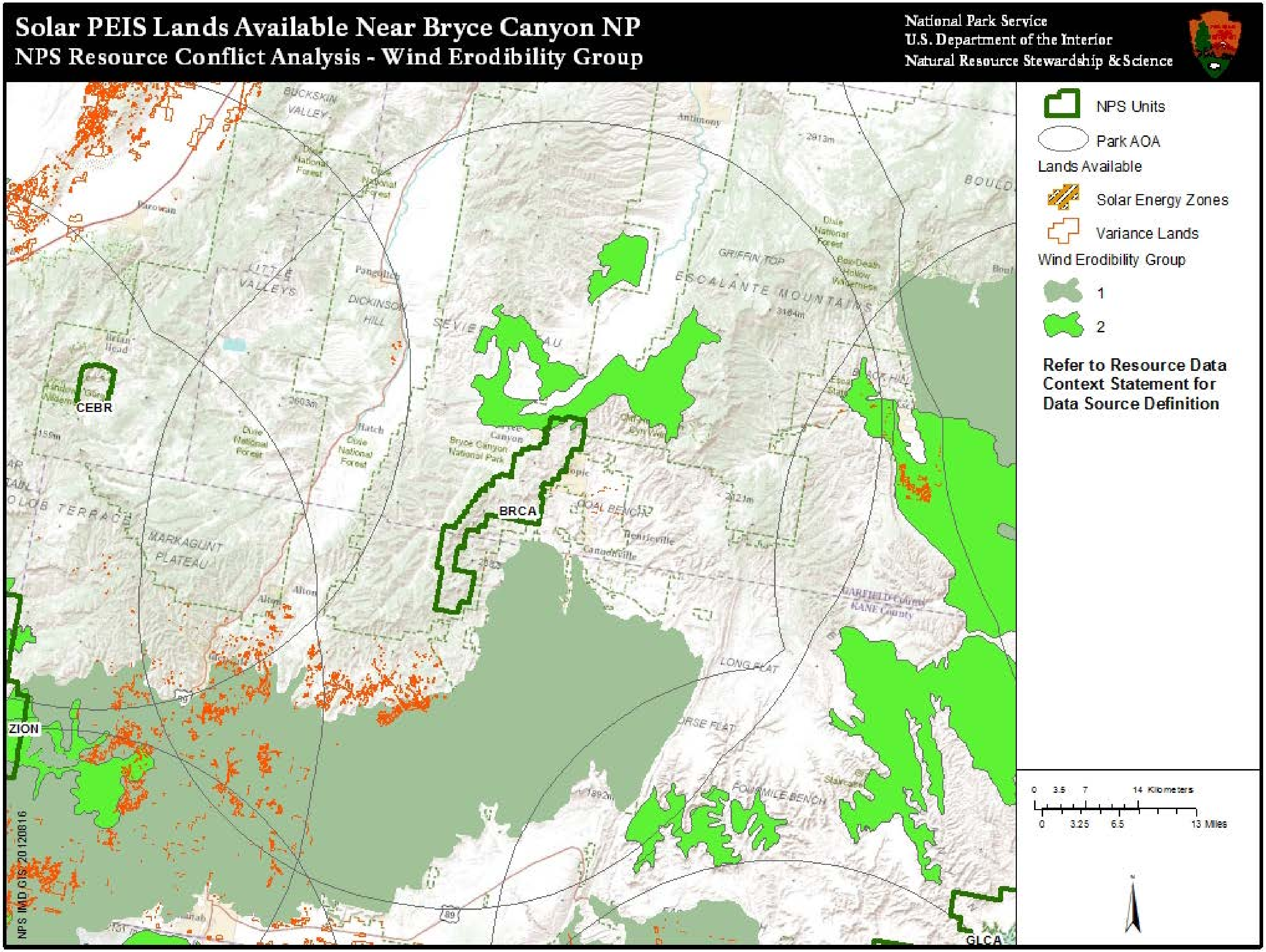


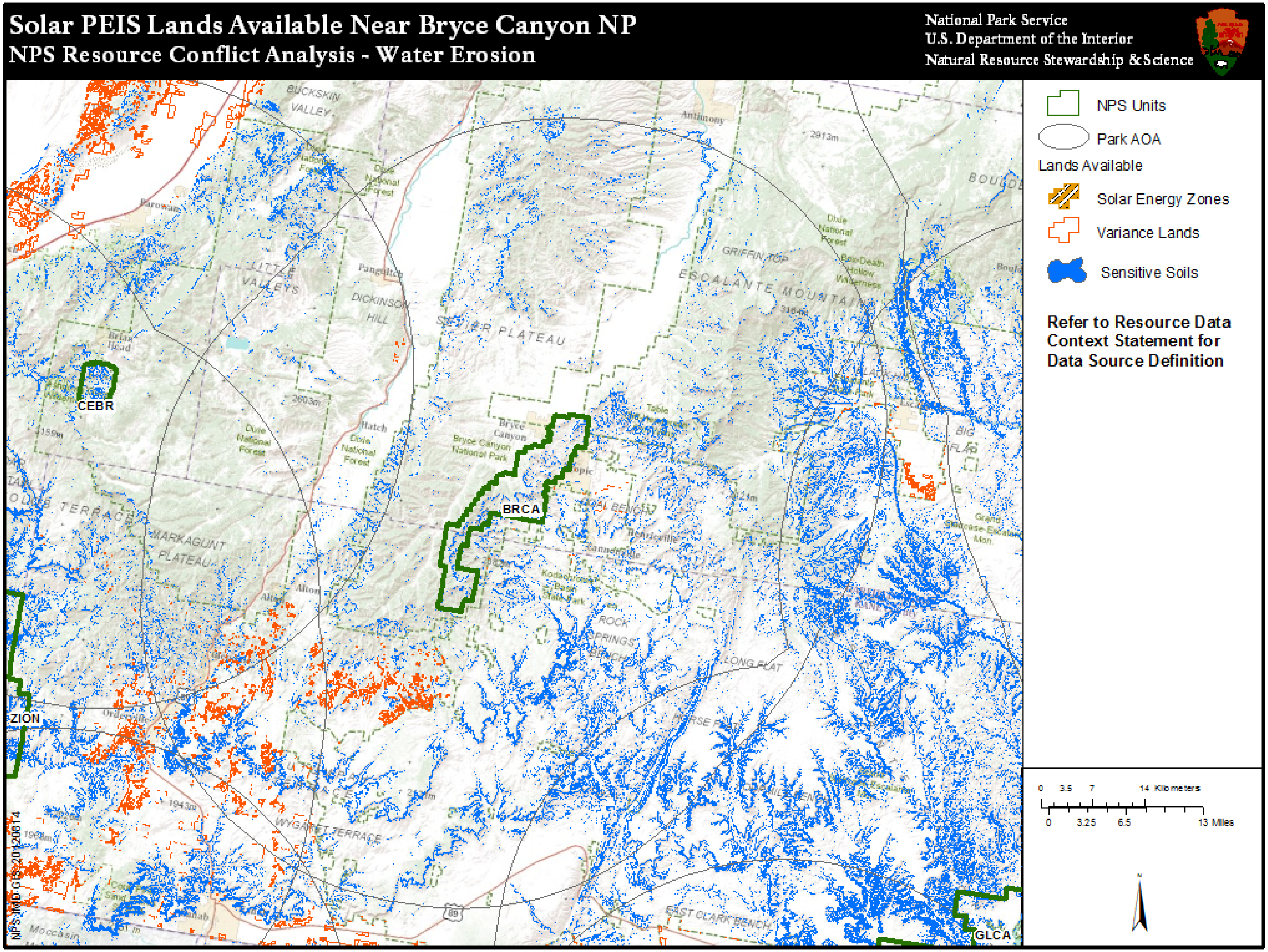

Solar PEIS Lands Available Near Aztec Ruins NM
NPS Resource Conflict Analysis - Viewshed Analysis - NRHP
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
NRHP Points (4)
Composite Viewshed
Visible Points
1
2
3
4
Refer to Resource Data Context Statement for Data Source Definition
0 2.5 5 10 Kilometers
0 2.5 5 10 Miles
MEVE
AZRU
NPS IMD GIS: 20120809



Solar PEIS Lands Available Near Aztec Ruins NM
NPS Resource Conflict Analysis - Viewshed Analysis -Spatial Balanced Sample Pts
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
SBS Points (34)
Composite_Viewshed
Visible Points
0
1 - 4
5 - 7
8 - 10
11 - 13
14 - 17
18
Refer to Resource Data Context Statement for Datasource Definition
MEVE
AZRU
NPS IMD GIS: 20120809

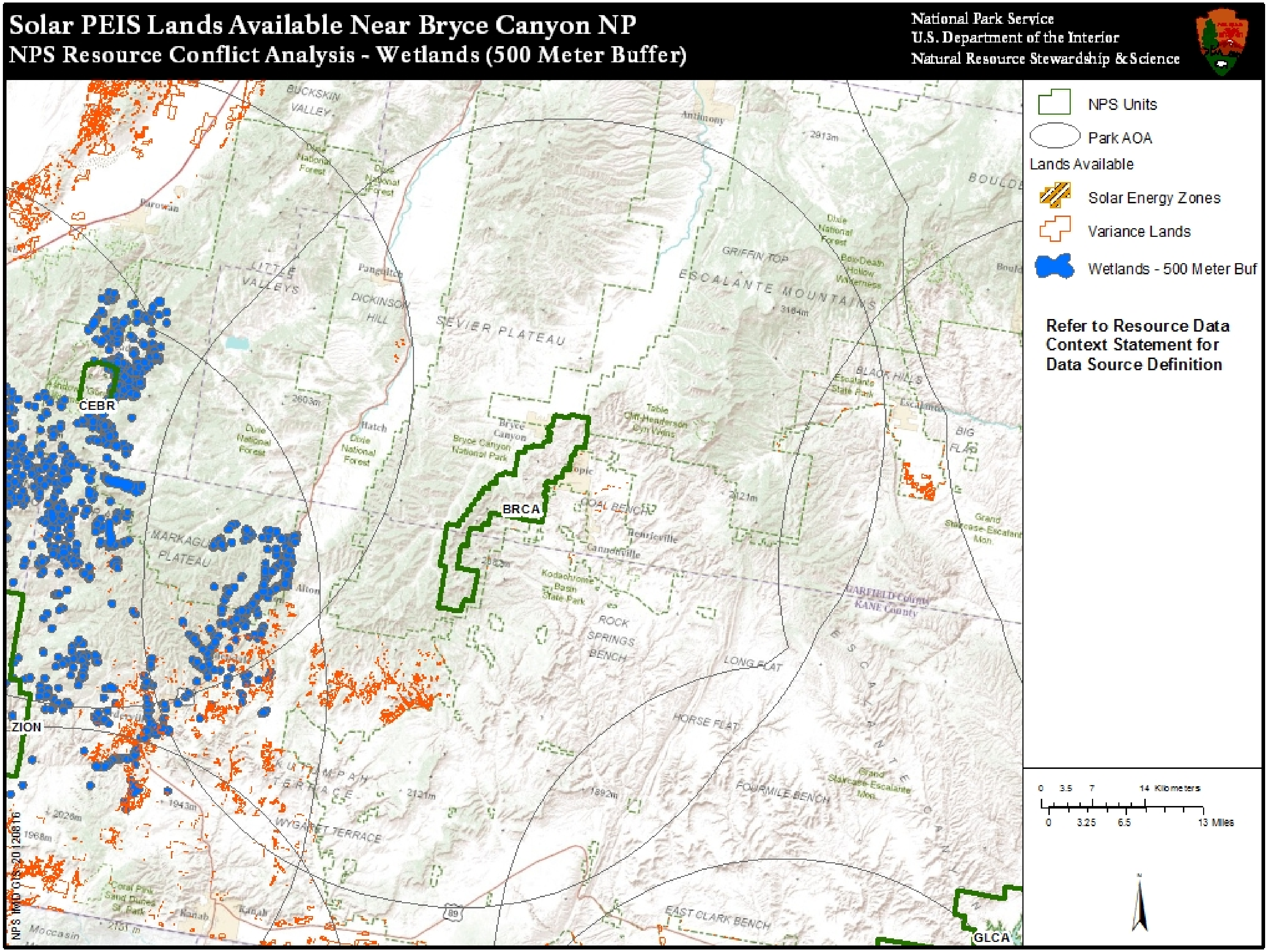
Bryce Canyon National Park
Wind Erodibility Group



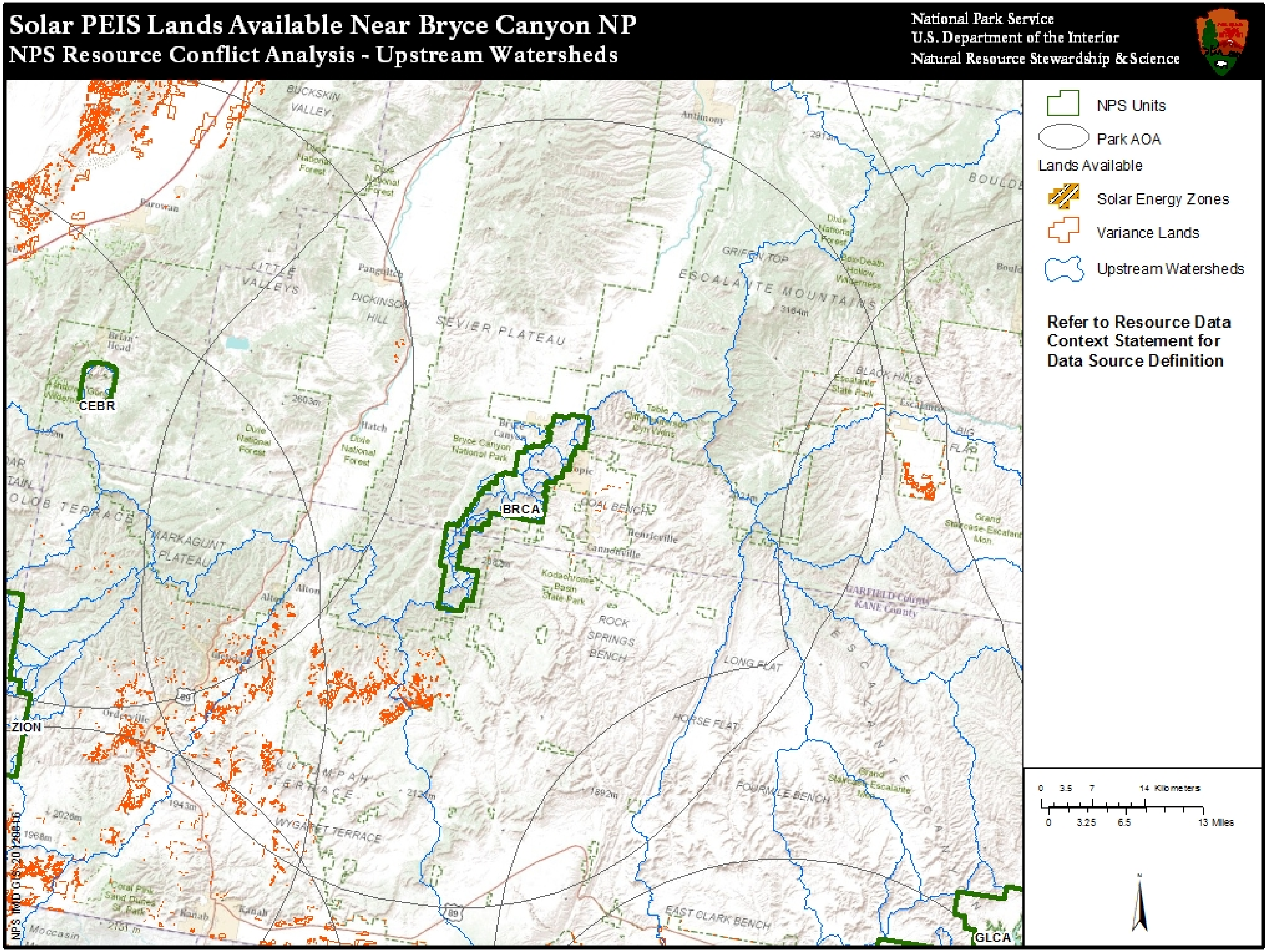


Solar PEIS Lands Available Near Bryce Canyon NP
NPS Resource Conflict Analysis - Water Erosion
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Sensitive Soils
Refer to Resource Data Context Statement for Data Source Definition
CEBR
BRCA
ZION
GLCA
PAUNSAUGUNT PLATEAU
ESCALANTE MOUNTAINS
SEVIER PLATEAU
WYGARET TERRACE
EAST CLARK BENCH
ROCK SPRINGS BENCH
LONG FLAT
0 3.5 7 14 Kilometers
0 3.25 6.5 13 Miles

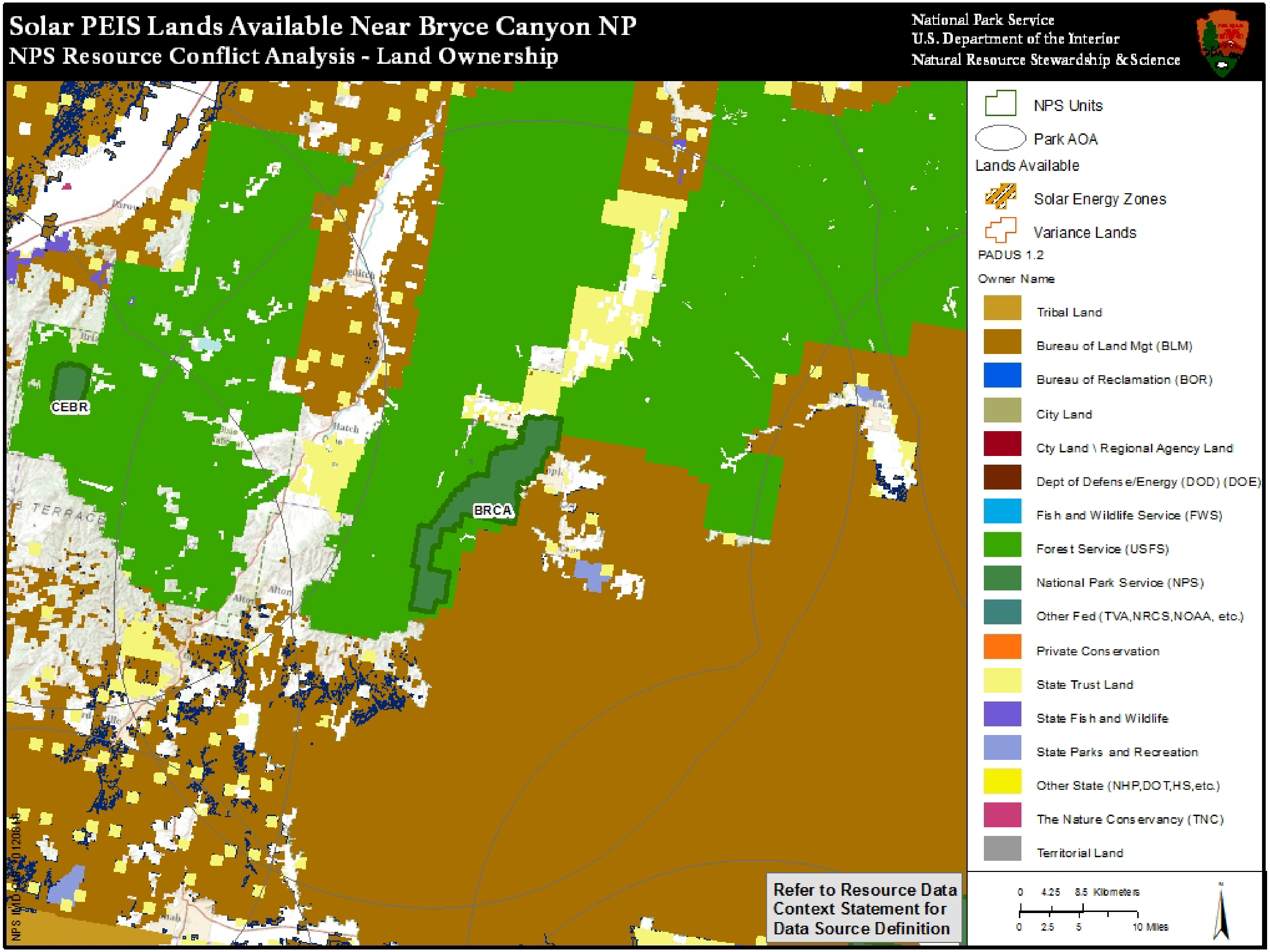
Wetlands

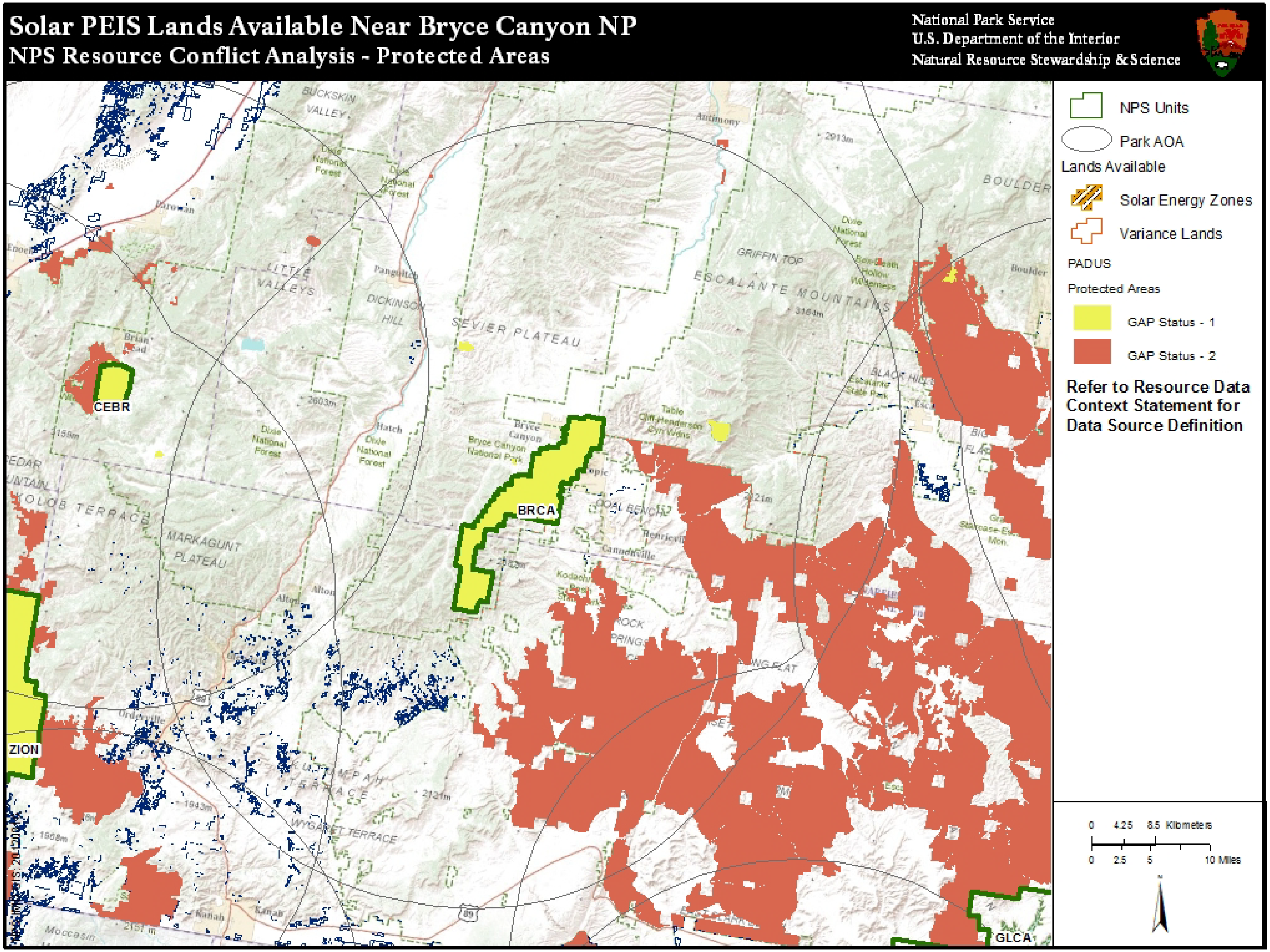

Solar PEIS Lands Available Near Bryce Canyon NP
NPS Resource Conflict Analysis - Wetlands (500 Meter Buffer)
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Wetlands - 500 Meter Buf
Refer to Resource Data Context Statement for Data Source Definition
0 3.5 7 14 Kilometers
0 3.25 6.5 13 Miles
CEBR
BRCA
ZION
GLCA
SEVIER PLATEAU
ESCALANTE MOUNTAINS
MARKAGUNT PLATEAU
LITTLE VALLEYS
DICKINSON HILL
BUCKSKIN VALLEY
GRIFFIN TOP
BLACK HILLS
COAL BENCH
ROCK SPRINGS BENCH
LONG FLAT
HORSE FLAT
FOURMILE BENCH
EAST CLARK BENCH
WYGARET TERRACE
GARFIELD County
KANE County
Dixie National Forest
Bryce Canyon National Park
Kodachrome Basin State Park
Grand Staircase-Escalante Nat. Mon.
Antimony
Tropic
Henrieville
Cannonville
Hatch
Alton
Kanab
Moccasin
NPS IMD GIS 20120816

Upstream Watershed

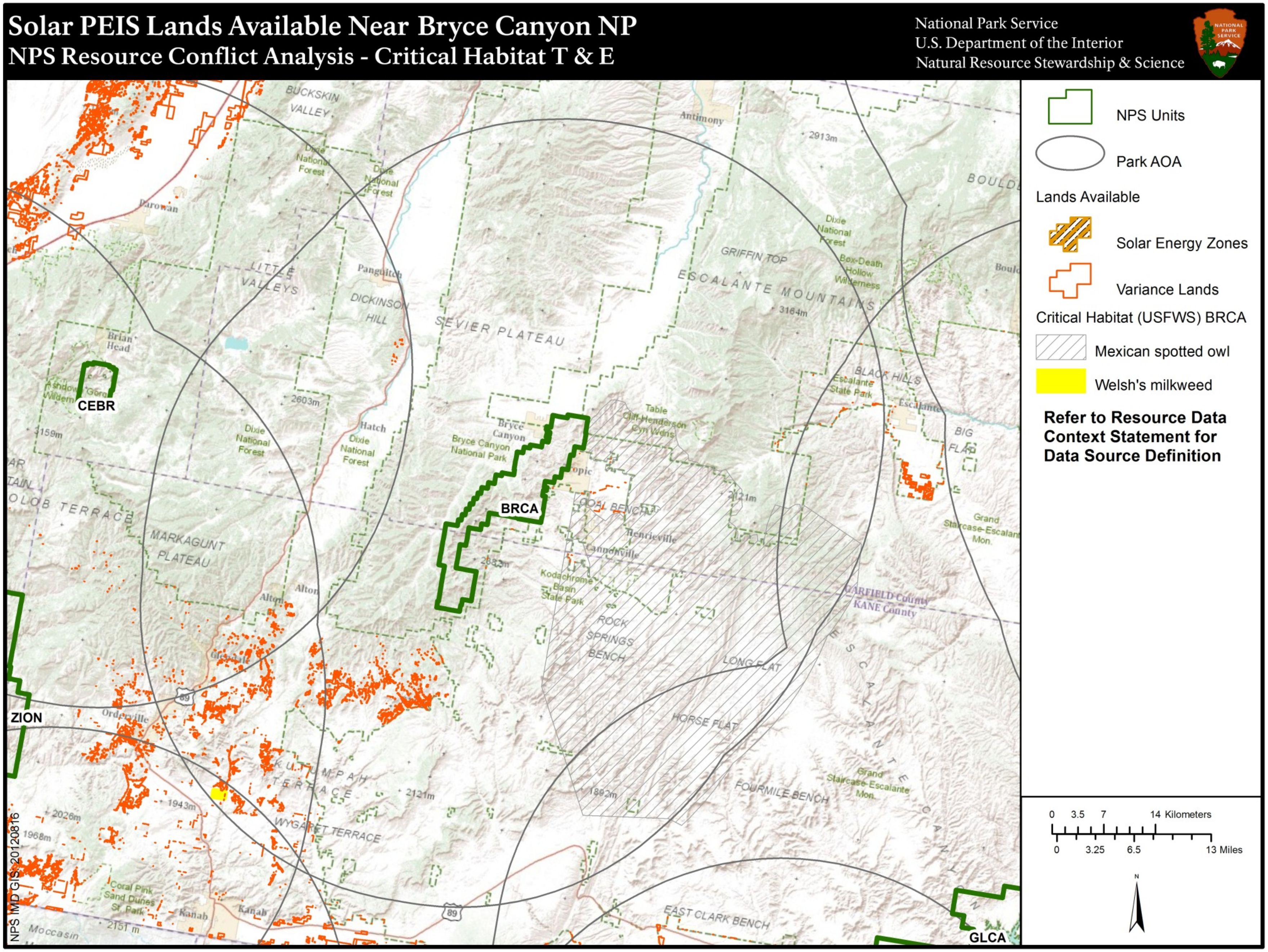


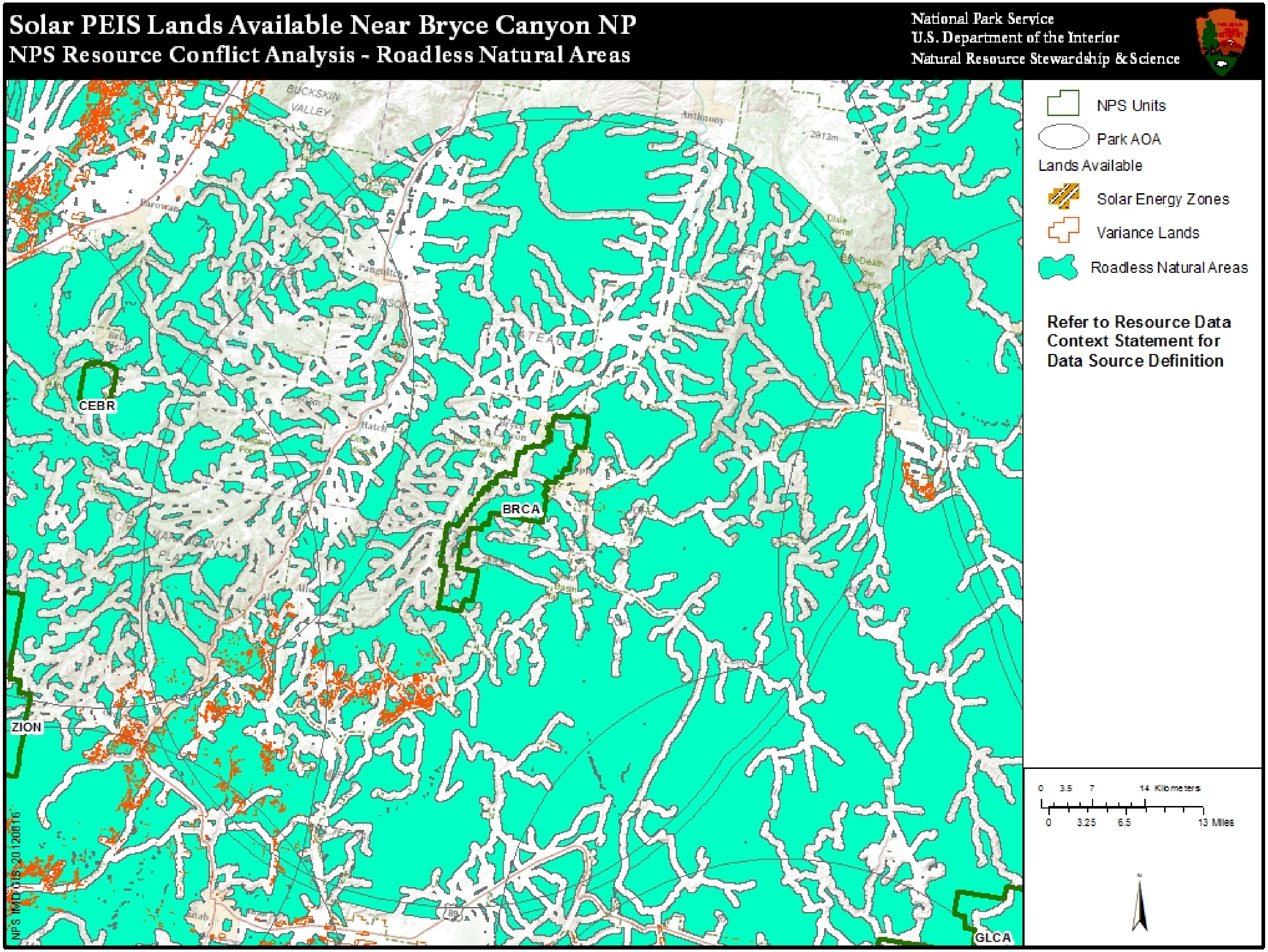
Land Ownership

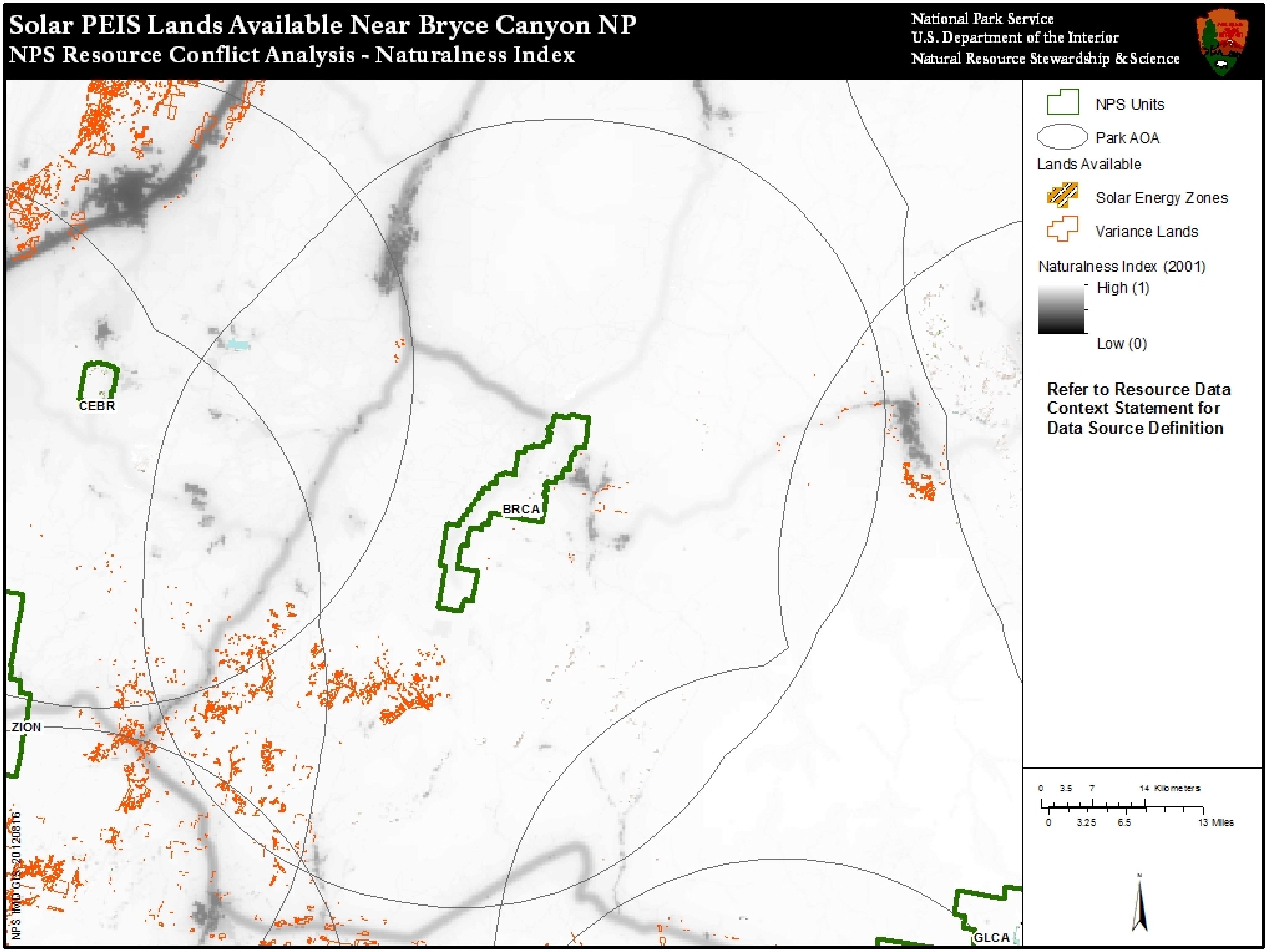


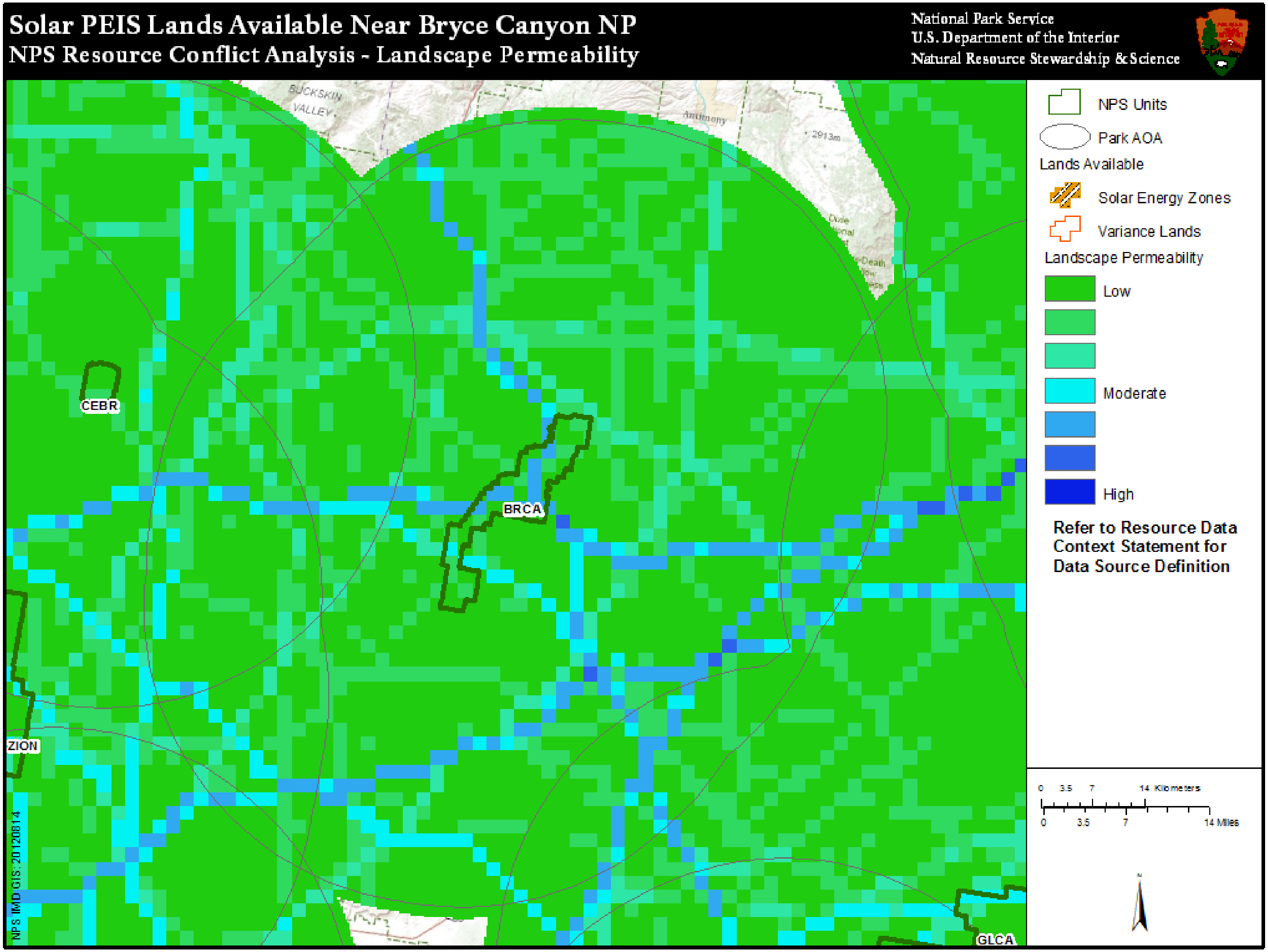


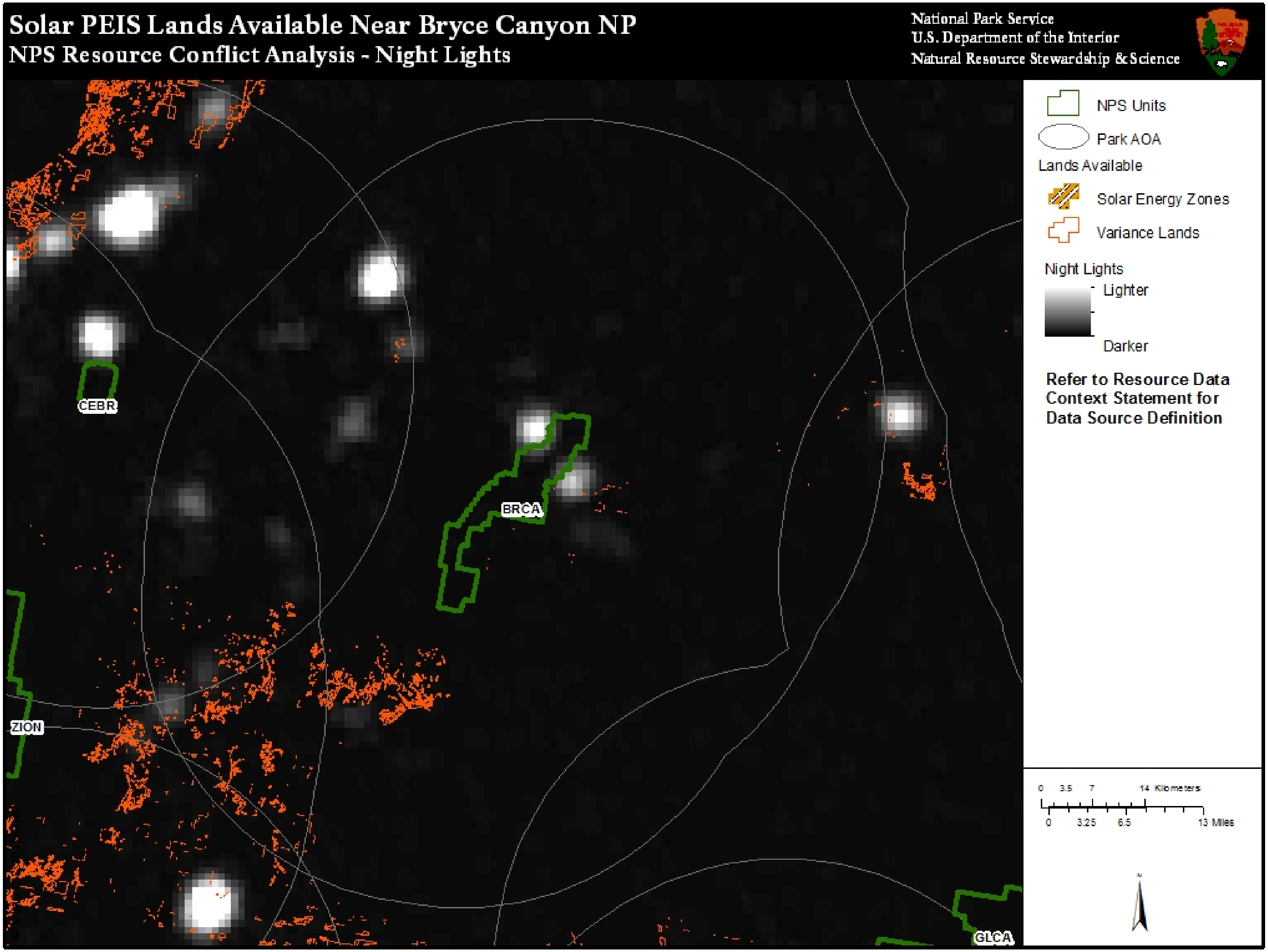
Solar PEIS Lands Available Near Bryce Canyon NP
NPS Resource Conflict Analysis - Protected Areas
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
PADUS
Protected Areas
GAP Status - 1
GAP Status - 2
Refer to Resource Data Context Statement for Data Source Definition
CEBR
BRCA
ZION
GLCA
SEVIER PLATEAU
ESCALANTE MOUNTAINS
MARKAGUNT PLATEAU
0 4.25 8.5 Kilometers
0 2.5 5 10 Miles

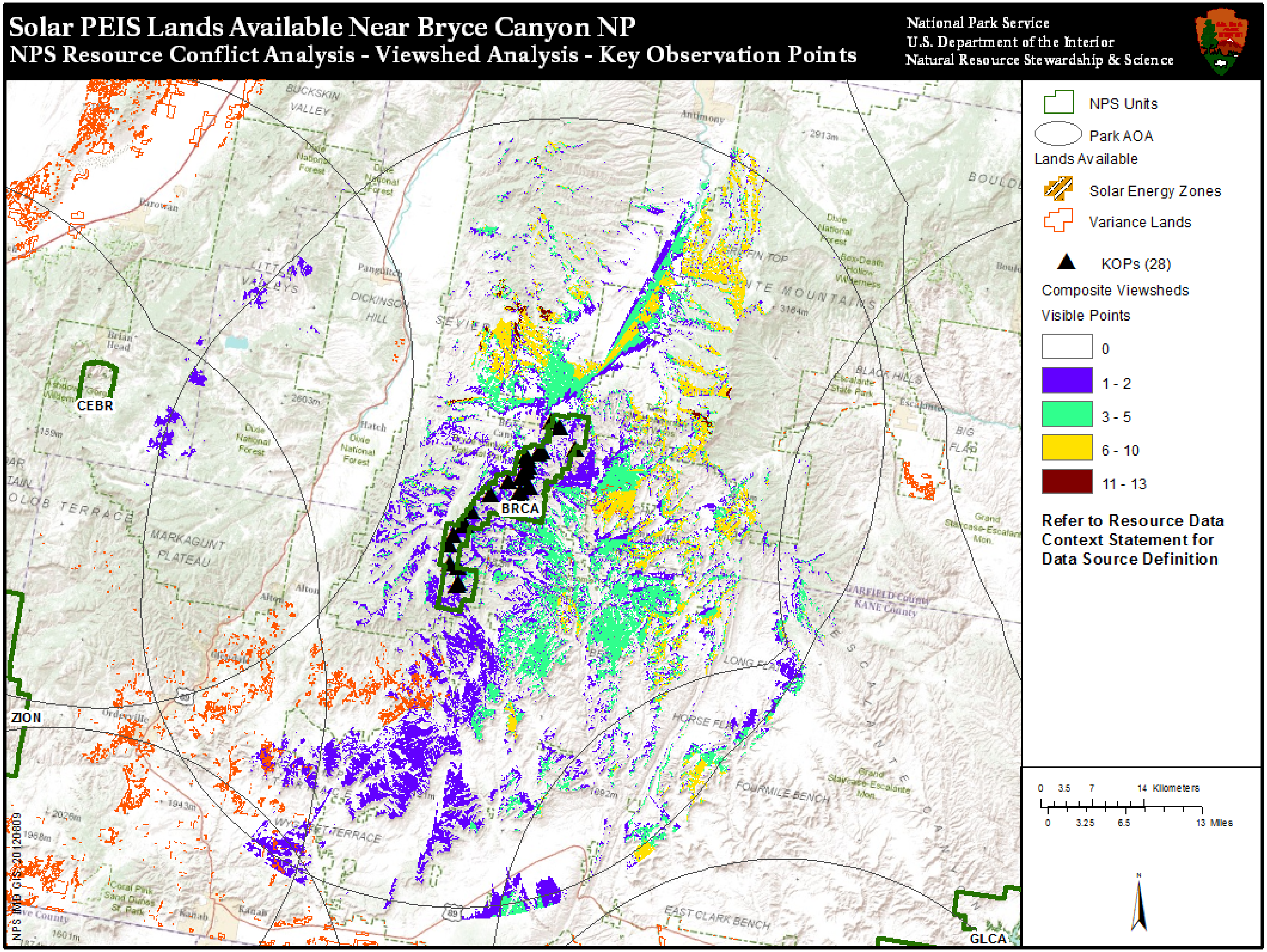

Solar PEIS Lands Available Near Bryce Canyon NP
NPS Resource Conflict Analysis - Critical Habitat T & E
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Critical Habitat (USFWS) BRCA
Mexican spotted owl
Welsh's milkweed
Refer to Resource Data Context Statement for Data Source Definition
0 3.5 7 14 Kilometers
0 3.25 6.5 13 Miles
N
CEBR
BRCA
ZION
GLCA
SEVIER PLATEAU
ESCALANTE MOUNTAINS
MARKAGUNT PLATEAU
Bryce Canyon National Park
Dixie National Forest
Grand Staircase-Escalante Mon.
NPS IMD GIS 20120816

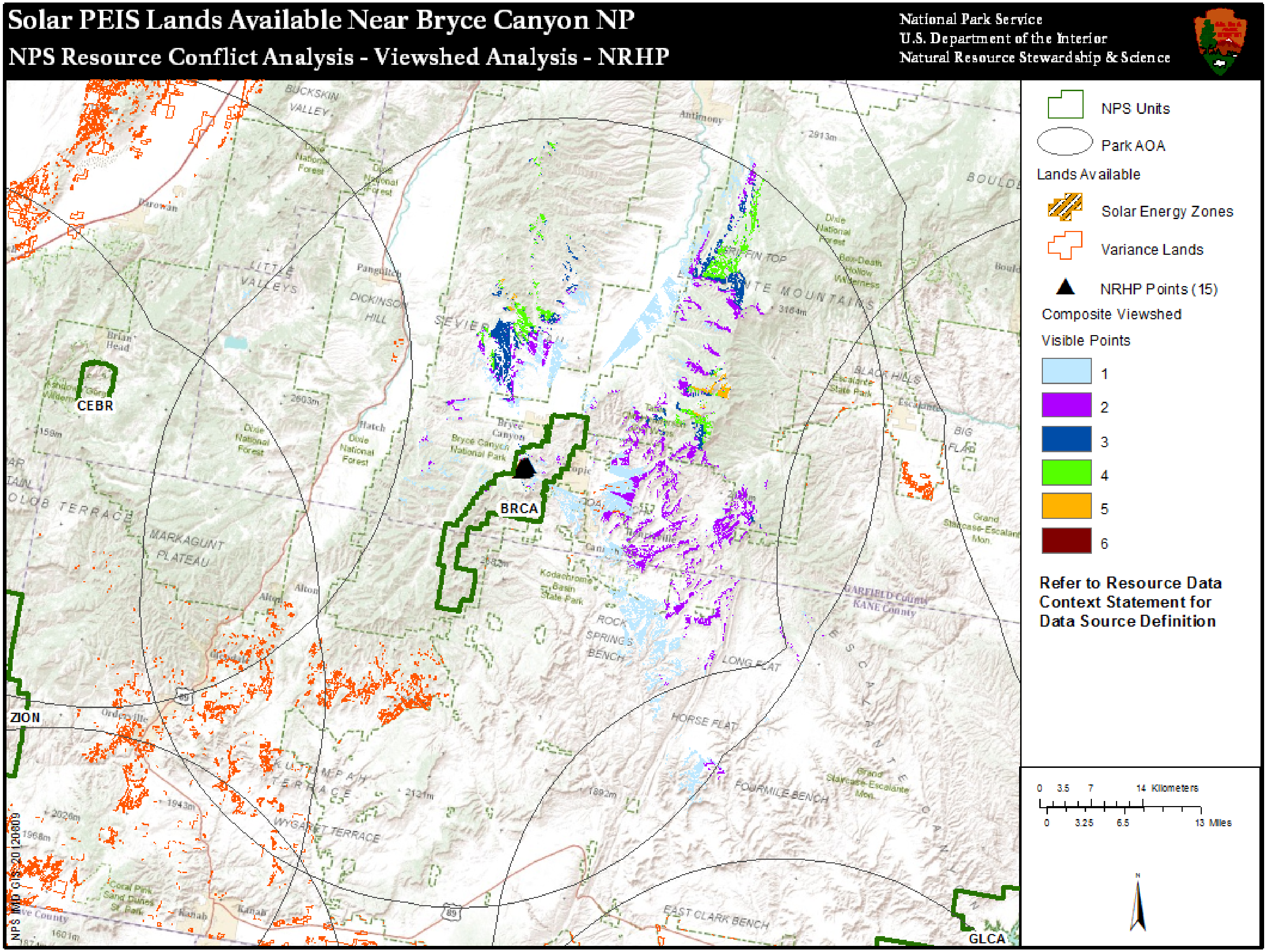

Solar PEIS Lands Available Near Bryce Canyon NP
NPS Resource Conflict Analysis - Roadless Natural Areas
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Roadless Natural Areas
Refer to Resource Data Context Statement for Data Source Definition
0 3.5 7 14 Kilometers
0 3.25 6.5 13 Miles
CEBR
BRCA
ZION
GLCA
NPS IMD GIS 20120816

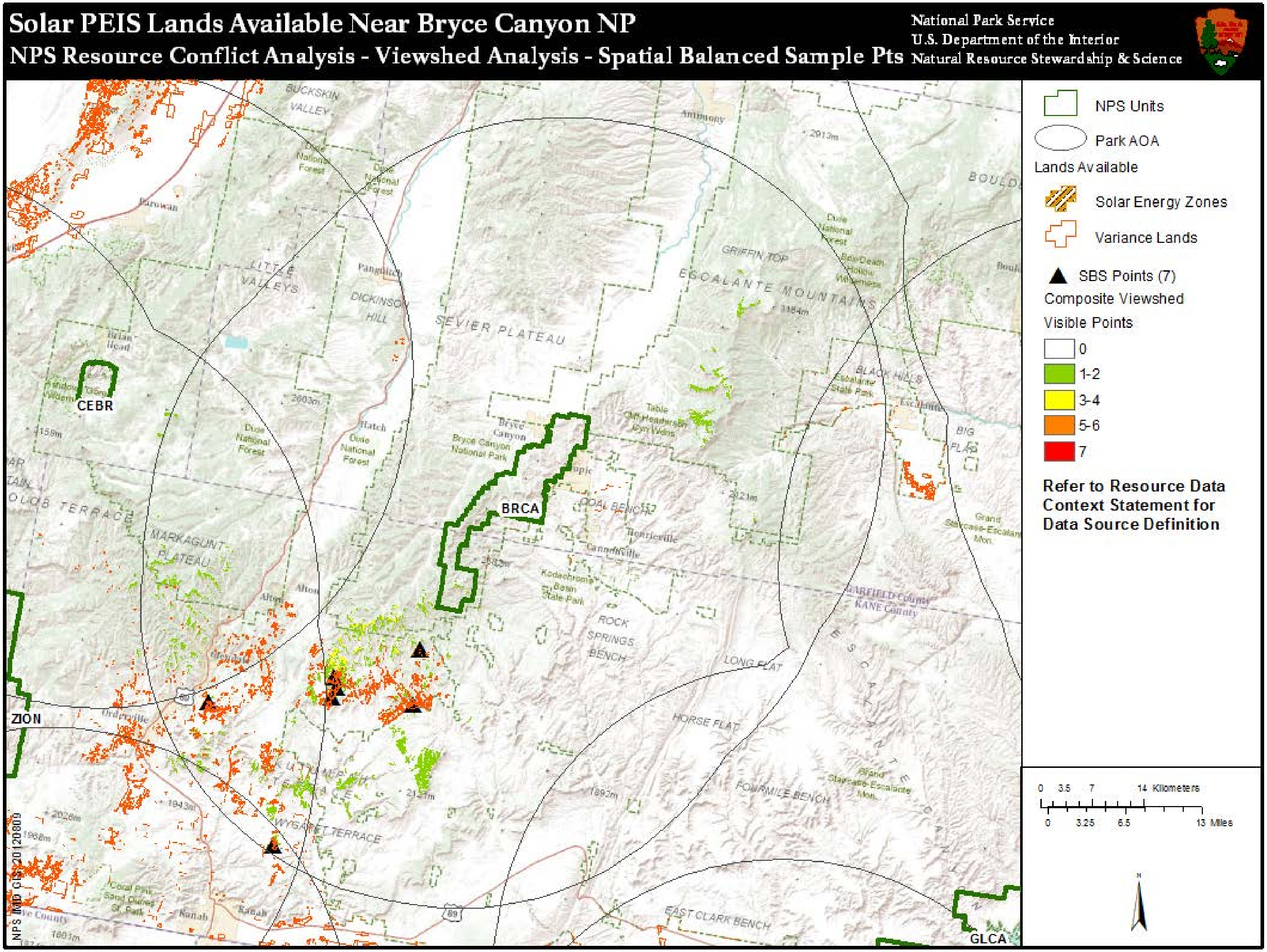

Solar PEIS Lands Available Near Bryce Canyon NP
NPS Resource Conflict Analysis - Naturalness Index
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Naturalness Index (2001)
High (1)
Low (0)
Refer to Resource Data Context Statement for Data Source Definition
0 3.5 7 14 Kilometers
0 3.25 6.5 13 Miles
CEBR
BRCA
ZION
GLCA


Solar PEIS Lands Available Near Bryce Canyon NP
NPS Resource Conflict Analysis - Landscape Permeability
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Landscape Permeability
Low
Moderate
High
Refer to Resource Data Context Statement for Data Source Definition
0 3.5 7 14 Kilometers
0 3.5 7 14 Miles
CEBR
BRCA
ZION
GLCA
NPS IMD GIS: 20120814

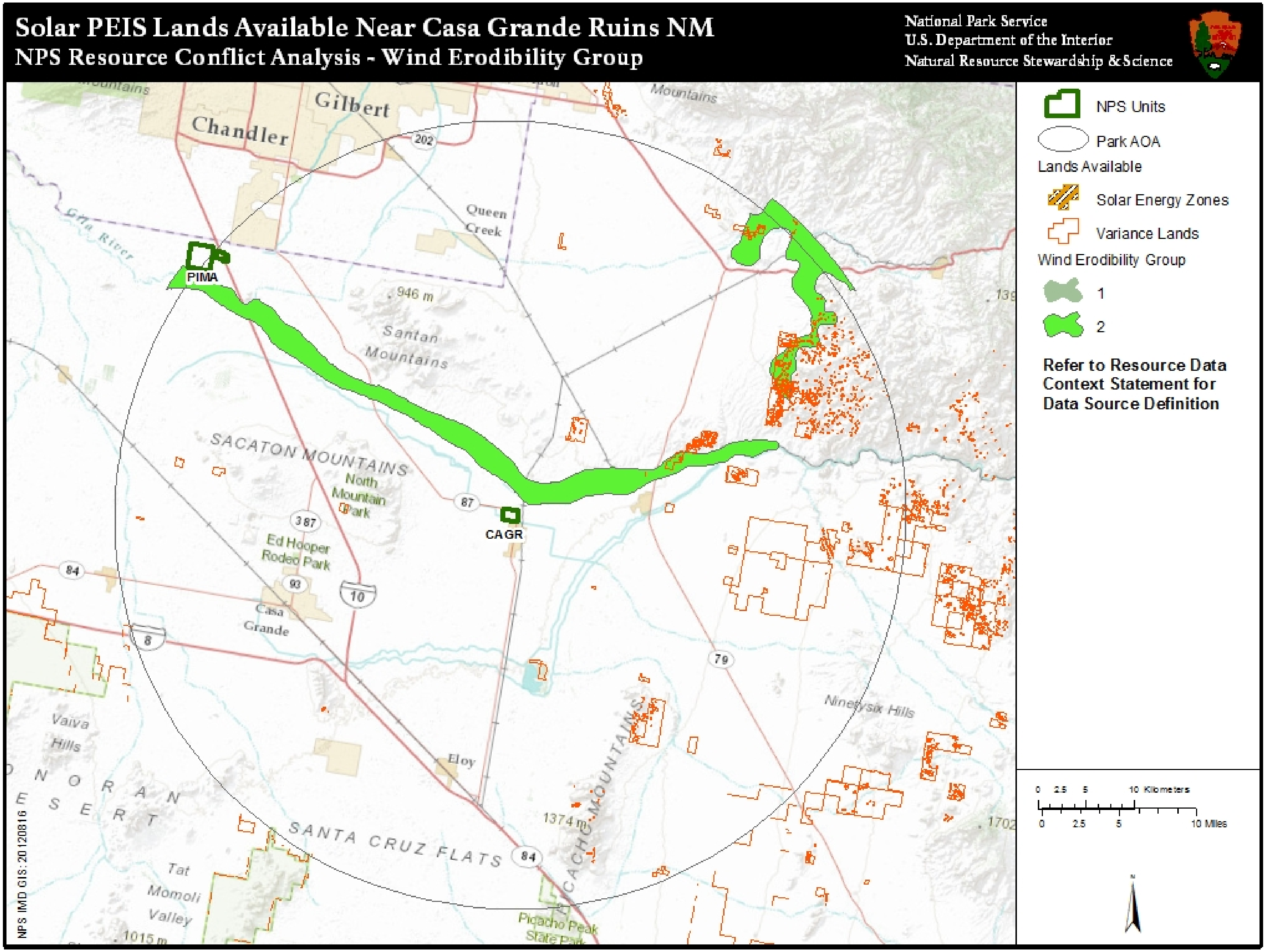

Solar PEIS Lands Available Near Bryce Canyon NP
NPS Resource Conflict Analysis - Night Lights
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Night Lights
Lighter
Darker
Refer to Resource Data Context Statement for Data Source Definition
0 3.5 7 14 Kilometers
0 3.25 6.5 13 Miles
CEBR
BRCA
ZION
GLCA

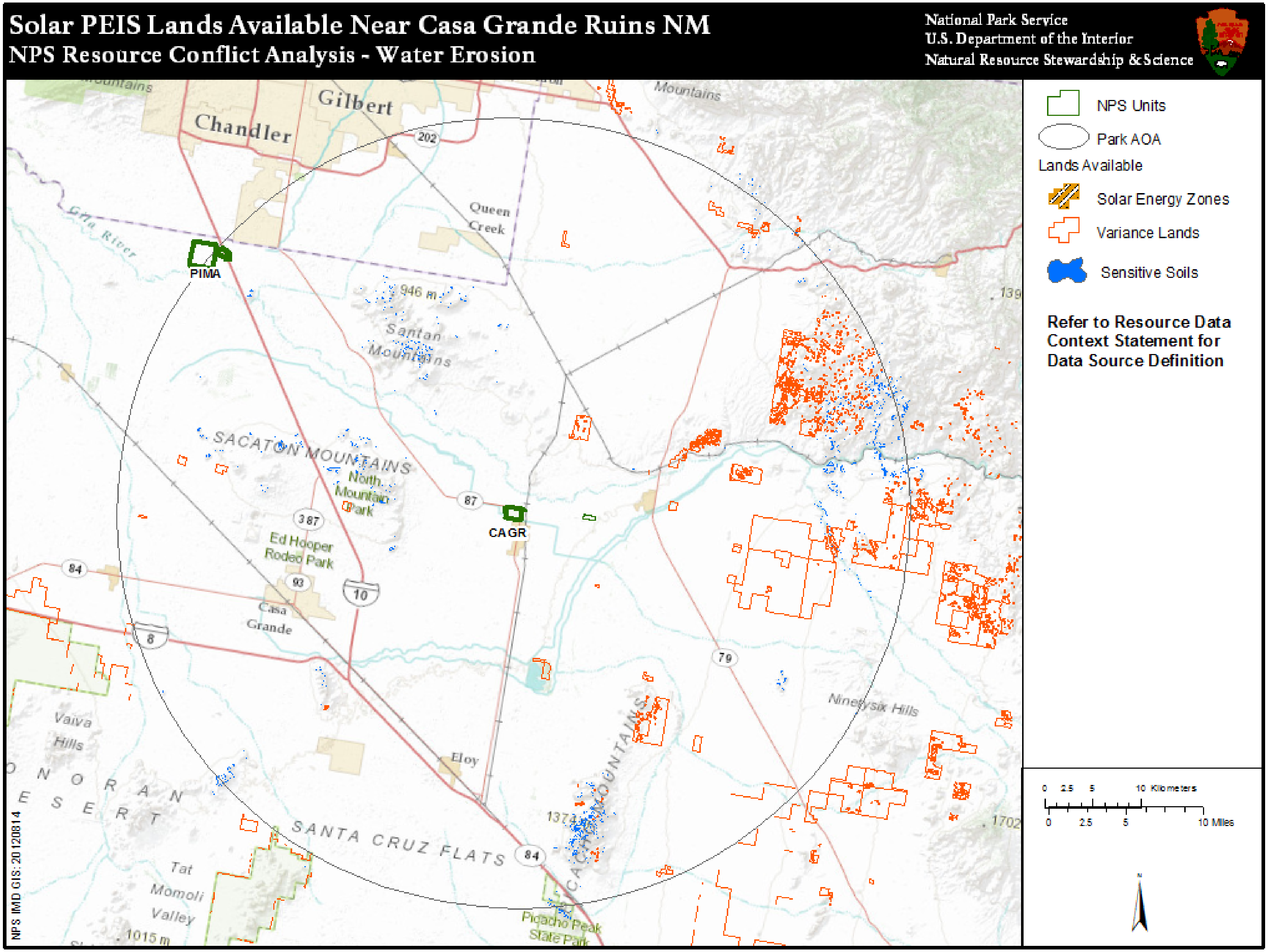

Solar PEIS Lands Available Near Bryce Canyon NP
NPS Resource Conflict Analysis - Viewshed Analysis - Key Observation Points
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
KOPs (28)
Composite Viewsheds
Visible Points
0
1 - 2
3 - 5
6 - 10
11 - 13
Refer to Resource Data Context Statement for Data Source Definition
0 3.5 7 14 Kilometers
0 3.25 6.5 13 Miles
CEBR
BRCA
ZION
GLCA
NPS IMD GIS 20120809


Solar PEIS Lands Available Near Bryce Canyon NP
NPS Resource Conflict Analysis - Viewshed Analysis - NRHP
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
NRHP Points (15)
Composite Viewshed
Visible Points
1
2
3
4
5
6
Refer to Resource Data Context Statement for Data Source Definition
0 3.5 7 14 Kilometers
0 3.25 6.5 13 Miles
CEBR
BRCA
ZION
GLCA


Solar PEIS Lands Available Near Bryce Canyon NP
NPS Resource Conflict Analysis - Viewshed Analysis - Spatial Balanced Sample Pts
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
SBS Points (7)
Composite Viewshed
Visible Points
0
1-2
3-4
5-6
7
Refer to Resource Data Context Statement for Data Source Definition
CEBR
BRCA
ZION
GLCA
SEVIER PLATEAU
ESCALANTE MOUNTAINS
MARKAGUNT PLATEAU
0 3.5 7 14 Kilometers
0 3.25 6.5 13 Miles

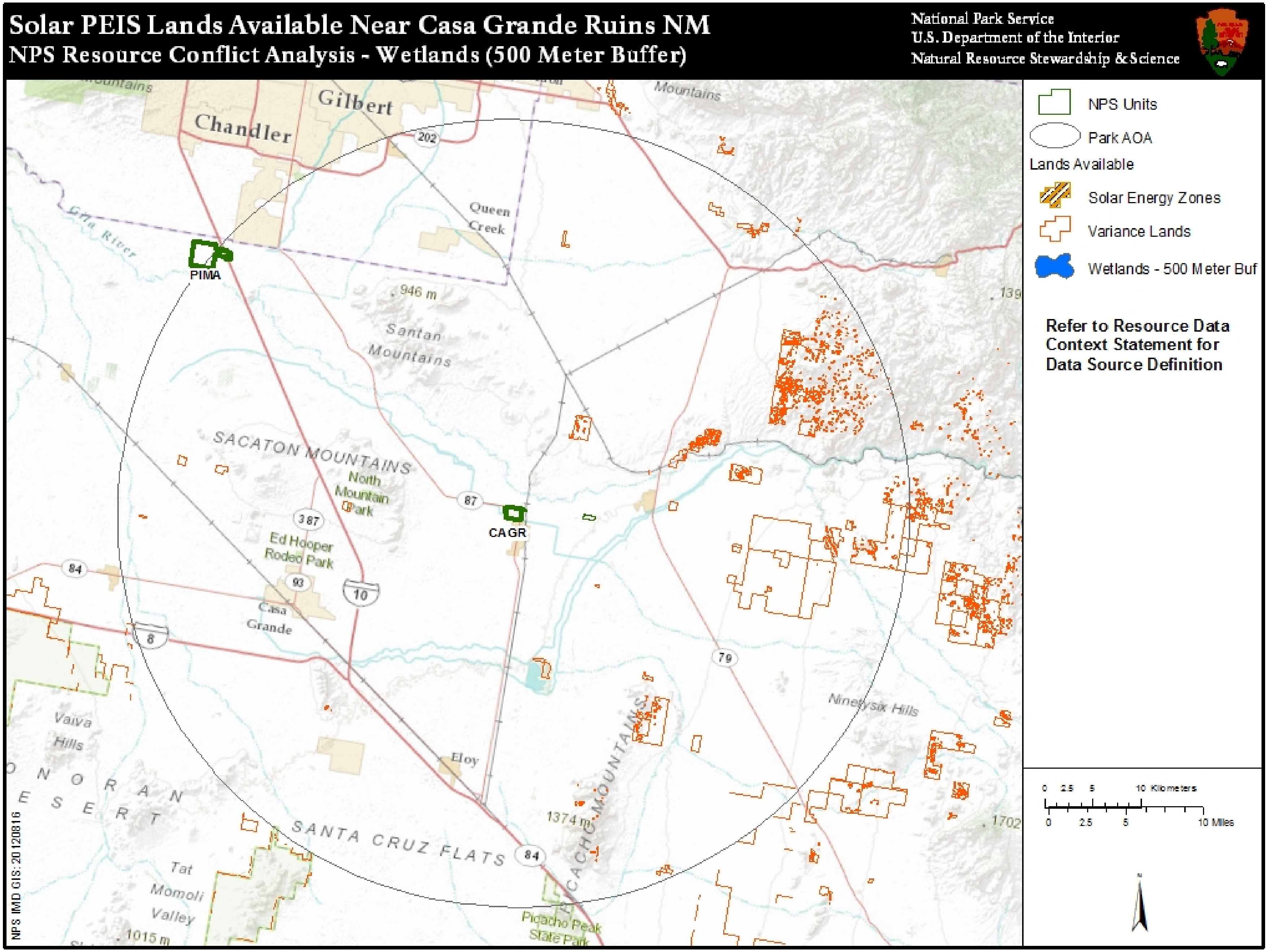
Casa Grande Ruins National Monument
Wind Erodibility Group





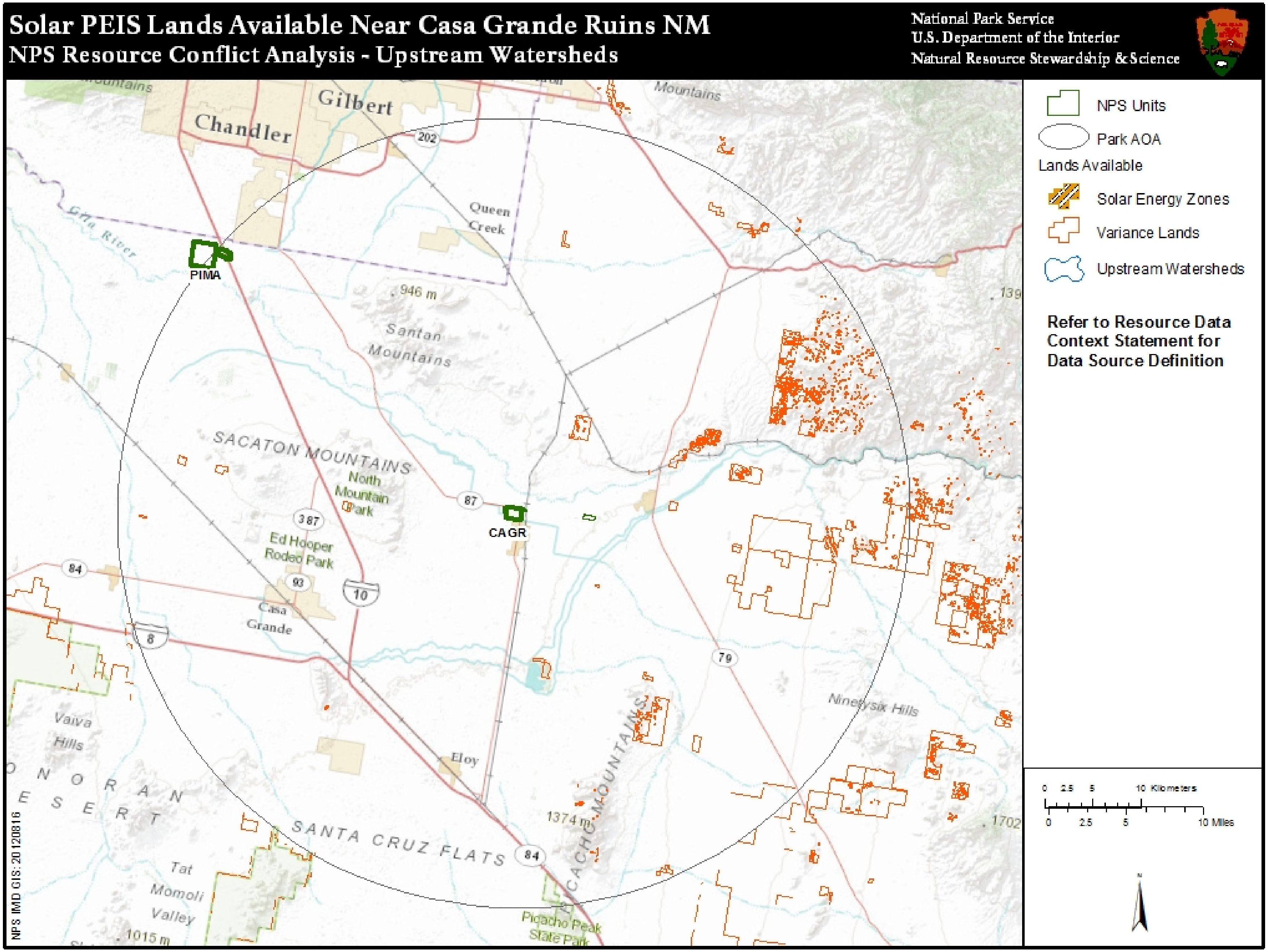
Solar PEIS Lands Available Near Casa Grande Ruins NM
NPS Resource Conflict Analysis - Water Erosion
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Sensitive Soils
Refer to Resource Data Context Statement for Data Source Definition
0 2.5 5 10 Kilometers
0 2.5 5 10 Miles
NPS IMD GIS: 20120814
Chandler
Gilbert
Queen Creek
PIMA
CAGR
Santan Mountains
SACATON MOUNTAINS
North Mountain Park
Ed Hooper Rodeo Park
Casa Grande
Eloy
SANTA CRUZ FLATS
SONORAN DESERT
Vaiva Hills
Tat Momoli Valley
Ninetysix Hills
Picacho Peak State Park
Gila River
Mountains
202
87
387
84
93
10
8
79
946 m
1374
1015 m
1702
139

Wetlands

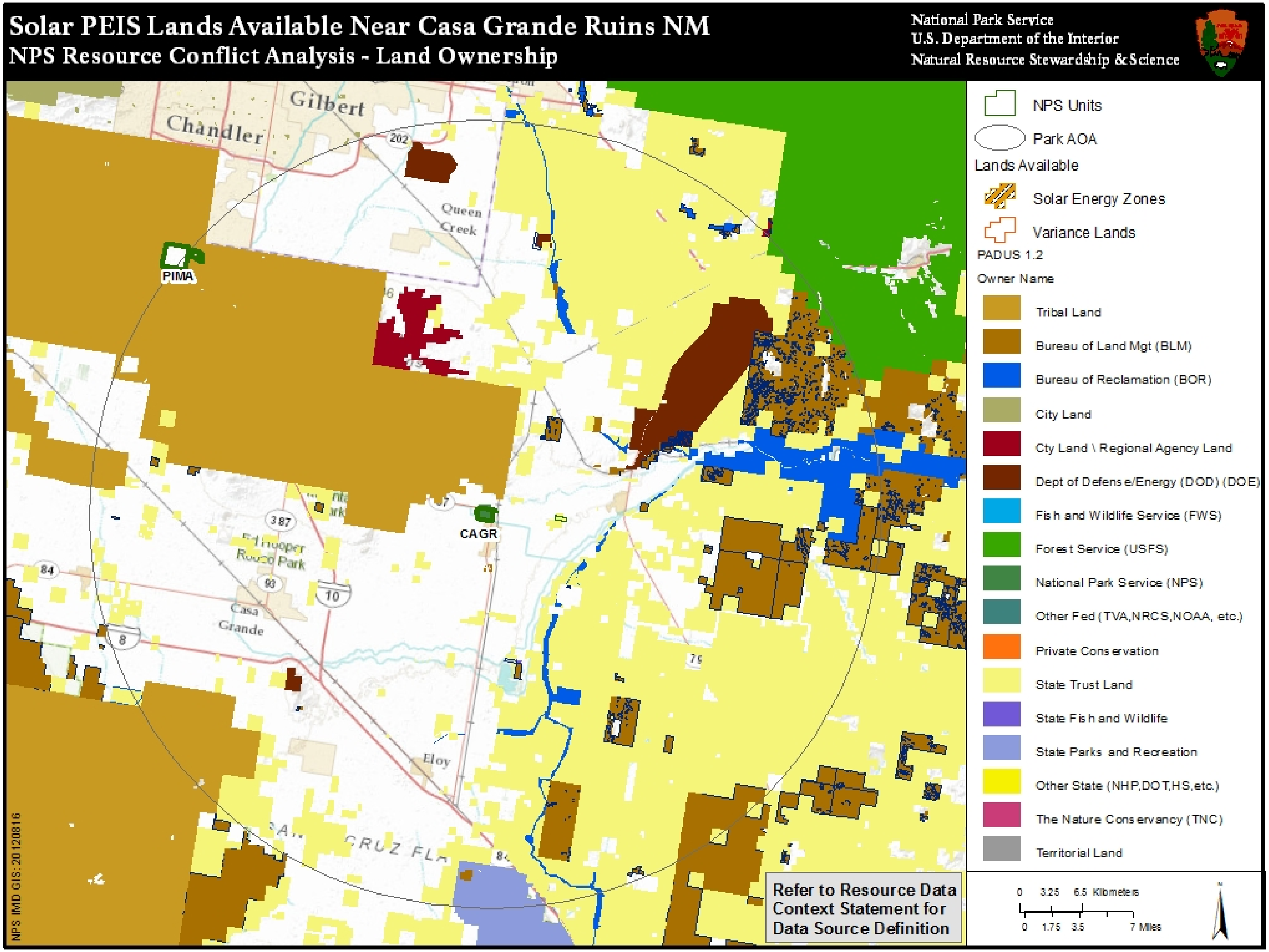


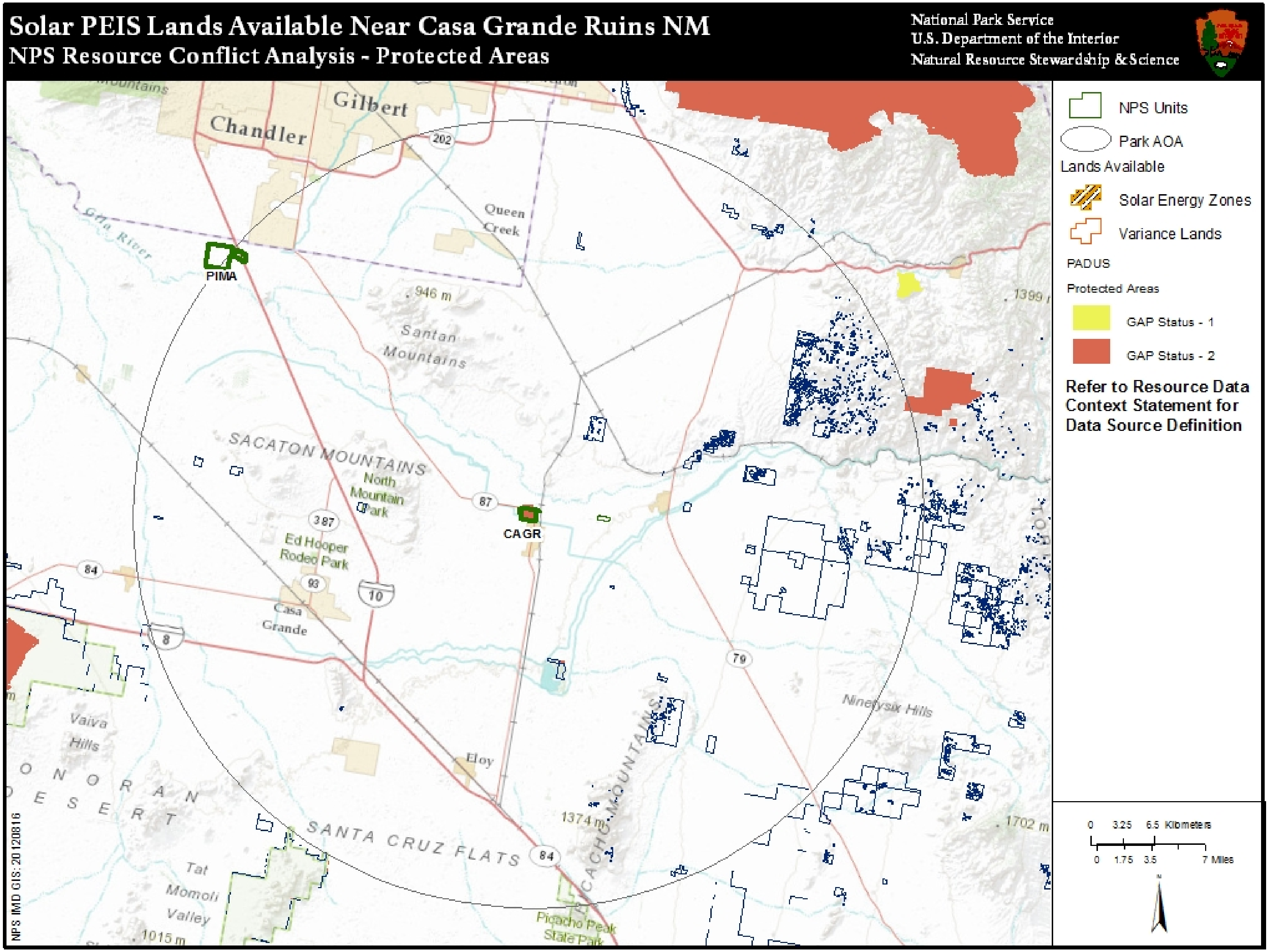
Solar PEIS Lands Available Near Casa Grande Ruins NM
NPS Resource Conflict Analysis - Wetlands (500 Meter Buffer)
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Wetlands - 500 Meter Buf
Refer to Resource Data Context Statement for Data Source Definition
0 2.5 5 10 Kilometers
0 2.5 5 10 Miles
NPS IMD GIS: 20120816
Gilbert
Chandler
Queen Creek
Gila River
PIMA
CAGR
Santan Mountains
SACATON MOUNTAINS
North Mountain Park
Ed Hooper Rodeo Park
Casa Grande
Eloy
SANTA CRUZ FLATS
Vaiva Hills
Tat Momoli Valley
Picacho Peak State Park
Ninetysix Hills
946 m
1374 m
1015 m
1702
139

Upstream Watershed

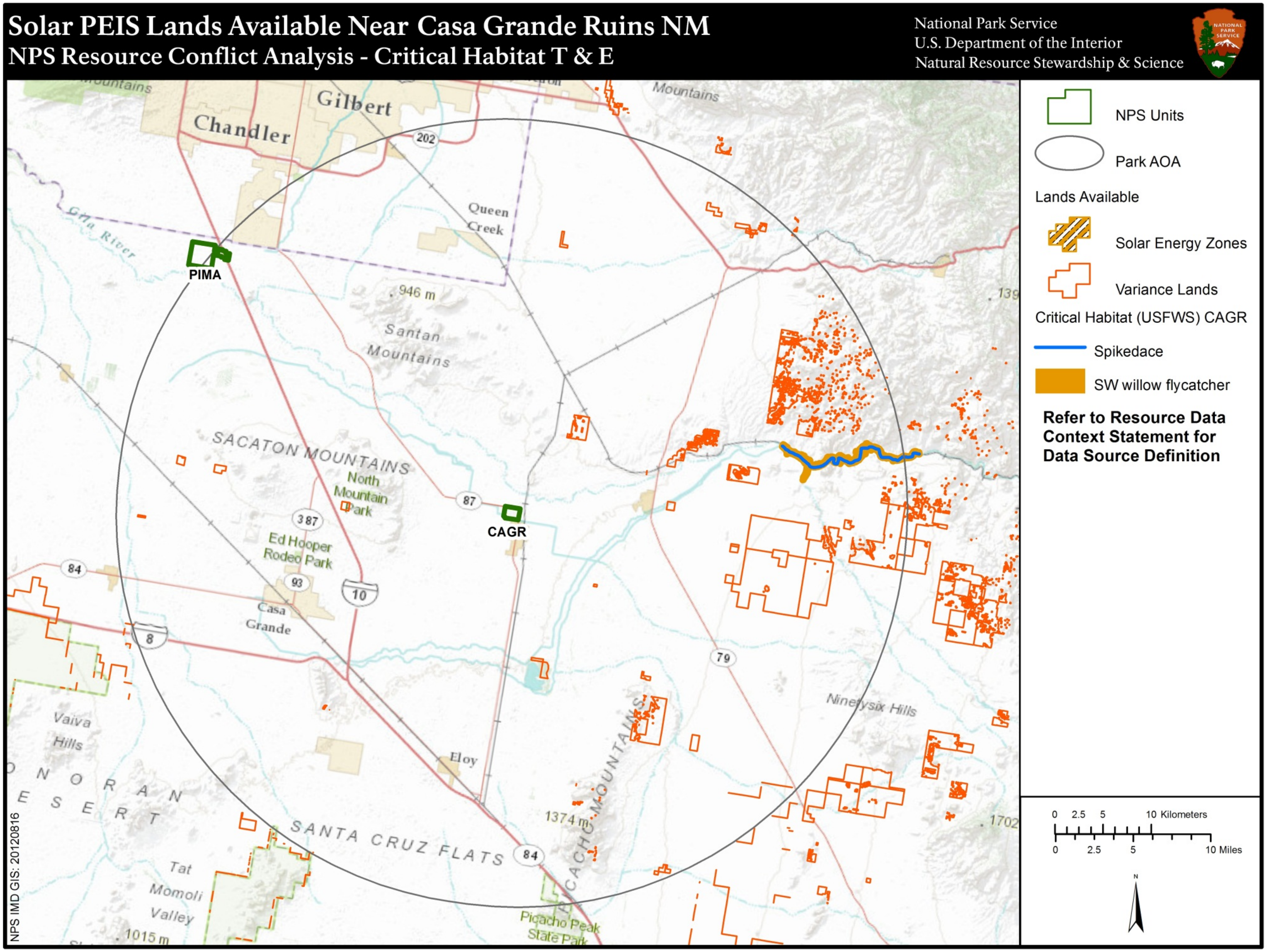


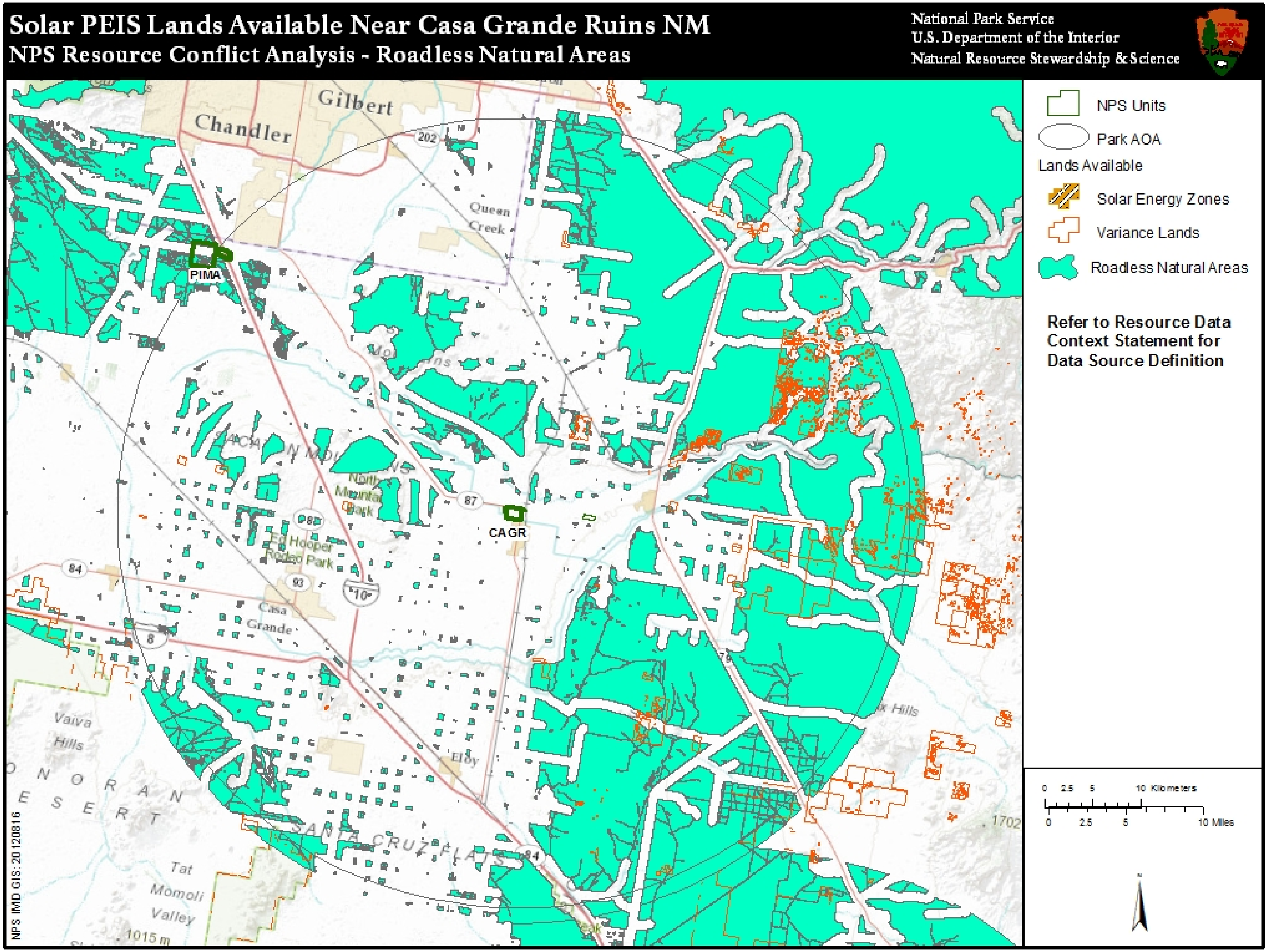
Land Ownership



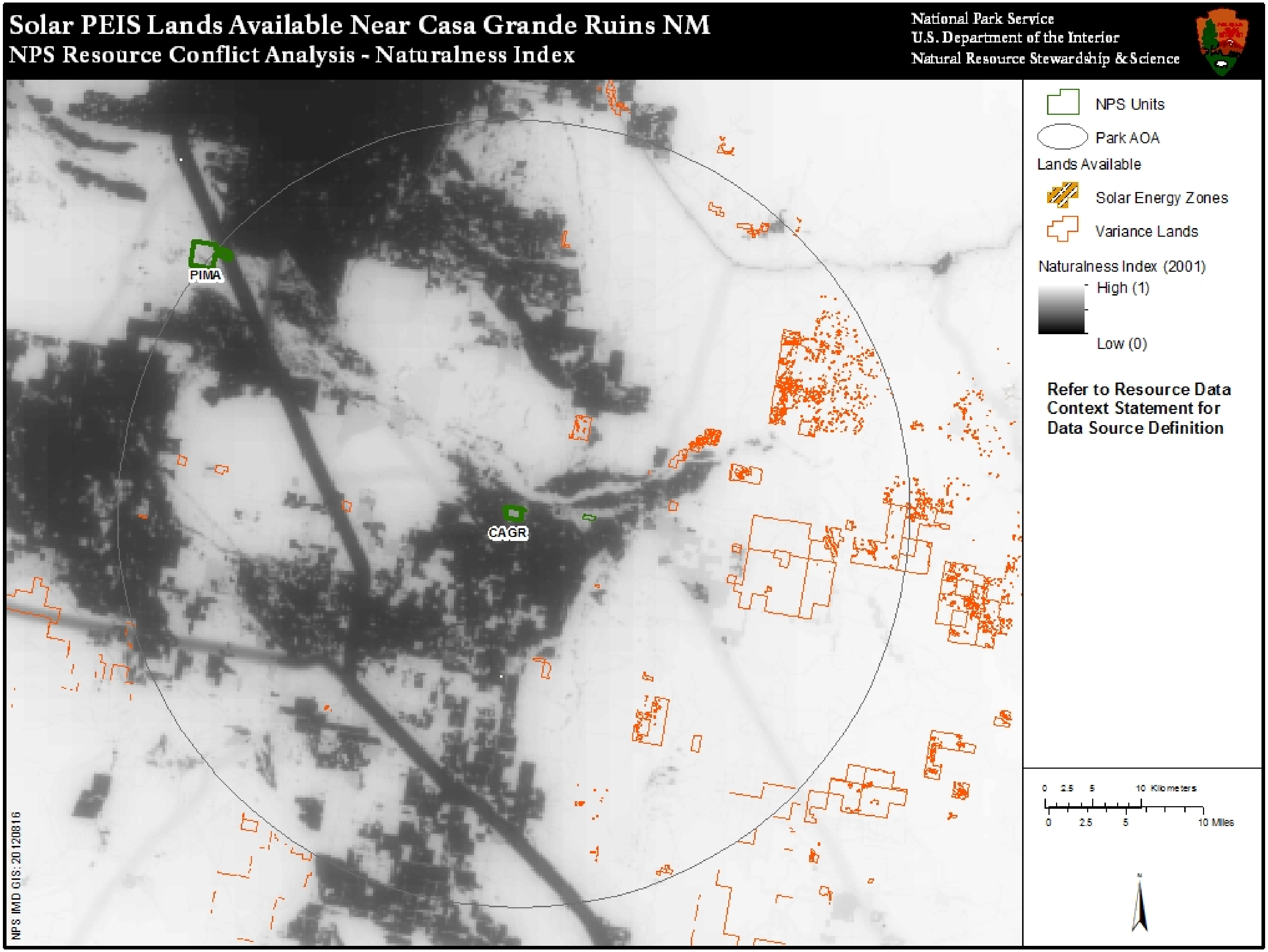

Solar PEIS Lands Available Near Casa Grande Ruins NM
NPS Resource Conflict Analysis - Protected Areas
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
PADUS
Protected Areas
GAP Status - 1
GAP Status - 2
Refer to Resource Data Context Statement for Data Source Definition
0 3.25 6.5 Kilometers
0 1.75 3.5 7 Miles
Gilbert
Chandler
Queen Creek
PIMA
CAGR
Santan Mountains
SACATON MOUNTAINS
North Mountain Park
Ed Hooper Rodeo Park
Casa Grande
Eloy
Ninetysix Hills
Vaiva Hills
SONORAN DESERT
SANTA CRUZ FLATS
Tat Momoli Valley
Picacho Peak State Park
NPS IMD GIS: 20120816

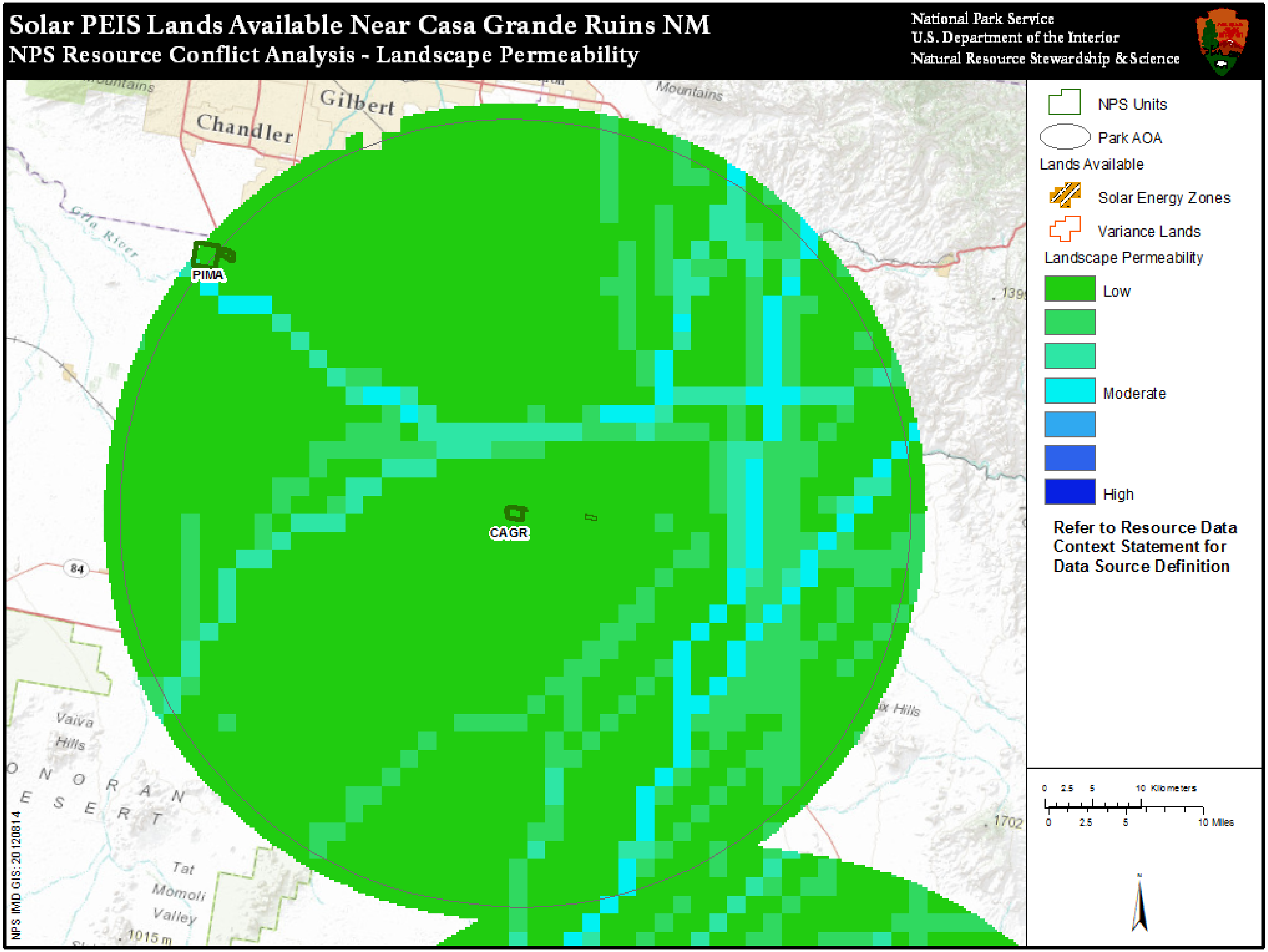
Critical Habitat



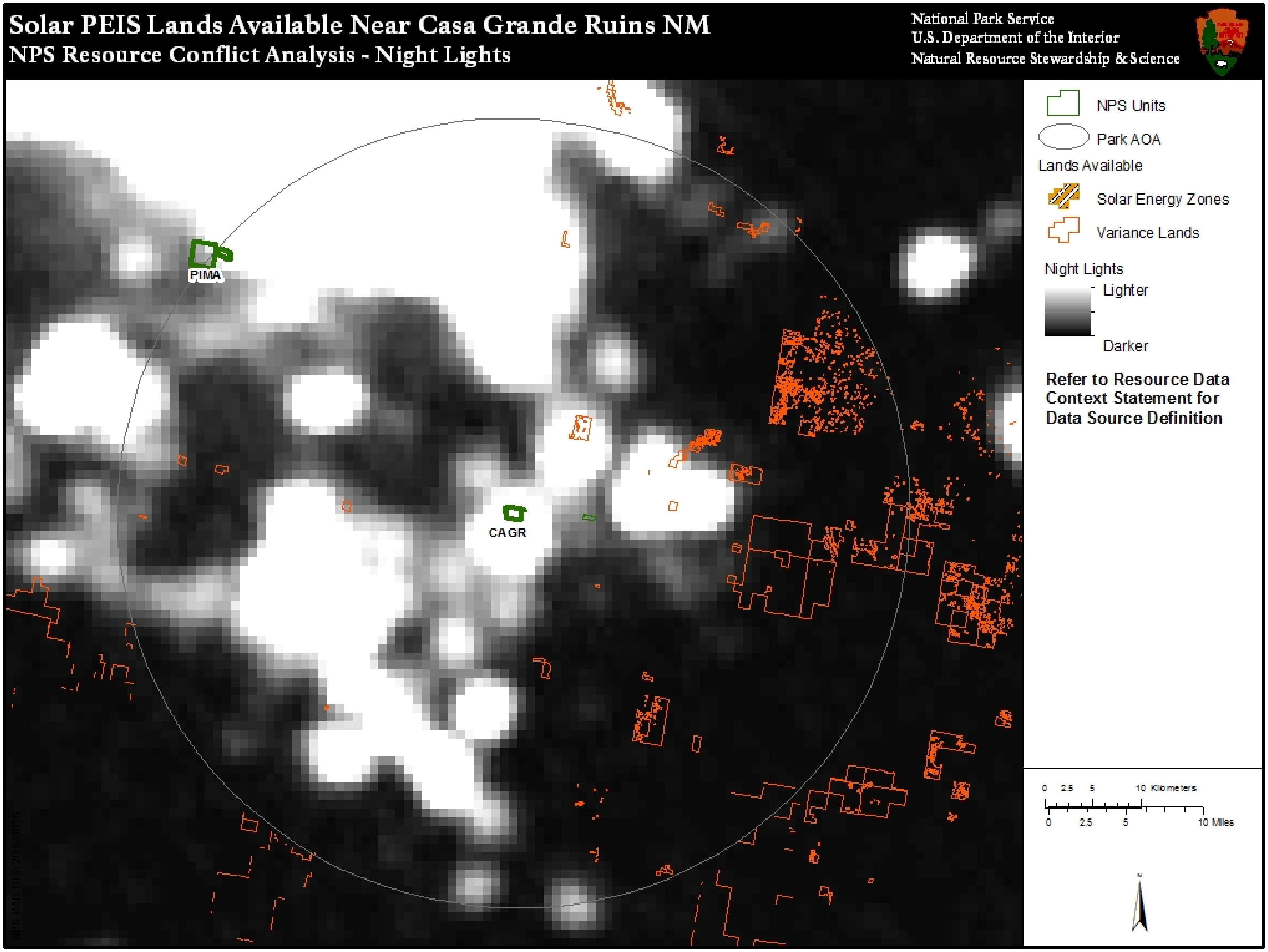


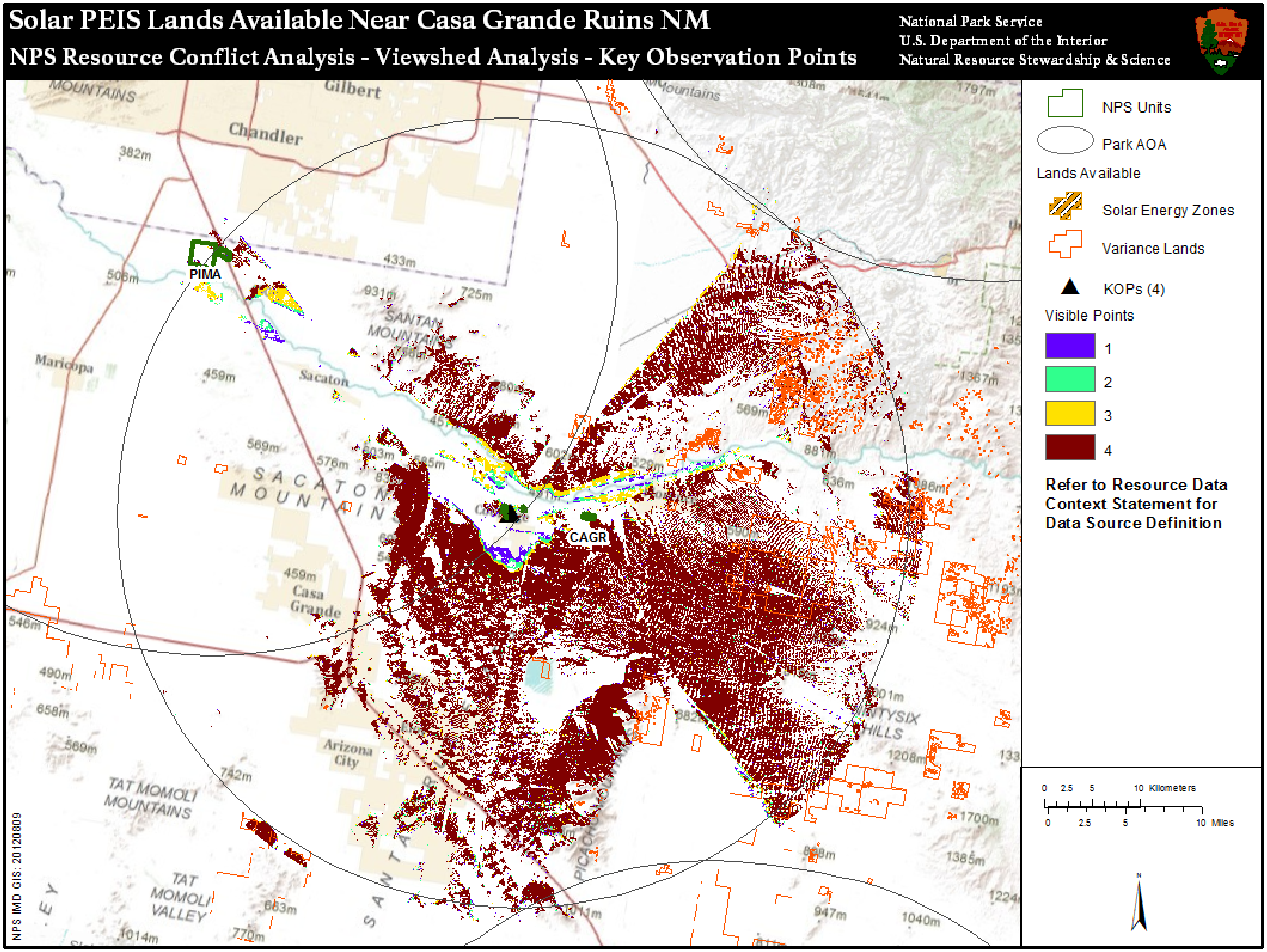
Solar PEIS Lands Available Near Casa Grande Ruins NM
NPS Resource Conflict Analysis - Roadless Natural Areas
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Roadless Natural Areas
Refer to Resource Data Context Statement for Data Source Definition
0 2.5 5 10 Kilometers
0 2.5 5 10 Miles
NPS IMD GIS: 20120816
Chandler
Gilbert
Queen Creek
PIMA
CAGR
Casa Grande
Eloy
Vaiva Hills
SONORAN DESERT
SANTA CRUZ FLATS
Tat Momoli Valley
Ed Hooper Rodeo Park


Solar PEIS Lands Available Near Casa Grande Ruins NM
NPS Resource Conflict Analysis - Naturalness Index
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
PIMA
CAGR
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Naturalness Index (2001)
High (1)
Low (0)
Refer to Resource Data Context Statement for Data Source Definition
0 2.5 5 10 Kilometers
0 2.5 5 10 Miles
NPS IMD GIS: 20120816

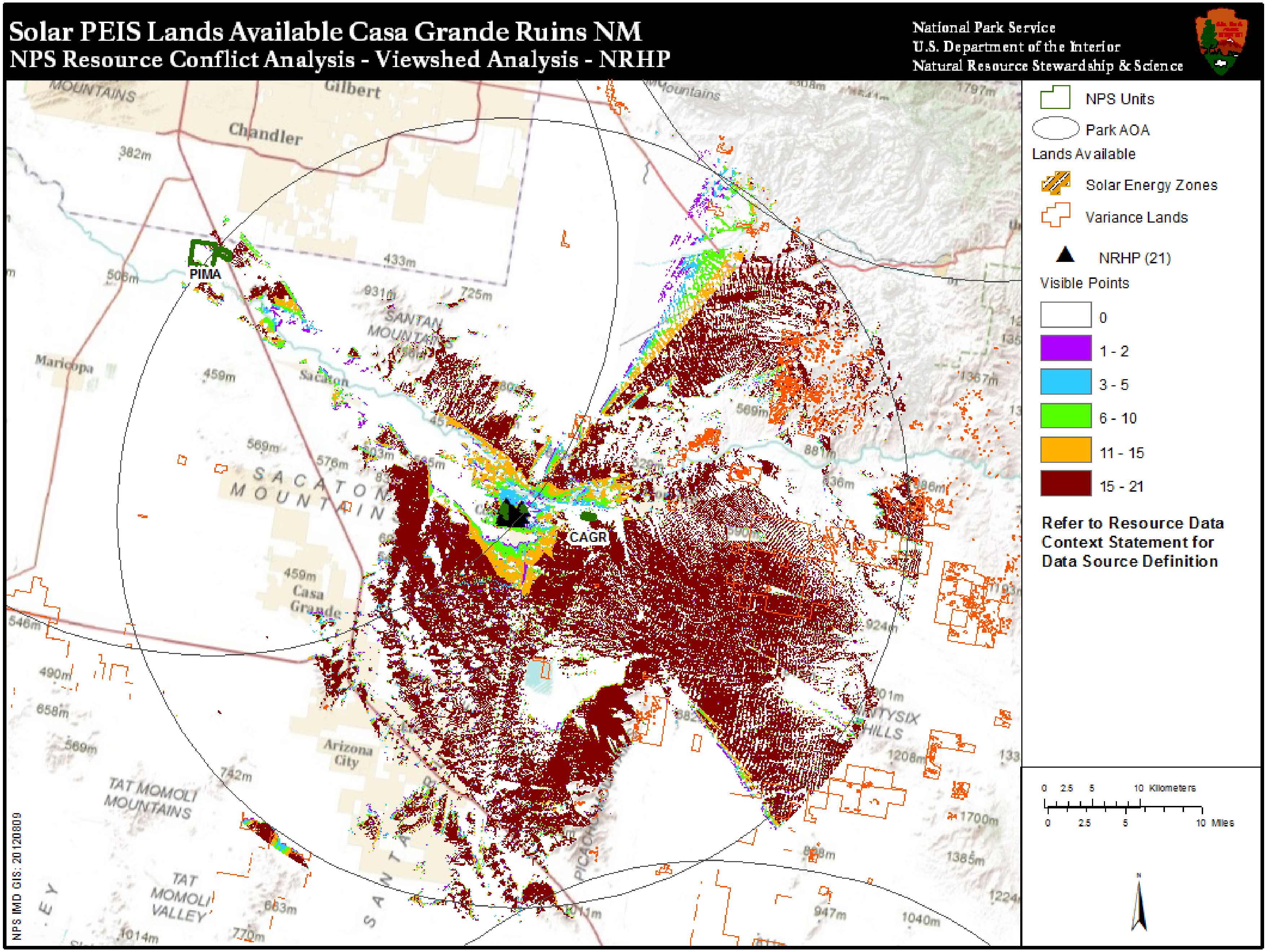


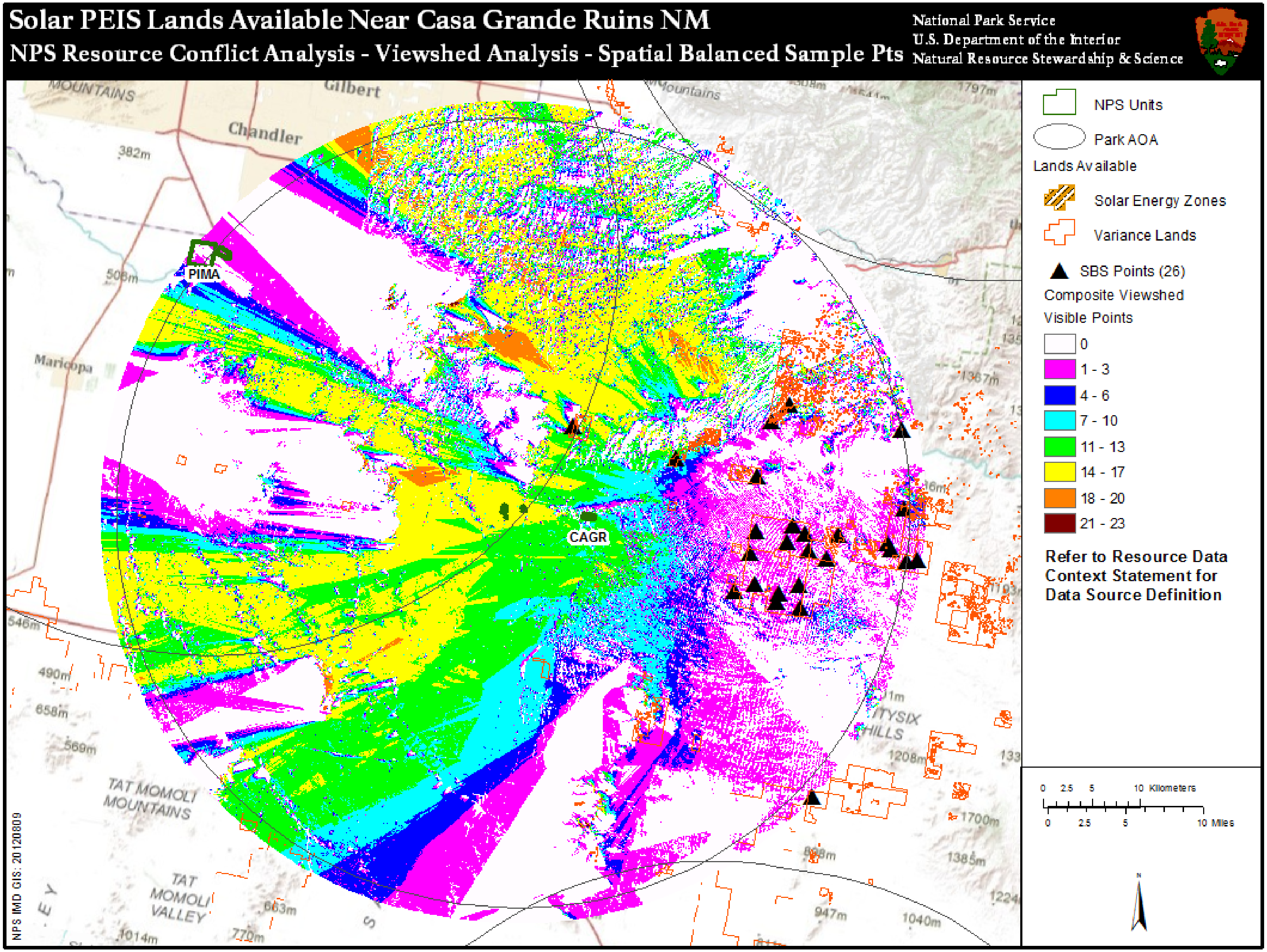
Solar PEIS Lands Available Near Casa Grande Ruins NM
NPS Resource Conflict Analysis - Landscape Permeability
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
Gilbert
Chandler
Mountains
Gila River
PIMA
CAGR
84
Vaiva Hills
SONORAN DESERT
Tat Momoli Valley
1015 m
1702
NPS IMD GIS: 20120814
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Landscape Permeability
Low
Moderate
High
Refer to Resource Data Context Statement for Data Source Definition
0 2.5 5 10 Kilometers
0 2.5 5 10 Miles


Solar PEIS Lands Available Near Casa Grande Ruins NM
NPS Resource Conflict Analysis - Night Lights
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
PIMA
CAGR
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Night Lights
Lighter
Darker
Refer to Resource Data Context Statement for Data Source Definition
0 2.5 5 10 Kilometers
0 2.5 5 10 Miles



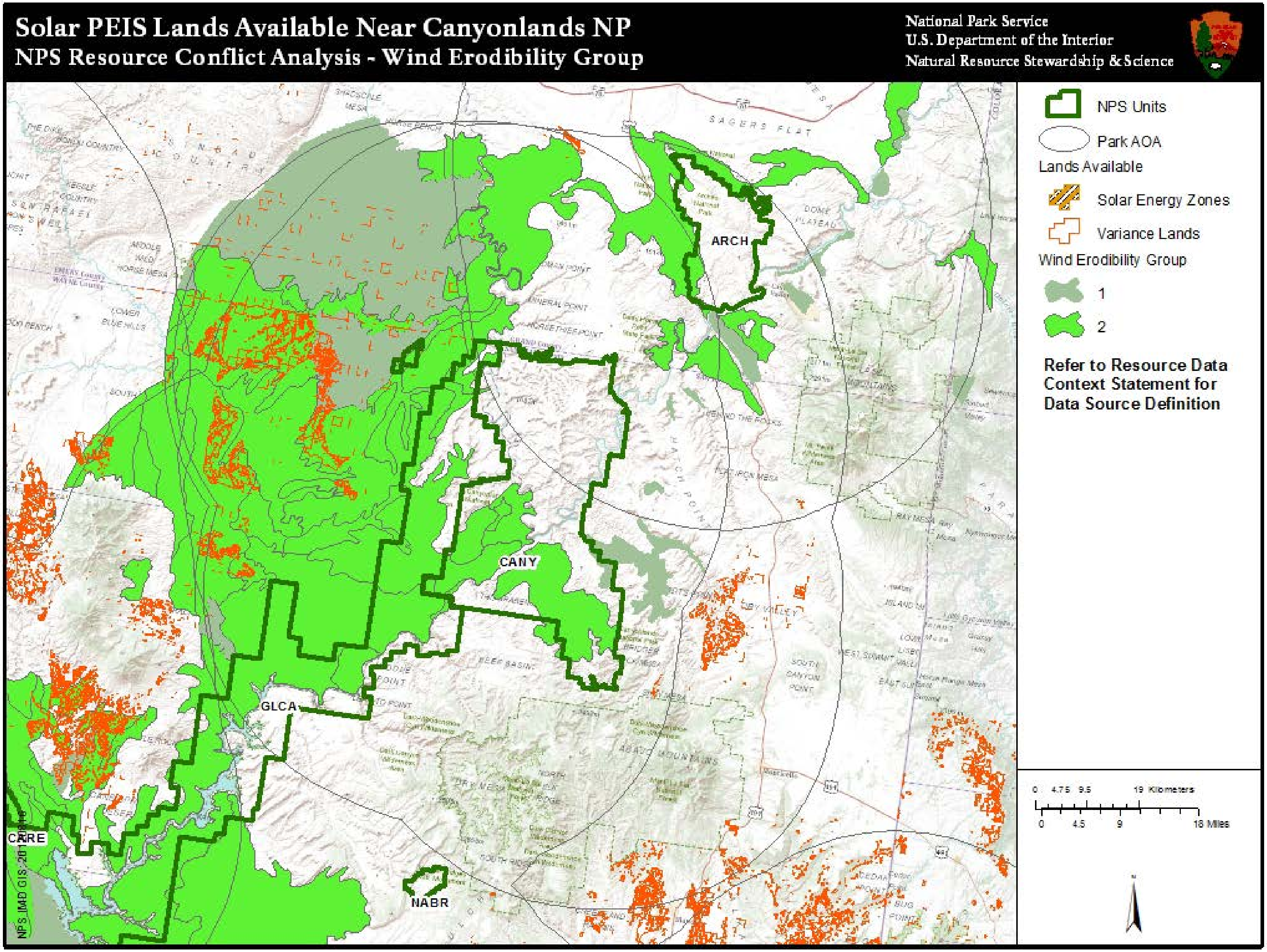
Solar PEIS Lands Available Near Casa Grande Ruins NM
NPS Resource Conflict Analysis - Viewshed Analysis - Key Observation Points
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
KOPs (4)
Visible Points
1
2
3
4
Refer to Resource Data Context Statement for Data Source Definition
0 2.5 5 10 Kilometers
0 2.5 5 10 Miles
PIMA
CAGR
Chandler
Gilbert
Maricopa
Sacaton
SACATON MOUNTAINS
SANTAN MOUNTAINS
Casa Grande
Arizona City
TAT MOMOLI MOUNTAINS
TAT MOMOLI VALLEY
NPS IMD GIS: 20120809

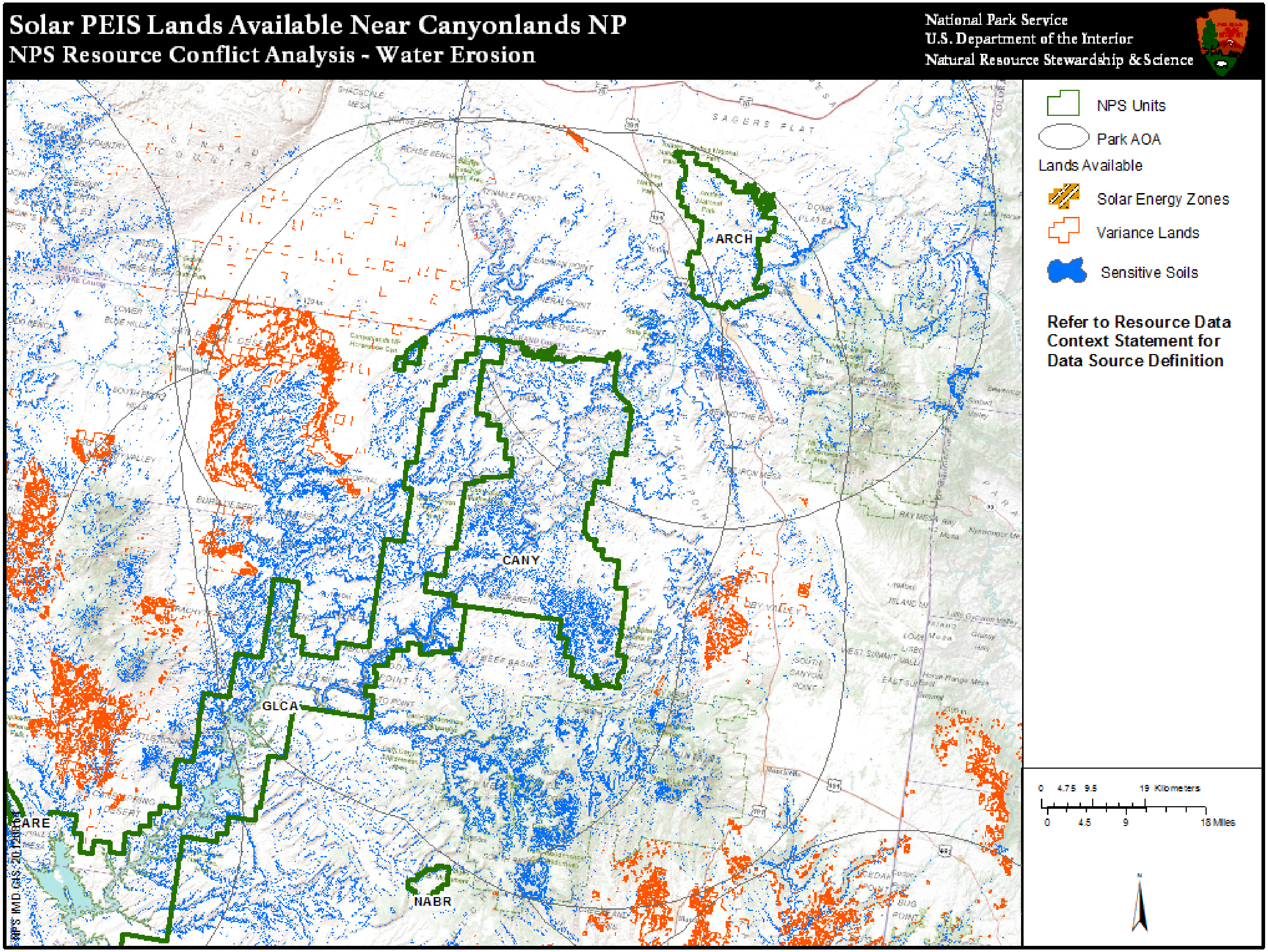

Solar PEIS Lands Available Casa Grande Ruins NM
NPS Resource Conflict Analysis - Viewshed Analysis - NRHP
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
NRHP (21)
Visible Points
0
1 - 2
3 - 5
6 - 10
11 - 15
15 - 21
Refer to Resource Data Context Statement for Data Source Definition
0 2.5 5 10 Kilometers
0 2.5 5 10 Miles
PIMA
CAGR
Chandler
Gilbert
Maricopa
Sacaton
SACATON MOUNTAINS
SANTAN MOUNTAINS
Casa Grande
Arizona City
TAT MOMOLI MOUNTAINS
TAT MOMOLI VALLEY
NPS IMD GIS: 20120809

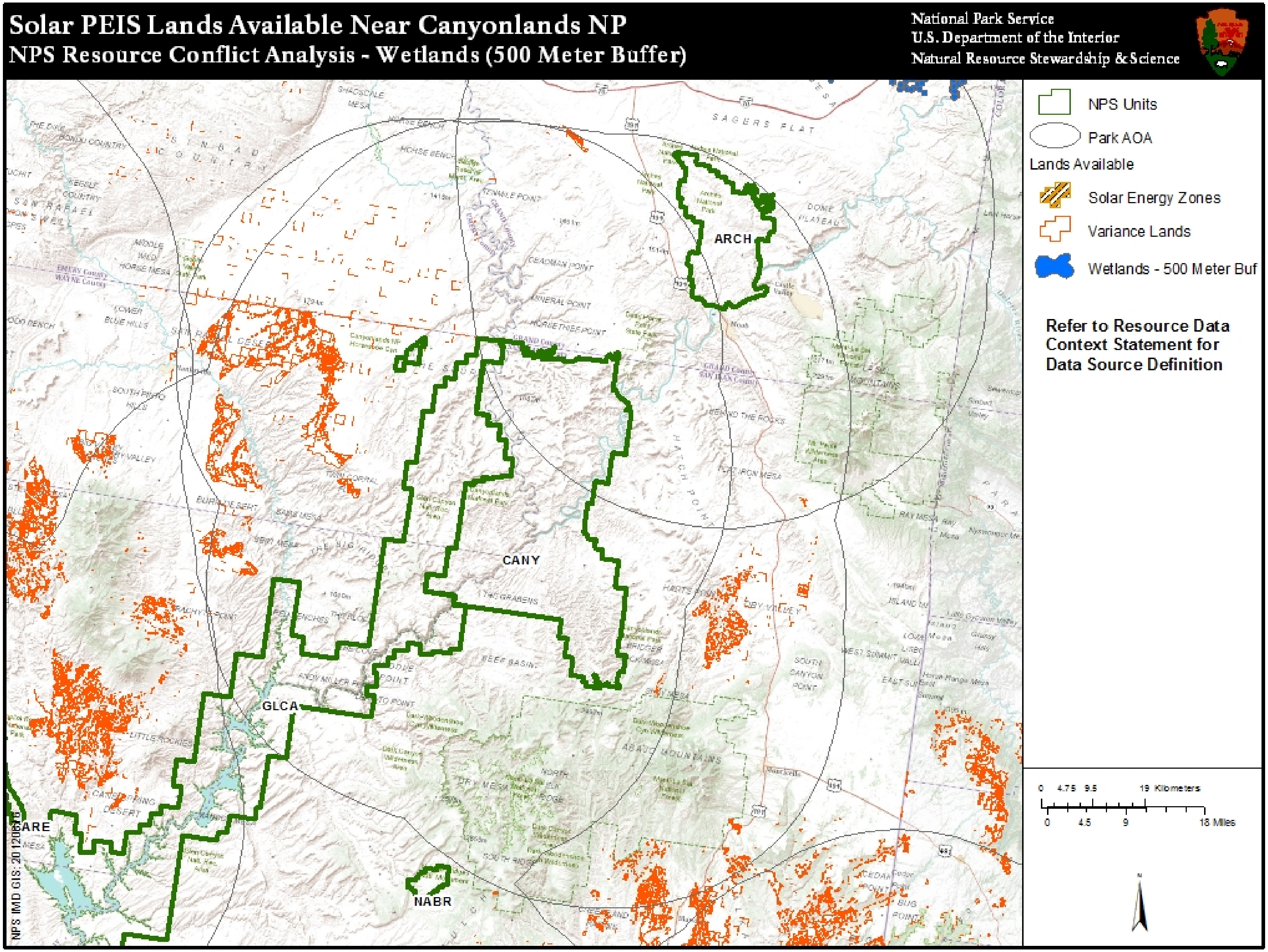


Solar PEIS Lands Available Near Casa Grande Ruins NM
NPS Resource Conflict Analysis - Viewshed Analysis - Spatial Balanced Sample Pts
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
SBS Points (26)
Composite Viewshed
Visible Points
0
1 - 3
4 - 6
7 - 10
11 - 13
14 - 17
18 - 20
21 - 23
Refer to Resource Data Context Statement for Data Source Definition
0 2.5 5 10 Kilometers
0 2.5 5 10 Miles
PIMA
CAGR
NPS IMD GIS: 20120809

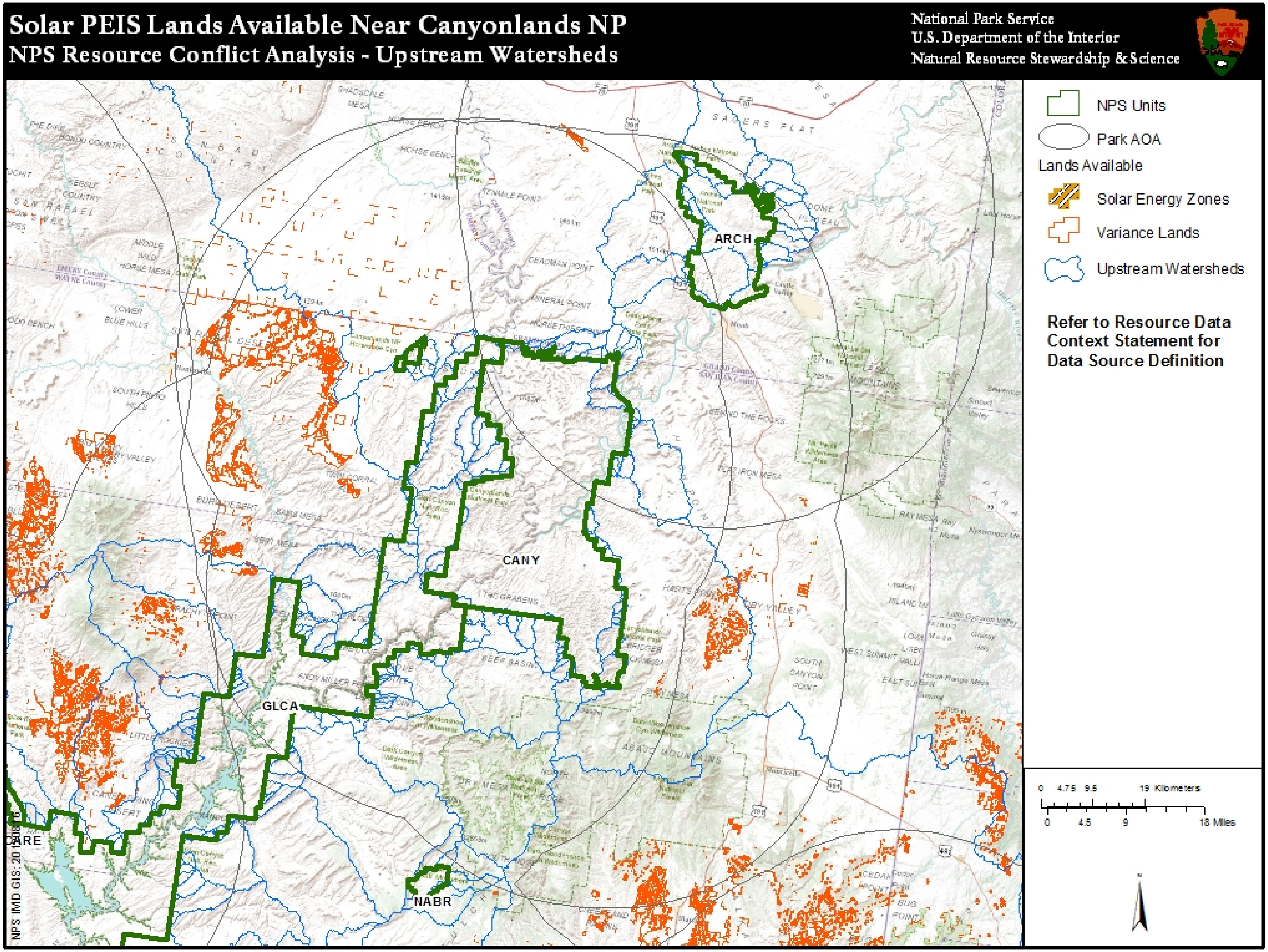
Canyonlands National Park
Wind Erodibility Group



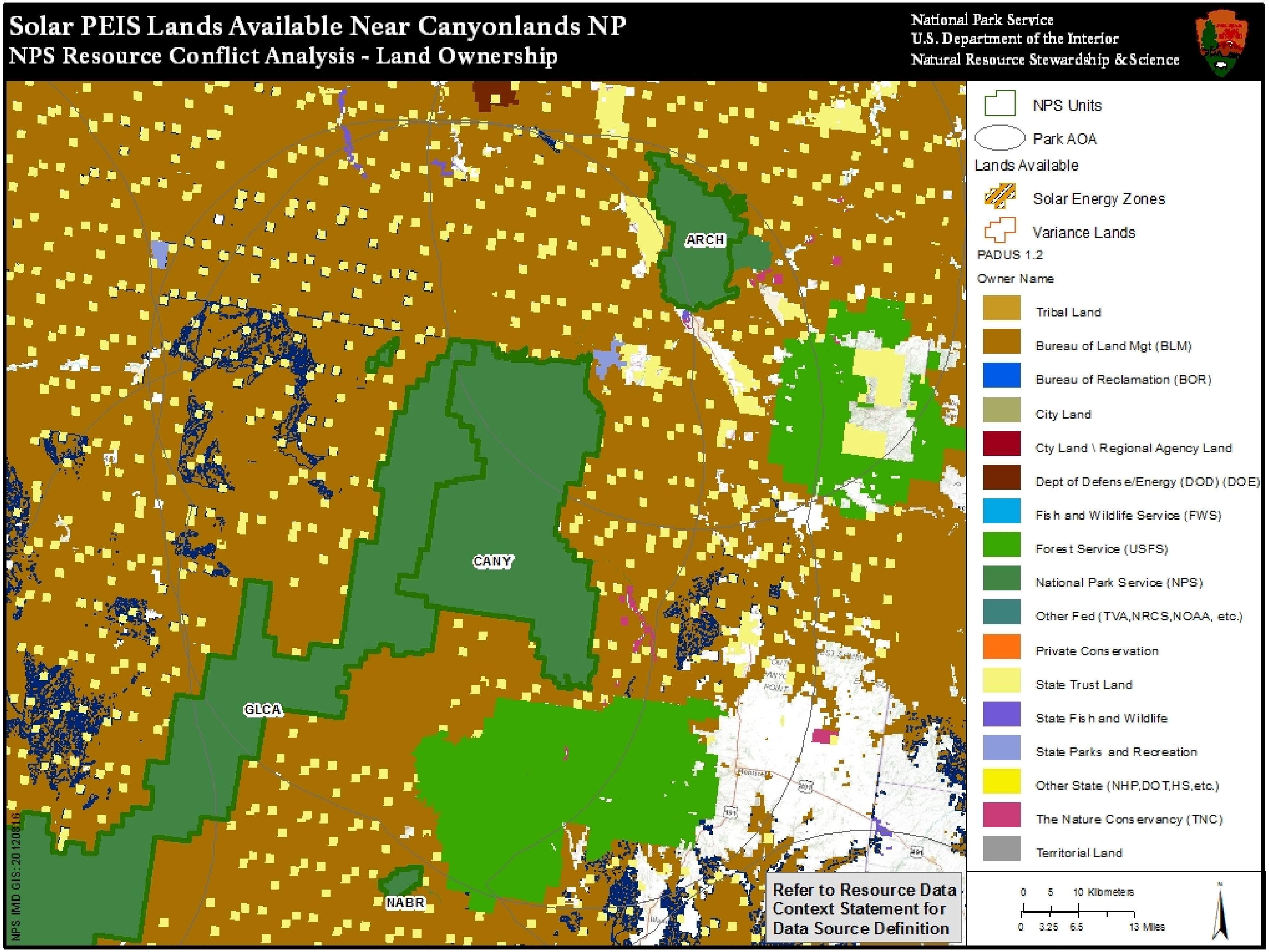

Solar PEIS Lands Available Near Canyonlands NP
NPS Resource Conflict Analysis - Water Erosion
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Sensitive Soils
Refer to Resource Data Context Statement for Data Source Definition
0 4.75 9.5 19 Kilometers
0 4.5 9 18 Miles
ARCH
CANY
GLCA
NABR
ARE
NPS IMD GIS 20120604

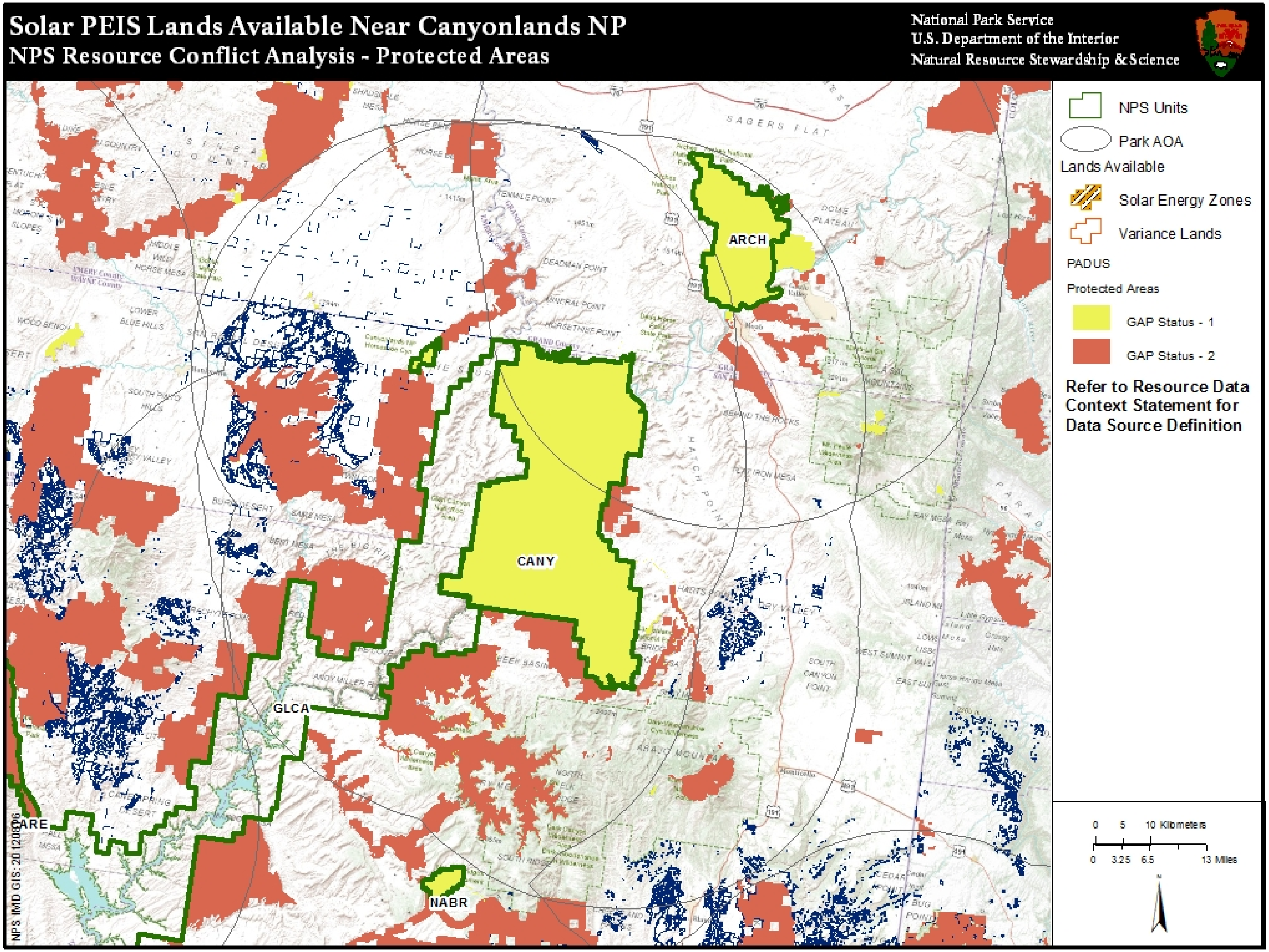


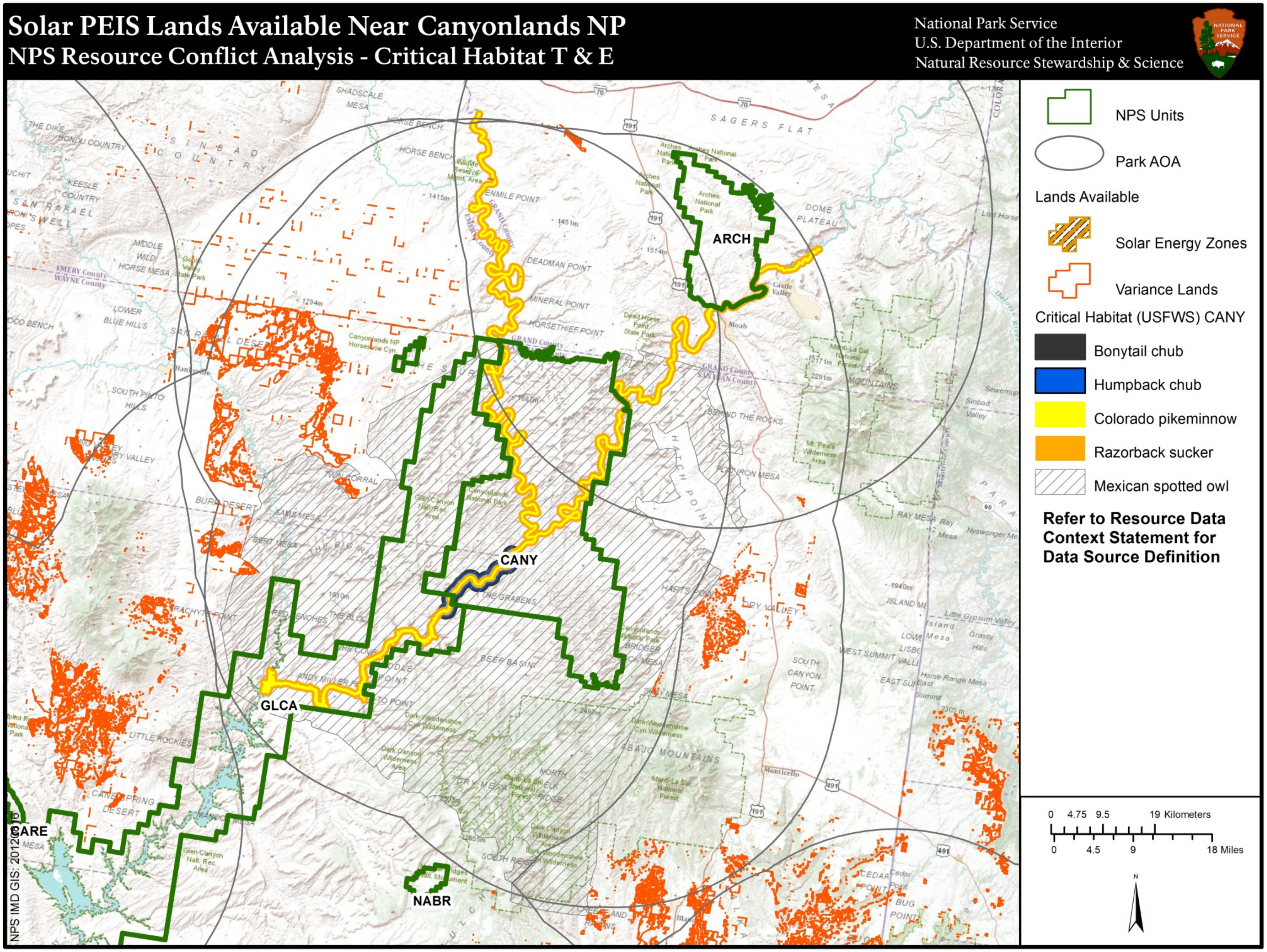
Solar PEIS Lands Available Near Canyonlands NP
NPS Resource Conflict Analysis - Wetlands (500 Meter Buffer)
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Wetlands - 500 Meter Buf
Refer to Resource Data Context Statement for Data Source Definition
ARCH
CANY
GLCA
NABR
ARE
0 4.75 9.5 19 Kilometers
0 4.5 9 18 Miles

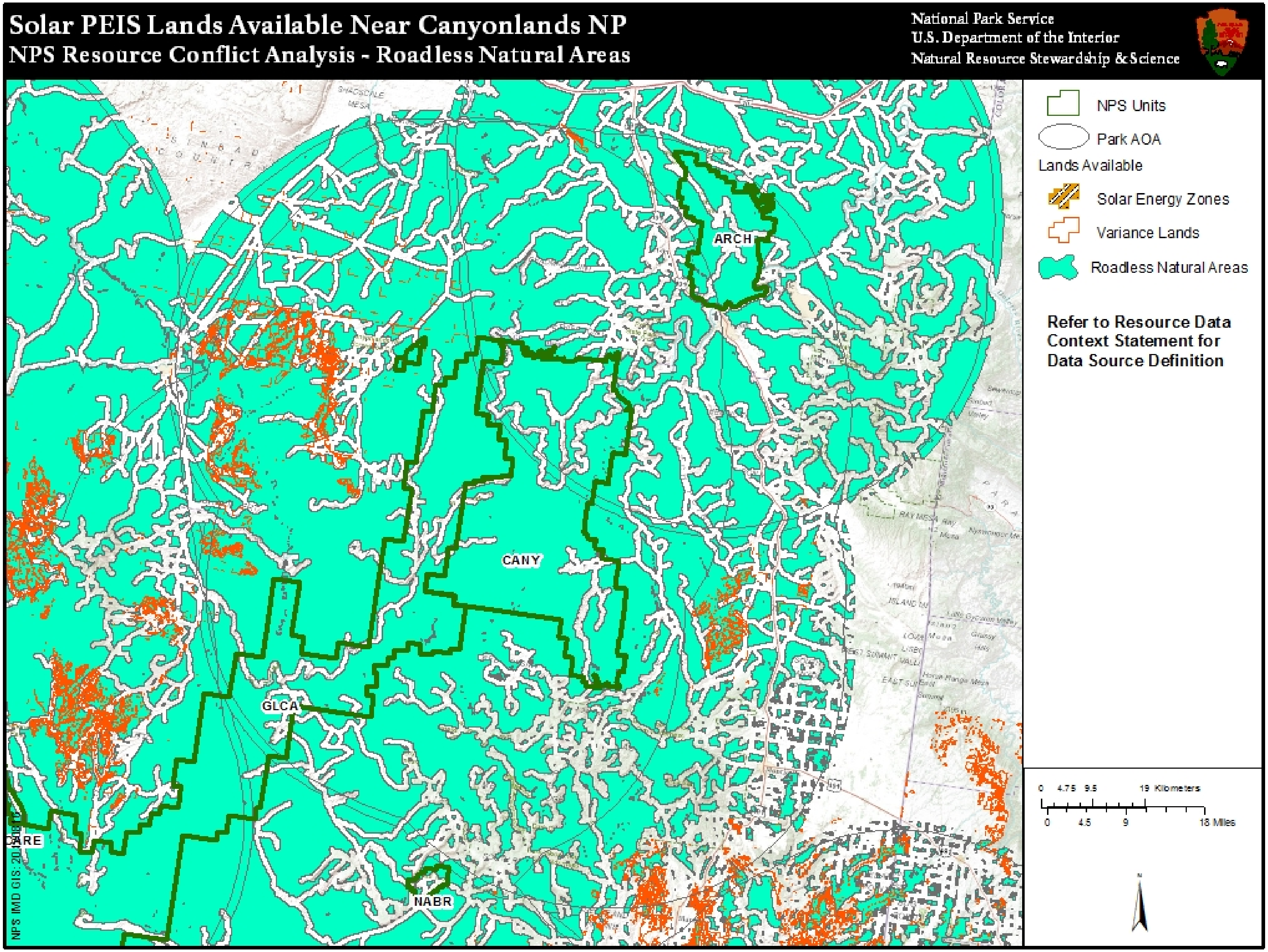

Solar PEIS Lands Available Near Canyonlands NP
NPS Resource Conflict Analysis - Upstream Watersheds
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Upstream Watersheds
Refer to Resource Data Context Statement for Data Source Definition
0 4.75 9.5 19 Kilometers
0 4.5 9 18 Miles
ARCH
CANY
GLCA
NABR
CARE

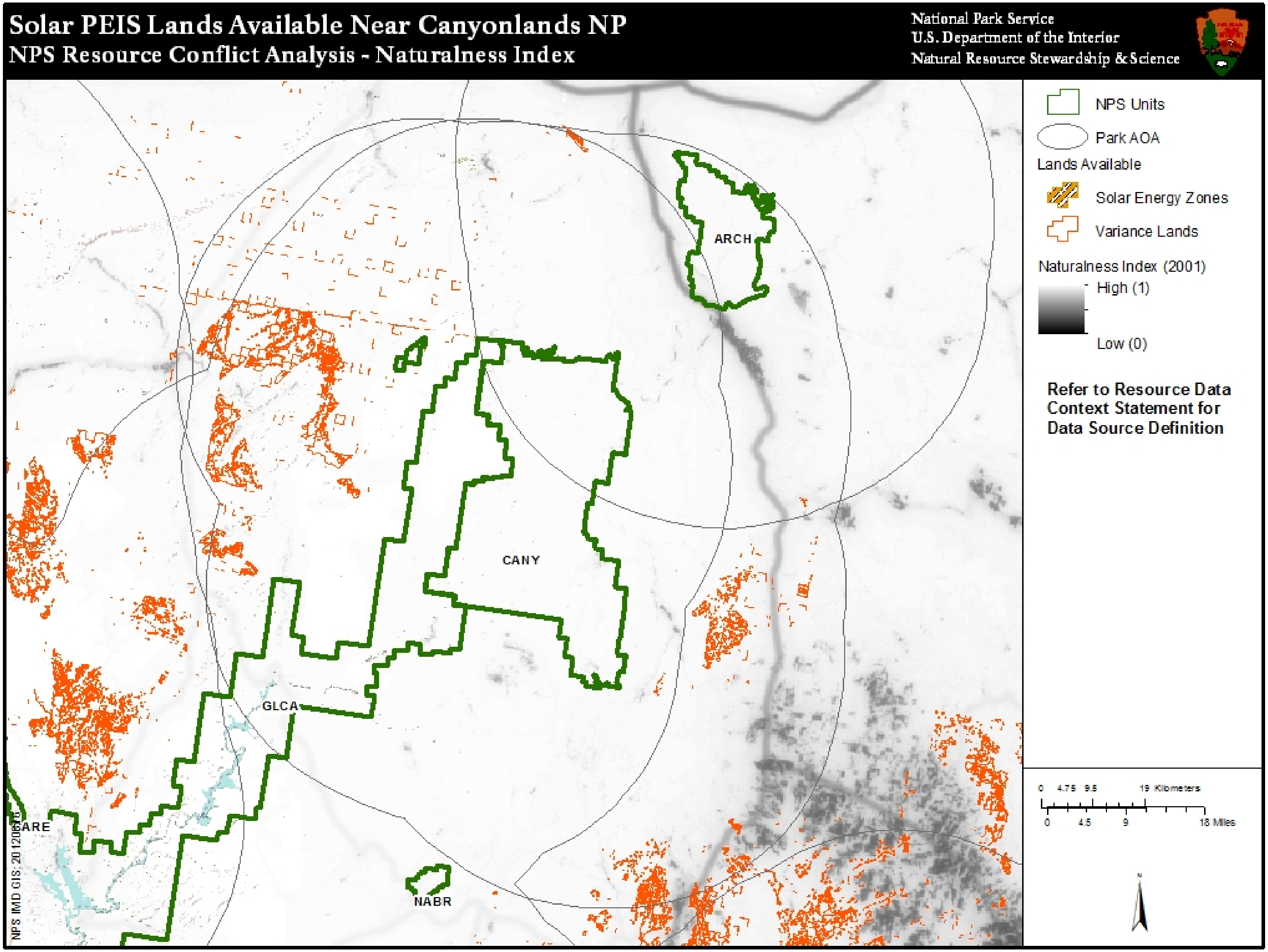
Land Ownership



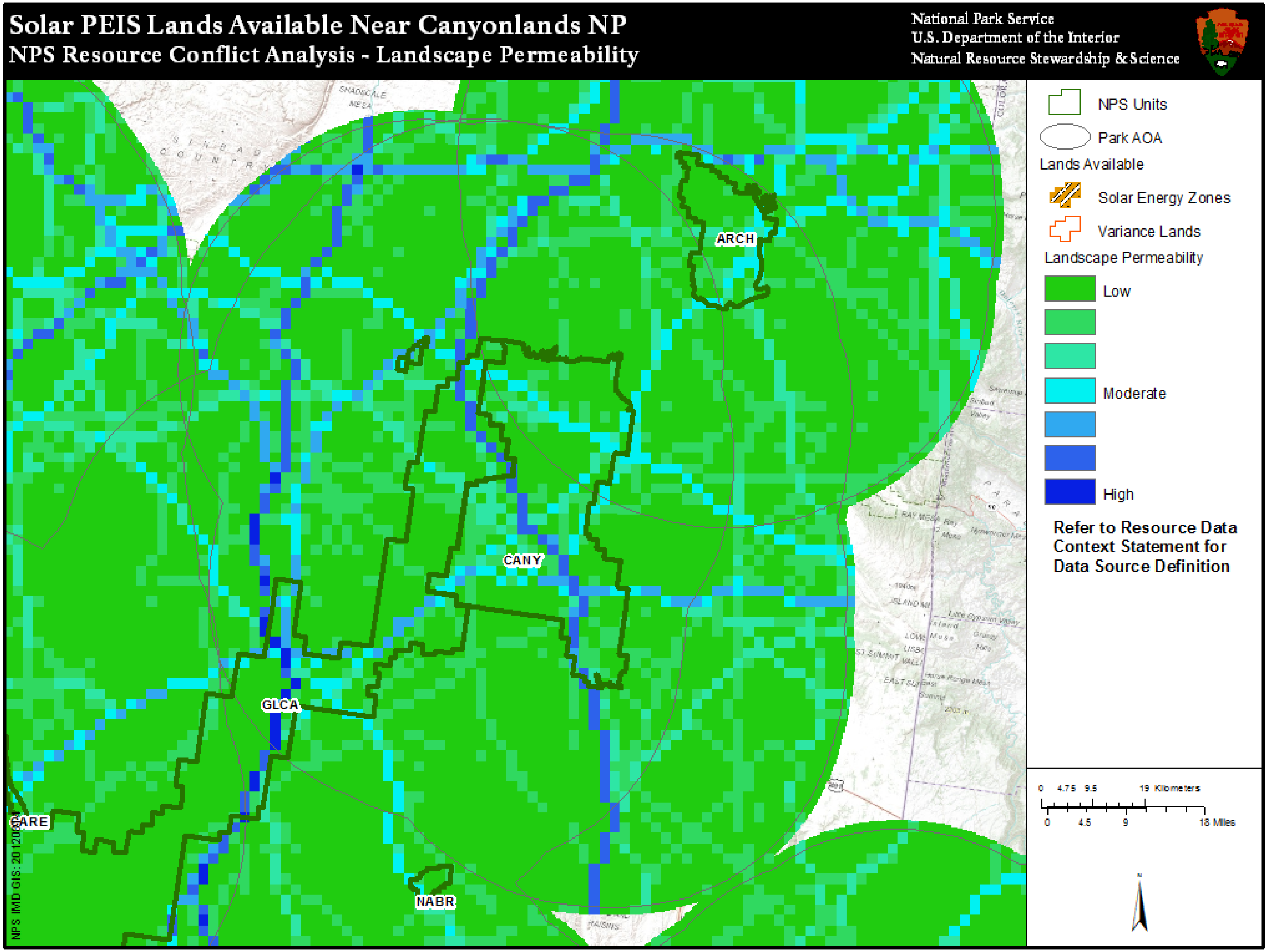

Solar PEIS Lands Available Near Canyonlands NP
NPS Resource Conflict Analysis - Protected Areas
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
PADUS
Protected Areas
GAP Status - 1
GAP Status - 2
Refer to Resource Data Context Statement for Data Source Definition
ARCH
CANY
GLCA
CARE
NABR
0 5 10 Kilometers
0 3.25 6.5 13 Miles
NPS IMD GIS: 20120806


Solar PEIS Lands Available Near Canyonlands NP
NPS Resource Conflict Analysis - Critical Habitat T & E
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Critical Habitat (USFWS) CANY
Bonytail chub
Humpback chub
Colorado pikeminnow
Razorback sucker
Mexican spotted owl
Refer to Resource Data Context Statement for Data Source Definition
ARCH
CANY
GLCA
CARE
NABR
0 4.75 9.5 19 Kilometers
0 4.5 9 18 Miles
N

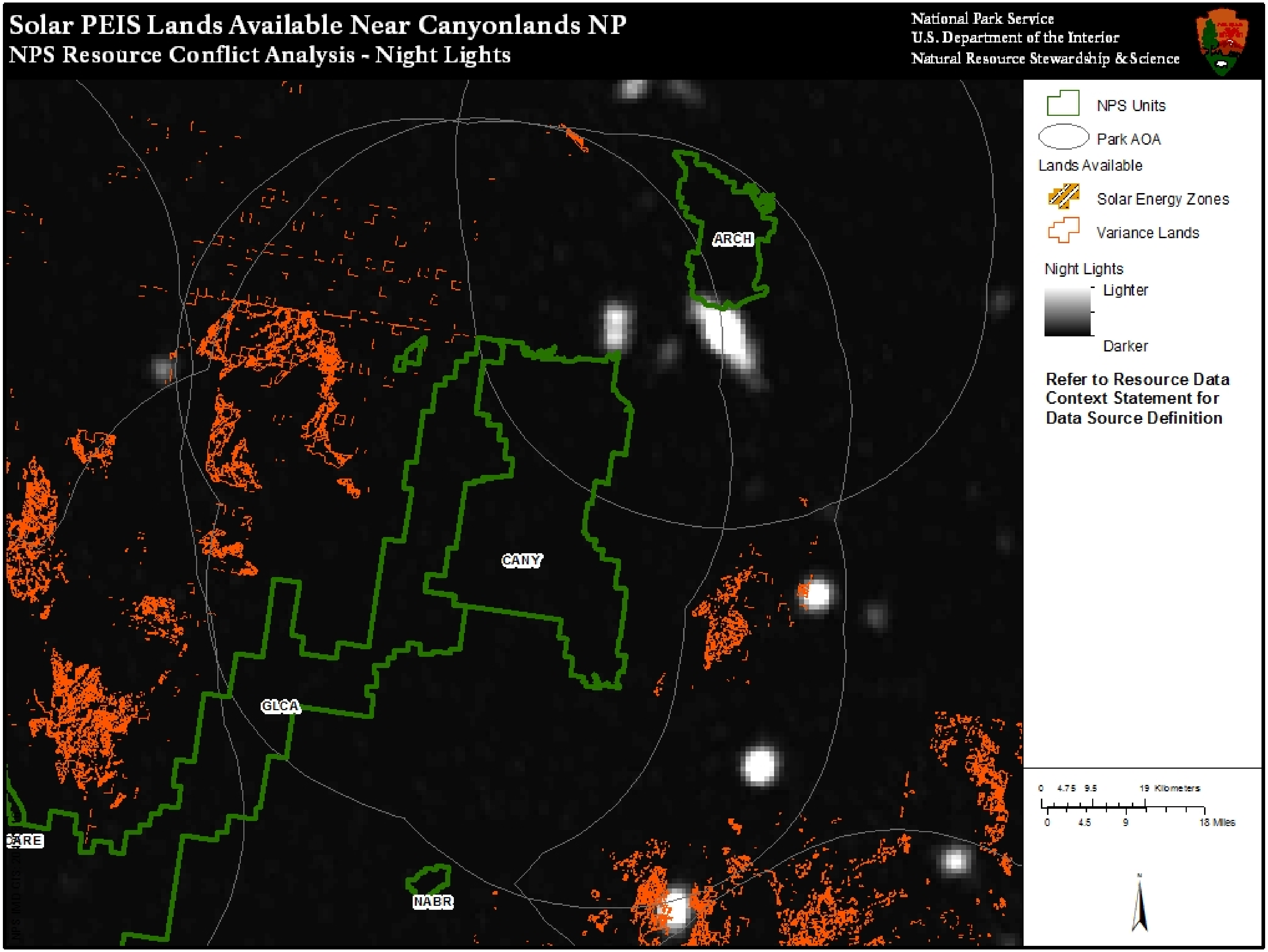

Solar PEIS Lands Available Near Canyonlands NP
NPS Resource Conflict Analysis - Roadless Natural Areas
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Roadless Natural Areas
Refer to Resource Data Context Statement for Data Source Definition
ARCH
CANY
GLCA
CARE
NABR
0 4.75 9.5 19 Kilometers
0 4.5 9 18 Miles

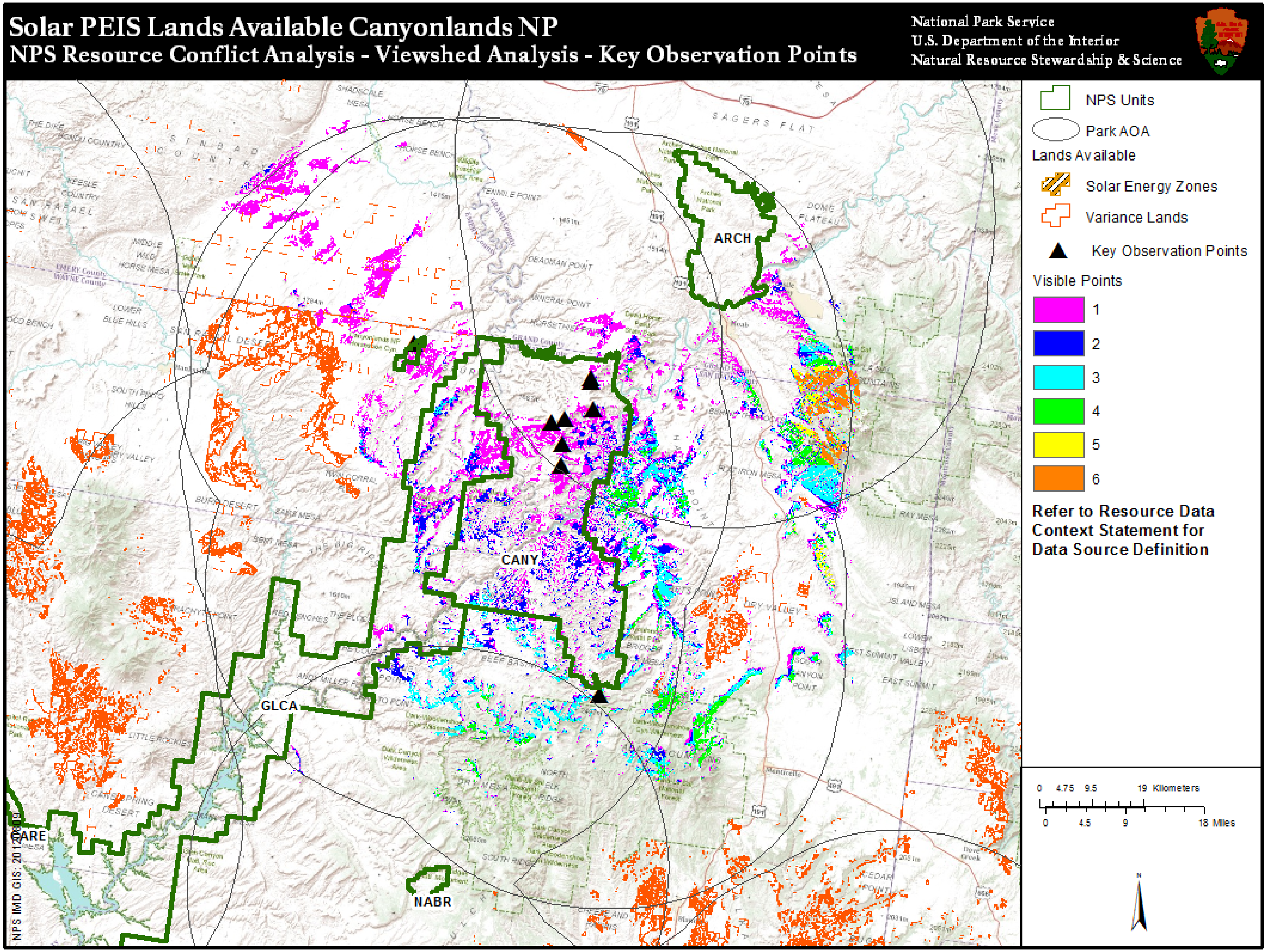


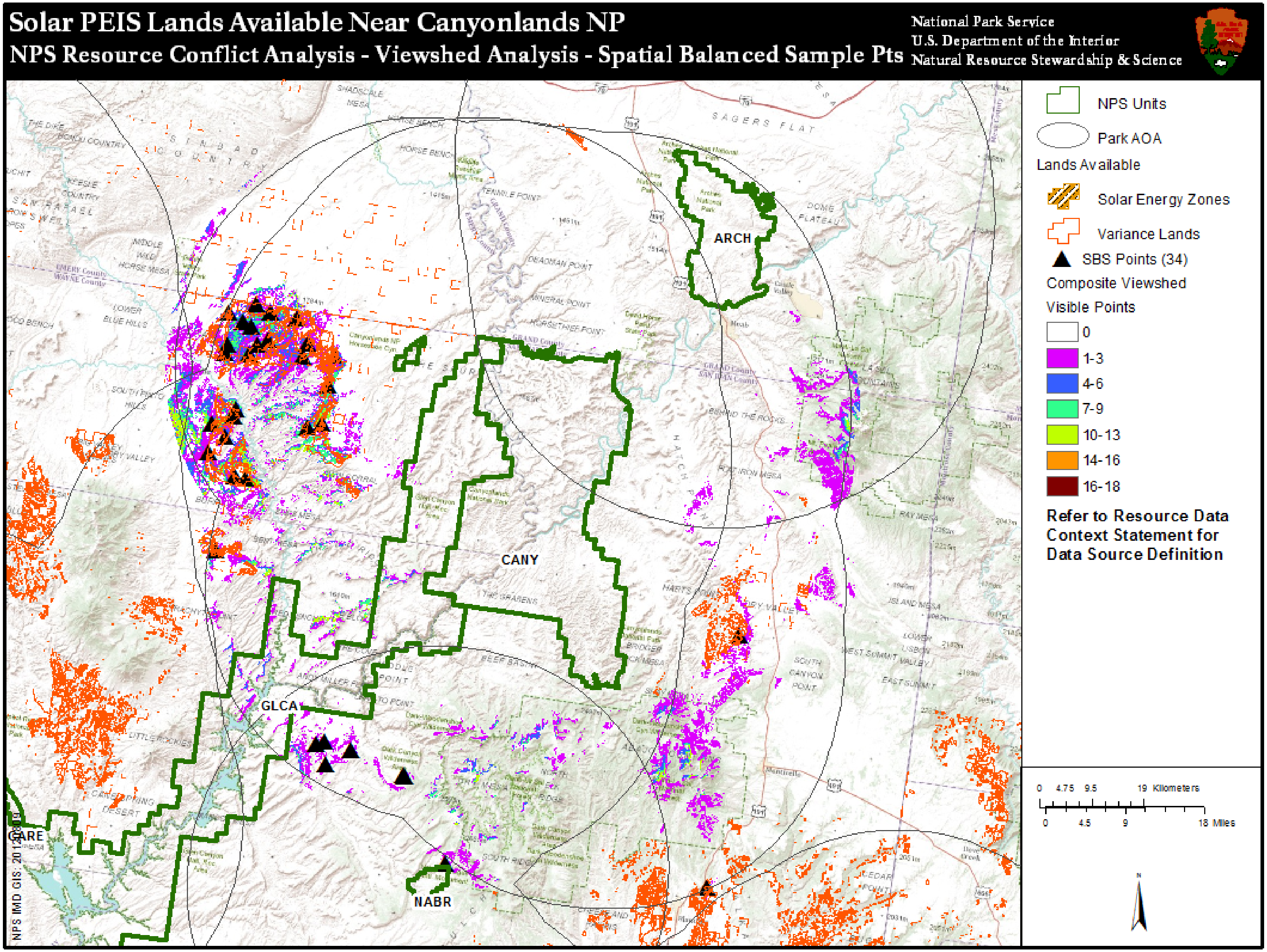
Solar PEIS Lands Available Near Canyonlands NP
NPS Resource Conflict Analysis - Naturalness Index
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Naturalness Index (2001)
High (1)
Low (0)
Refer to Resource Data Context Statement for Data Source Definition
ARCH
CANY
GLCA
NABR
0 4.75 9.5 19 Kilometers
0 4.5 9 18 Miles
NPS IMD GIS: 20120615



Solar PEIS Lands Available Near Canyonlands NP
NPS Resource Conflict Analysis - Landscape Permeability
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
ARCH
CANY
GLCA
CARE
NABR
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Landscape Permeability
Low
Moderate
High
Refer to Resource Data Context Statement for Data Source Definition
0 4.75 9.5 19 Kilometers
0 4.5 9 18 Miles
NPS IMD GIS: 20120604

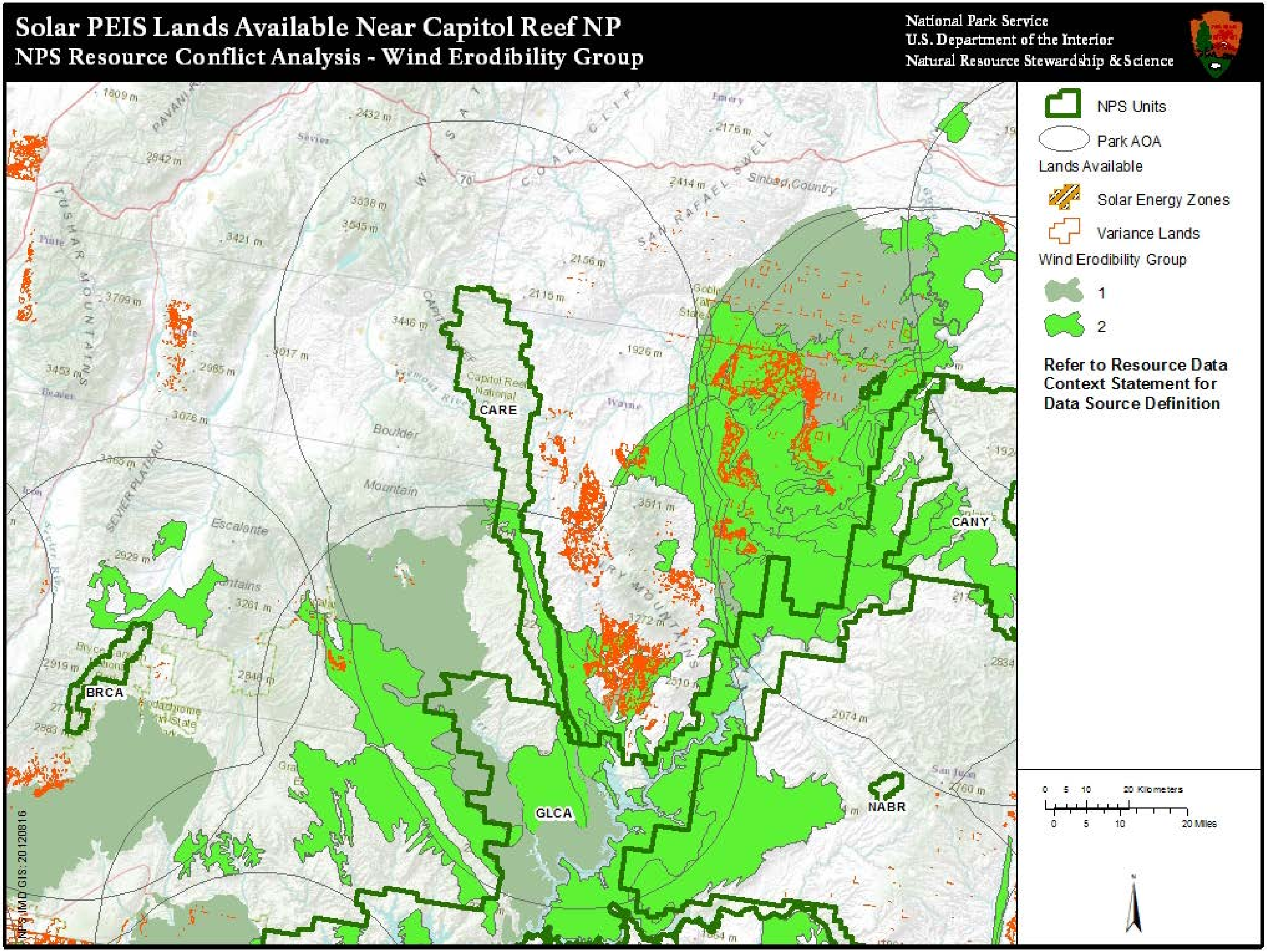

Solar PEIS Lands Available Near Canyonlands NP
NPS Resource Conflict Analysis - Night Lights
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Night Lights
Lighter
Darker
Refer to Resource Data Context Statement for Data Source Definition
ARCH
CANY
GLCA
NABR
CARE
0 4.75 9.5 19 Kilometers
0 4.5 9 18 Miles

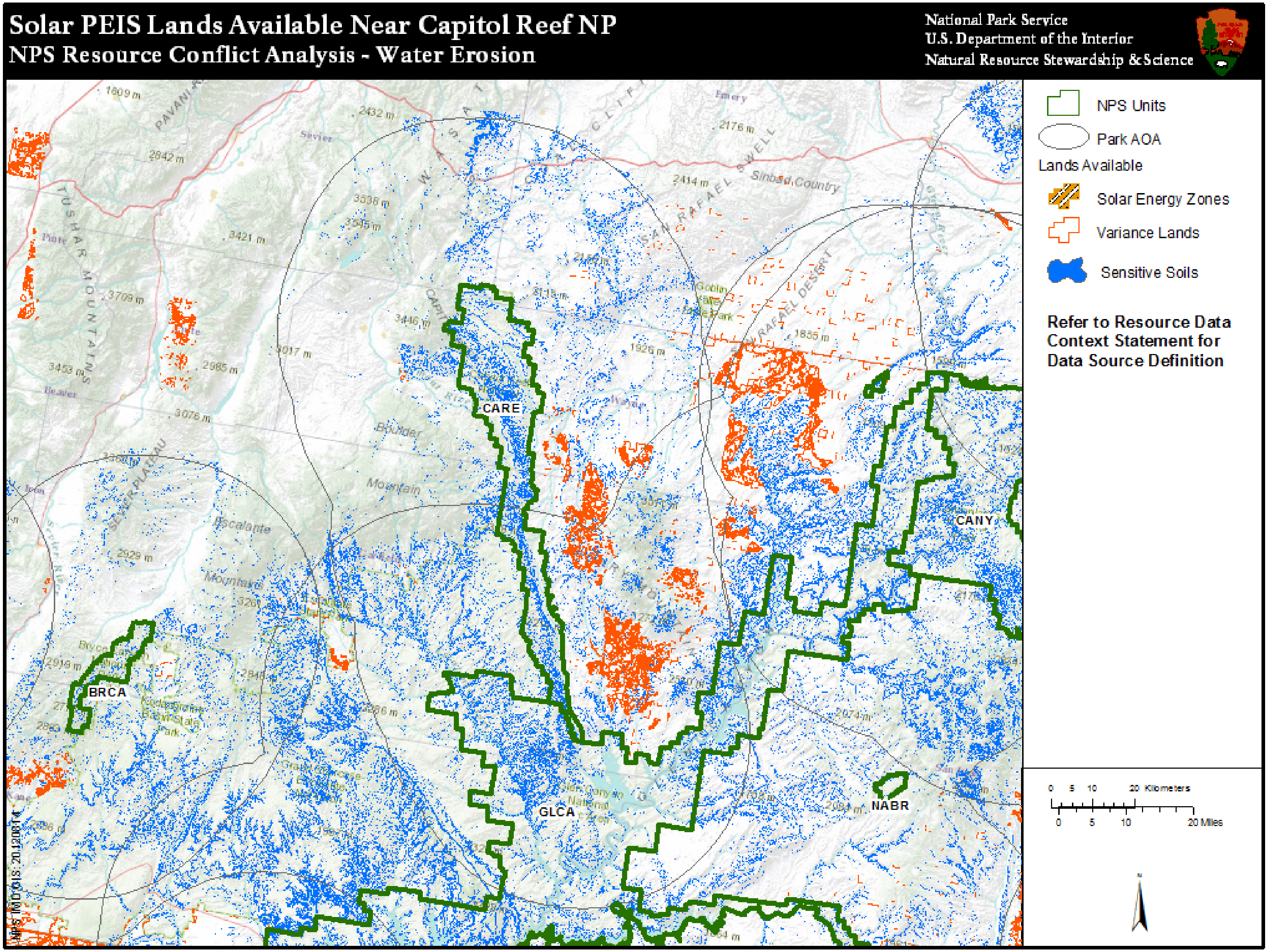

Solar PEIS Lands Available Canyonlands NP
NPS Resource Conflict Analysis - Viewshed Analysis - Key Observation Points
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Key Observation Points
Visible Points
1
2
3
4
5
6
Refer to Resource Data Context Statement for Data Source Definition
0 4.75 9.5 19 Kilometers
0 4.5 9 18 Miles
ARCH
CANY
GLCA
NABR
CARE
NPS IMD GIS: 20120619

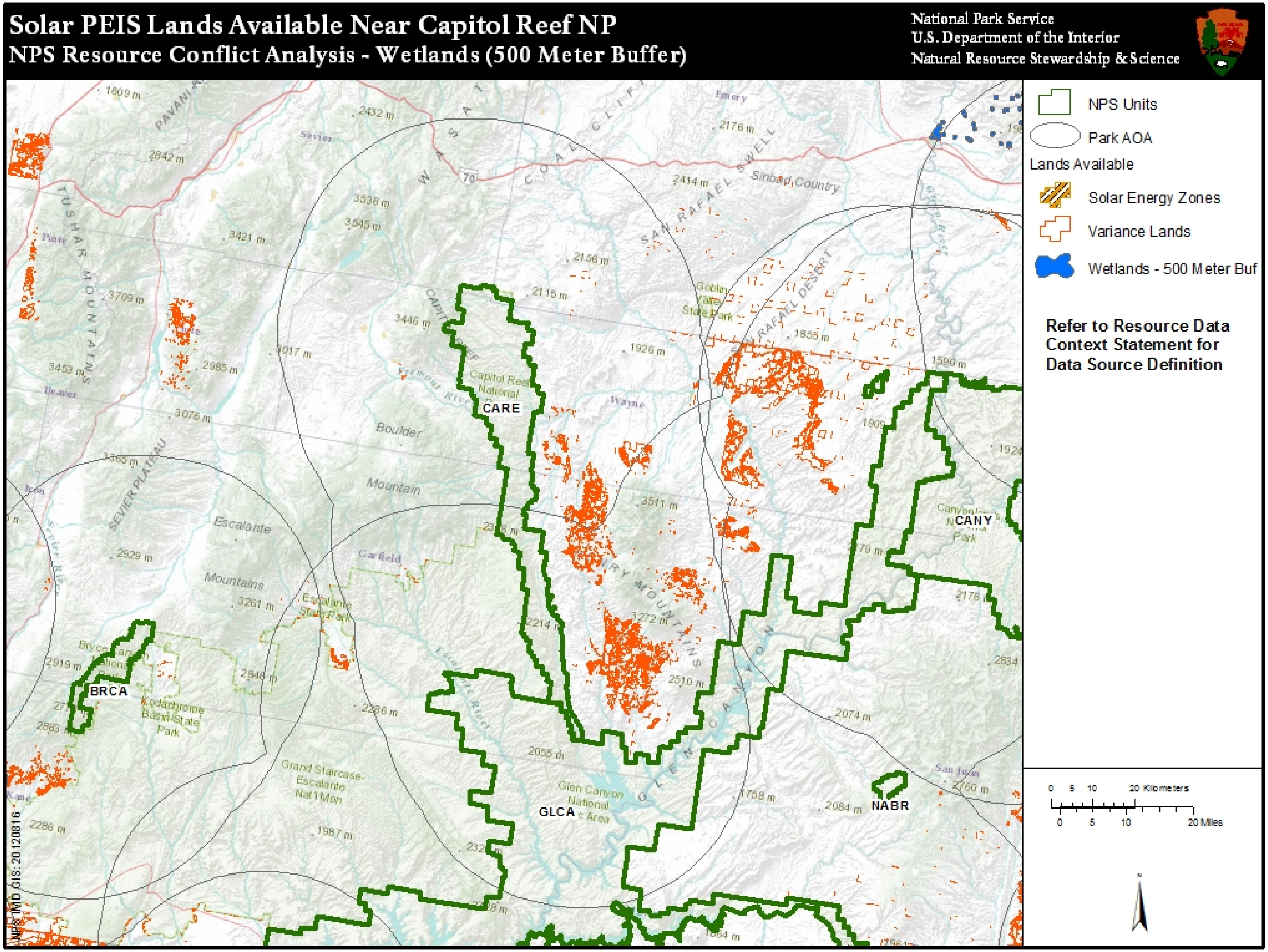


Solar PEIS Lands Available Near Canyonlands NP
NPS Resource Conflict Analysis - Viewshed Analysis - Spatial Balanced Sample Pts
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
SBS Points (34)
Composite Viewshed
Visible Points
0
1-3
4-6
7-9
10-13
14-16
16-18
Refer to Resource Data Context Statement for Data Source Definition
0 4.75 9.5 19 Kilometers
0 4.5 9 18 Miles
ARCH
CANY
GLCA
NABR
CARE
NPS IMD GIS: 2012

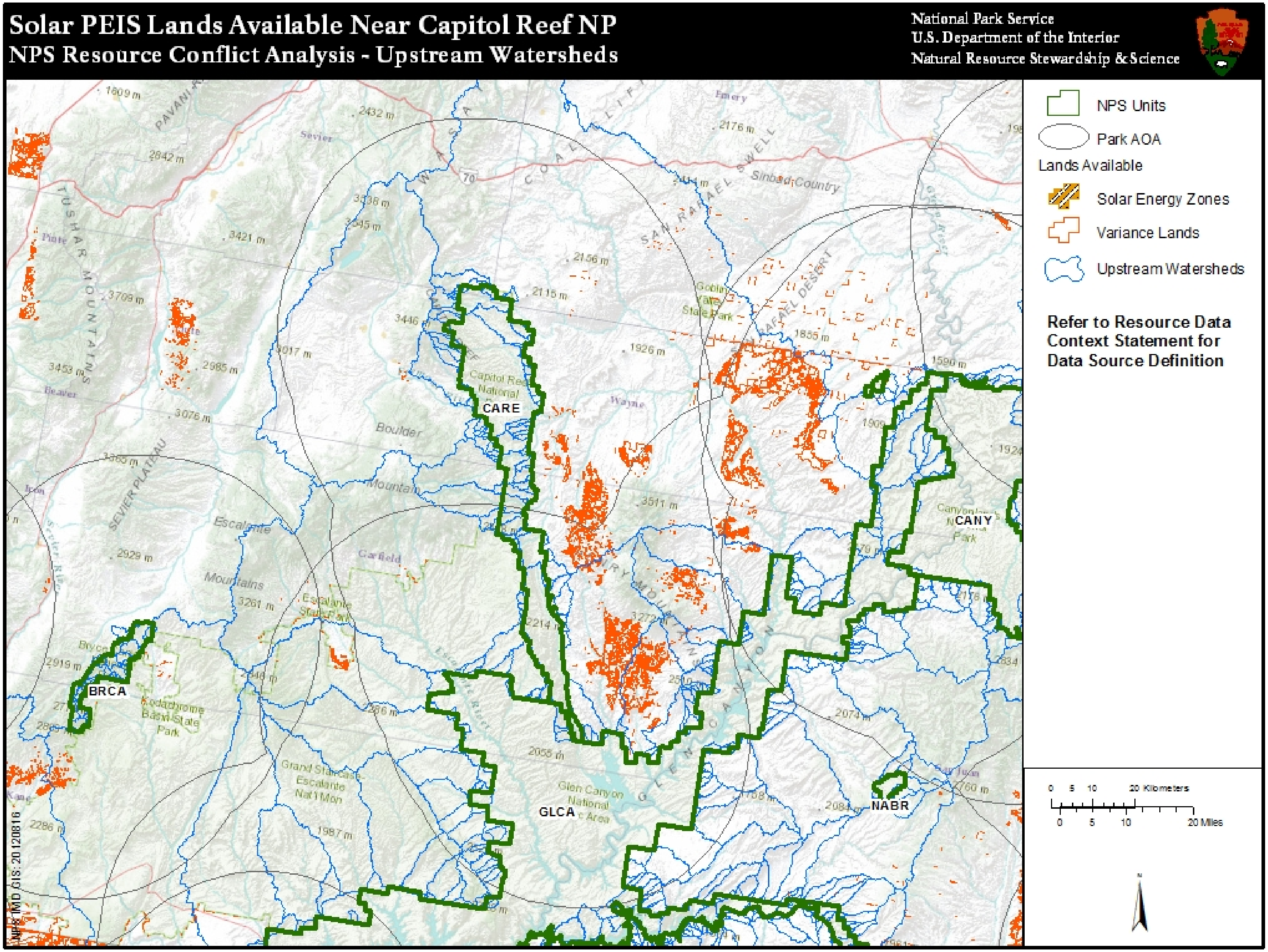
Capital Reef National Park
Wind Erodibility Group



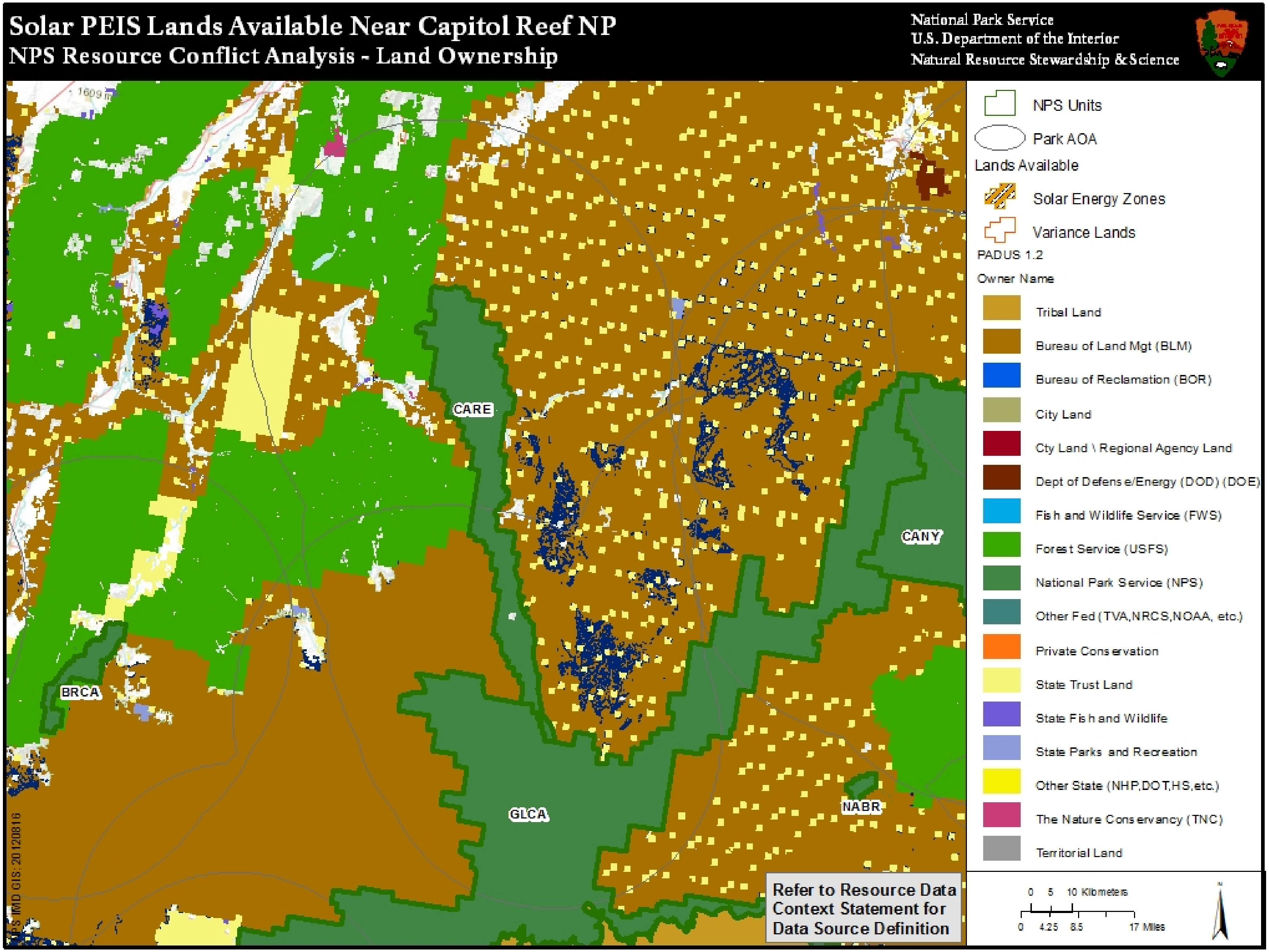

Solar PEIS Lands Available Near Capitol Reef NP
NPS Resource Conflict Analysis - Water Erosion
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Sensitive Soils
Refer to Resource Data Context Statement for Data Source Definition
0 5 10 20 Kilometers
0 5 10 20 Miles
CARE
CANY
BRCA
GLCA
NABR

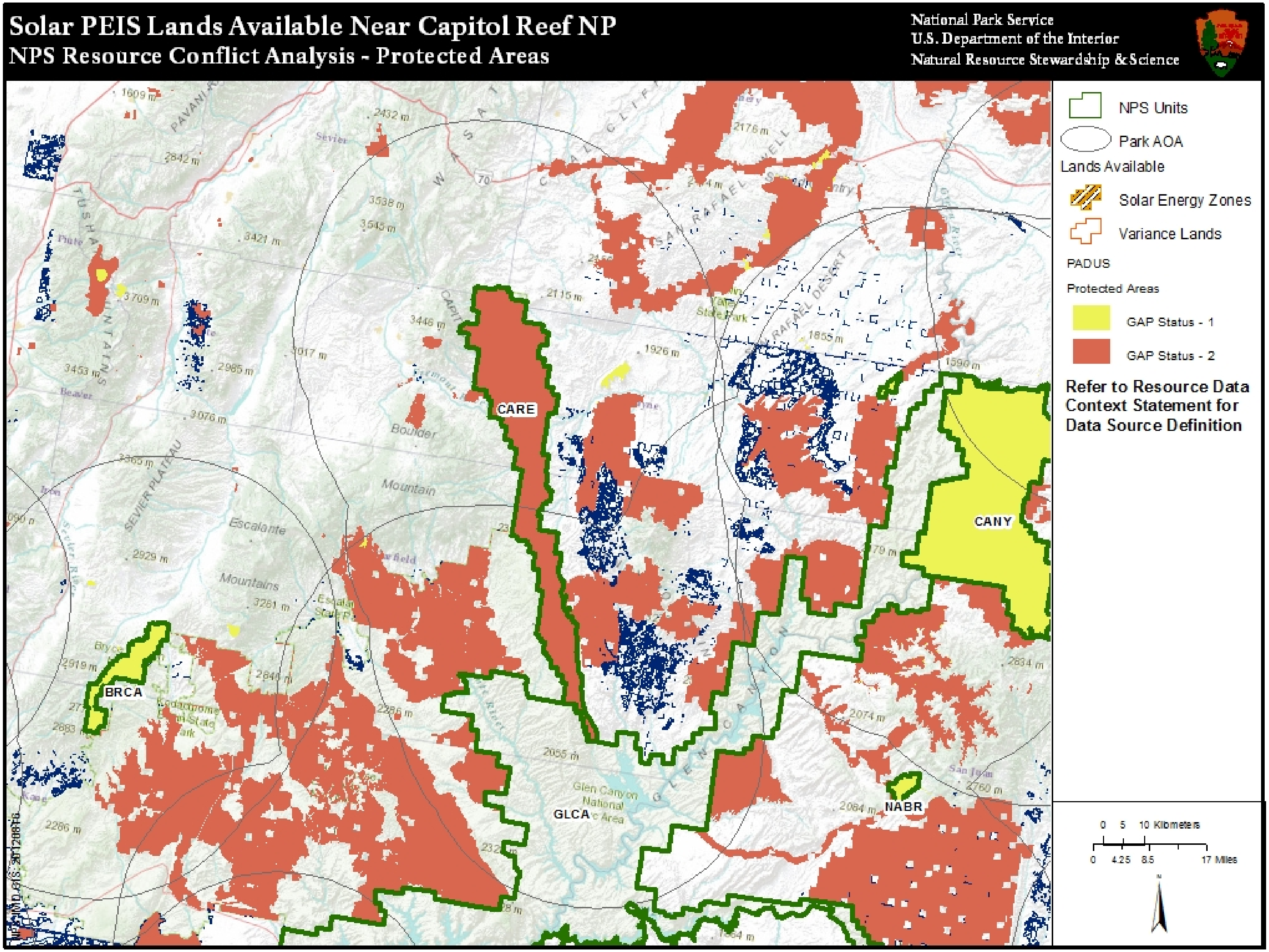

Solar PEIS Lands Available Near Capitol Reef NP
NPS Resource Conflict Analysis - Wetlands (500 Meter Buffer)
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Wetlands - 500 Meter Buf
Refer to Resource Data Context Statement for Data Source Definition
CARE
BRCA
GLCA
NABR
CANY
Capitol Reef National
Glen Canyon National Rec Area
Grand Staircase-Escalante Nat'l Mon
Kodachrome Basin State Park
Escalante State Park
Goblin Valley State Park
Boulder
Mountain
Escalante
Mountains
Sinbad Country
0 5 10 20 Kilometers
0 5 10 20 Miles
NPS IMD GIS: 20120816

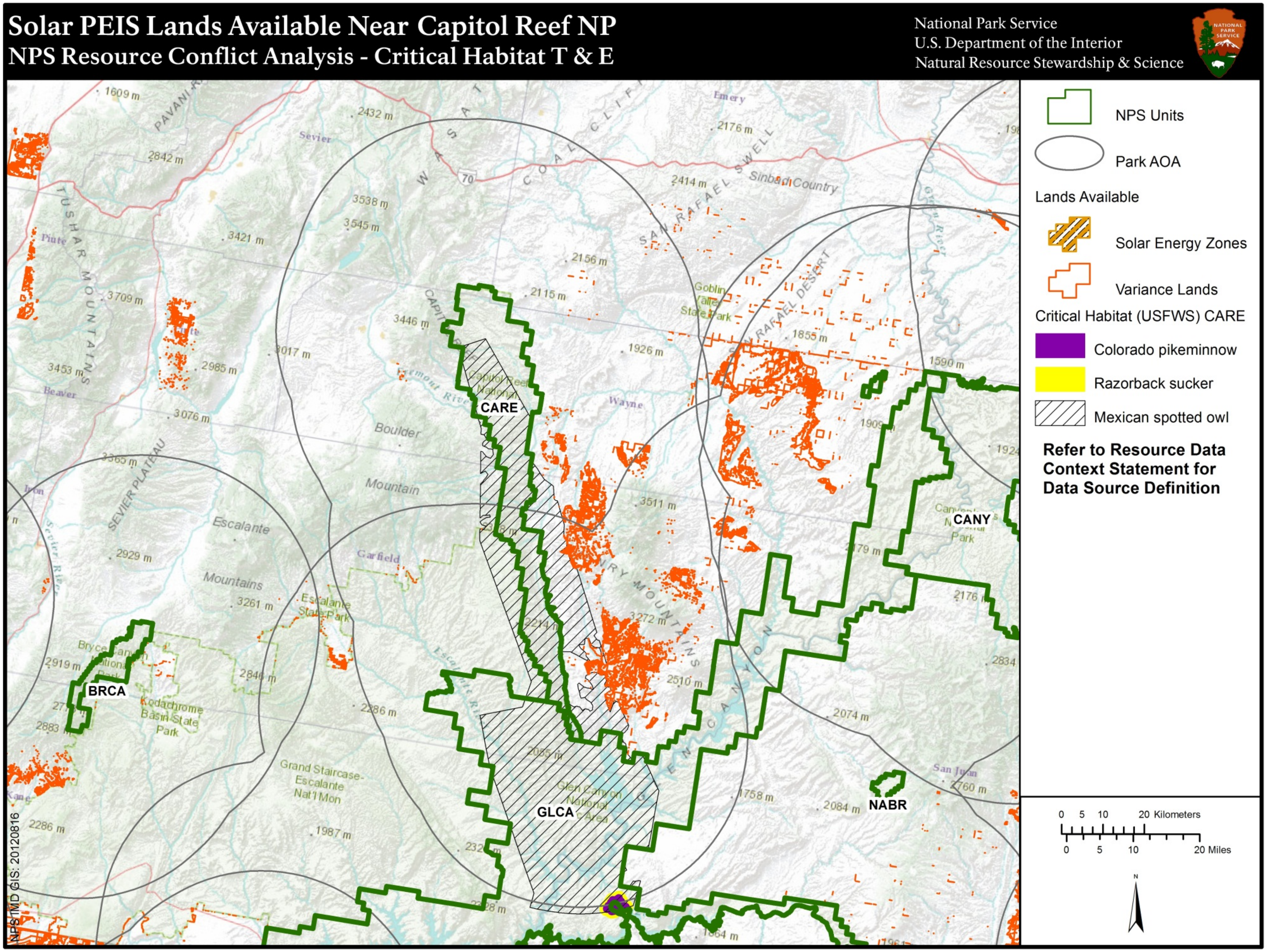
Upstream Watershed

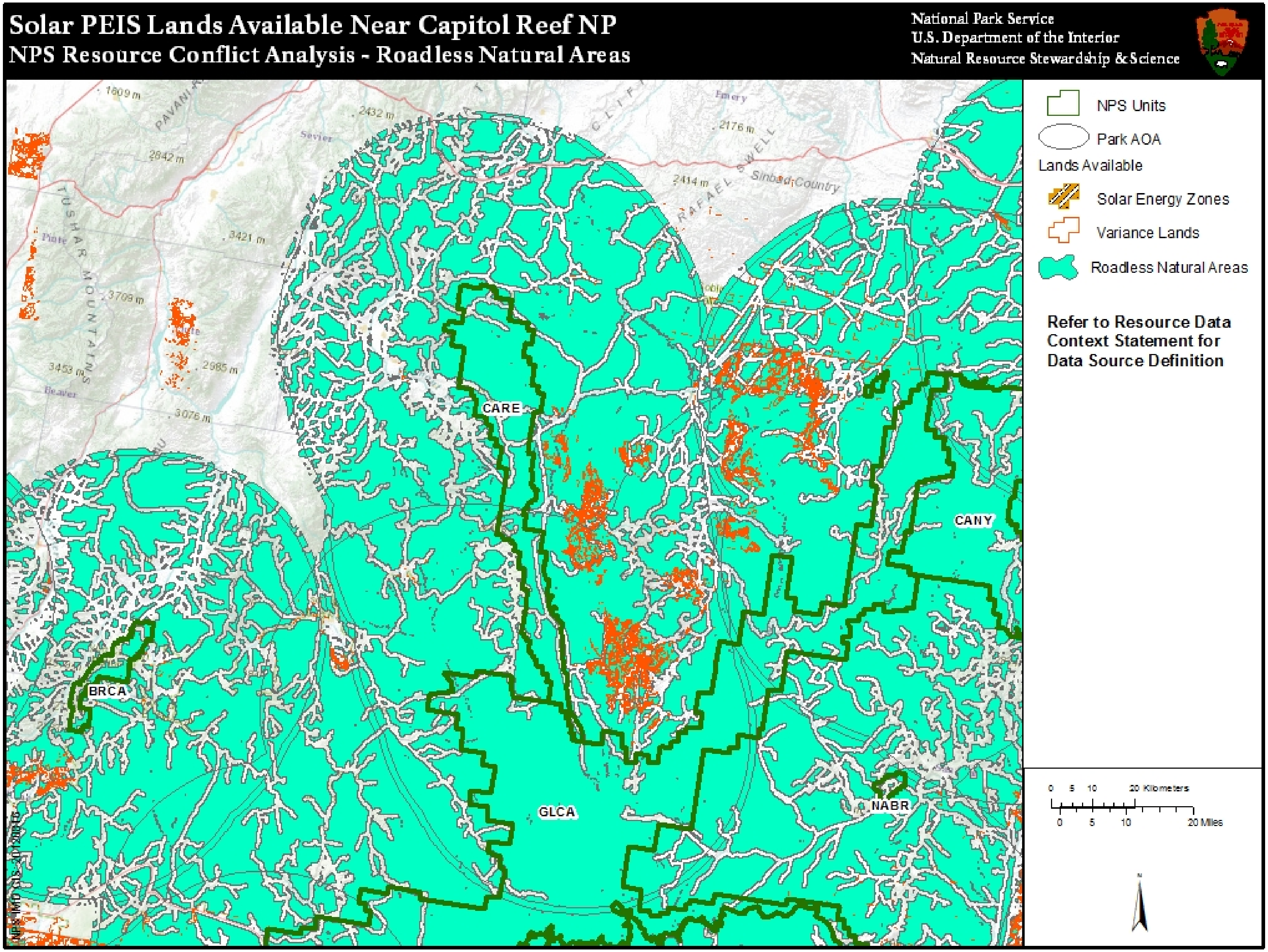


Land Ownership

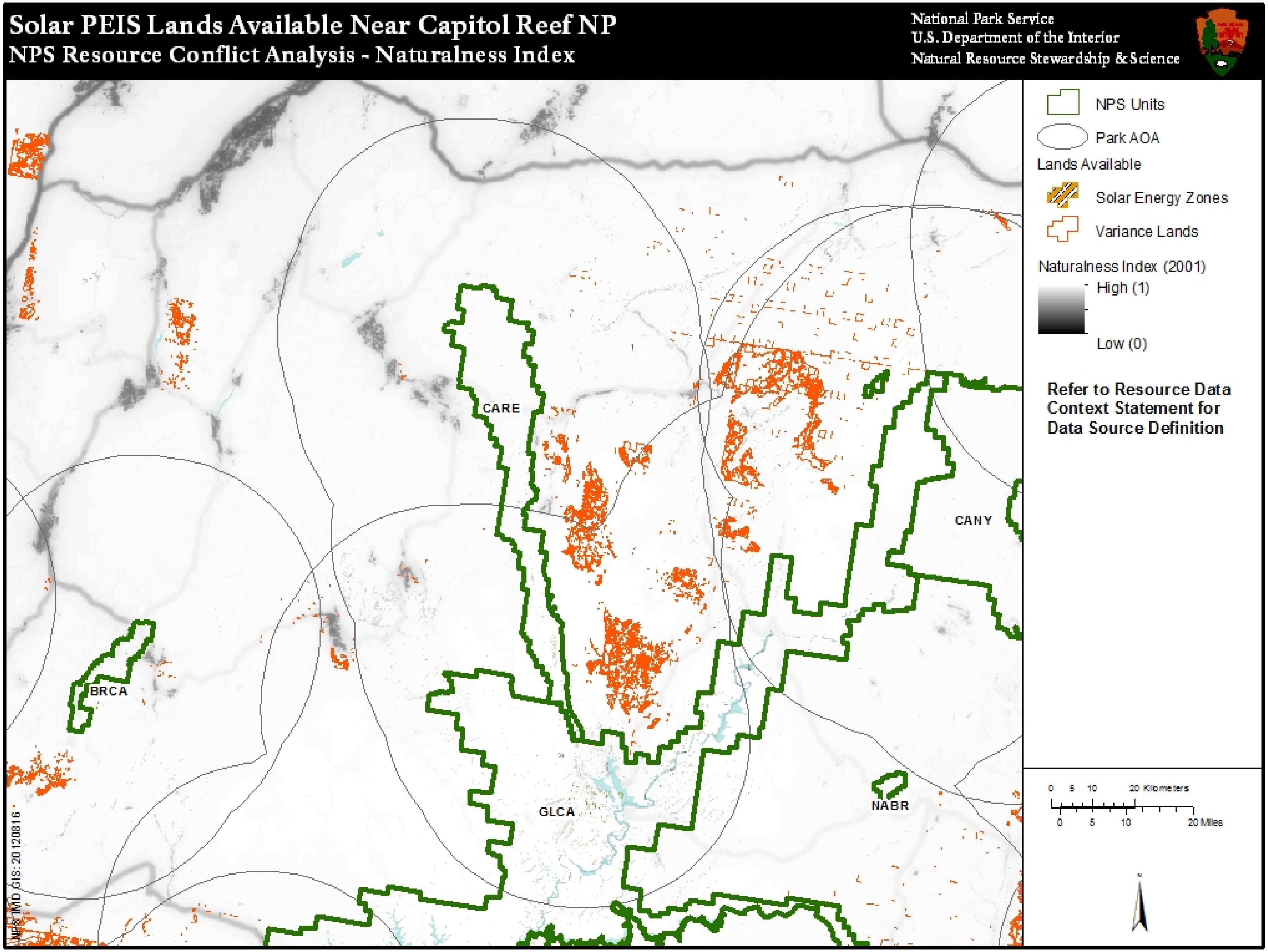


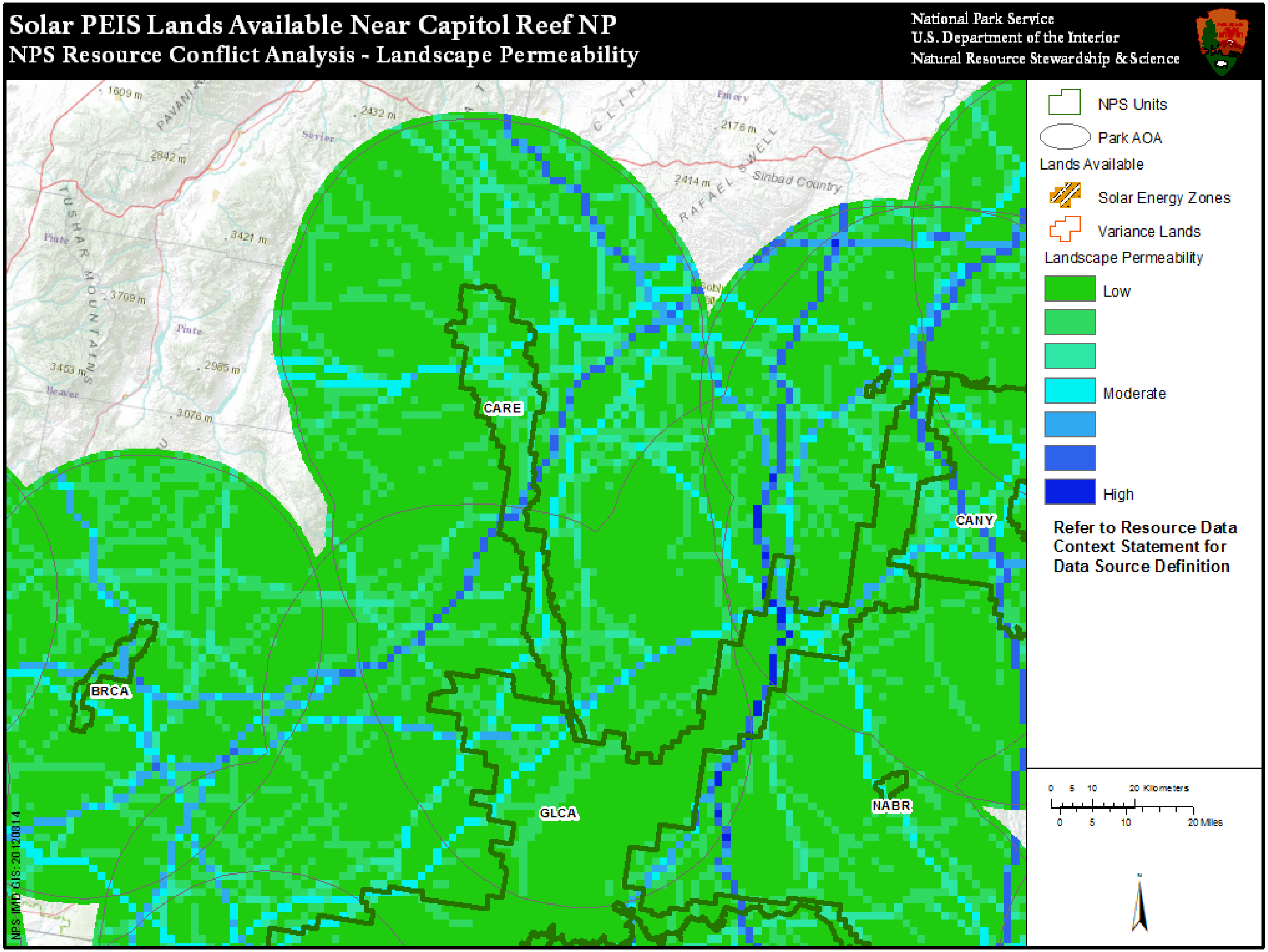

Solar PEIS Lands Available Near Capitol Reef NP
NPS Resource Conflict Analysis - Protected Areas
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
PADUS
Protected Areas
GAP Status - 1
GAP Status - 2
Refer to Resource Data Context Statement for Data Source Definition
CARE
CANY
BRCA
GLCA
NABR
0 5 10 Kilometers
0 4.25 8.5 17 Miles

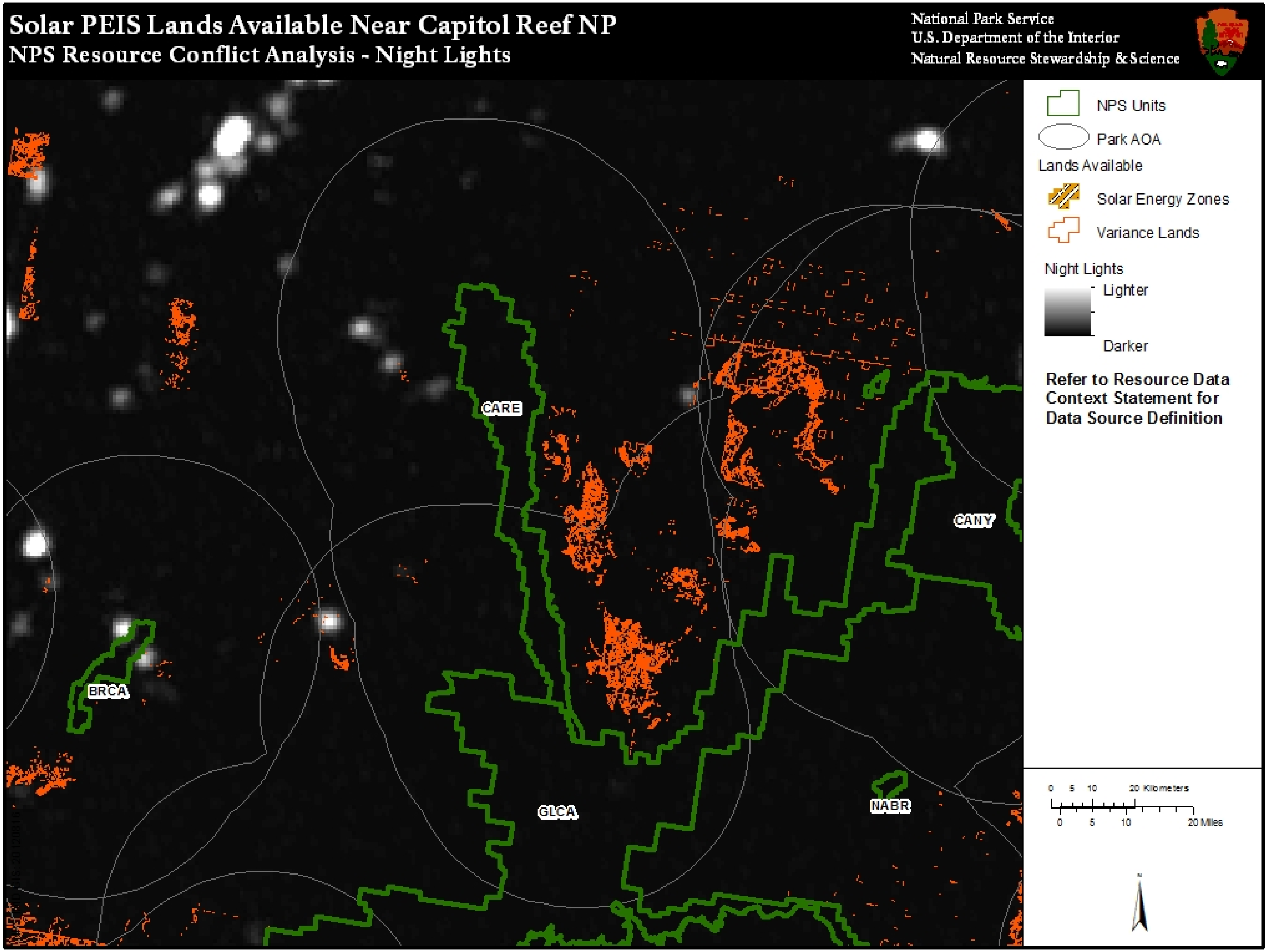

Solar PEIS Lands Available Near Capitol Reef NP
NPS Resource Conflict Analysis - Critical Habitat T & E
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Critical Habitat (USFWS) CARE
Colorado pikeminnow
Razorback sucker
Mexican spotted owl
Refer to Resource Data Context Statement for Data Source Definition
CARE
GLCA
BRCA
CANY
NABR
0 5 10 20 Kilometers
0 5 10 20 Miles
NPS IMD GIS: 20120816

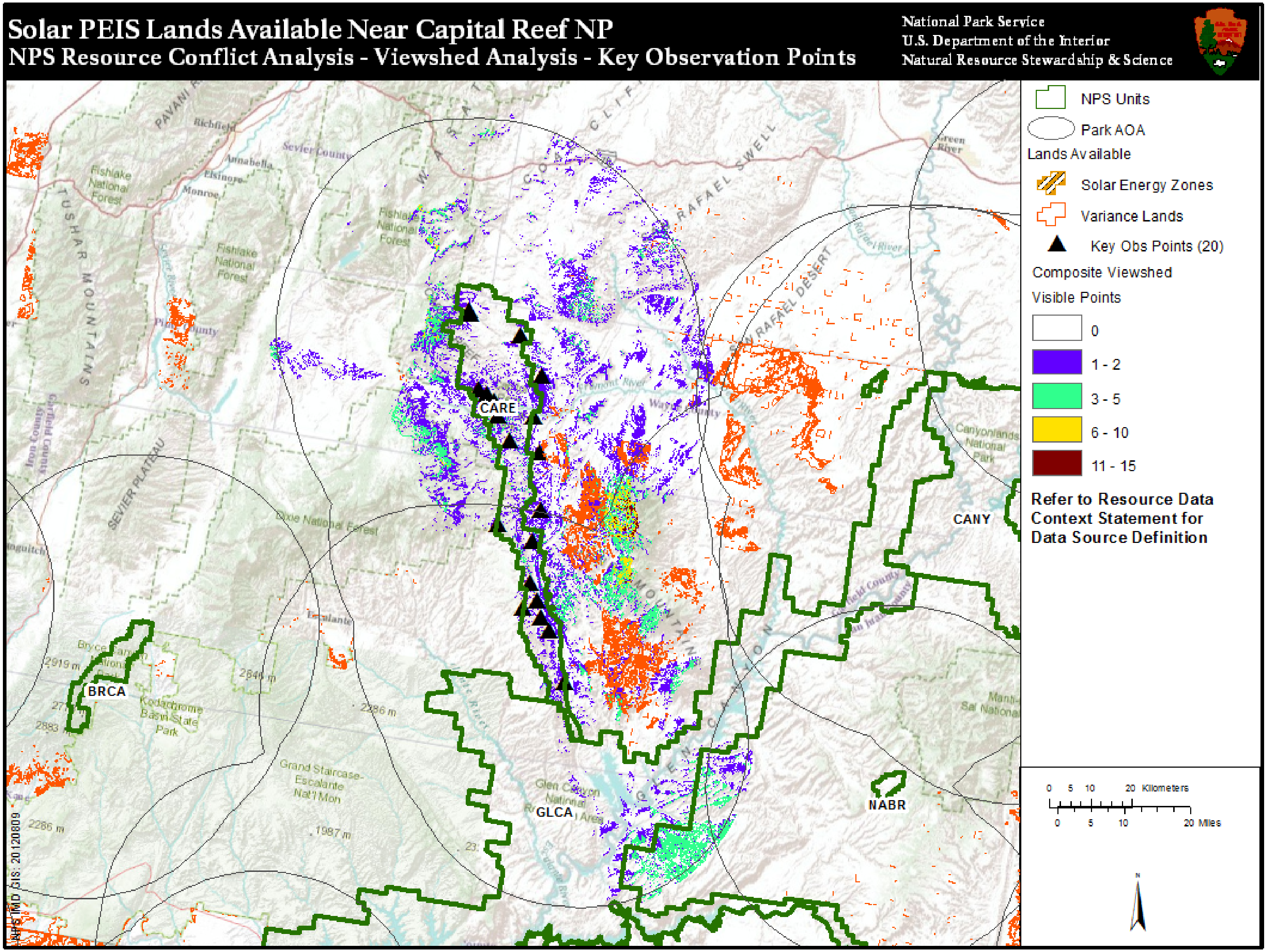

Solar PEIS Lands Available Near Capitol Reef NP
NPS Resource Conflict Analysis - Roadless Natural Areas
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Roadless Natural Areas
Refer to Resource Data Context Statement for Data Source Definition
CARE
CANY
BRCA
GLCA
NABR
0 5 10 20 Kilometers
0 5 10 20 Miles

Naturalness Index



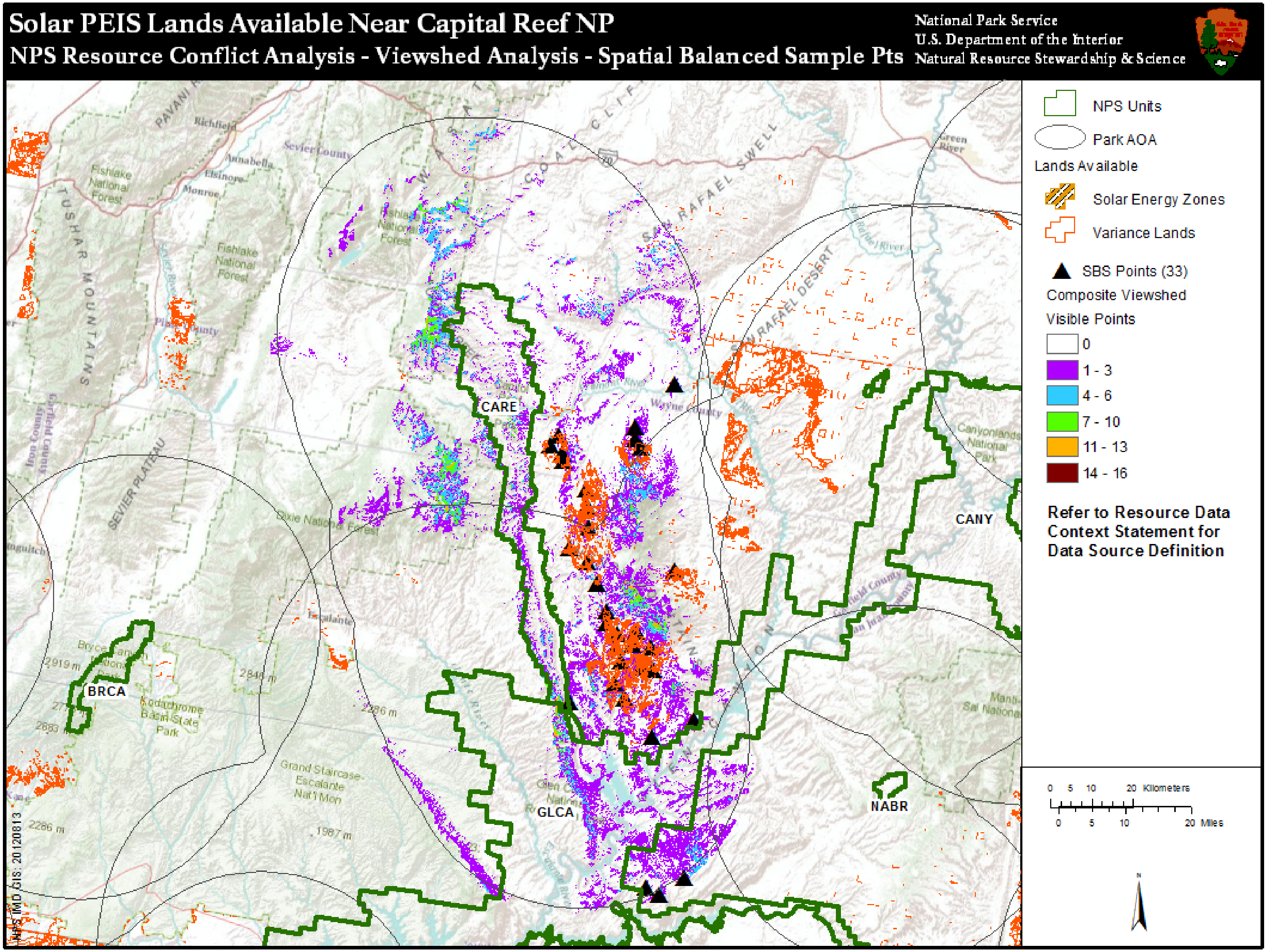

Solar PEIS Lands Available Near Capitol Reef NP
NPS Resource Conflict Analysis - Landscape Permeability
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Landscape Permeability
Low
Moderate
High
Refer to Resource Data Context Statement for Data Source Definition
CARE
CANY
BRCA
GLCA
NABR
0 5 10 20 Kilometers
0 5 10 20 Miles
NPS IMD GIS: 20120814

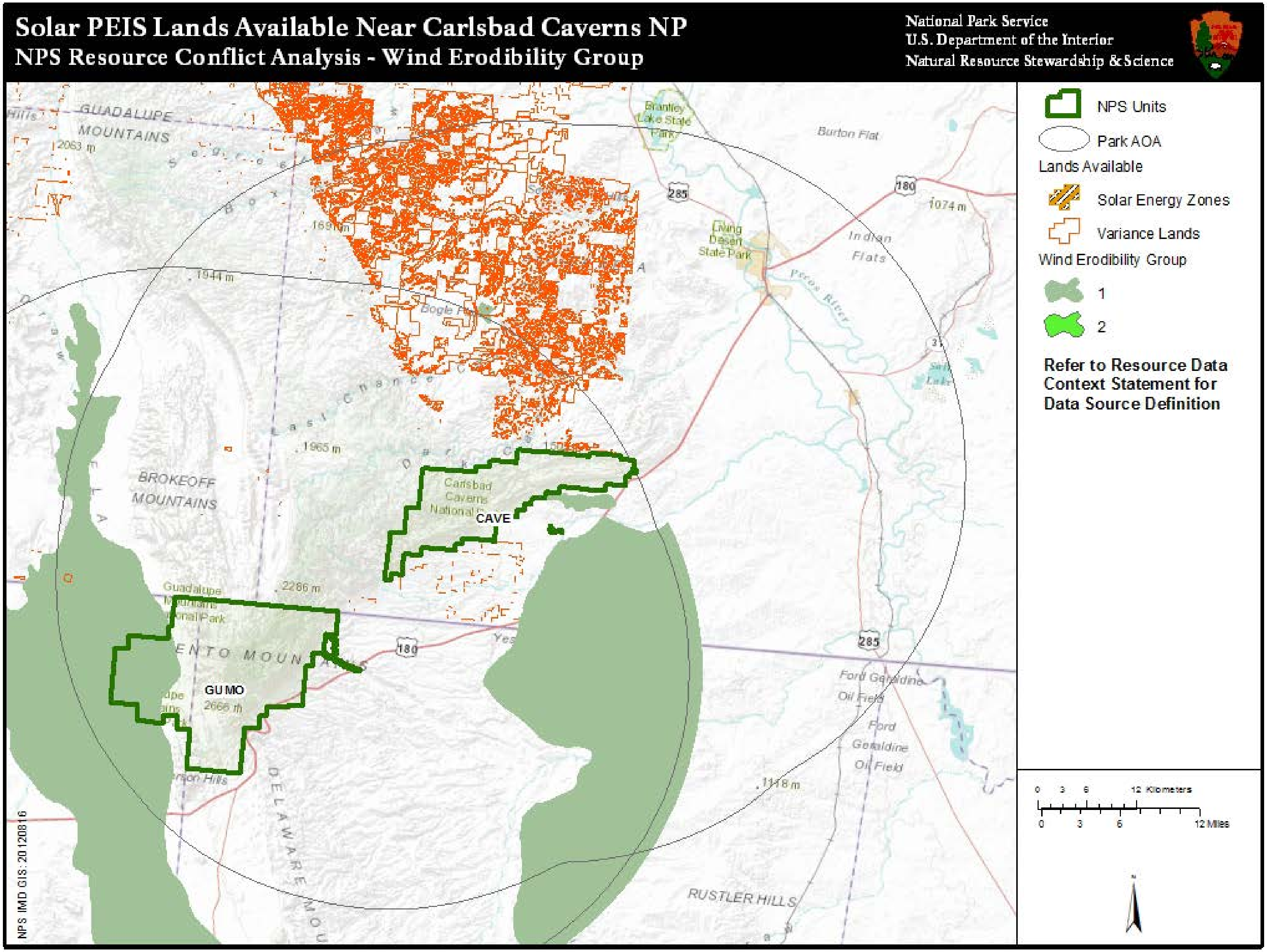

Solar PEIS Lands Available Near Capitol Reef NP
NPS Resource Conflict Analysis - Night Lights
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Night Lights
Lighter
Darker
Refer to Resource Data Context Statement for Data Source Definition
CARE
CANY
BRCA
GLCA
NABR
0 5 10 20 Kilometers
0 5 10 20 Miles

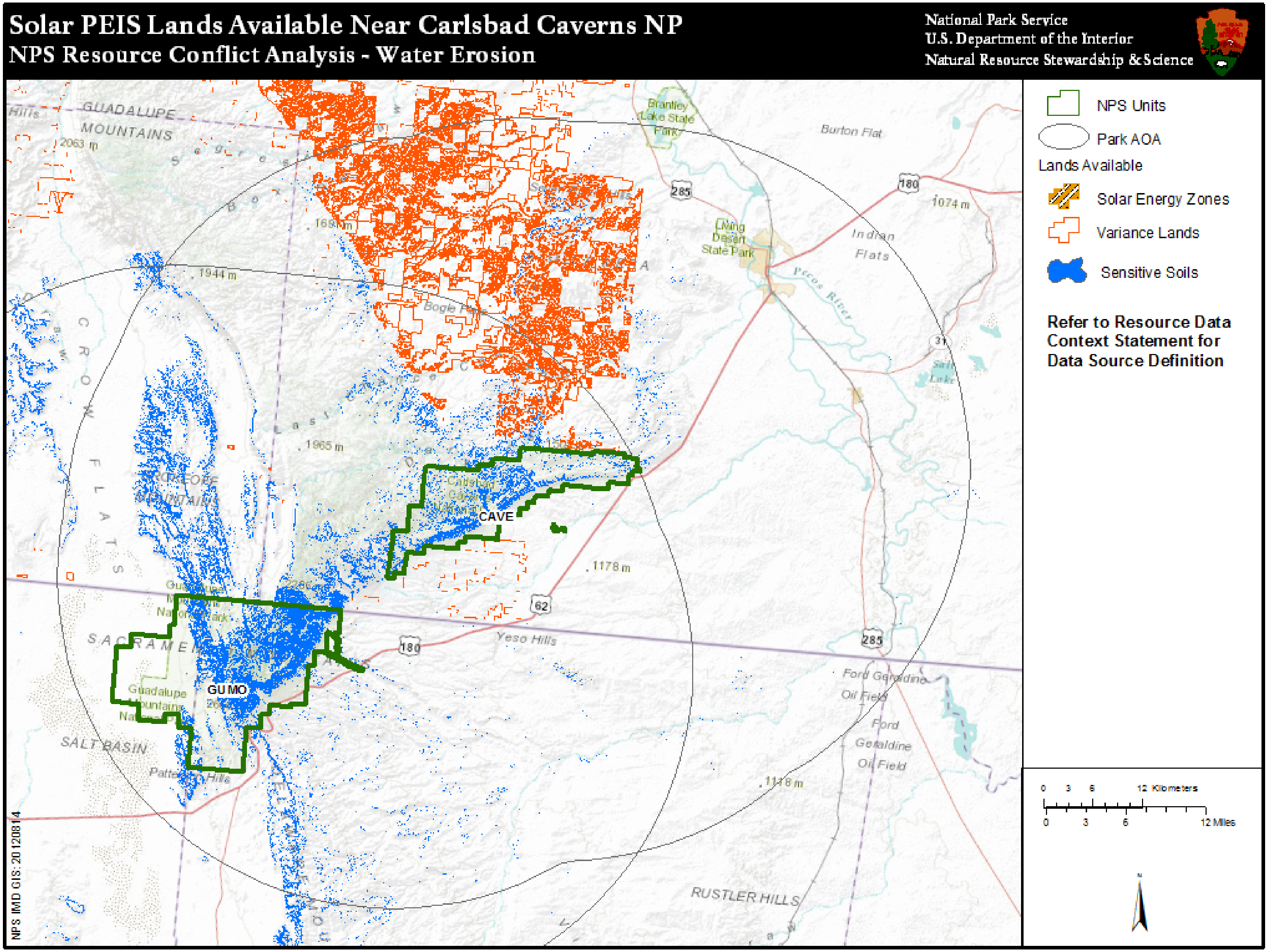


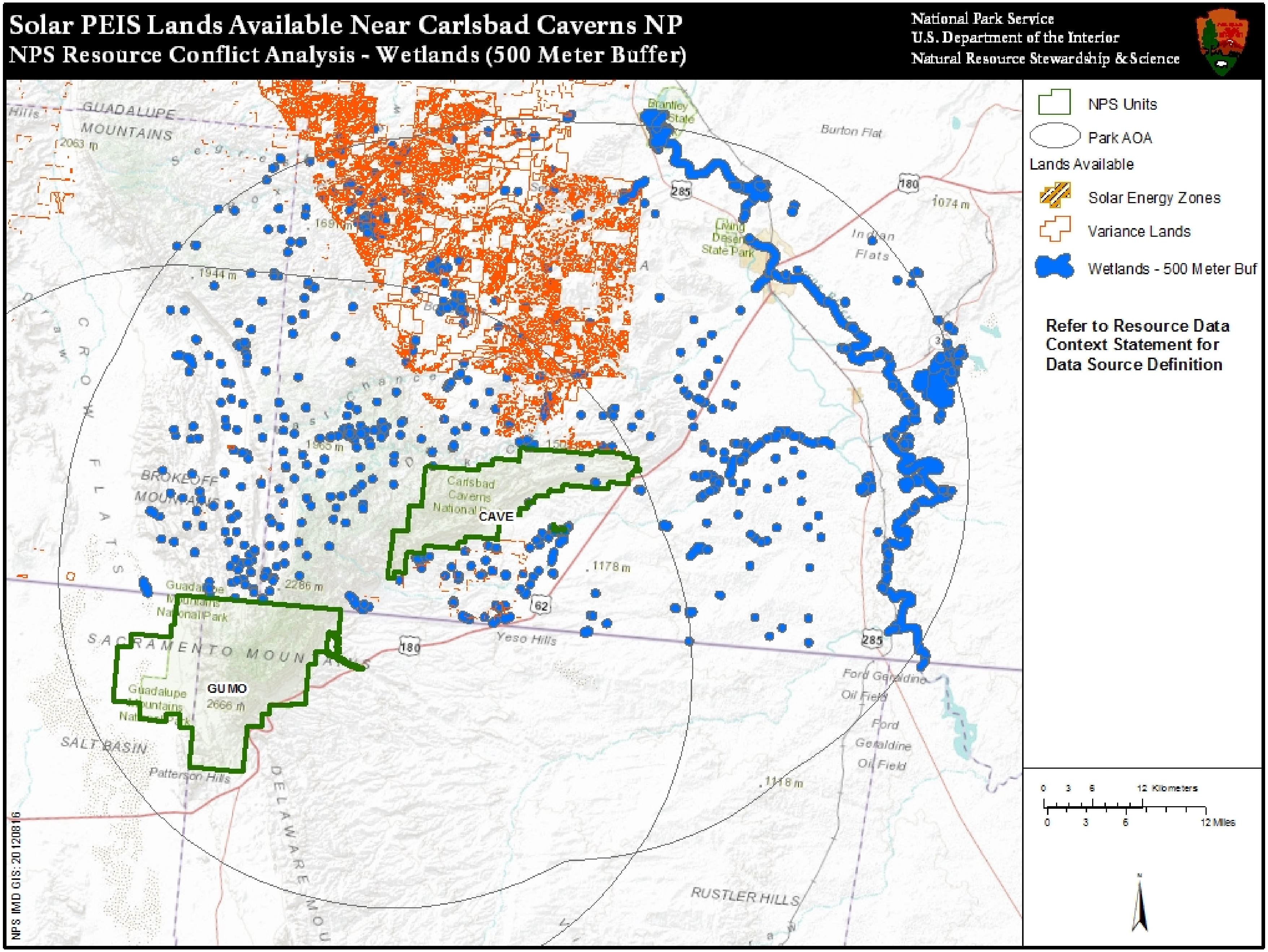
Solar PEIS Lands Available Near Capital Reef NP
NPS Resource Conflict Analysis - Viewshed Analysis - Key Observation Points
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Key Obs Points (20)
Composite Viewshed
Visible Points
0
1 - 2
3 - 5
6 - 10
11 - 15
Refer to Resource Data Context Statement for Data Source Definition
CARE
CANY
BRCA
GLCA
NABR
0 5 10 20 Kilometers
0 5 10 20 Miles
N
NPS IMD GIS: 20120809

Viewshed – Spatial Balanced Sample

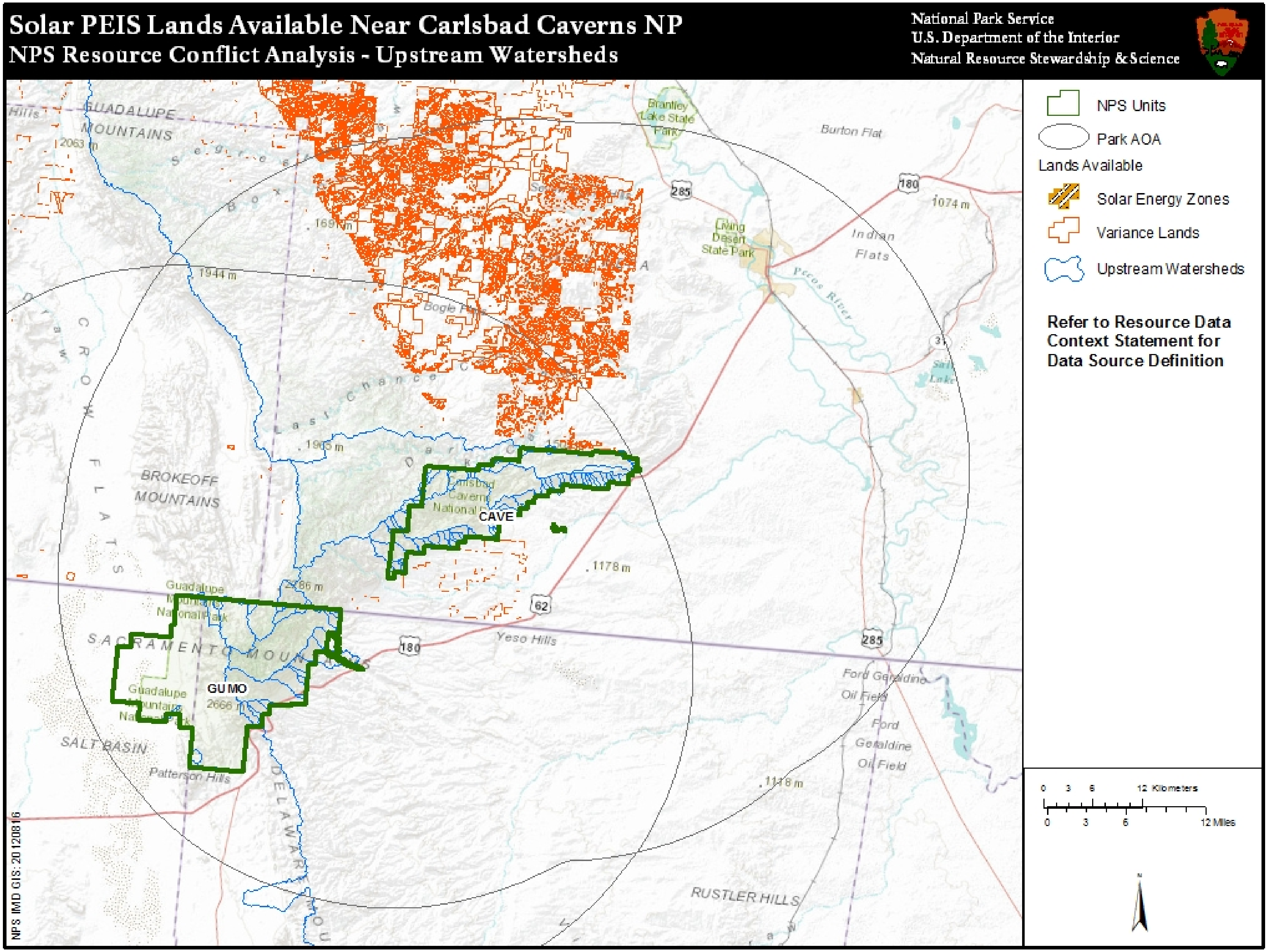



Solar PEIS Lands Available Near Carlsbad Caverns NP
NPS Resource Conflict Analysis - Wind Erodibility Group
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Wind Erodibility Group
1
2
Refer to Resource Data Context Statement for Data Source Definition
GUADALUPE MOUNTAINS
BROKEOFF MOUNTAINS
CAVE
GUMO
RUSTLER HILLS
Burton Flat
Indian Flats
Carlsbad Caverns National
Living Desert State Park
Brantley Lake State Park
Ford Geraldine Oil Field
0 3 6 12 Kilometers
0 3 6 12 Miles
NPS IMD GIS: 20120816

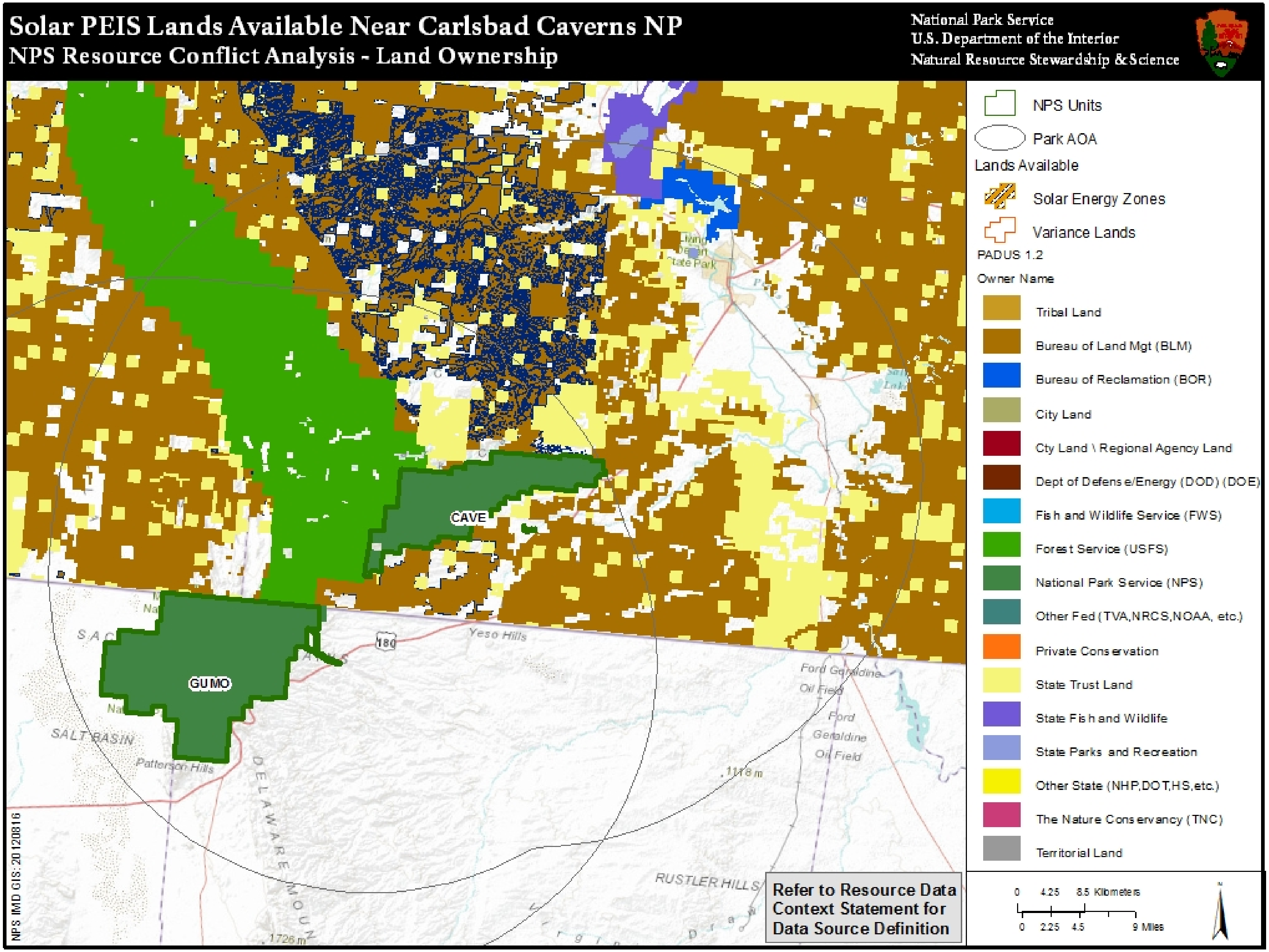

Solar PEIS Lands Available Near Carlsbad Caverns NP
NPS Resource Conflict Analysis - Water Erosion
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Sensitive Soils
Refer to Resource Data Context Statement for Data Source Definition
0 3 6 12 Kilometers
0 3 6 12 Miles
GUADALUPE MOUNTAINS
2063 m
1944 m
1965 m
1178 m
1118 m
1074 m
Burton Flat
Indian Flats
Pecos River
Yeso Hills
Ford Geraldine Oil Field
SALT BASIN
RUSTLER HILLS
CAVE
GUMO
SACRAMENTO
285
180
62
31
NPS IMD GIS: 20120814

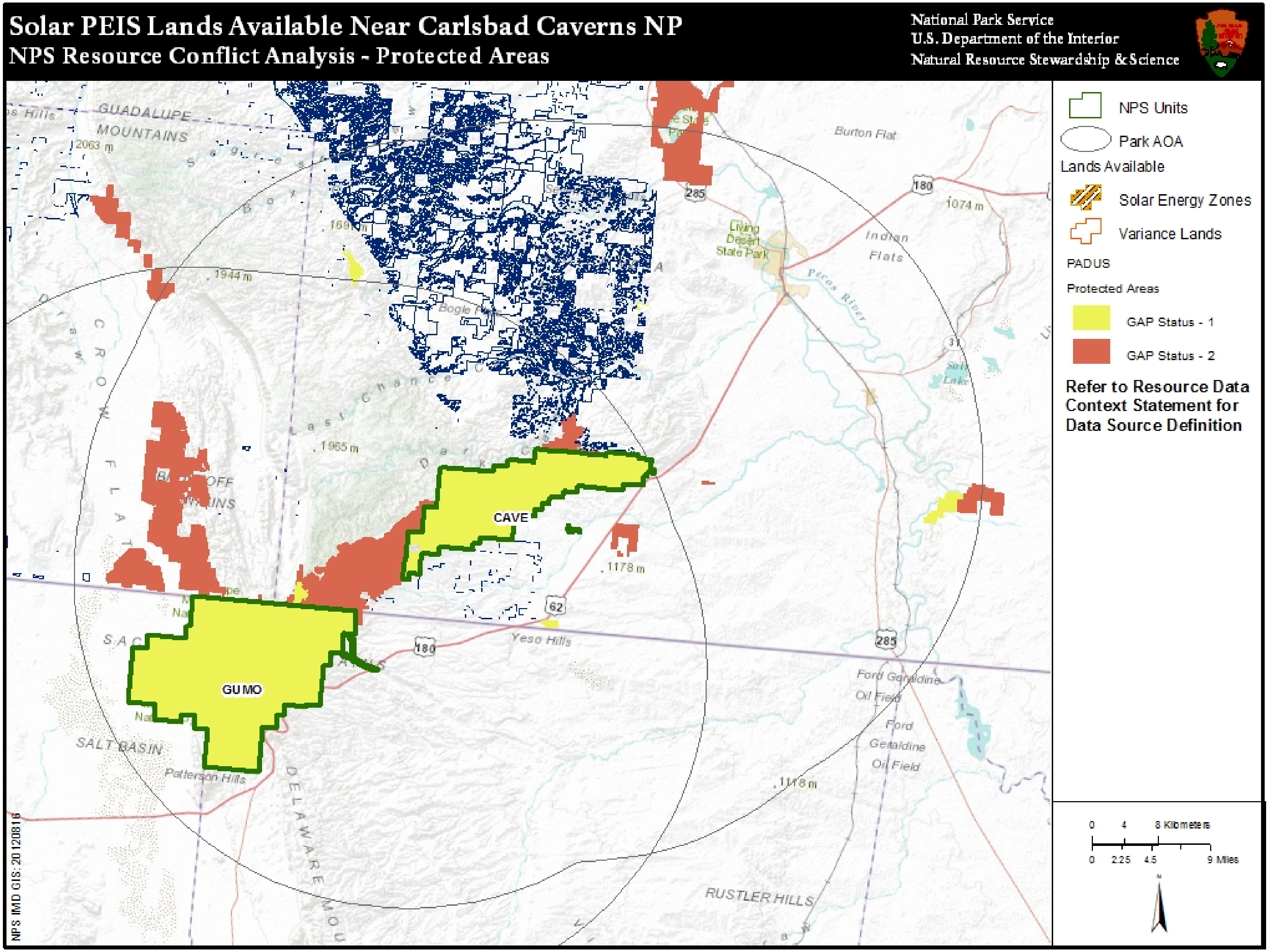

Solar PEIS Lands Available Near Carlsbad Caverns NP
NPS Resource Conflict Analysis - Wetlands (500 Meter Buffer)
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Wetlands - 500 Meter Buf
Refer to Resource Data Context Statement for Data Source Definition
CAVE
GUMO
NPS IMD GIS: 20120816

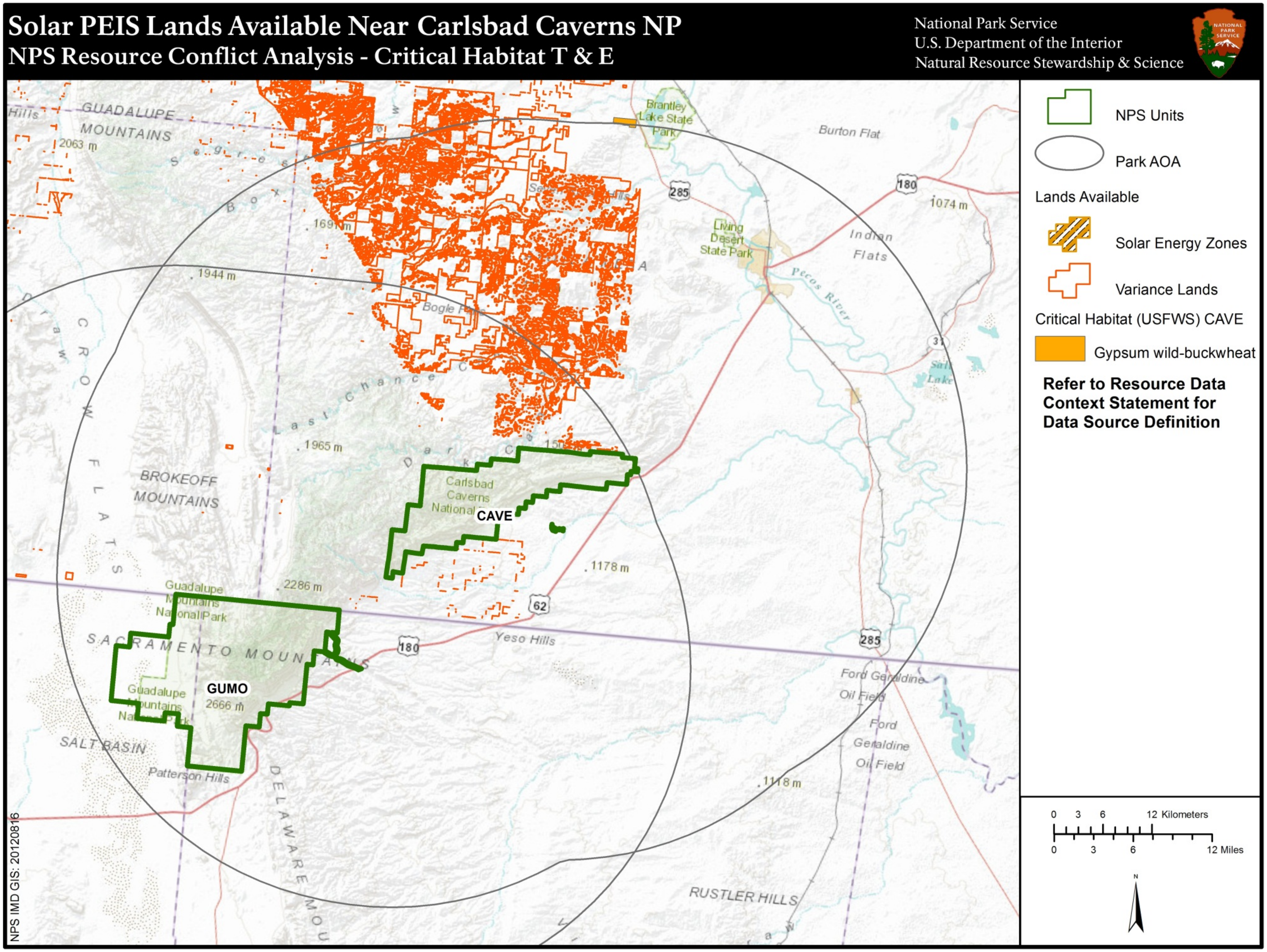
Upstream Watershed

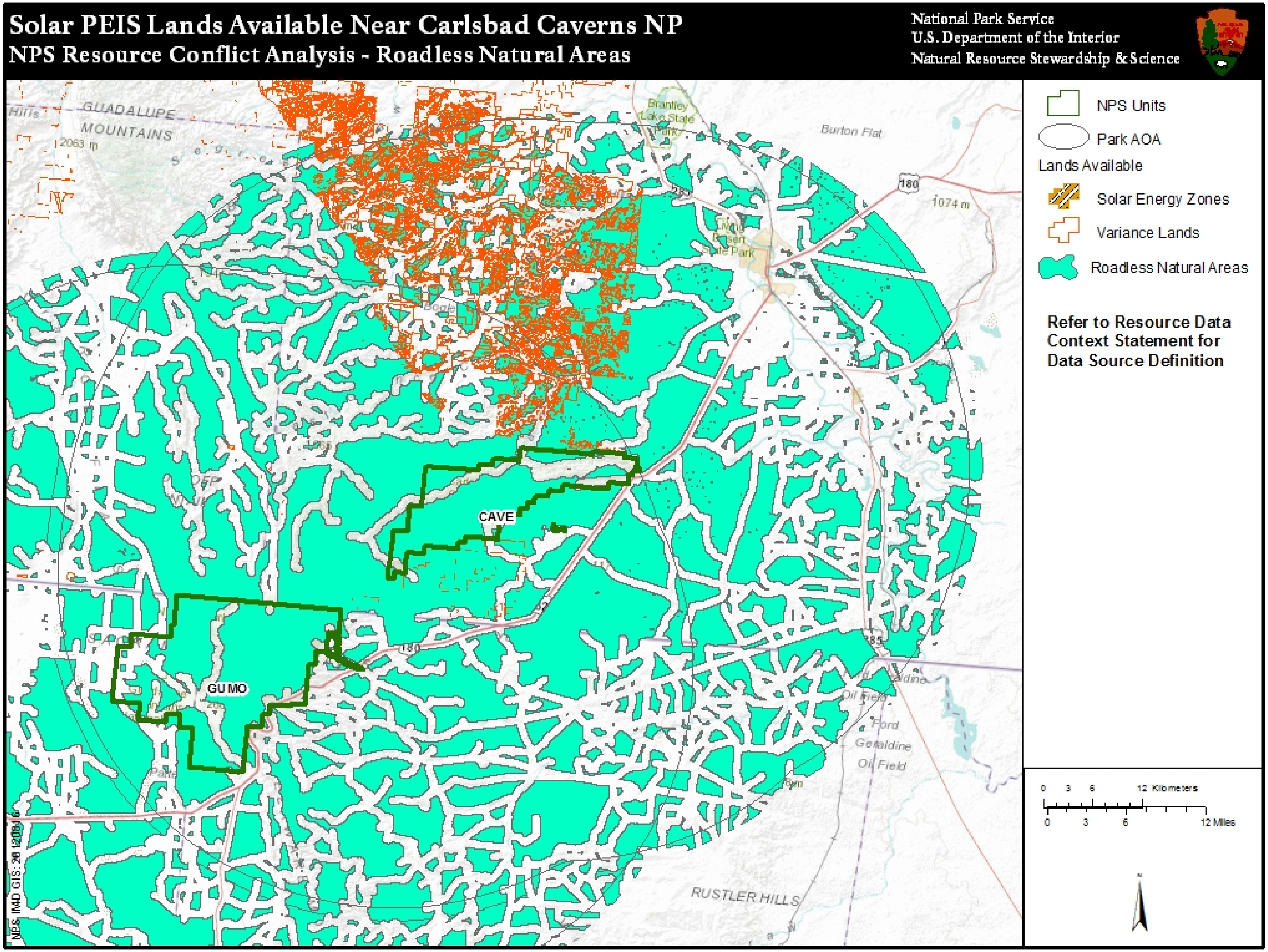


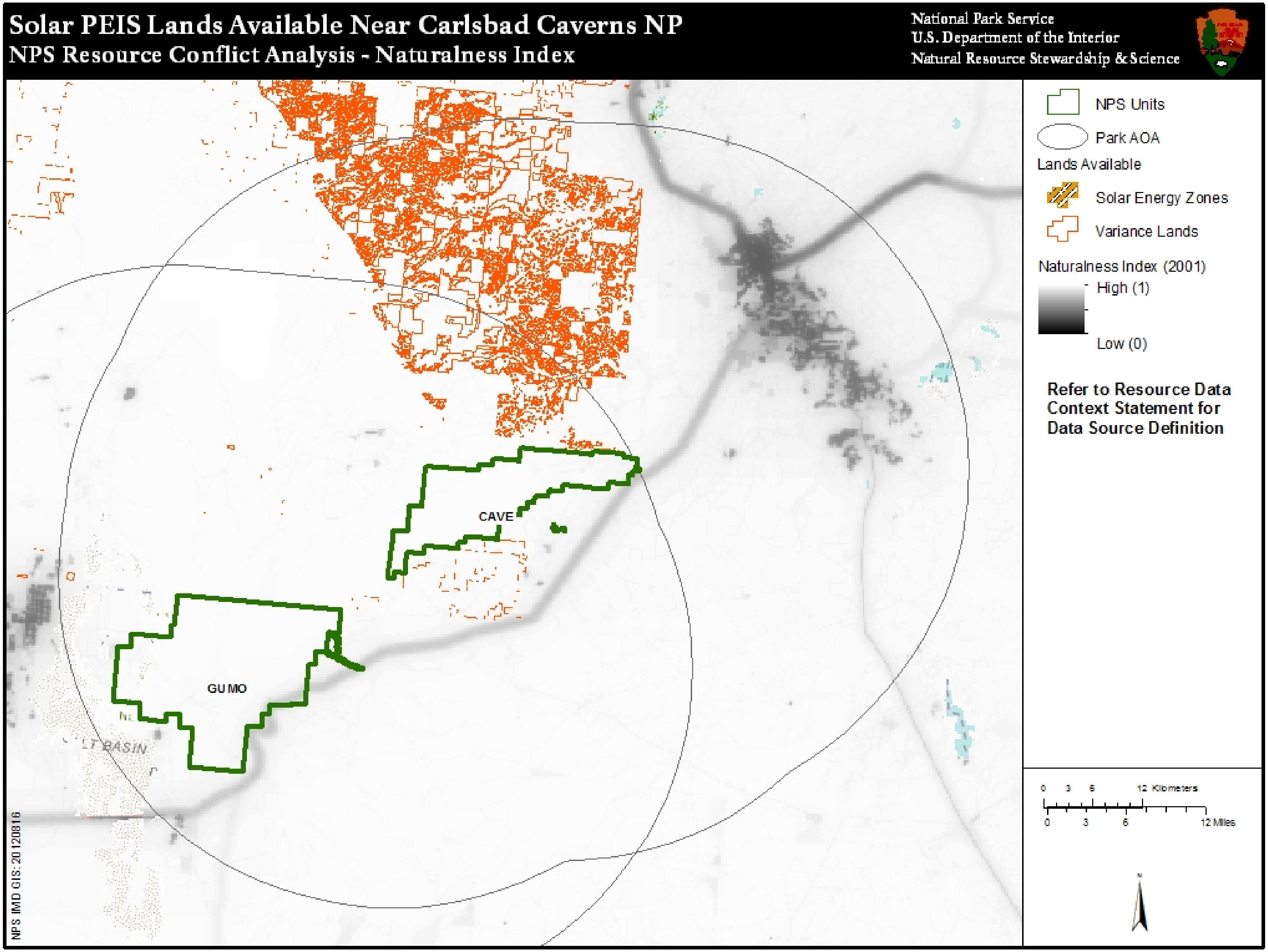
Land Ownership

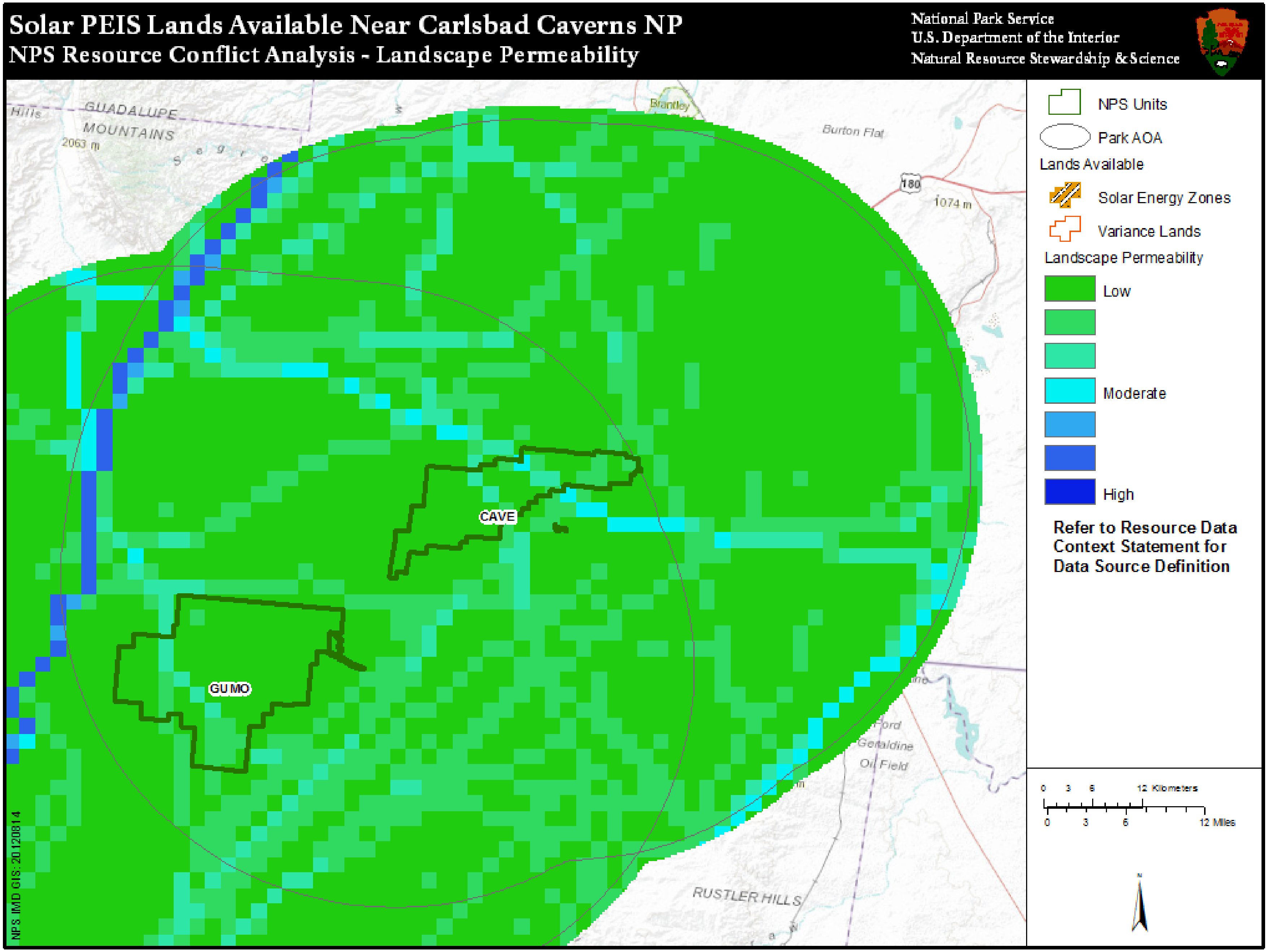


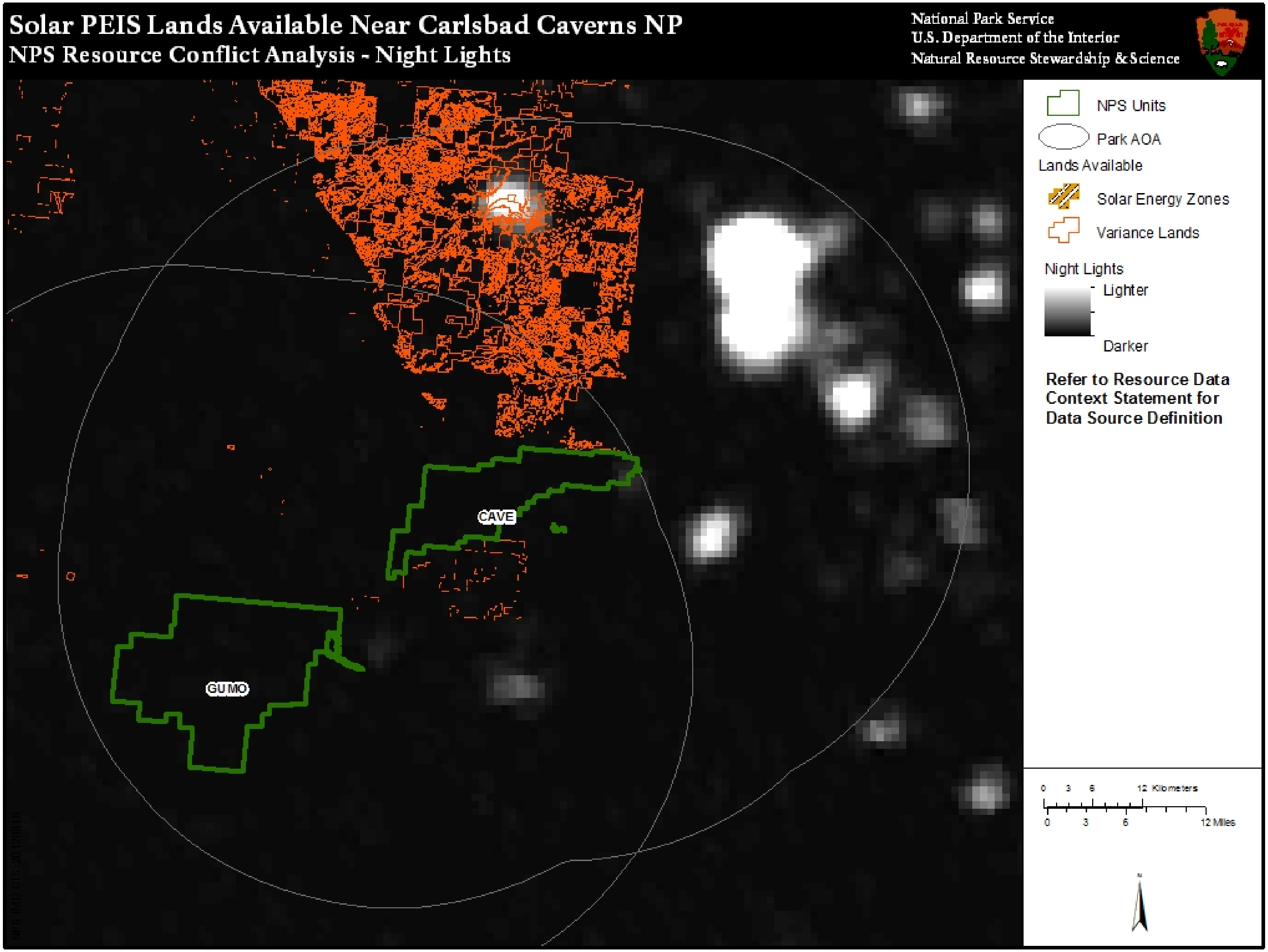

Solar PEIS Lands Available Near Carlsbad Caverns NP
NPS Resource Conflict Analysis - Protected Areas
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
PADUS
Protected Areas
GAP Status - 1
GAP Status - 2
Refer to Resource Data Context Statement for Data Source Definition
0 4 8 Kilometers
0 2.25 4.5 9 Miles
CAVE
GUMO
GUADALUPE MOUNTAINS
SALT BASIN
Patterson Hills
Yeso Hills
Burton Flat
Indian Flats
Pecos River
Living Desert State Park
RUSTLER HILLS
Ford Geraldine Oil Field
NPS IMD GIS: 20120816

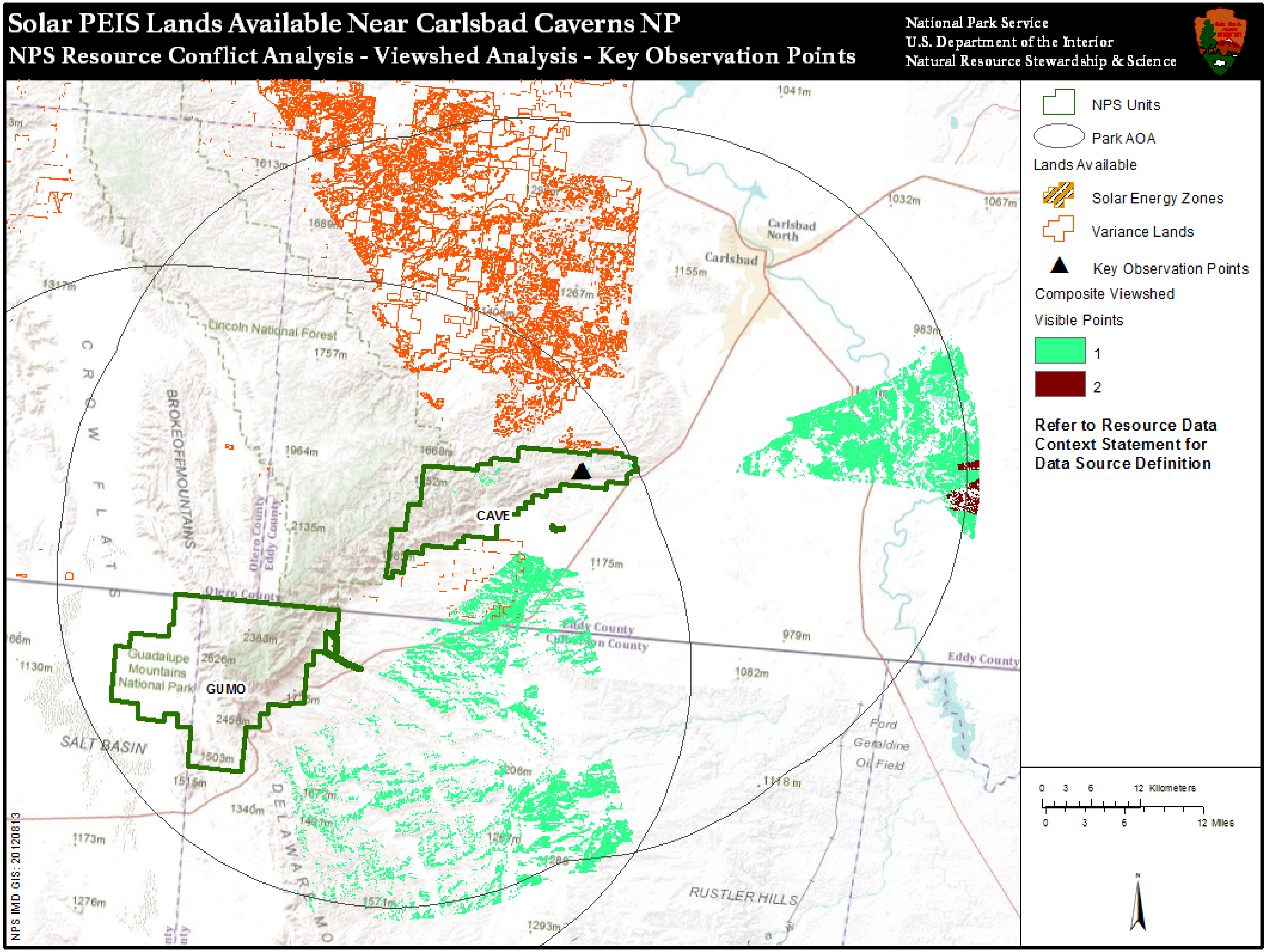

Solar PEIS Lands Available Near Carlsbad Caverns NP
NPS Resource Conflict Analysis - Critical Habitat T & E
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Critical Habitat (USFWS) CAVE
Gypsum wild-buckwheat
Refer to Resource Data Context Statement for Data Source Definition
CAVE
GUMO
0 3 6 12 Kilometers
0 3 6 12 Miles
NPS IMD GIS: 20120816


Solar PEIS Lands Available Near Carlsbad Caverns NP
NPS Resource Conflict Analysis - Roadless Natural Areas
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Roadless Natural Areas
Refer to Resource Data Context Statement for Data Source Definition
0 3 6 12 Kilometers
0 3 6 12 Miles
CAVE
GUMO
GUADALUPE MOUNTAINS
RUSTLER HILLS
Burton Flat
Brantley Lake State Park
Living Desert State Park

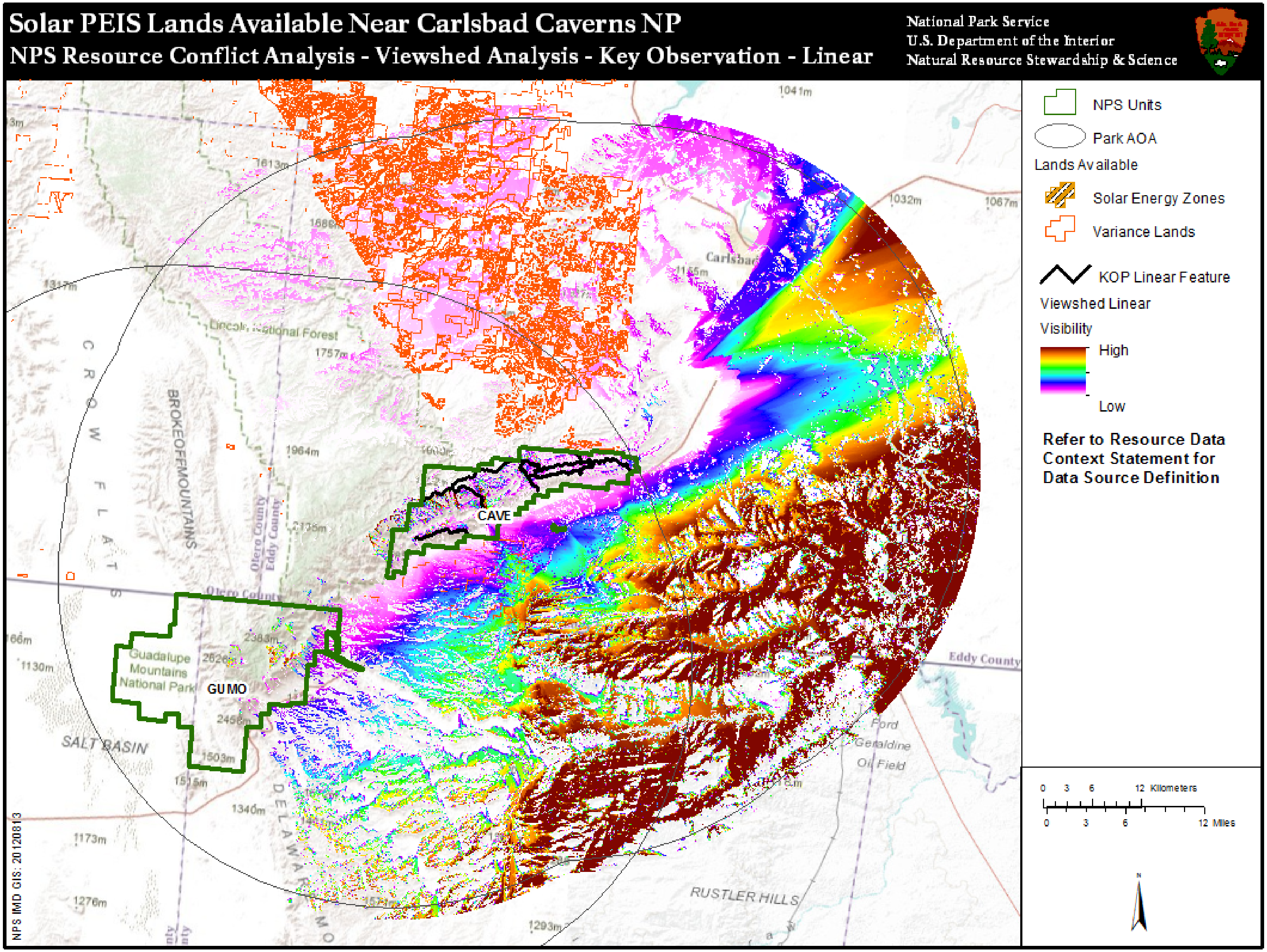

Solar PEIS Lands Available Near Carlsbad Caverns NP
NPS Resource Conflict Analysis - Naturalness Index
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Naturalness Index (2001)
High (1)
Low (0)
Refer to Resource Data Context Statement for Data Source Definition
0 3 6 12 Kilometers
0 3 6 12 Miles
CAVE
GUMO
NPS IMD GIS: 20120816


Solar PEIS Lands Available Near Carlsbad Caverns NP
NPS Resource Conflict Analysis - Landscape Permeability
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
GUADALUPE
MOUNTAINS
2063 m
Brantley
Burton Flat
180
1074 m
CAVE
GUMO
Ford
Geraldine
Oil Field
RUSTLER HILLS
NPS IMD GIS: 20120814
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Landscape Permeability
Low
Moderate
High
Refer to Resource Data Context Statement for Data Source Definition
0 3 6 12 Kilometers
0 3 6 12 Miles

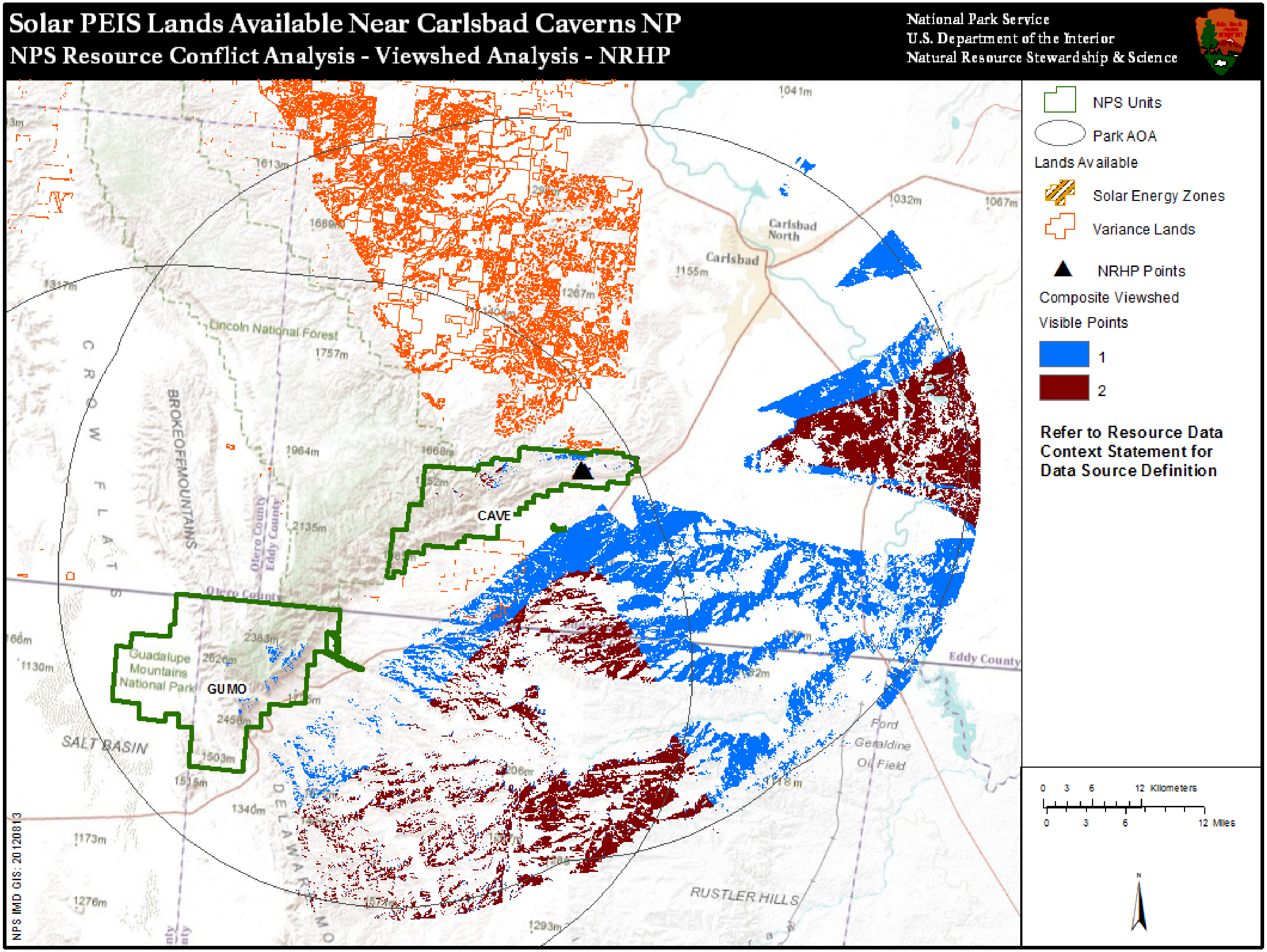

Solar PEIS Lands Available Near Carlsbad Caverns NP
NPS Resource Conflict Analysis - Night Lights
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Night Lights
Lighter
Darker
Refer to Resource Data Context Statement for Data Source Definition
CAVE
GUMO
0 3 6 12 Kilometers
0 3 6 12 Miles



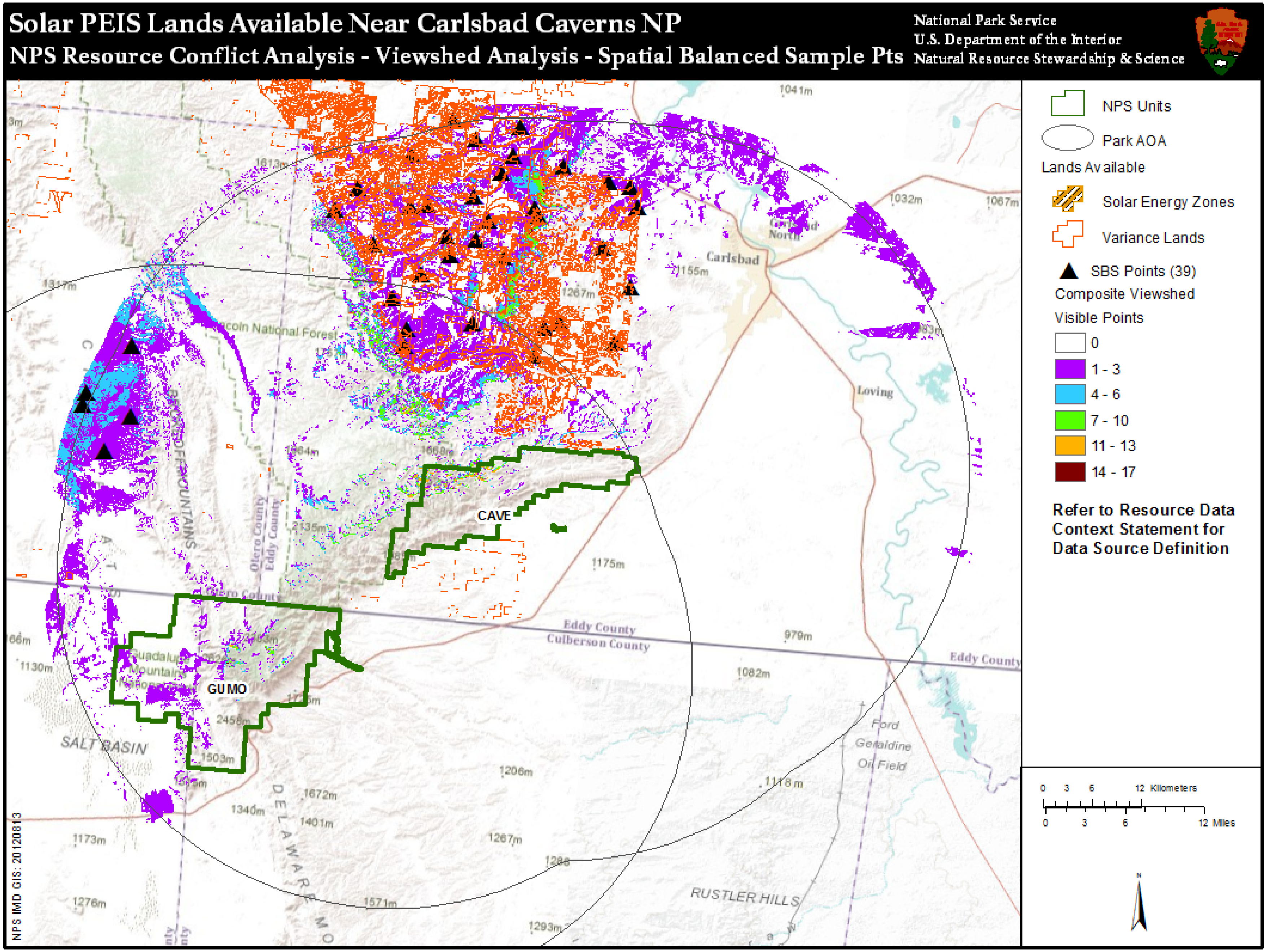
Solar PEIS Lands Available Near Carlsbad Caverns NP
NPS Resource Conflict Analysis - Viewshed Analysis - Key Observation Points
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Key Observation Points
Composite Viewshed
Visible Points
1
2
Refer to Resource Data Context Statement for Data Source Definition
0 3 6 12 Kilometers
0 3 6 12 Miles
CAVE
GUMO
Guadalupe Mountains National Park
Carlsbad
Carlsbad North
Lincoln National Forest
BROKEOFFMOUNTAINS
CROW FLATS
SALT BASIN
DELAWARE MO
RUSTLER HILLS
Ford Geraldine Oil Field
Otero County
Eddy County
Culberson County
NPS IMD GIS: 20120813


Solar PEIS Lands Available Near Carlsbad Caverns NP
NPS Resource Conflict Analysis - Viewshed Analysis - Key Observation - Linear
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
KOP Linear Feature
Viewshed Linear
Visibility
High
Low
Refer to Resource Data Context Statement for Data Source Definition
0 3 6 12 Kilometers
0 3 6 12 Miles
CAVE
GUMO
Guadalupe Mountains National Park
Carlsbad
Lincoln National Forest
BROKEOFF MOUNTAINS
CROW FLATS
SALT BASIN
RUSTLER HILLS
Eddy County
Otero County
NPS IMD GIS: 20120813

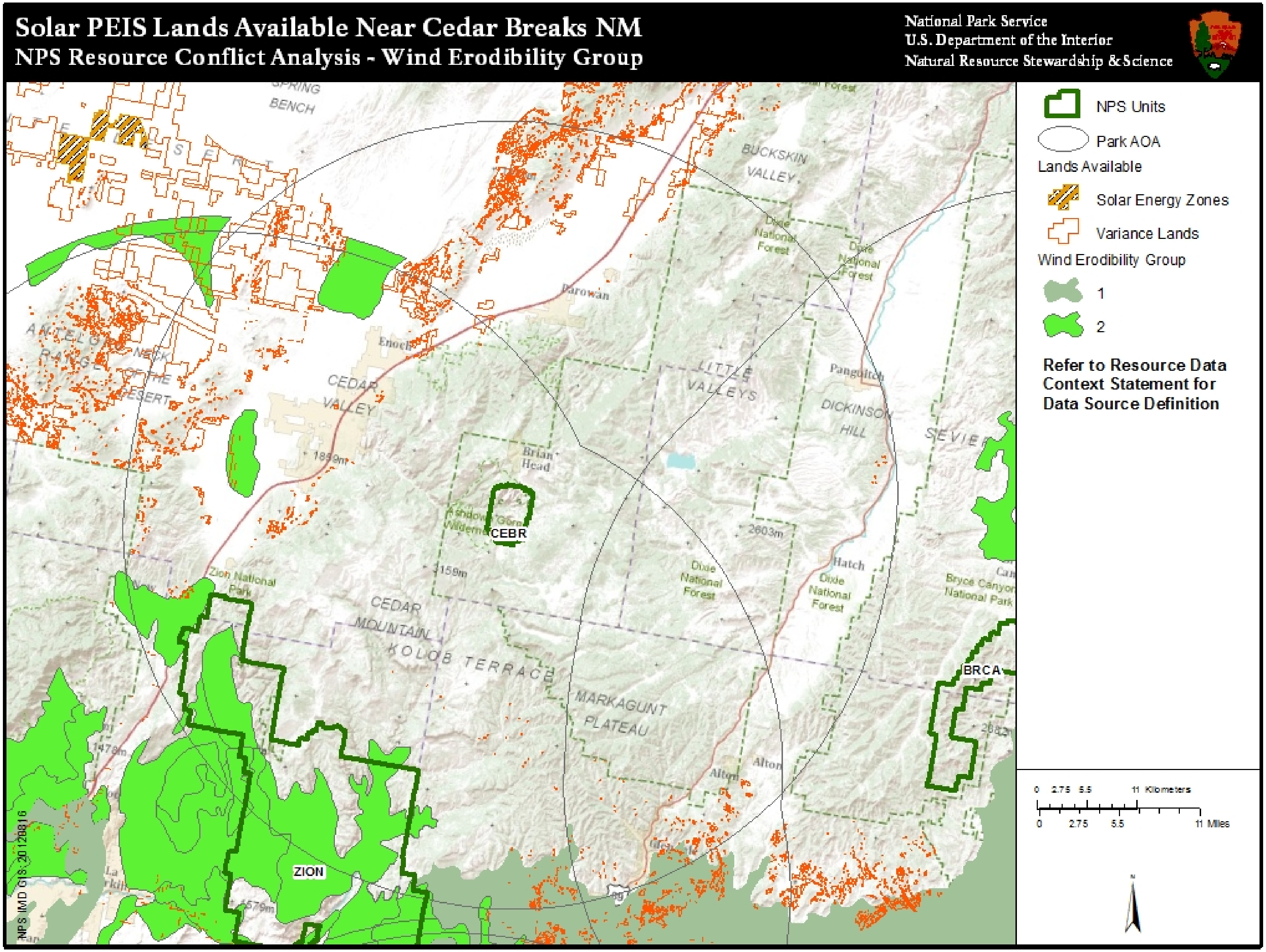
Viewshed - NRHP

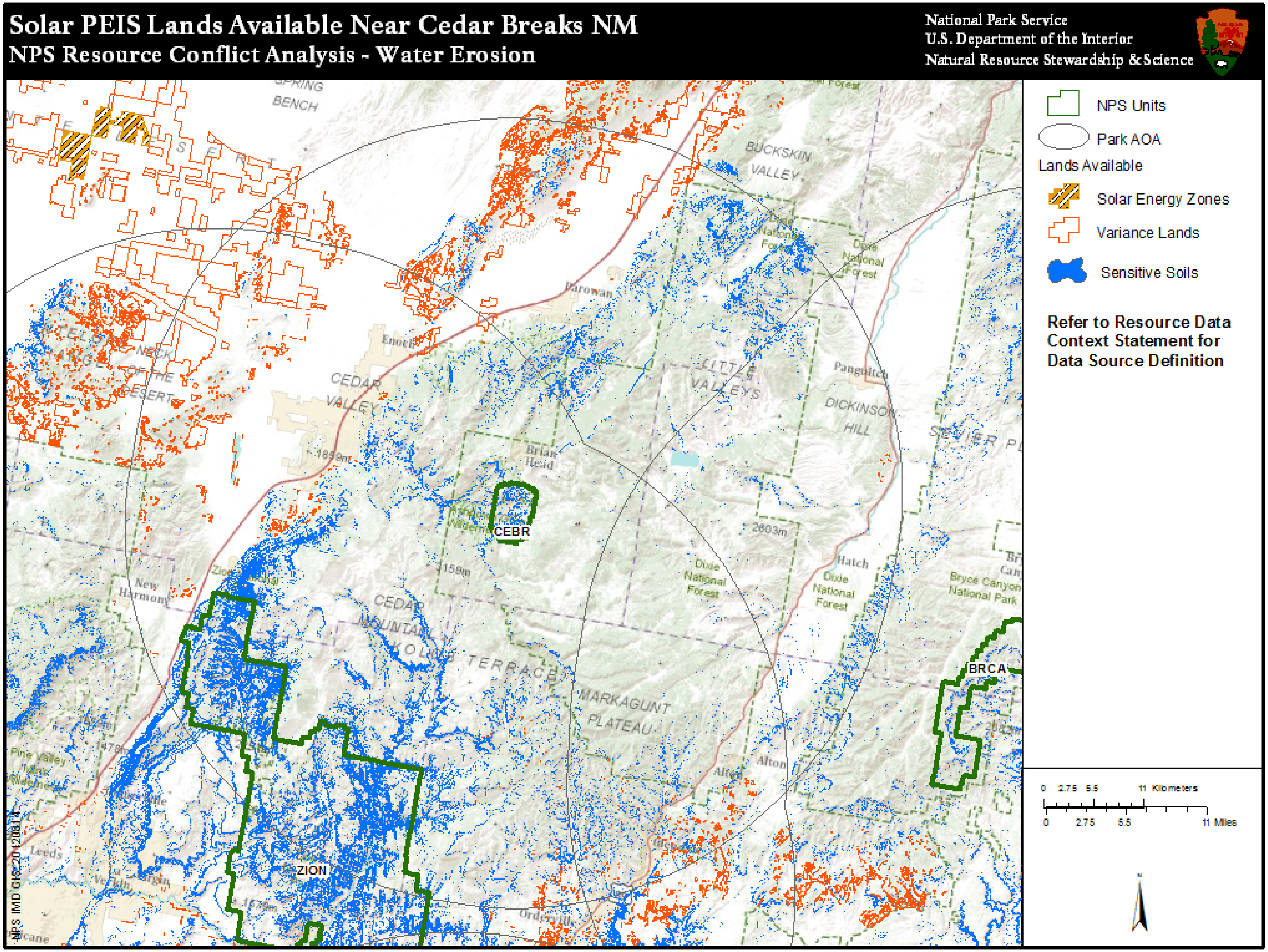


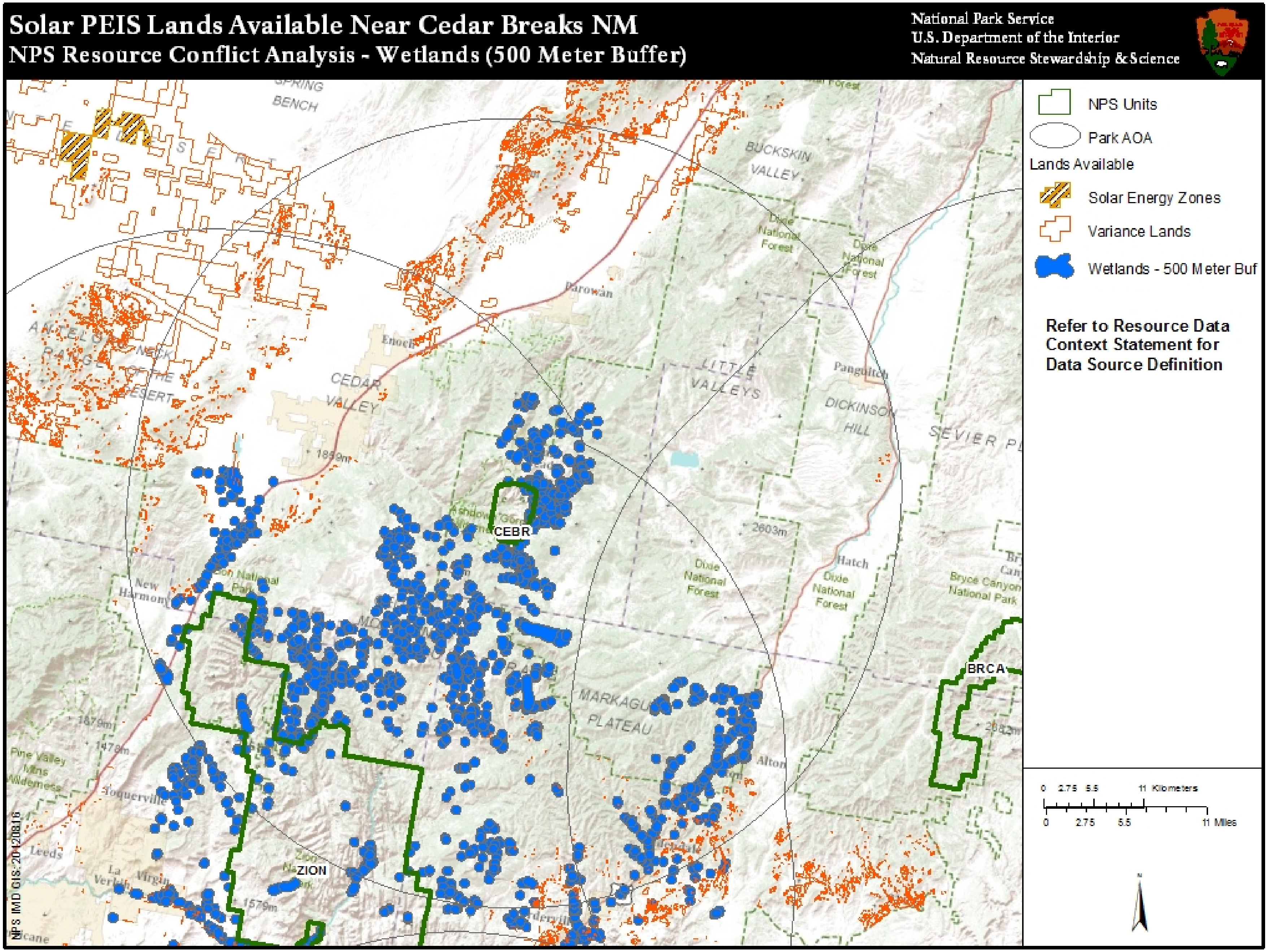
Viewshed – Spatial Balanced Sample

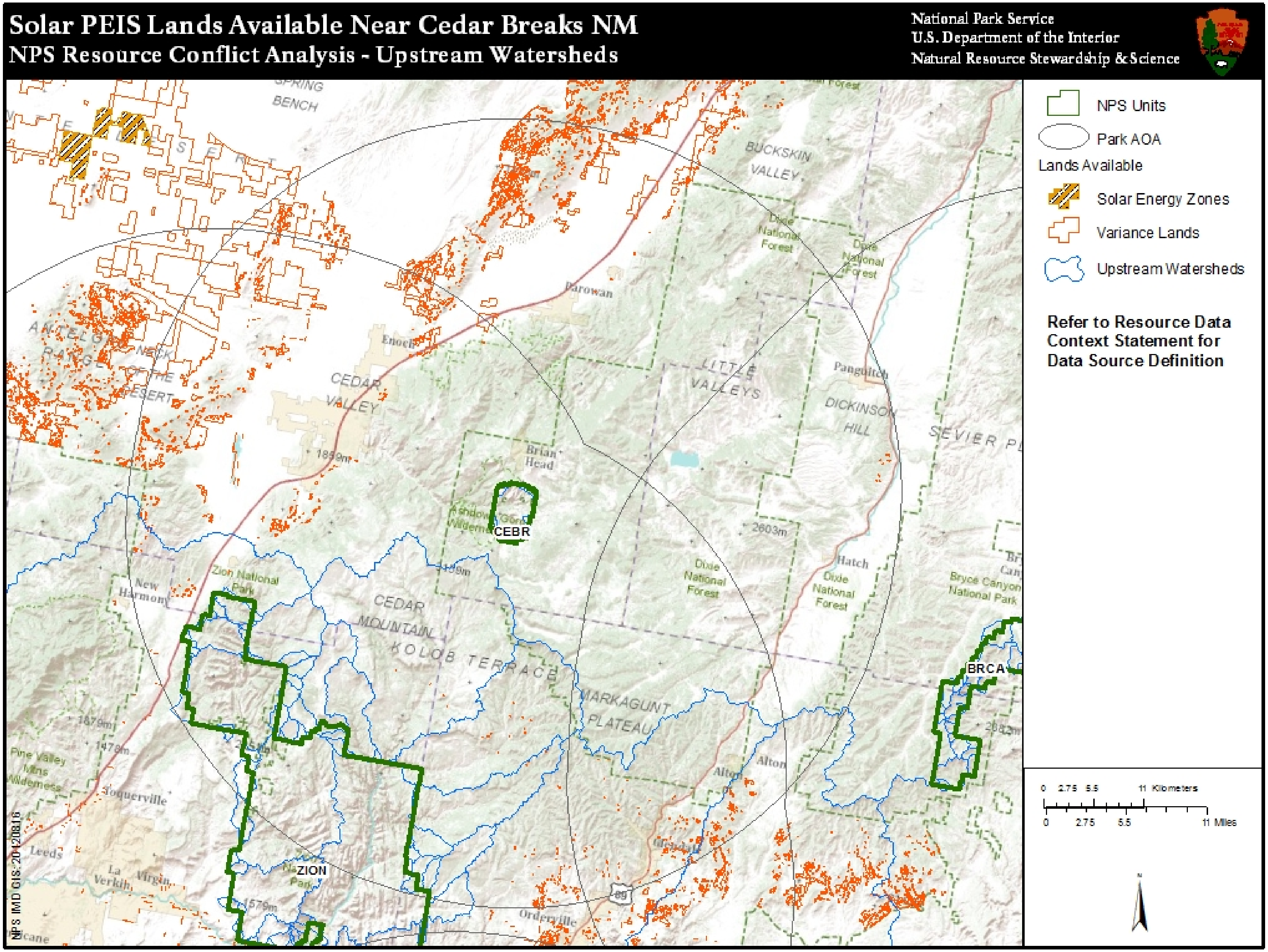


Cedar Breaks National Monument
Wind Erodibility Group

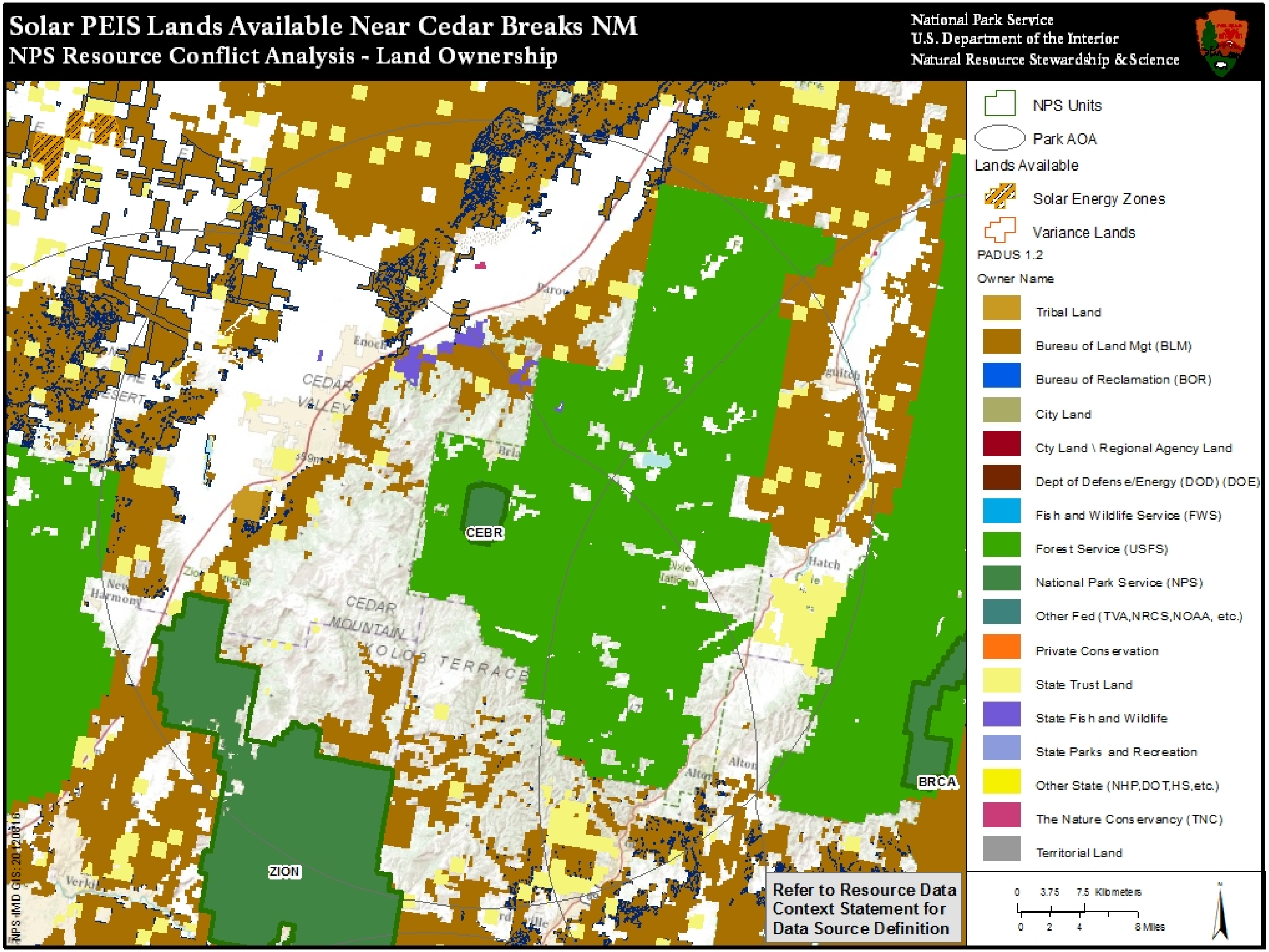


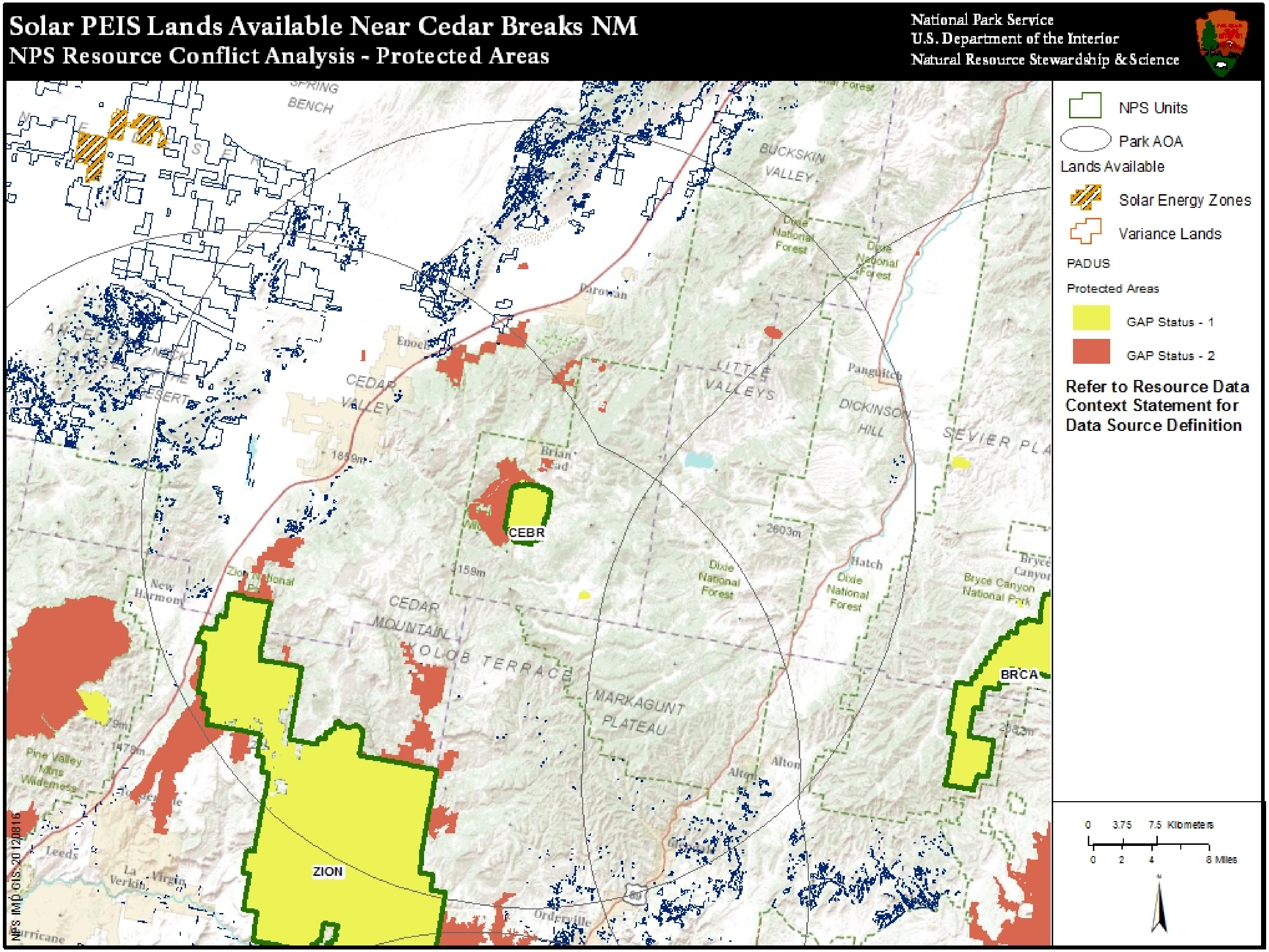

Solar PEIS Lands Available Near Cedar Breaks NM
NPS Resource Conflict Analysis - Water Erosion
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Sensitive Soils
Refer to Resource Data Context Statement for Data Source Definition
0 2.75 5.5 11 Kilometers
0 2.75 5.5 11 Miles
CEBR
ZION
BRCA
BUCKSKIN VALLEY
LITTLE VALLEYS
DICKINSON HILL
CEDAR VALLEY
MARKAGUNT PLATEAU
Parowan
Panguitch
Brian Head
Hatch
Dixie National Forest
Bryce Canyon National Park
Alton
Orderville
New Harmony
NPS IMD GIS 20120814

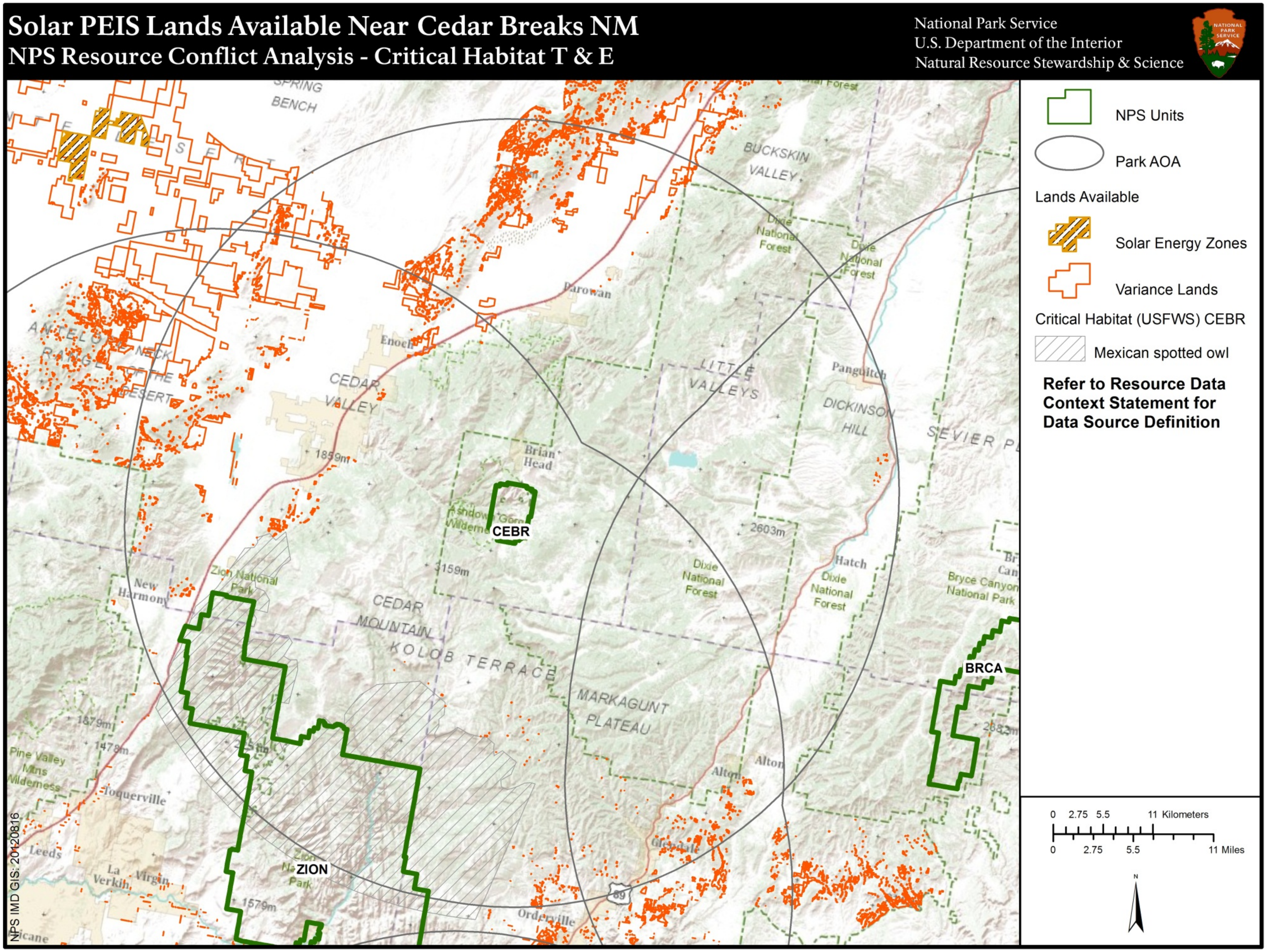

Solar PEIS Lands Available Near Cedar Breaks NM
NPS Resource Conflict Analysis - Wetlands (500 Meter Buffer)
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Wetlands - 500 Meter Buf
Refer to Resource Data Context Statement for Data Source Definition
CEBR
ZION
BRCA
0 2.75 5.5 11 Kilometers
0 2.75 5.5 11 Miles
NPS IMD GIS: 20120816

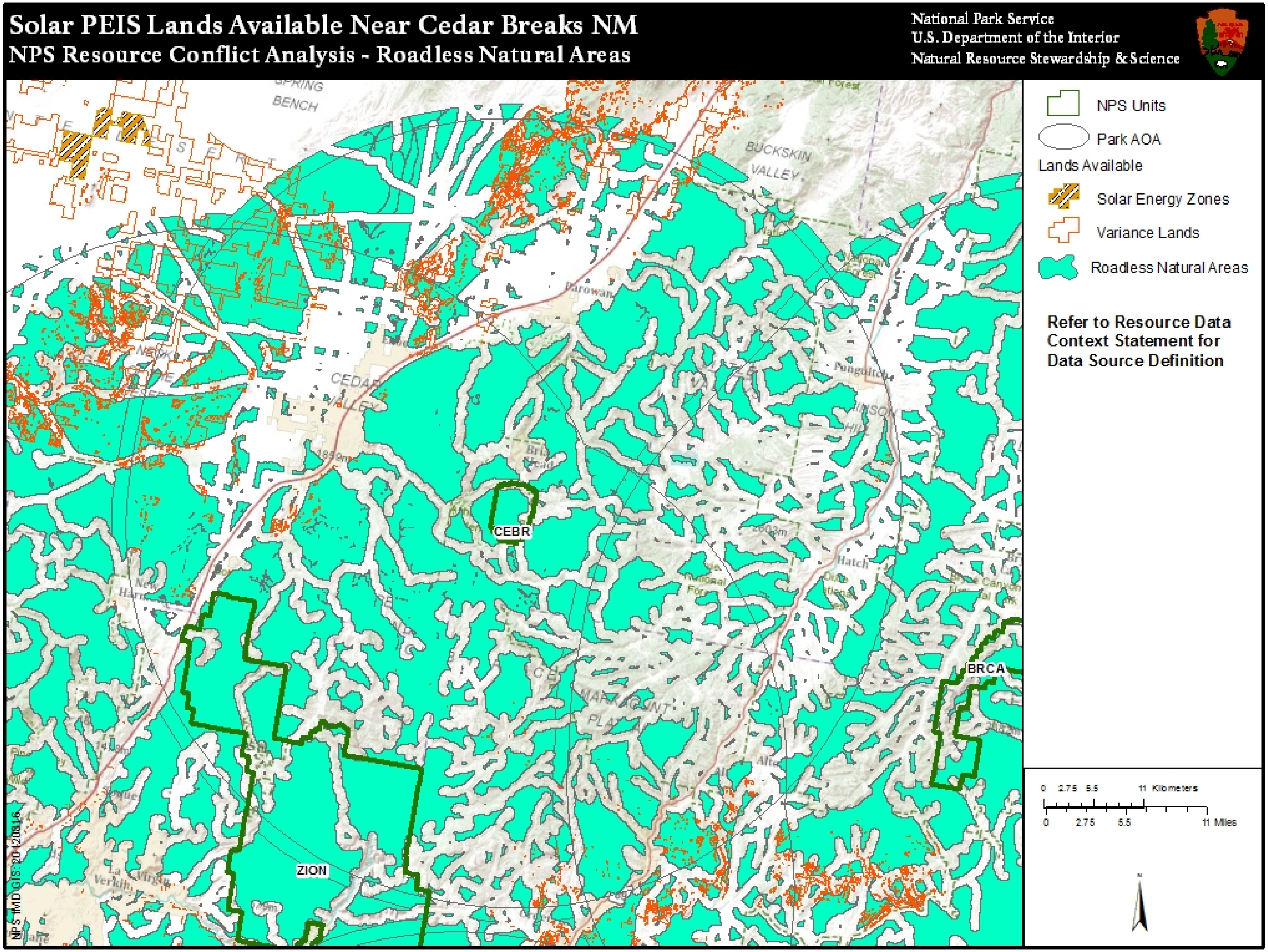

Solar PEIS Lands Available Near Cedar Breaks NM
NPS Resource Conflict Analysis - Upstream Watersheds
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Upstream Watersheds
Refer to Resource Data Context Statement for Data Source Definition
0 2.75 5.5 11 Kilometers
0 2.75 5.5 11 Miles
CEBR
ZION
BRCA
NPS IMD GIS:20120816

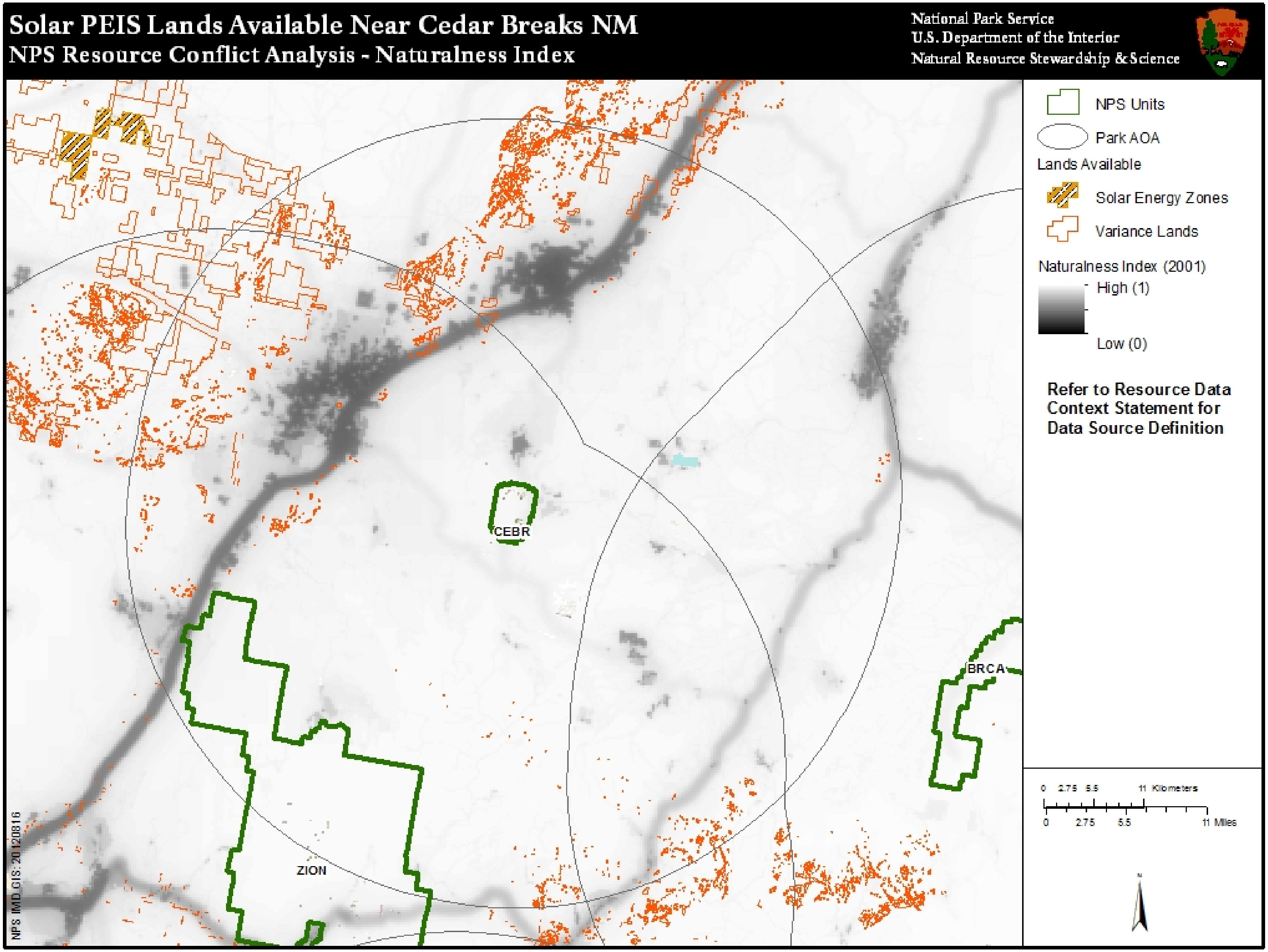
Land Ownership

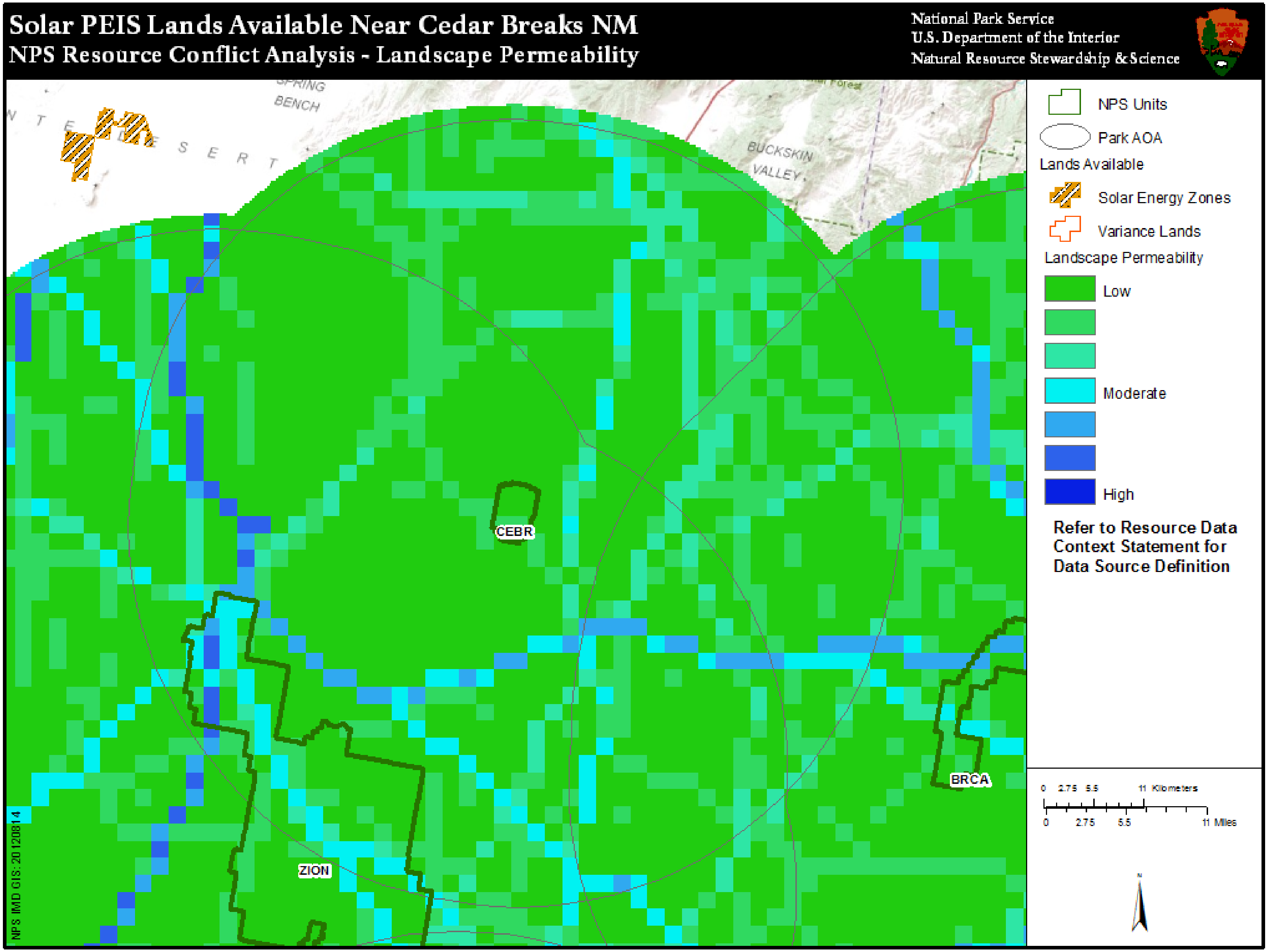


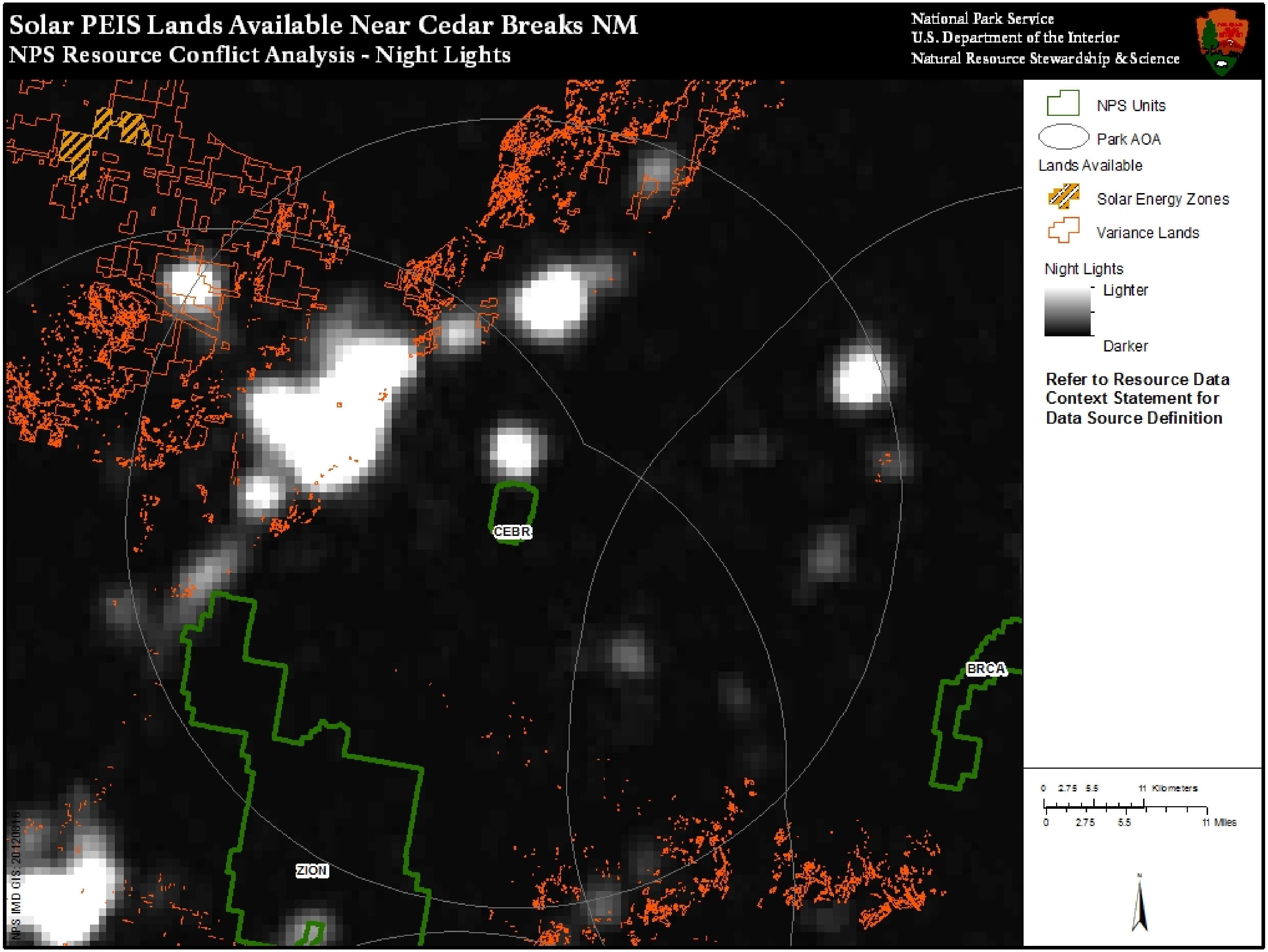

Solar PEIS Lands Available Near Cedar Breaks NM
NPS Resource Conflict Analysis - Protected Areas
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
PADUS
Protected Areas
GAP Status - 1
GAP Status - 2
Refer to Resource Data Context Statement for Data Source Definition
0 3.75 7.5 Kilometers
0 2 4 8 Miles
CEBR
ZION
BRCA
CEDAR VALLEY
CEDAR MOUNTAIN
KOLOB TERRACE
MARKAGUNT PLATEAU
LITTLE VALLEYS
DICKINSON HILL
BUCKSKIN VALLEY
SEVIER PLA
Dixie National Forest
Parowan
Panguitch
Hatch
Alton
Orderville
Bryce Canyon National Park
NPS IMD GIS 20120816

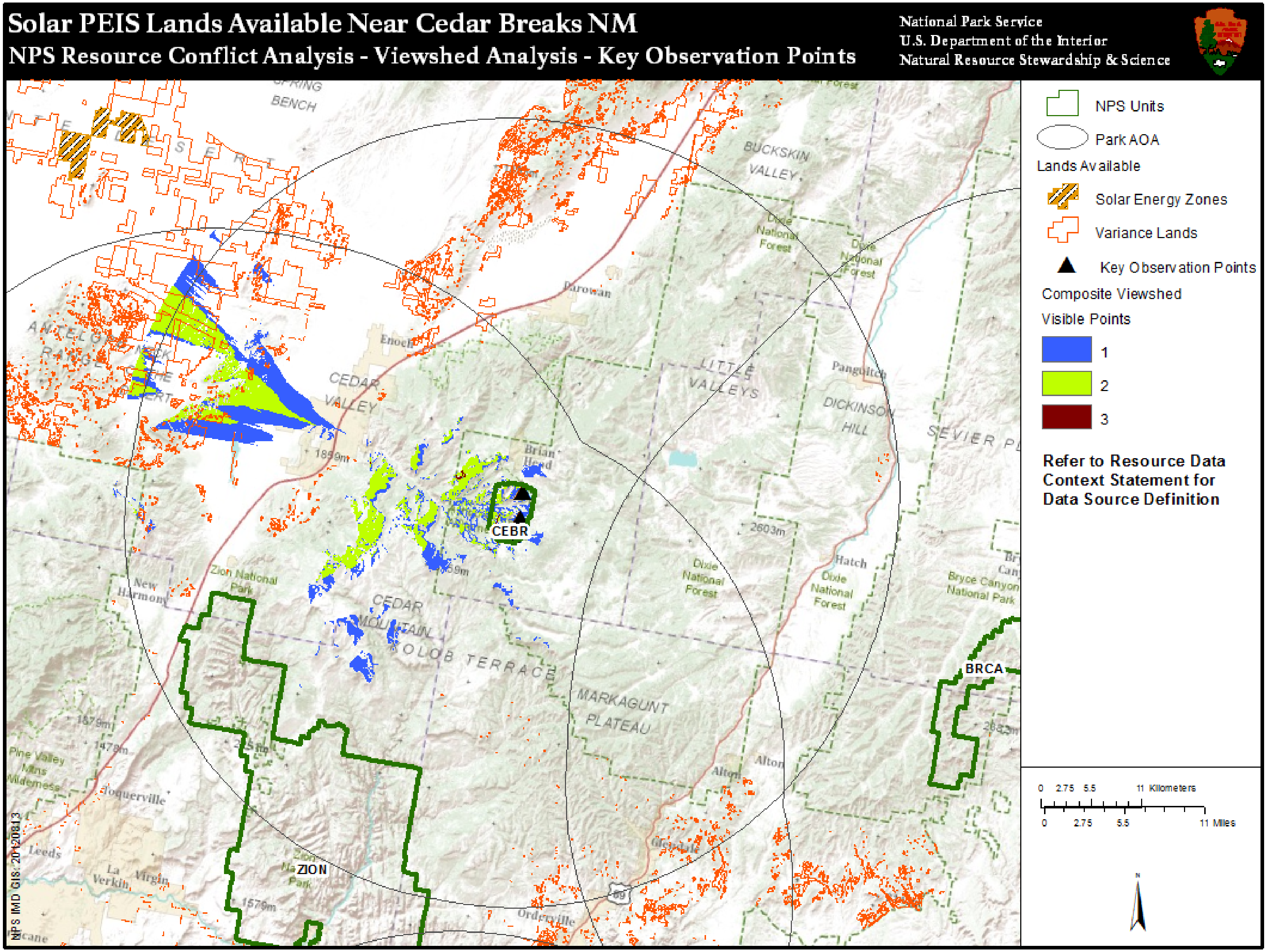

Solar PEIS Lands Available Near Cedar Breaks NM
NPS Resource Conflict Analysis - Critical Habitat T & E
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Critical Habitat (USFWS) CEBR
Mexican spotted owl
Refer to Resource Data Context Statement for Data Source Definition
0 2.75 5.5 11 Kilometers
0 2.75 5.5 11 Miles
CEBR
ZION
BRCA
Parowan
Enoch
Cedar Valley
Brian Head
Panguitch
Hatch
Alton
Glendale
Orderville
Toquerville
Leeds
La Verkin
Virgin
New Harmony
Kolob Terrace
Markagunt Plateau
Cedar Mountain
Little Valleys
Buckskin Valley
Dickinson Hill
Dixie National Forest
Zion National Park
Bryce Canyon National Park
Pine Valley Mtns Wilderness
NPS IMD GIS: 20120816


Solar PEIS Lands Available Near Cedar Breaks NM
NPS Resource Conflict Analysis - Roadless Natural Areas
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Roadless Natural Areas
Refer to Resource Data Context Statement for Data Source Definition
0 2.75 5.5 11 Kilometers
0 2.75 5.5 11 Miles
CEBR
ZION
BRCA
BUCKSKIN VALLEY
CEDAR VALLEY
SPRING BENCH
NPS IMD GIS: 20120816


Solar PEIS Lands Available Near Cedar Breaks NM
NPS Resource Conflict Analysis - Naturalness Index
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Naturalness Index (2001)
High (1)
Low (0)
Refer to Resource Data Context Statement for Data Source Definition
CEBR
ZION
BRCA
0 2.75 5.5 11 Kilometers
0 2.75 5.5 11 Miles
NPS IMD GIS: 20120816

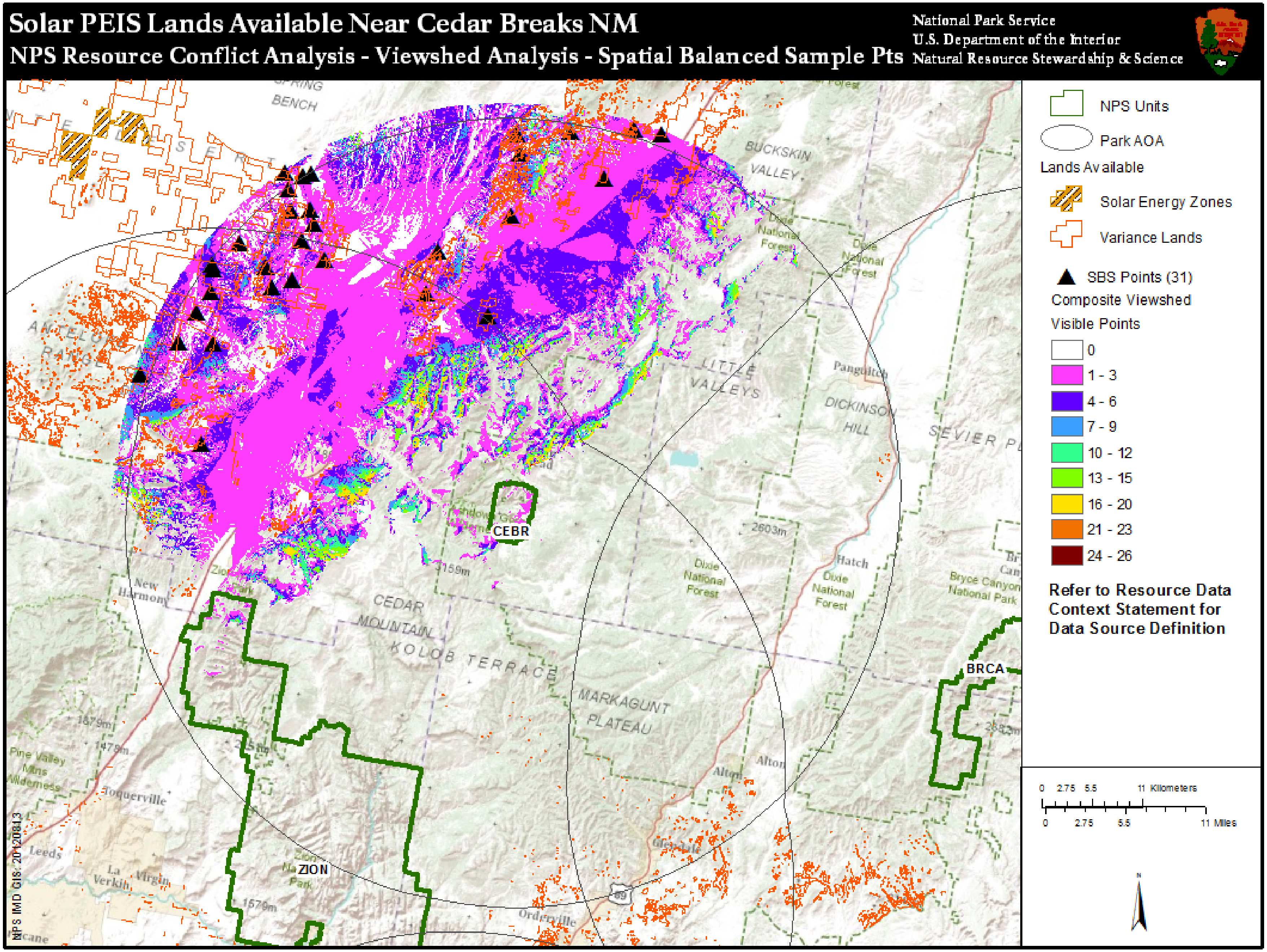

Solar PEIS Lands Available Near Cedar Breaks NM
NPS Resource Conflict Analysis - Landscape Permeability
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Landscape Permeability
Low
Moderate
High
Refer to Resource Data Context Statement for Data Source Definition
CEBR
ZION
BRCA
BUCKSKIN VALLEY
SPRING BENCH
0 2.75 5.5 11 Kilometers
0 2.75 5.5 11 Miles
NPS IMD GIS: 20120814


Solar PEIS Lands Available Near Cedar Breaks NM
NPS Resource Conflict Analysis - Night Lights
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Night Lights
Lighter
Darker
Refer to Resource Data Context Statement for Data Source Definition
CEBR
BRCA
ZION
0 2.75 5.5 11 Kilometers
0 2.75 5.5 11 Miles
NPS IMD GIS 20120816

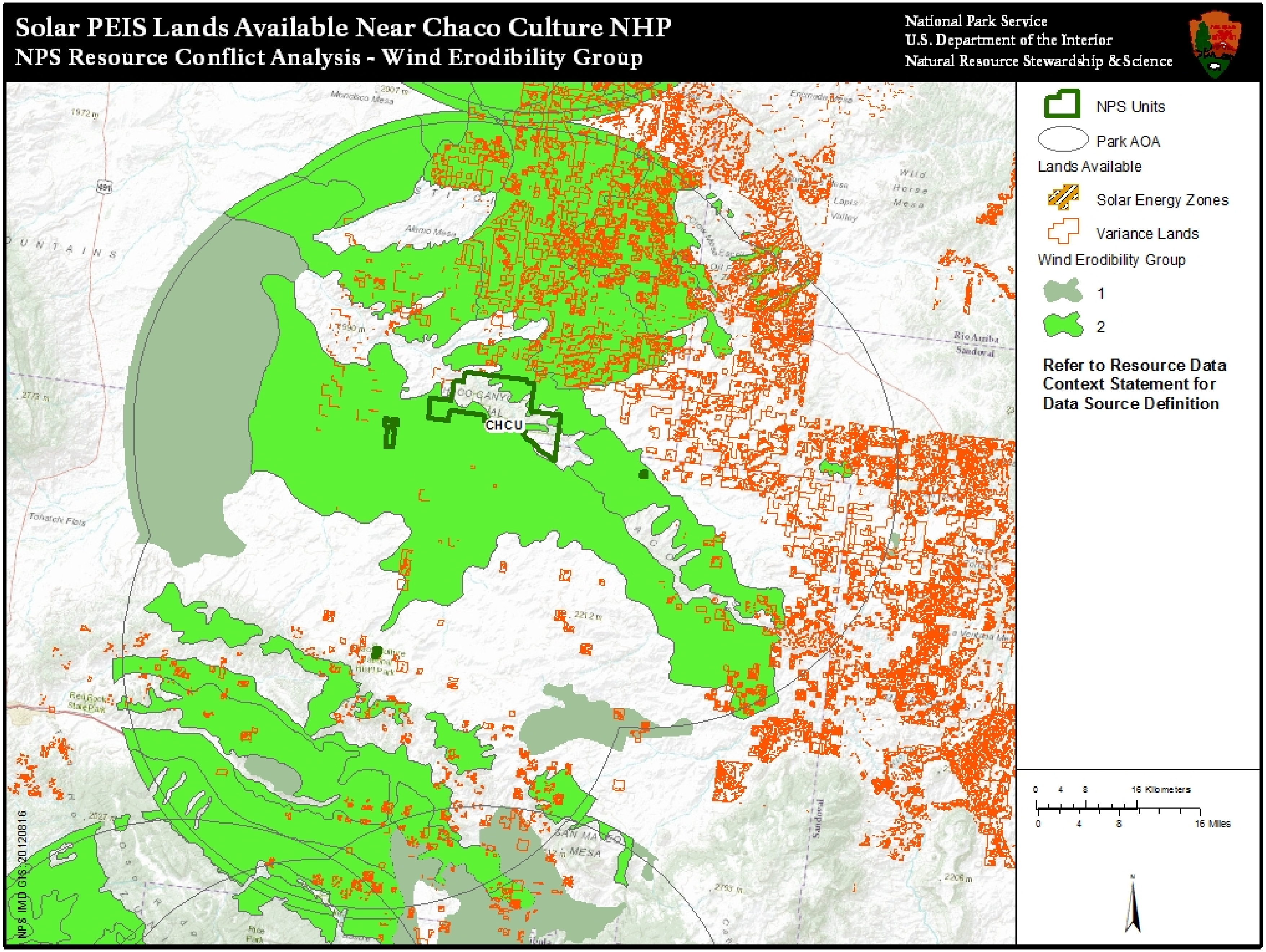


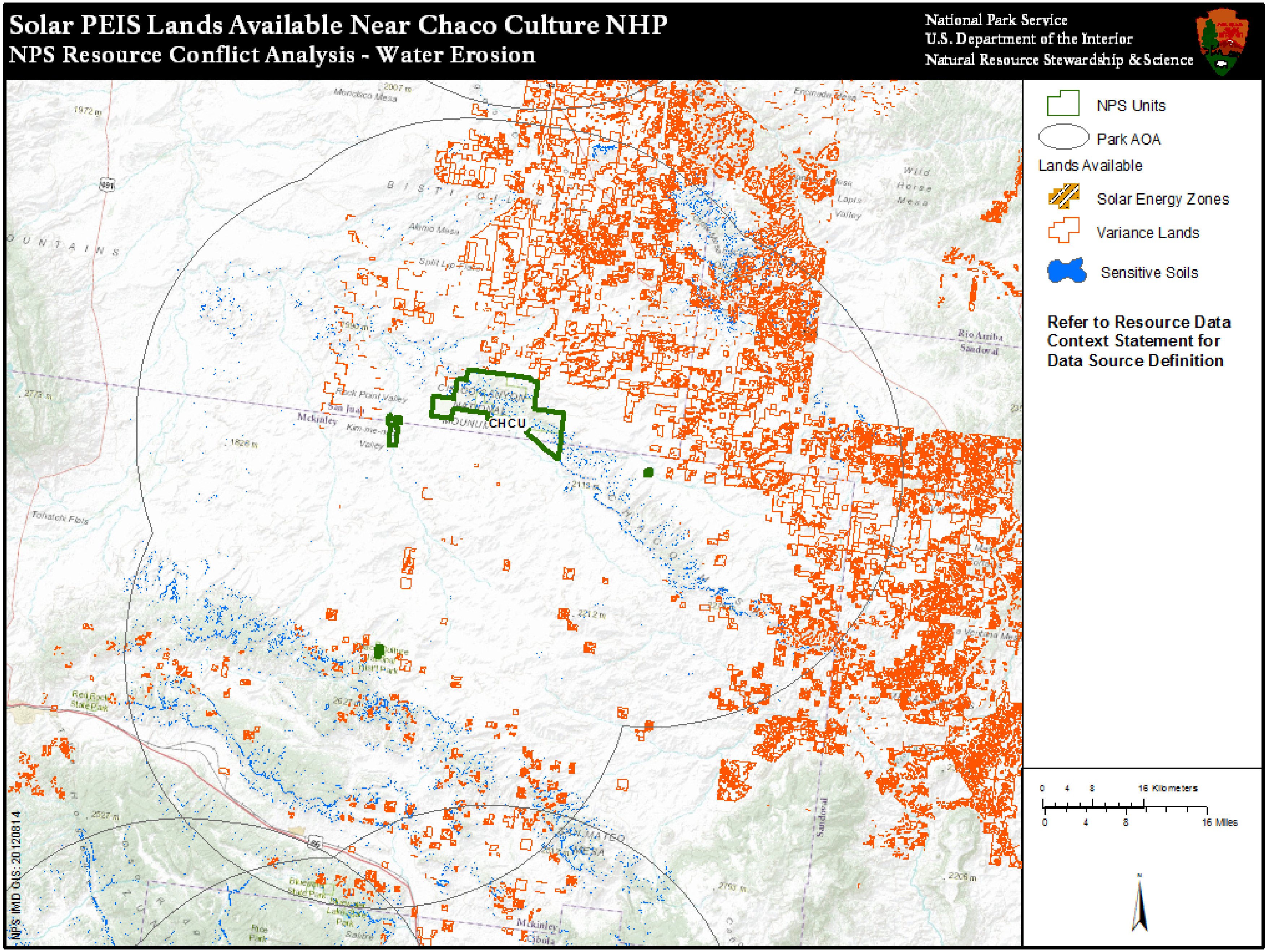
Solar PEIS Lands Available Near Cedar Breaks NM
NPS Resource Conflict Analysis - Viewshed Analysis - Key Observation Points
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Key Observation Points
Composite Viewshed
Visible Points
1
2
3
Refer to Resource Data Context Statement for Data Source Definition
0 2.75 5.5 11 Kilometers
0 2.75 5.5 11 Miles
CEBR
ZION
BRCA
CEDAR VALLEY
CEDAR MOUNTAIN
KOLOB TERRACE
MARKAGUNT PLATEAU
LITTLE VALLEYS
BUCKSKIN VALLEY
DICKINSON HILL
Parowan
Enoch
Panguitch
Hatch
Alton
Glendale
Orderville
Toquerville
Leeds
La Verkin
Virgin
New Harmony
Brian Head
Dixie National Forest
Zion National Park
Bryce Canyon National Park
Pine Valley Mtns Wilderness
NPS IMD GIS: 20120813

Viewshed – Spatial Balanced Sample

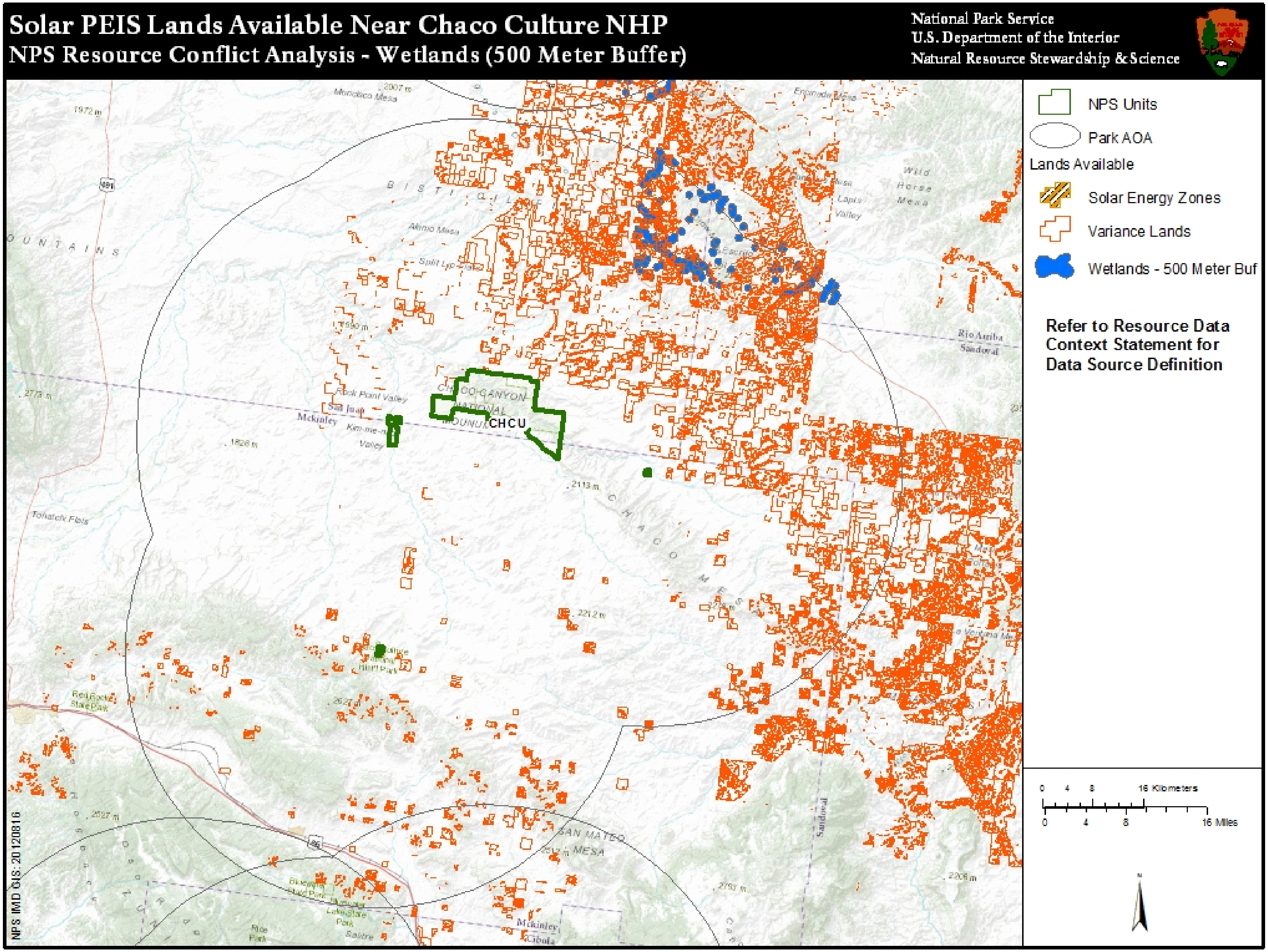


Chaco Culture National Historic Park
Wind Erodibility Group



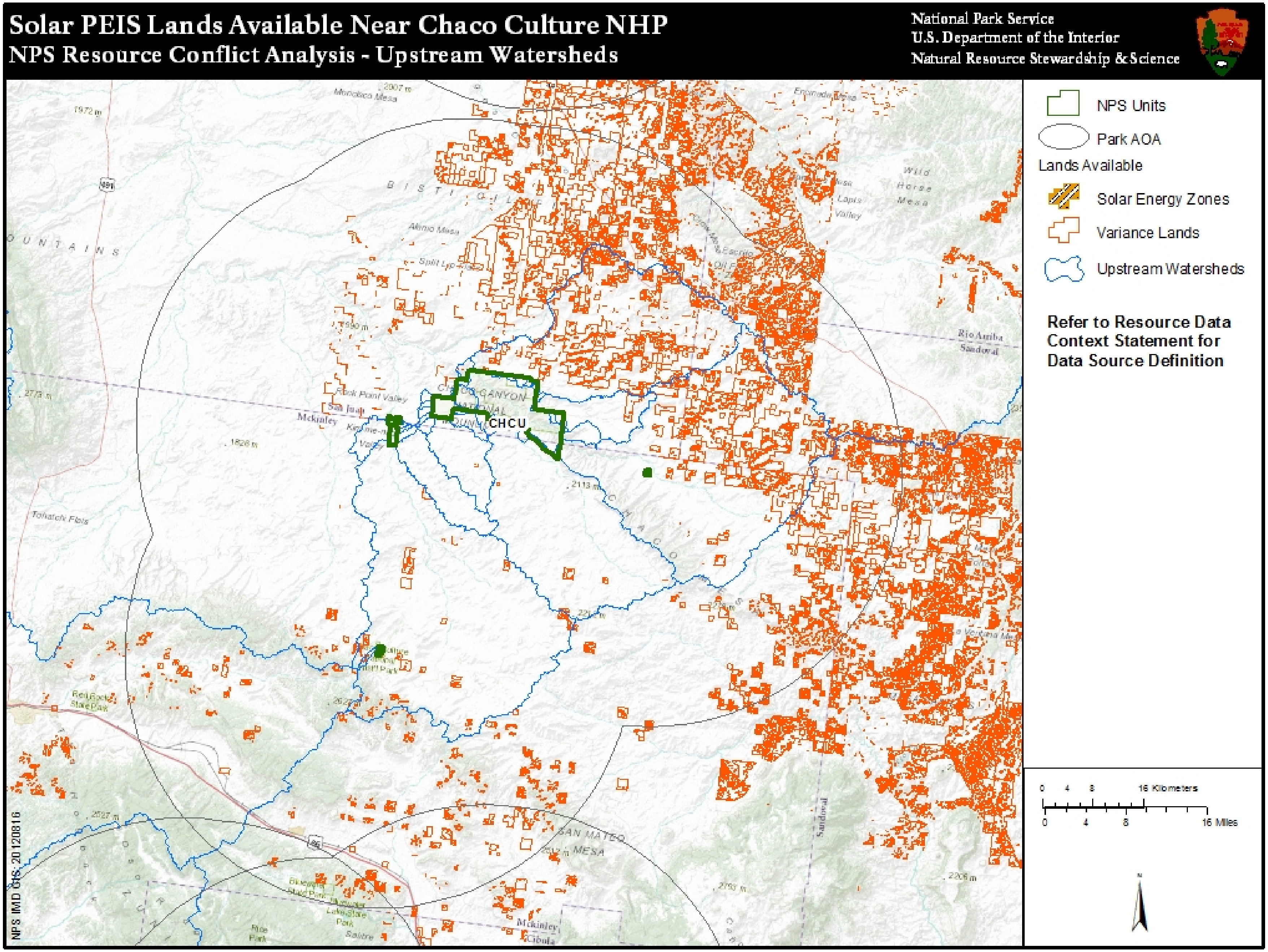

Solar PEIS Lands Available Near Chaco Culture NHP
NPS Resource Conflict Analysis - Water Erosion
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Sensitive Soils
Refer to Resource Data Context Statement for Data Source Definition
CHCU
0 4 8 16 Kilometers
0 4 8 16 Miles
NPS IMD GIS: 20120814

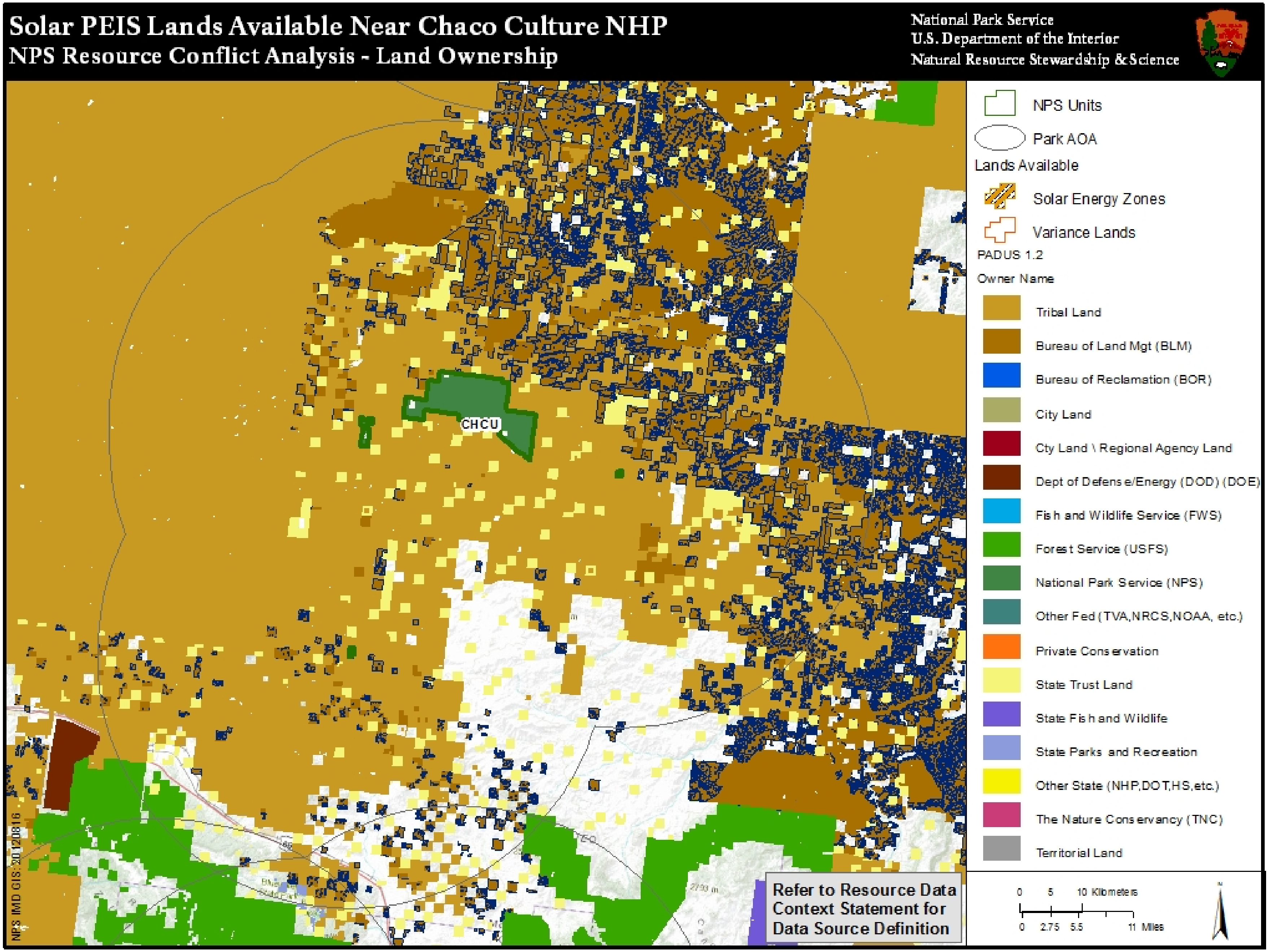
Wetlands

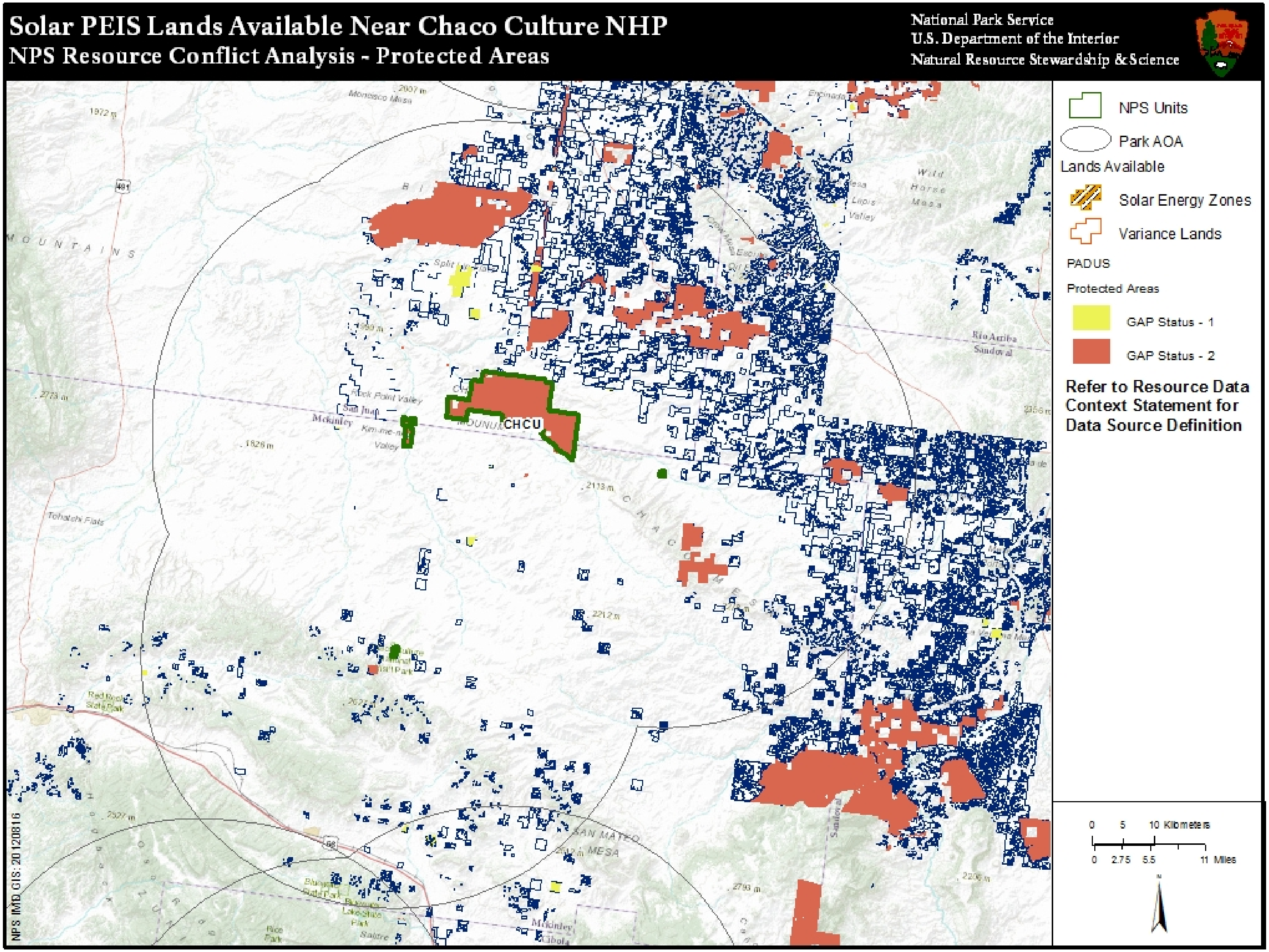


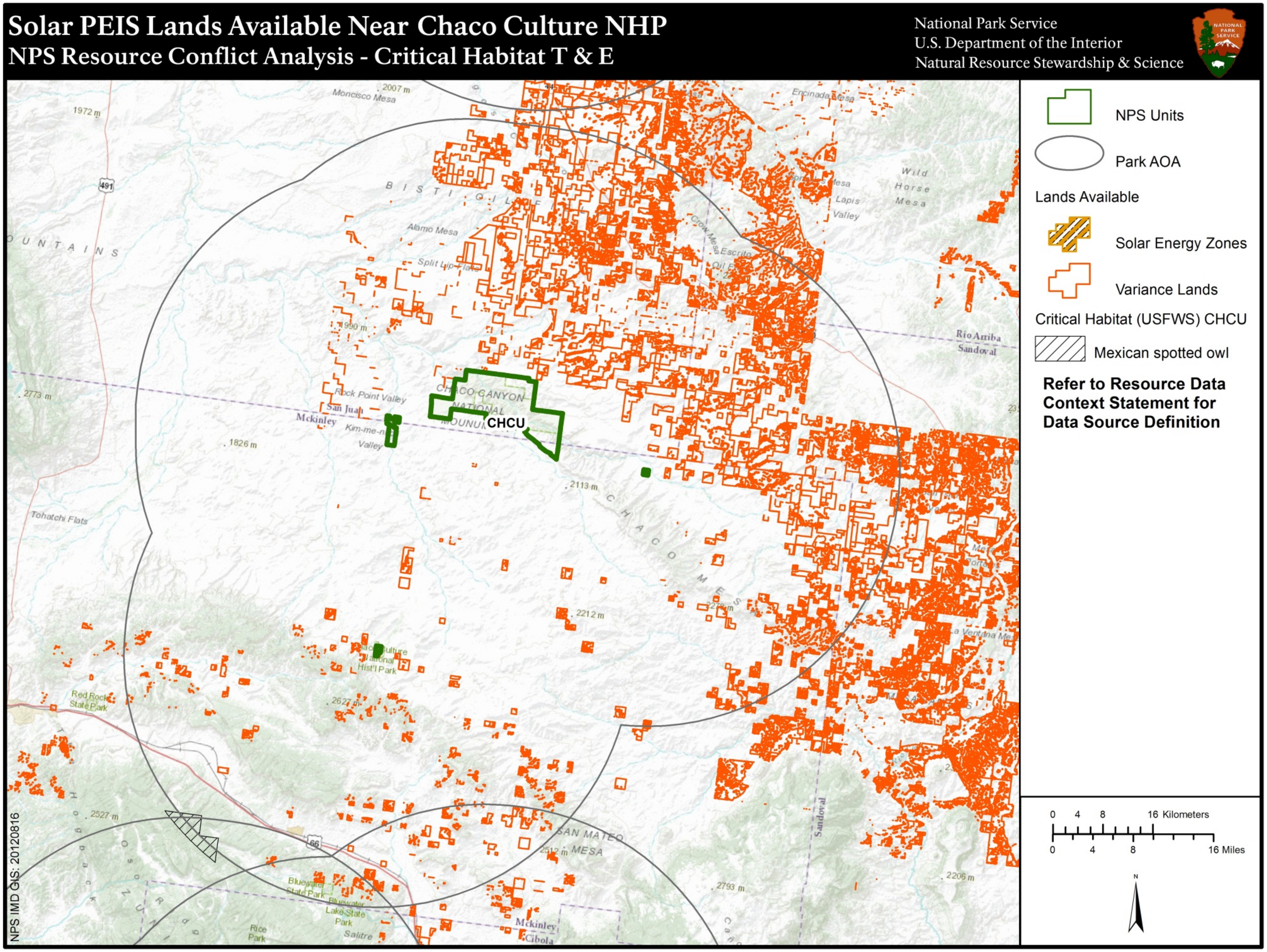
Solar PEIS Lands Available Near Chaco Culture NHP
NPS Resource Conflict Analysis - Wetlands (500 Meter Buffer)
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Wetlands - 500 Meter Buf
Refer to Resource Data Context Statement for Data Source Definition
CHCU
16 Kilometers
16 Miles
NPS IMD GIS: 20120816

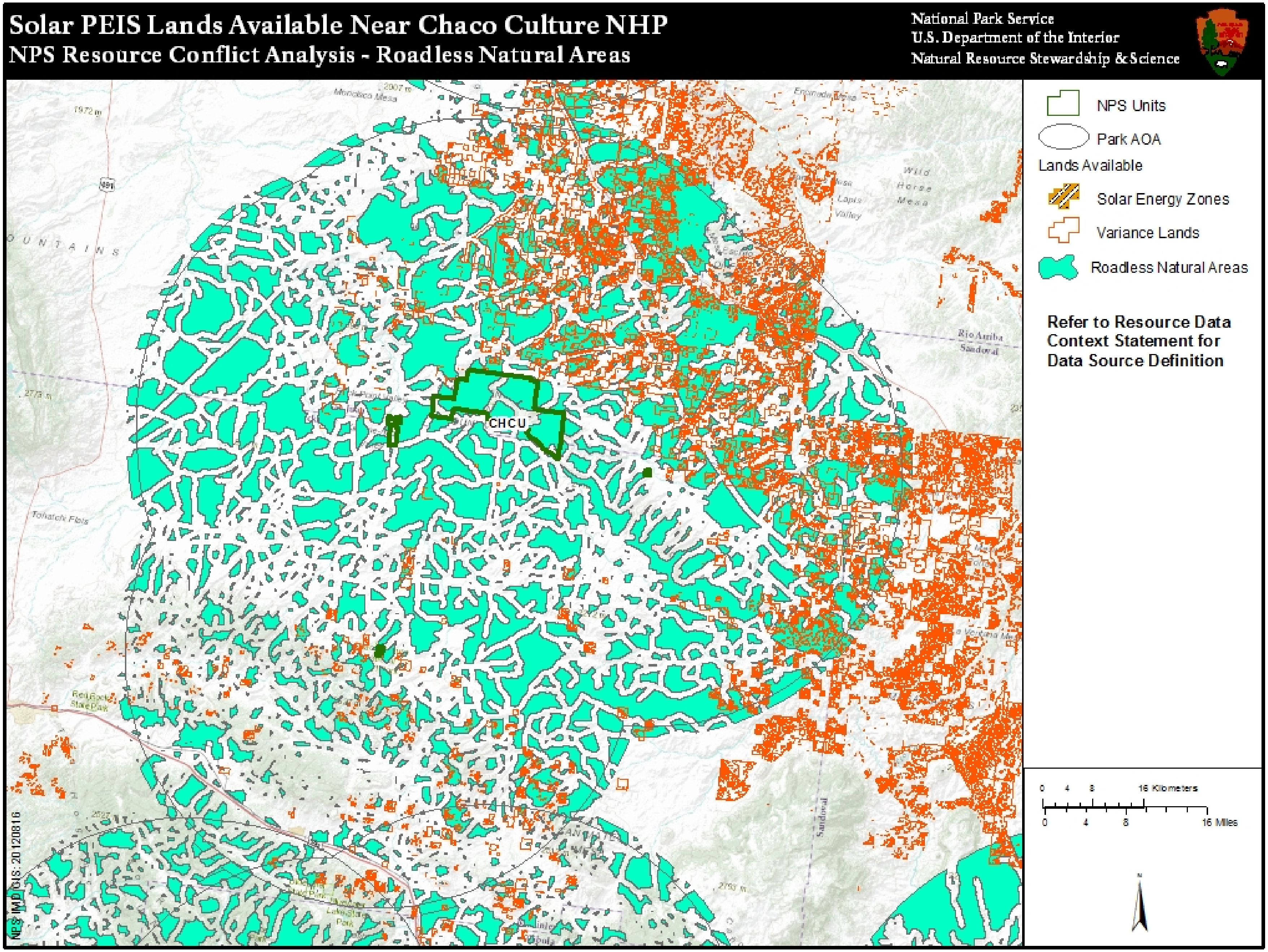
Upstream Watershed



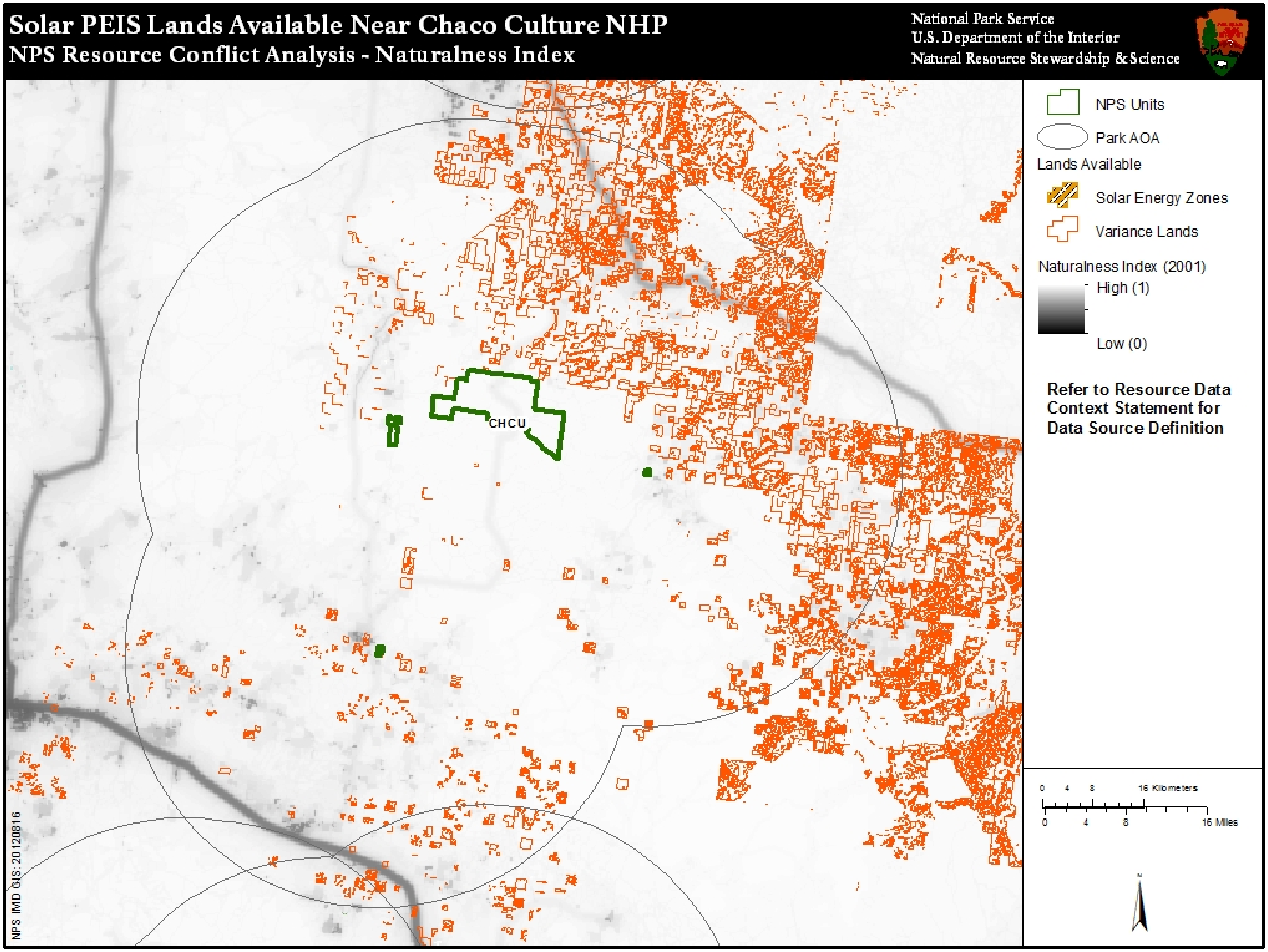

Solar PEIS Lands Available Near Chaco Culture NHP
NPS Resource Conflict Analysis - Land Ownership
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
CHCU
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
PADUS 1.2
Owner Name
Tribal Land
Bureau of Land Mgt (BLM)
Bureau of Reclamation (BOR)
City Land
Cty Land \ Regional Agency Land
Dept of Defense/Energy (DOD) (DOE)
Fish and Wildlife Service (FWS)
Forest Service (USFS)
National Park Service (NPS)
Other Fed (TVA,NRCS,NOAA, etc.)
Private Conservation
State Trust Land
State Fish and Wildlife
State Parks and Recreation
Other State (NHP,DOT,HS,etc.)
The Nature Conservancy (TNC)
Territorial Land
Refer to Resource Data Context Statement for Data Source Definition
0 5 10 Kilometers
0 2.75 5.5 11 Miles
NPS IMD GIS: 20120816

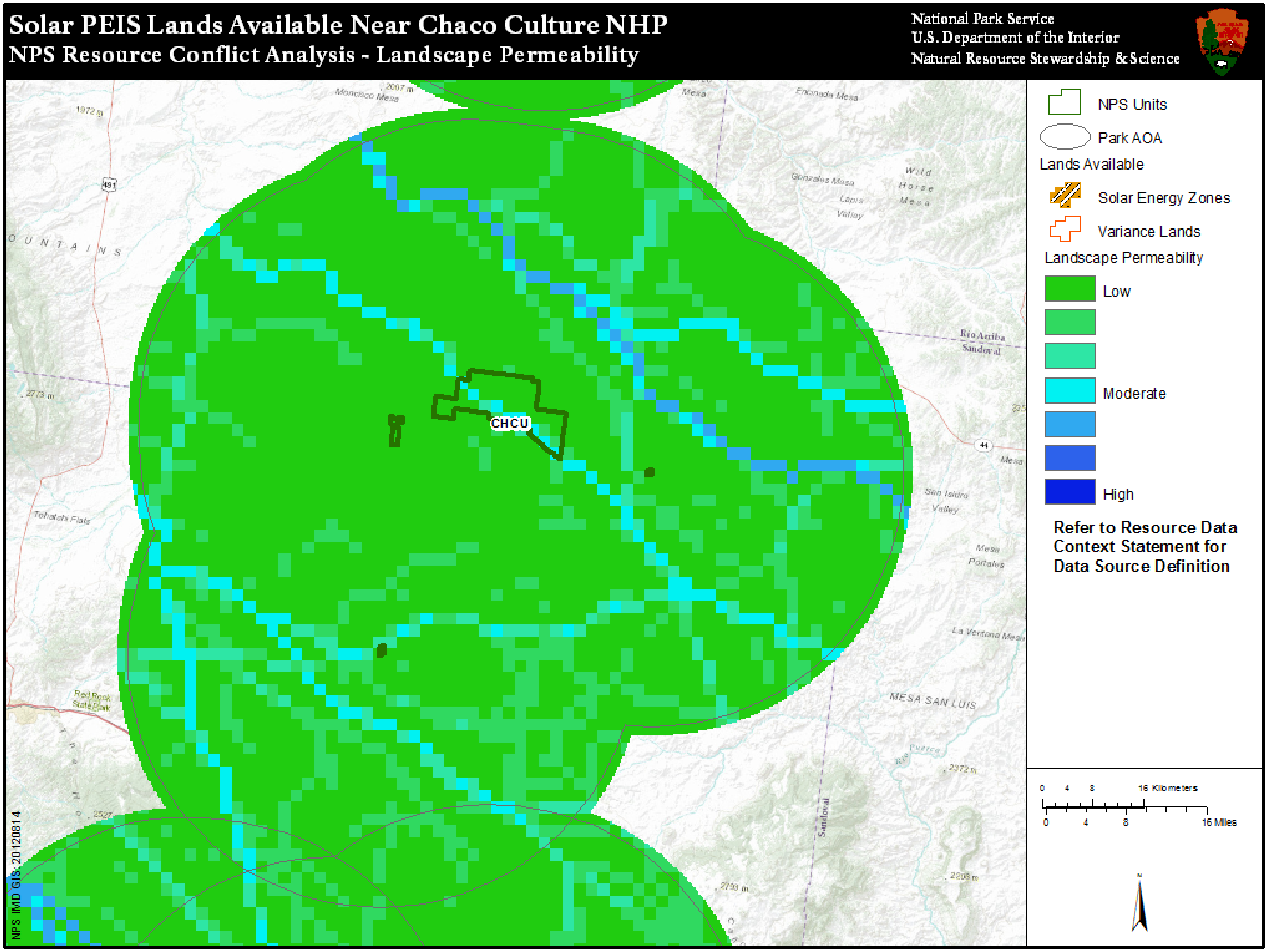

Solar PEIS Lands Available Near Chaco Culture NHP
NPS Resource Conflict Analysis - Protected Areas
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
PADUS
Protected Areas
GAP Status - 1
GAP Status - 2
Refer to Resource Data Context Statement for Data Source Definition
CHCU
0 5 10 Kilometers
0 2.75 5.5 11 Miles
NPS IMD GIS: 20120816

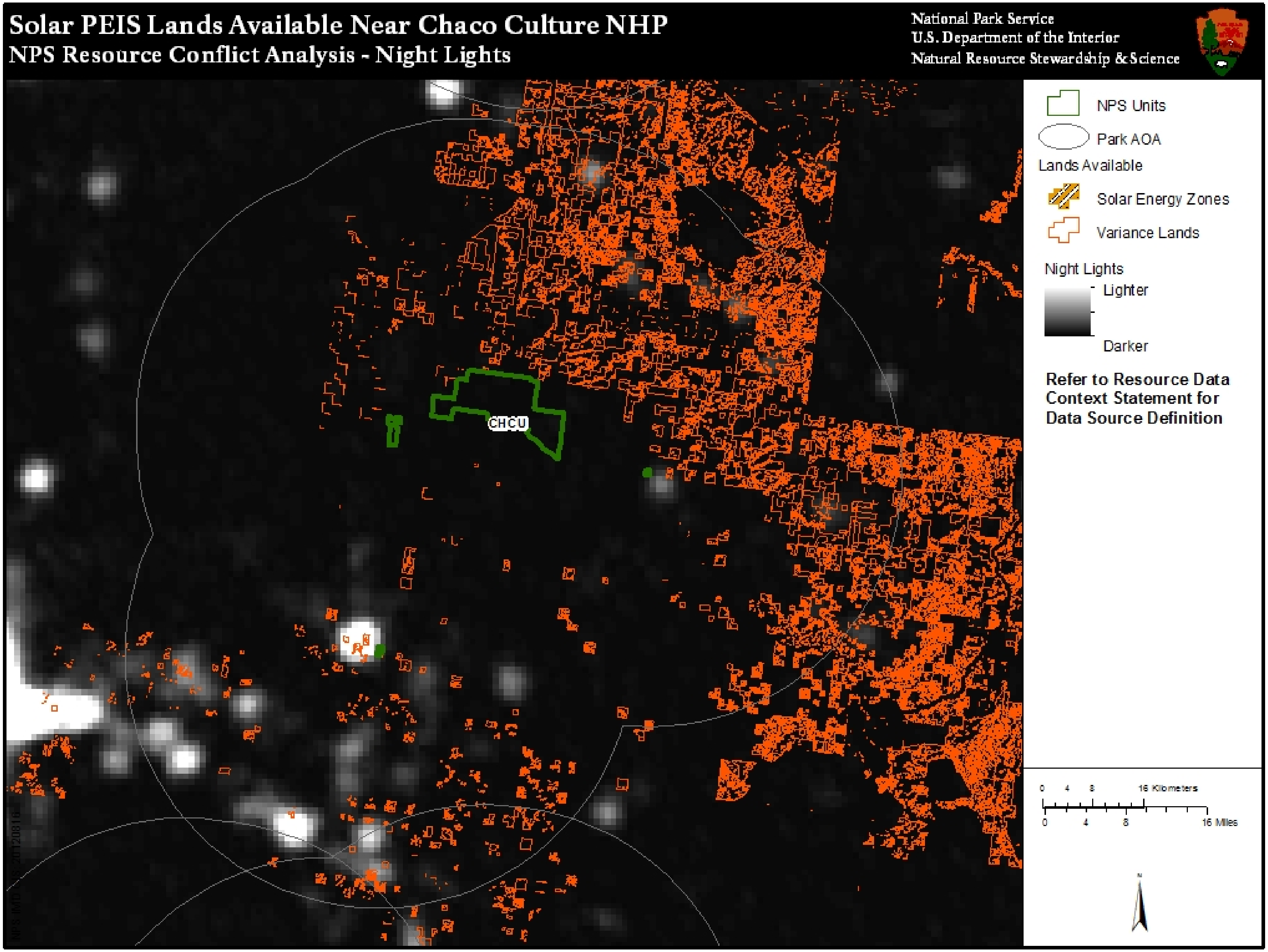

Solar PEIS Lands Available Near Chaco Culture NHP
NPS Resource Conflict Analysis - Critical Habitat T & E
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Critical Habitat (USFWS) CHCU
Mexican spotted owl
Refer to Resource Data Context Statement for Data Source Definition
CHCU
0 4 8 16 Kilometers
0 4 8 16 Miles
NPS IMD GIS: 20120816



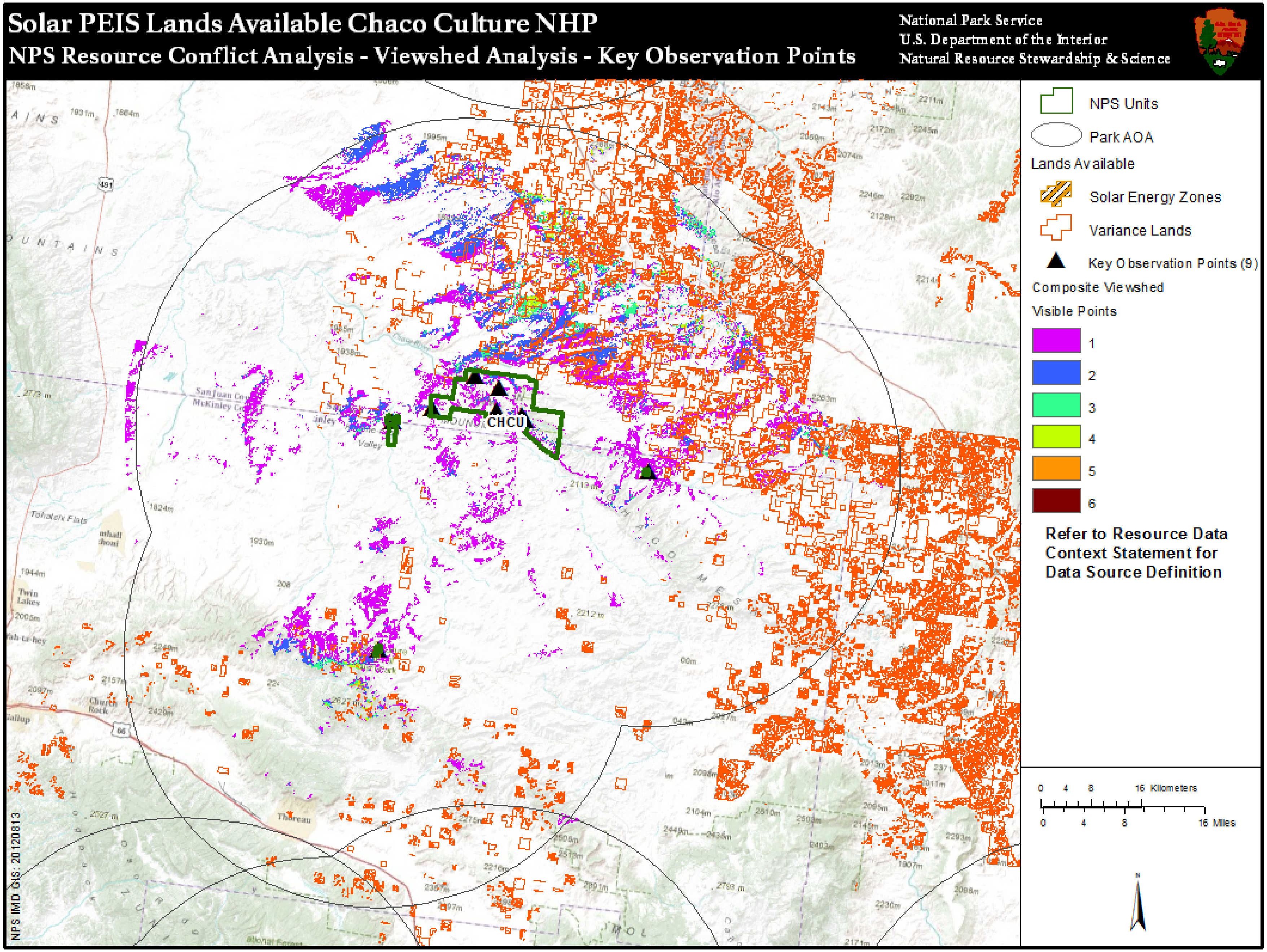
Solar PEIS Lands Available Near Chaco Culture NHP
NPS Resource Conflict Analysis - Roadless Natural Areas
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Roadless Natural Areas
Refer to Resource Data Context Statement for Data Source Definition
0 4 8 16 Kilometers
0 4 8 16 Miles
CHCU
NPS IMD GIS: 20120816


Solar PEIS Lands Available Near Chaco Culture NHP
NPS Resource Conflict Analysis - Naturalness Index
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Naturalness Index (2001)
High (1)
Low (0)
Refer to Resource Data Context Statement for Data Source Definition
CHCU
0 4 8 16 Kilometers
0 4 8 16 Miles
NPS IMD GIS: 20120816

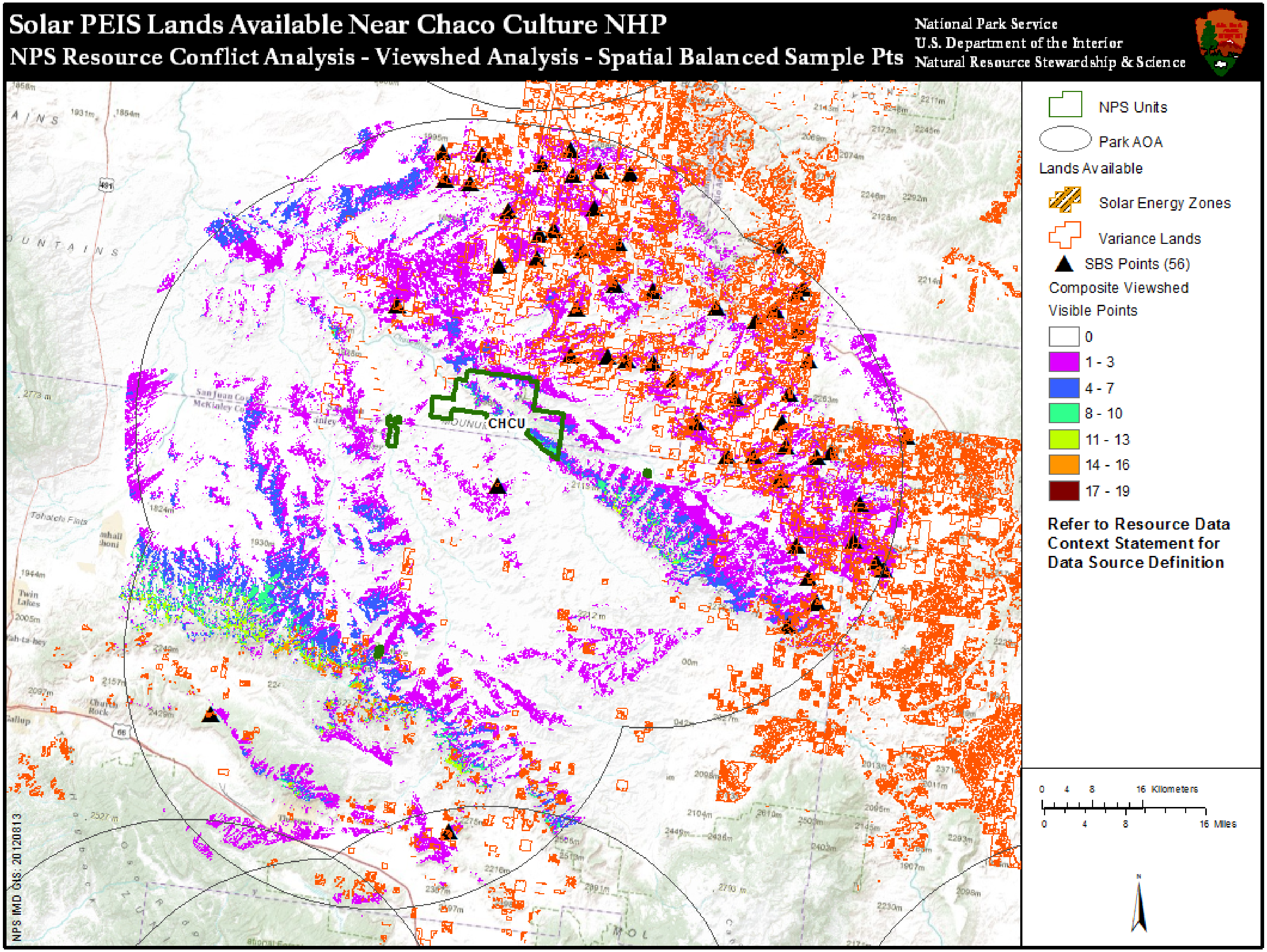

Solar PEIS Lands Available Near Chaco Culture NHP
NPS Resource Conflict Analysis - Landscape Permeability
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Landscape Permeability
Low
Moderate
High
Refer to Resource Data Context Statement for Data Source Definition
CHCU
0 4 8 16 Kilometers
0 4 8 16 Miles
NPS IMD GIS 20120814


Solar PEIS Lands Available Near Chaco Culture NHP
NPS Resource Conflict Analysis - Night Lights
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
CHCU
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Night Lights
Lighter
Darker
Refer to Resource Data Context Statement for Data Source Definition
0 4 8 16 Kilometers
0 4 8 16 Miles

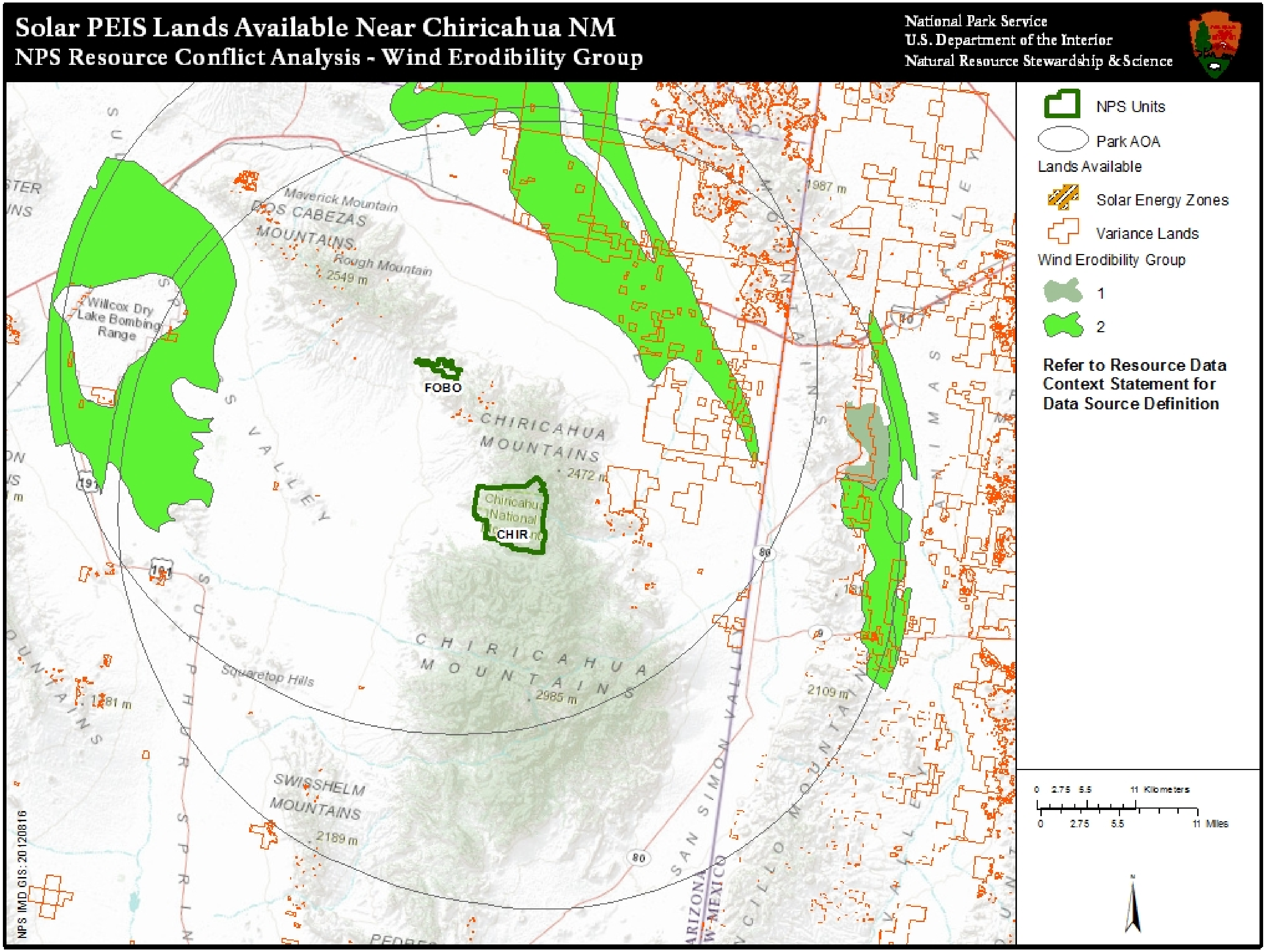
Viewshed - Key Observation Points

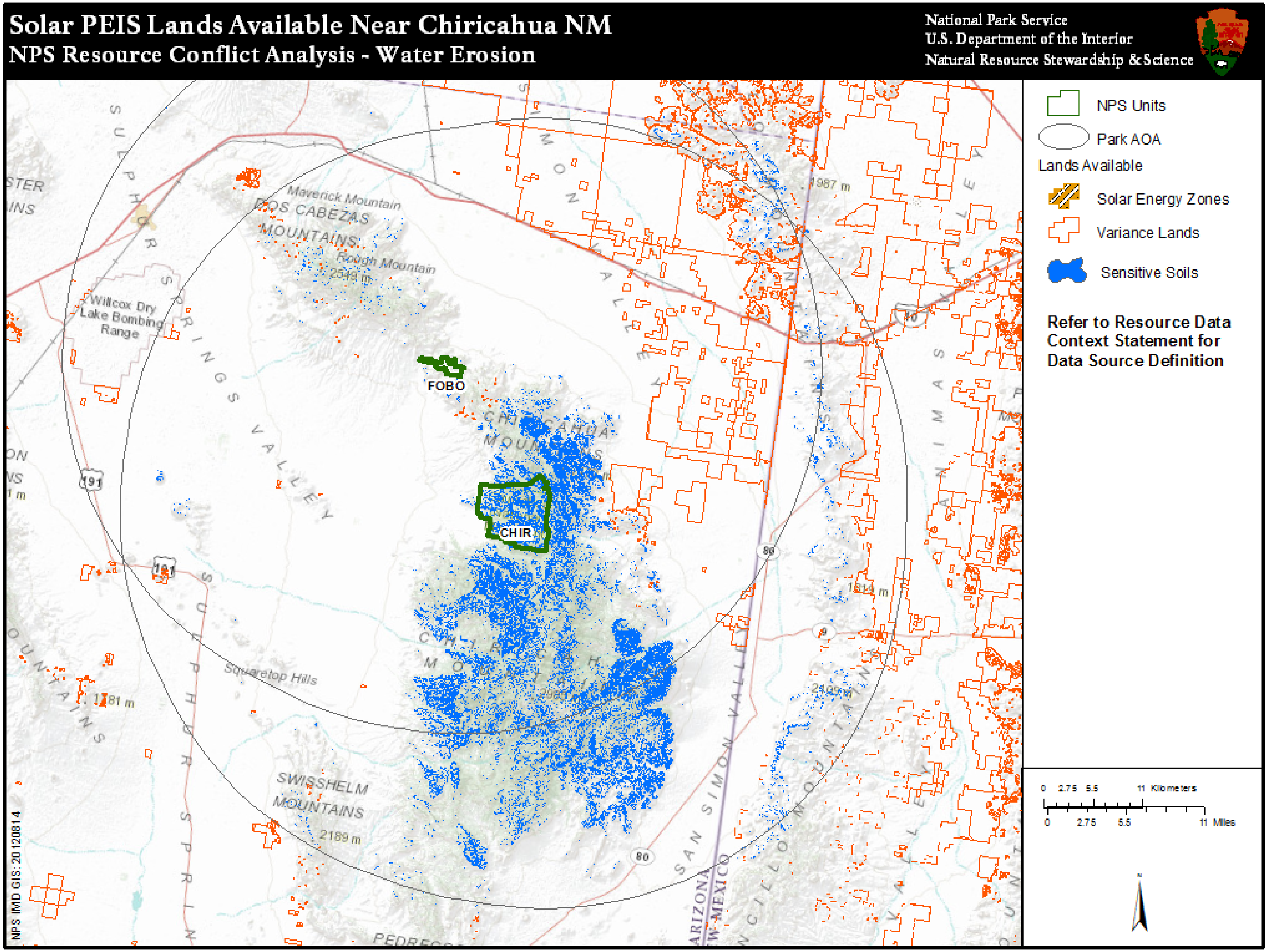


Viewshed – Spatial Balanced Sample

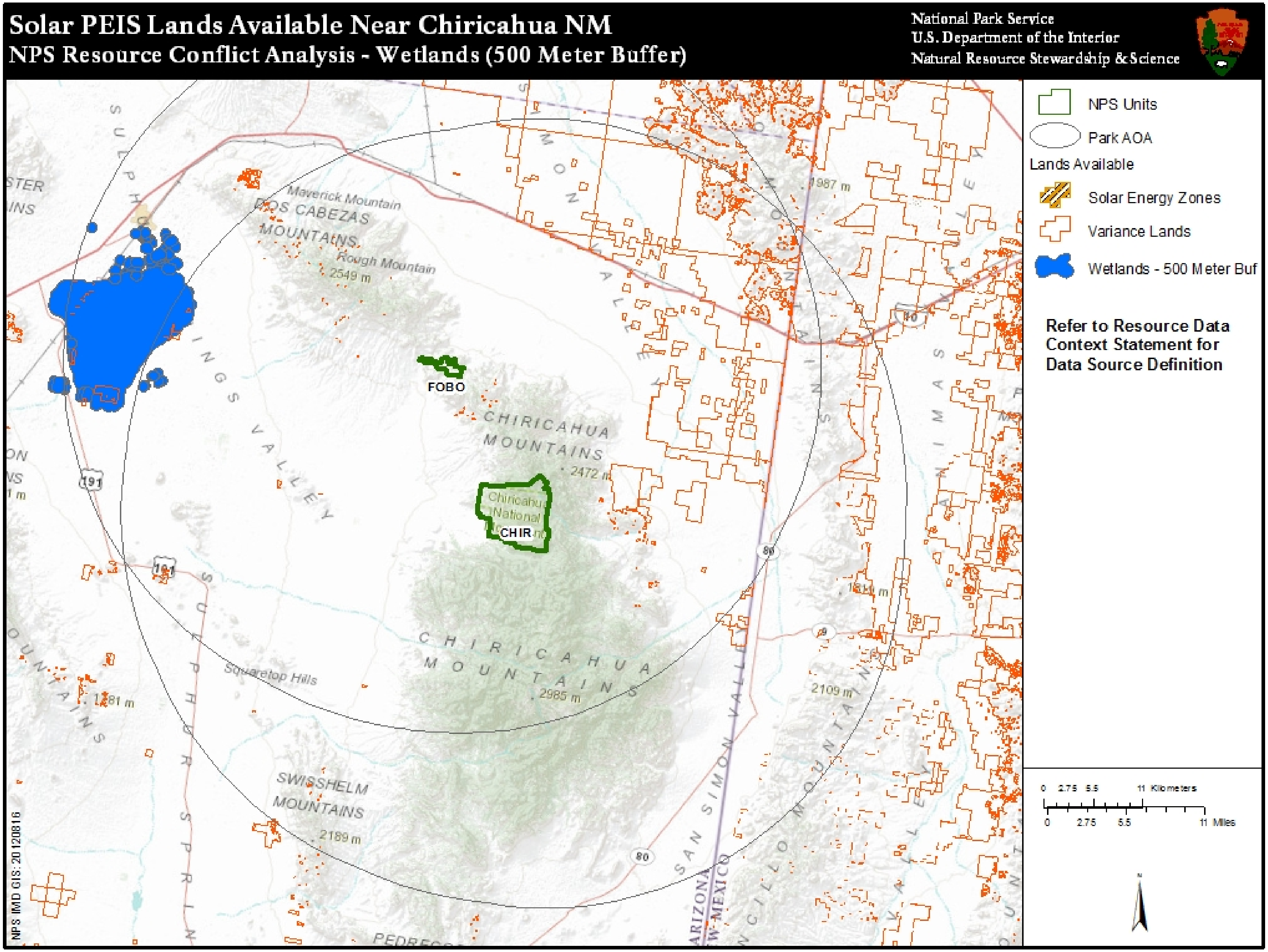


Chiricahua Naional Monument
Wind Erodibility Group

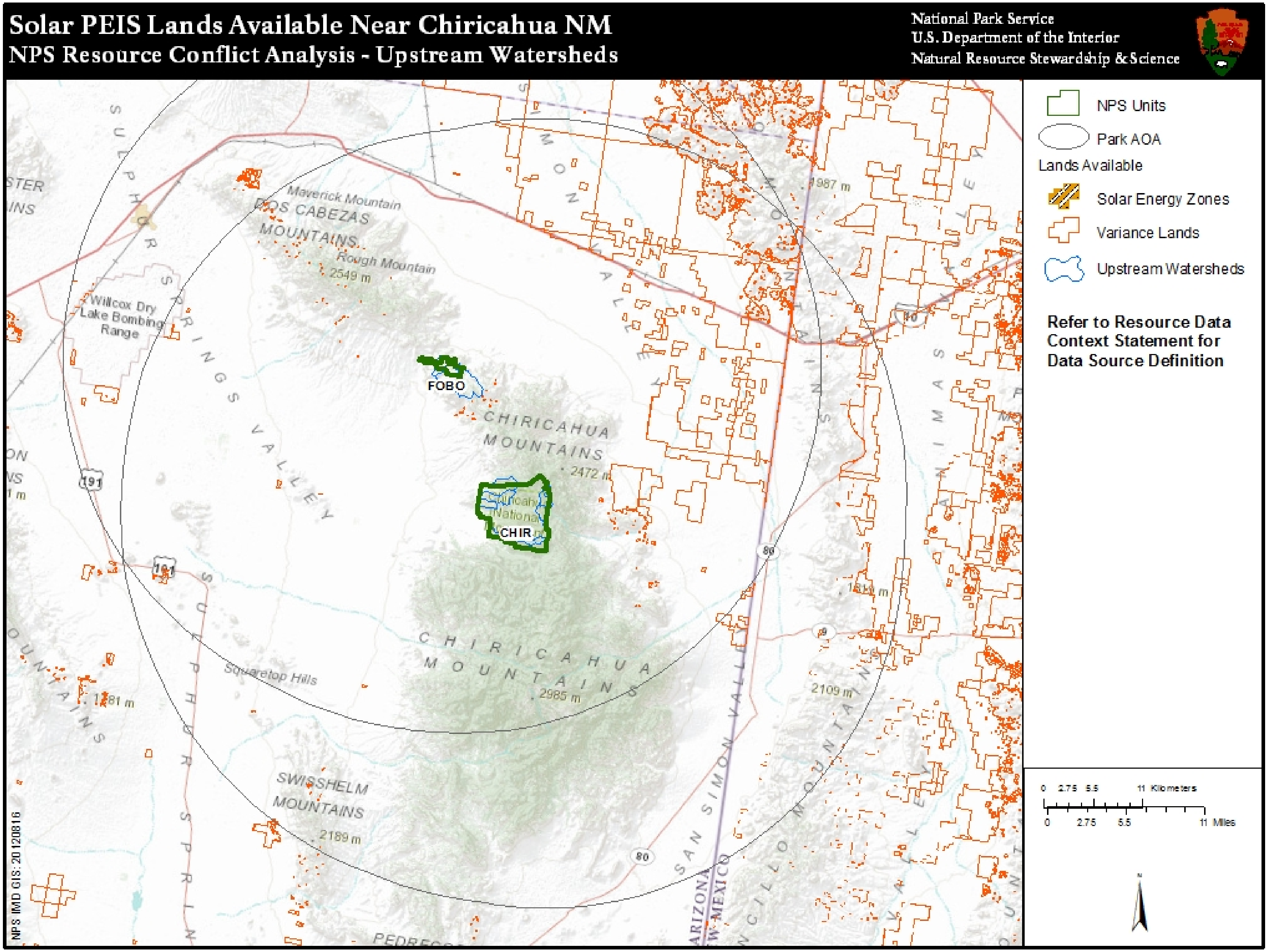




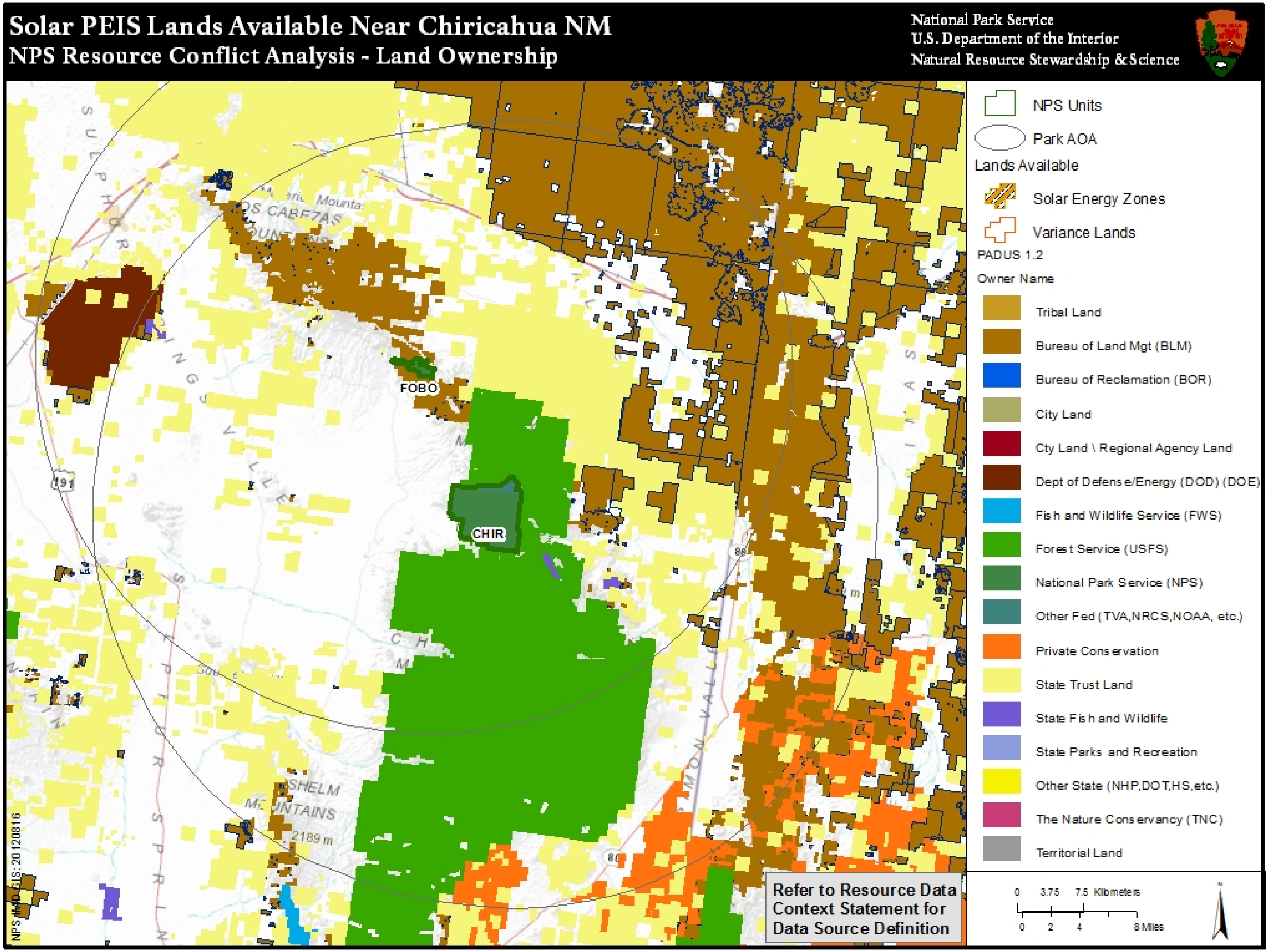
Solar PEIS Lands Available Near Chiricahua NM
NPS Resource Conflict Analysis - Water Erosion
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Sensitive Soils
Refer to Resource Data Context Statement for Data Source Definition
FOBO
CHIR
NPS IMD GIS: 20120814

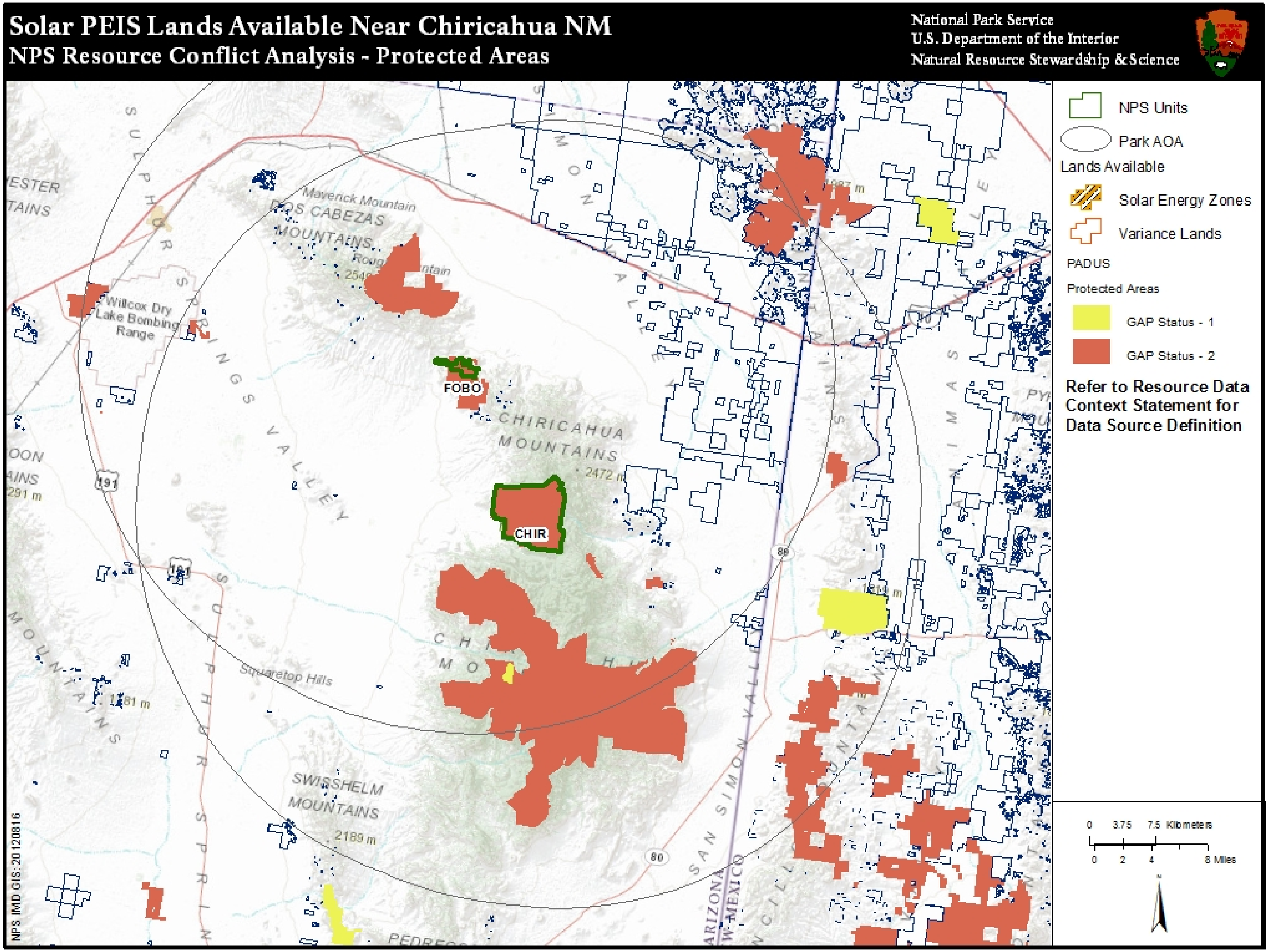

Solar PEIS Lands Available Near Chiricahua NM
NPS Resource Conflict Analysis - Wetlands (500 Meter Buffer)
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Wetlands - 500 Meter Buf
Refer to Resource Data Context Statement for Data Source Definition
0 2.75 5.5 11 Kilometers
0 2.75 5.5 11 Miles
FOBO
CHIR
CHIRICAHUA MOUNTAINS
DOS CABEZAS MOUNTAINS
SWISSHELM MOUNTAINS
SULPHUR SPRINGS VALLEY
SAN SIMON VALLEY
Maverick Mountain
Rough Mountain
Squaretop Hills
NPS IMD GIS: 20120816

Upstream Watershed

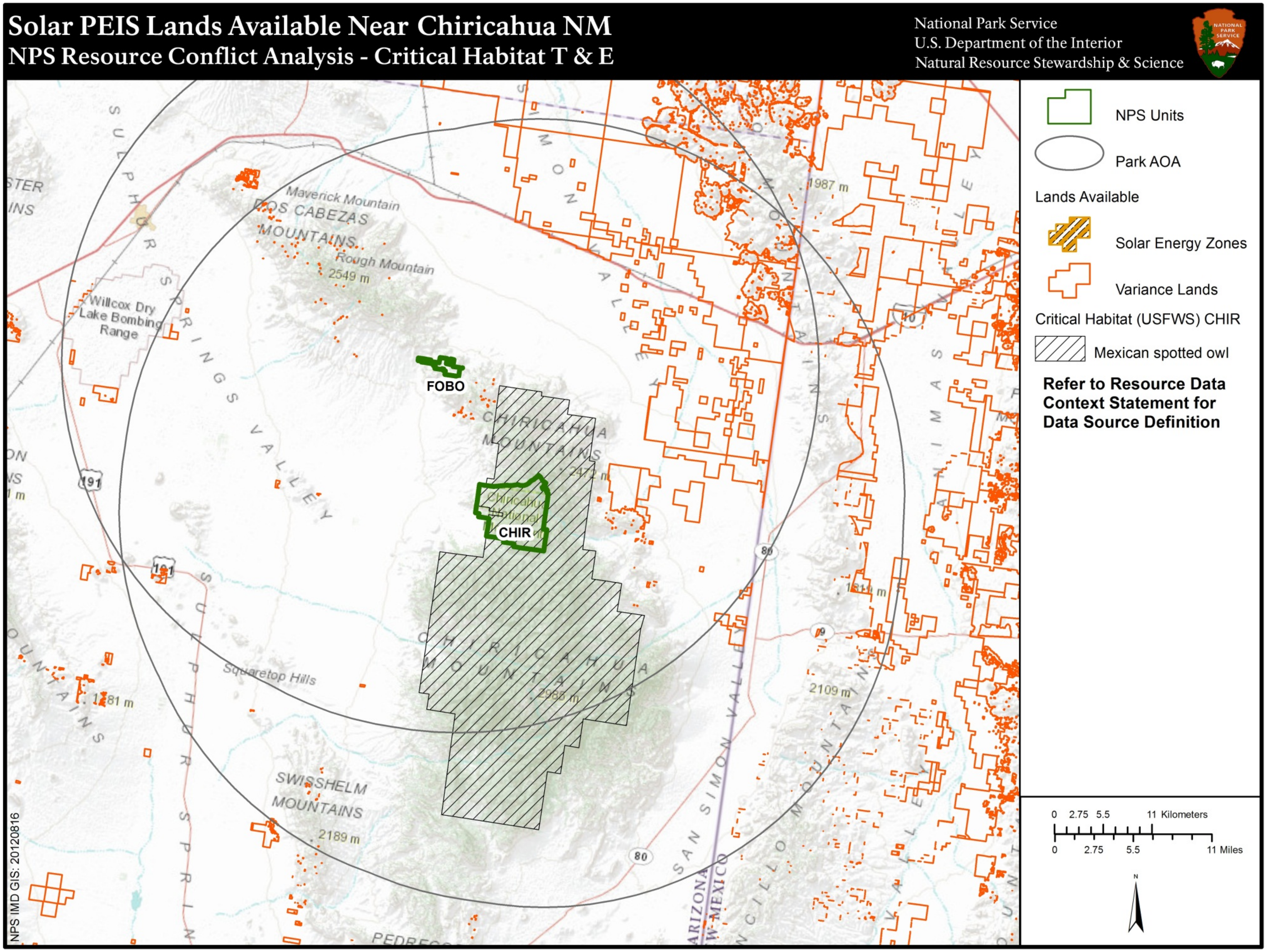


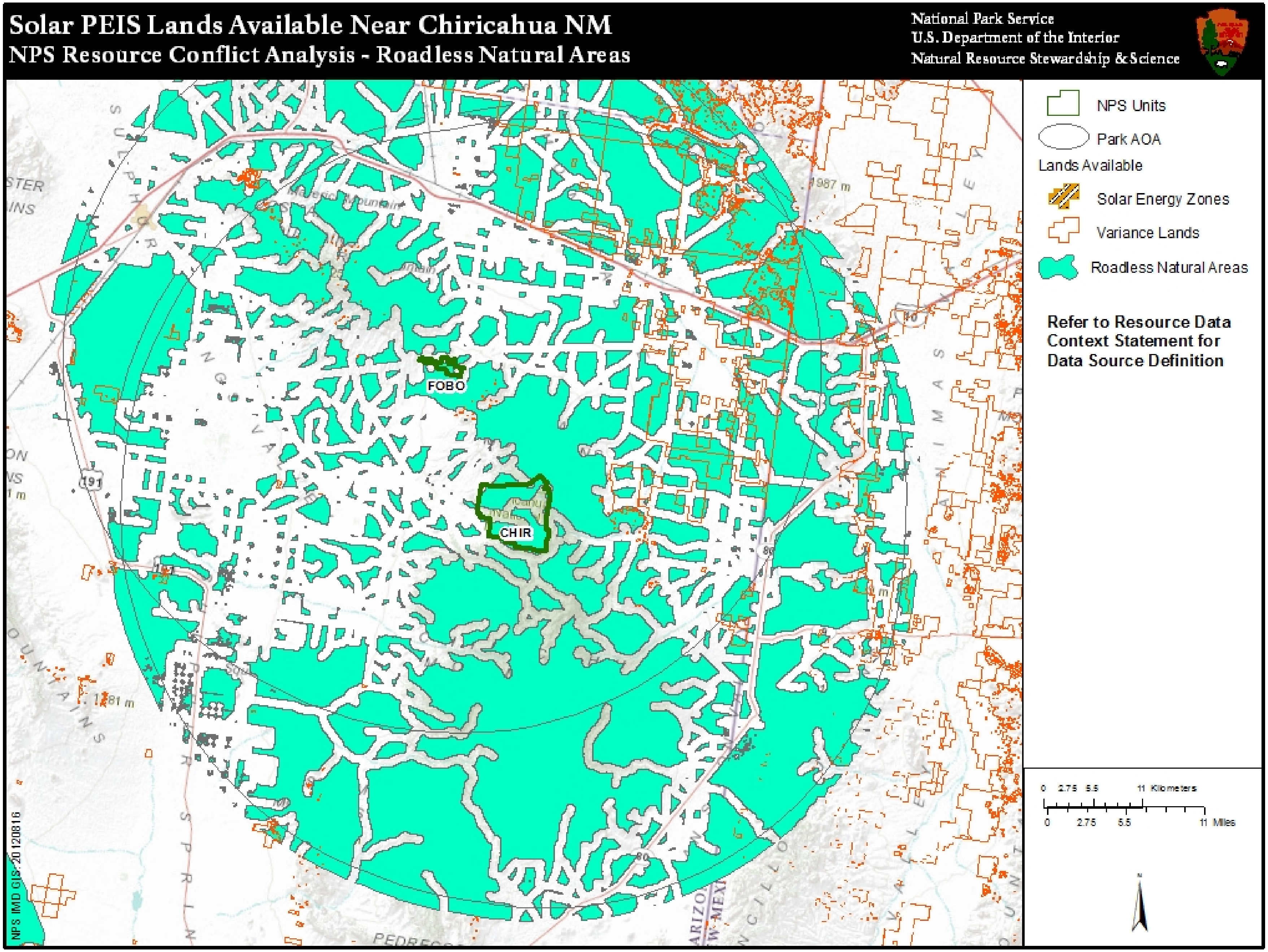
Land Ownership

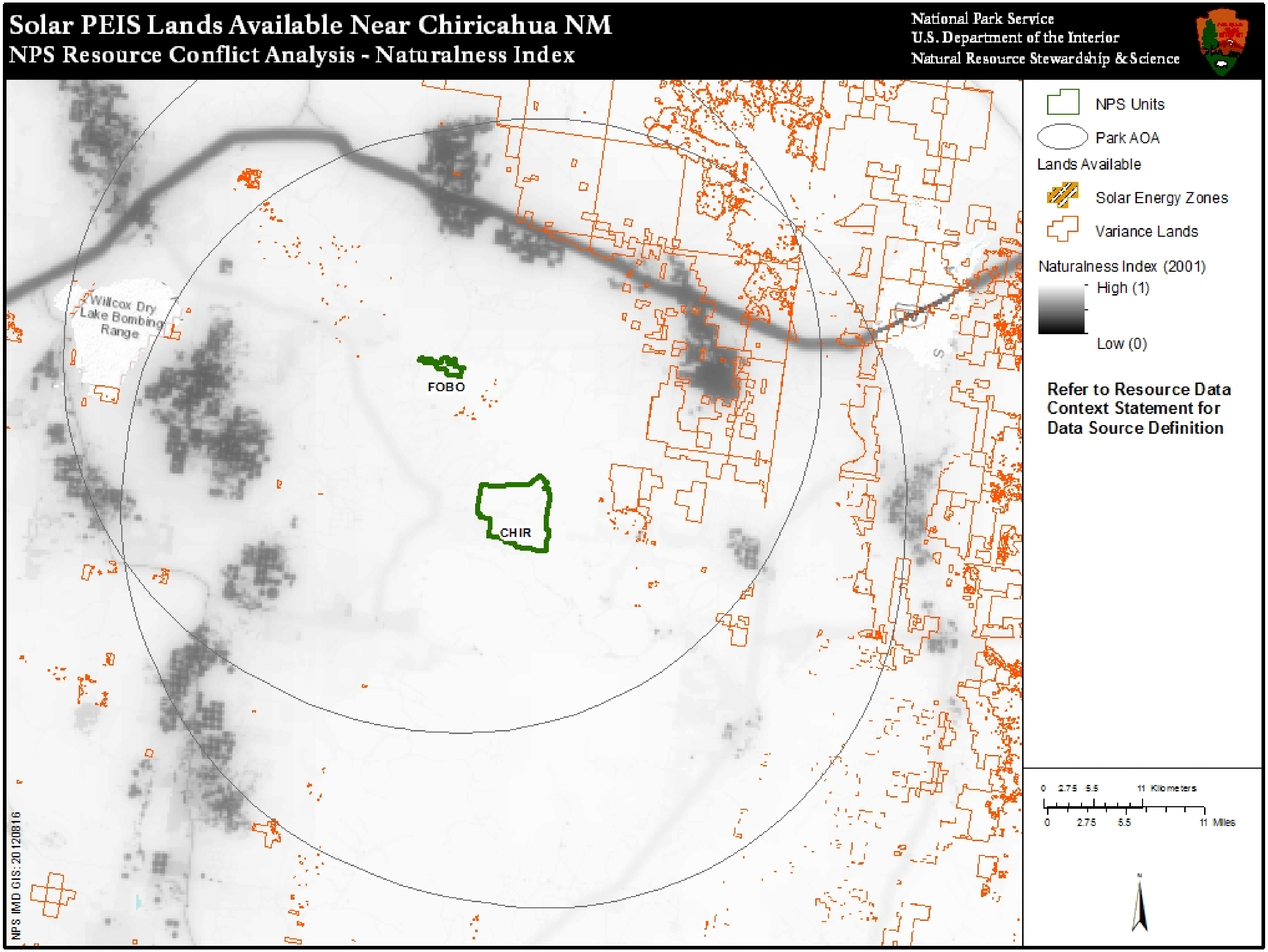


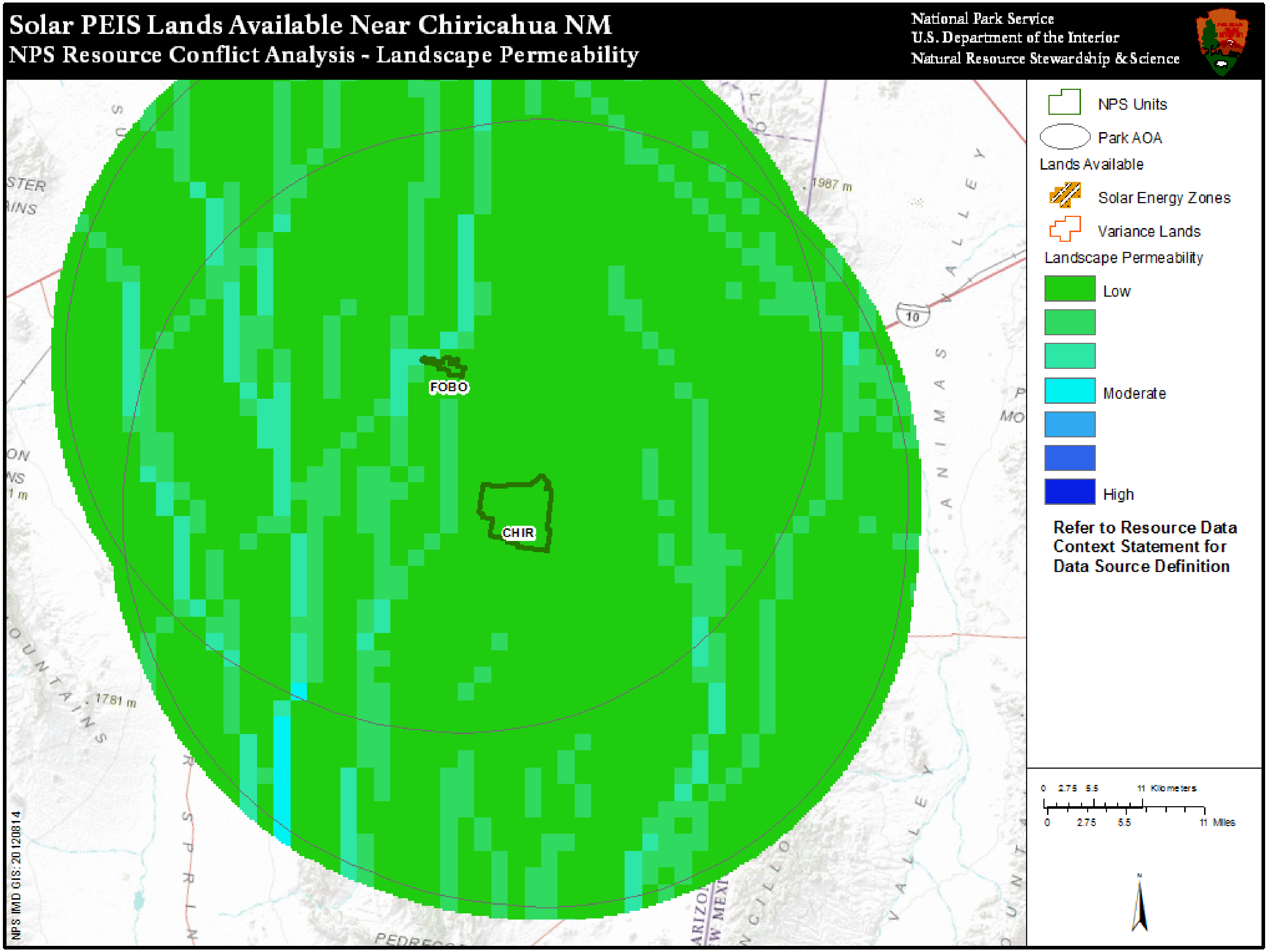

Solar PEIS Lands Available Near Chiricahua NM
NPS Resource Conflict Analysis - Protected Areas
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
PADUS
Protected Areas
GAP Status - 1
GAP Status - 2
Refer to Resource Data Context Statement for Data Source Definition
0 3.75 7.5 Kilometers
0 2 4 8 Miles
NPS IMD GIS: 20120816
FOBO
CHIR
CHIRICAHUA MOUNTAINS
SULPHUR SPRINGS VALLEY
SAN SIMON VALLEY
DOS CABEZAS MOUNTAINS
Maverick Mountain
Willcox Dry Lake Bombing Range
SWISSHELM MOUNTAINS
Squaretop Hills
ARIZONA NEW MEXICO

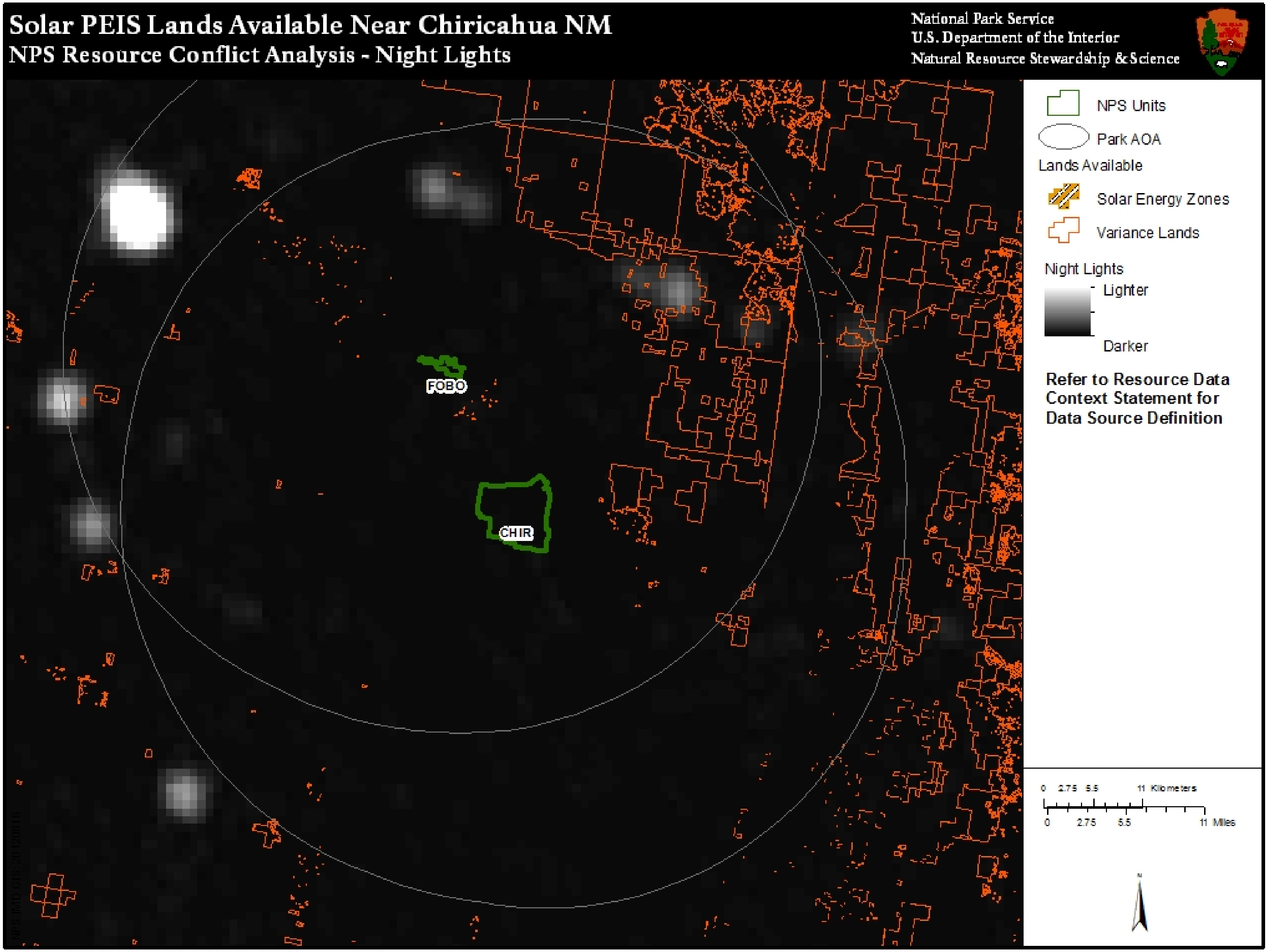
Critical Habitat



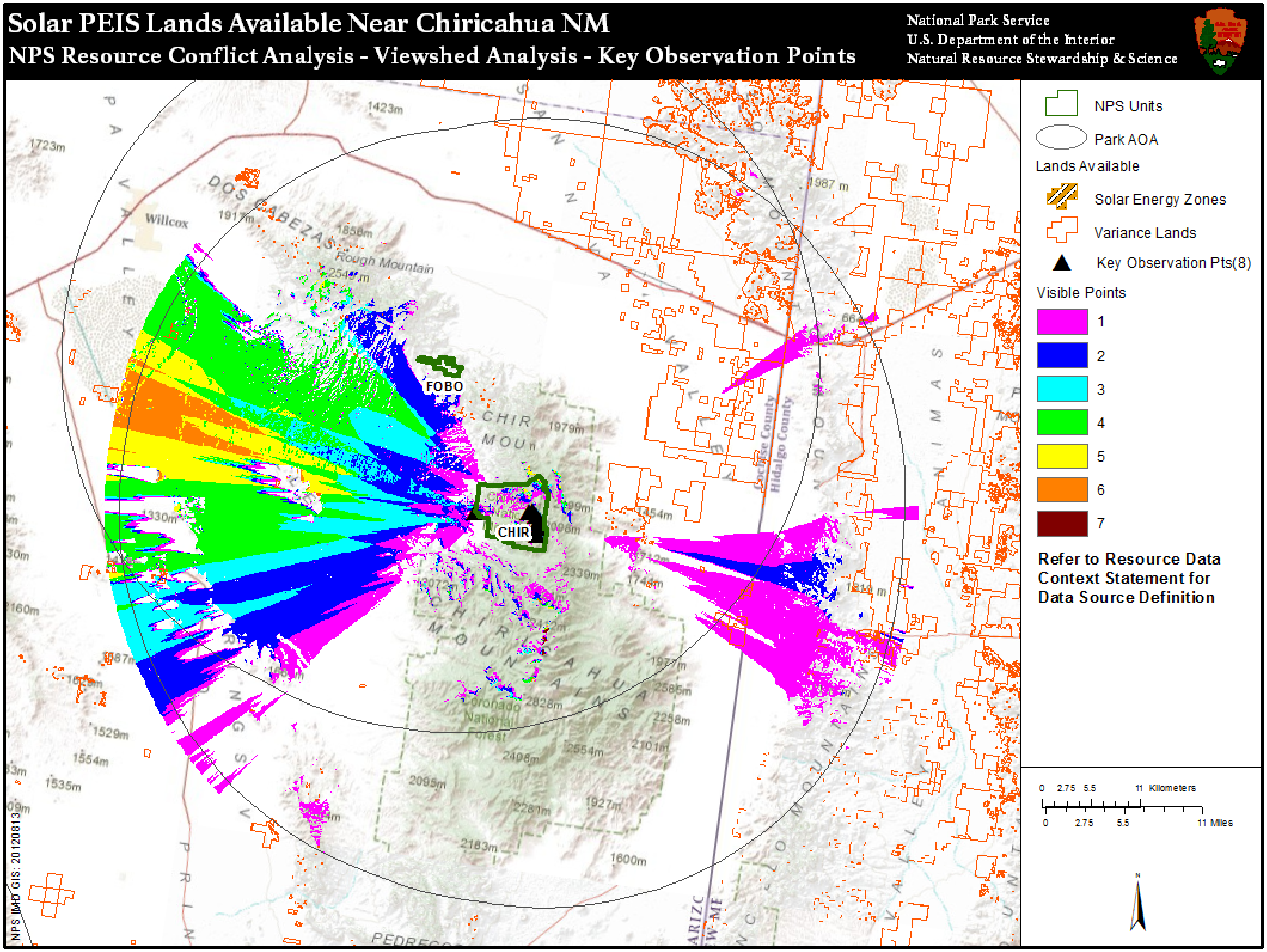

Solar PEIS Lands Available Near Chiricahua NM
NPS Resource Conflict Analysis - Roadless Natural Areas
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Roadless Natural Areas
Refer to Resource Data Context Statement for Data Source Definition
0 2.75 5.5 11 Kilometers
0 2.75 5.5 11 Miles
FOBO
CHIR
NPS IMD GIS 20120816

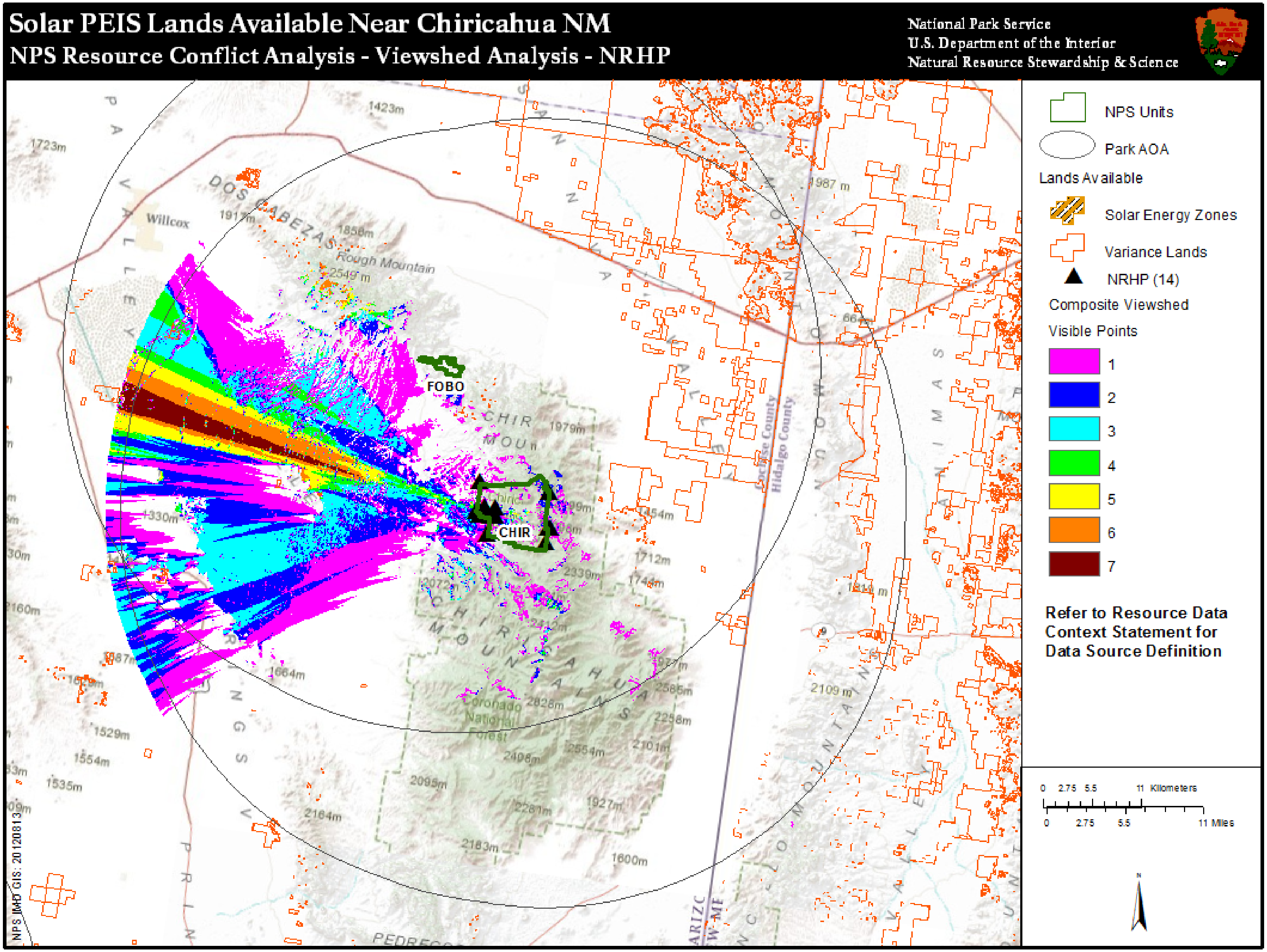

Solar PEIS Lands Available Near Chiricahua NM
NPS Resource Conflict Analysis - Naturalness Index
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Naturalness Index (2001)
High (1)
Low (0)
Refer to Resource Data Context Statement for Data Source Definition
Willcox Dry Lake Bombing Range
FOBO
CHIR
0 2.75 5.5 11 Kilometers
0 2.75 5.5 11 Miles
NPS IMD GIS: 20120816

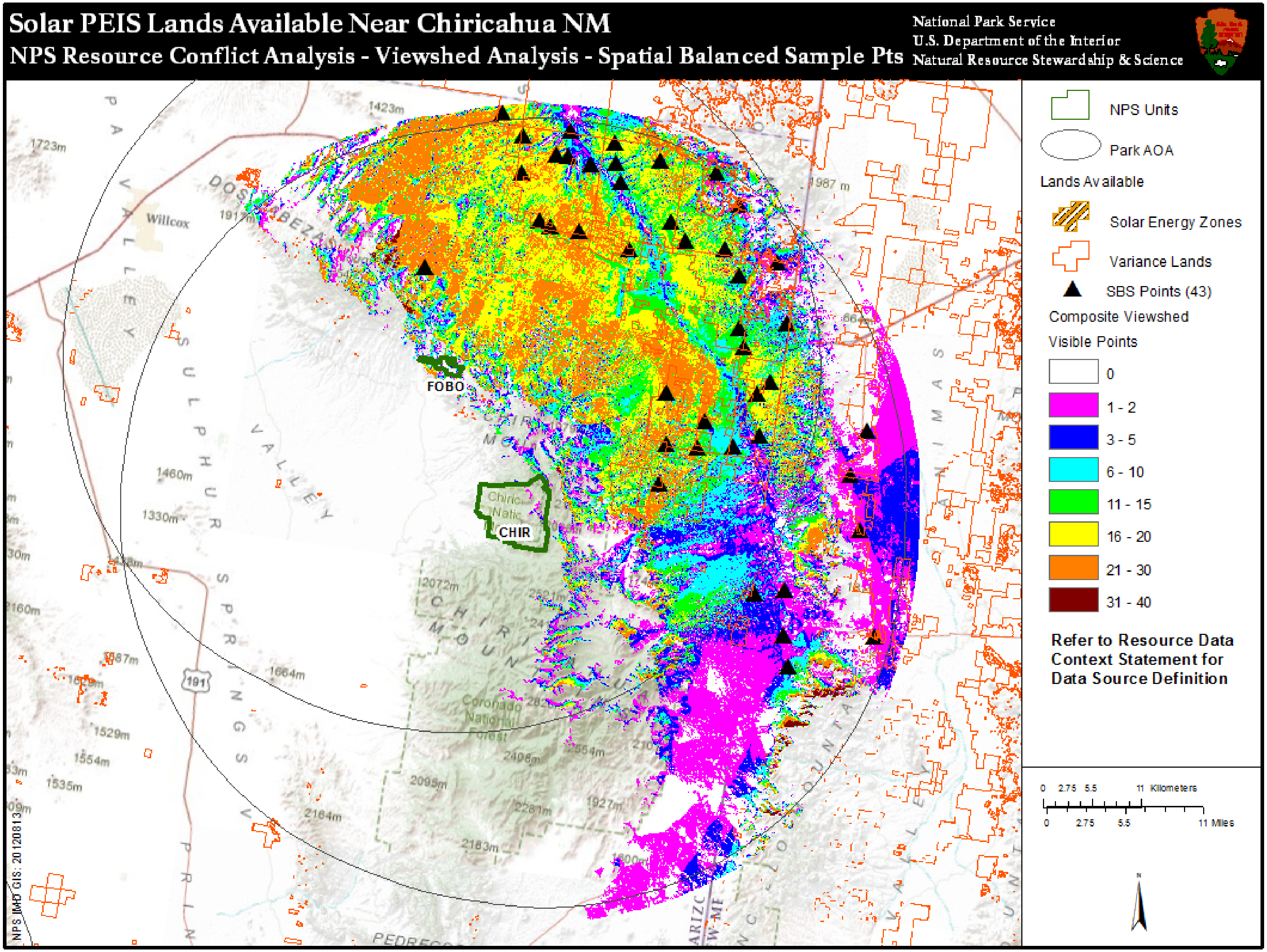

Solar PEIS Lands Available Near Chiricahua NM
NPS Resource Conflict Analysis - Landscape Permeability
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
FOBO
CHIR
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Landscape Permeability
Low
Moderate
High
Refer to Resource Data Context Statement for Data Source Definition
0 2.75 5.5 11 Kilometers
0 2.75 5.5 11 Miles
NPS IMD GIS: 20120814



Solar PEIS Lands Available Near Chiricahua NM
NPS Resource Conflict Analysis - Night Lights
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
FOBO
CHIR
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Night Lights
Lighter
Darker
Refer to Resource Data Context Statement for Data Source Definition
0 2.75 5.5 11 Kilometers
0 2.75 5.5 11 Miles

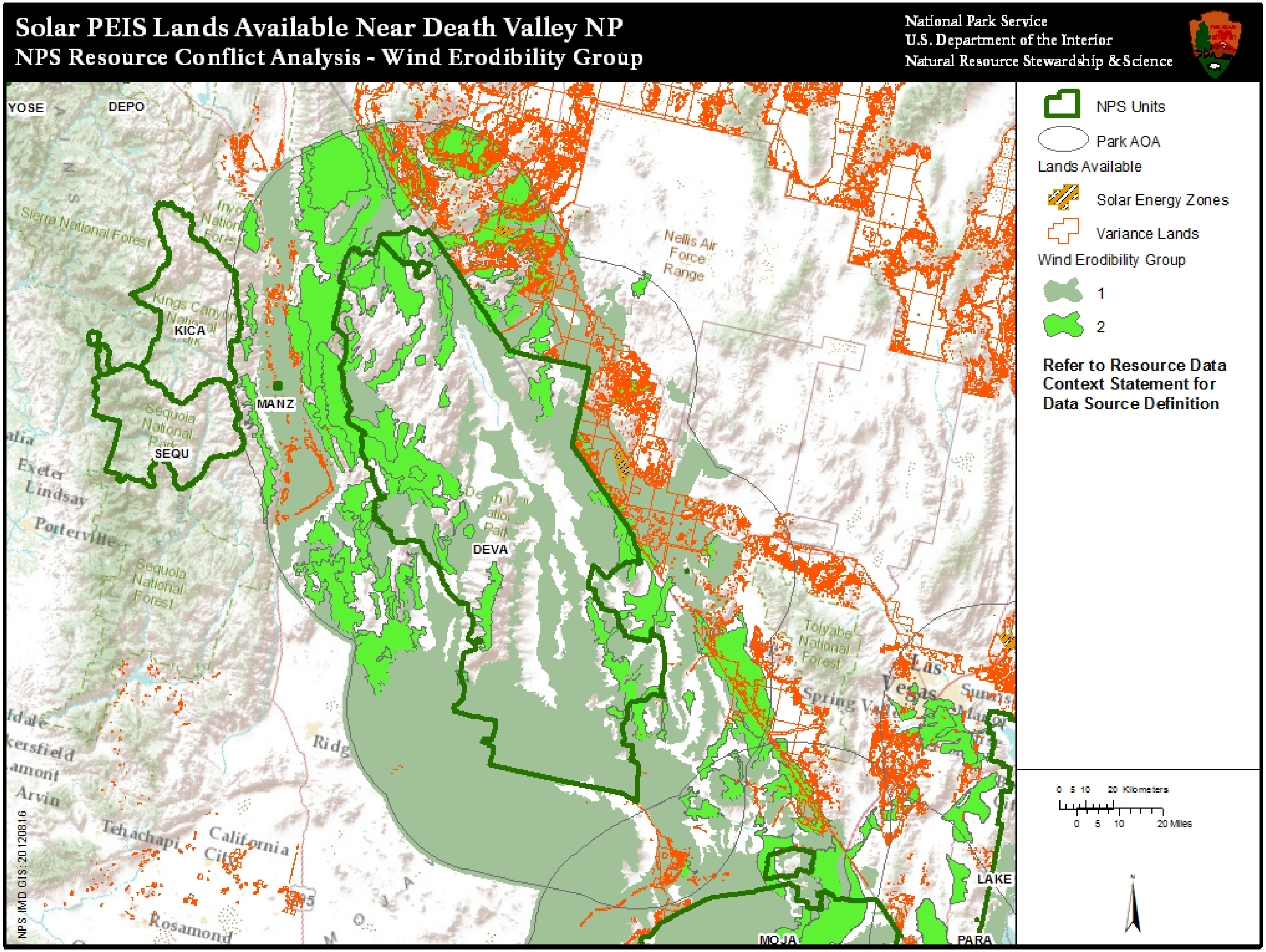

Solar PEIS Lands Available Near Chiricahua NM
NPS Resource Conflict Analysis - Viewshed Analysis - Key Observation Points
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Key Observation Pts(8)
Visible Points
1
2
3
4
5
6
7
Refer to Resource Data Context Statement for Data Source Definition
FOBO
CHIR
Willcox
Rough Mountain
Cochise County
Hidalgo County
Coronado National Forest
0 2.75 5.5 11 Kilometers
0 2.75 5.5 11 Miles
NPS IMD GIS: 20120813

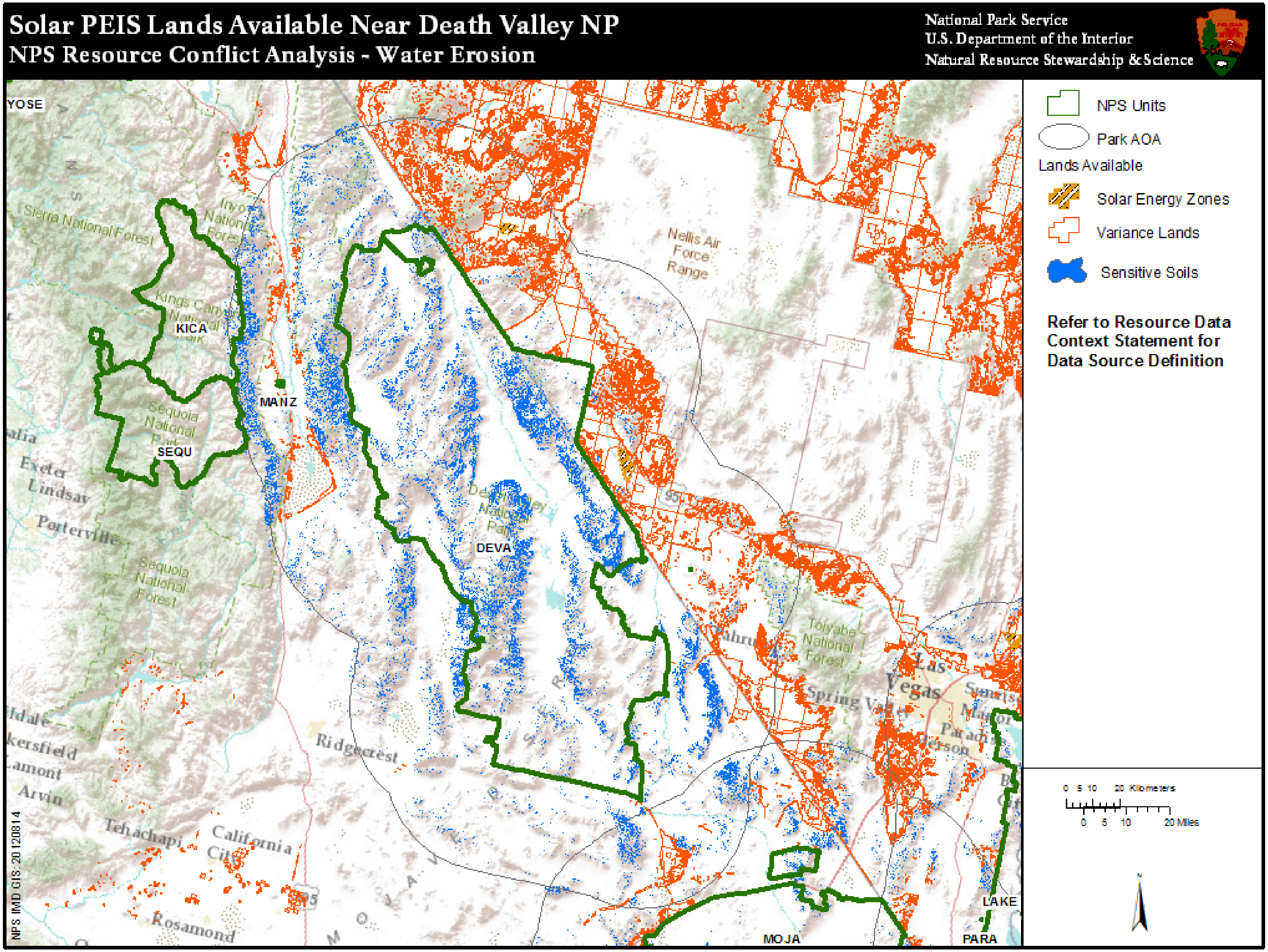

Solar PEIS Lands Available Near Chiricahua NM
NPS Resource Conflict Analysis - Viewshed Analysis - NRHP
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
NRHP (14)
Composite Viewshed
Visible Points
1
2
3
4
5
6
7
Refer to Resource Data Context Statement for Data Source Definition
0 2.75 5.5 11 Kilometers
0 2.75 5.5 11 Miles
FOBO
CHIR
Willcox
Rough Mountain
Cochise County
Hidalgo County
Coronado National Forest
NPS IMD GIS: 20120813


Solar PEIS Lands Available Near Chiricahua NM
NPS Resource Conflict Analysis - Viewshed Analysis - Spatial Balanced Sample Pts
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
SBS Points (43)
Composite Viewshed
Visible Points
0
1 - 2
3 - 5
6 - 10
11 - 15
16 - 20
21 - 30
31 - 40
Refer to Resource Data Context Statement for Data Source Definition
0 2.75 5.5 11 Kilometers
0 2.75 5.5 11 Miles
FOBO
CHIR
Willcox
Coronado National Forest
NPS IMD GIS: 20120813

Death Valley National Park

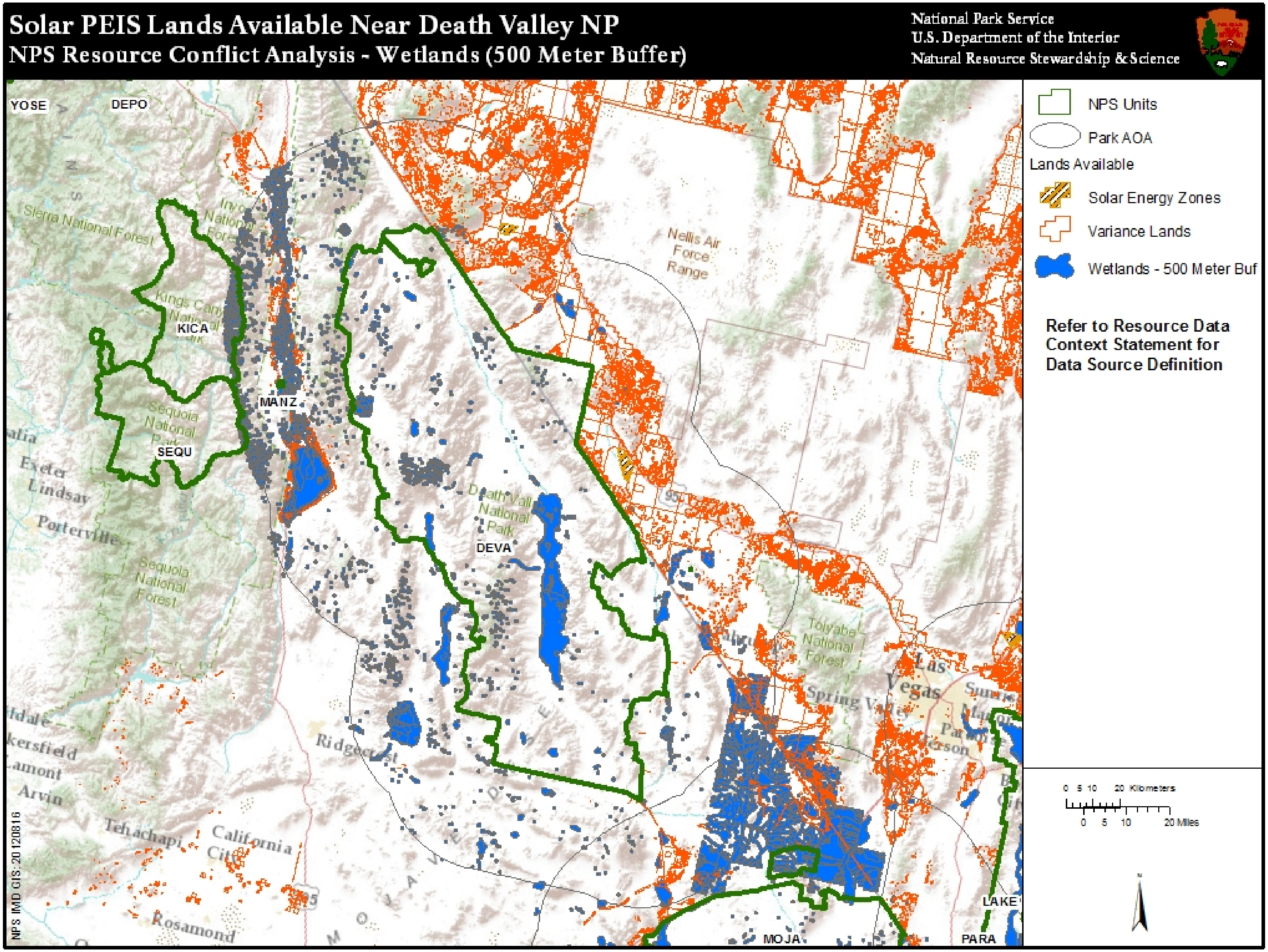
Wind Erodibility Group



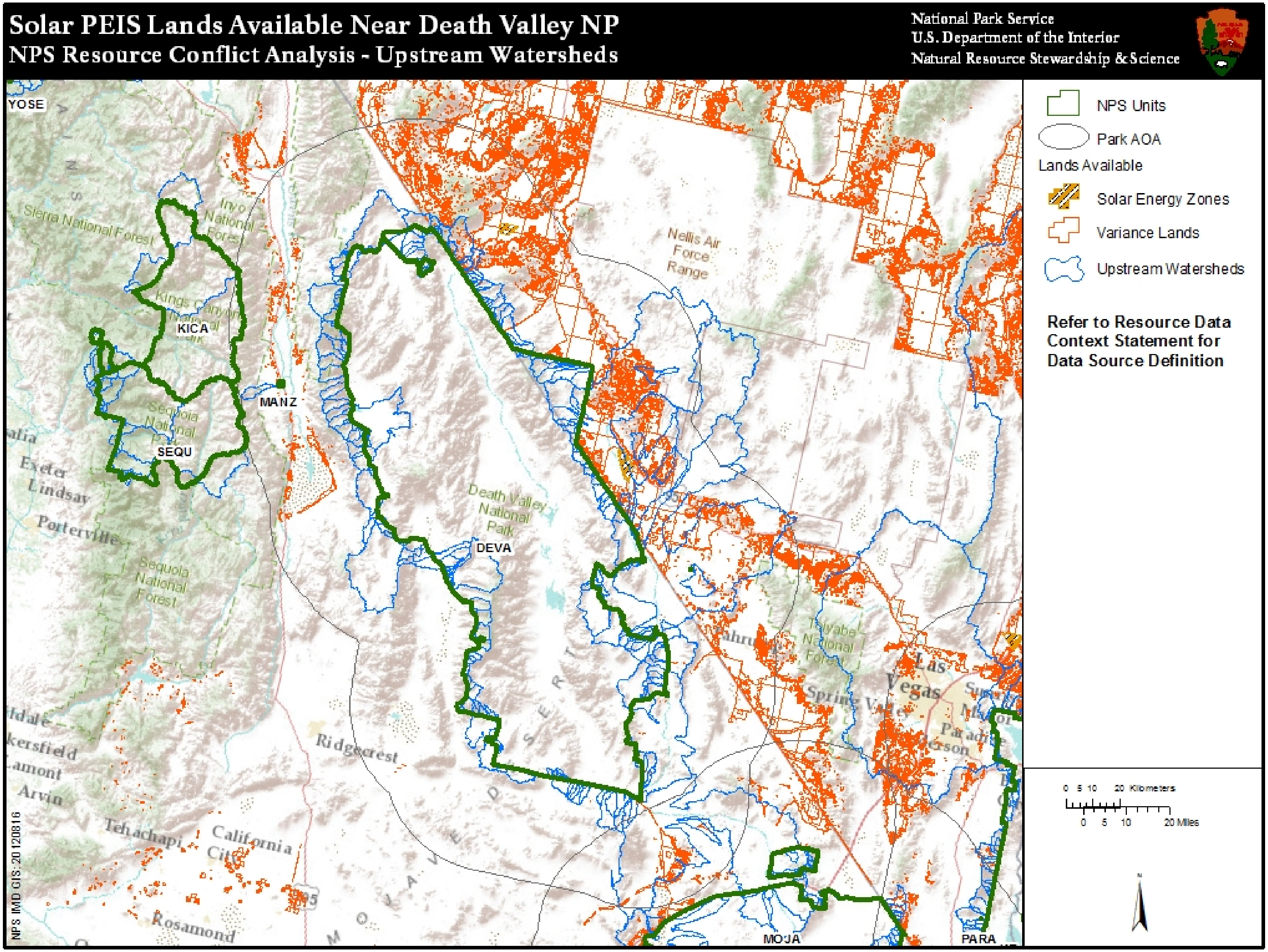


Solar PEIS Lands Available Near Death Valley NP
NPS Resource Conflict Analysis - Water Erosion
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Sensitive Soils
Refer to Resource Data Context Statement for Data Source Definition
0 5 10 20 Kilometers
0 5 10 20 Miles
YOSE
KICA
SEQU
MANZ
DEVA
MOJA
LAKE
PARA
Nellis Air Force Range
Sierra National Forest
Sequoia National Forest
Toiyabe National Forest
Ridgecrest
Porterville
Lindsay
Exeter
Tehachapi
California City
Rosamond
Las Vegas
Spring Valley
NPS IMD GIS: 20120814

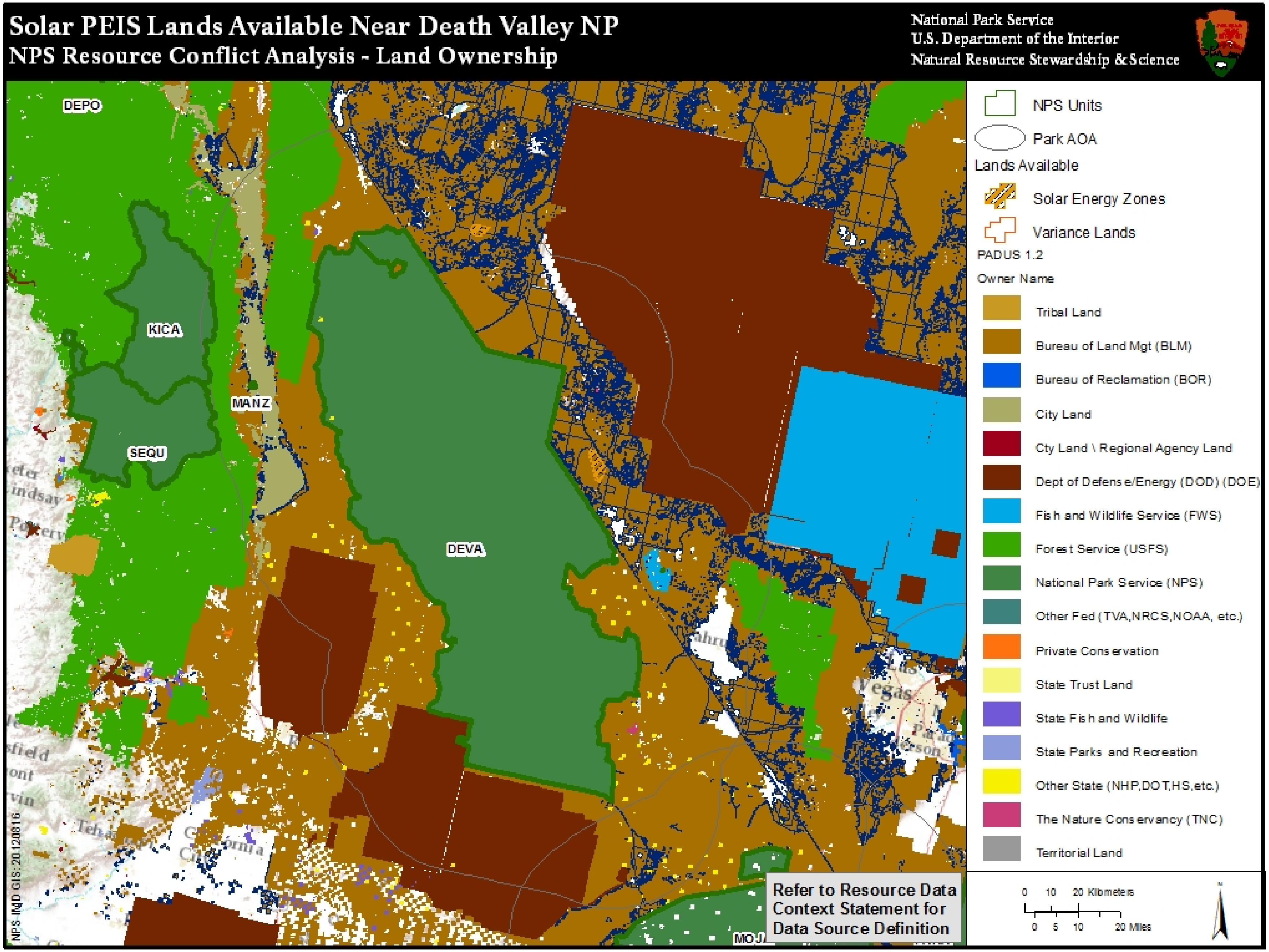
Wetlands

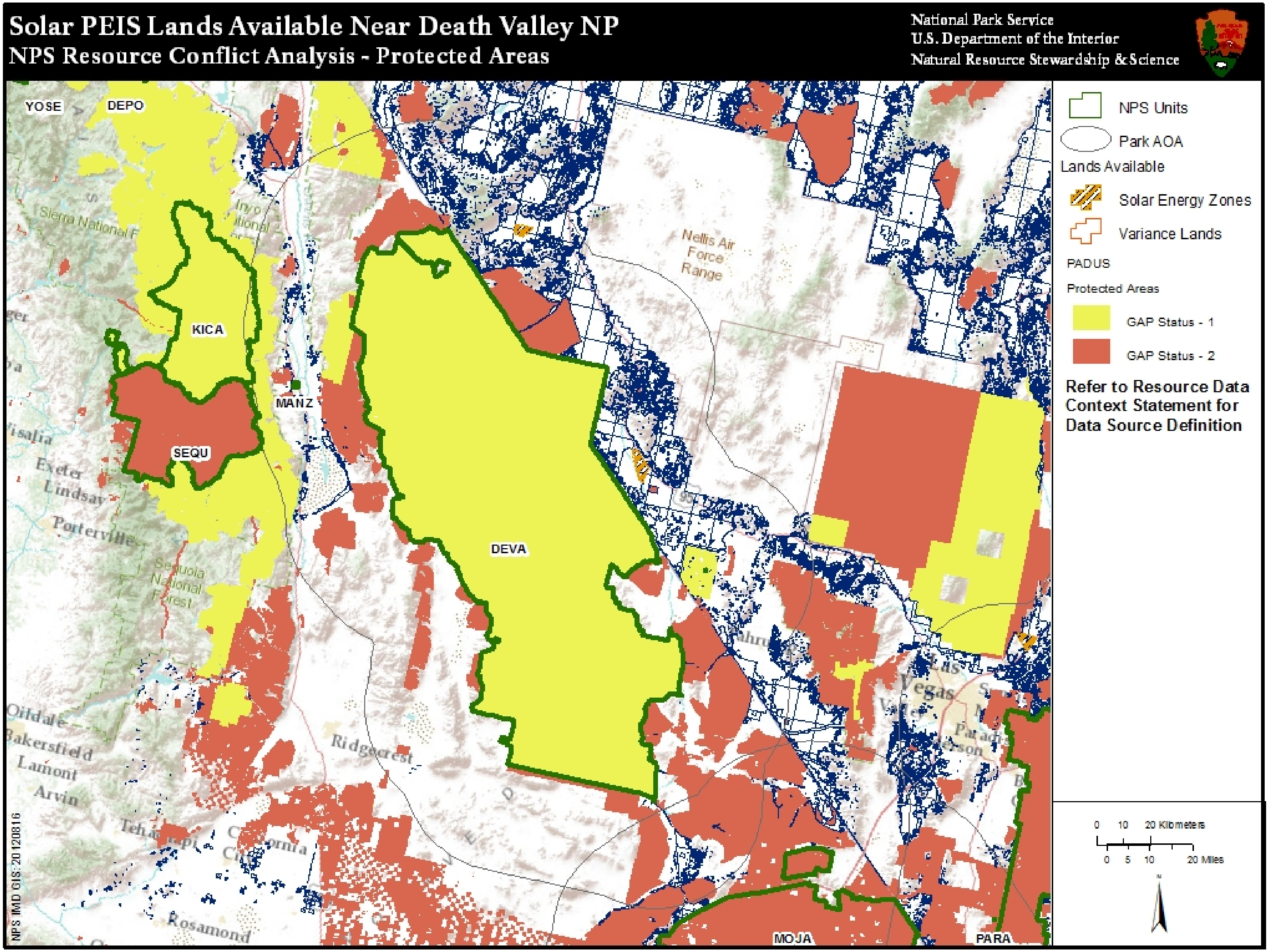


Solar PEIS Lands Available Near Death Valley NP
NPS Resource Conflict Analysis - Wetlands (500 Meter Buffer)
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Wetlands - 500 Meter Buf
Refer to Resource Data Context Statement for Data Source Definition
YOSE
DEPO
KICA
MANZ
SEQU
DEVA
MOJA
LAKE
PARA
Nellis Air Force Range
NPS IMD GIS: 20120816

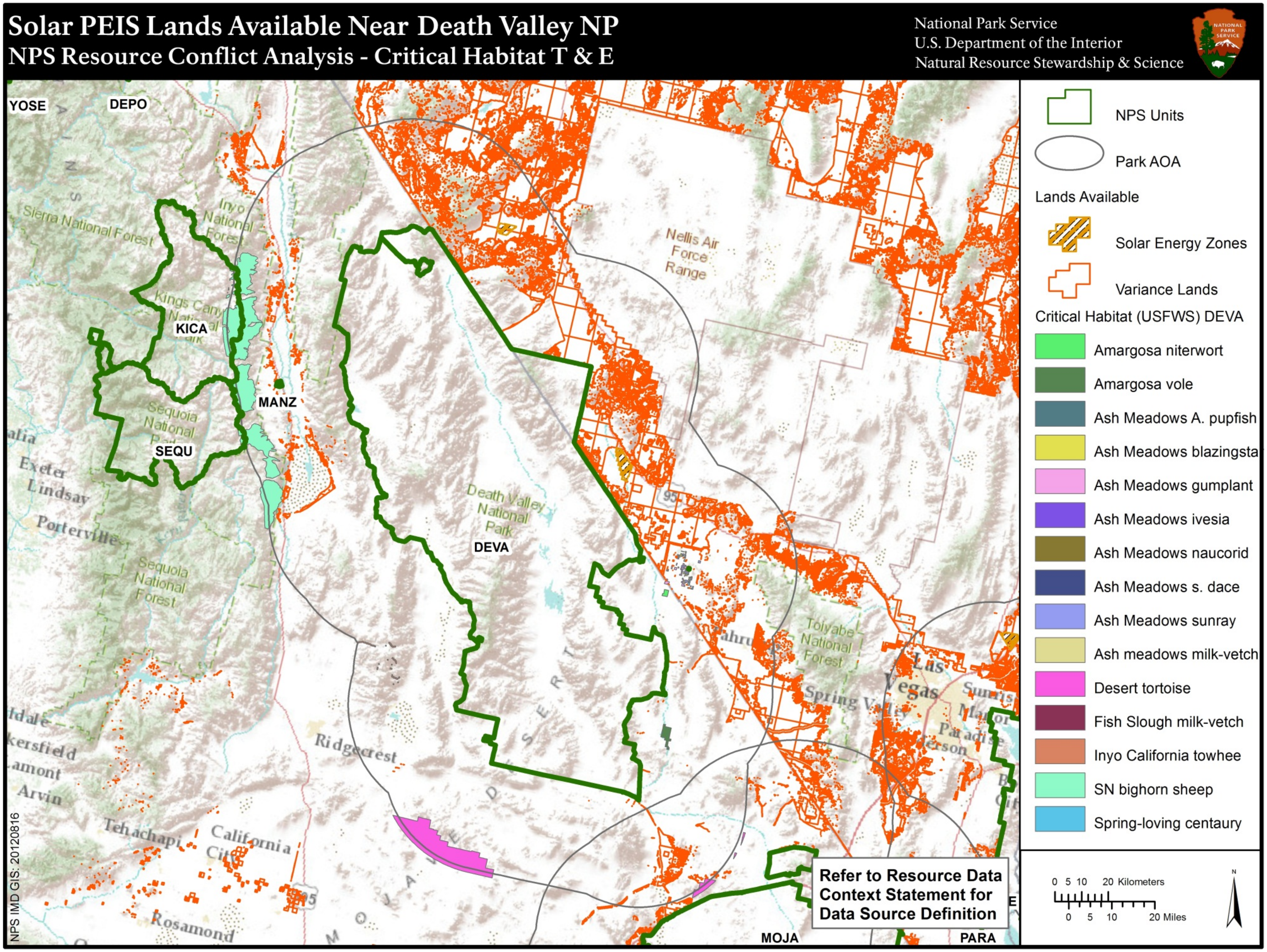

Solar PEIS Lands Available Near Death Valley NP
NPS Resource Conflict Analysis - Upstream Watersheds
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Upstream Watersheds
Refer to Resource Data Context Statement for Data Source Definition
YOSE
KICA
SEQU
MANZ
DEVA
MOJA
PARA
Death Valley National Park
Nellis Air Force Range
Sierra National Forest
Sequoia National Forest
Exeter
Lindsay
Porterville
Ridgecrest
Tehachapi
California City
Rosamond
Las Vegas
Spring Valley
NPS IMD GIS: 20120816
0 5 10 20 Kilometers
0 5 10 20 Miles

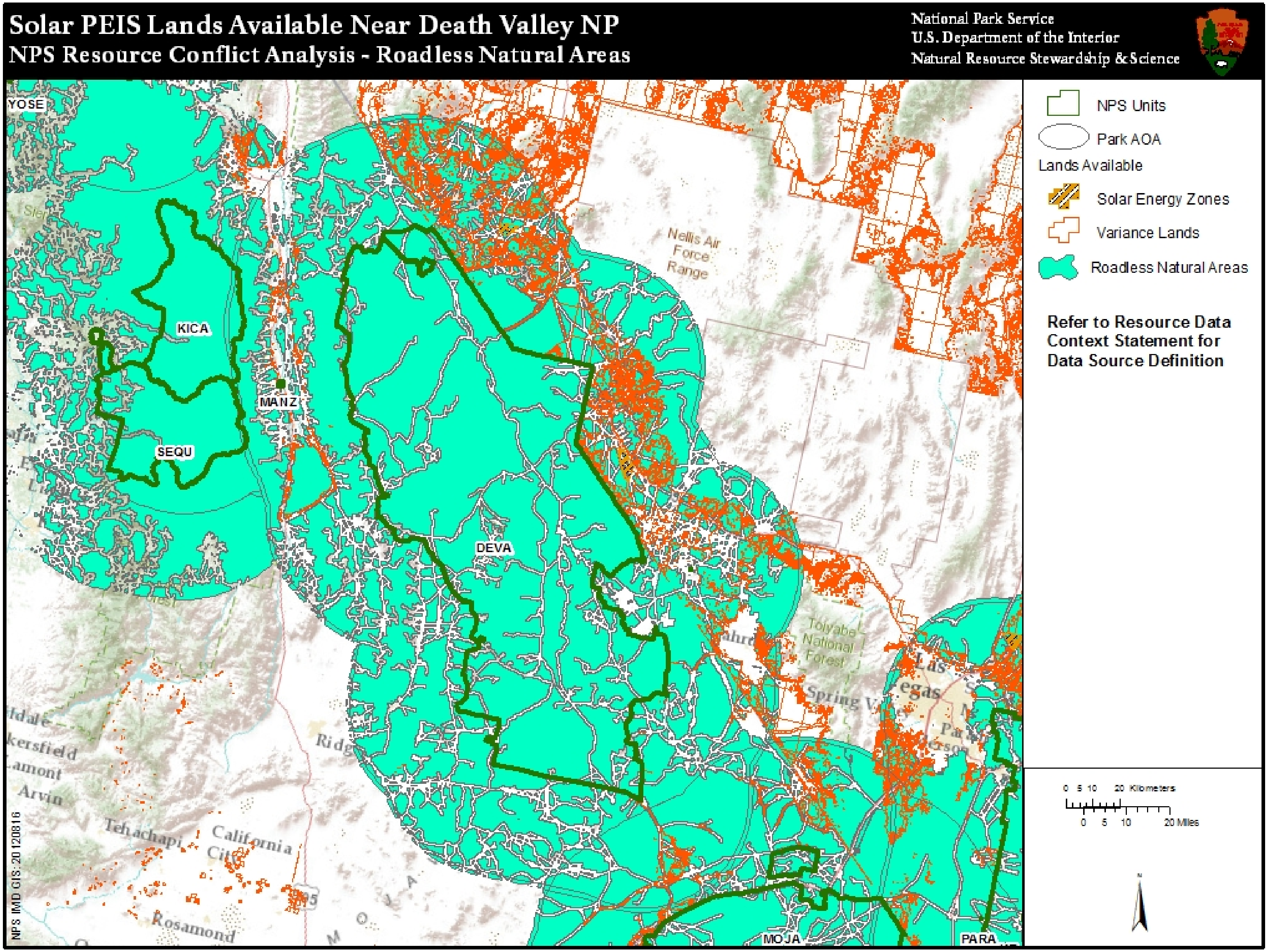
Land Ownership

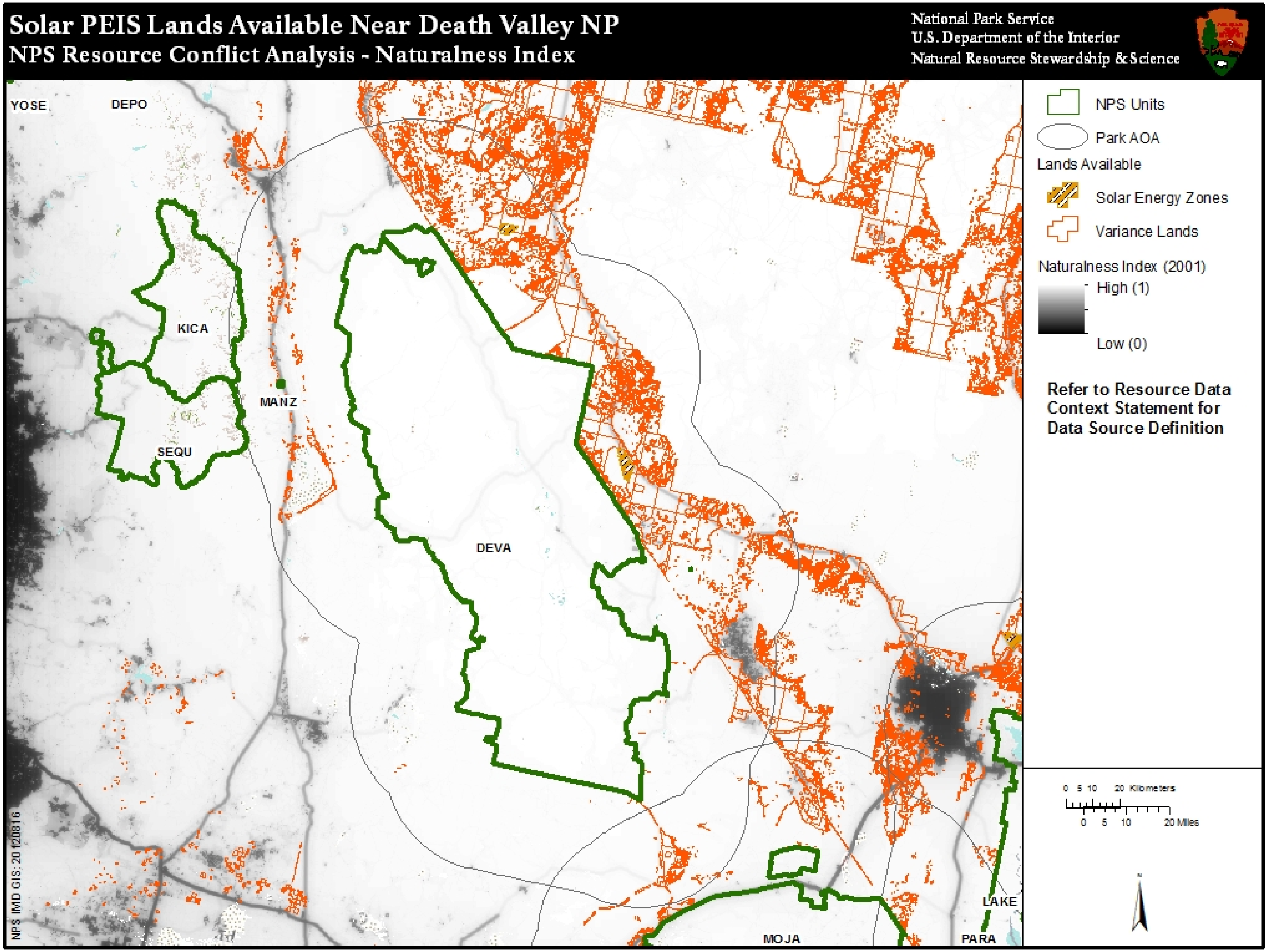


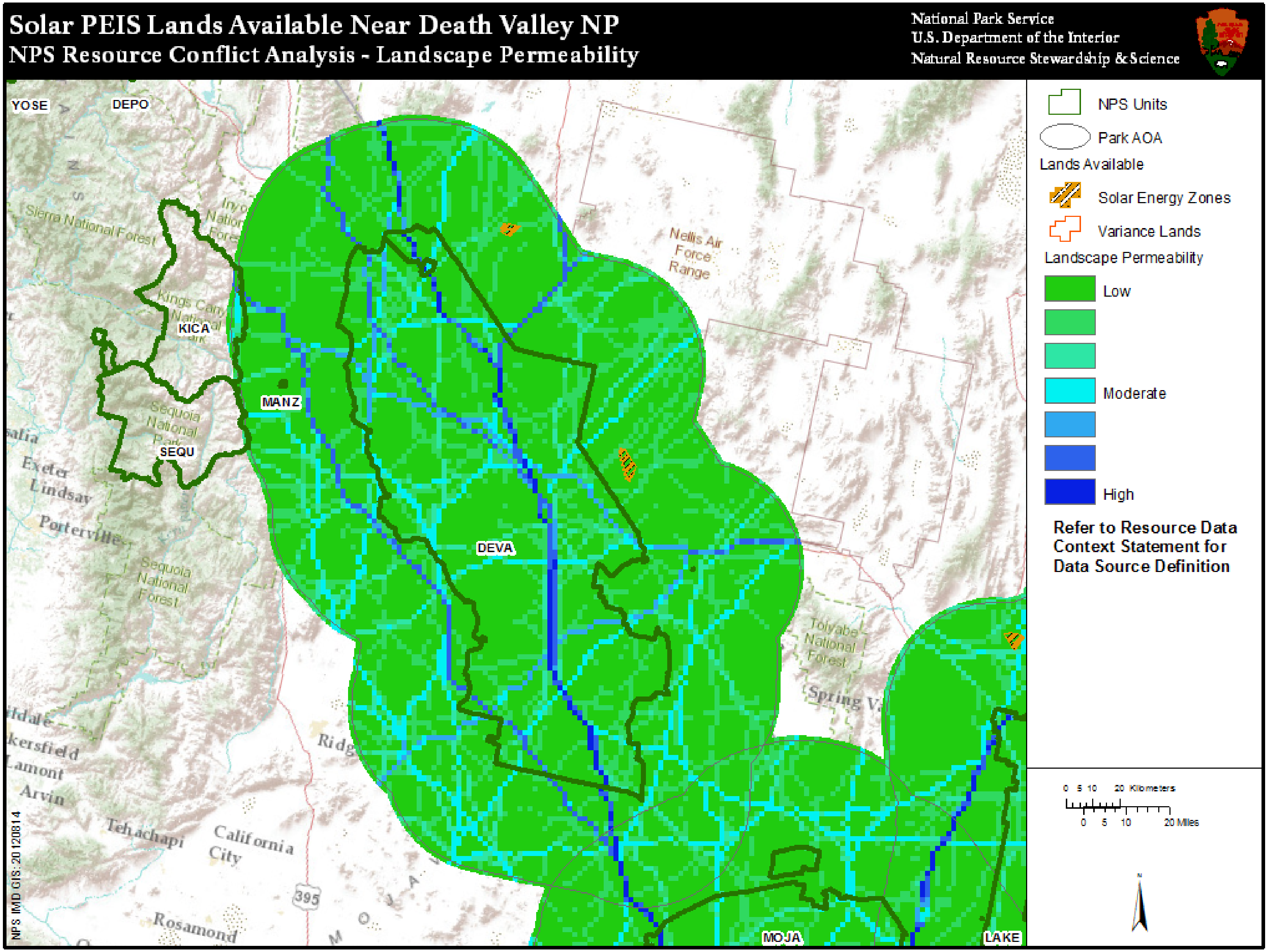


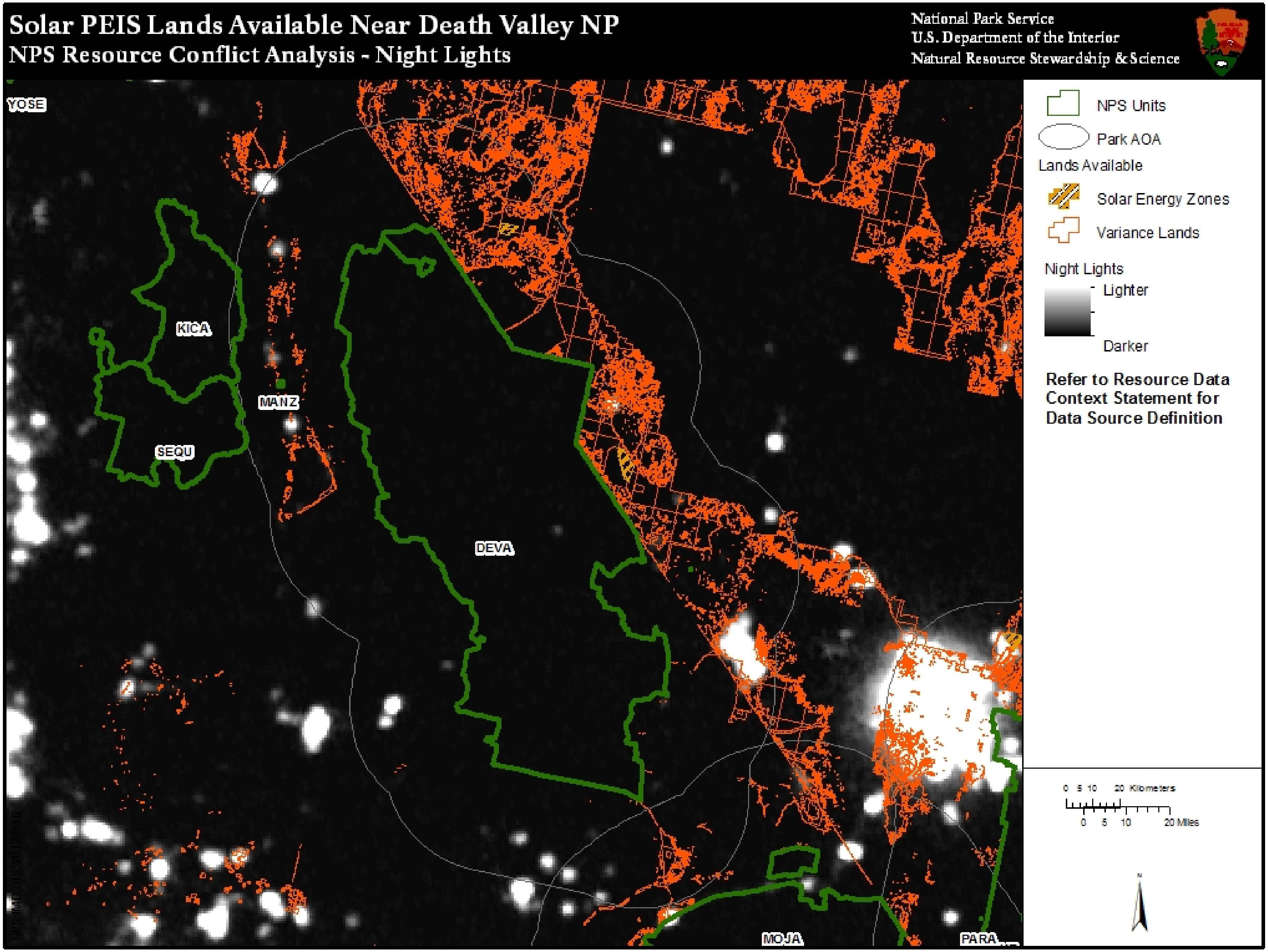
Solar PEIS Lands Available Near Death Valley NP
NPS Resource Conflict Analysis - Protected Areas
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
PADUS
Protected Areas
GAP Status - 1
GAP Status - 2
Refer to Resource Data Context Statement for Data Source Definition
0 10 20 Kilometers
0 5 10 20 Miles
YOSE
DEPO
KICA
MANZ
SEQU
DEVA
MOJA
PARA
Nellis Air Force Range
Ridgecrest
Bakersfield
Lamont
Arvin
Porterville
Exeter
Lindsay
Rosamond
Vegas
NPS IMD GIS: 20120816

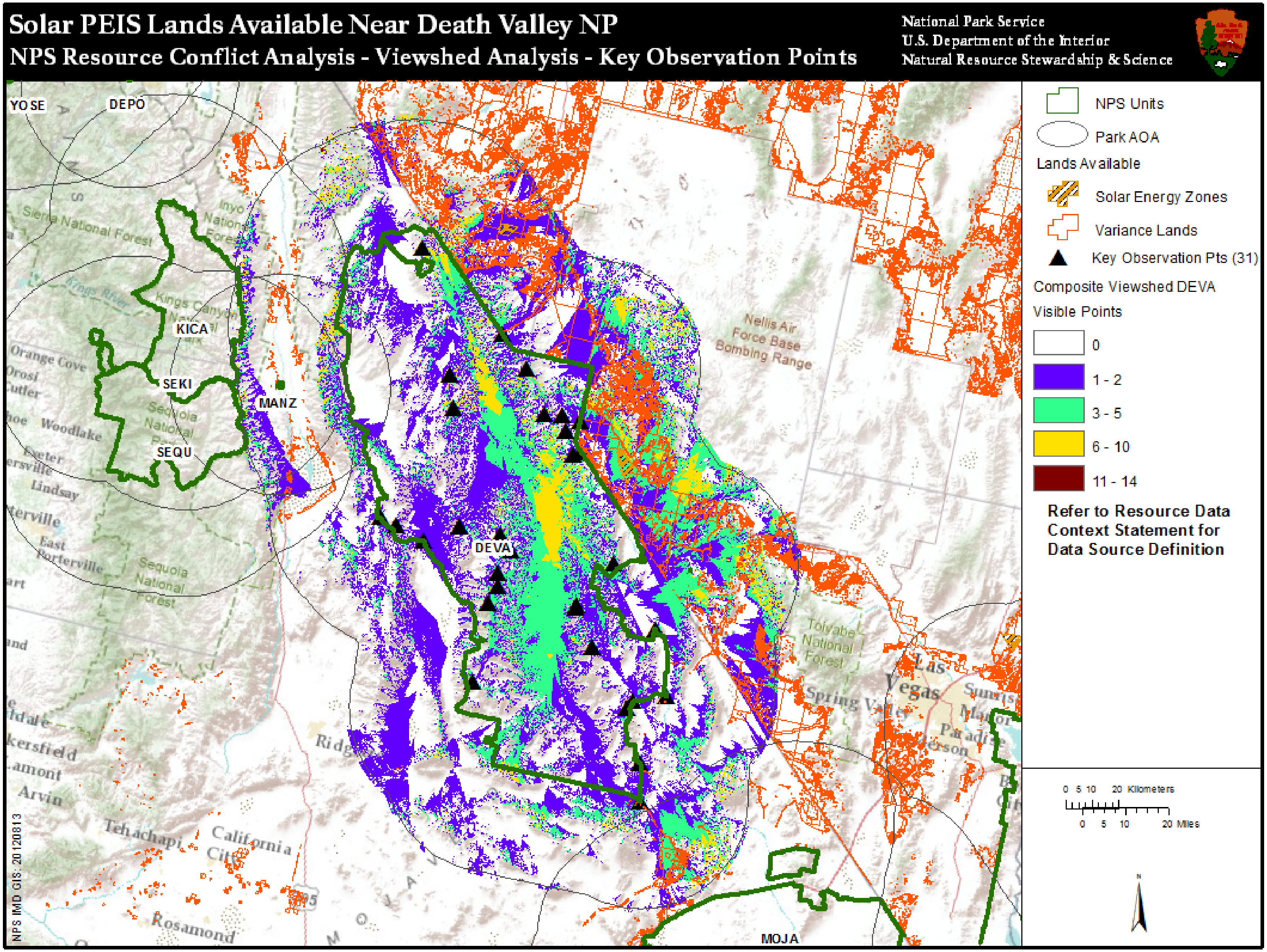

Solar PEIS Lands Available Near Death Valley NP
NPS Resource Conflict Analysis - Critical Habitat T & E
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Critical Habitat (USFWS) DEVA
Amargosa niterwort
Amargosa vole
Ash Meadows A. pupfish
Ash Meadows blazingsta
Ash Meadows gumplant
Ash Meadows ivesia
Ash Meadows naucorid
Ash Meadows s. dace
Ash Meadows sunray
Ash meadows milk-vetch
Desert tortoise
Fish Slough milk-vetch
Inyo California towhee
SN bighorn sheep
Spring-loving centaury
0 5 10 20 Kilometers
0 5 10 20 Miles
Refer to Resource Data Context Statement for Data Source Definition
YOSE
DEPO
KICA
MANZ
SEQU
DEVA
MOJA
PARA
Death Valley National Park
Nellis Air Force Range
Sierra National Forest
Inyo National Forest
Sequoia National Forest
Toiyabe National Forest
Exeter
Lindsay
Porterville
Ridgecrest
Tehachapi
California City
Rosamond
Arvin
Las Vegas
Spring Valley
NPS IMD GIS: 20120816


Solar PEIS Lands Available Near Death Valley NP
NPS Resource Conflict Analysis - Roadless Natural Areas
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
YOSE
KICA
MANZ
SEQU
DEVA
MOJA
PARA
Nellis Air Force Range
Toiyabe National Forest
Las Vegas
Spring Valley
Bakersfield
Lamont
Arvin
Tehachapi
California City
Rosamond
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Roadless Natural Areas
Refer to Resource Data Context Statement for Data Source Definition
0 5 10 20 Kilometers
0 5 10 20 Miles
NPS IMD GIS: 20120816


Solar PEIS Lands Available Near Death Valley NP
NPS Resource Conflict Analysis - Naturalness Index
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
YOSE
DEPO
KICA
MANZ
SEQU
DEVA
LAKE
MOJA
PARA
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Naturalness Index (2001)
High (1)
Low (0)
Refer to Resource Data Context Statement for Data Source Definition
0 5 10 20 Kilometers
0 5 10 20 Miles
NPS IMD GIS: 20120816

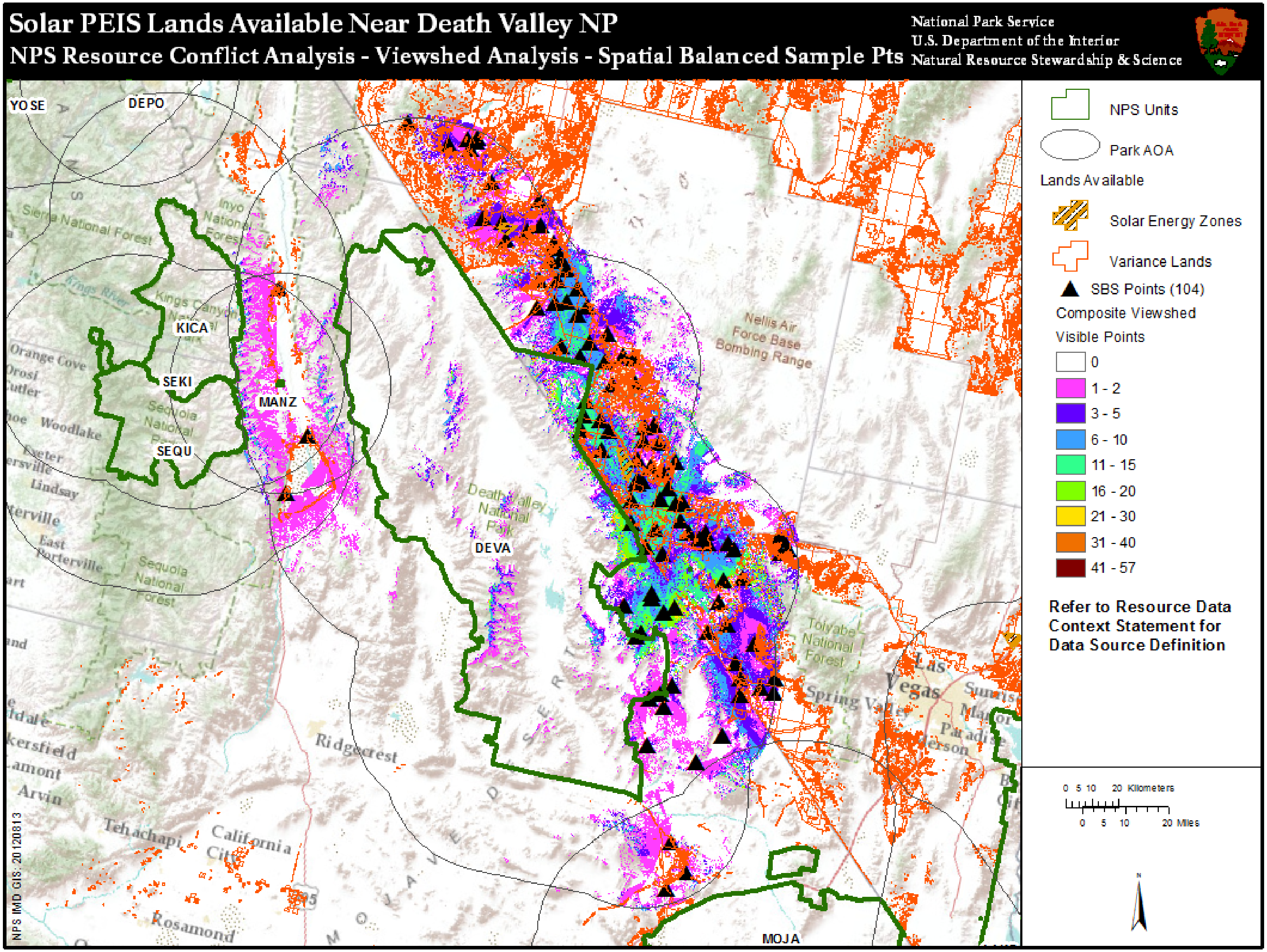

Solar PEIS Lands Available Near Death Valley NP
NPS Resource Conflict Analysis - Landscape Permeability
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Landscape Permeability
Low
Moderate
High
Refer to Resource Data Context Statement for Data Source Definition
0 5 10 20 Kilometers
0 5 10 20 Miles
YOSE
DEPO
KICA
MANZ
SEQU
DEVA
MOJA
LAKE
Sierra National Forest
Sequoia National Park
Sequoia National Forest
Nellis Air Force Range
Toiyabe National Forest
Exeter
Lindsay
Porterville
Tehachapi
California City
Rosamond
Arvin
Lamont
Spring V
Ridg
395
NPS IMD GIS: 20120814

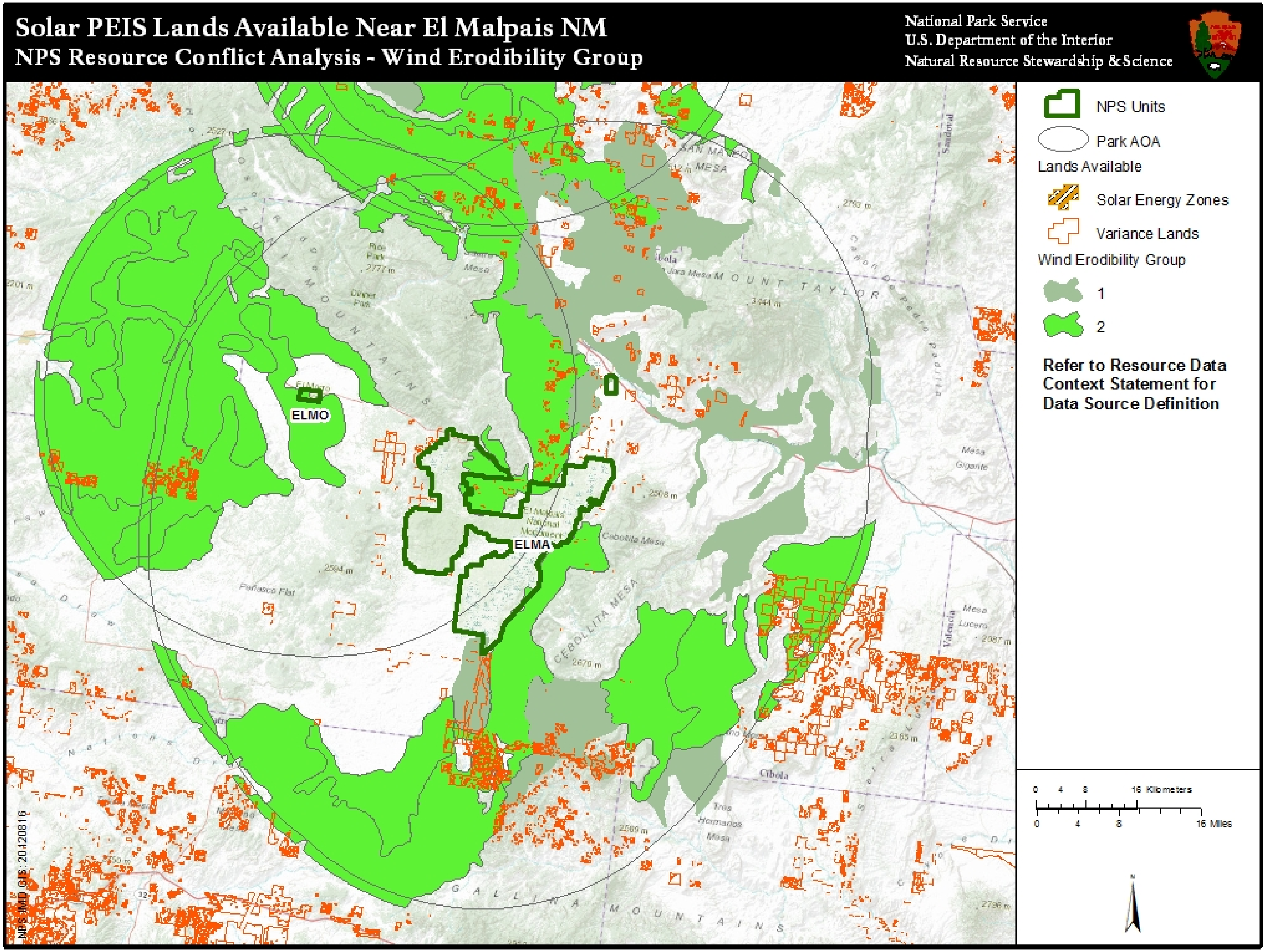

Solar PEIS Lands Available Near Death Valley NP
NPS Resource Conflict Analysis - Night Lights
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
YOSE
KICA
MANZ
SEQU
DEVA
MOJA
PARA
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Night Lights
Lighter
Darker
Refer to Resource Data Context Statement for Data Source Definition
0 5 10 20 Kilometers
0 5 10 20 Miles

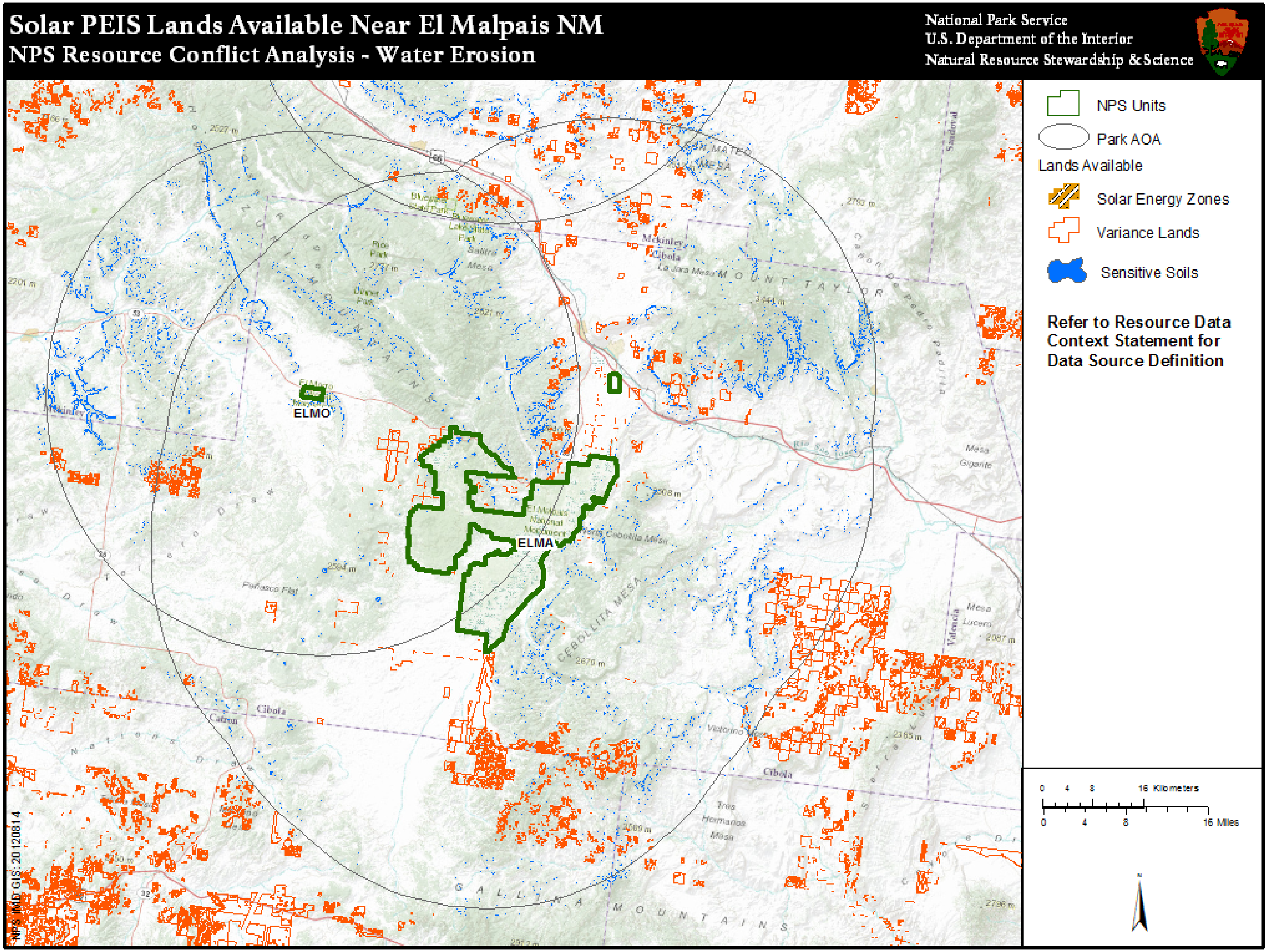


Solar PEIS Lands Available Near Death Valley NP
NPS Resource Conflict Analysis - Viewshed Analysis - Key Observation Points
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Key Observation Pts (31)
Composite Viewshed DEVA
Visible Points
0
1 - 2
3 - 5
6 - 10
11 - 14
Refer to Resource Data
Context Statement for
Data Source Definition
0 5 10 20 Kilometers
0 5 10 20 Miles
YOSE
DEPO
KICA
SEKI
SEQU
MANZ
DEVA
MOJA
Sierra National Forest
Kings Canyon National Park
Sequoia National Forest
Nellis Air Force Base Bombing Range
Toiyabe National Forest
Las Vegas
Spring Valley
Orange Cove
Woodlake
Lindsay
East Porterville
Bakersfield
Lamont
Arvin
Tehachapi
California City
Rosamond
NPS IMD GIS: 20120813

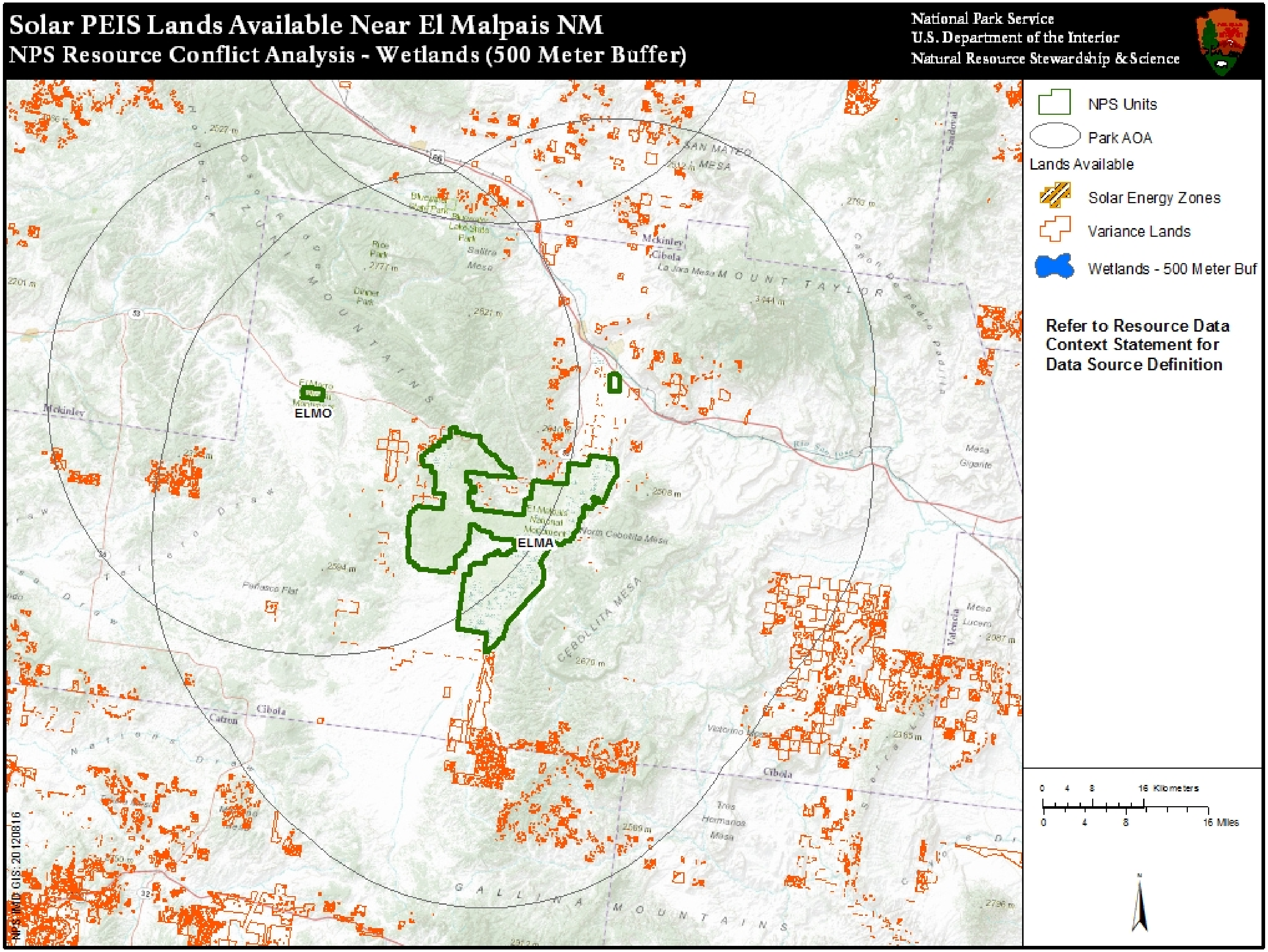
Viewshed – Spatial Balanced Sample

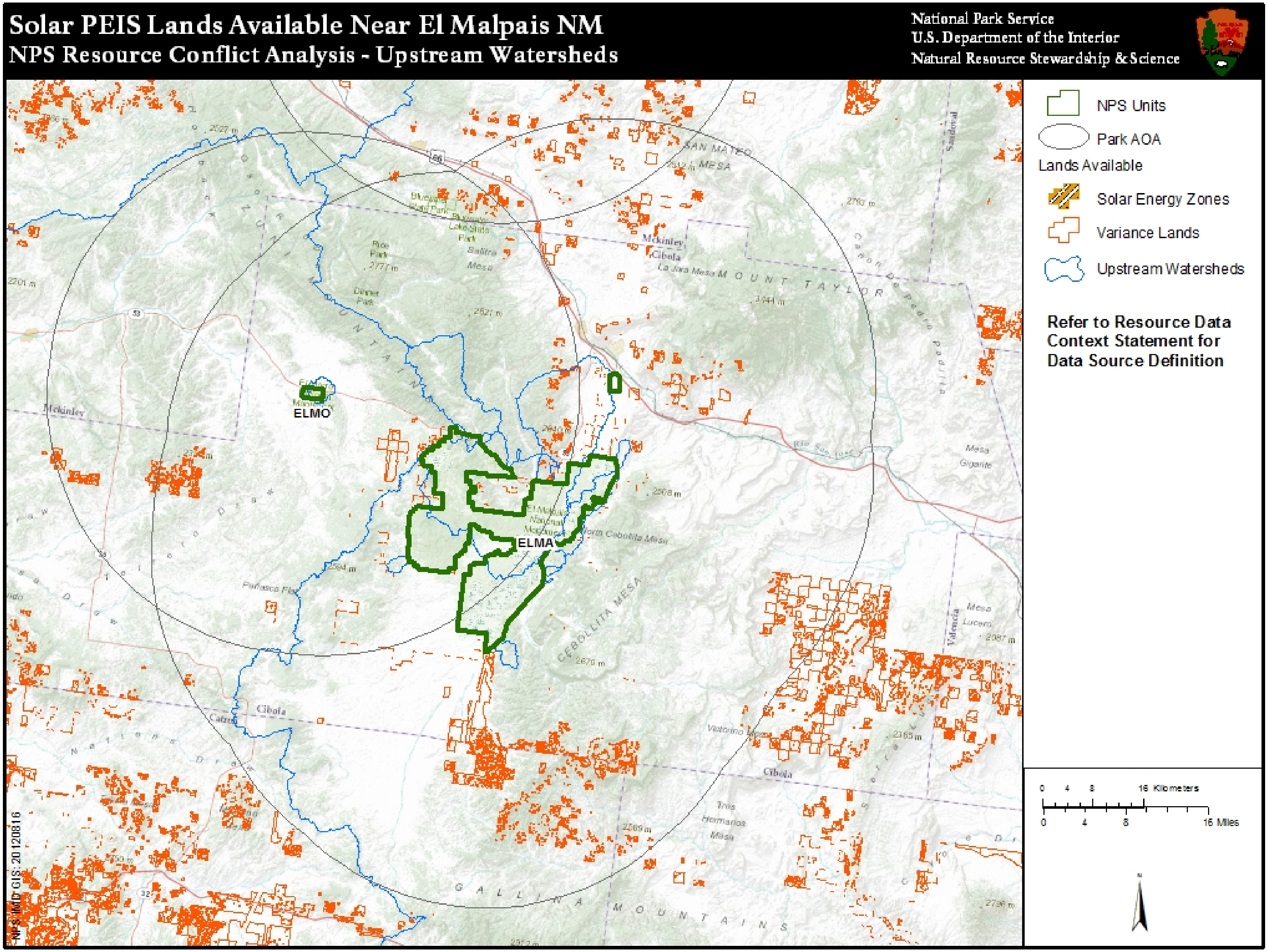



Solar PEIS Lands Available Near El Malpais NM
NPS Resource Conflict Analysis - Wind Erodibility Group
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Wind Erodibility Group
1
2
Refer to Resource Data Context Statement for Data Source Definition
ELMO
ELMA
MOUNT TAYLOR
ZUNI MOUNTAINS
CEBOLLITA MESA
GALLINA MOUNTAINS
0 4 8 16 Kilometers
0 4 8 16 Miles
NPS IMD GIS: 20120816

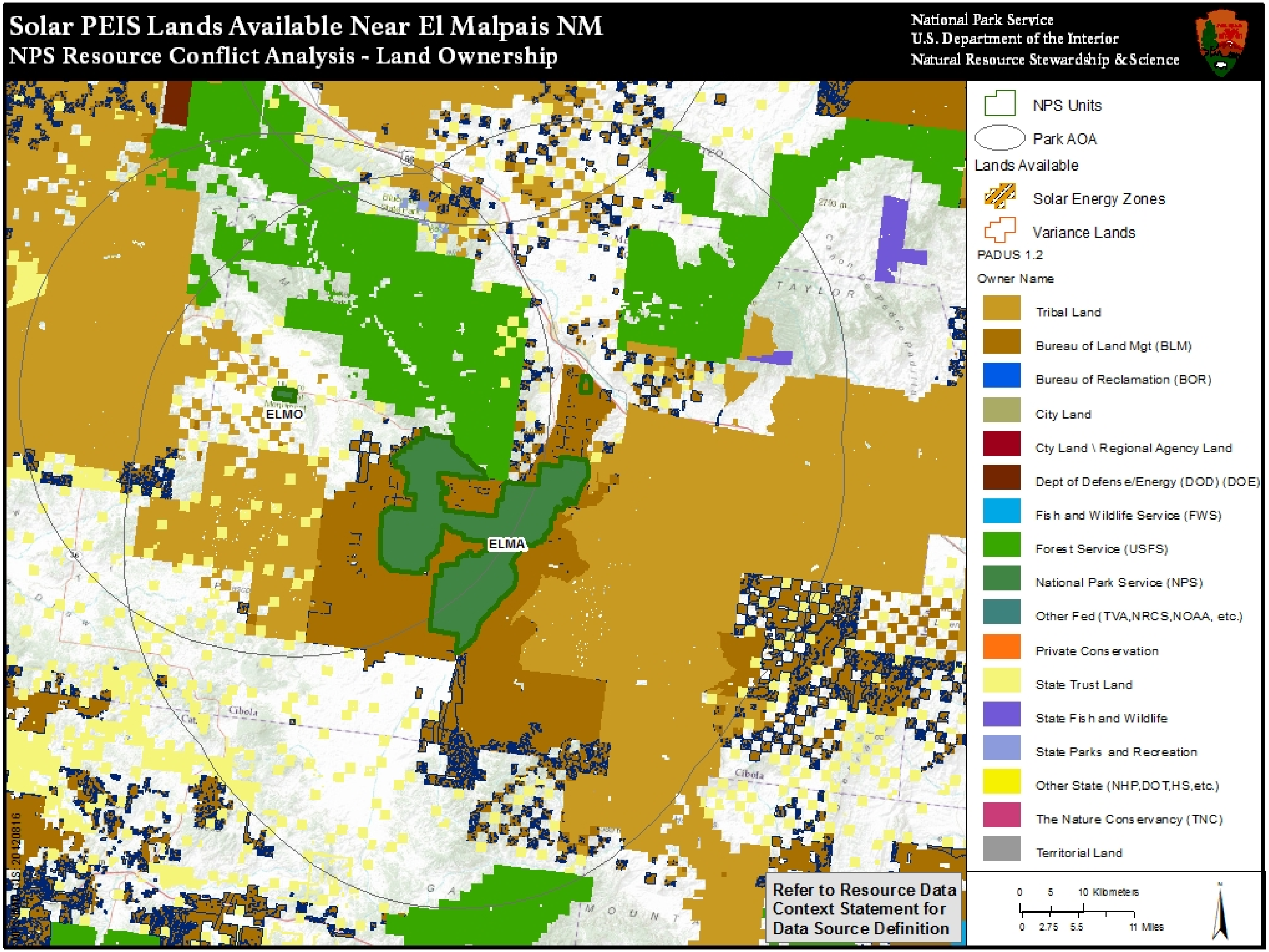


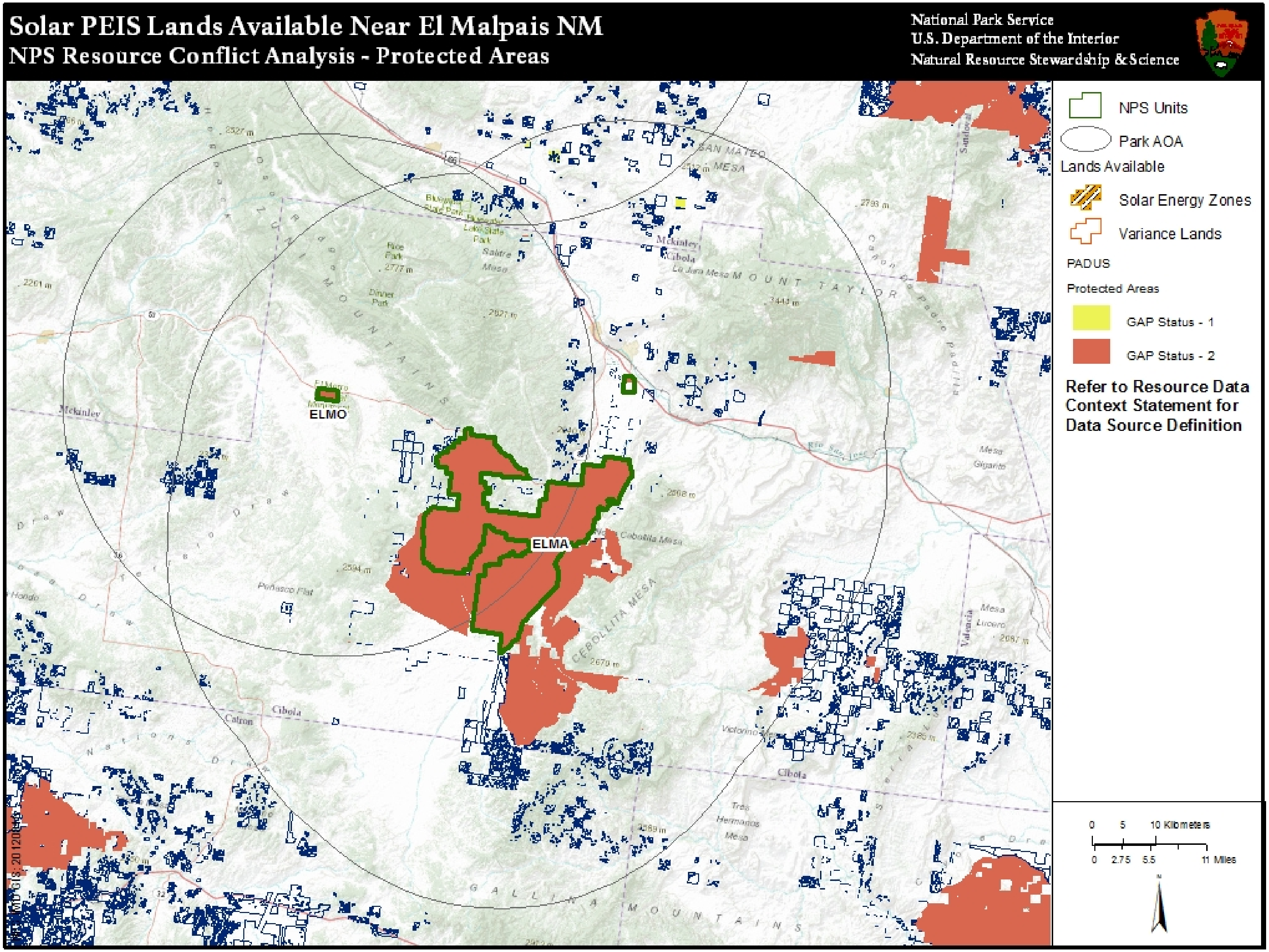
Solar PEIS Lands Available Near El Malpais NM
NPS Resource Conflict Analysis - Water Erosion
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Sensitive Soils
Refer to Resource Data Context Statement for Data Source Definition
ELMO
ELMA
0 4 8 16 Kilometers
0 4 8 16 Miles
NPS IMD GIS 20120814

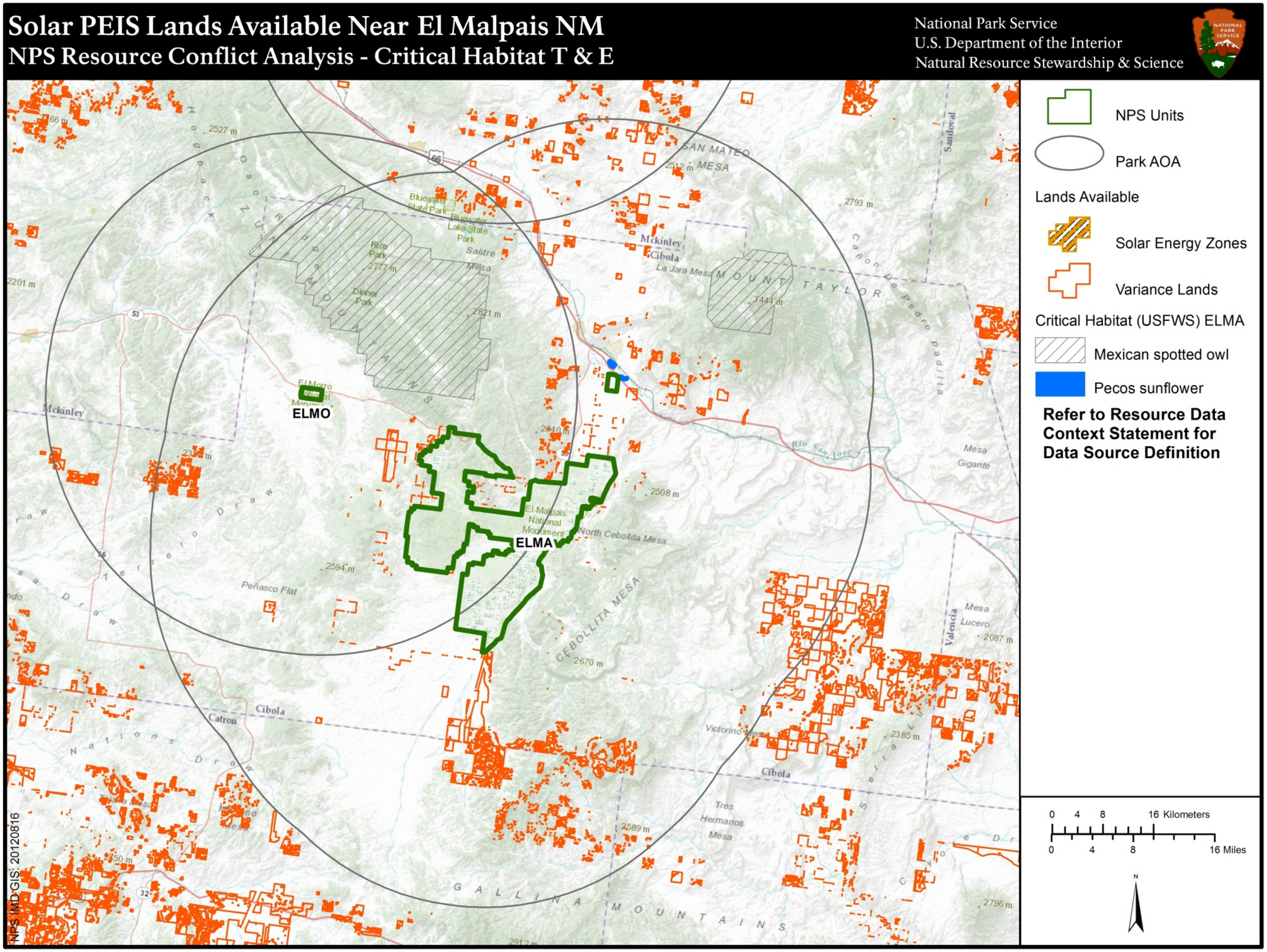

Solar PEIS Lands Available Near El Malpais NM
NPS Resource Conflict Analysis - Wetlands (500 Meter Buffer)
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Wetlands - 500 Meter Buf
Refer to Resource Data Context Statement for Data Source Definition
0 4 8 16 Kilometers
0 4 8 16 Miles
ELMO
ELMA
NPS IMD GIS: 20120816

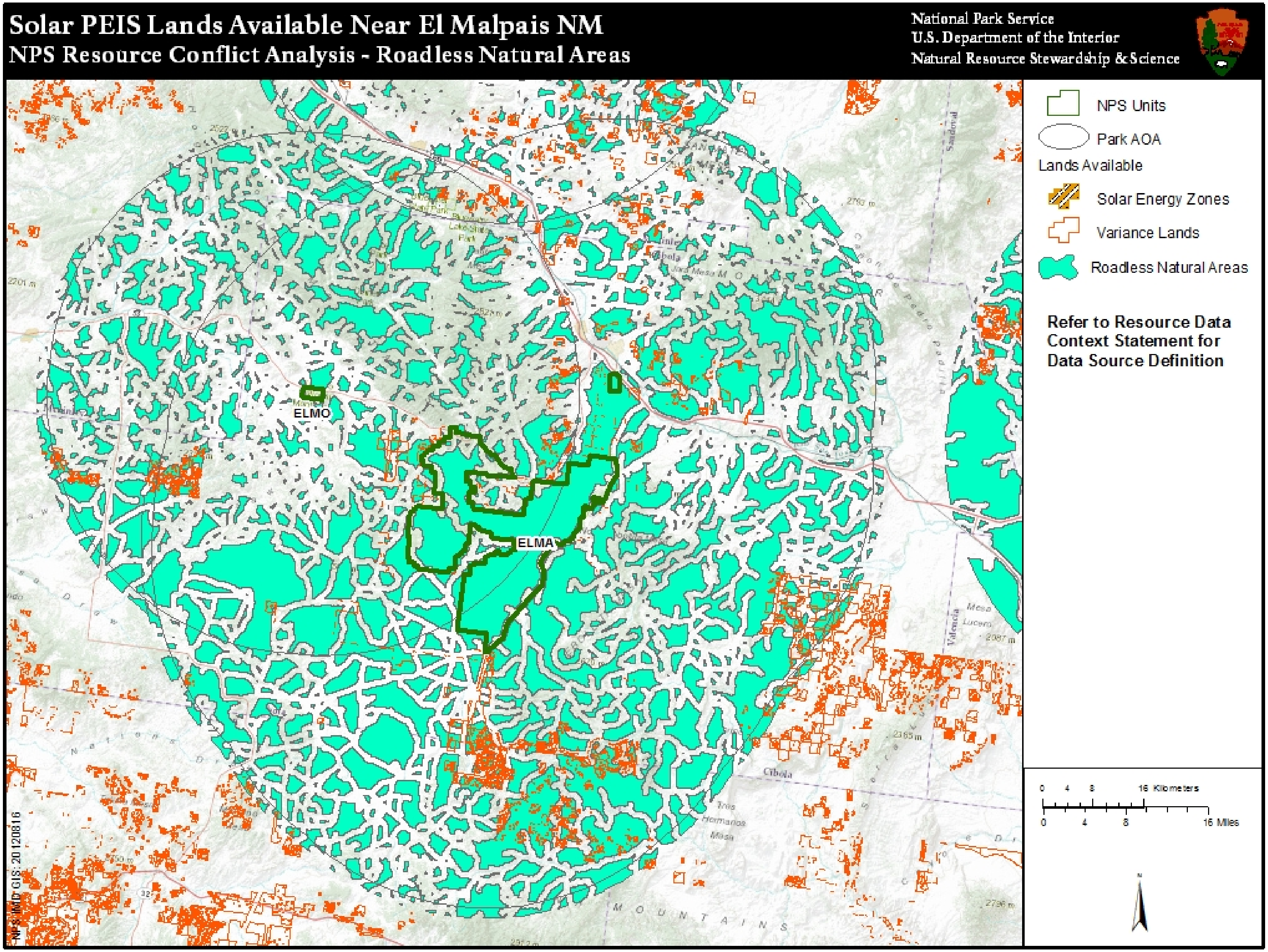

Solar PEIS Lands Available Near El Malpais NM
NPS Resource Conflict Analysis - Upstream Watersheds
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Upstream Watersheds
Refer to Resource Data Context Statement for Data Source Definition
0 4 8 16 Kilometers
0 4 8 16 Miles
ELMO
ELMA
NPS IMD GIS: 20120816

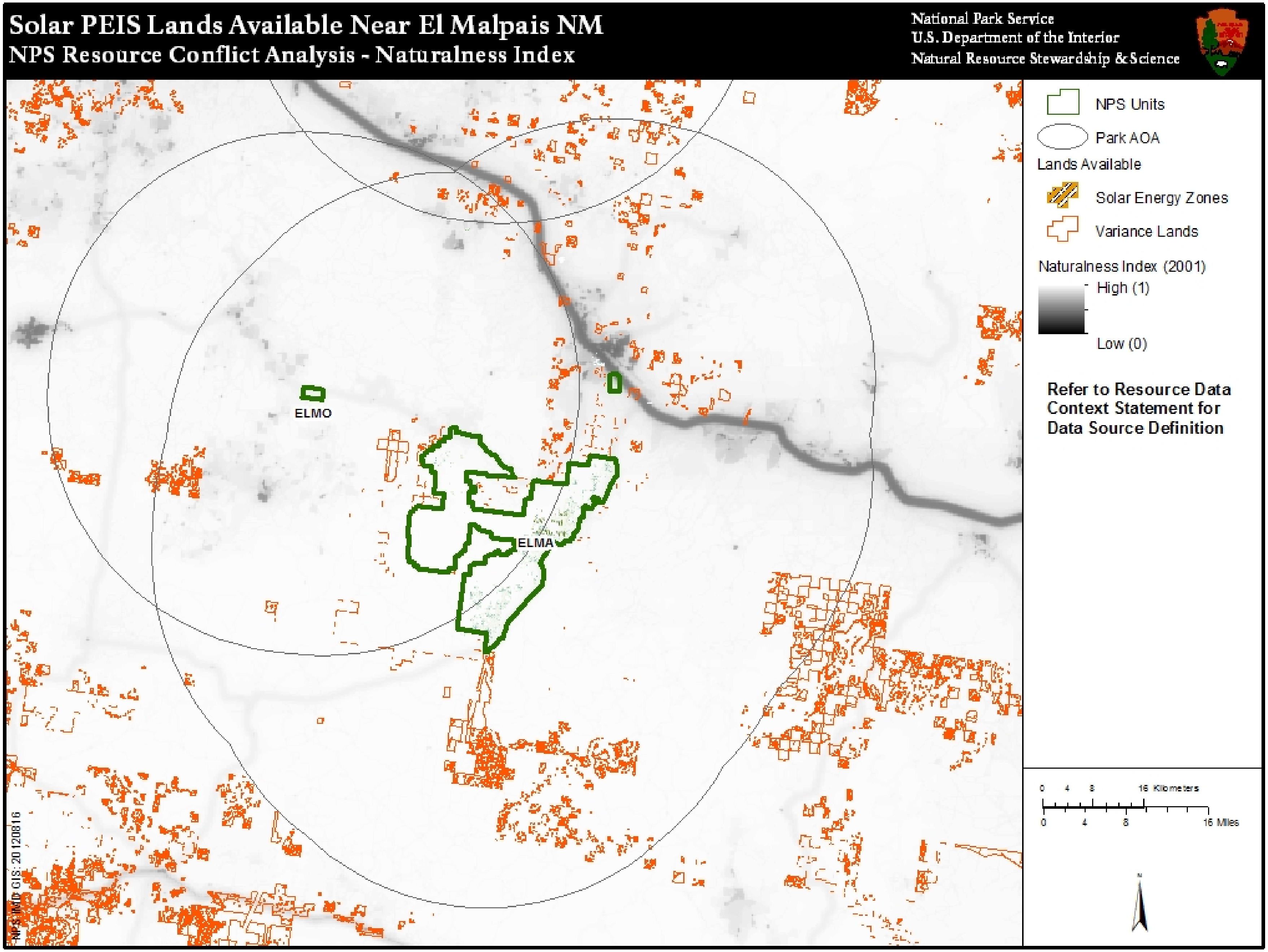
Land Ownership

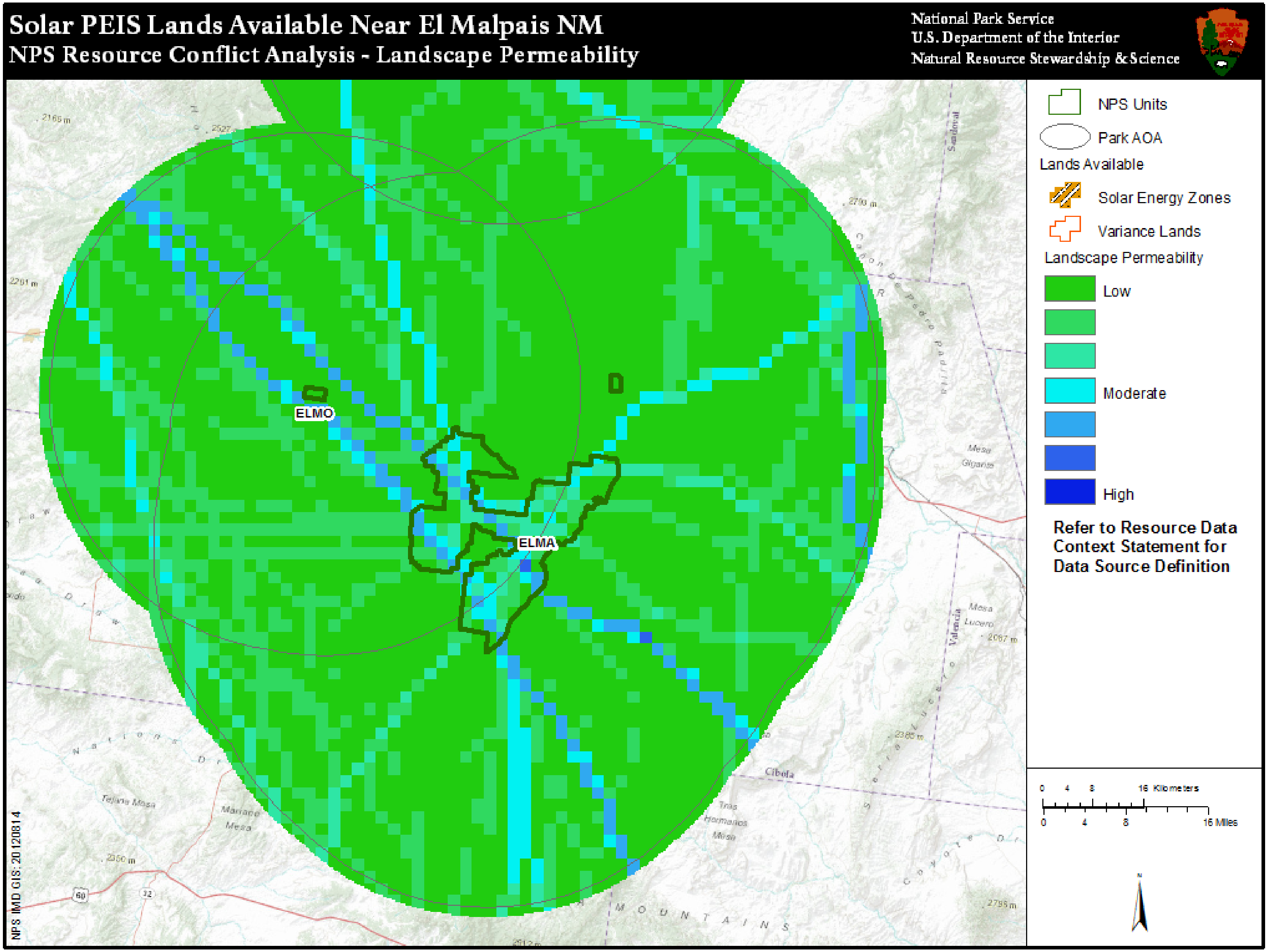



Solar PEIS Lands Available Near El Malpais NM
NPS Resource Conflict Analysis - Protected Areas
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
PADUS
Protected Areas
GAP Status - 1
GAP Status - 2
Refer to Resource Data Context Statement for Data Source Definition
0 5 10 Kilometers
0 2.75 5.5 11 Miles
ELMO
ELMA
ZUNI MOUNTAINS
MOUNT TAYLOR
CEBOLLITA MESA
GALLINA MOUNTAINS
SAN MATEO MESA

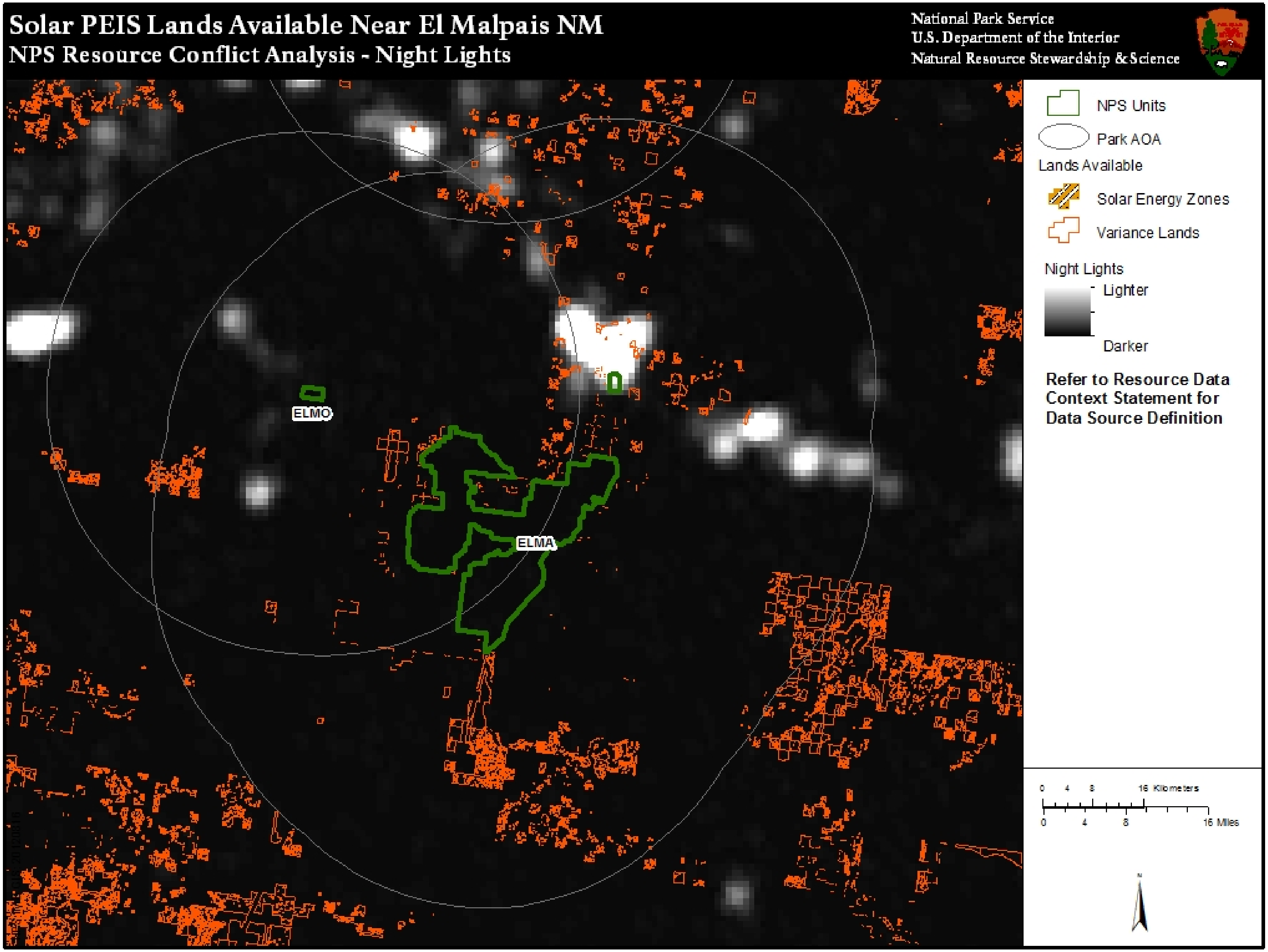

Solar PEIS Lands Available Near El Malpais NM
NPS Resource Conflict Analysis - Critical Habitat T & E
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Critical Habitat (USFWS) ELMA
Mexican spotted owl
Pecos sunflower
Refer to Resource Data Context Statement for Data Source Definition
0 4 8 16 Kilometers
0 4 8 16 Miles
ELMO
ELMA
El Malpais National Monument
NPS IMD GIS: 20120816

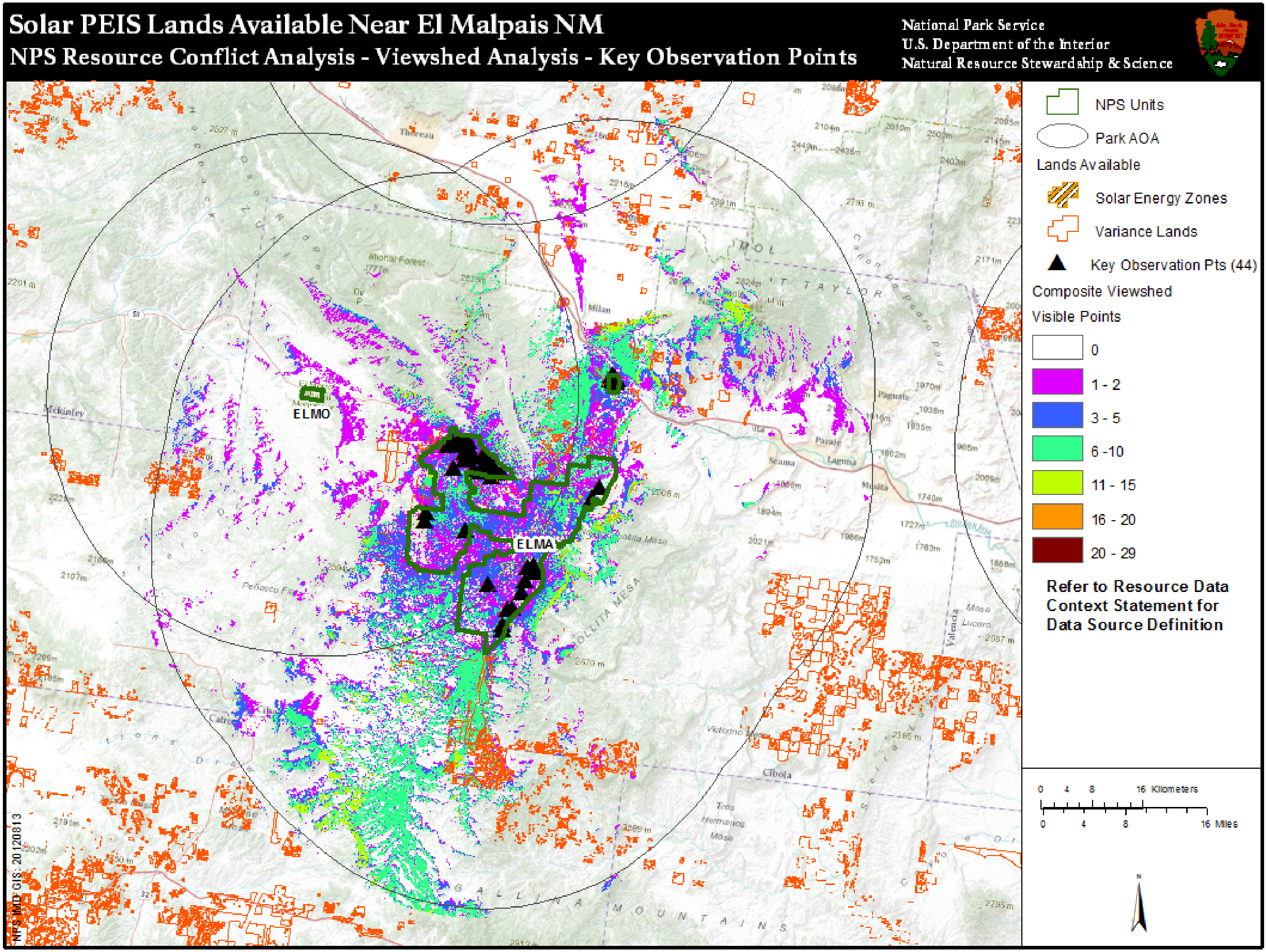

Solar PEIS Lands Available Near El Malpais NM
NPS Resource Conflict Analysis - Roadless Natural Areas
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Roadless Natural Areas
Refer to Resource Data Context Statement for Data Source Definition
ELMO
ELMA
0 4 8 16 Kilometers
0 4 8 16 Miles
NPS IMD GIS: 20120816

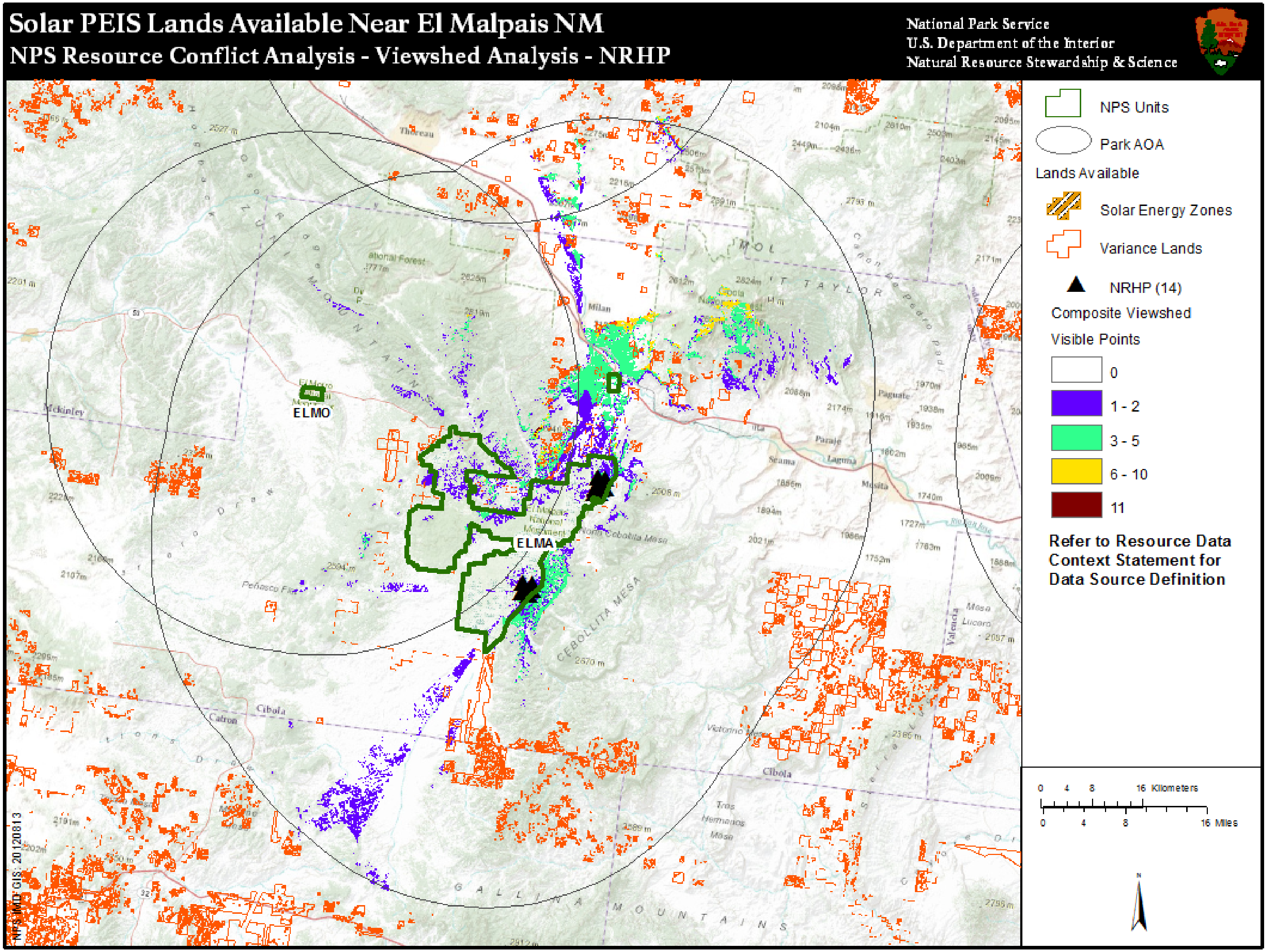

Solar PEIS Lands Available Near El Malpais NM
NPS Resource Conflict Analysis - Naturalness Index
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Naturalness Index (2001)
High (1)
Low (0)
Refer to Resource Data Context Statement for Data Source Definition
ELMO
ELMA
0 4 8 16 Kilometers
0 4 8 16 Miles
NPS IMD GIS: 20120816



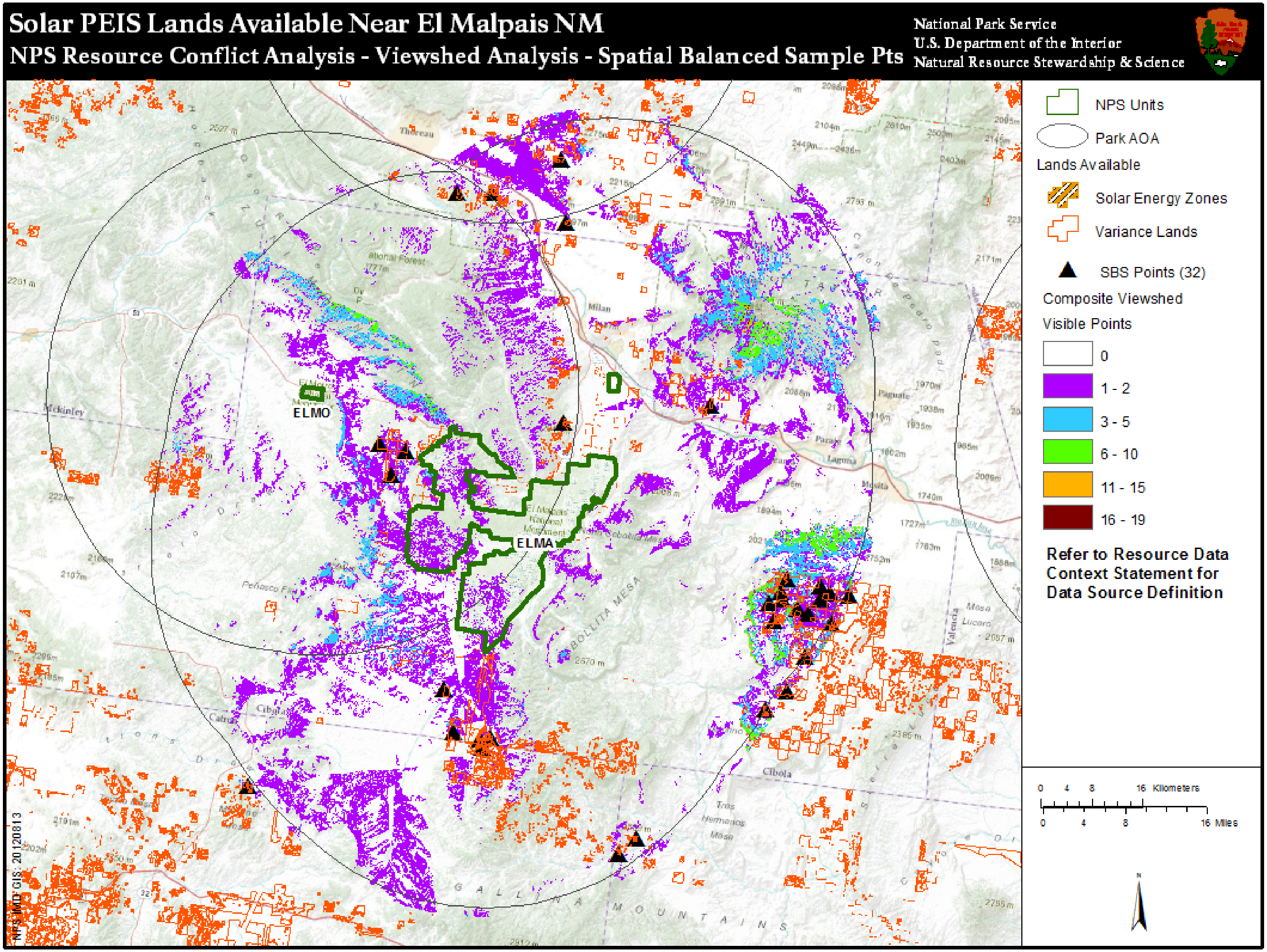
Solar PEIS Lands Available Near El Malpais NM
NPS Resource Conflict Analysis - Landscape Permeability
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Landscape Permeability
Low
Moderate
High
Refer to Resource Data Context Statement for Data Source Definition
0 4 8 16 Kilometers
0 4 8 16 Miles
ELMO
ELMA
NPS IMD GIS: 20120814


Solar PEIS Lands Available Near El Malpais NM
NPS Resource Conflict Analysis - Night Lights
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
ELMO
ELMA
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Night Lights
Lighter
Darker
Refer to Resource Data Context Statement for Data Source Definition
0 4 8 16 Kilometers
0 4 8 16 Miles

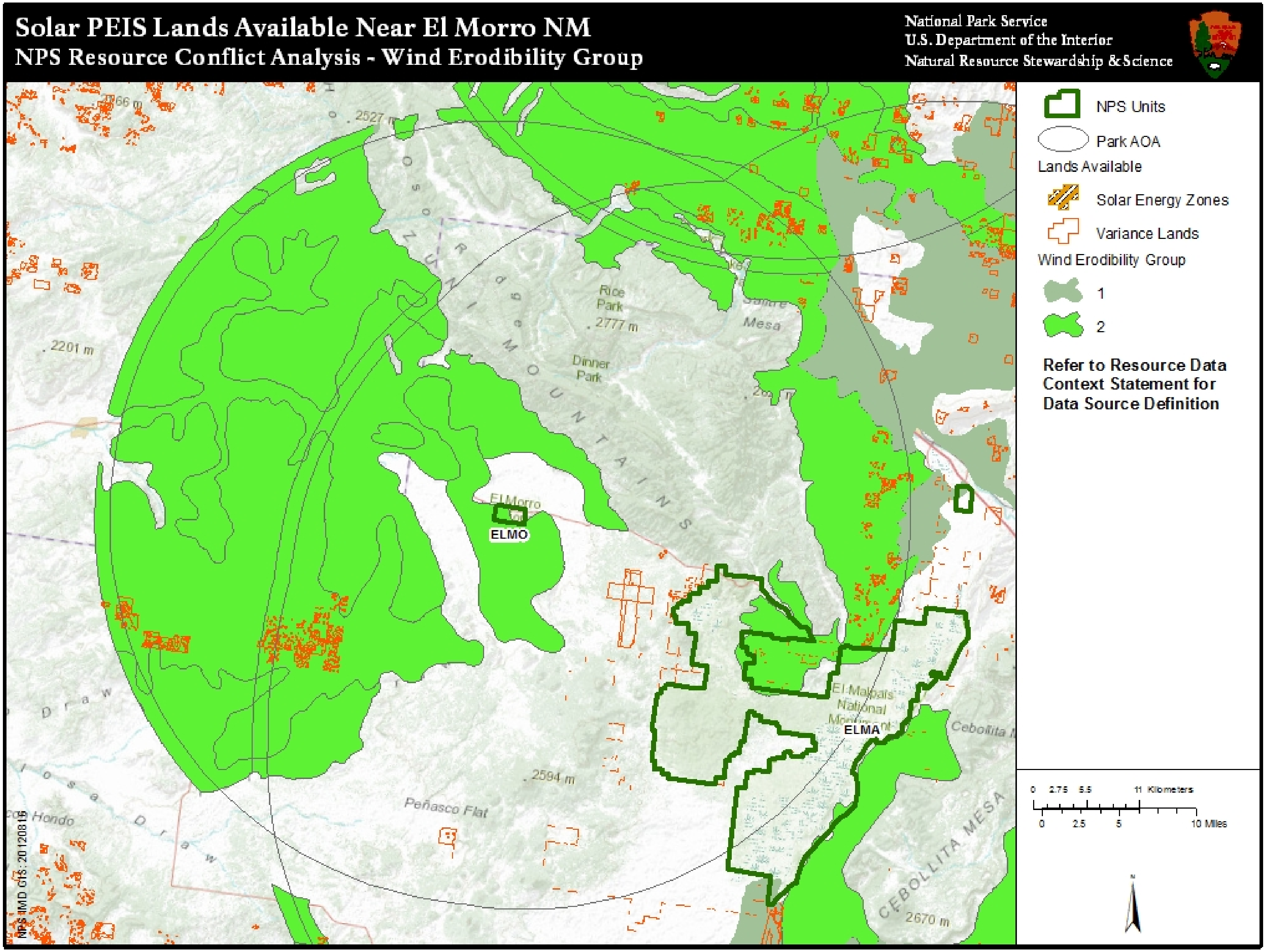

Solar PEIS Lands Available Near El Malpais NM
NPS Resource Conflict Analysis - Viewshed Analysis - Key Observation Points
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Key Observation Pts (44)
Composite Viewshed
Visible Points
0
1 - 2
3 - 5
6 -10
11 - 15
16 - 20
20 - 29
Refer to Resource Data Context Statement for Data Source Definition
0 4 8 16 Kilometers
0 4 8 16 Miles
ELMO
ELMA
NPS IMD GIS 20120813

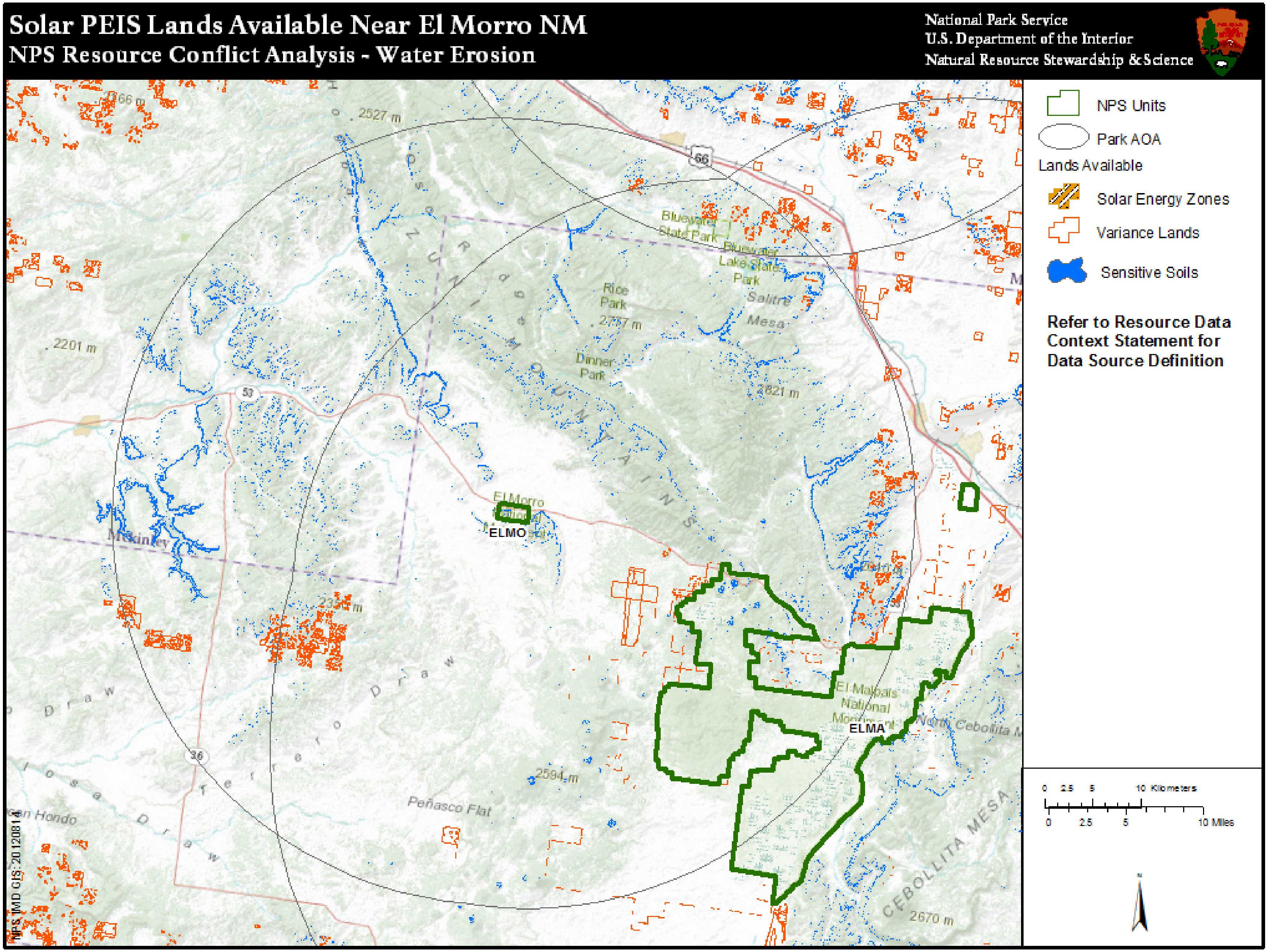

Solar PEIS Lands Available Near El Malpais NM
NPS Resource Conflict Analysis - Viewshed Analysis - NRHP
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
NRHP (14)
Composite Viewshed
Visible Points
0
1 - 2
3 - 5
6 - 10
11
Refer to Resource Data Context Statement for Data Source Definition
ELMO
ELMA
CEBOLLITA MESA
0 4 8 16 Kilometers
0 4 8 16 Miles
NPS IMD GIS 20120813

Viewshed – Spatial Balanced Sample

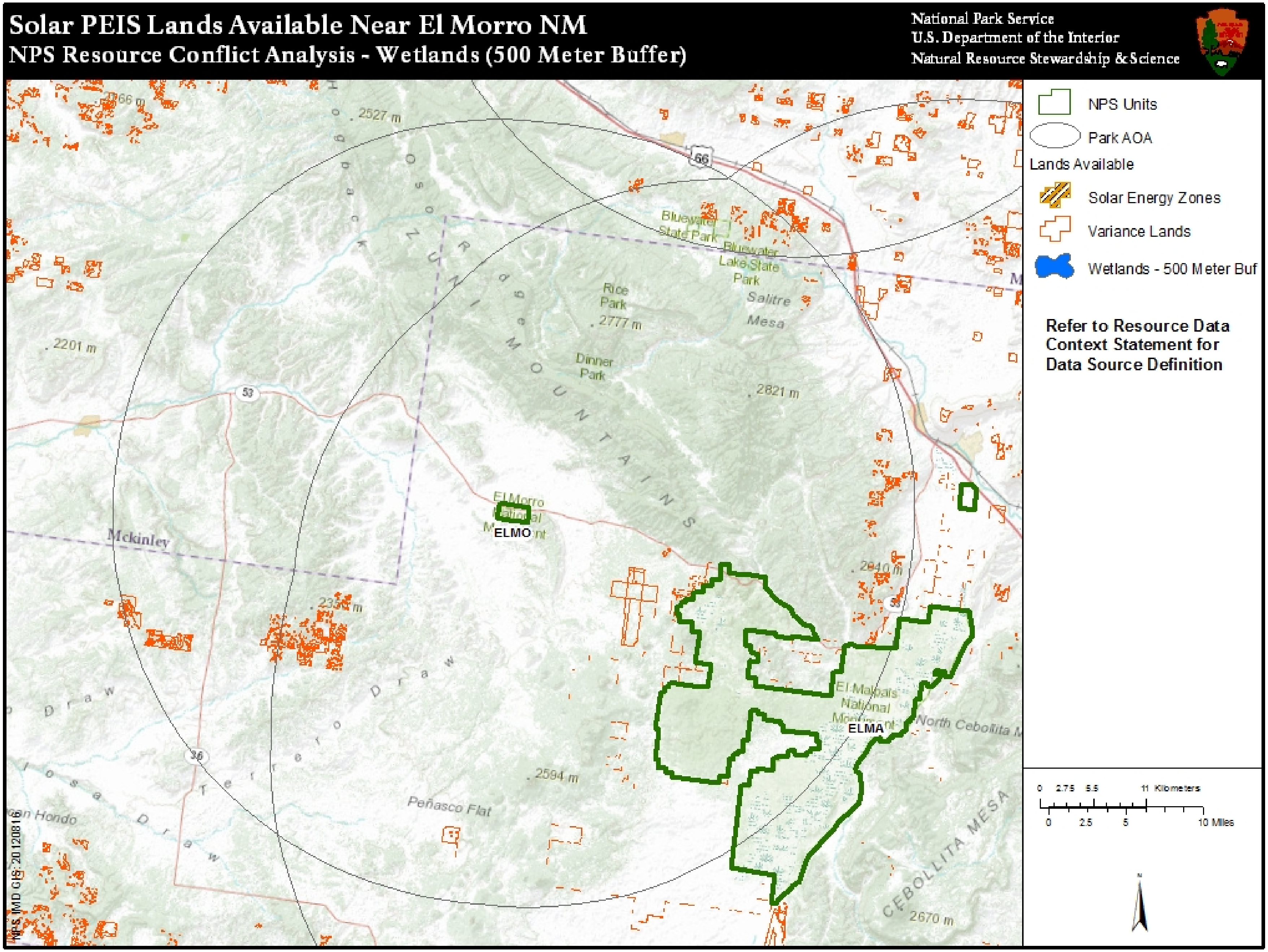


El Morro National Monument
Wind Erodibility Group

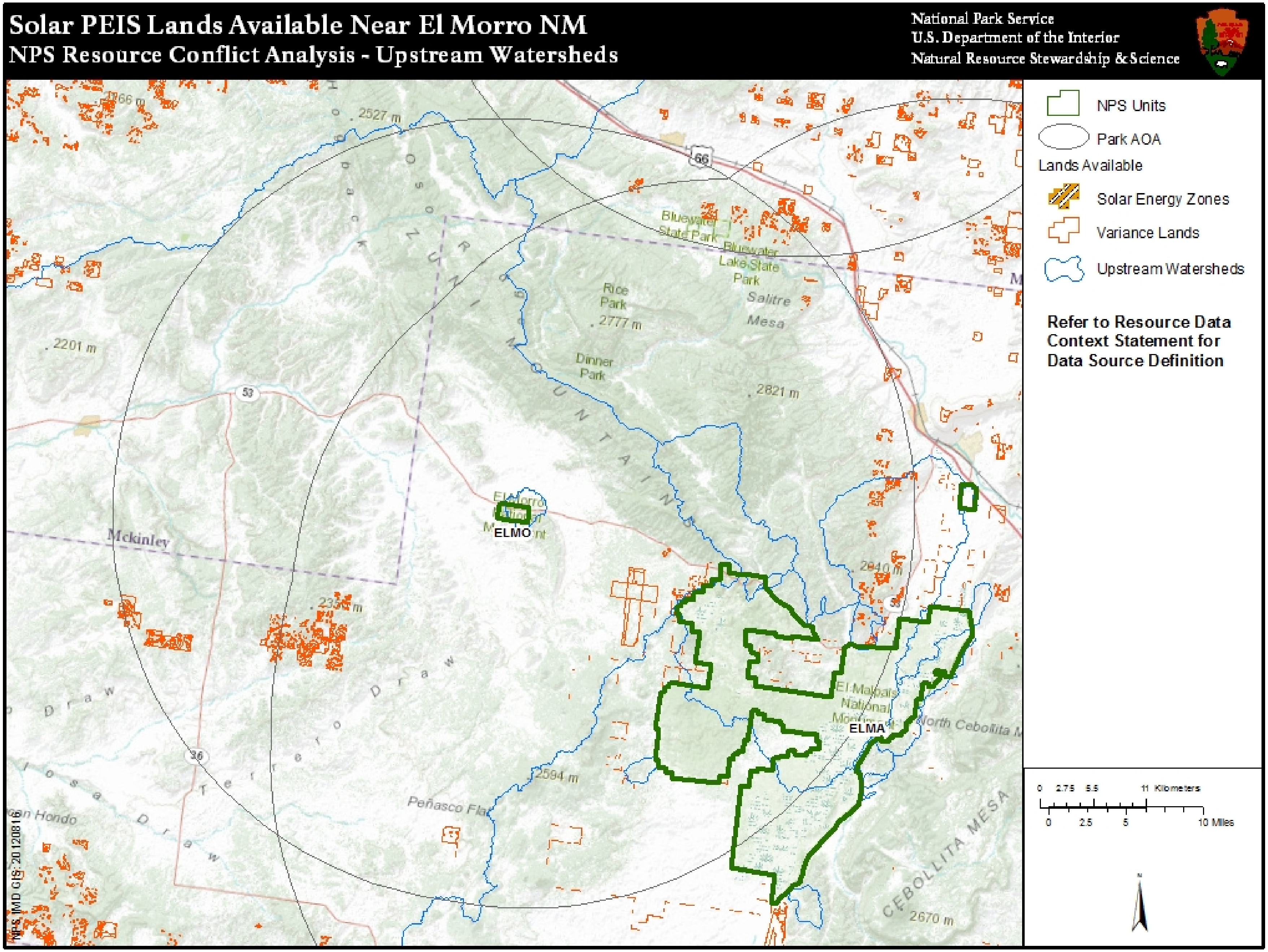



Solar PEIS Lands Available Near El Morro NM
NPS Resource Conflict Analysis - Water Erosion
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Sensitive Soils
Refer to Resource Data Context Statement for Data Source Definition
El Morro
ELMO
El Malpais National Monument
ELMA
Bluewater State Park
Bluewater Lake State Park
Rice Park
Dinner Park
Salitre Mesa
Zuni Mountains
Peñasco Flat
Cebollita Mesa
2527 m
2201 m
2777 m
2821 m
2594 m
2670 m
0 2.5 5 10 Kilometers
0 2.5 5 10 Miles
NPS IMD GIS: 20120814

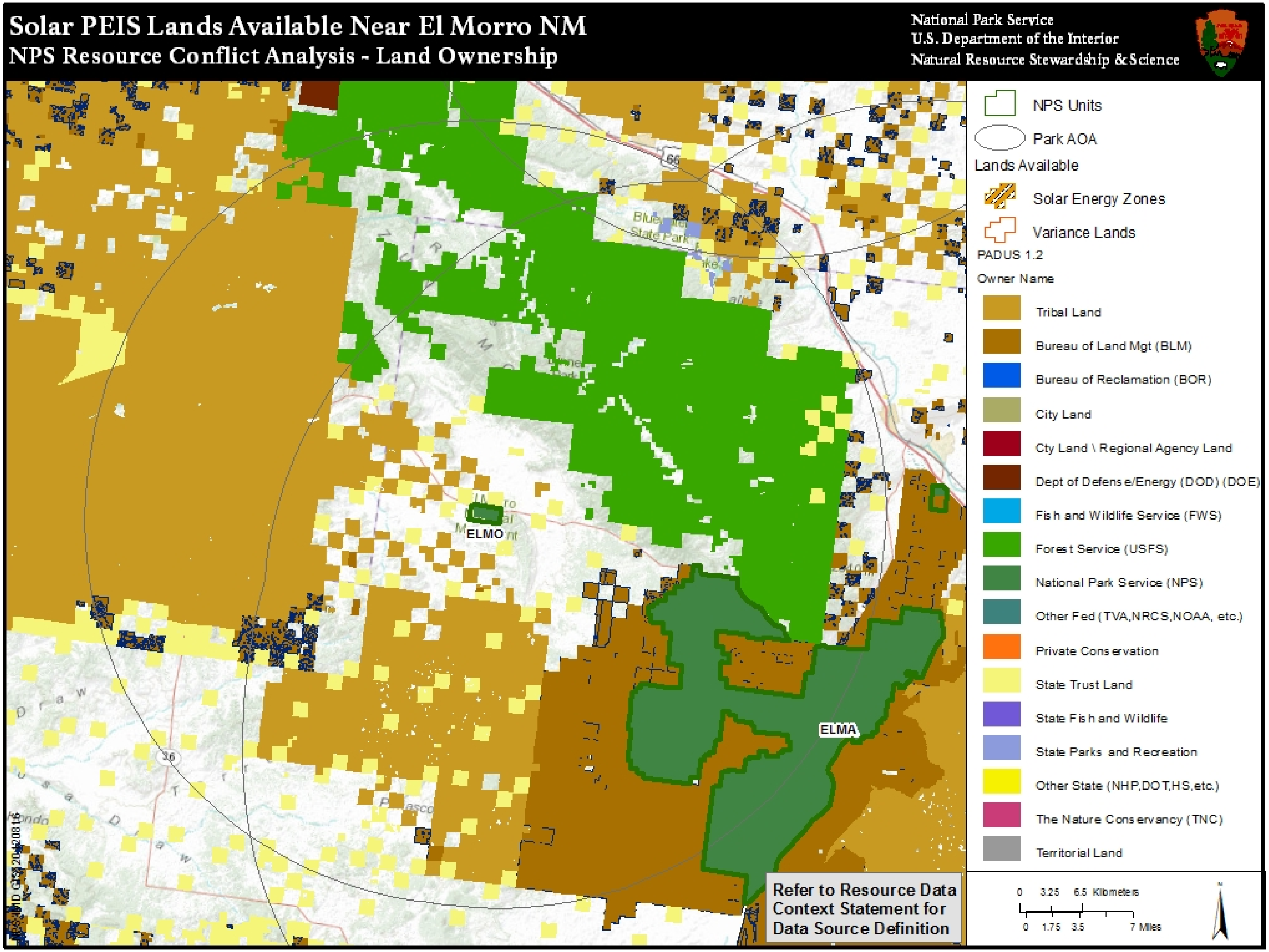
Wetlands

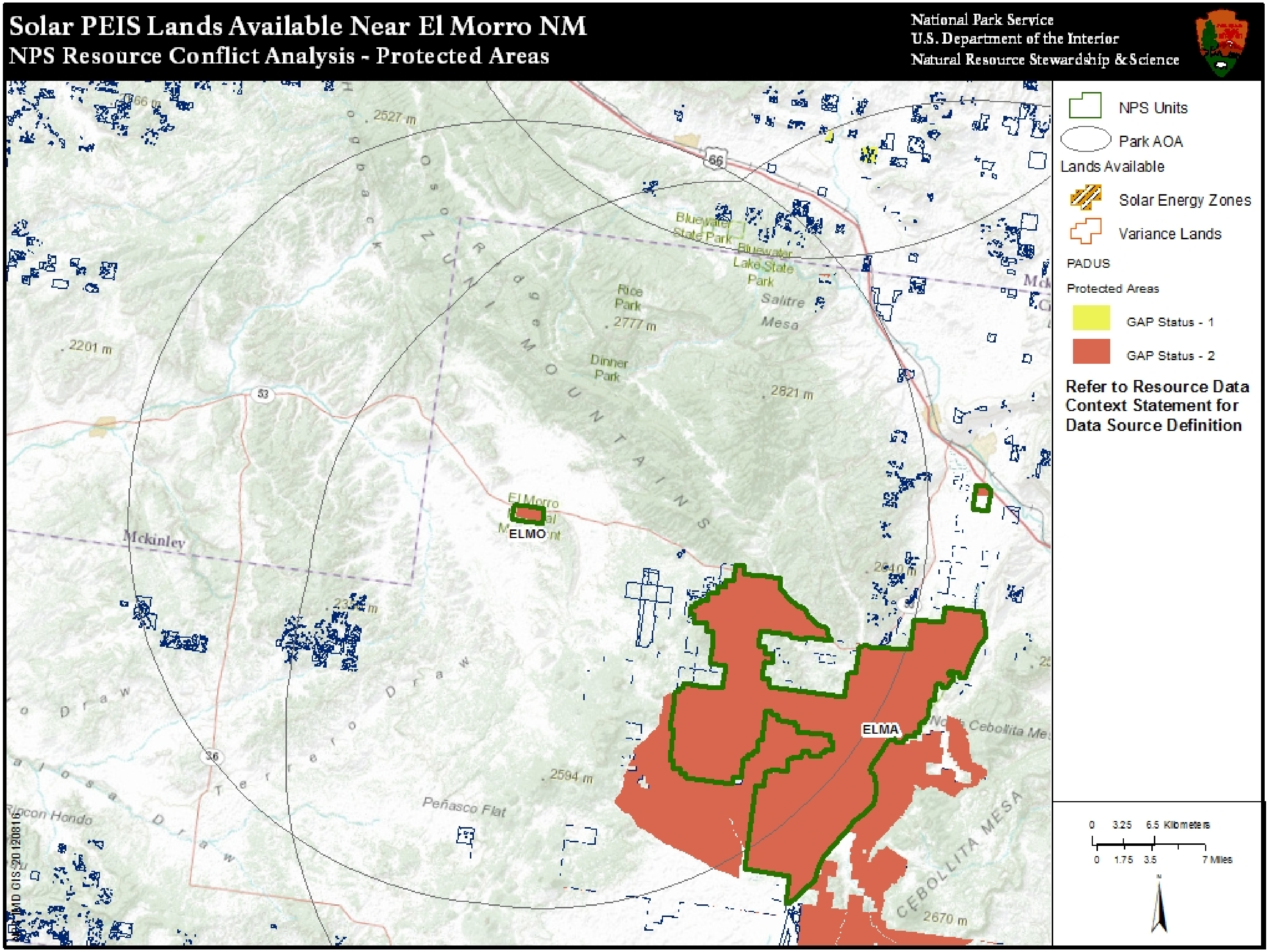

Solar PEIS Lands Available Near El Morro NM
NPS Resource Conflict Analysis - Wetlands (500 Meter Buffer)
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Wetlands - 500 Meter Buf
Refer to Resource Data Context Statement for Data Source Definition
0 2.75 5.5 11 Kilometers
0 2.5 5 10 Miles
El Morro National Monument
ELMO
El Malpais National Monument
ELMA
Bluewater State Park
Bluewater Lake State Park
Salitre Mesa
Rice Park
Dinner Park
ZUNI MOUNTAINS
Mckinley
Peñasco Flat
North Cebolita
CEBOLLITA MESA
2527 m
2777 m
2201 m
2821 m
2840 m
2594 m
2670 m
NPS IMD GIS: 20120816

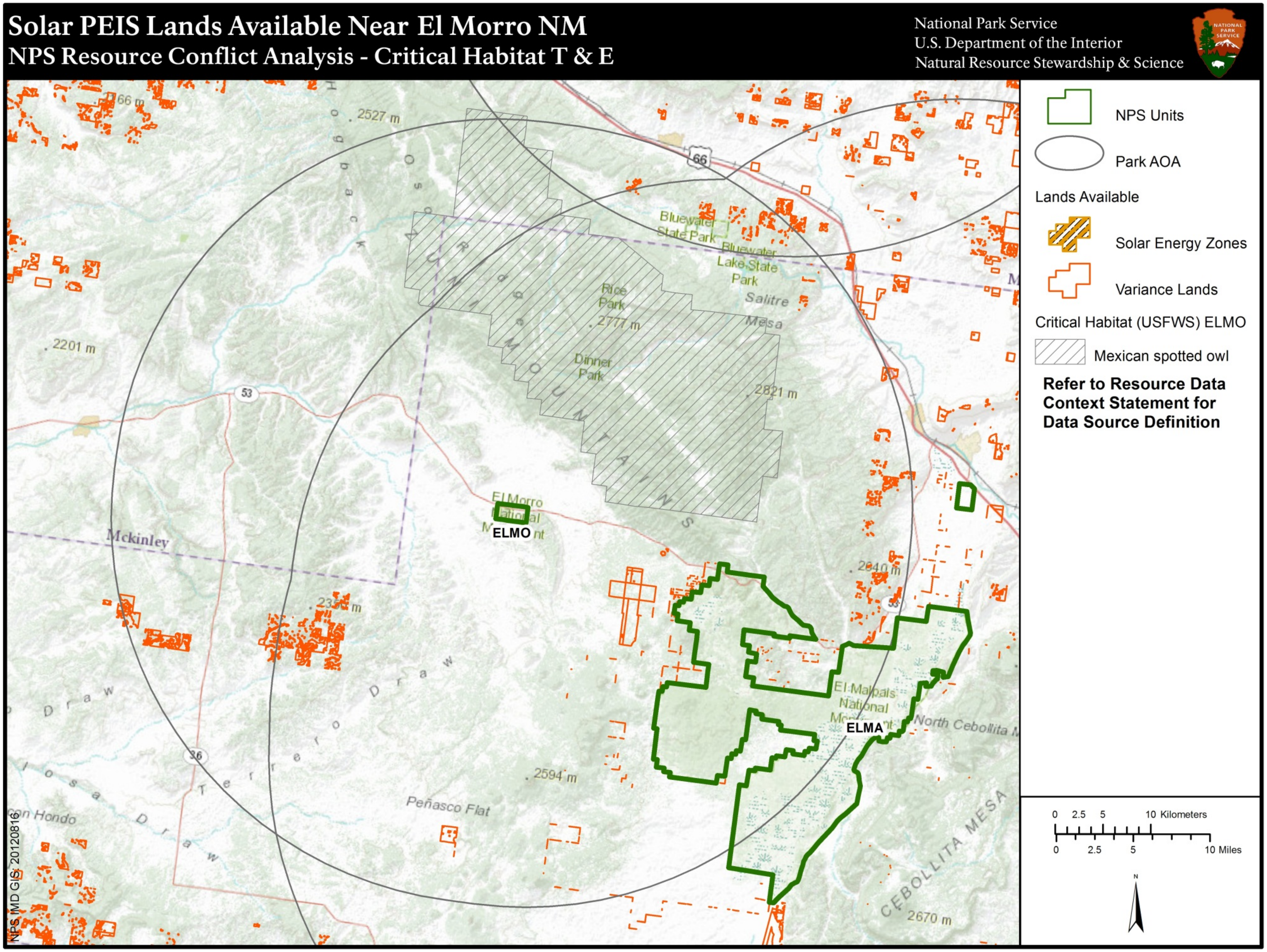
Upstream Watershed

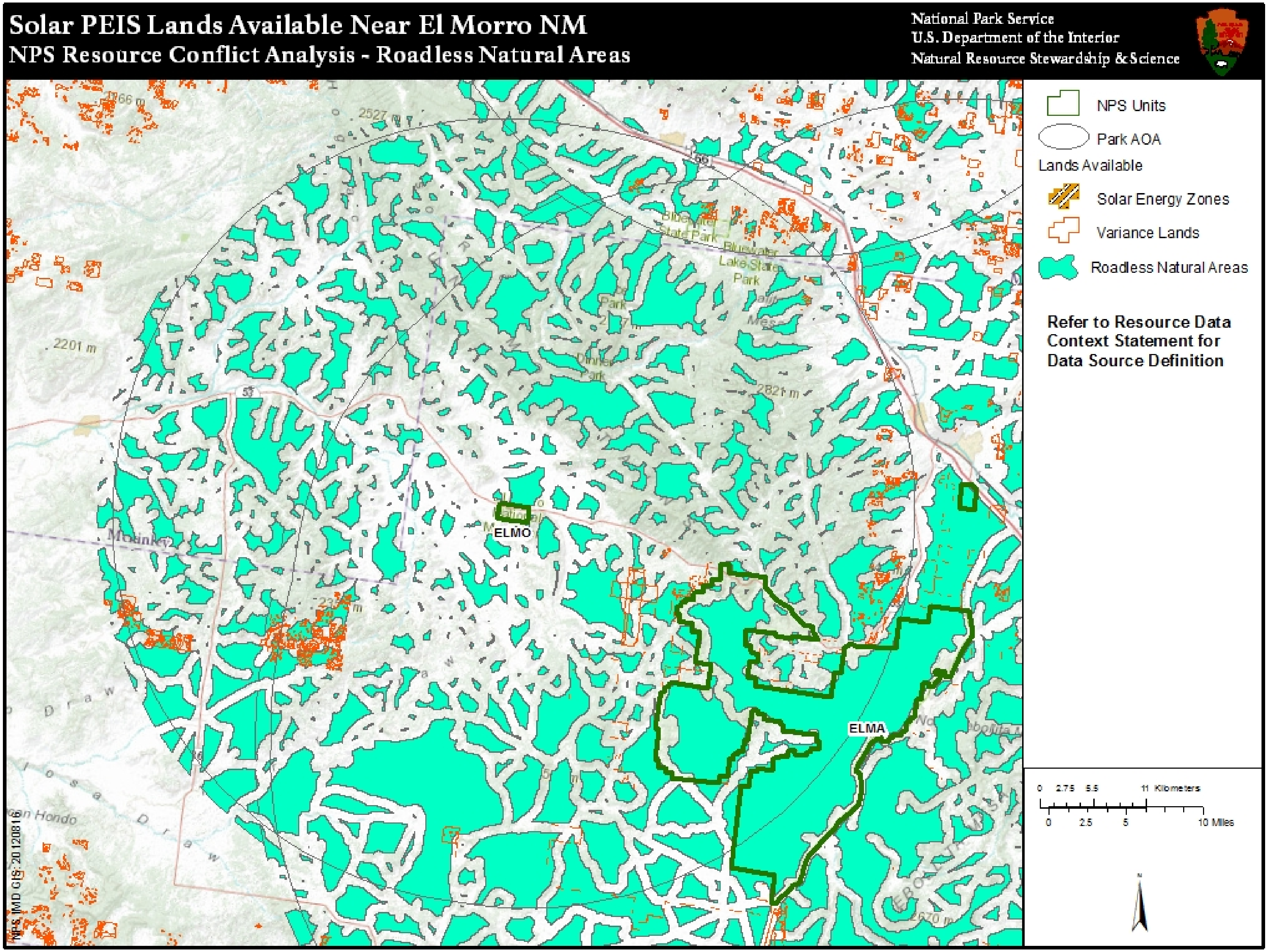


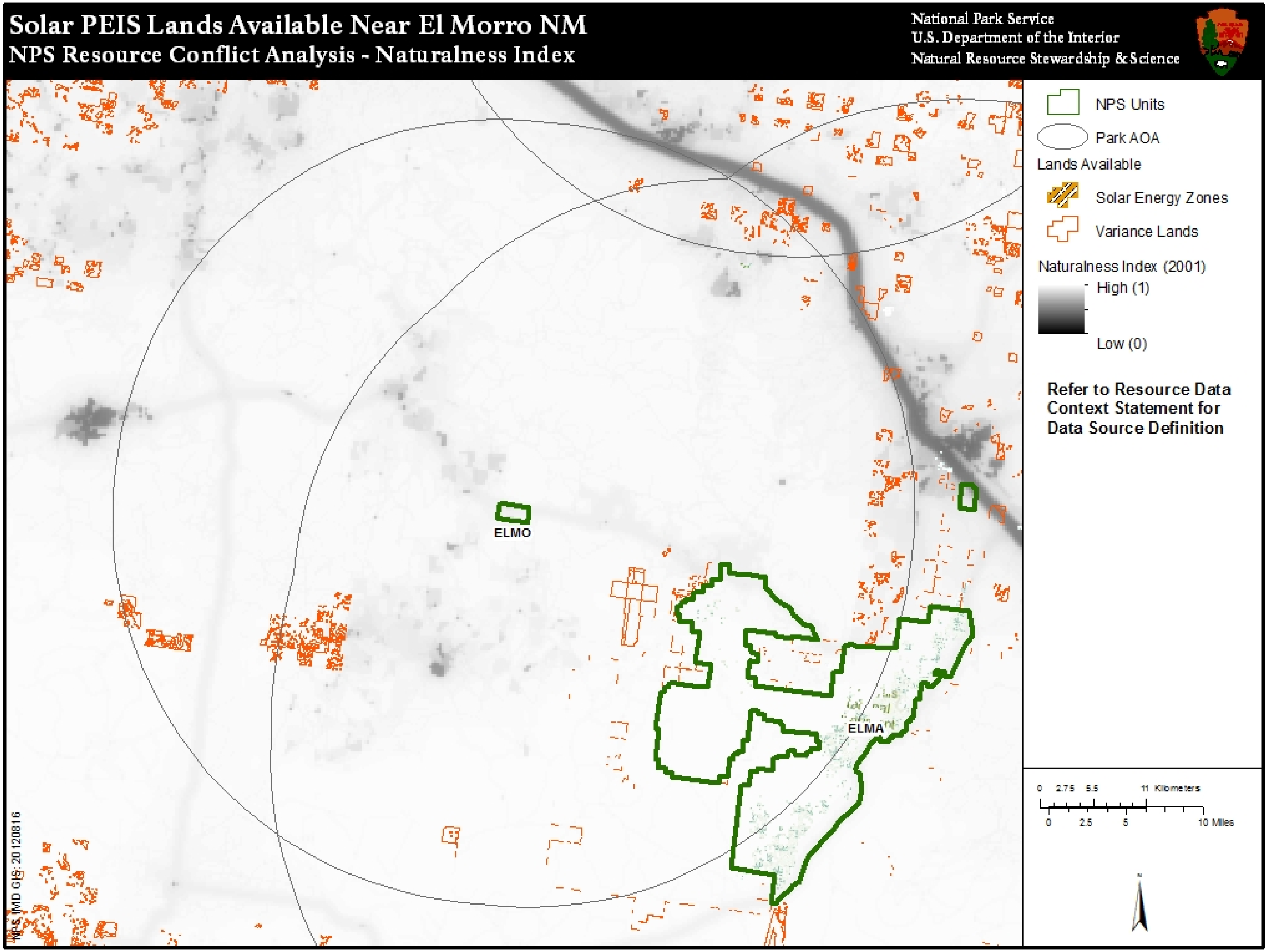
Land Ownership

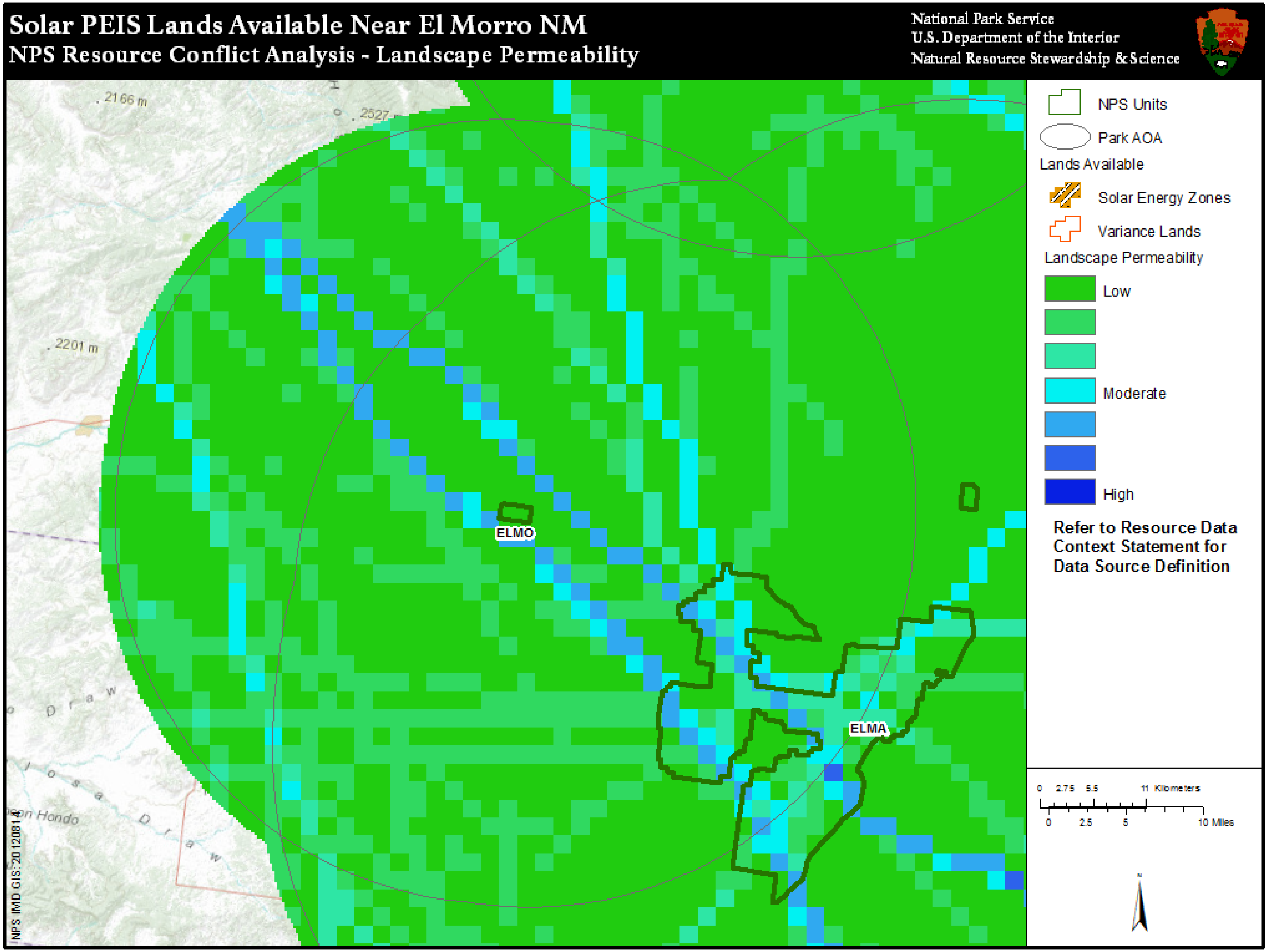



Solar PEIS Lands Available Near El Morro NM
NPS Resource Conflict Analysis - Protected Areas
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
PADUS
Protected Areas
GAP Status - 1
GAP Status - 2
Refer to Resource Data Context Statement for Data Source Definition
0 3.25 6.5 Kilometers
0 1.75 3.5 7 Miles
ELMO
ELMA
El Morro
Mckinley
ZUNI MOUNTAINS
Bluewater State Park
Bluewater Lake State Park
Rice Park
Dinner Park
Salitre Mesa
Peñasco Flat
Rincon Hondo
CEBOLLITA MESA
2527 m
2777 m
2201 m
2821 m
2594 m
2670 m
66
53
36

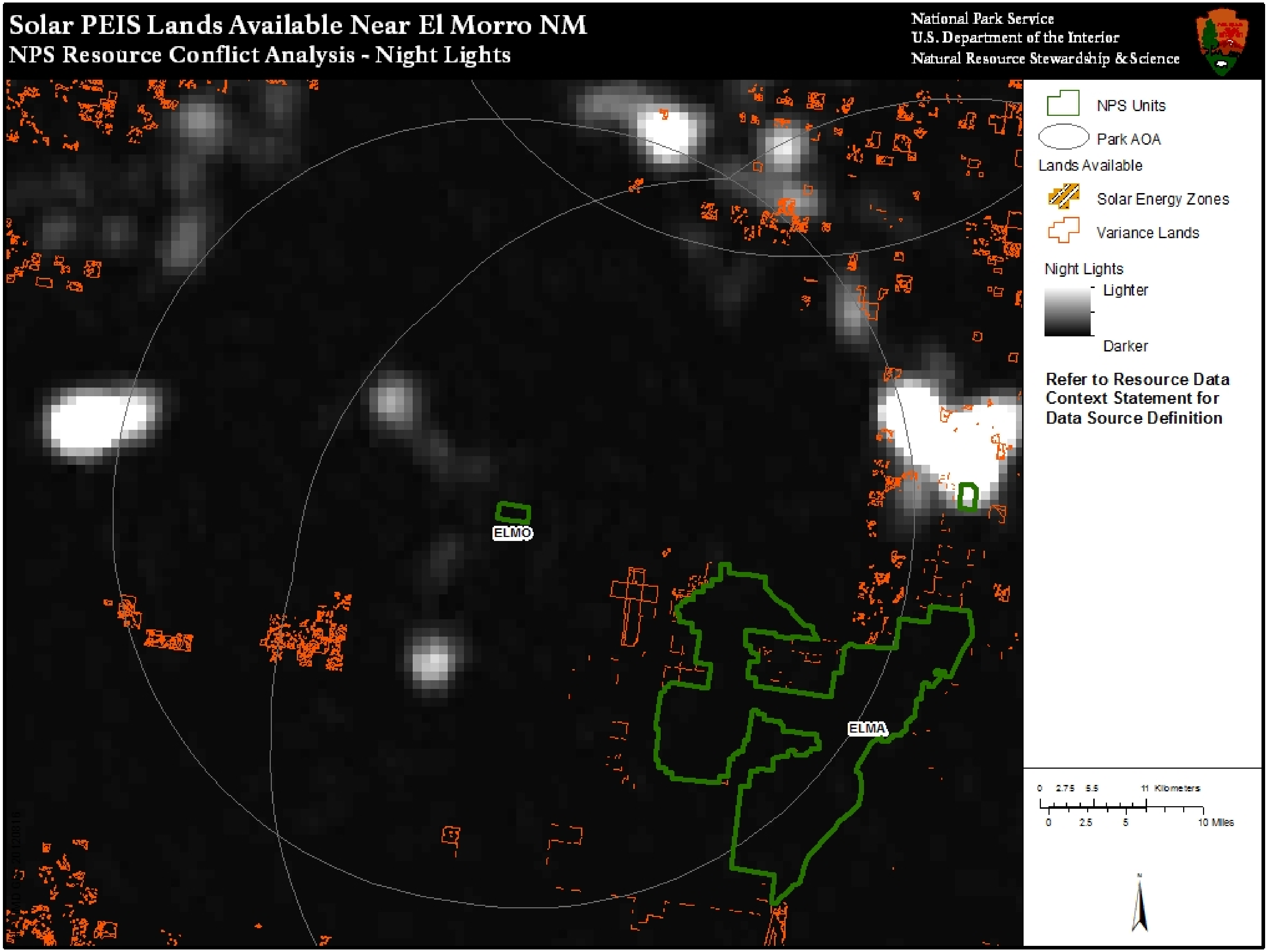

Solar PEIS Lands Available Near El Morro NM
NPS Resource Conflict Analysis - Critical Habitat T & E
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Critical Habitat (USFWS) ELMO
Mexican spotted owl
Refer to Resource Data Context Statement for Data Source Definition
0 2.5 5 10 Kilometers
0 2.5 5 10 Miles
ELMO
ELMA
El Morro National Monument
El Malpais National Monument
Bluewater State Park
Bluewater Lake State Park
Rice Park
Dinner Park
Salitre Mesa
Mckinley
Peñasco Flat
North Cebollita M
CEBOLLITA MESA
NPS IMD GIS: 20120816

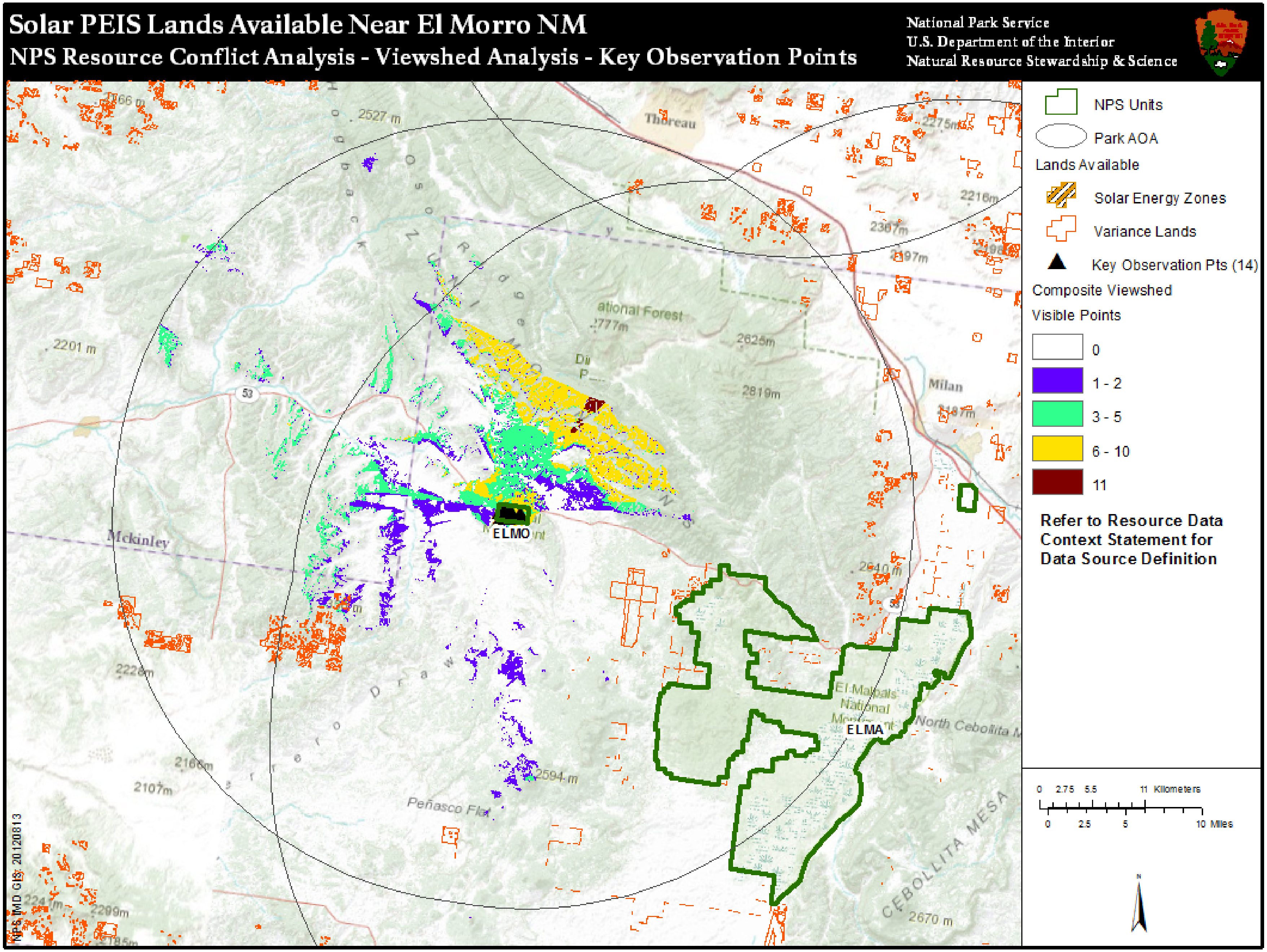

Solar PEIS Lands Available Near El Morro NM
NPS Resource Conflict Analysis - Roadless Natural Areas
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Roadless Natural Areas
Refer to Resource Data Context Statement for Data Source Definition
ELMO
ELMA
0 2.75 5.5 11 Kilometers
0 2.5 5 10 Miles
NPS IMD GIS: 20120816


Solar PEIS Lands Available Near El Morro NM
NPS Resource Conflict Analysis - Naturalness Index
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Naturalness Index (2001)
High (1)
Low (0)
Refer to Resource Data Context Statement for Data Source Definition
ELMO
ELMA
0 2.75 5.5 11 Kilometers
0 2.5 5 10 Miles
NPS IMD GIS: 20120816

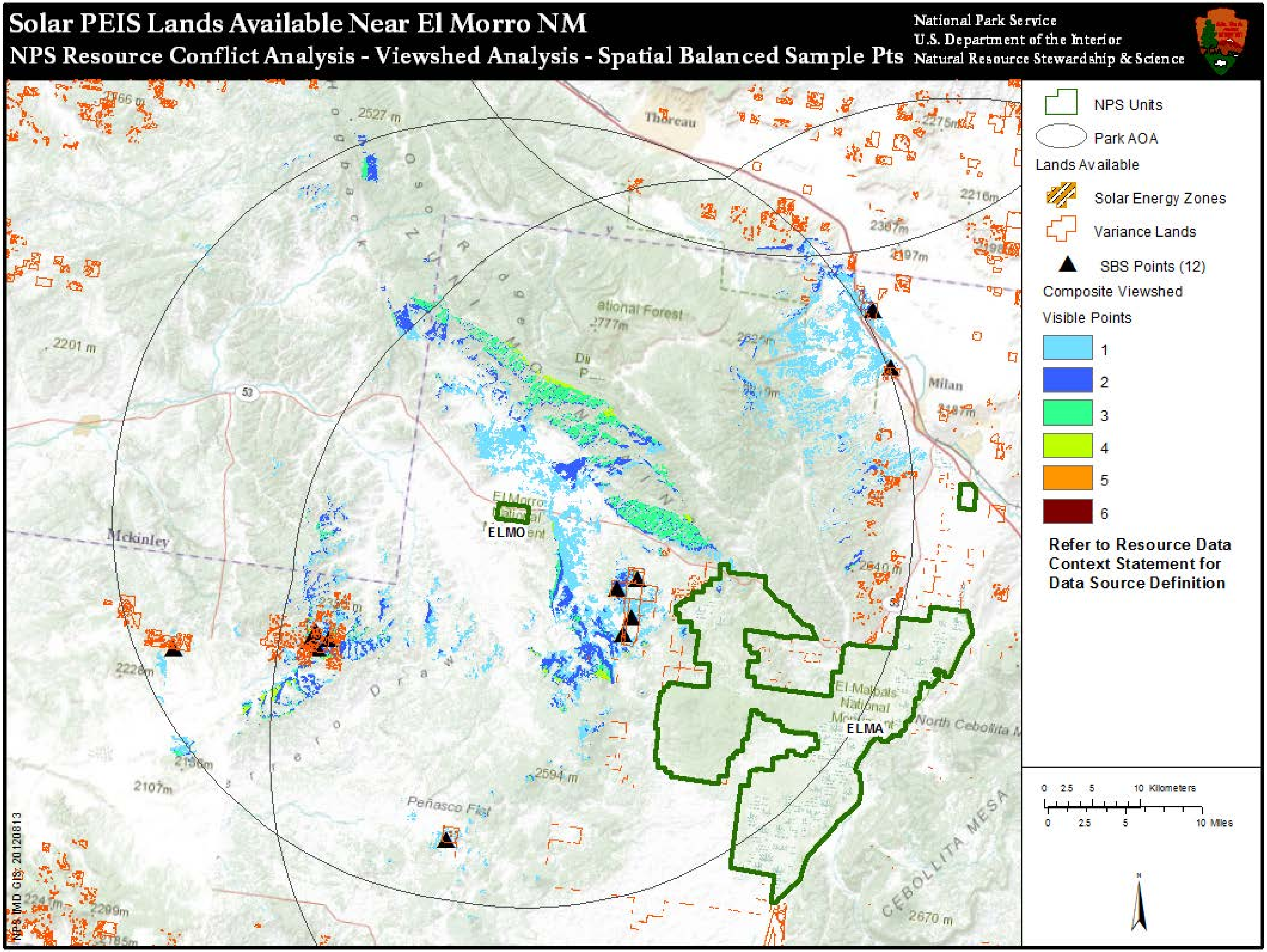


Solar PEIS Lands Available Near El Morro NM
NPS Resource Conflict Analysis - Landscape Permeability
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Landscape Permeability
Low
Moderate
High
Refer to Resource Data Context Statement for Data Source Definition
0 2.75 5.5 11 Kilometers
0 2.5 5 10 Miles
ELMO
ELMA
2166 m
2201 m
NPS IMD GIS:20120814

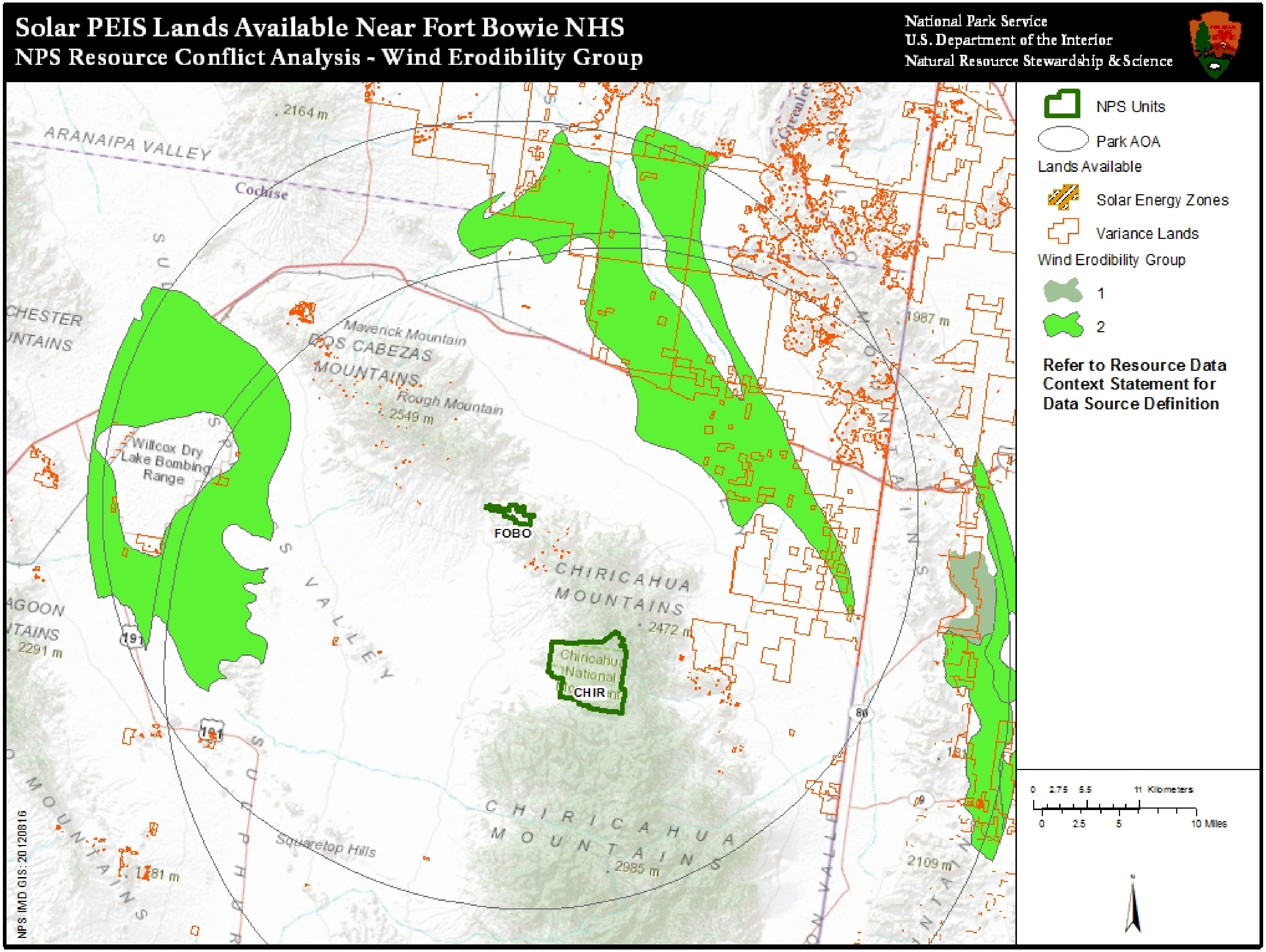

Solar PEIS Lands Available Near El Morro NM
NPS Resource Conflict Analysis - Night Lights
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Night Lights
Lighter
Darker
Refer to Resource Data Context Statement for Data Source Definition
0 2.75 5.5 11 Kilometers
0 2.5 5 10 Miles
ELMO
ELMA

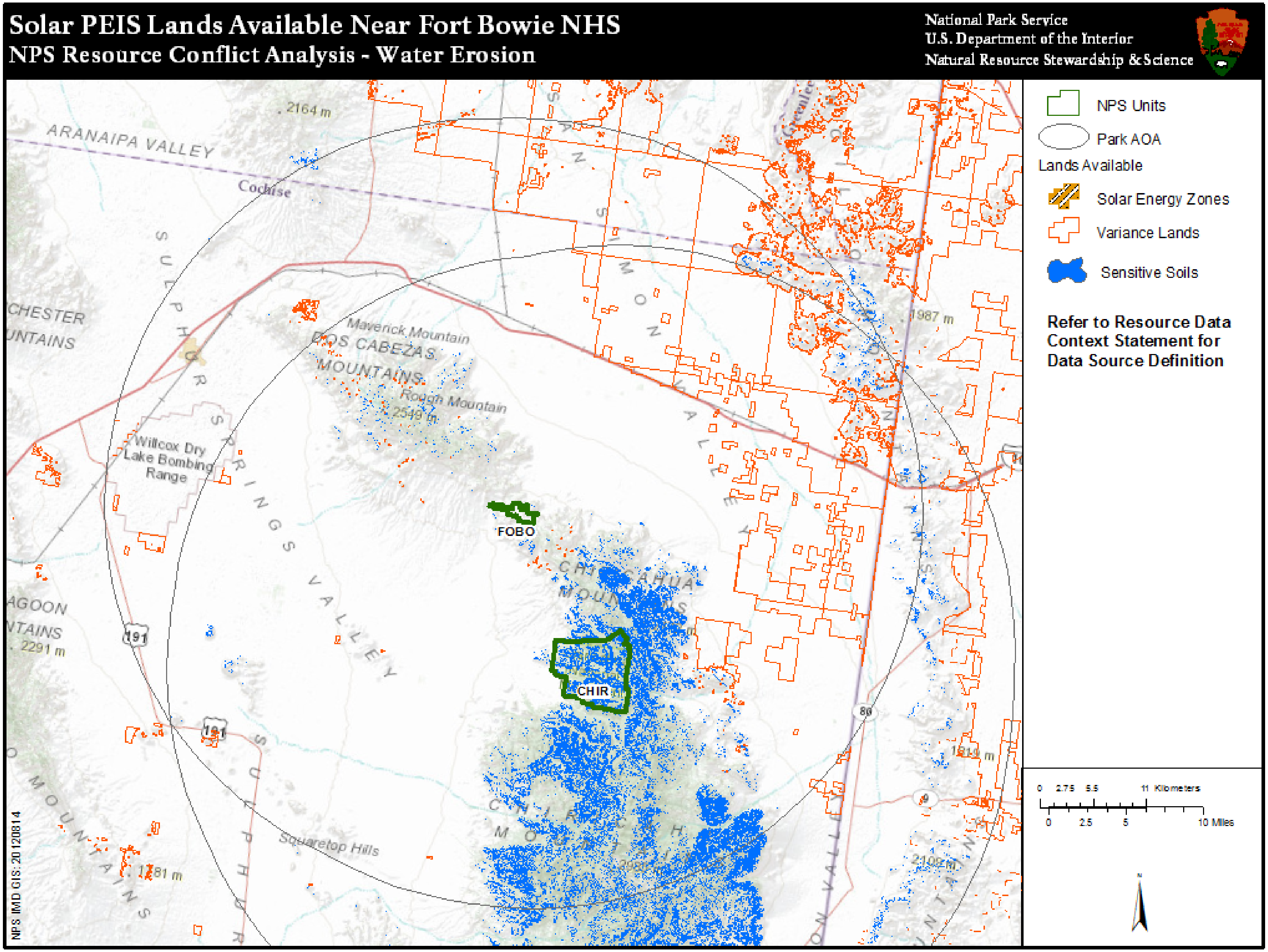

Solar PEIS Lands Available Near El Morro NM
NPS Resource Conflict Analysis - Viewshed Analysis - Key Observation Points
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Key Observation Pts (14)
Composite Viewshed
Visible Points
0
1 - 2
3 - 5
6 - 10
11
Refer to Resource Data Context Statement for Data Source Definition
0 2.75 5.5 11 Kilometers
0 2.5 5 10 Miles
ELMO
ELMA
Thoreau
Milan
Mckinley
El Malpais National Monument
North Cebolita
CEBOLLITA MESA
Peñasco Flat
NPS IMD GIS 20120813

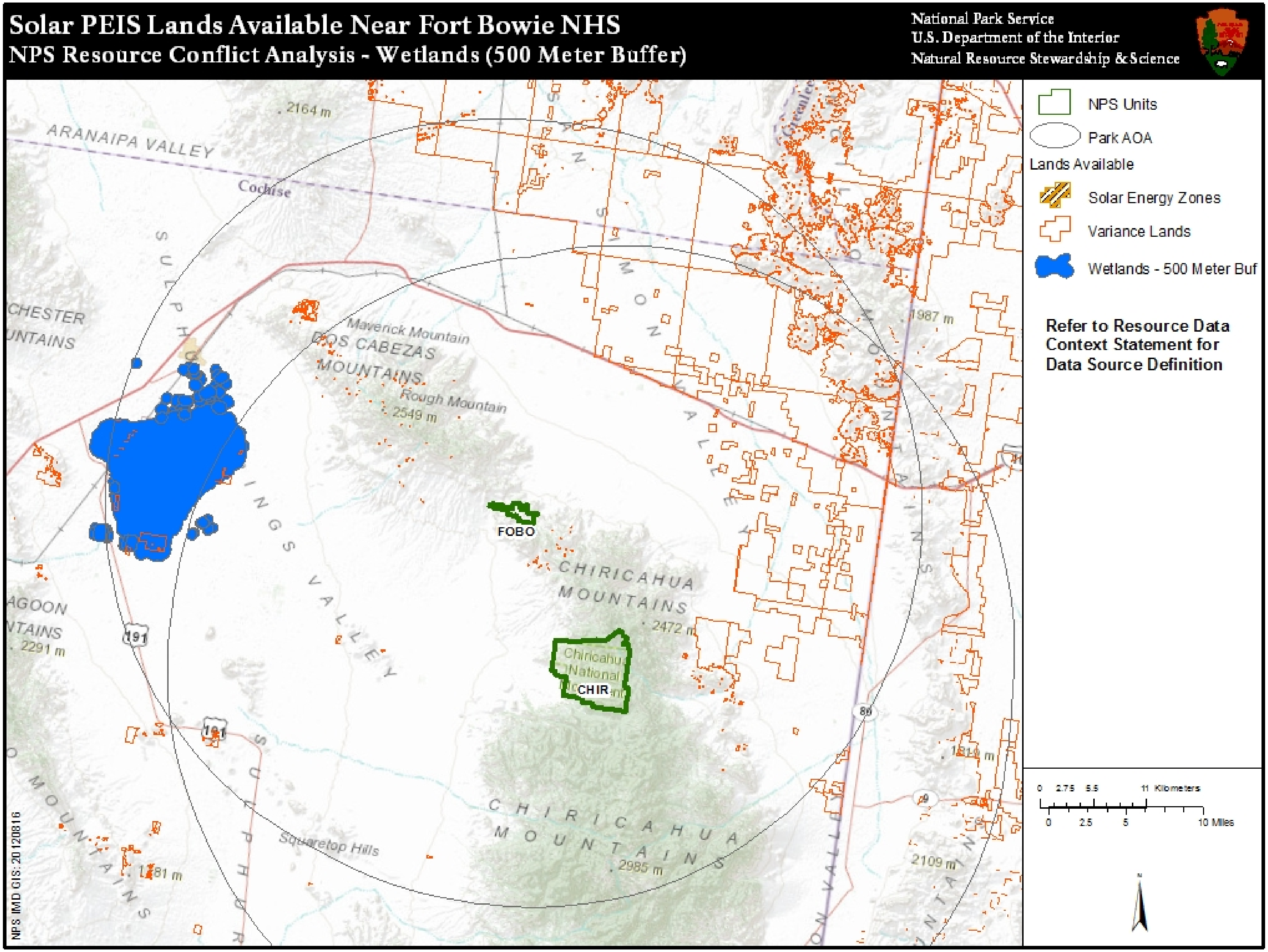
Viewshed – Spatial Balanced Sample

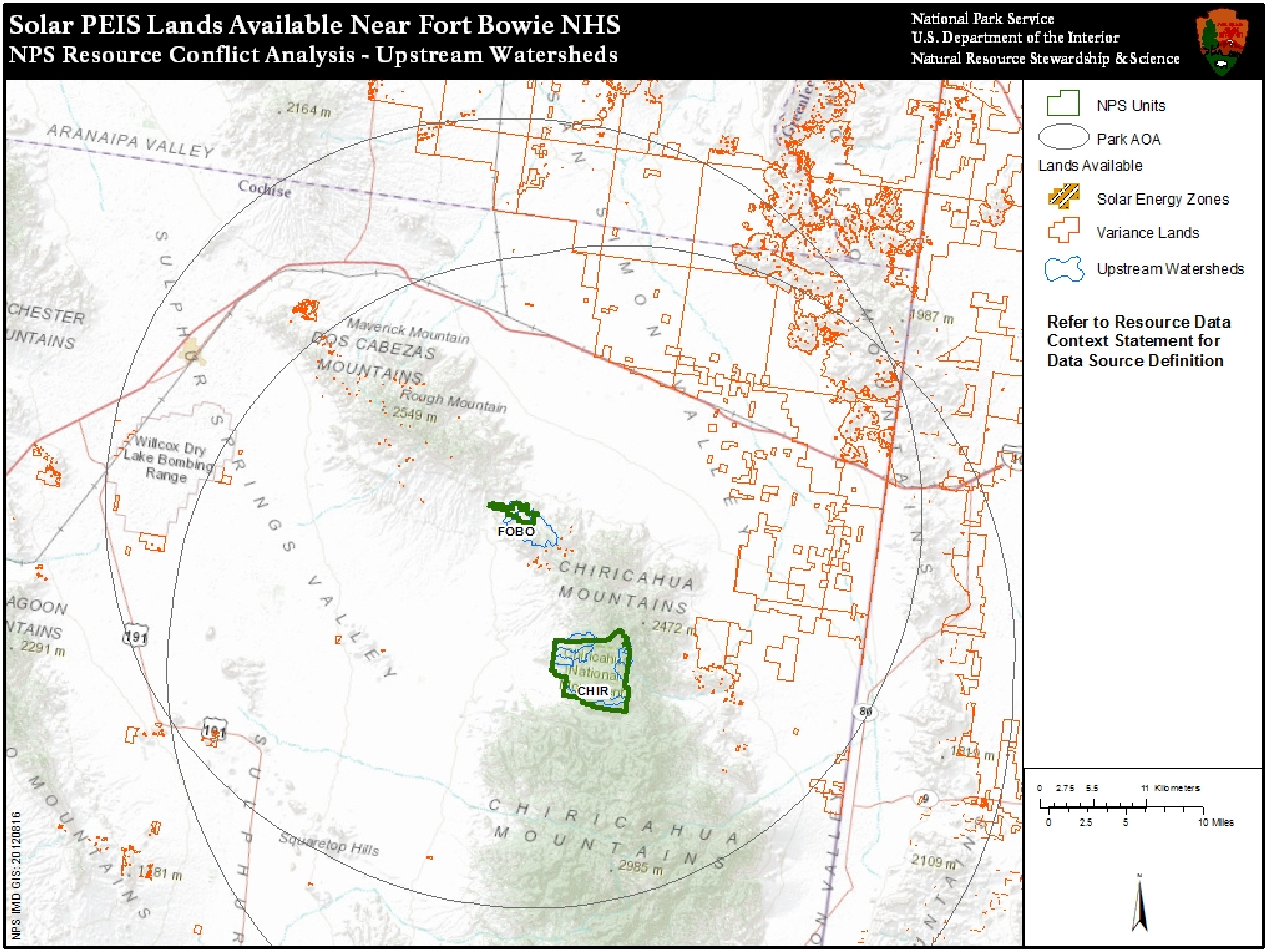


Fort Bowie National Historic Site
Wind Erodibility Group

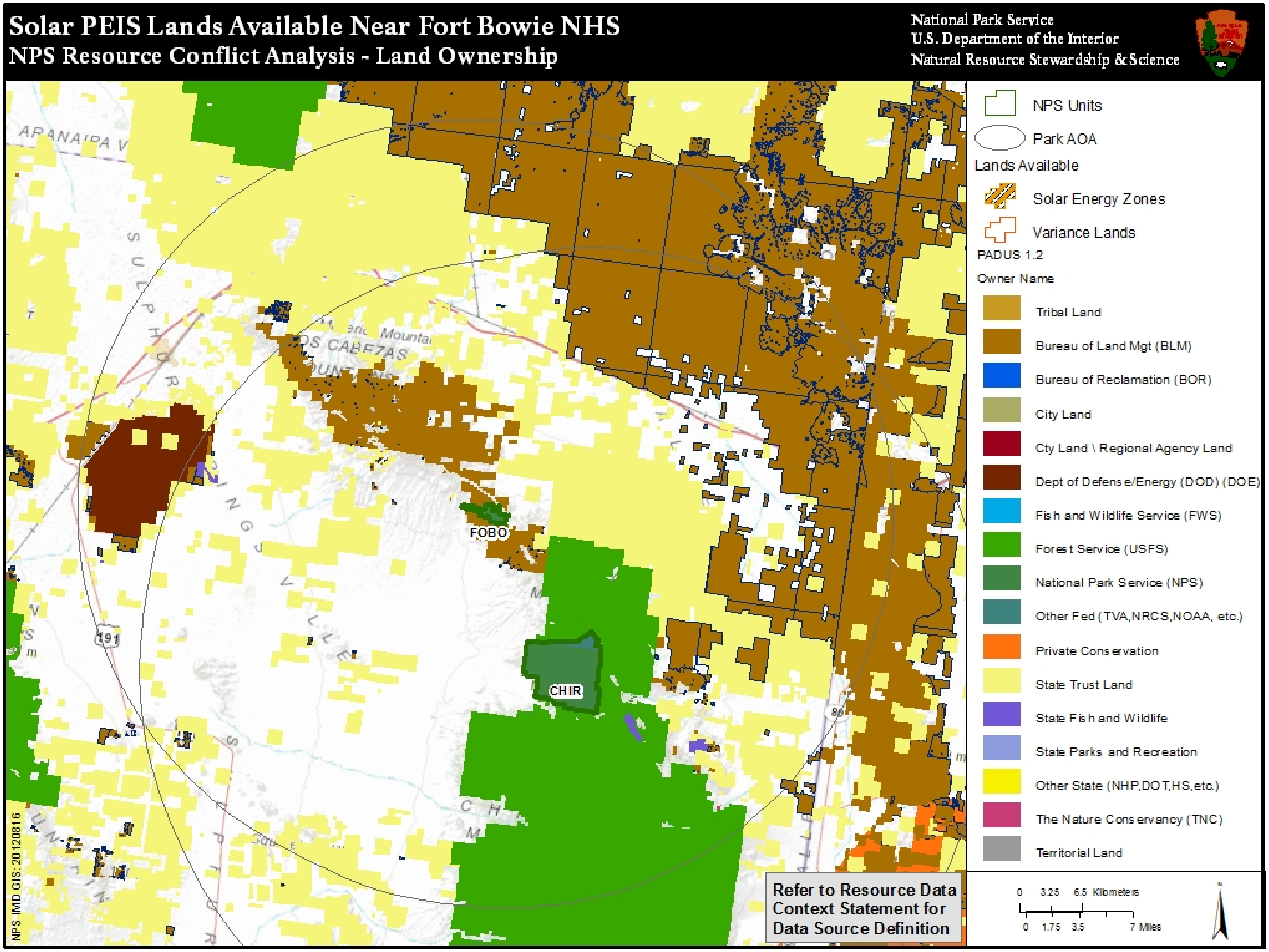


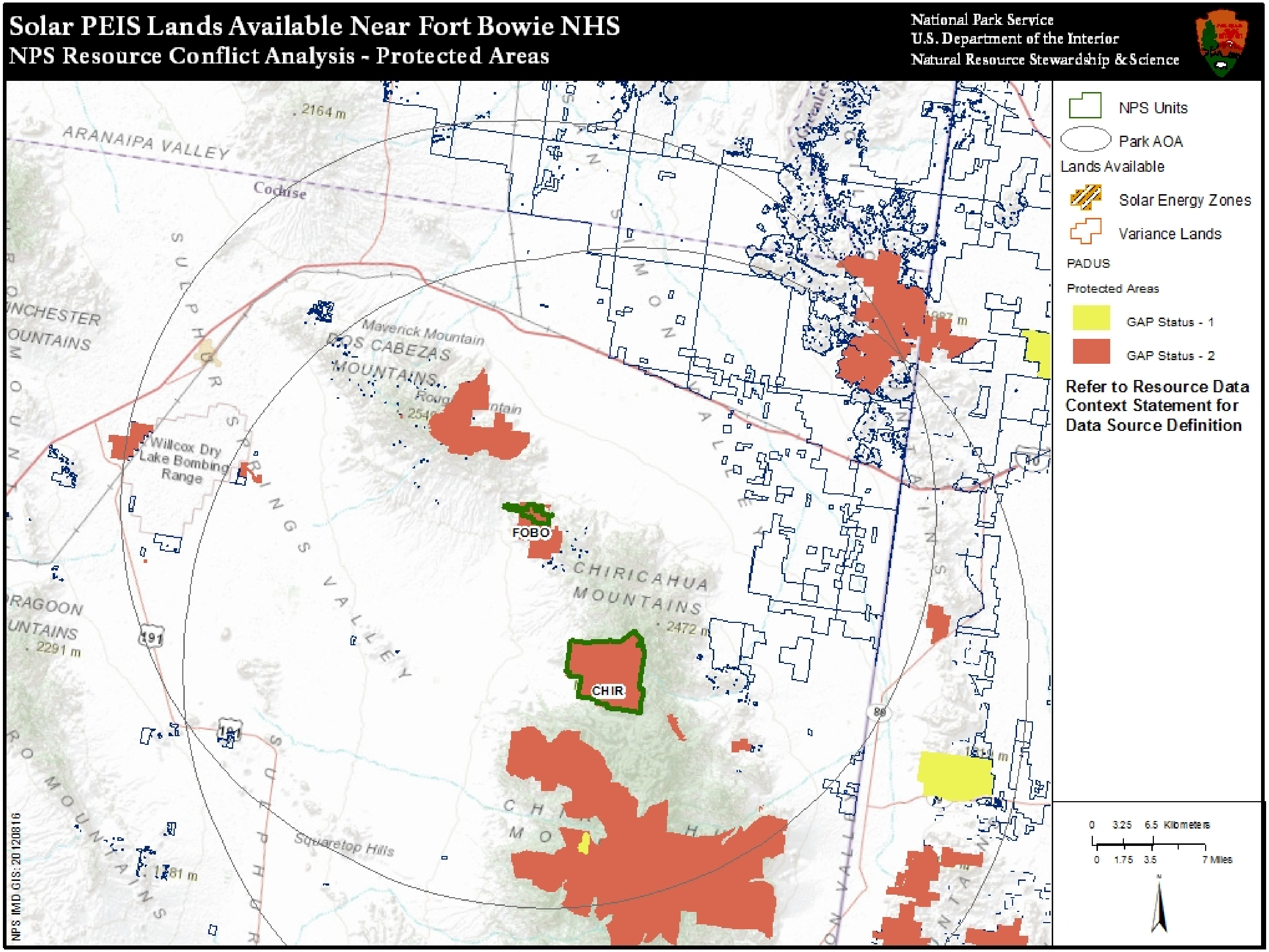

Solar PEIS Lands Available Near Fort Bowie NHS
NPS Resource Conflict Analysis - Water Erosion
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Sensitive Soils
Refer to Resource Data Context Statement for Data Source Definition
0 2.75 5.5 11 Kilometers
0 2.5 5 10 Miles
FOBO
CHIR
ARANAIPA VALLEY
Cochise
SULPHUR SPRINGS VALLEY
DOS CABEZAS MOUNTAINS
Maverick Mountain
Rough Mountain
Willcox Dry Lake Bombing Range
CHIRICAHUA MOUNTAINS
SAN SIMON VALLEY
Squaretop Hills
NPS IMD GIS: 20120814

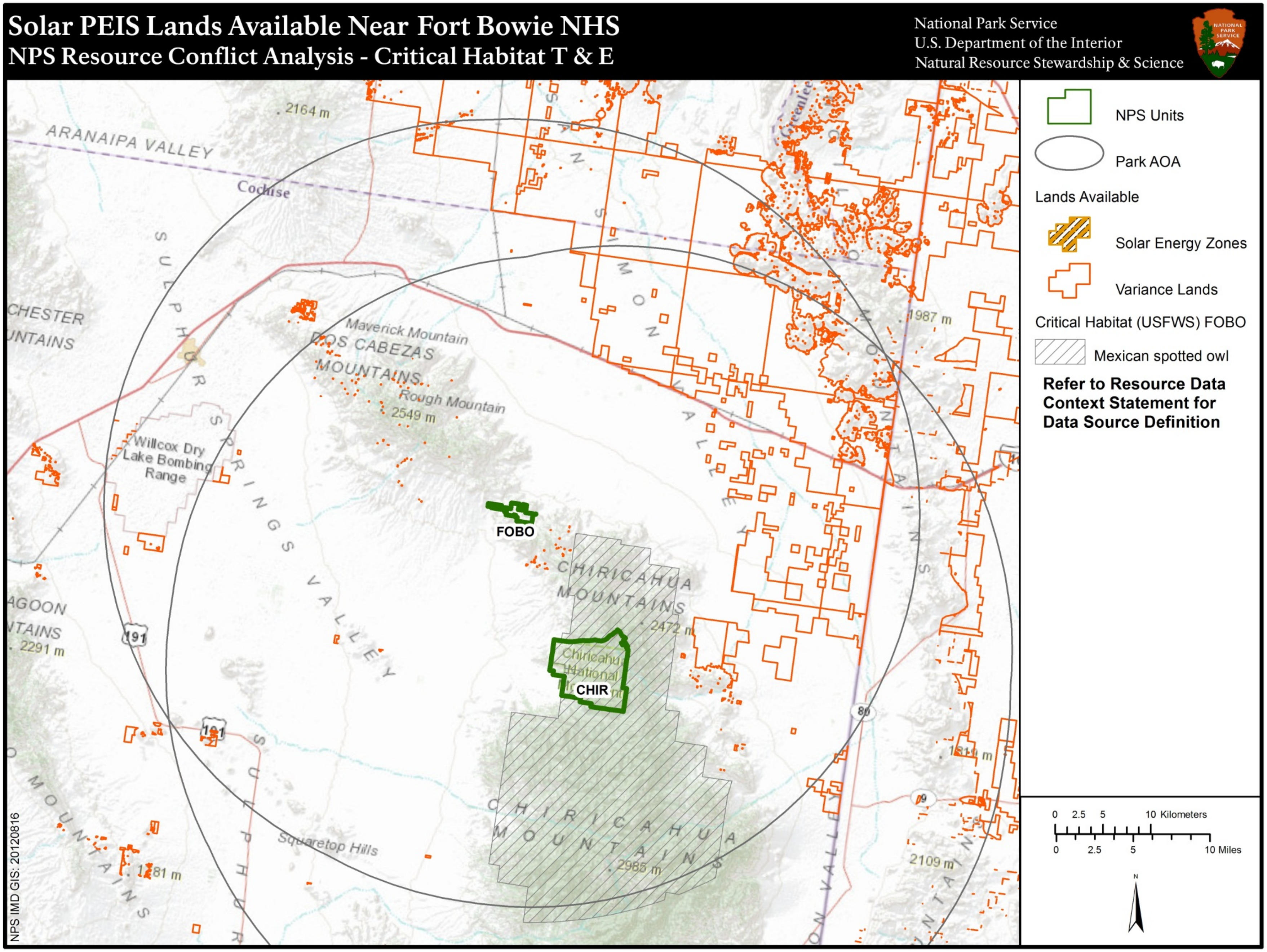

Solar PEIS Lands Available Near Fort Bowie NHS
NPS Resource Conflict Analysis - Wetlands (500 Meter Buffer)
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Wetlands - 500 Meter Buf
Refer to Resource Data Context Statement for Data Source Definition
0 2.75 5.5 11 Kilometers
0 2.5 5 10 Miles
FOBO
CHIR
Chiricahua National Monument
CHIRICAHUA MOUNTAINS
DOS CABEZAS MOUNTAINS
Maverick Mountain
Rough Mountain
SULPHUR SPRINGS VALLEY
SAN SIMON VALLEY
ARANAIPA VALLEY
Cochise
Squaretop Hills
2164 m
2549 m
2472 m
2985 m
1987 m
2109 m
2291 m
NPS IMD GIS: 20120816

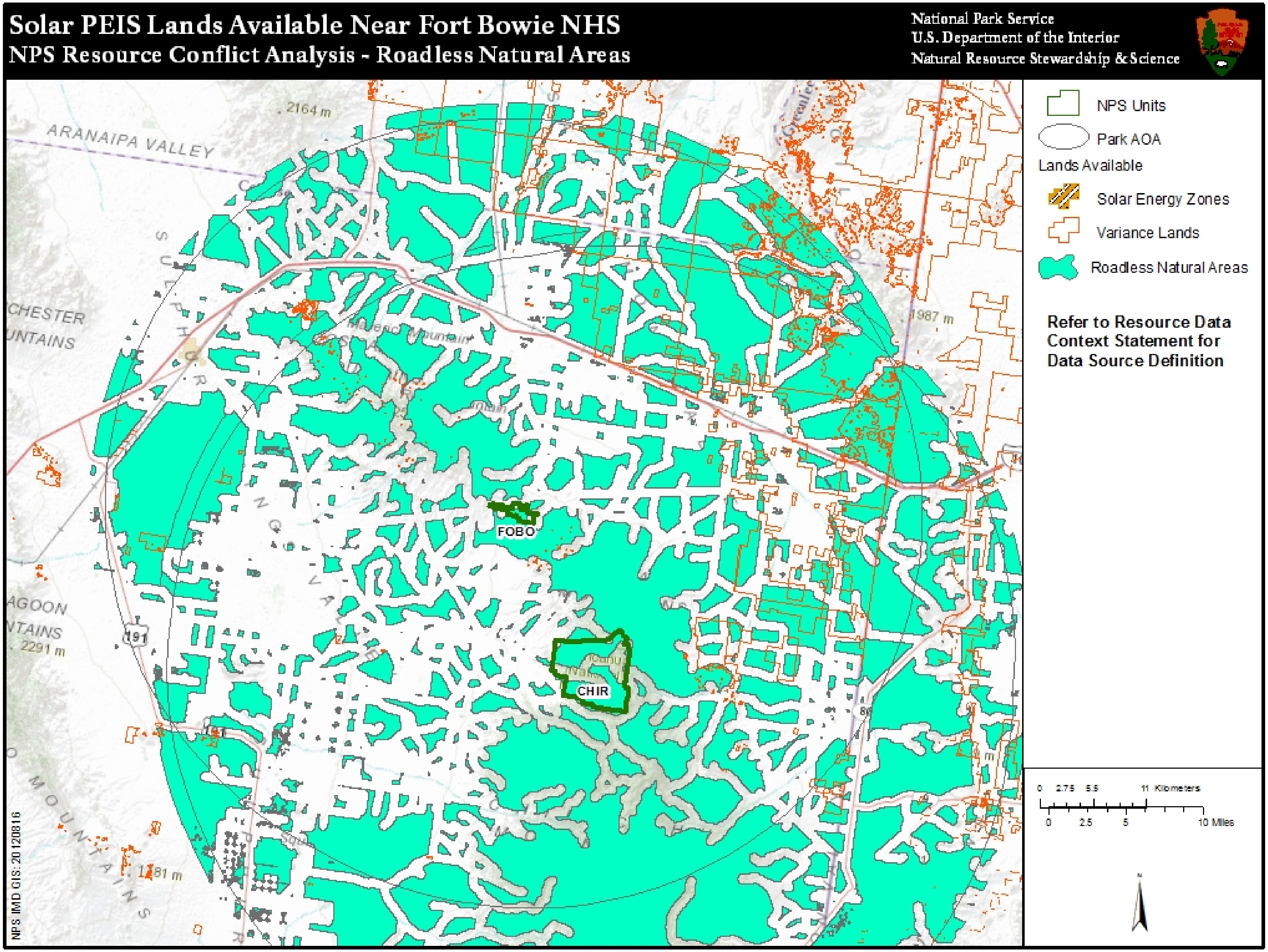

Solar PEIS Lands Available Near Fort Bowie NHS
NPS Resource Conflict Analysis - Upstream Watersheds
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Upstream Watersheds
Refer to Resource Data Context Statement for Data Source Definition
0 2.75 5.5 11 Kilometers
0 2.5 5 10 Miles
FOBO
CHIR
CHIRICAHUA MOUNTAINS
DOS CABEZAS MOUNTAINS
SULPHUR SPRINGS VALLEY
ARANAIPA VALLEY
Cochise
Willcox Dry Lake Bombing Range
Maverick Mountain
Rough Mountain
Squaretop Hills
NPS IMD GIS: 20120816

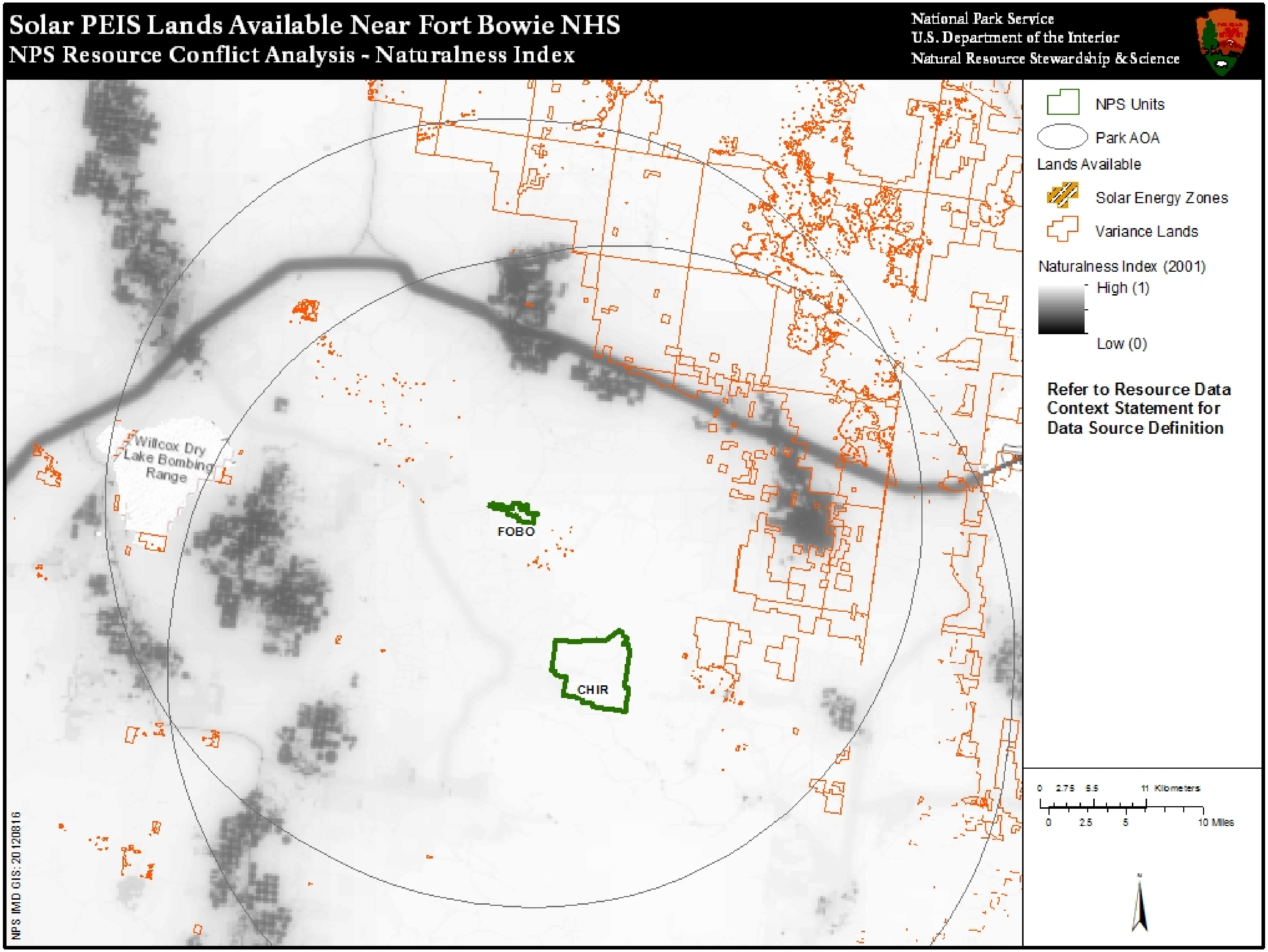
Land Ownership



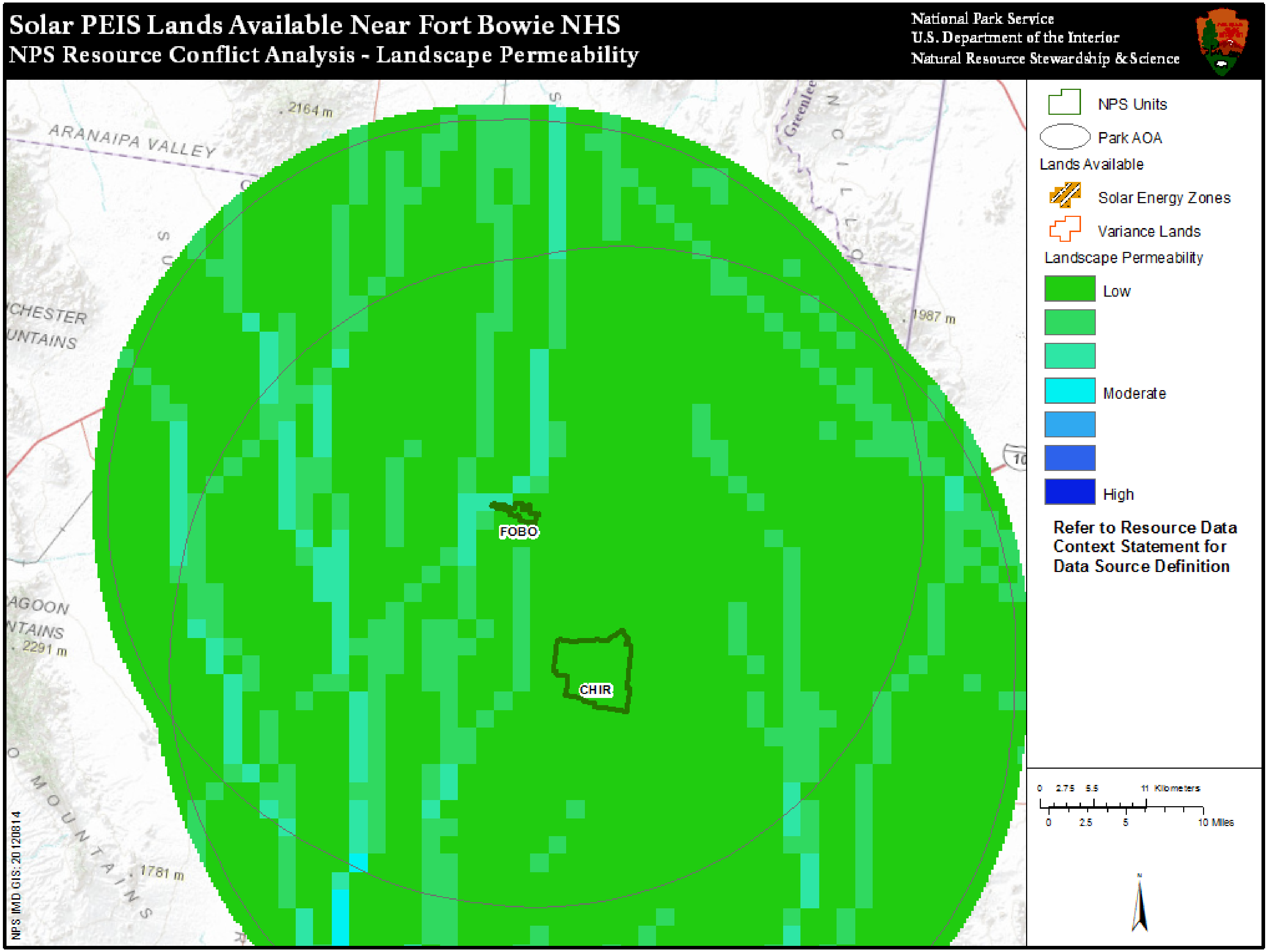

Solar PEIS Lands Available Near Fort Bowie NHS
NPS Resource Conflict Analysis - Protected Areas
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
PADUS
Protected Areas
GAP Status - 1
GAP Status - 2
Refer to Resource Data Context Statement for Data Source Definition
0 3.25 6.5 Kilometers
0 1.75 3.5 7 Miles
ARANAIPA VALLEY
Cochise
SULPHUR SPRINGS VALLEY
DOS CABEZAS MOUNTAINS
Maverick Mountain
Willcox Dry Lake Bombing Range
FOBO
CHIRICAHUA MOUNTAINS
CHIR
SAN SIMON VALLEY
Squaretop Hills
2164 m
2472 m
2291 m
191
186
NPS IMD GIS: 20120816

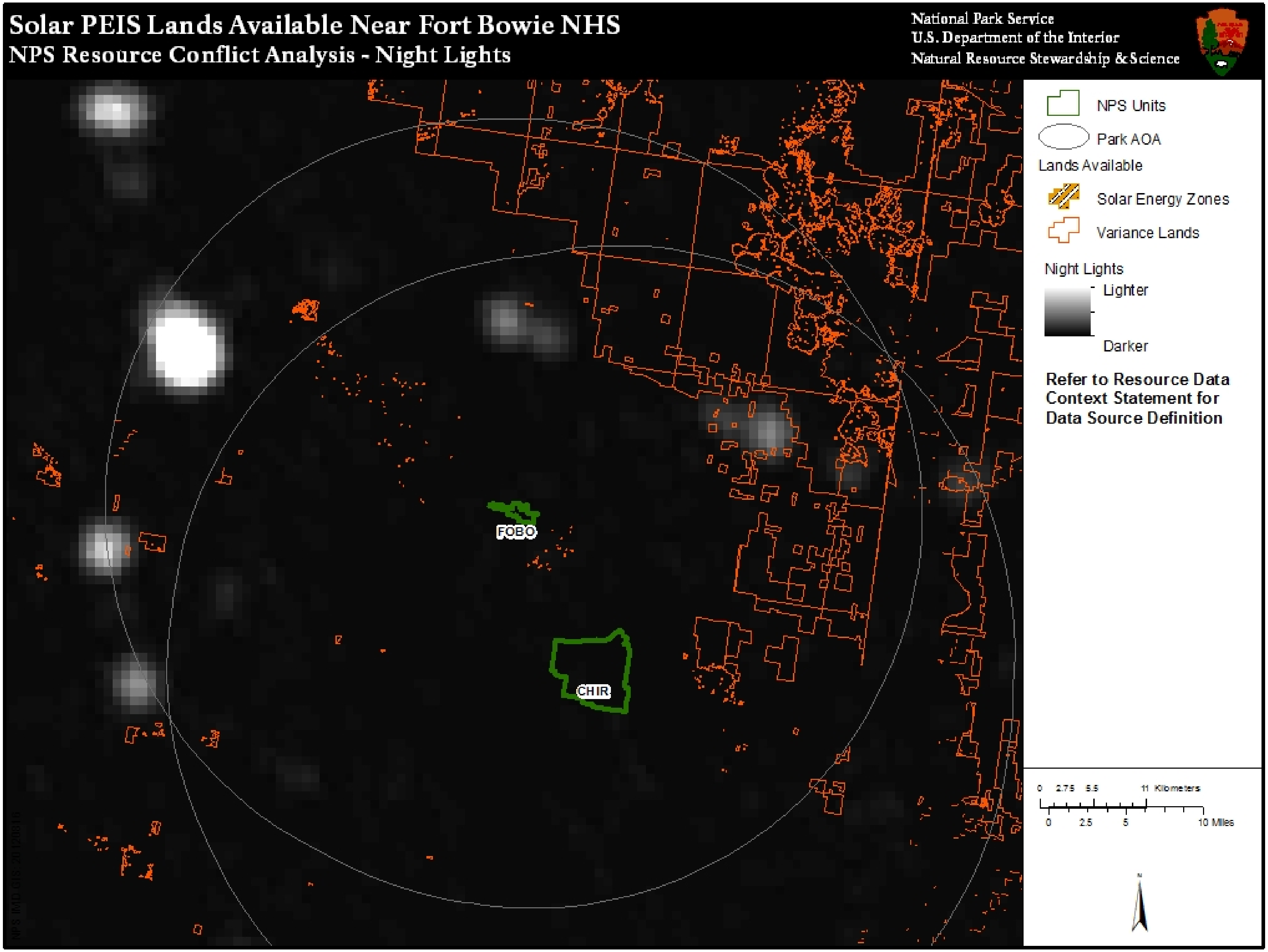

Solar PEIS Lands Available Near Fort Bowie NHS
NPS Resource Conflict Analysis - Critical Habitat T & E
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Critical Habitat (USFWS) FOBO
Mexican spotted owl
Refer to Resource Data Context Statement for Data Source Definition
0 2.5 5 10 Kilometers
0 2.5 5 10 Miles
N
FOBO
CHIR
ARANAIPA VALLEY
Cochise
SULPHUR SPRINGS VALLEY
DOS CABEZAS MOUNTAINS
Maverick Mountain
Rough Mountain
2549 m
CHIRICAHUA MOUNTAINS
2472 m
2985 m
Willcox Dry Lake Bombing Range
Squaretop Hills
2164 m
1987 m
2109 m
2291 m
NPS IMD GIS: 20120816

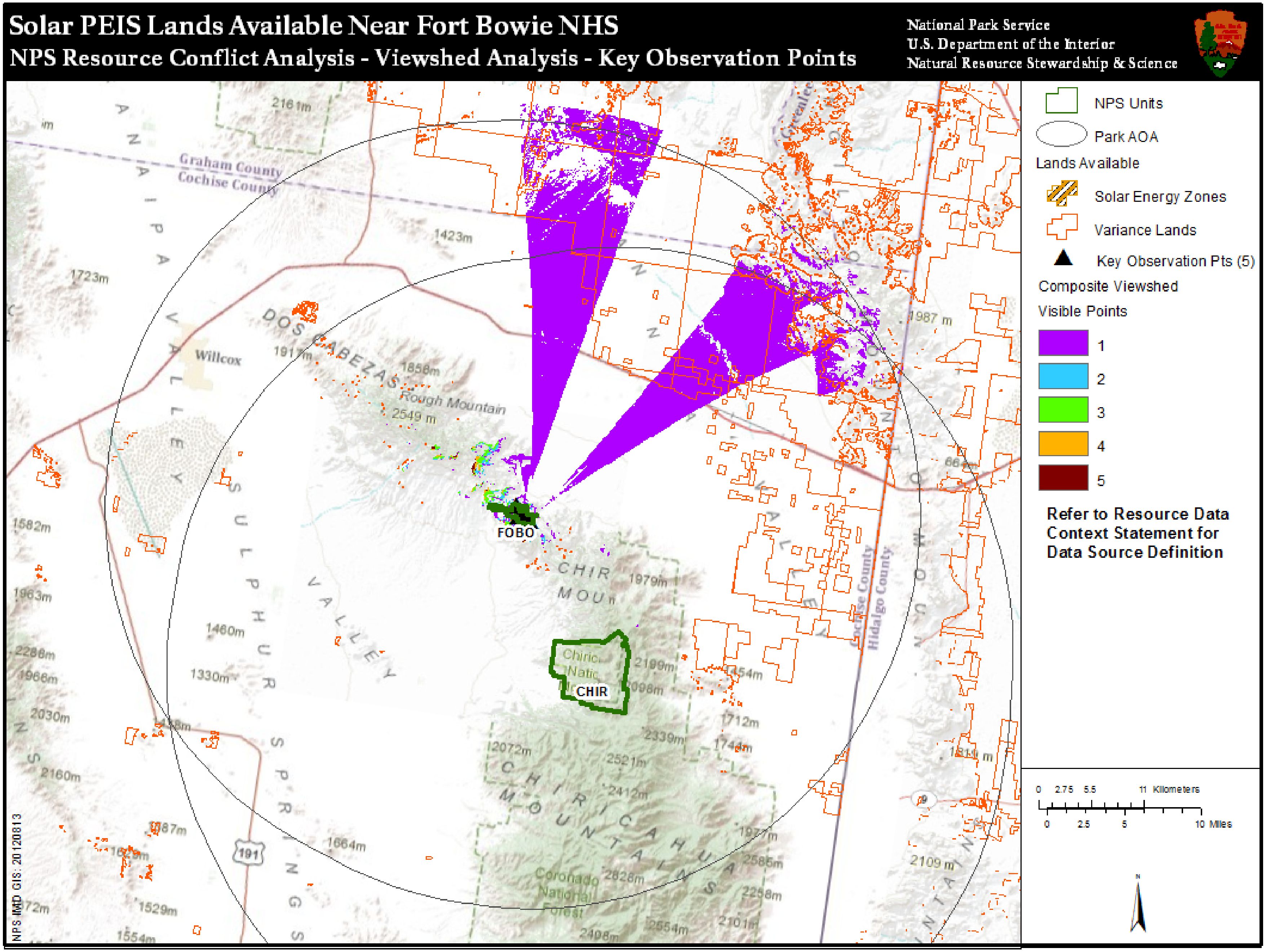

Solar PEIS Lands Available Near Fort Bowie NHS
NPS Resource Conflict Analysis - Roadless Natural Areas
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Roadless Natural Areas
Refer to Resource Data Context Statement for Data Source Definition
0 2.75 5.5 11 Kilometers
0 2.5 5 10 Miles
FOBO
CHIR
ARANAIPA VALLEY
2164 m
1987 m
2291 m
1281 m
191
NPS IMD GIS: 20120816



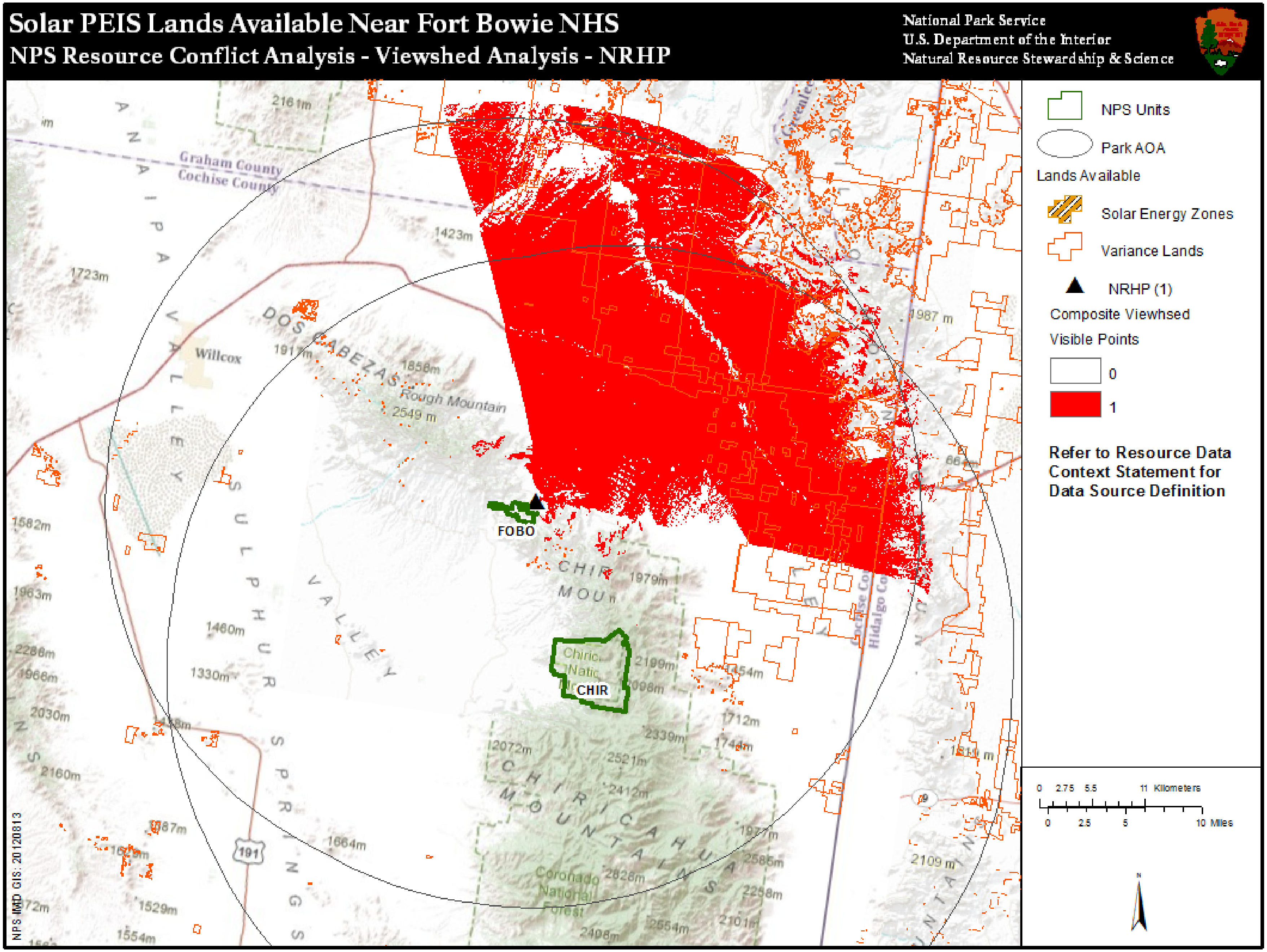
Solar PEIS Lands Available Near Fort Bowie NHS
NPS Resource Conflict Analysis - Naturalness Index
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Naturalness Index (2001)
High (1)
Low (0)
Refer to Resource Data Context Statement for Data Source Definition
Willcox Dry Lake Bombing Range
FOBO
CHIR
0 2.75 5.5 11 Kilometers
0 2.5 5 10 Miles
NPS IMD GIS: 20120816


Solar PEIS Lands Available Near Fort Bowie NHS
NPS Resource Conflict Analysis - Landscape Permeability
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Landscape Permeability
Low
Moderate
High
Refer to Resource Data Context Statement for Data Source Definition
0 2.75 5.5 11 Kilometers
0 2.5 5 10 Miles
FOBO
CHIR
ARANAIPA VALLEY
2164 m
1987 m
2291 m
1781 m
NPS IMD GIS: 20120814

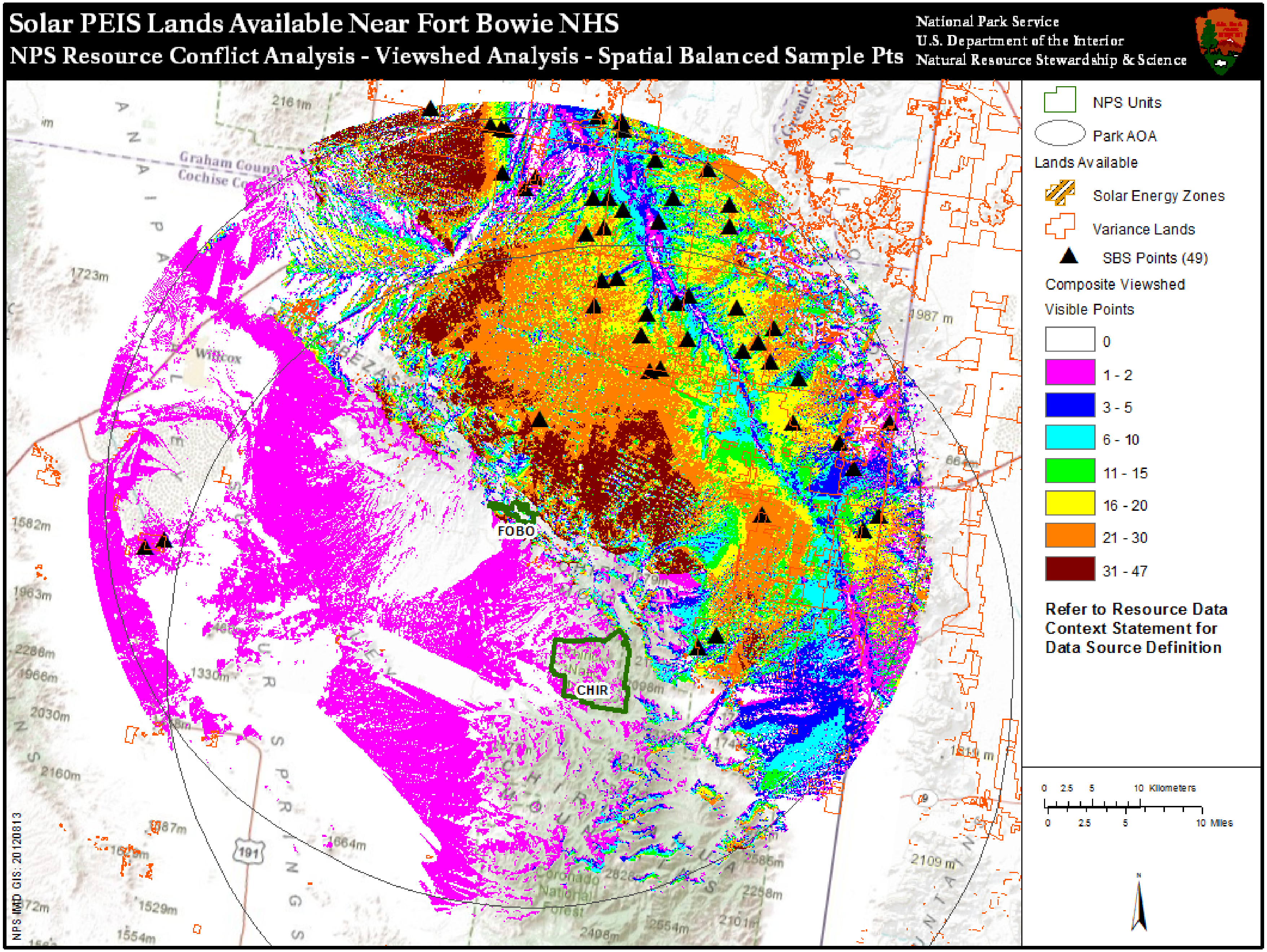

Solar PEIS Lands Available Near Fort Bowie NHS
NPS Resource Conflict Analysis - Night Lights
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Night Lights
Lighter
Darker
Refer to Resource Data Context Statement for Data Source Definition
FOBO
CHIR
0 2.75 5.5 11 Kilometers
0 2.5 5 10 Miles


Solar PEIS Lands Available Near Fort Bowie NHS
NPS Resource Conflict Analysis - Viewshed Analysis - Key Observation Points
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Key Observation Pts (5)
Composite Viewshed
Visible Points
1
2
3
4
5
Refer to Resource Data Context Statement for Data Source Definition
0 2.75 5.5 11 Kilometers
0 2.5 5 10 Miles
FOBO
CHIR
Willcox
Graham County
Cochise County
Hidalgo County
Rough Mountain
NPS IMD GIS: 20120813

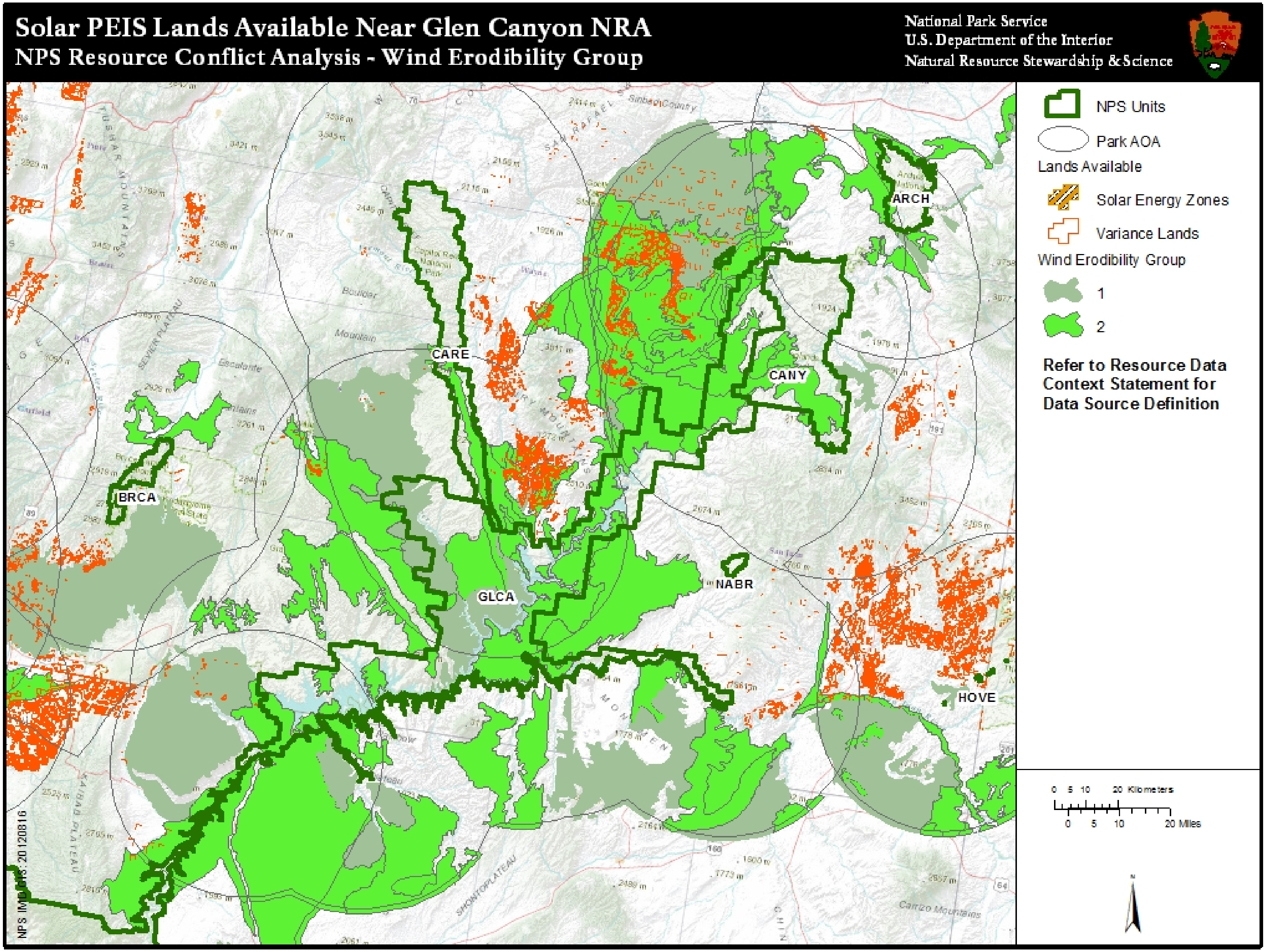
Viewshed – NRHP

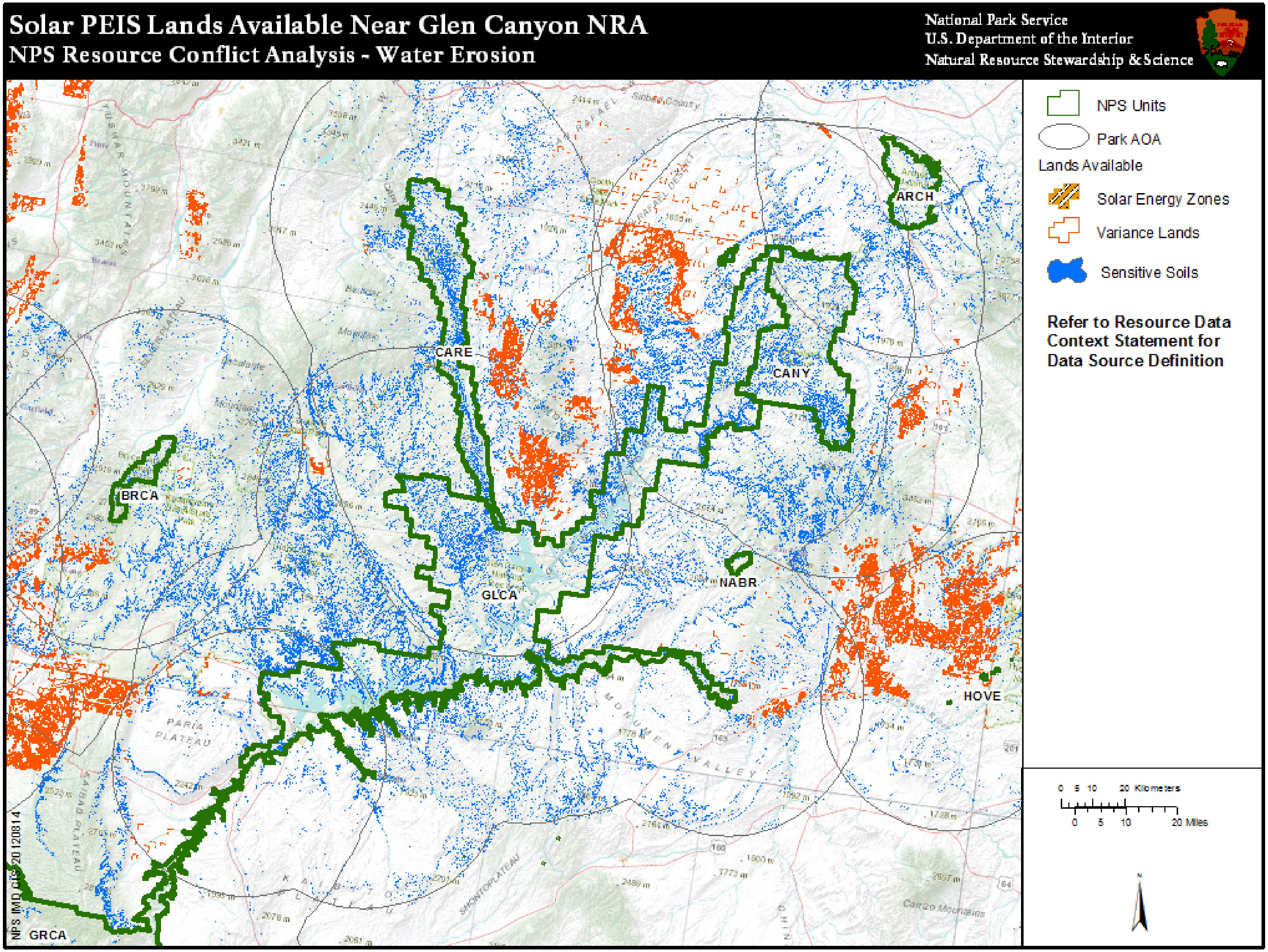


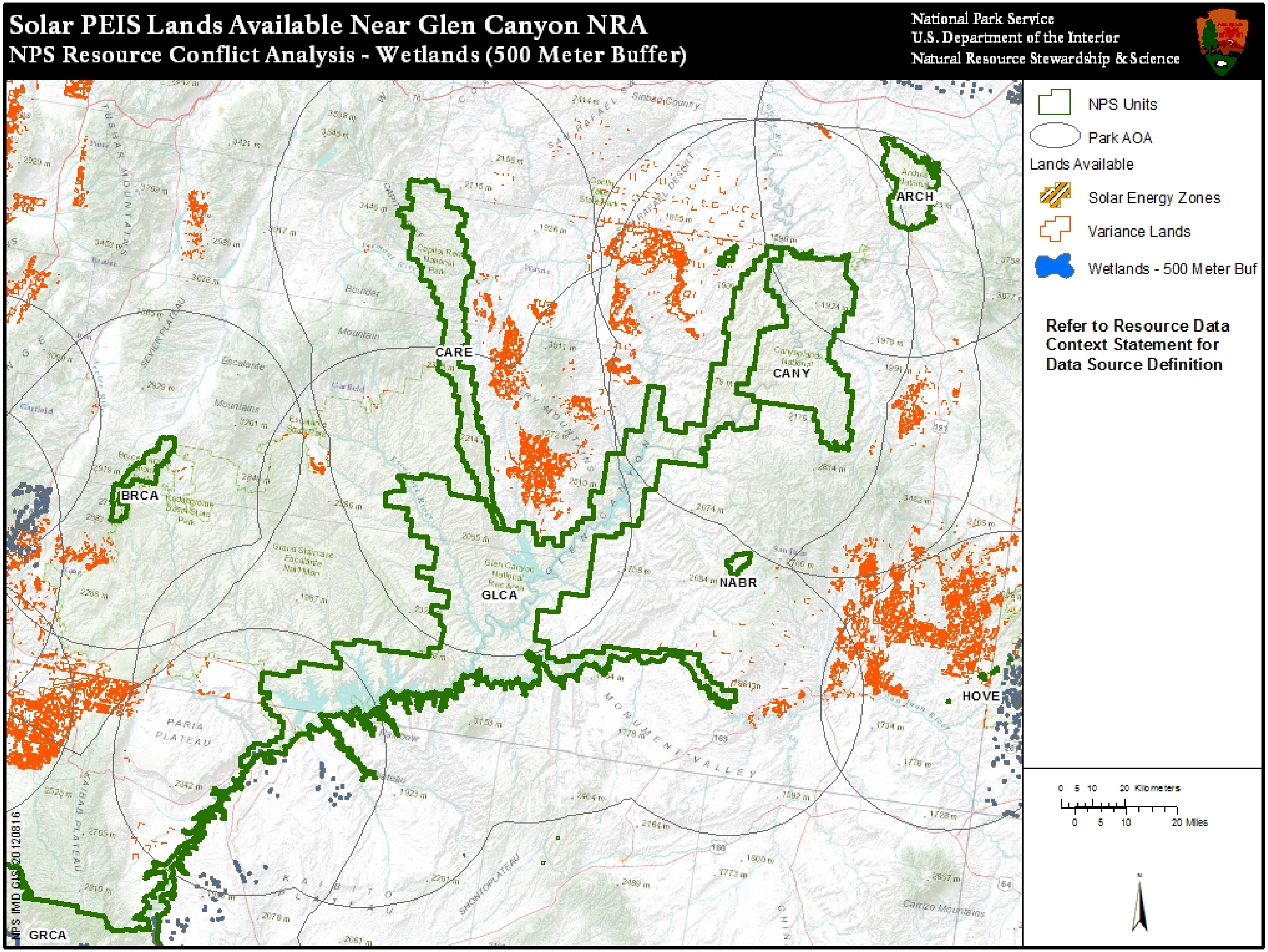
Viewshed – Spatial Balanced Sample



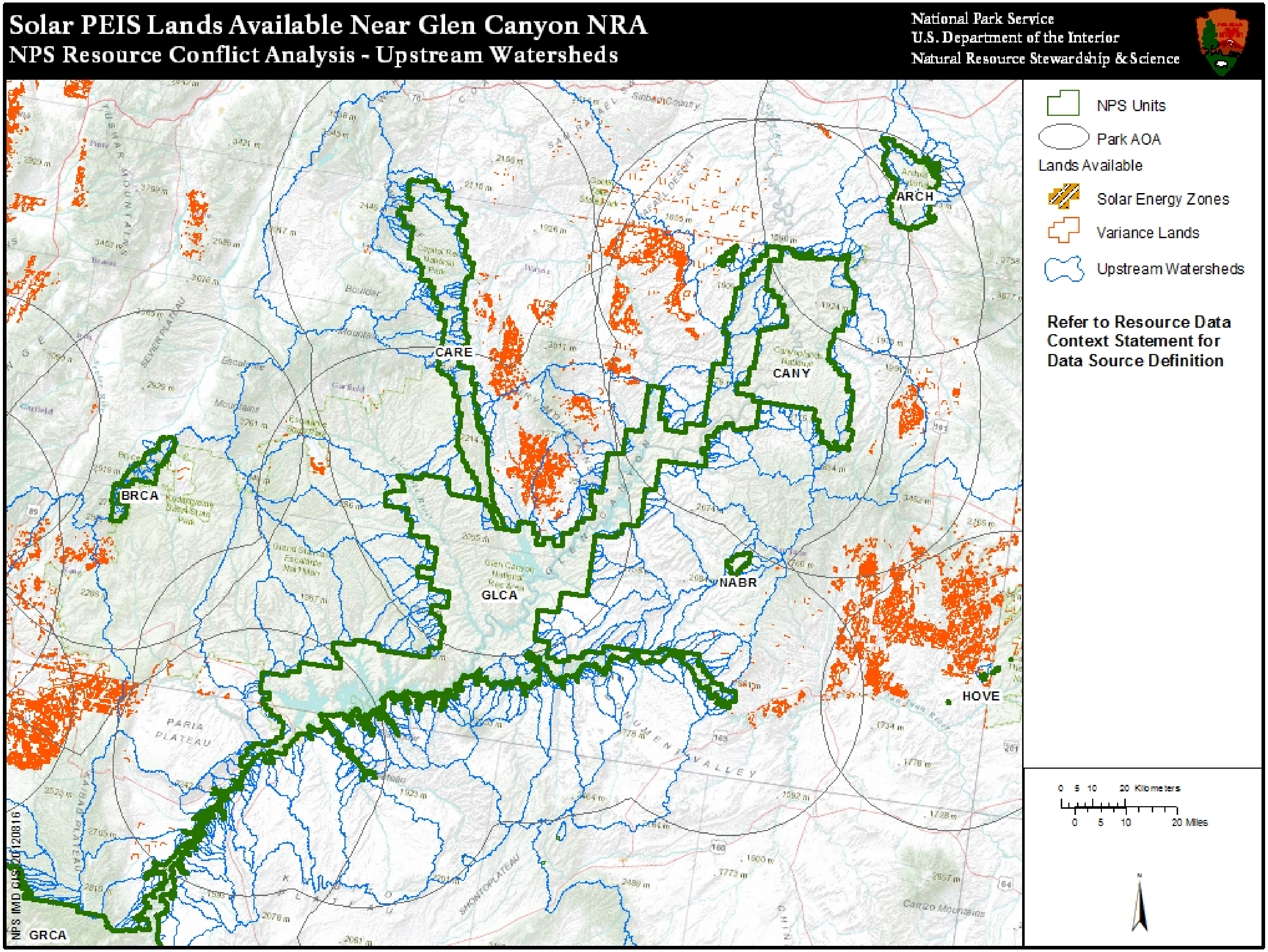
Glen Canyon National Recreation Area
Wind Erodibility Group



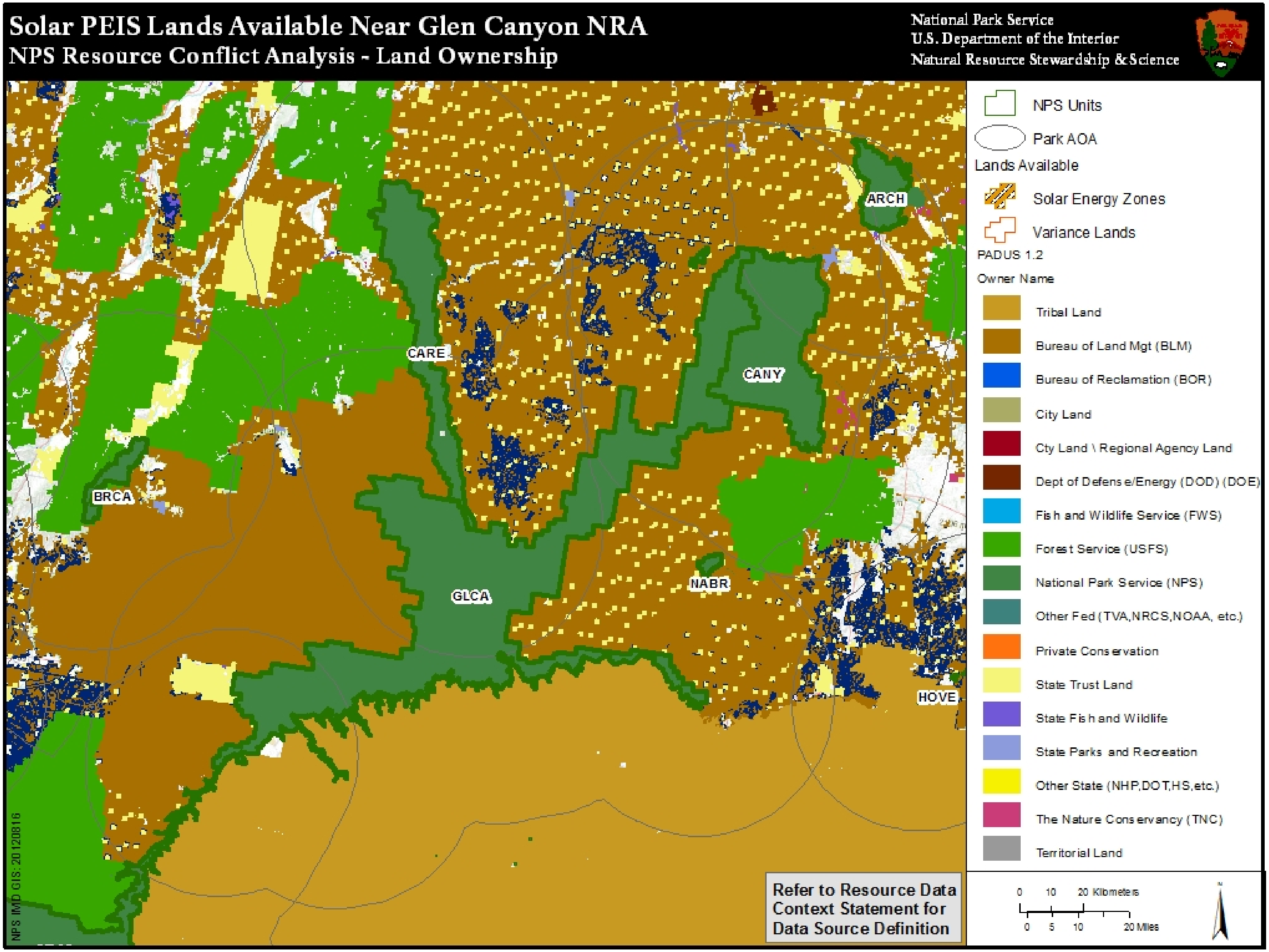

Solar PEIS Lands Available Near Glen Canyon NRA
NPS Resource Conflict Analysis - Water Erosion
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Sensitive Soils
Refer to Resource Data Context Statement for Data Source Definition
0 5 10 20 Kilometers
0 5 10 20 Miles
ARCH
CARE
CANY
BRCA
NABR
GLCA
HOVE
GRCA
NPS IMD GIS 20120814

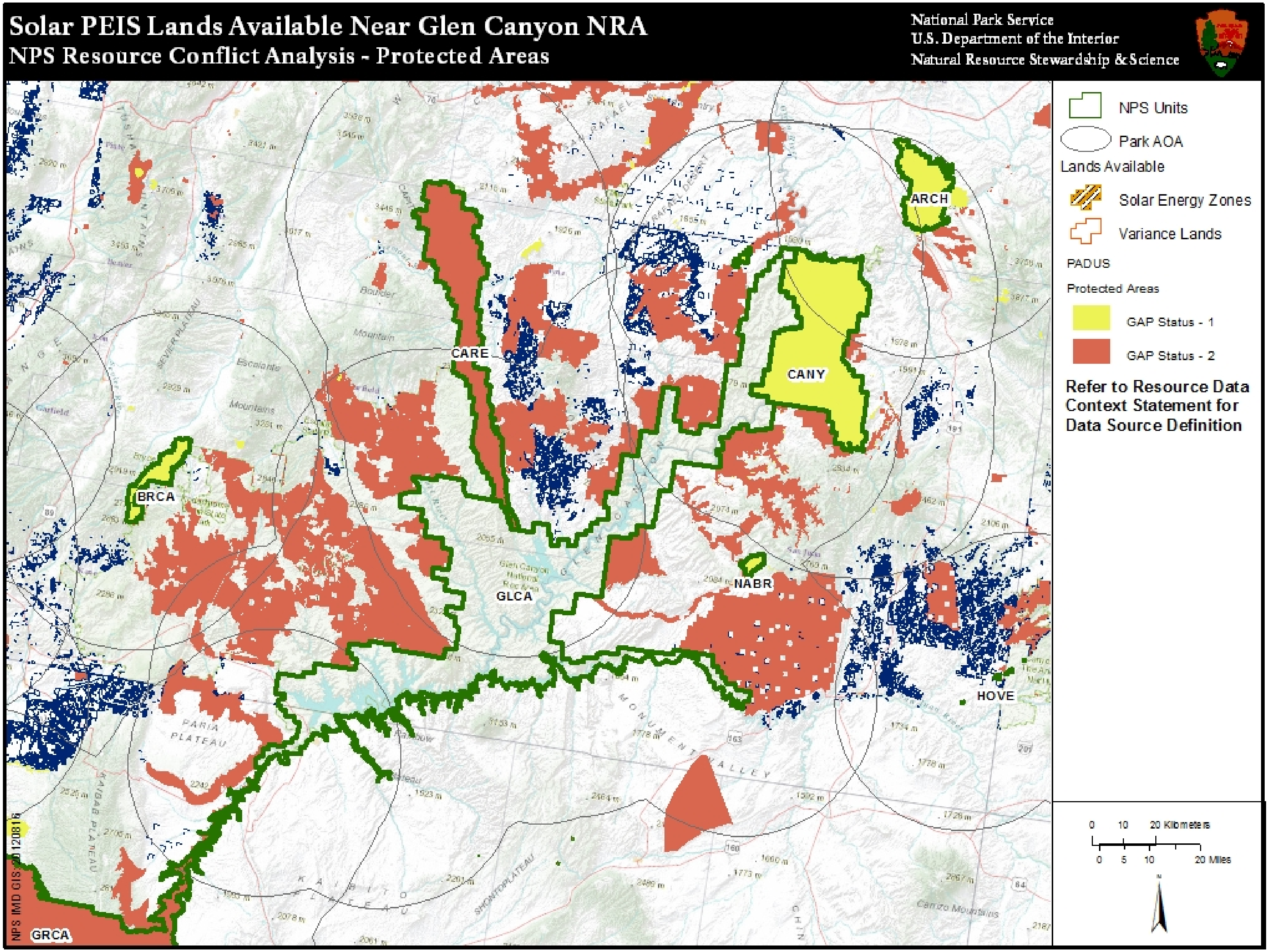

Solar PEIS Lands Available Near Glen Canyon NRA
NPS Resource Conflict Analysis - Wetlands (500 Meter Buffer)
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Wetlands - 500 Meter Buf
Refer to Resource Data Context Statement for Data Source Definition
ARCH
CANY
CARE
BRCA
GLCA
NABR
HOVE
GRCA
0 5 10 20 Kilometers
0 5 10 20 Miles
NPS IMD GIS 20120816

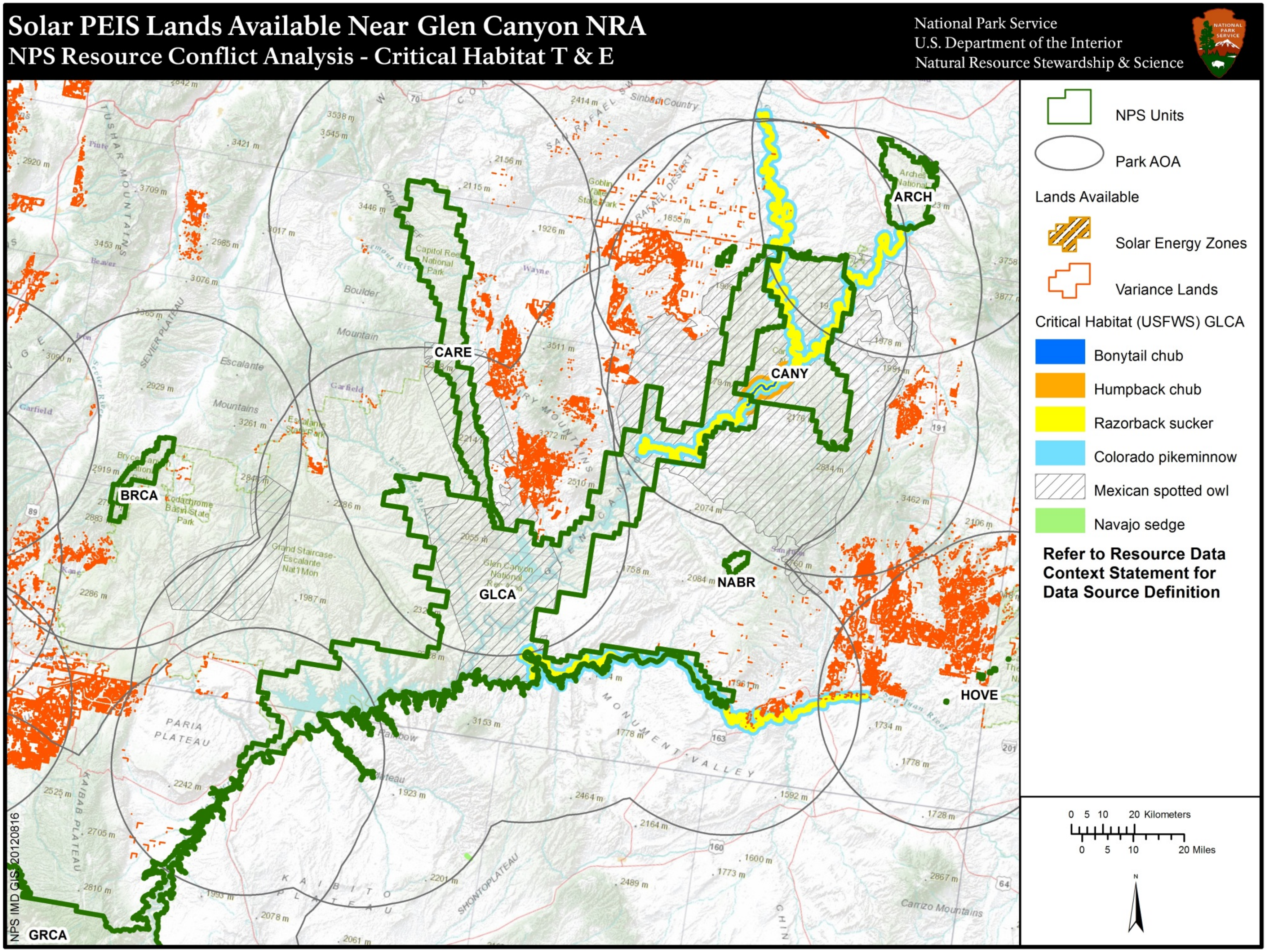
Upstream Watershed

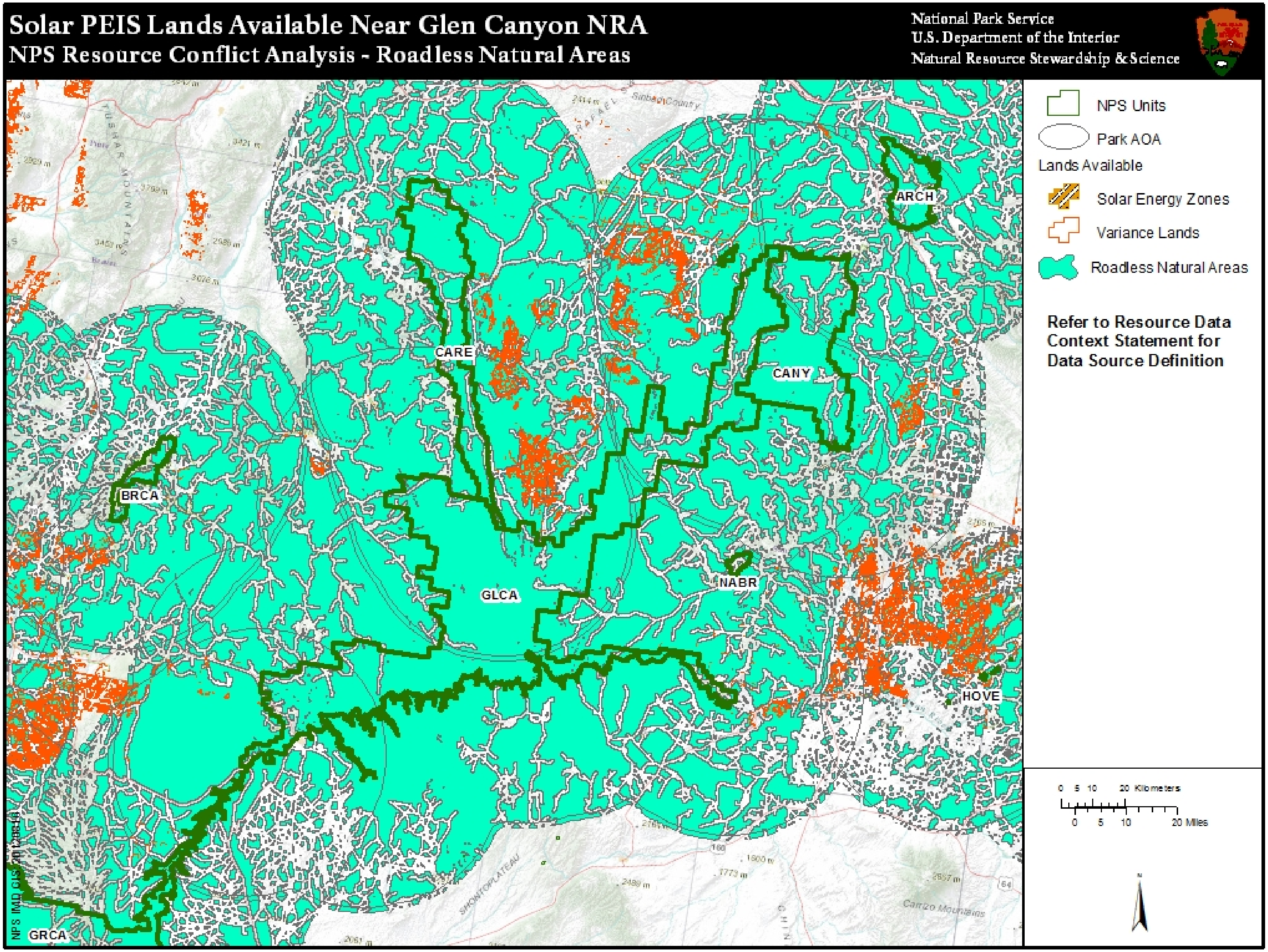


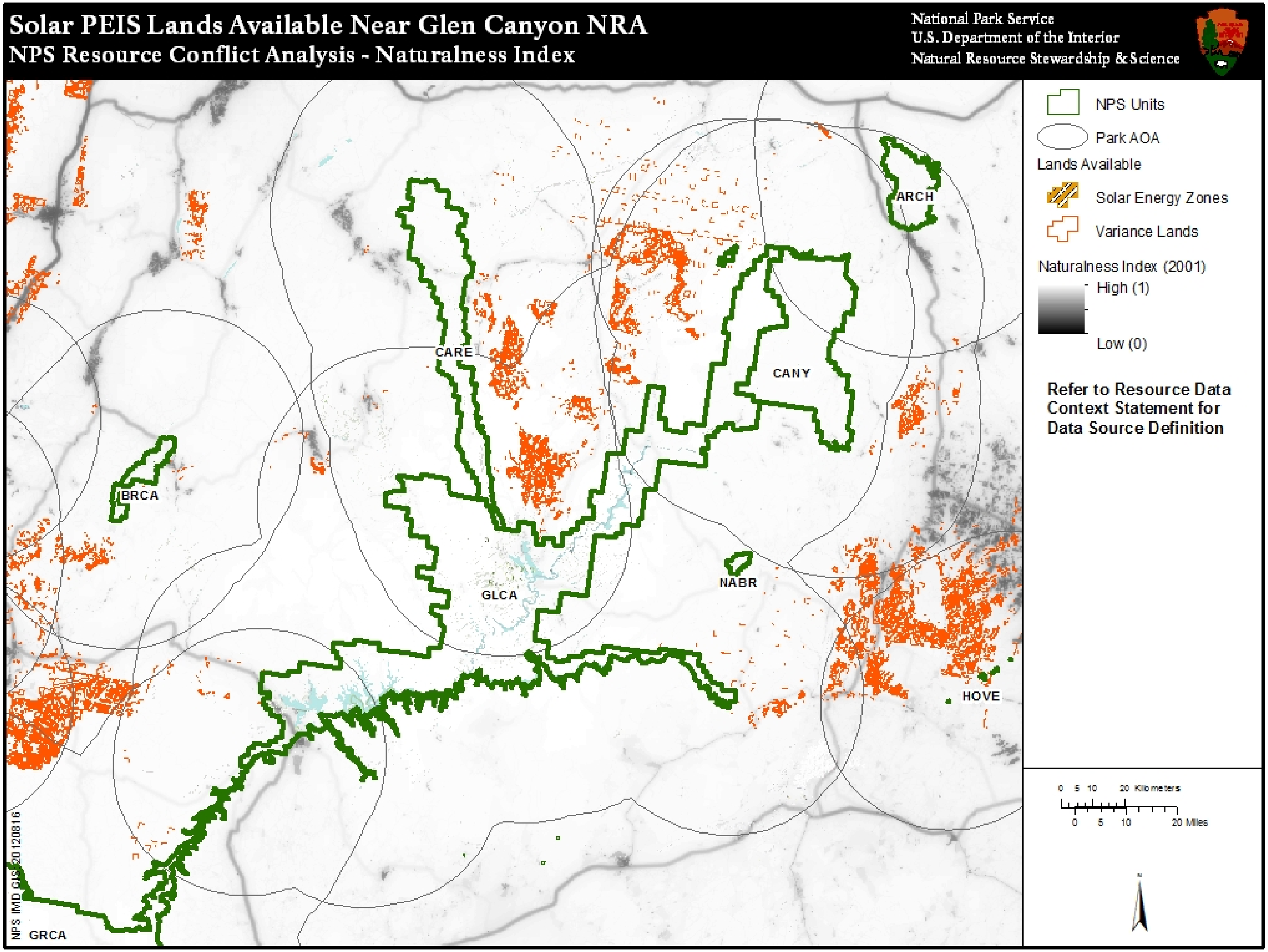
Land Ownership

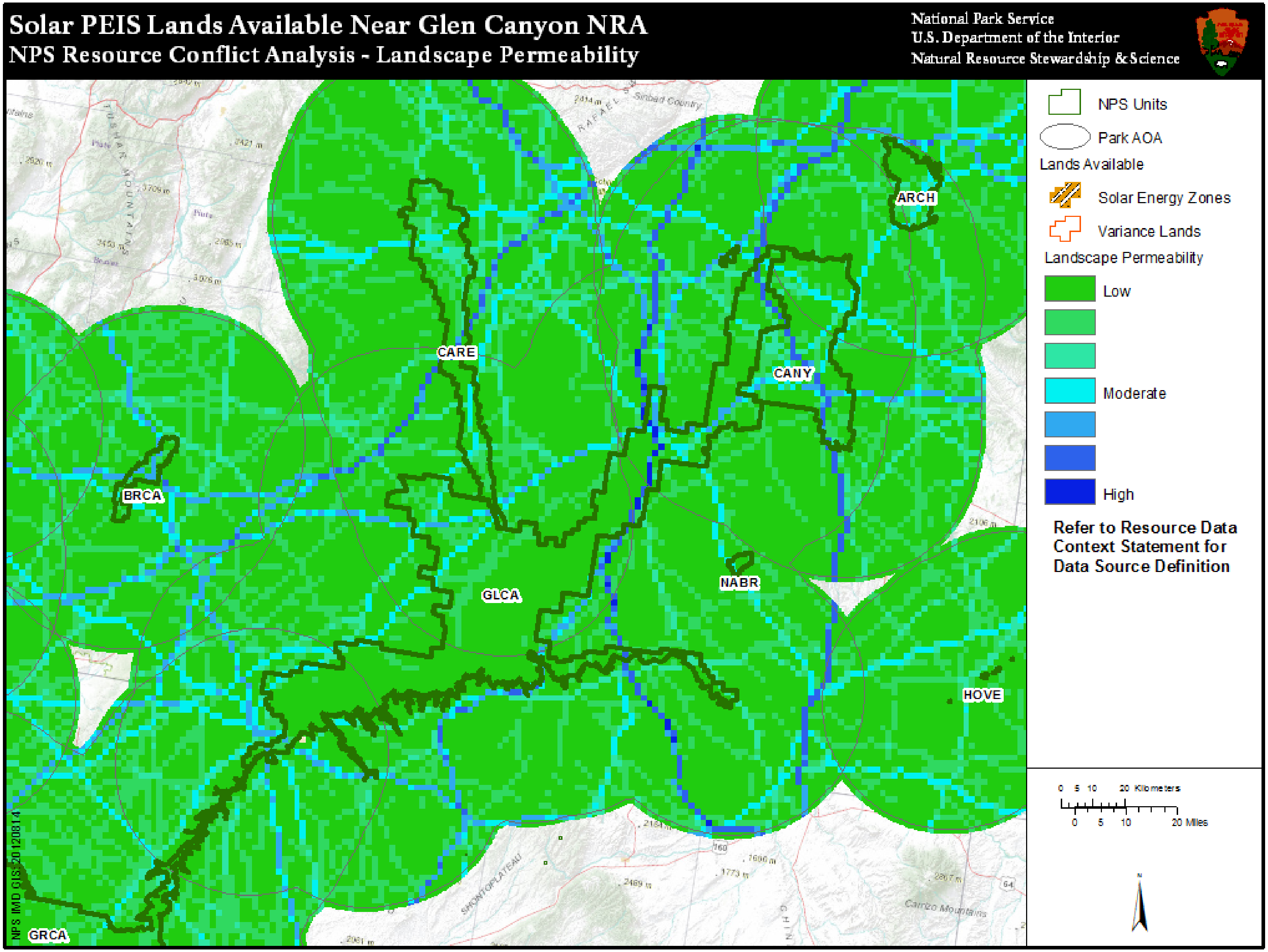



Solar PEIS Lands Available Near Glen Canyon NRA
NPS Resource Conflict Analysis - Protected Areas
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
PADUS
Protected Areas
GAP Status - 1
GAP Status - 2
Refer to Resource Data Context Statement for Data Source Definition
ARCH
CANY
CARE
BRCA
GLCA
NABR
HOVE
GRCA
0 10 20 Kilometers
0 5 10 20 Miles
NPS IMD GIS 20120816

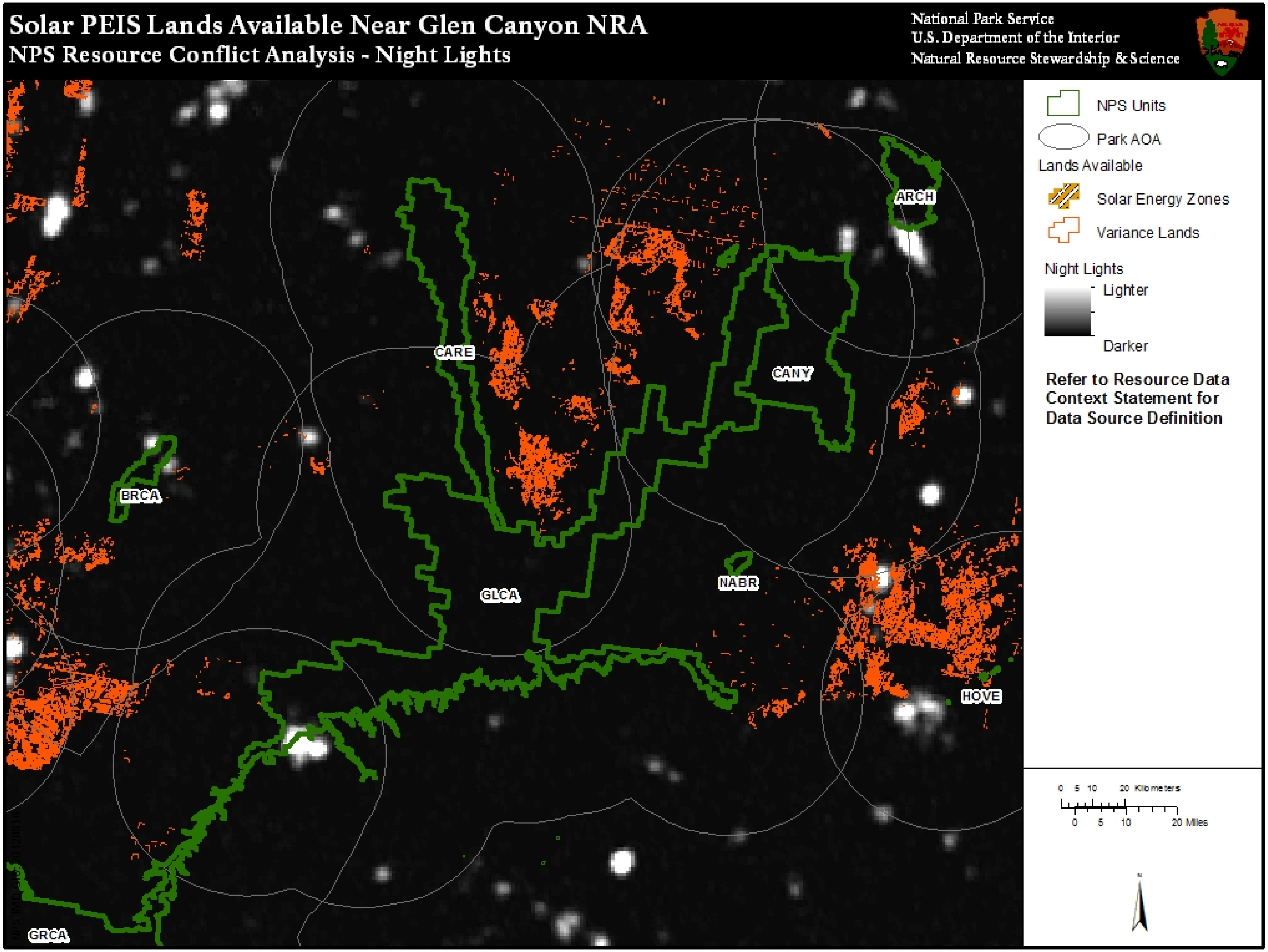

Solar PEIS Lands Available Near Glen Canyon NRA
NPS Resource Conflict Analysis - Critical Habitat T & E
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Critical Habitat (USFWS) GLCA
Bonytail chub
Humpback chub
Razorback sucker
Colorado pikeminnow
Mexican spotted owl
Navajo sedge
Refer to Resource Data Context Statement for Data Source Definition
0 5 10 20 Kilometers
0 5 10 20 Miles
N
ARCH
CANY
CARE
BRCA
GLCA
NABR
HOVE
GRCA
NPS IMD GIS 20120816

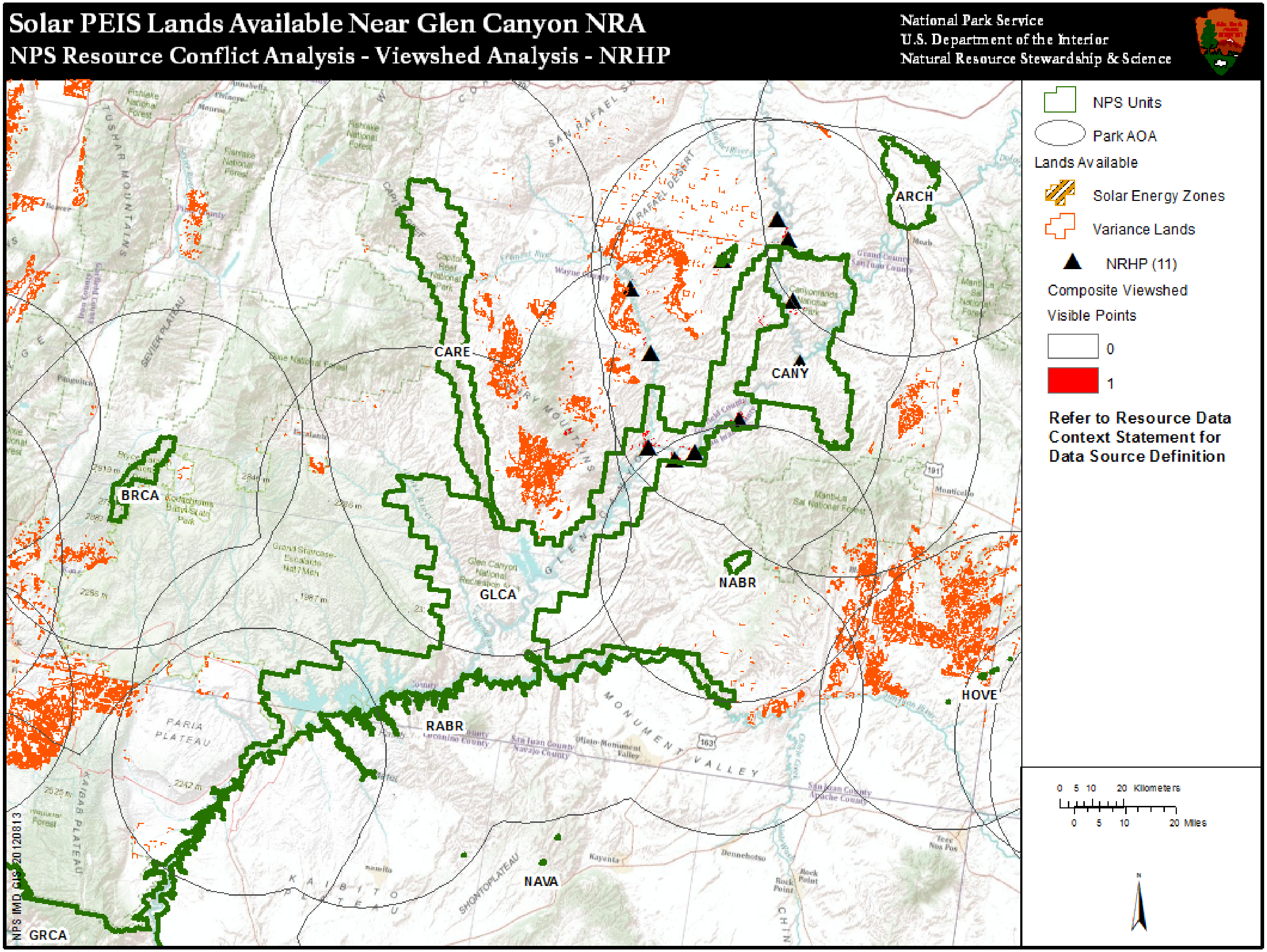

Solar PEIS Lands Available Near Glen Canyon NRA
NPS Resource Conflict Analysis - Roadless Natural Areas
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Roadless Natural Areas
Refer to Resource Data Context Statement for Data Source Definition
ARCH
CARE
CANY
BRCA
GLCA
NABR
HOVE
GRCA
0 5 10 20 Kilometers
0 5 10 20 Miles

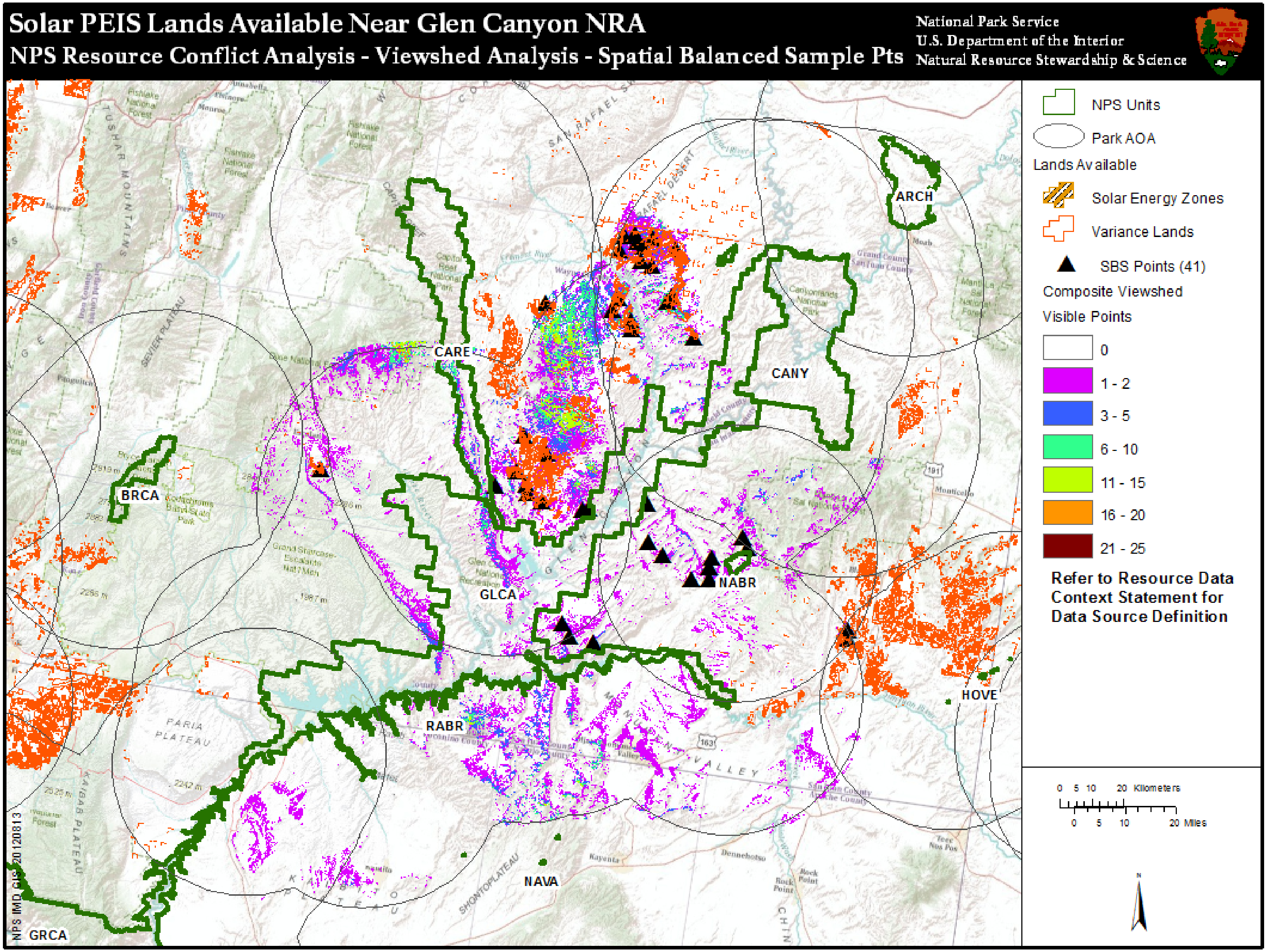

Solar PEIS Lands Available Near Glen Canyon NRA
NPS Resource Conflict Analysis - Naturalness Index
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Naturalness Index (2001)
High (1)
Low (0)
Refer to Resource Data Context Statement for Data Source Definition
0 5 10 20 Kilometers
0 5 10 20 Miles
ARCH
CARE
CANY
BRCA
GLCA
NABR
HOVE
GRCA
NPS IMD GIS 20120816



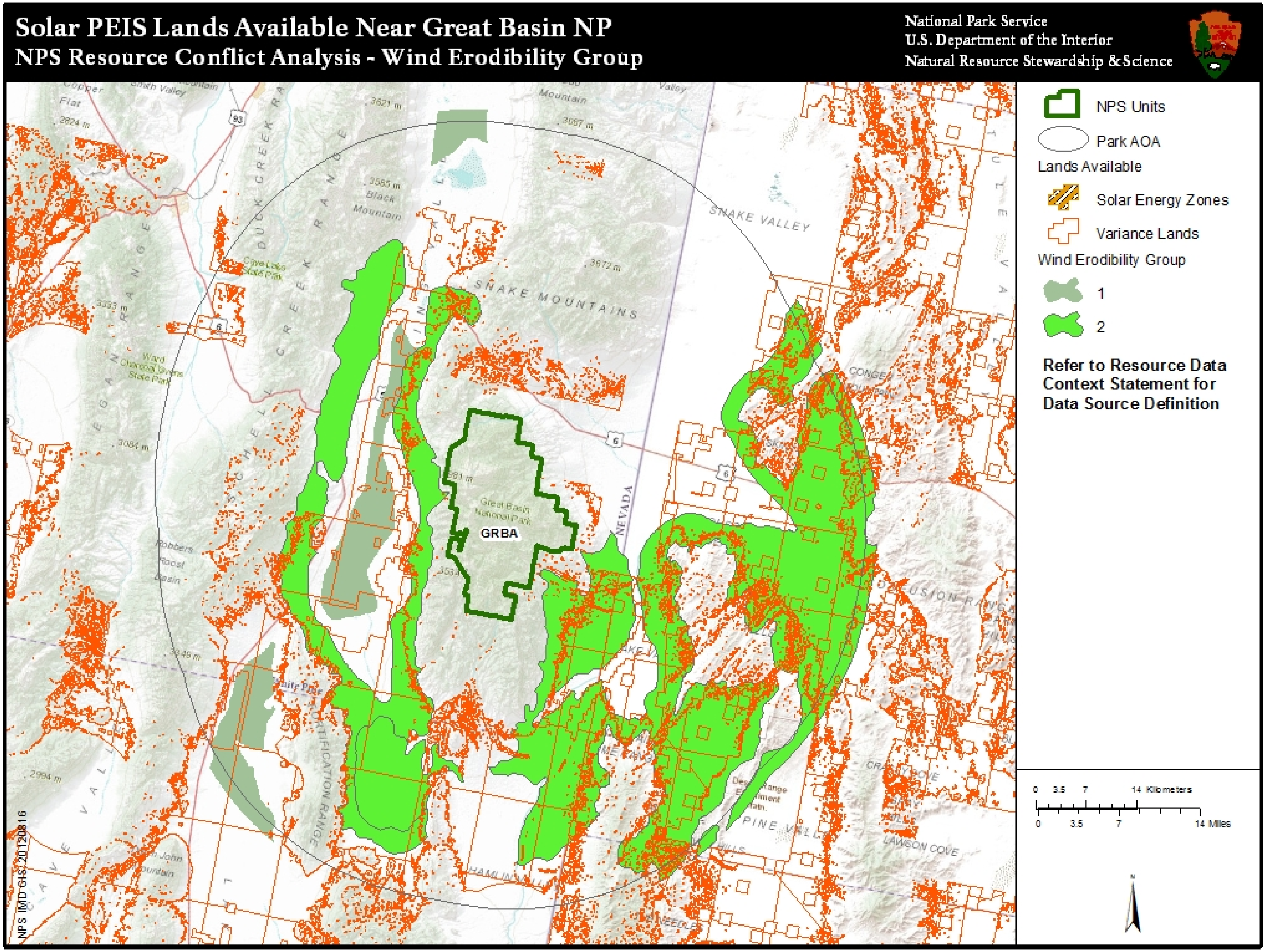
Solar PEIS Lands Available Near Glen Canyon NRA
NPS Resource Conflict Analysis - Landscape Permeability
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Landscape Permeability
Low
Moderate
High
Refer to Resource Data Context Statement for Data Source Definition
0 5 10 20 Kilometers
0 5 10 20 Miles
CARE
CANY
ARCH
BRCA
GLCA
NABR
HOVE
GRCA
NPS IMD GIS 20120814


Solar PEIS Lands Available Near Glen Canyon NRA
NPS Resource Conflict Analysis - Night Lights
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Night Lights
Lighter
Darker
Refer to Resource Data Context Statement for Data Source Definition
ARCH
CARE
CANY
BRCA
GLCA
NABR
HOVE
GRCA
0 5 10 20 Kilometers
0 5 10 20 Miles

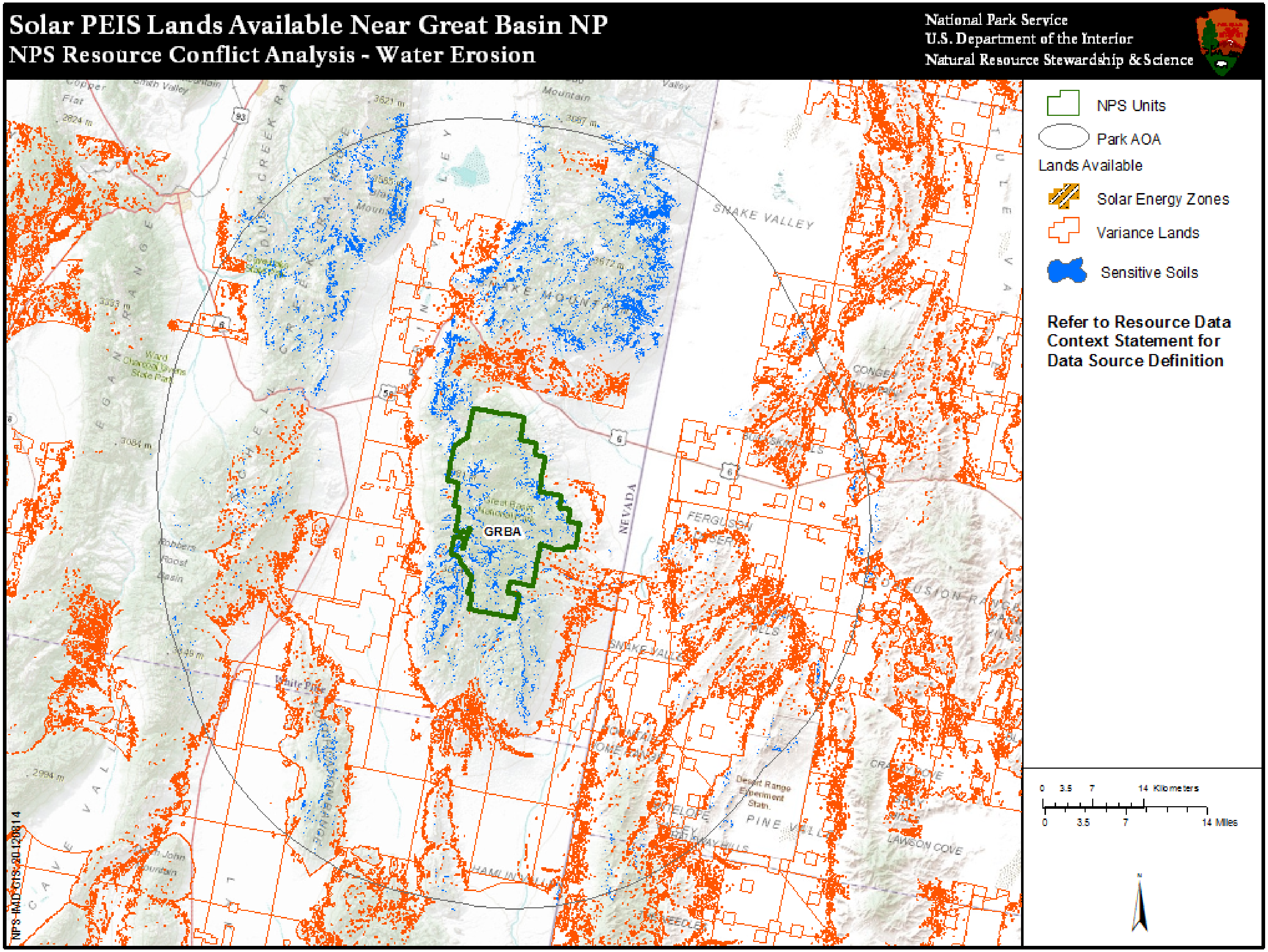

Solar PEIS Lands Available Near Glen Canyon NRA
NPS Resource Conflict Analysis - Viewshed Analysis - NRHP
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
NRHP (11)
Composite Viewshed
Visible Points
0
1
Refer to Resource Data Context Statement for Data Source Definition
0 5 10 20 Kilometers
0 5 10 20 Miles
ARCH
CARE
CANY
BRCA
NABR
GLCA
RABR
HOVE
NAVA
GRCA
NPS IMD GIS 20120813


Solar PEIS Lands Available Near Glen Canyon NRA
NPS Resource Conflict Analysis - Viewshed Analysis - Spatial Balanced Sample Pts
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
SBS Points (41)
Composite Viewshed
Visible Points
0
1 - 2
3 - 5
6 - 10
11 - 15
16 - 20
21 - 25
Refer to Resource Data Context Statement for Data Source Definition
0 5 10 20 Kilometers
0 5 10 20 Miles
ARCH
CARE
CANY
BRCA
GLCA
NABR
RABR
HOVE
NAVA
GRCA
NPS IMD GIS 20120813

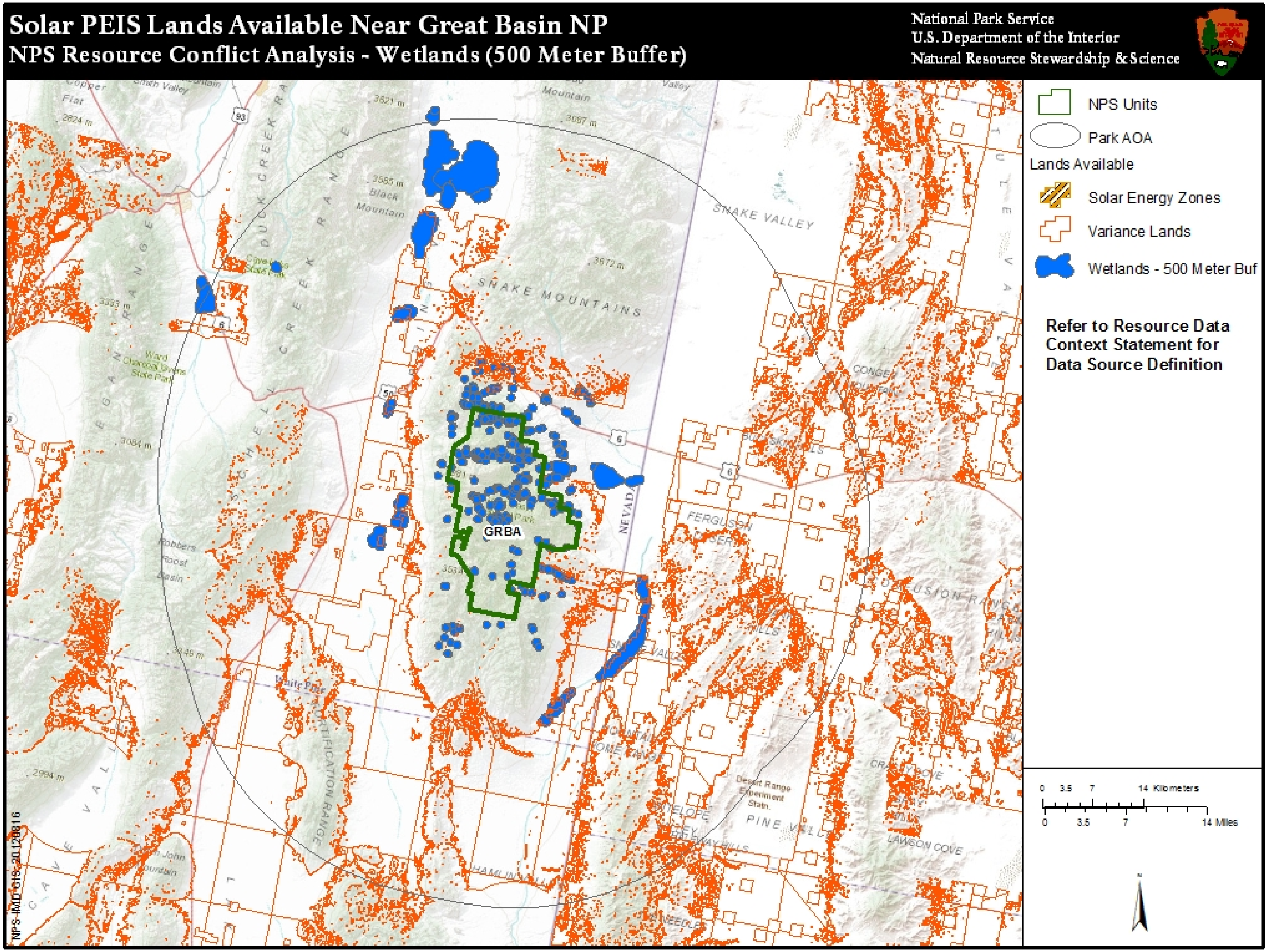
Great Basin National Park
Wind Erodibility Group



Water Erodibility Group

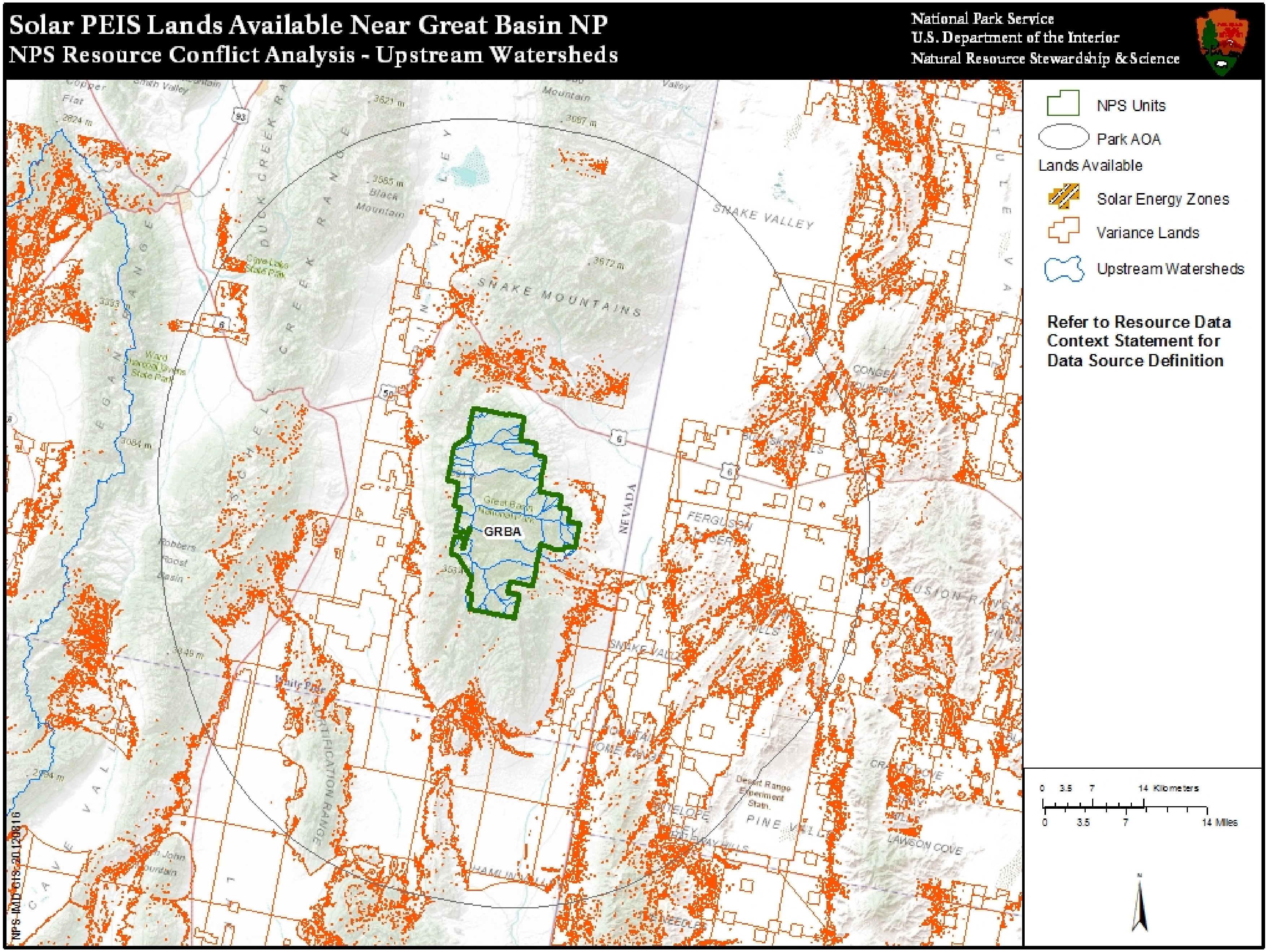


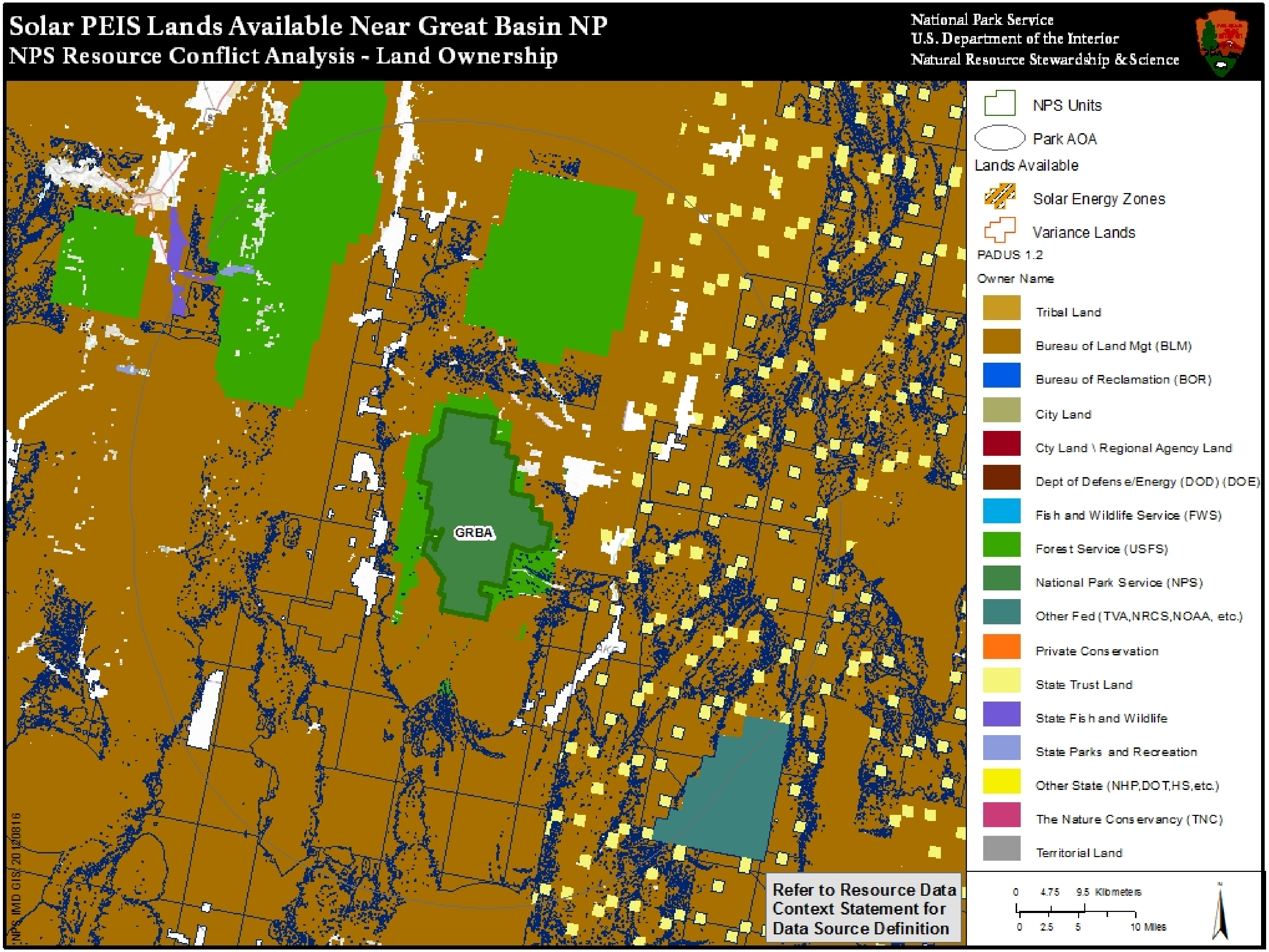
Wetlands

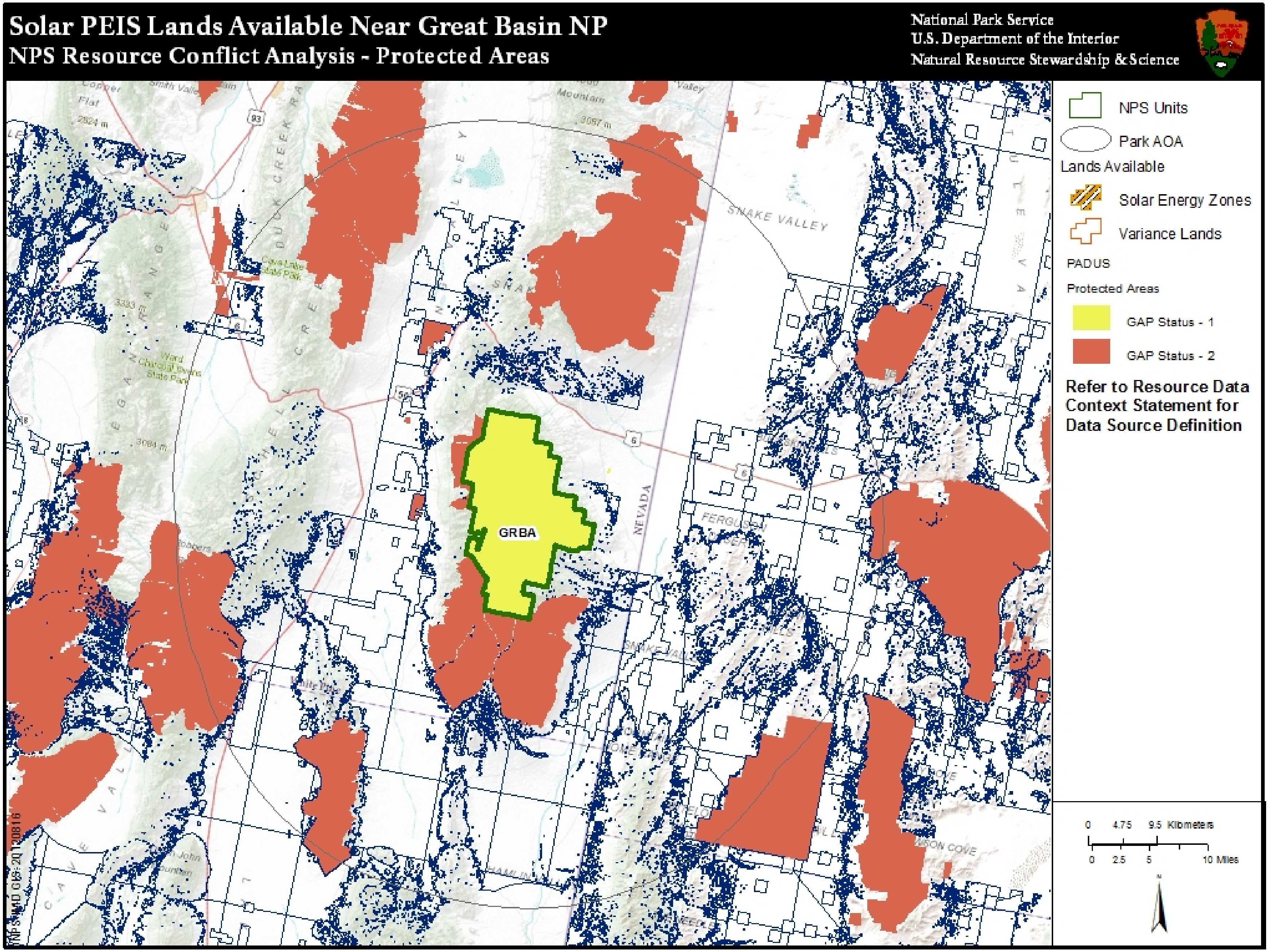


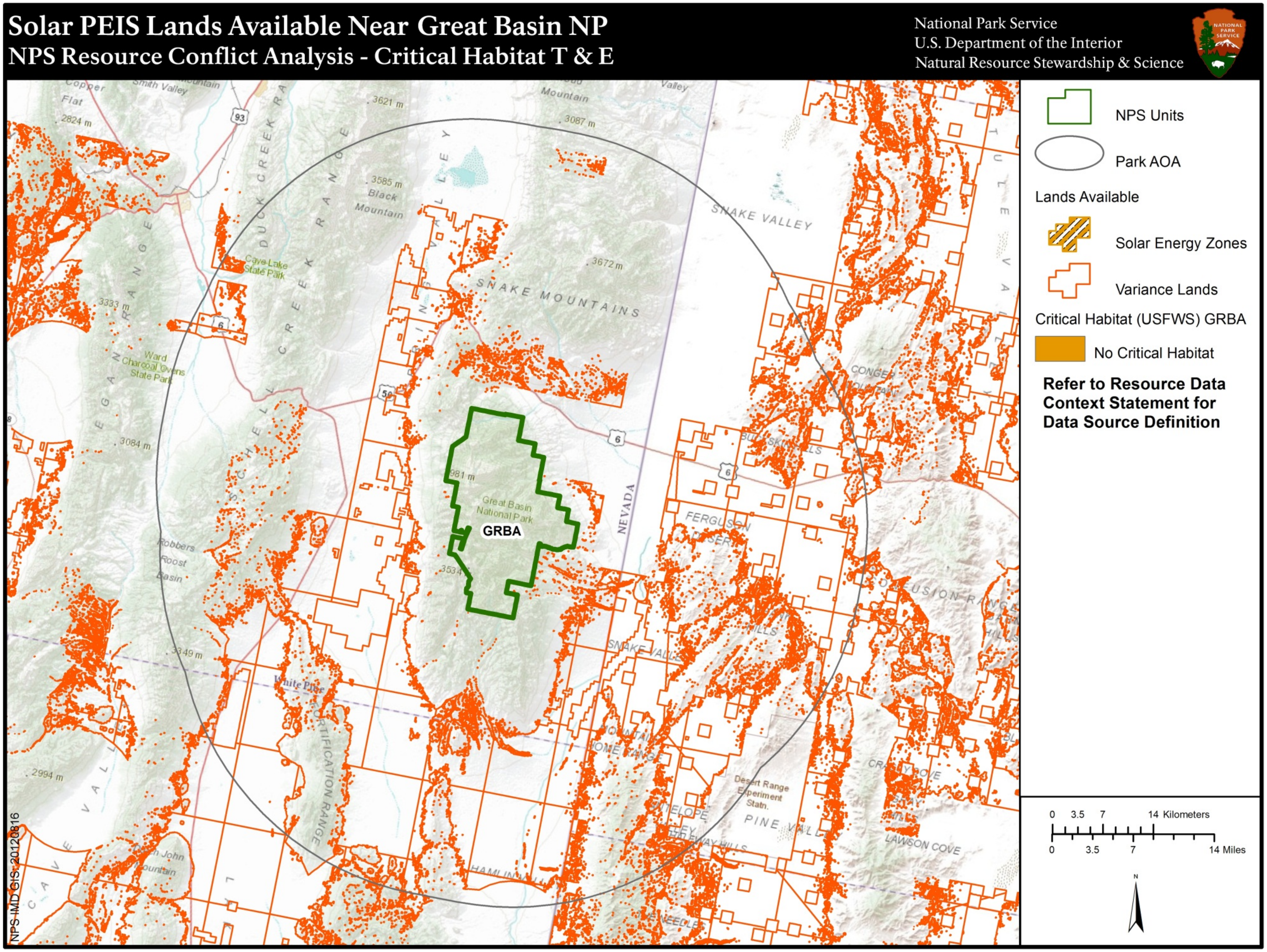
Solar PEIS Lands Available Near Great Basin NP
NPS Resource Conflict Analysis - Wetlands (500 Meter Buffer)
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Wetlands - 500 Meter Buf
Refer to Resource Data Context Statement for Data Source Definition
GRBA
SNAKE VALLEY
SNAKE MOUNTAINS
NEVADA
0 3.5 7 14 Kilometers
0 3.5 7 14 Miles

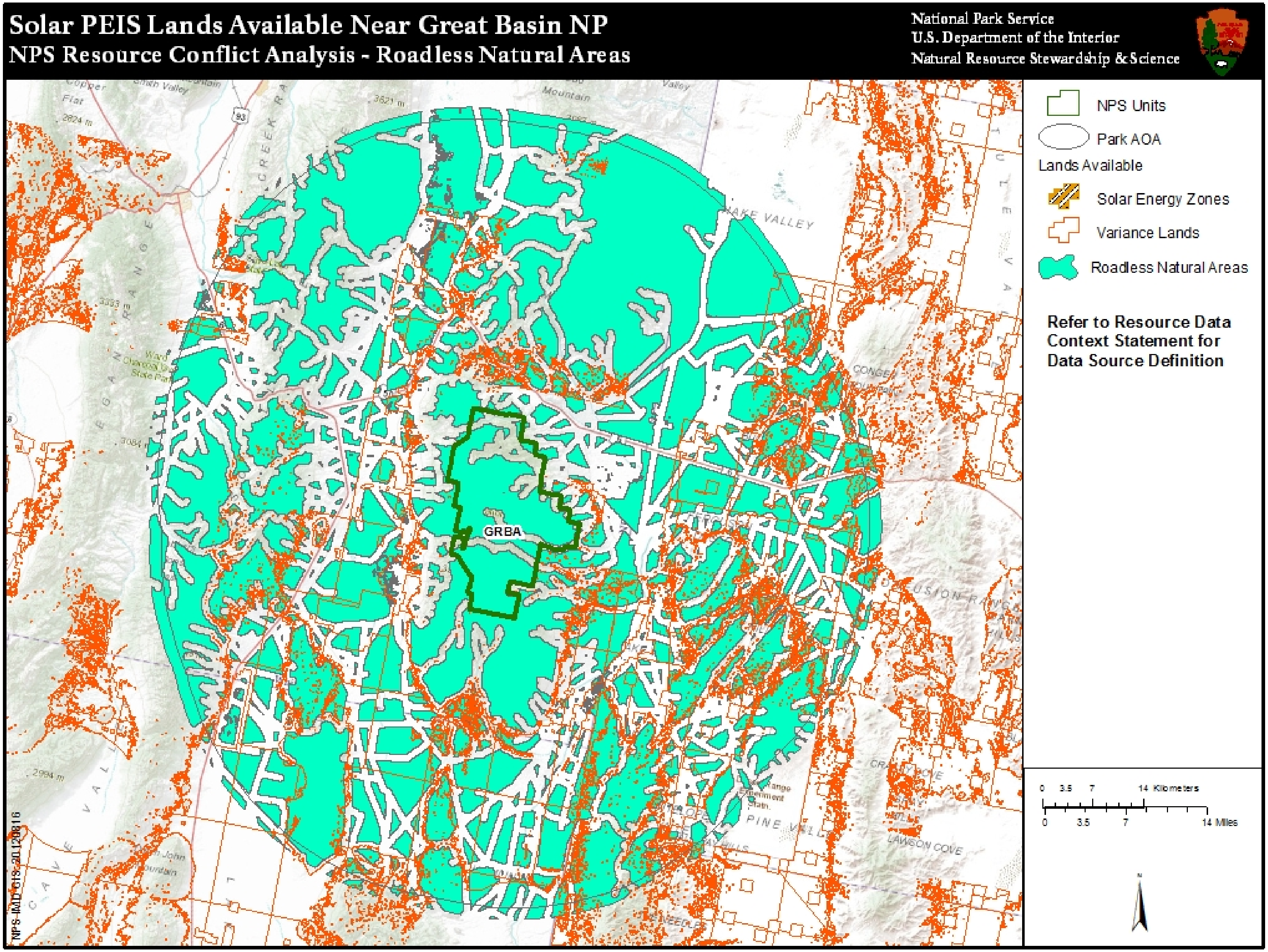
Upstream Watershed

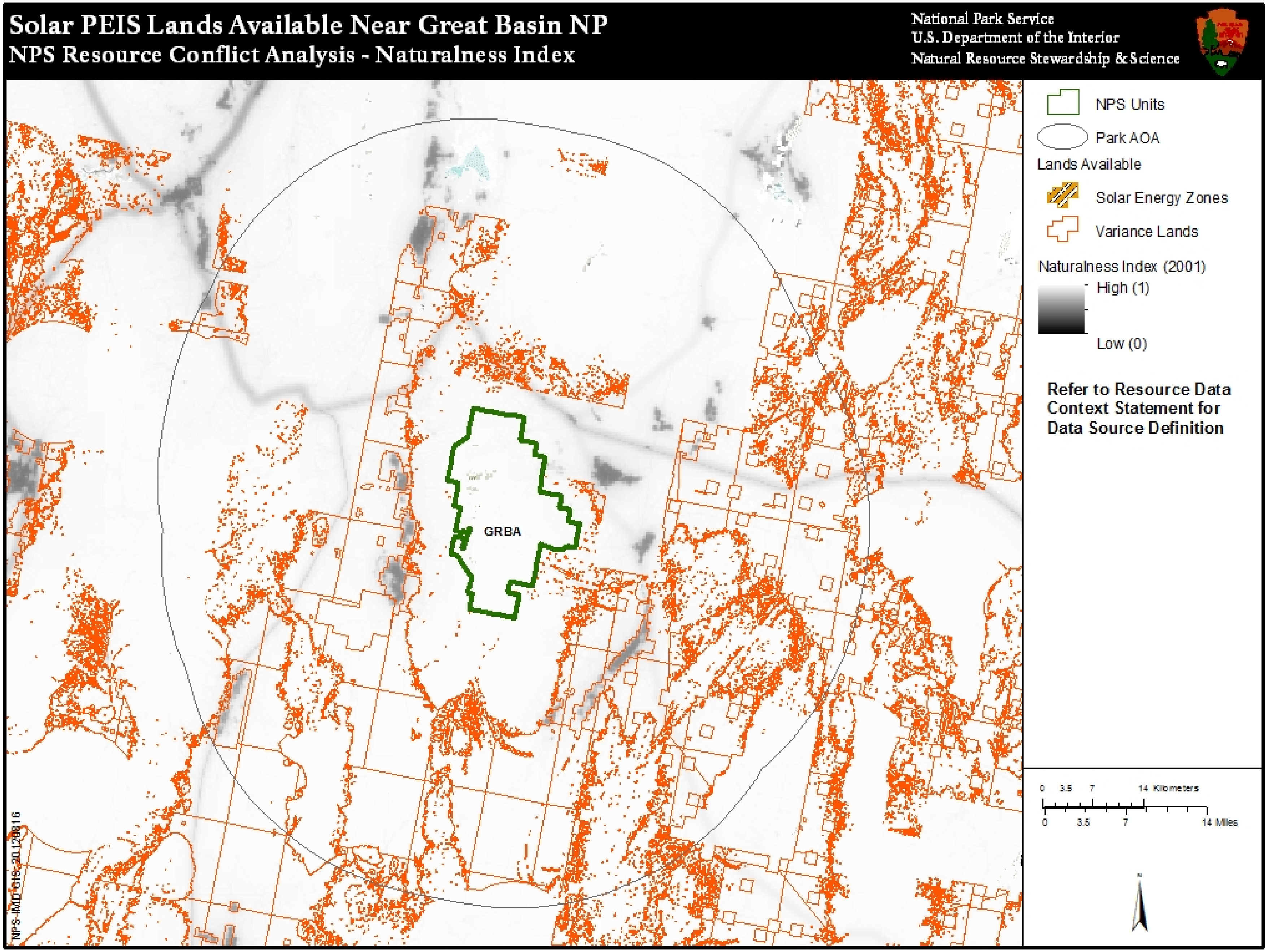



Solar PEIS Lands Available Near Great Basin NP
NPS Resource Conflict Analysis - Land Ownership
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
GRBA
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
PADUS 1.2
Owner Name
Tribal Land
Bureau of Land Mgt (BLM)
Bureau of Reclamation (BOR)
City Land
Cty Land \ Regional Agency Land
Dept of Defense/Energy (DOD) (DOE)
Fish and Wildlife Service (FWS)
Forest Service (USFS)
National Park Service (NPS)
Other Fed (TVA,NRCS,NOAA, etc.)
Private Conservation
State Trust Land
State Fish and Wildlife
State Parks and Recreation
Other State (NHP,DOT,HS,etc.)
The Nature Conservancy (TNC)
Territorial Land
Refer to Resource Data Context Statement for Data Source Definition
0 4.75 9.5 Kilometers
0 2.5 5 10 Miles
NPS IMD GIS 20120816

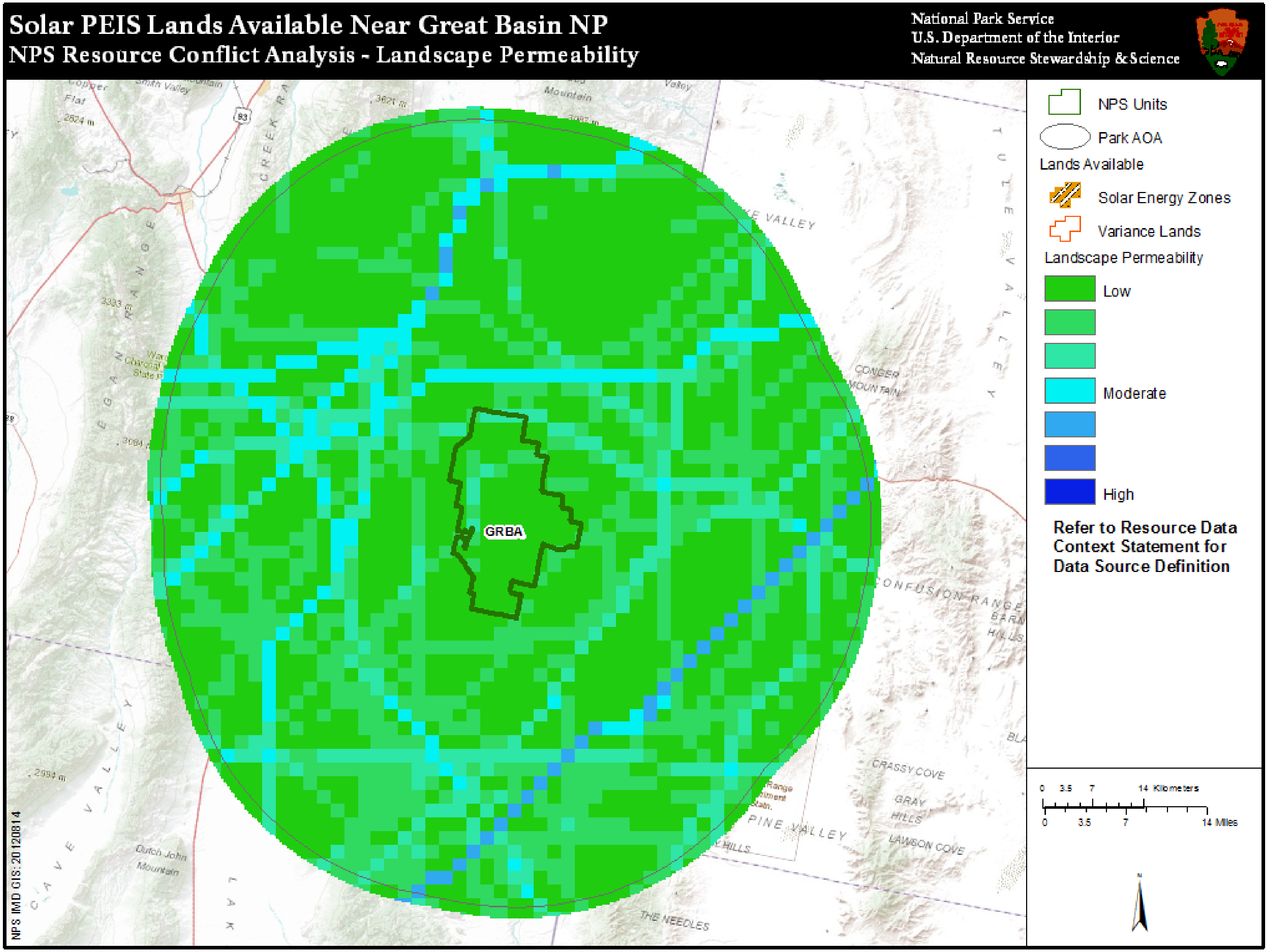

Solar PEIS Lands Available Near Great Basin NP
NPS Resource Conflict Analysis - Protected Areas
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
PADUS
Protected Areas
GAP Status - 1
GAP Status - 2
Refer to Resource Data Context Statement for Data Source Definition
GRBA
SNAKE VALLEY
NEVADA
0 4.75 9.5 Kilometers
0 2.5 5 10 Miles

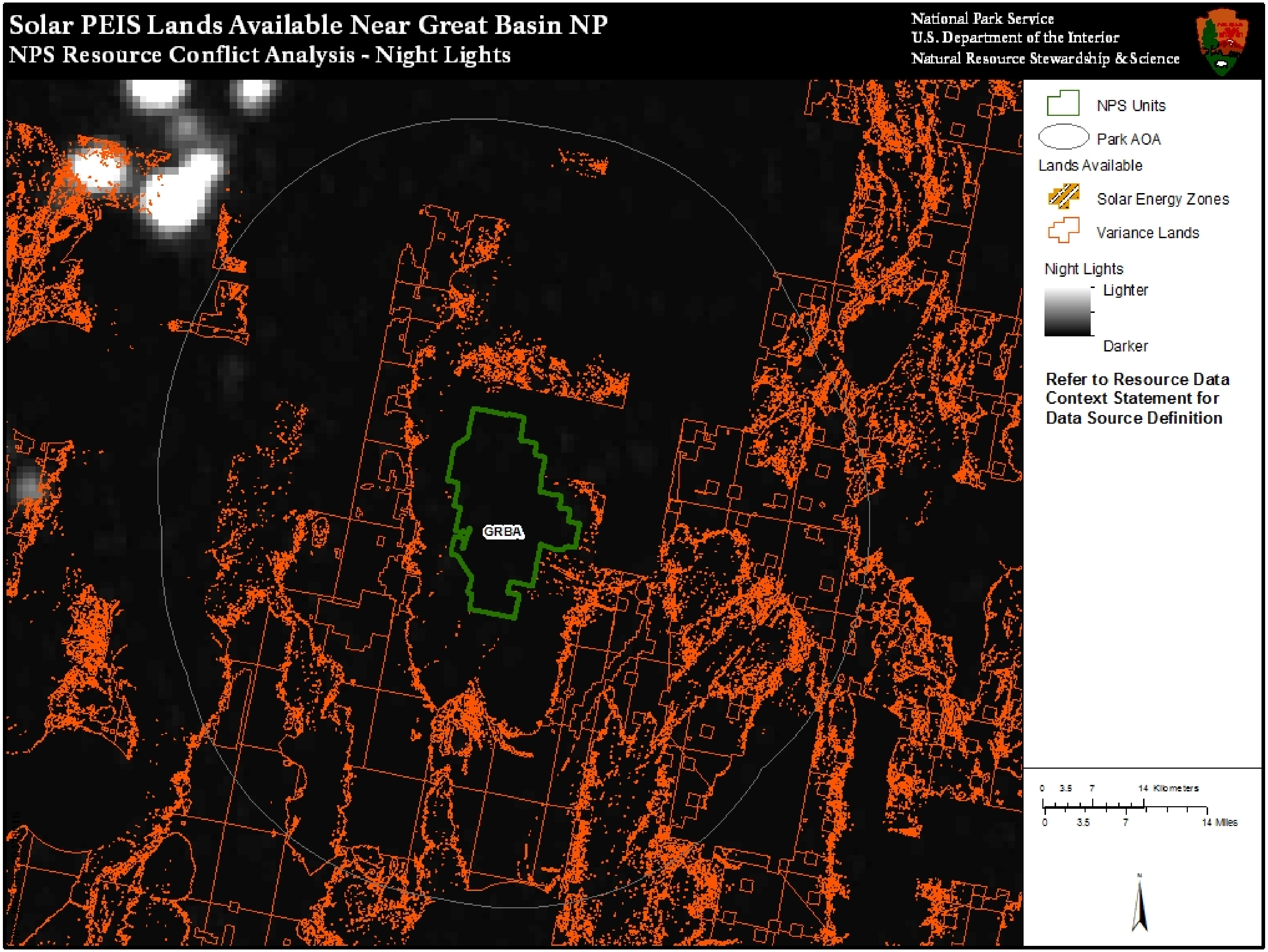

Solar PEIS Lands Available Near Great Basin NP
NPS Resource Conflict Analysis - Critical Habitat T & E
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Critical Habitat (USFWS) GRBA
No Critical Habitat
Refer to Resource Data Context Statement for Data Source Definition
0 3.5 7 14 Kilometers
0 3.5 7 14 Miles
N
GRBA
Great Basin National Park
SNAKE MOUNTAINS
SNAKE VALLEY
NEVADA
Cave Lake State Park
Ward Charcoal Ovens State Park
NPS-IMD GIS: 20120816

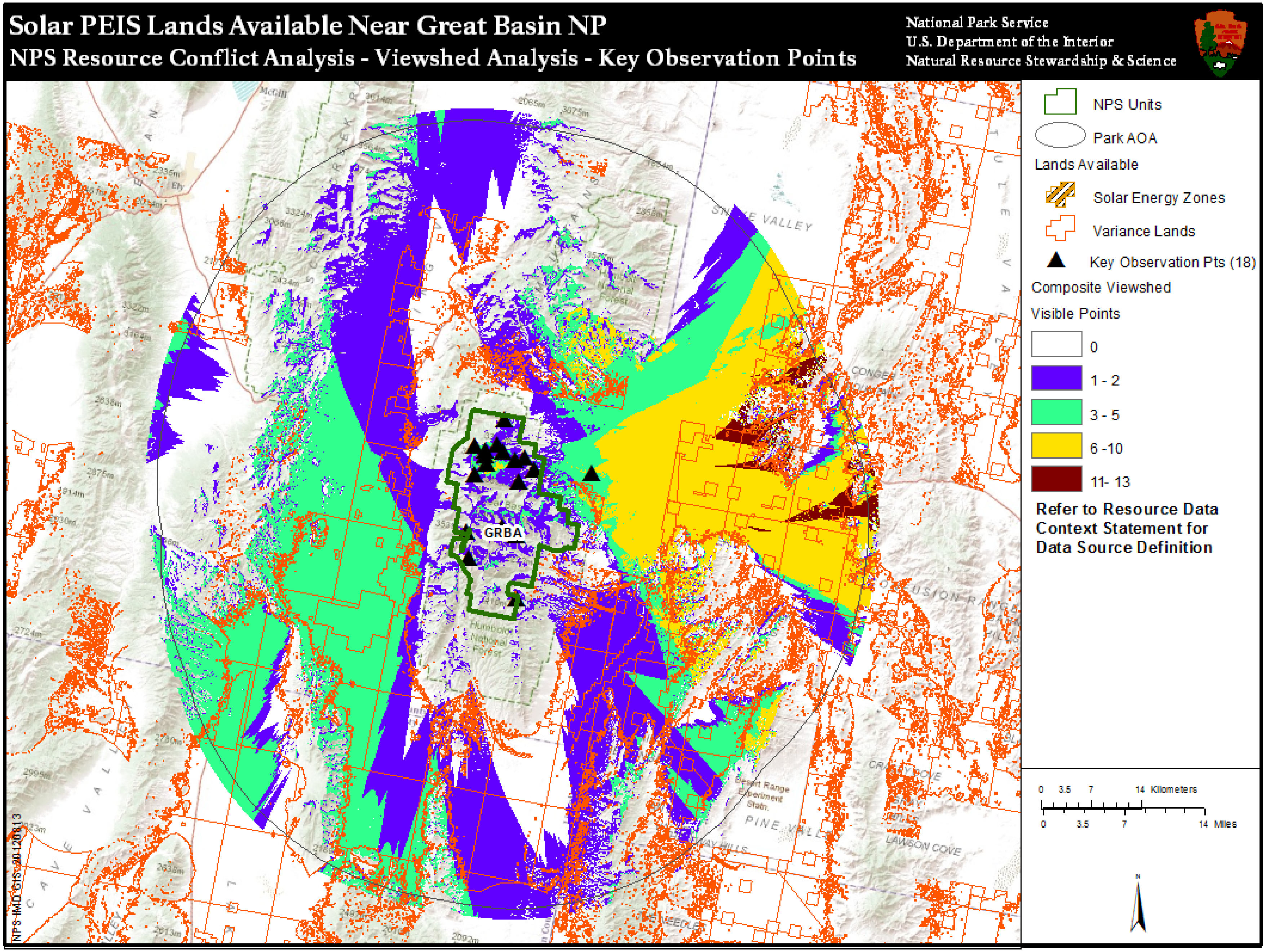

Solar PEIS Lands Available Near Great Basin NP
NPS Resource Conflict Analysis - Roadless Natural Areas
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Roadless Natural Areas
Refer to Resource Data Context Statement for Data Source Definition
0 3.5 7 14 Kilometers
0 3.5 7 14 Miles
GRBA
SNAKE VALLEY
PINE VALLEY
LAWSON COVE
NPS-IMD-013-20120816



Solar PEIS Lands Available Near Great Basin NP
NPS Resource Conflict Analysis - Naturalness Index
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
GRBA
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Naturalness Index (2001)
High (1)
Low (0)
Refer to Resource Data Context Statement for Data Source Definition
0 3.5 7 14 Kilometers
0 3.5 7 14 Miles
NPS-IMD-019-20120816

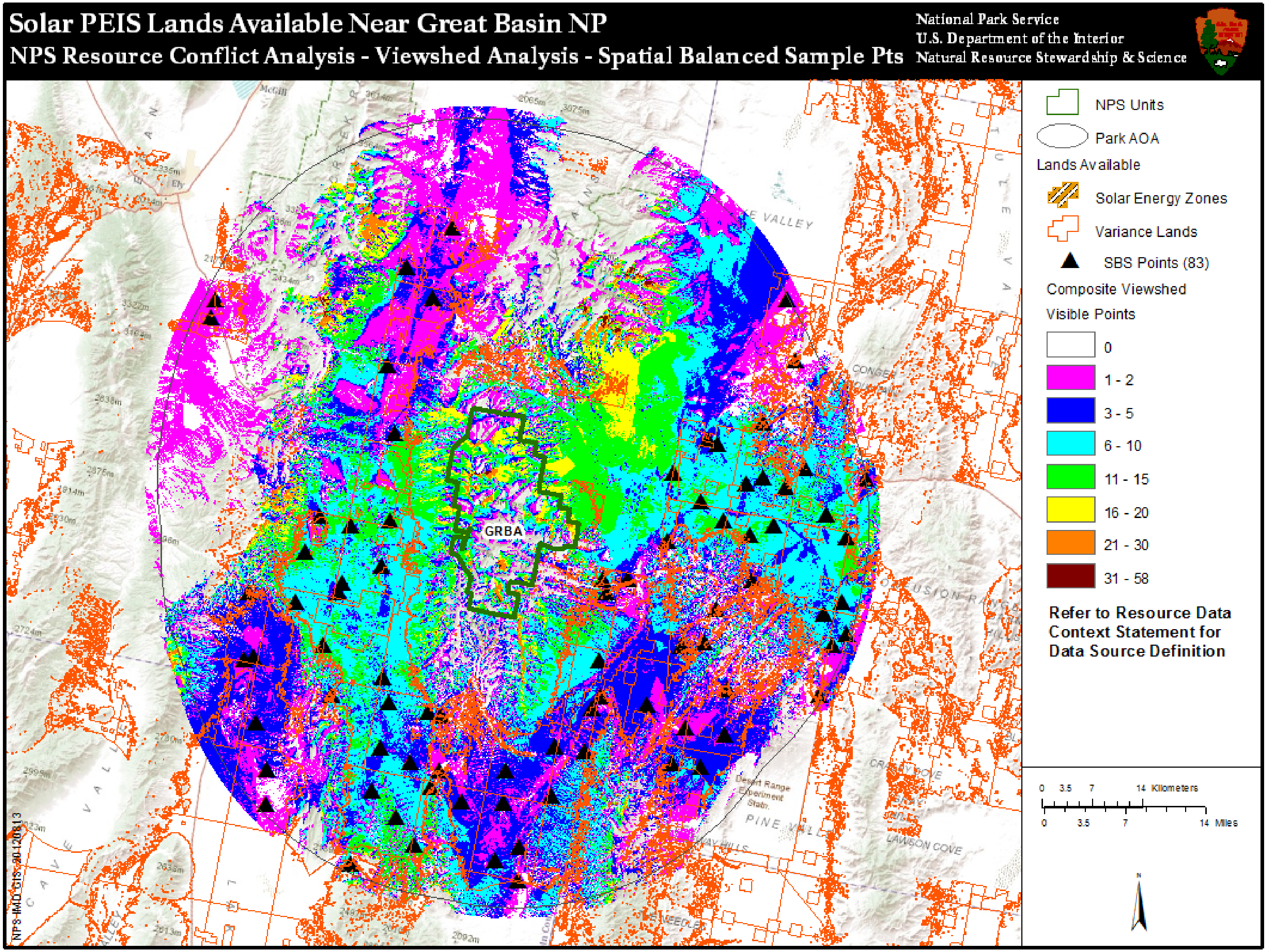

Solar PEIS Lands Available Near Great Basin NP
NPS Resource Conflict Analysis - Landscape Permeability
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
GRBA
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Landscape Permeability
Low
Moderate
High
Refer to Resource Data Context Statement for Data Source Definition
0 3.5 7 14 Kilometers
0 3.5 7 14 Miles
NPS IMD GIS: 20120814

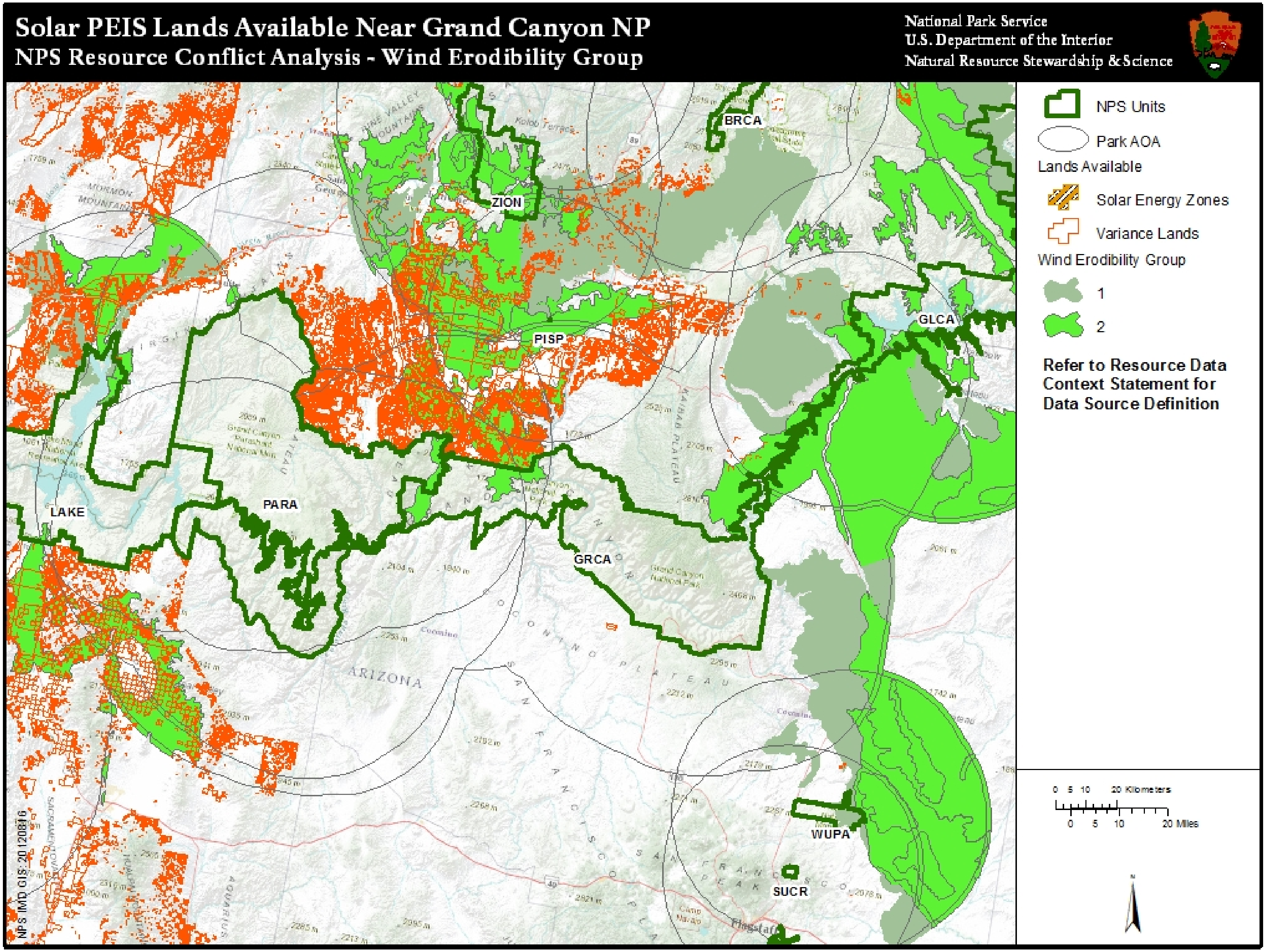

Solar PEIS Lands Available Near Great Basin NP
NPS Resource Conflict Analysis - Night Lights
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Night Lights
Lighter
Darker
Refer to Resource Data Context Statement for Data Source Definition
0 3.5 7 14 Kilometers
0 3.5 7 14 Miles
GRBA

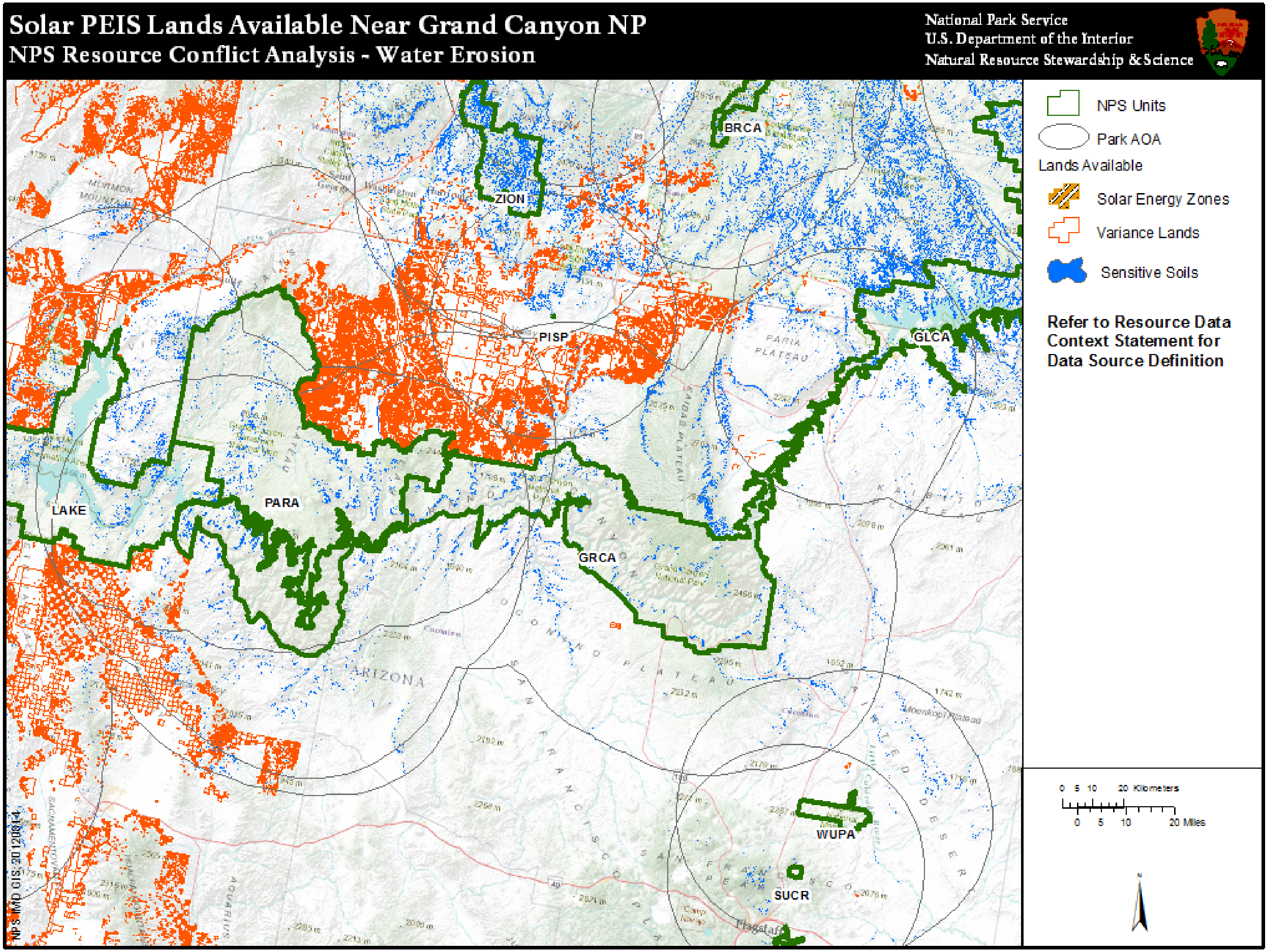


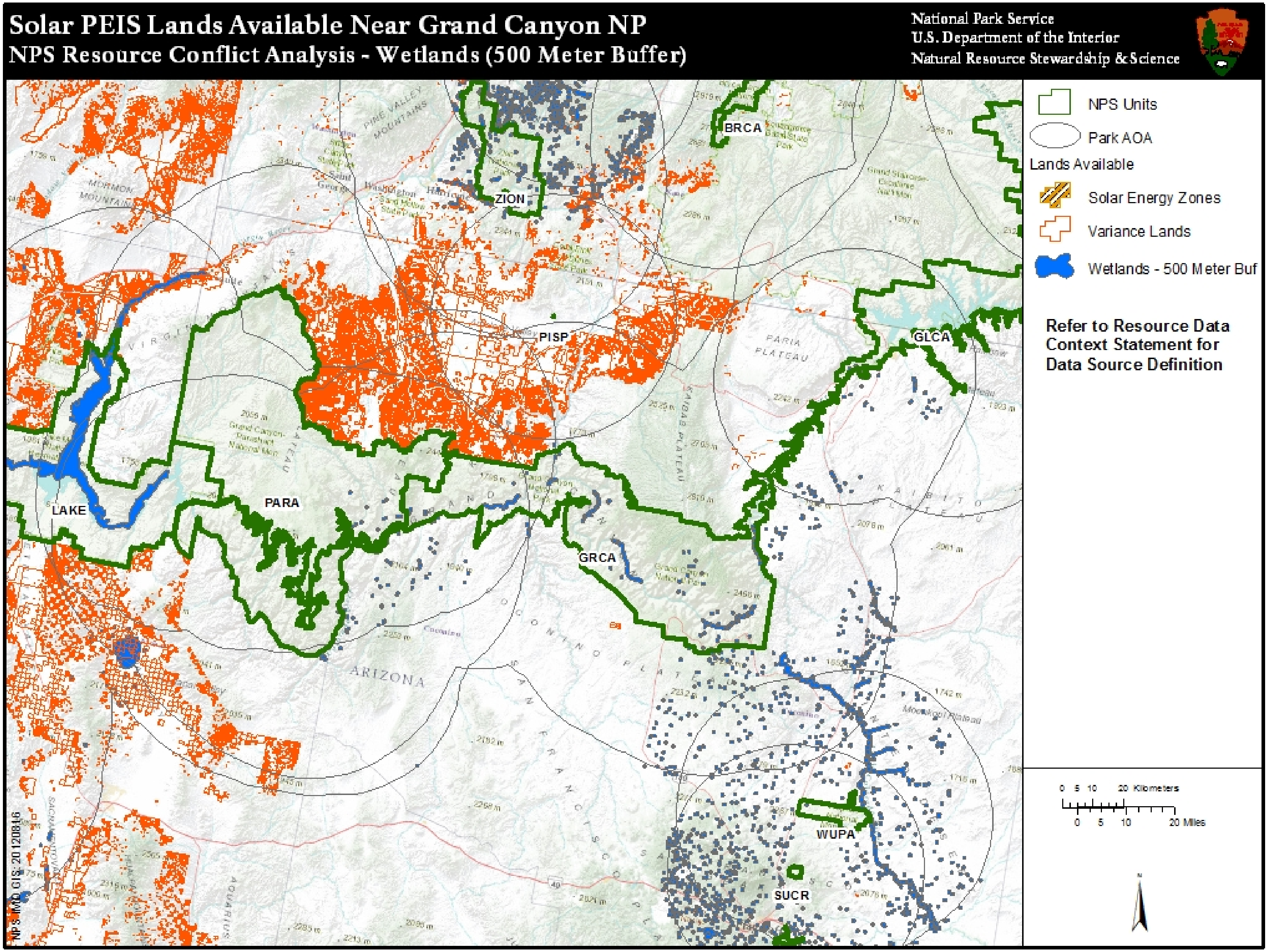
Solar PEIS Lands Available Near Great Basin NP
NPS Resource Conflict Analysis - Viewshed Analysis - Key Observation Points
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Key Observation Pts (18)
Composite Viewshed
Visible Points
0
1 - 2
3 - 5
6 -10
11- 13
Refer to Resource Data Context Statement for Data Source Definition
GRBA
0 3.5 7 14 Kilometers
0 3.5 7 14 Miles

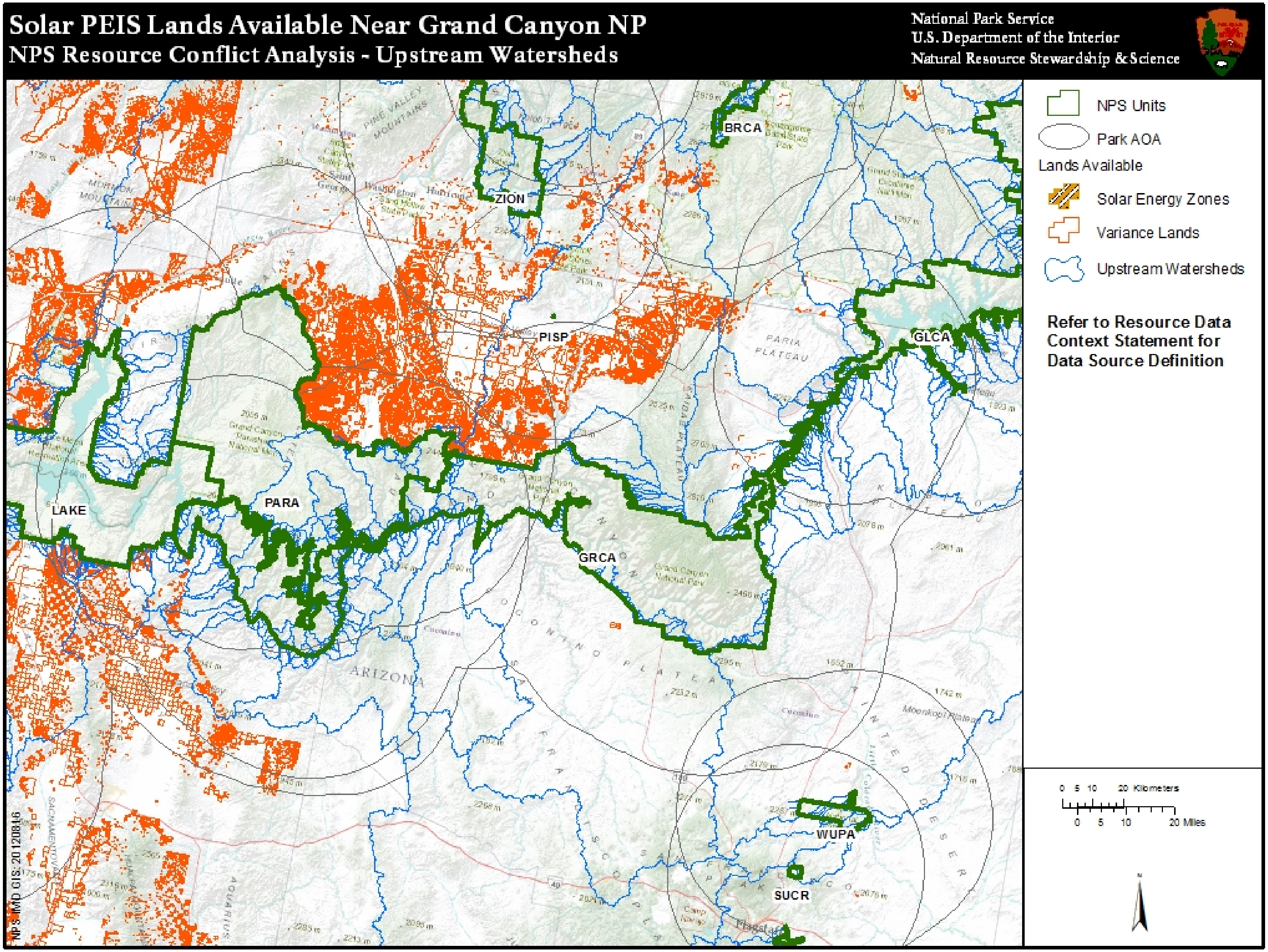
Viewshed – Spatial Balanced Sample

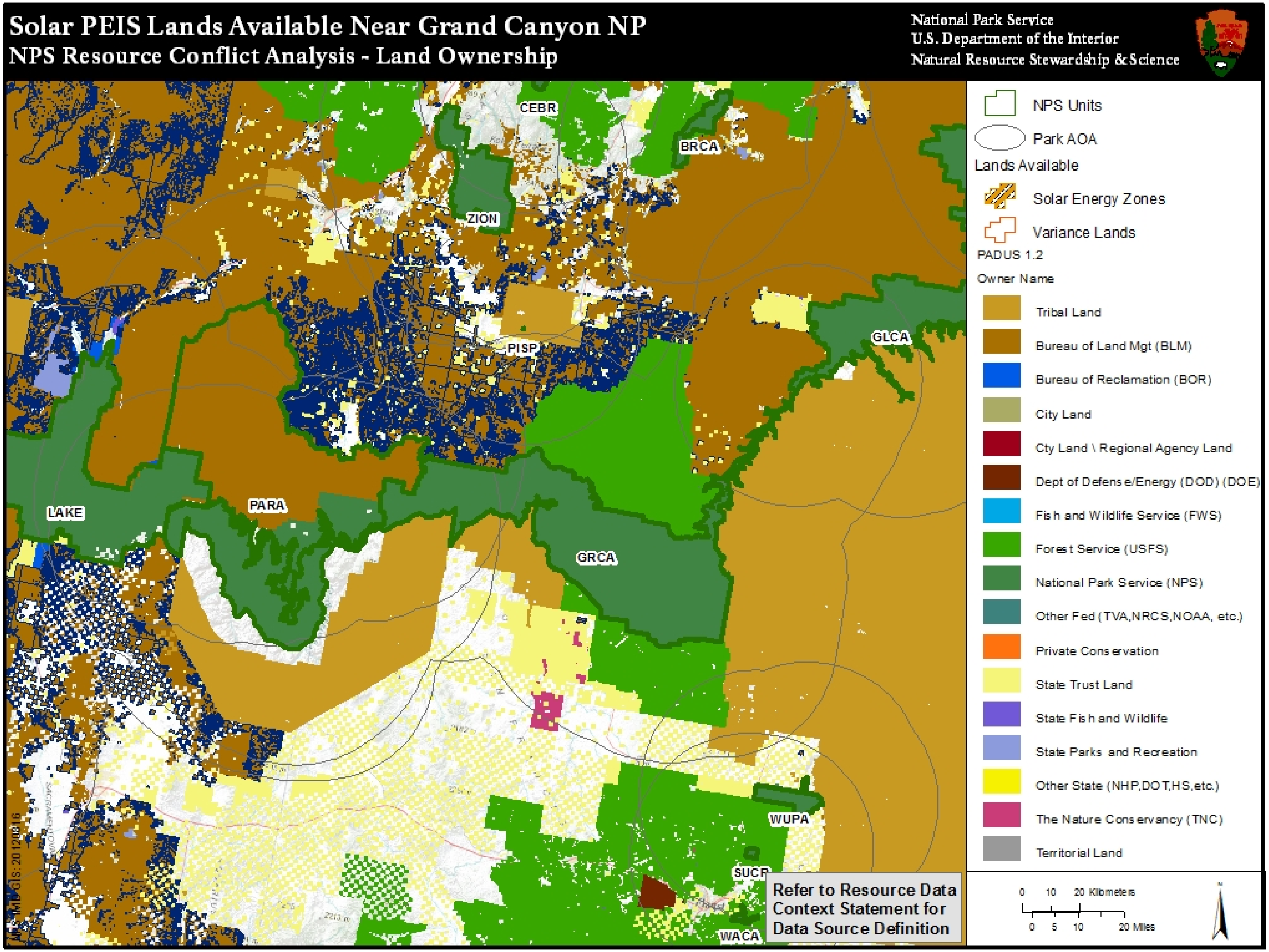


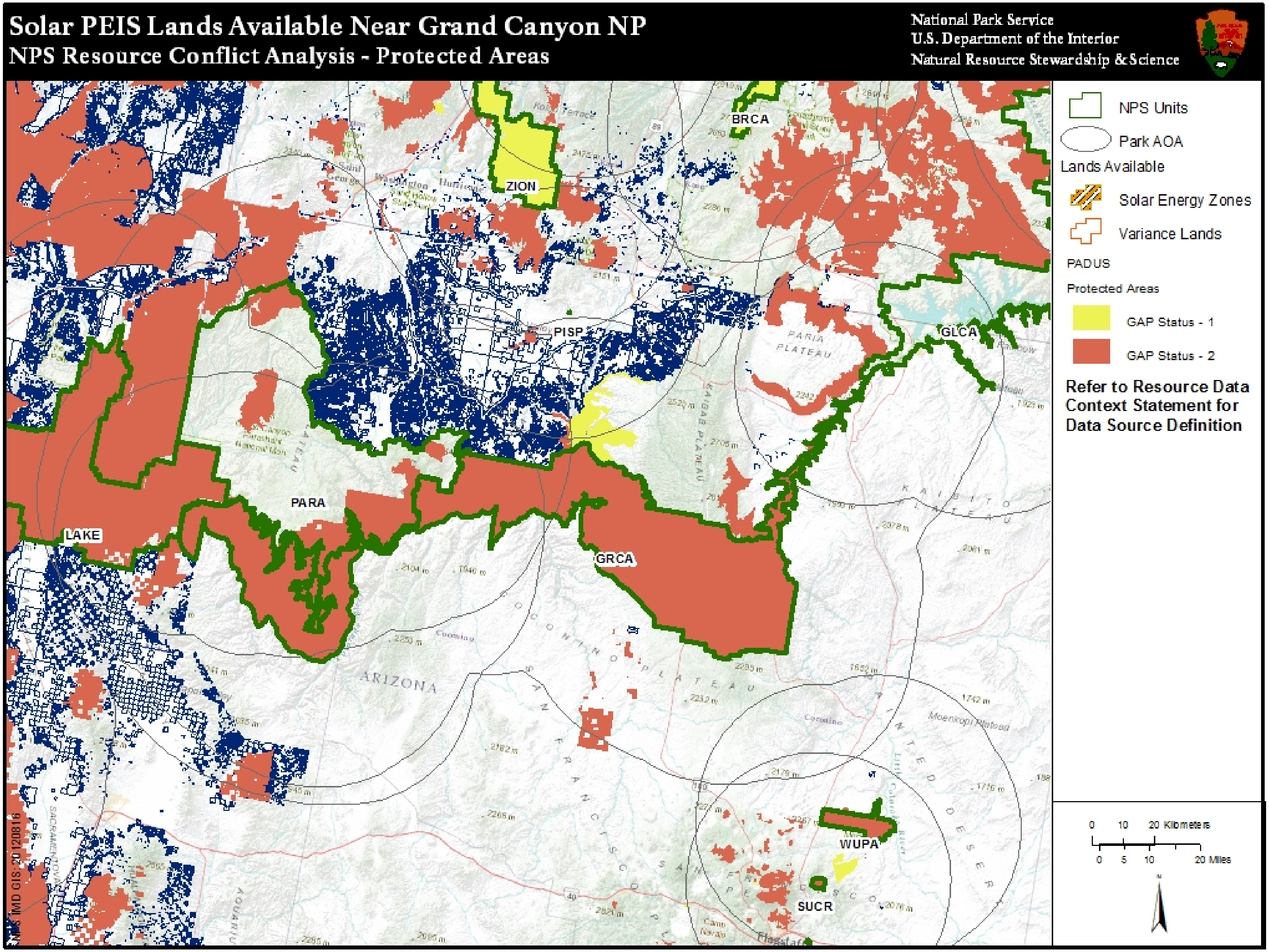

Solar PEIS Lands Available Near Grand Canyon NP
NPS Resource Conflict Analysis - Wind Erodibility Group
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Wind Erodibility Group
1
2
Refer to Resource Data Context Statement for Data Source Definition
0 5 10 20 Kilometers
0 5 10 20 Miles
BRCA
ZION
PISP
GLCA
LAKE
PARA
GRCA
WUPA
SUCR
ARIZONA
NPS IMD GIS: 20120816

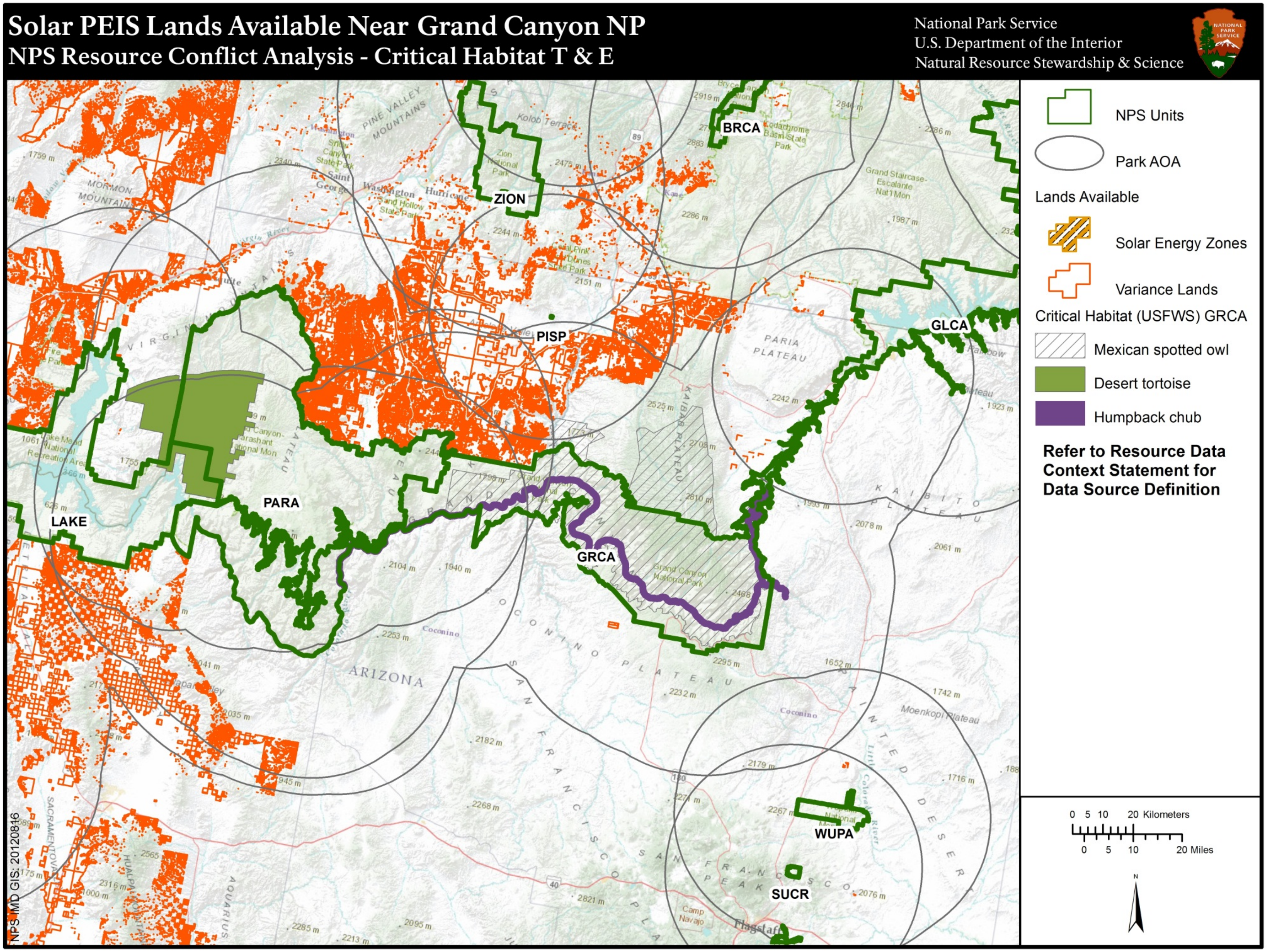

Solar PEIS Lands Available Near Grand Canyon NP
NPS Resource Conflict Analysis - Water Erosion
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Sensitive Soils
Refer to Resource Data Context Statement for Data Source Definition
BRCA
ZION
PISP
GLCA
LAKE
PARA
GRCA
WUPA
SUCR
ARIZONA
PARIA PLATEAU
0 5 10 20 Kilometers
0 5 10 20 Miles

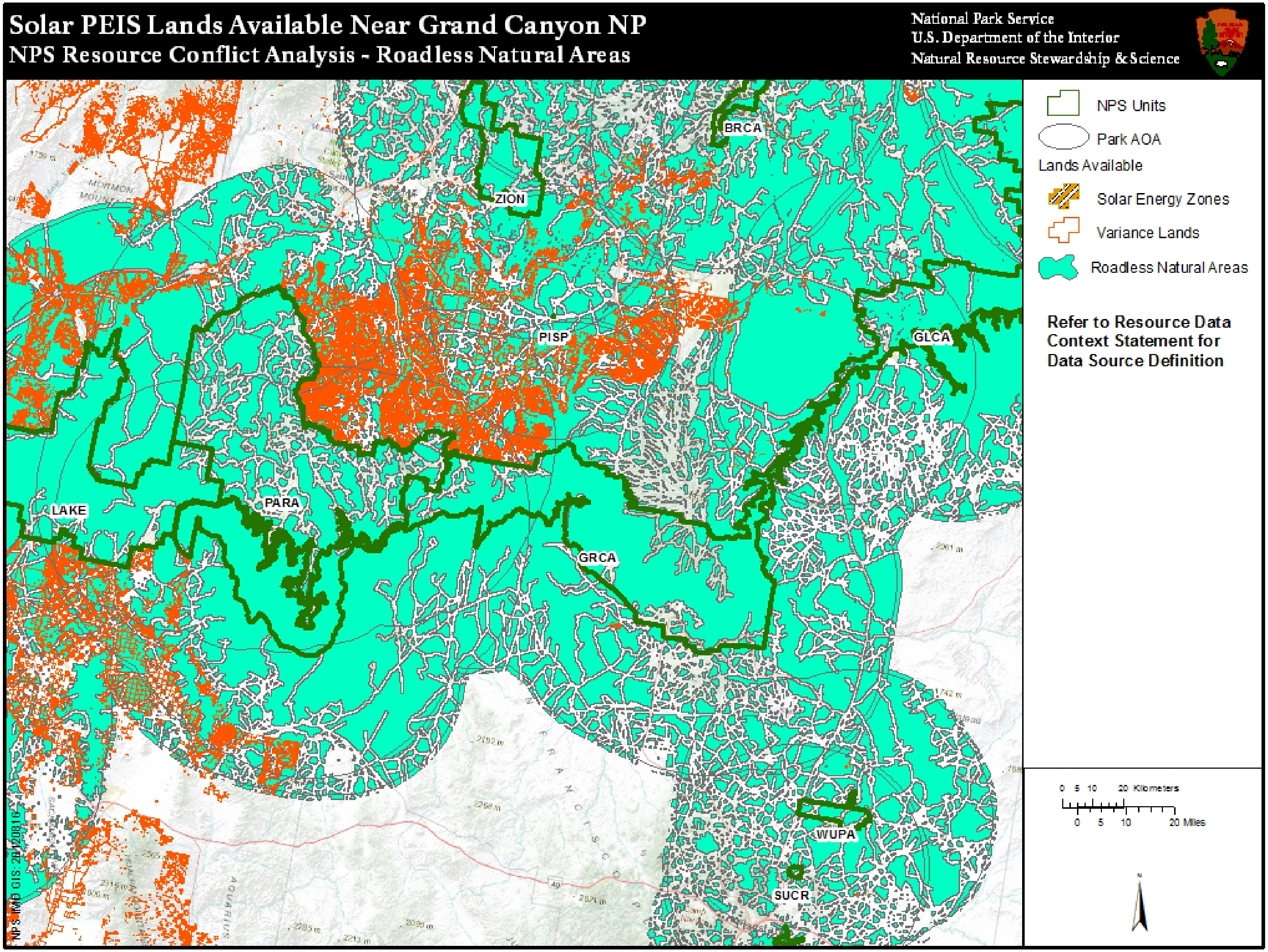

Solar PEIS Lands Available Near Grand Canyon NP
NPS Resource Conflict Analysis - Wetlands (500 Meter Buffer)
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Wetlands - 500 Meter Buf
Refer to Resource Data Context Statement for Data Source Definition
BRCA
ZION
PISP
GLCA
PARA
LAKE
GRCA
WUPA
SUCR
ARIZONA
NPS IMD GIS: 20120816
0 5 10 20 Kilometers
0 5 10 20 Miles

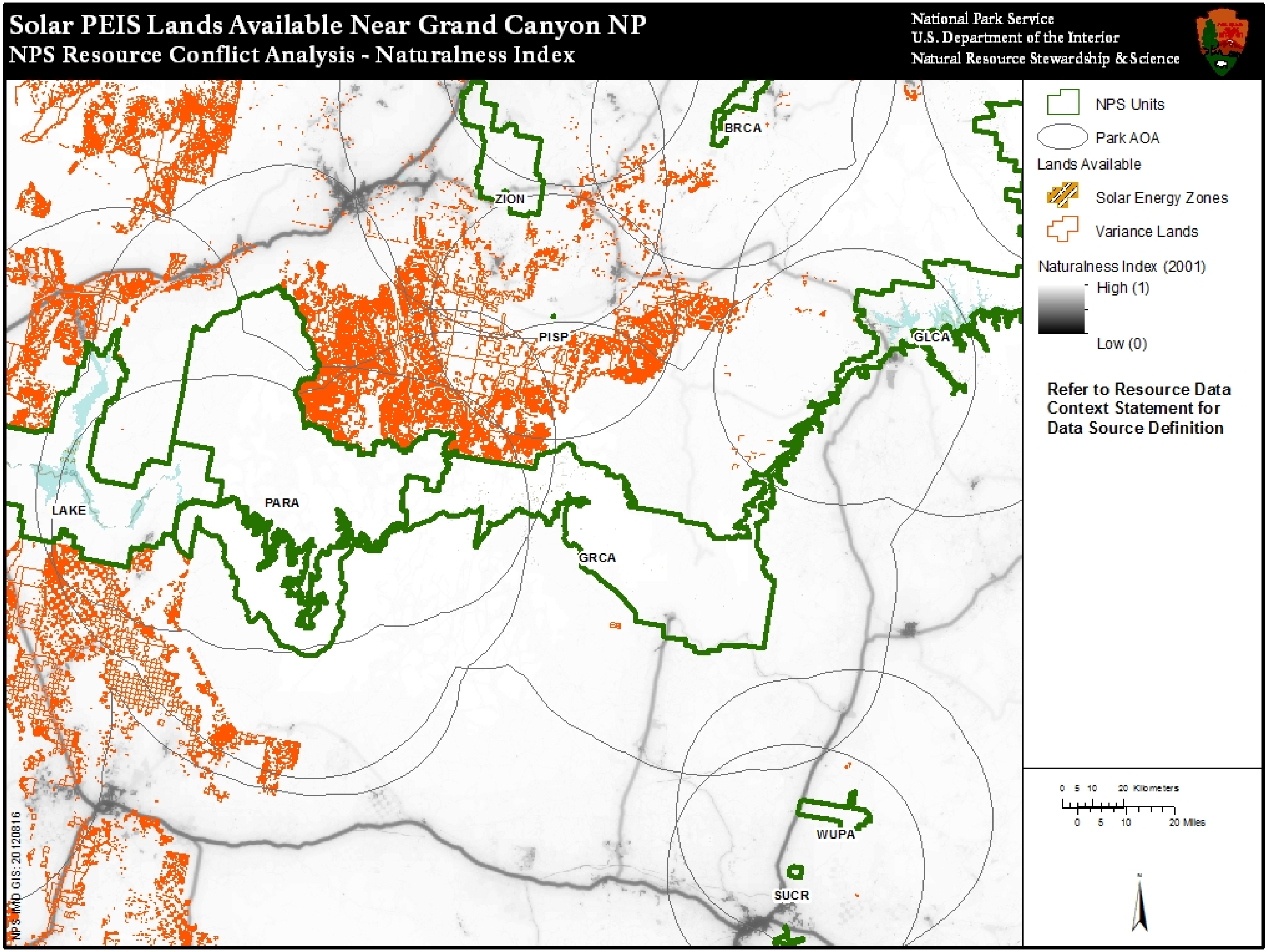

Solar PEIS Lands Available Near Grand Canyon NP
NPS Resource Conflict Analysis - Upstream Watersheds
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Upstream Watersheds
Refer to Resource Data Context Statement for Data Source Definition
BRCA
ZION
PISP
GLCA
PARA
LAKE
GRCA
WUPA
SUCR
ARIZONA
PARIA PLATEAU
0 5 10 20 Kilometers
0 5 10 20 Miles
NPS IMD GIS: 20120816

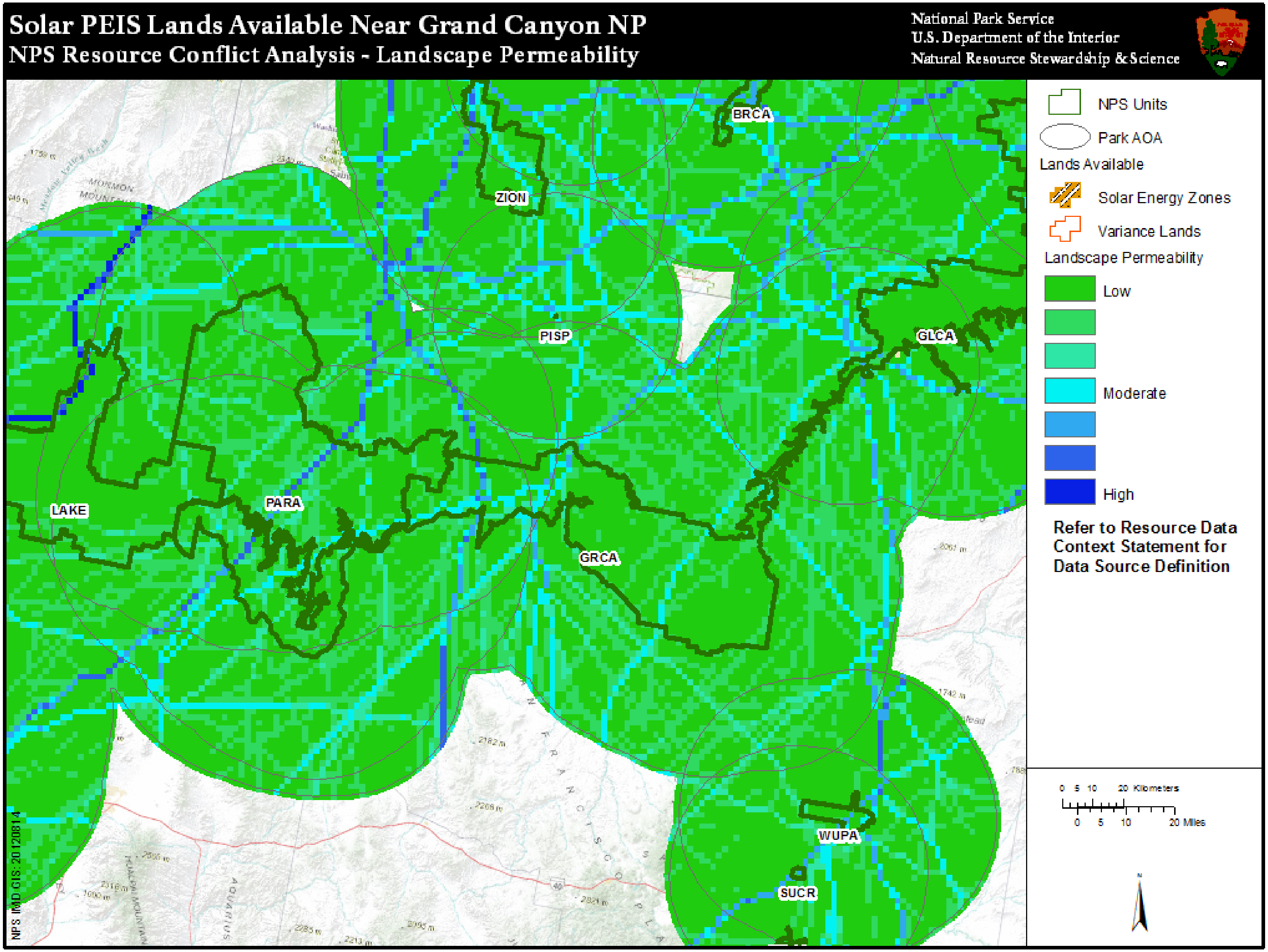

Solar PEIS Lands Available Near Grand Canyon NP
NPS Resource Conflict Analysis - Land Ownership
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
PADUS 1.2
Owner Name
Tribal Land
Bureau of Land Mgt (BLM)
Bureau of Reclamation (BOR)
City Land
Cty Land \ Regional Agency Land
Dept of Defense/Energy (DOD) (DOE)
Fish and Wildlife Service (FWS)
Forest Service (USFS)
National Park Service (NPS)
Other Fed (TVA,NRCS,NOAA, etc.)
Private Conservation
State Trust Land
State Fish and Wildlife
State Parks and Recreation
Other State (NHP,DOT,HS,etc.)
The Nature Conservancy (TNC)
Territorial Land
CEBR
BRCA
ZION
PISP
GLCA
LAKE
PARA
GRCA
WUPA
SUCR
WACA
Refer to Resource Data Context Statement for Data Source Definition
0 10 20 Kilometers
0 5 10 20 Miles

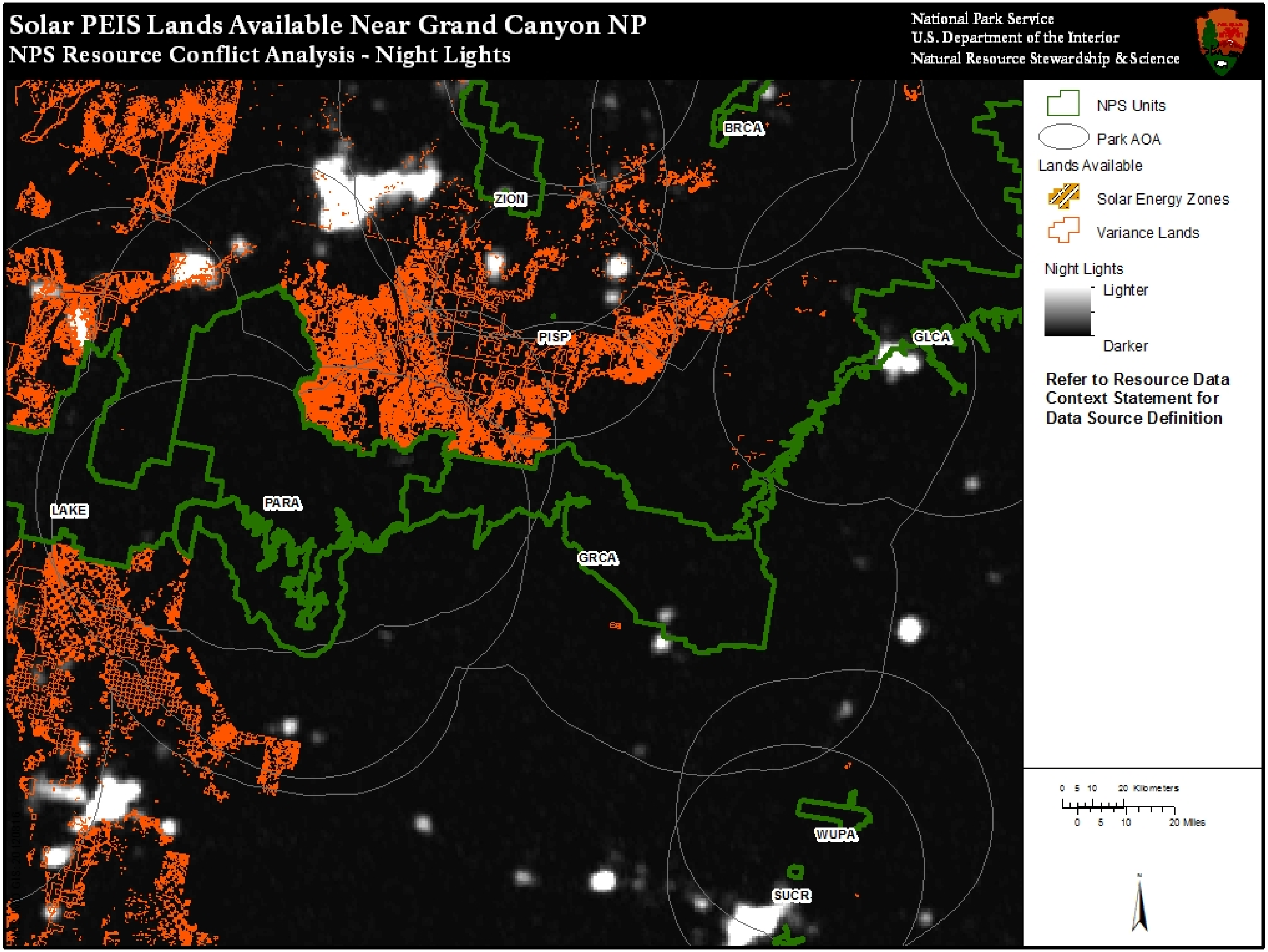

Solar PEIS Lands Available Near Grand Canyon NP
NPS Resource Conflict Analysis - Protected Areas
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
PADUS
Protected Areas
GAP Status - 1
GAP Status - 2
Refer to Resource Data Context Statement for Data Source Definition
ZION
BRCA
PISP
GLCA
PARA
LAKE
GRCA
WUPA
SUCR
ARIZONA
NPS IMD GIS: 20120816


Solar PEIS Lands Available Near Grand Canyon NP
NPS Resource Conflict Analysis - Critical Habitat T & E
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Critical Habitat (USFWS) GRCA
Mexican spotted owl
Desert tortoise
Humpback chub
Refer to Resource Data Context Statement for Data Source Definition
0 5 10 20 Kilometers
0 5 10 20 Miles
BRCA
ZION
PISP
GLCA
PARA
LAKE
GRCA
WUPA
SUCR
ARIZONA
NPS IMD GIS: 20120816


Solar PEIS Lands Available Near Grand Canyon NP
NPS Resource Conflict Analysis - Roadless Natural Areas
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Roadless Natural Areas
Refer to Resource Data Context Statement for Data Source Definition
0 5 10 20 Kilometers
0 5 10 20 Miles
BRCA
ZION
PISP
GLCA
LAKE
PARA
GRCA
WUPA
SUCR
NPS IMD GIS: 20120816

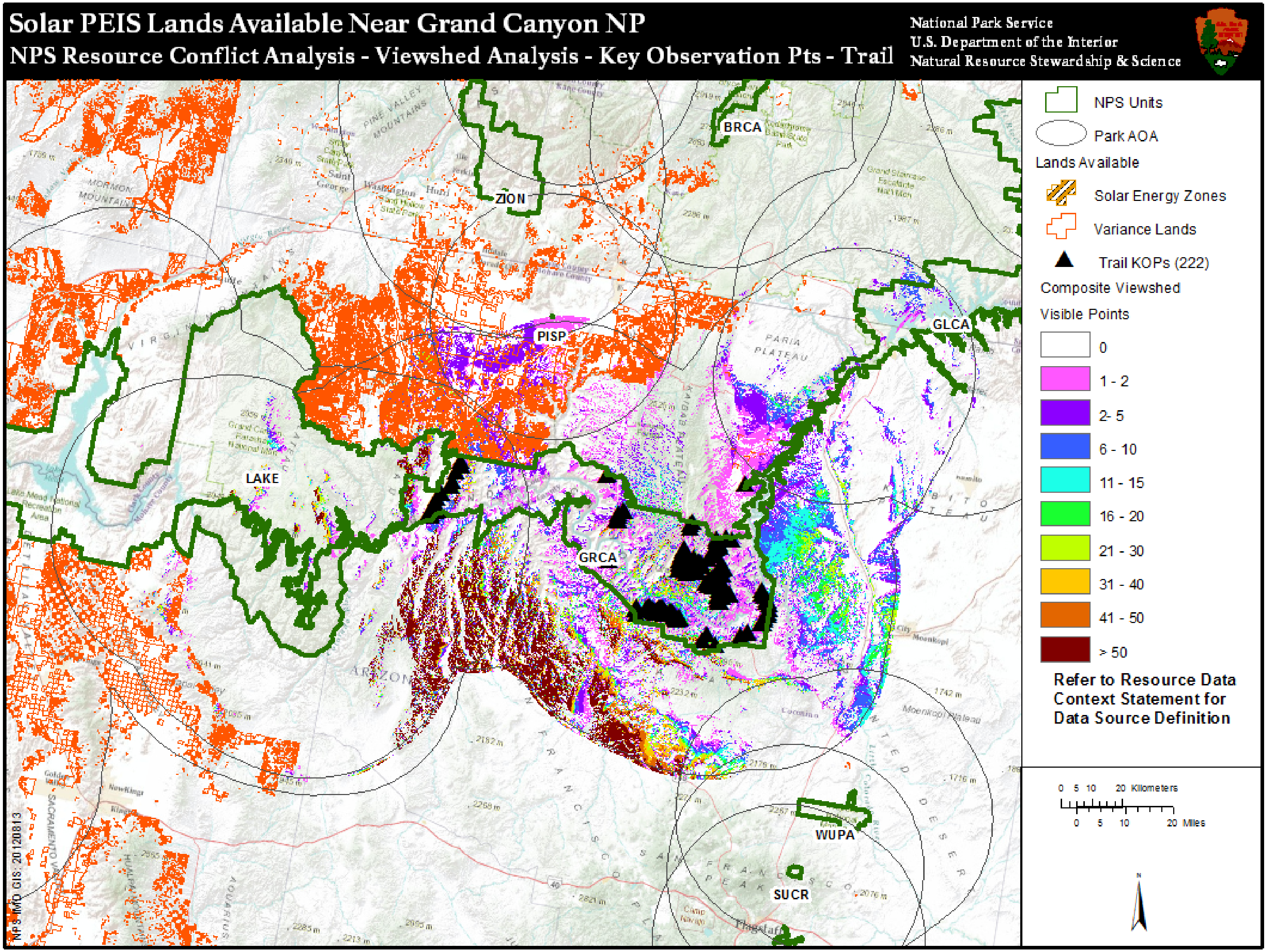

Solar PEIS Lands Available Near Grand Canyon NP
NPS Resource Conflict Analysis - Naturalness Index
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Naturalness Index (2001)
High (1)
Low (0)
Refer to Resource Data Context Statement for Data Source Definition
BRCA
ZION
PISP
GLCA
LAKE
PARA
GRCA
WUPA
SUCR
0 5 10 20 Kilometers
0 5 10 20 Miles
NPS IMD GIS: 20120816

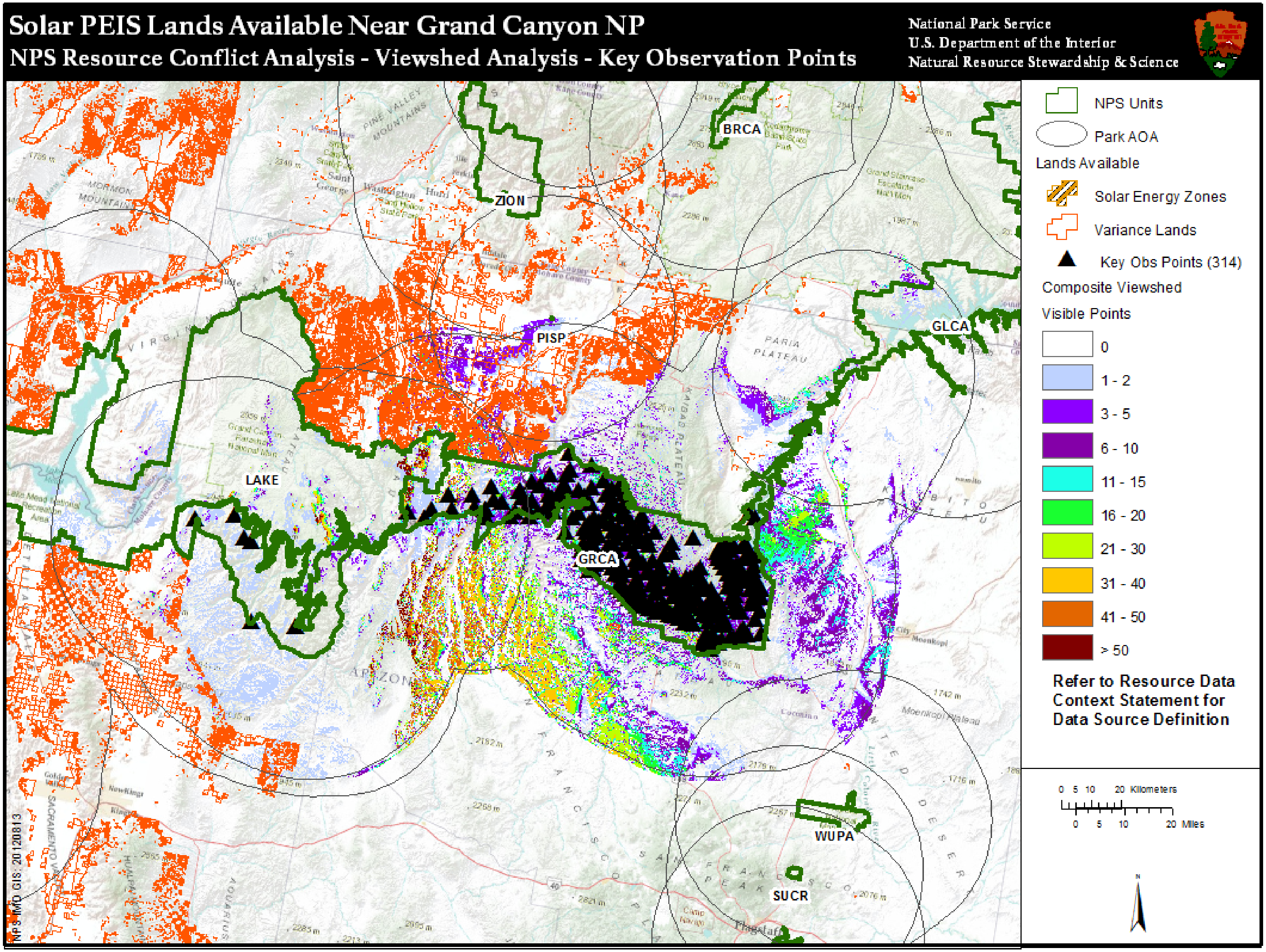

Solar PEIS Lands Available Near Grand Canyon NP
NPS Resource Conflict Analysis - Landscape Permeability
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Landscape Permeability
Low
Moderate
High
Refer to Resource Data Context Statement for Data Source Definition
BRCA
ZION
PISP
GLCA
LAKE
PARA
GRCA
WUPA
SUCR
0 5 10 20 Kilometers
0 5 10 20 Miles
NPS IMD GIS: 20120814

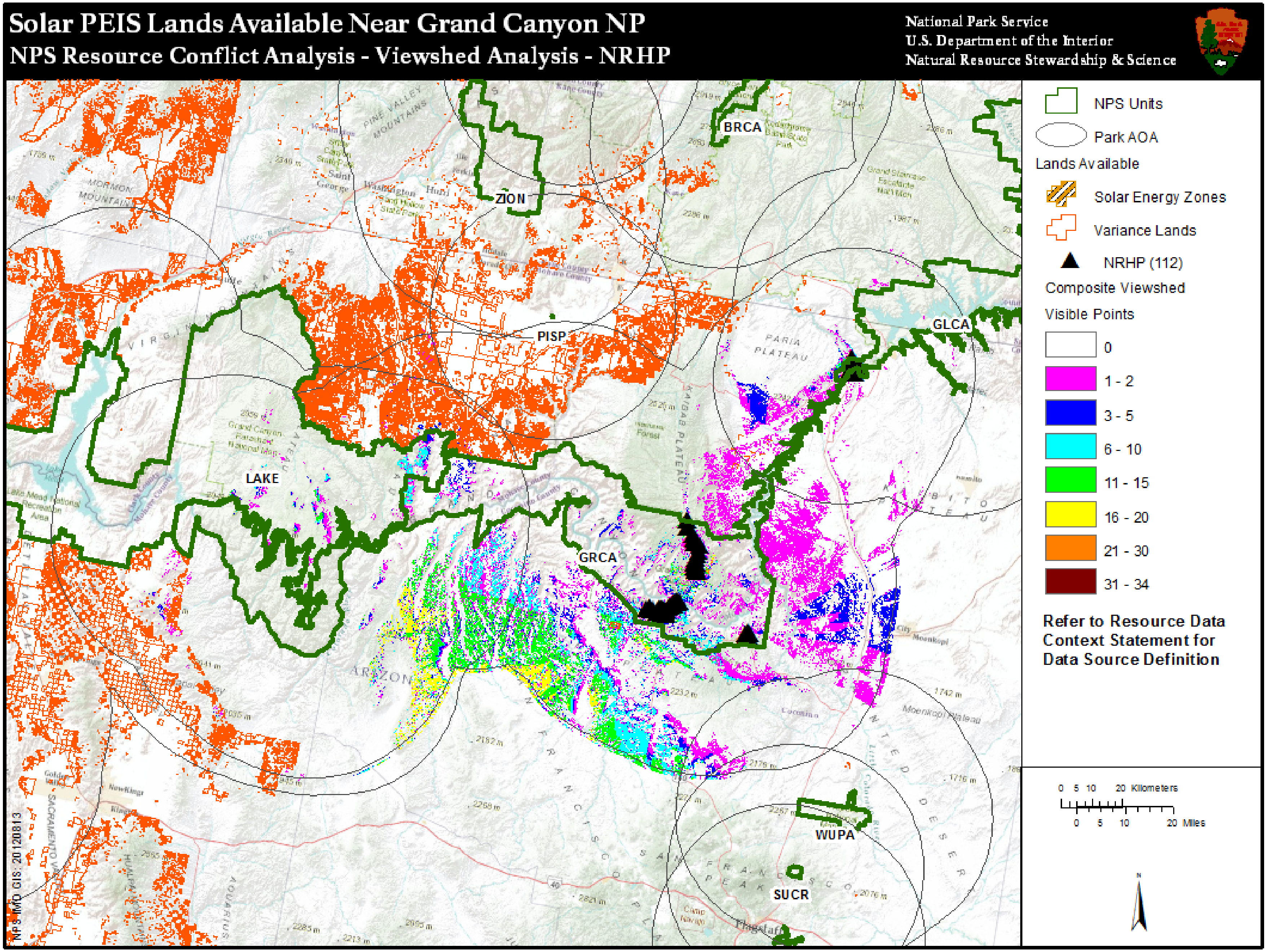


Solar PEIS Lands Available Near Grand Canyon NP
NPS Resource Conflict Analysis - Night Lights
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
BRCA
ZION
PISP
GLCA
LAKE
PARA
GRCA
WUPA
SUCR
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Night Lights
Lighter
Darker
Refer to Resource Data Context Statement for Data Source Definition
0 5 10 20 Kilometers
0 5 10 20 Miles

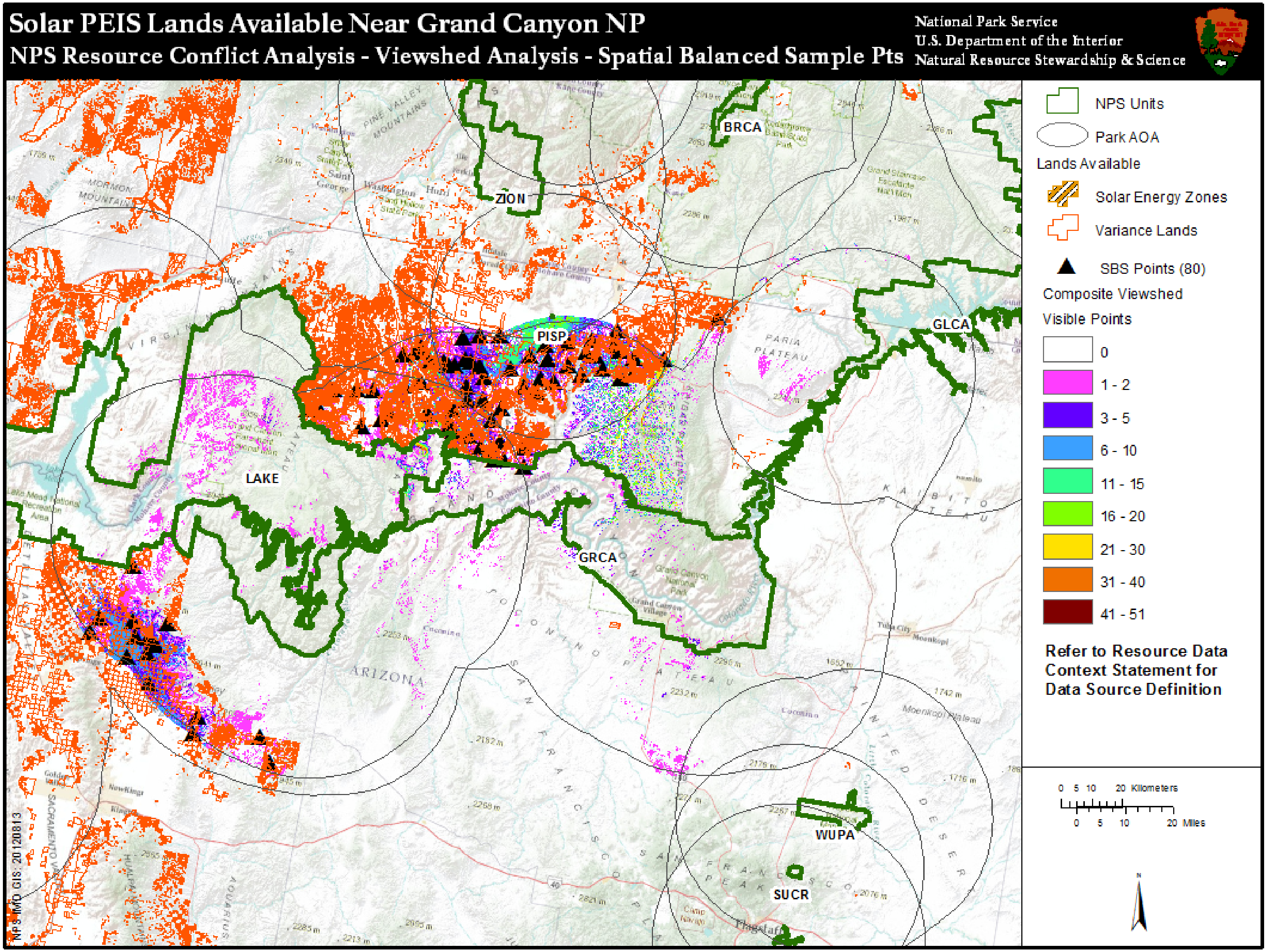
Viewshed - Key Observation Points - Trail



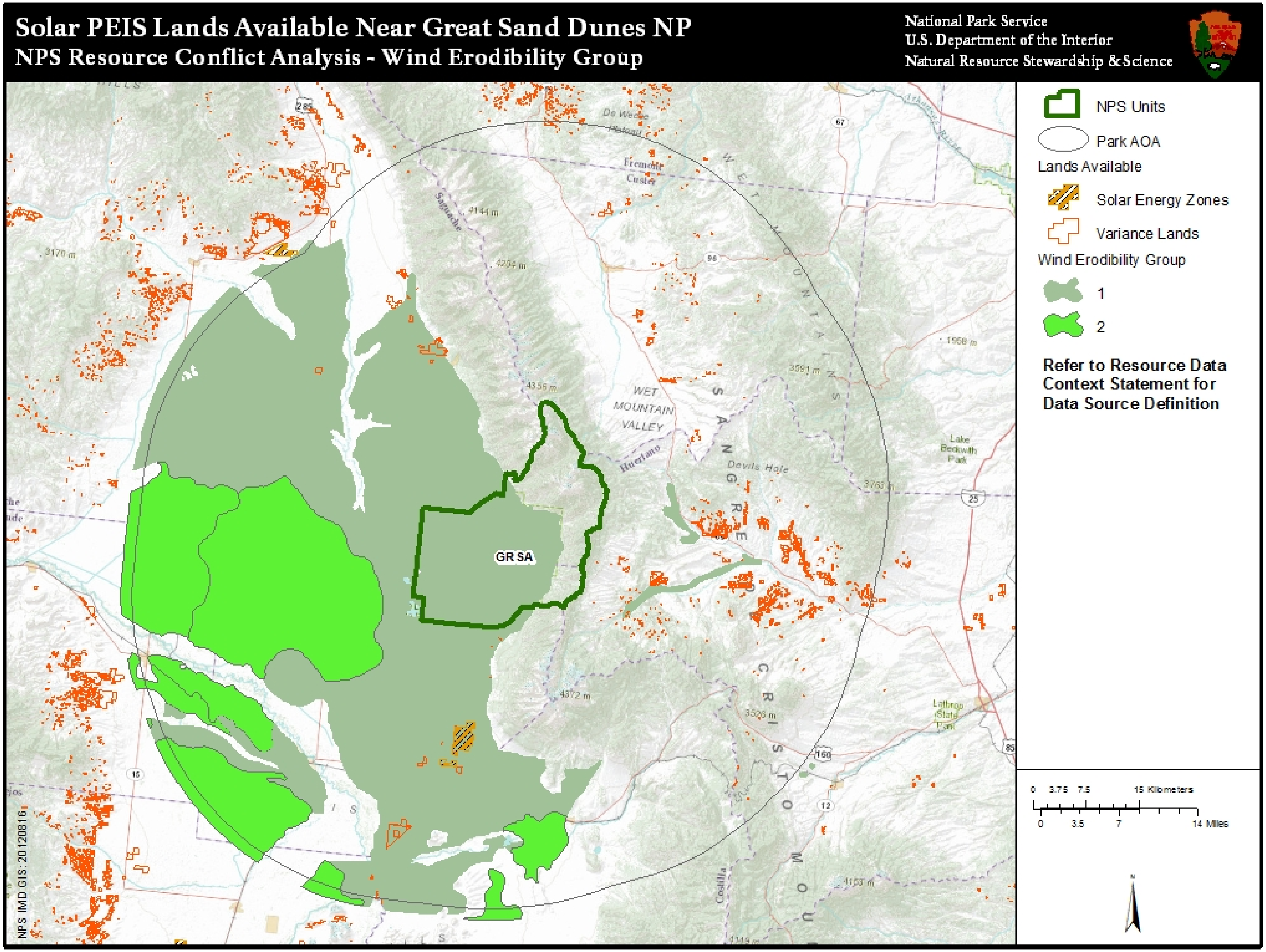

Solar PEIS Lands Available Near Grand Canyon NP
NPS Resource Conflict Analysis - Viewshed Analysis - Key Observation Points
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Key Obs Points (314)
Composite Viewshed
Visible Points
0
1 - 2
3 - 5
6 - 10
11 - 15
16 - 20
21 - 30
31 - 40
41 - 50
> 50
Refer to Resource Data Context Statement for Data Source Definition
0 5 10 20 Kilometers
0 5 10 20 Miles
N
BRCA
ZION
PISP
GLCA
LAKE
GRCA
WUPA
SUCR
NPS IMD GIS: 20120813

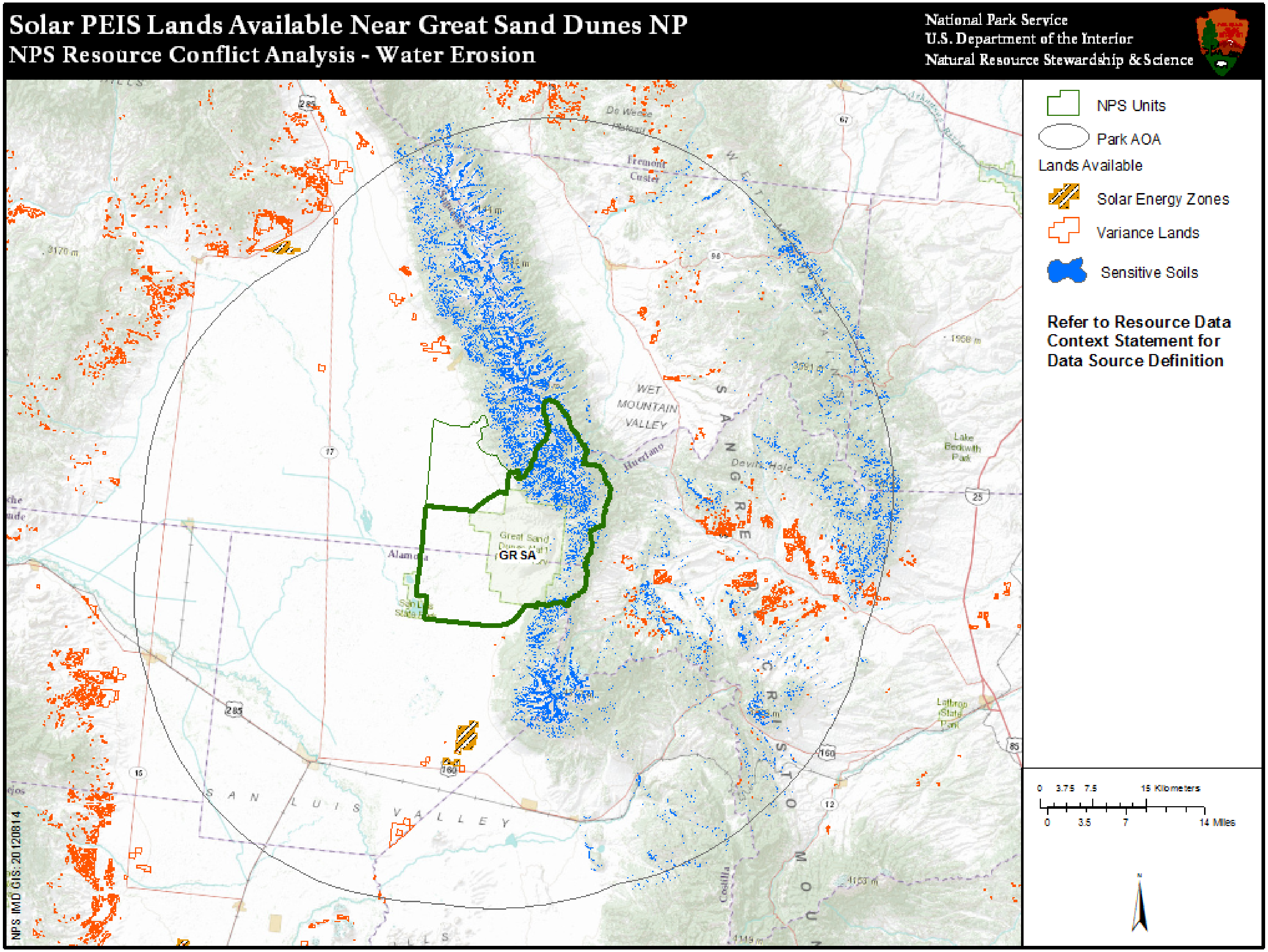

Solar PEIS Lands Available Near Grand Canyon NP
NPS Resource Conflict Analysis - Viewshed Analysis - NRHP
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
NRHP (112)
Composite Viewshed
Visible Points
0
1 - 2
3 - 5
6 - 10
11 - 15
16 - 20
21 - 30
31 - 34
Refer to Resource Data Context Statement for Data Source Definition
BRCA
ZION
PISP
GLCA
LAKE
GRCA
WUPA
SUCR
0 5 10 20 Kilometers
0 5 10 20 Miles
NPS IMD GIS: 20120813

Viewshed – Spatial Balanced Sample



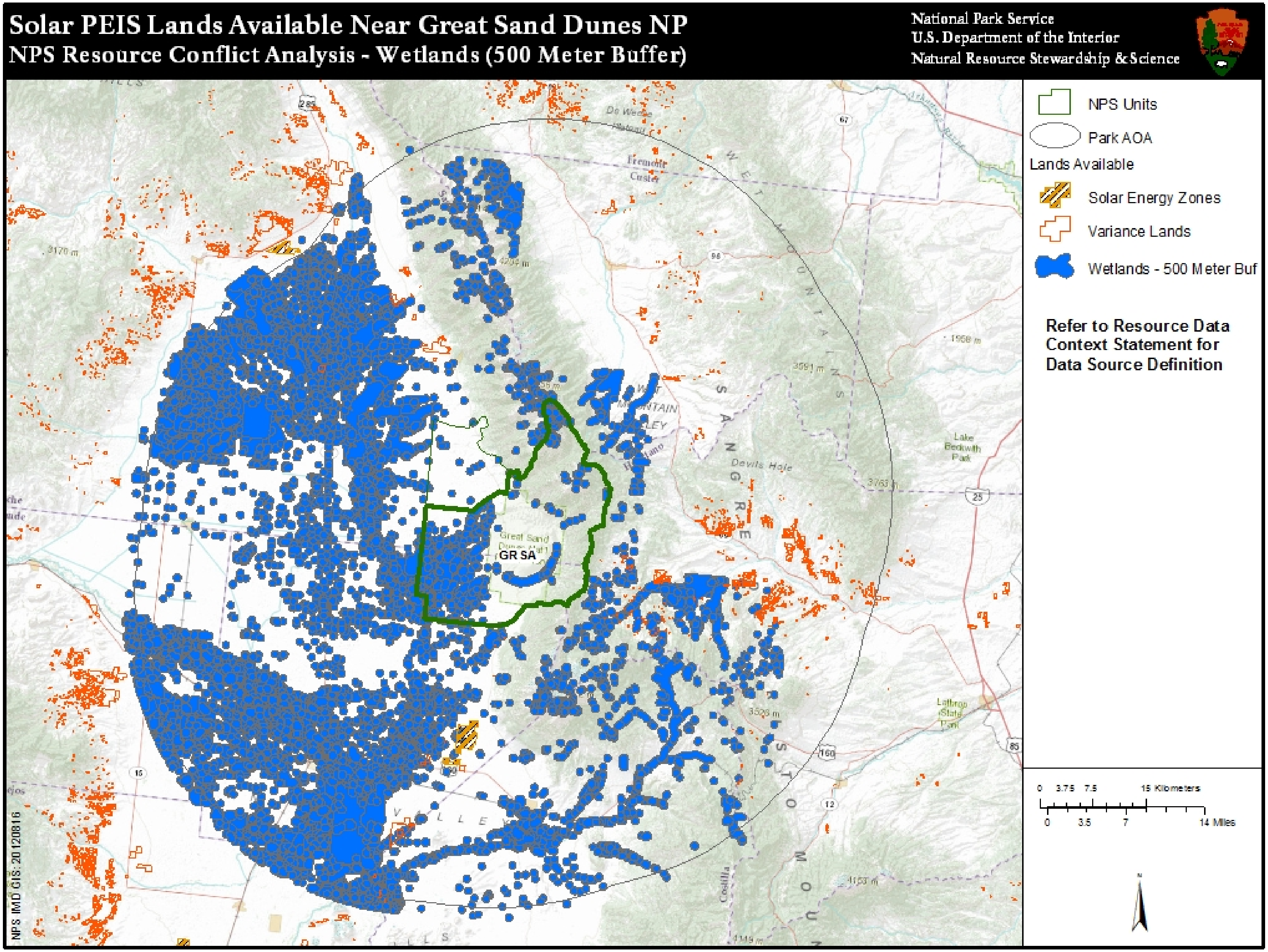
Great Sand Dunes National Park
Wind Erodibility Group





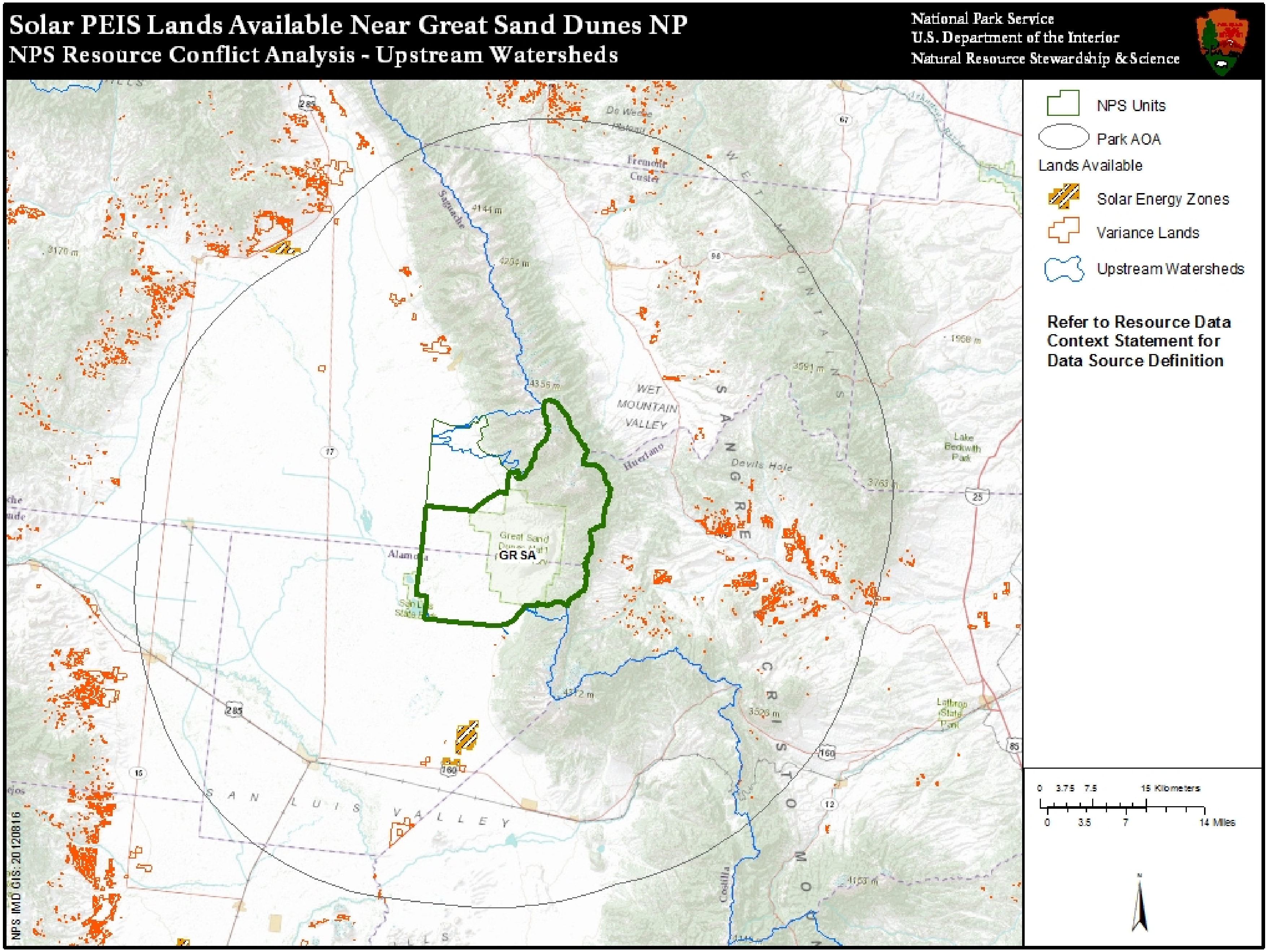
Solar PEIS Lands Available Near Great Sand Dunes NP
NPS Resource Conflict Analysis - Water Erosion
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Sensitive Soils
Refer to Resource Data Context Statement for Data Source Definition
0 3.75 7.5 15 Kilometers
0 3.5 7 14 Miles
GR SA
WET MOUNTAIN VALLEY
SAN LUIS VALLEY
NPS IMD GIS: 20120814

Wetlands

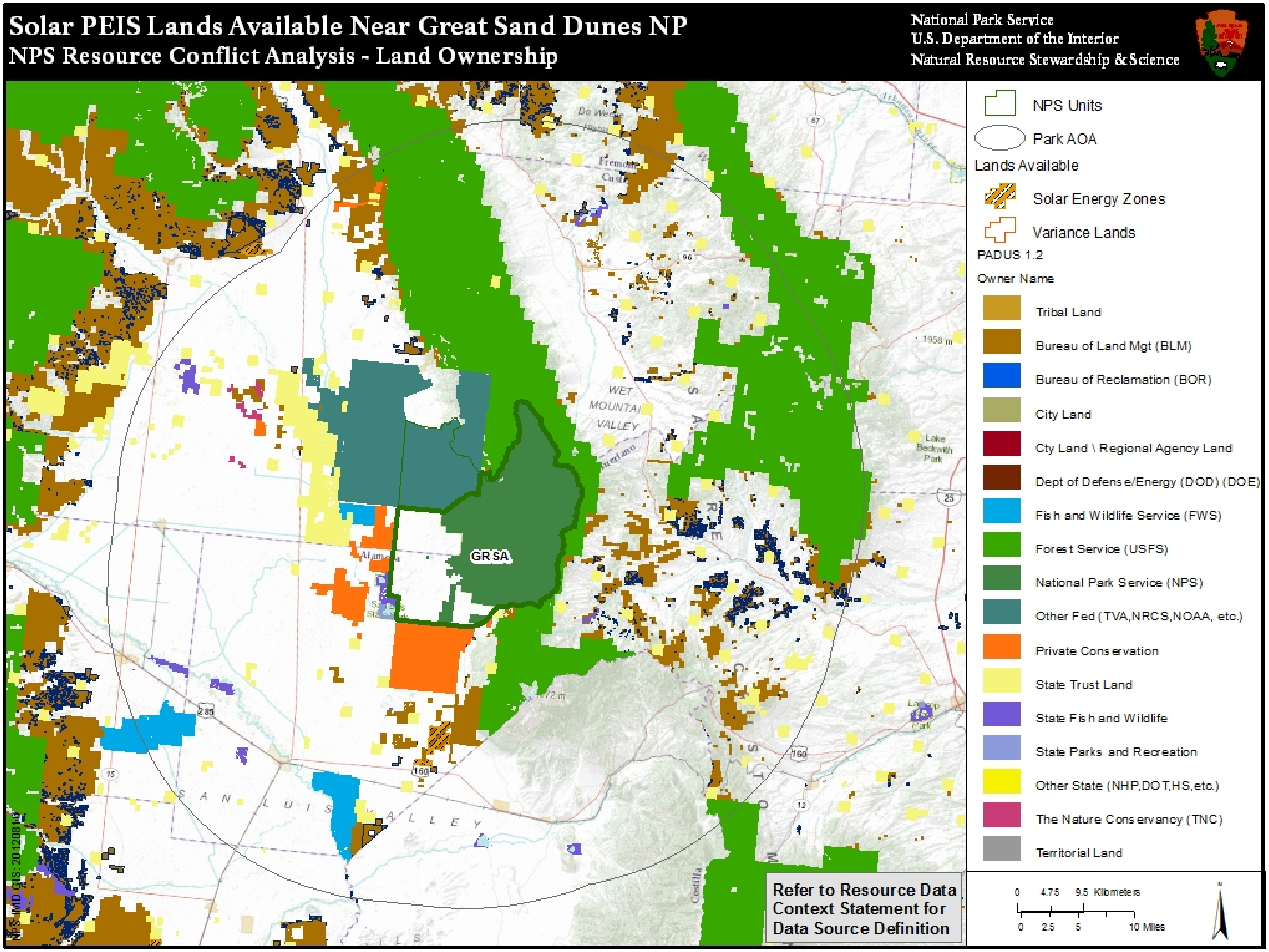


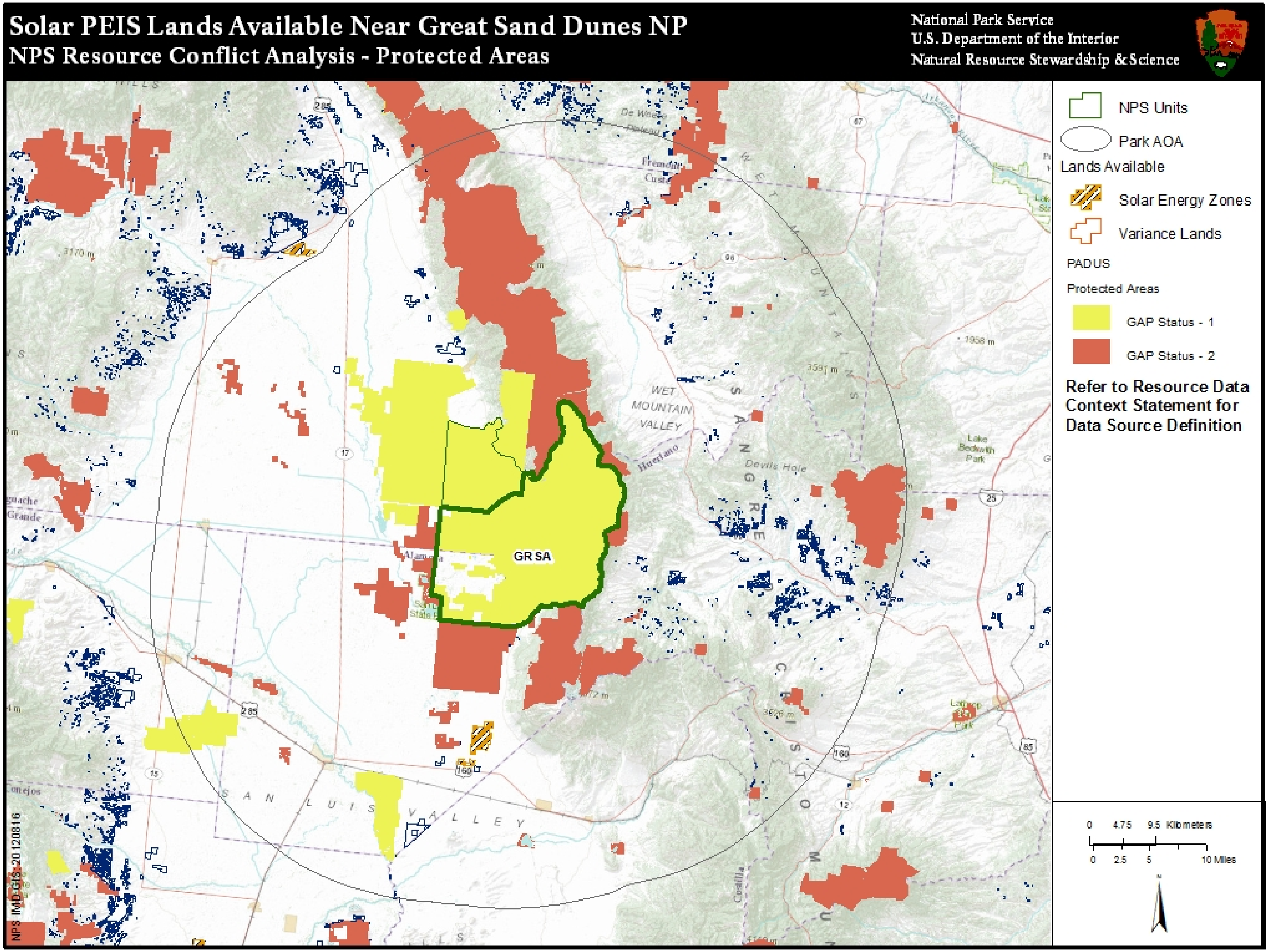
Solar PEIS Lands Available Near Great Sand Dunes NP
NPS Resource Conflict Analysis - Wetlands (500 Meter Buffer)
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Wetlands - 500 Meter Buf
Refer to Resource Data Context Statement for Data Source Definition
GR SA
0 3.75 7.5 15 Kilometers
0 3.5 7 14 Miles
NPS IMD GIS: 20120816

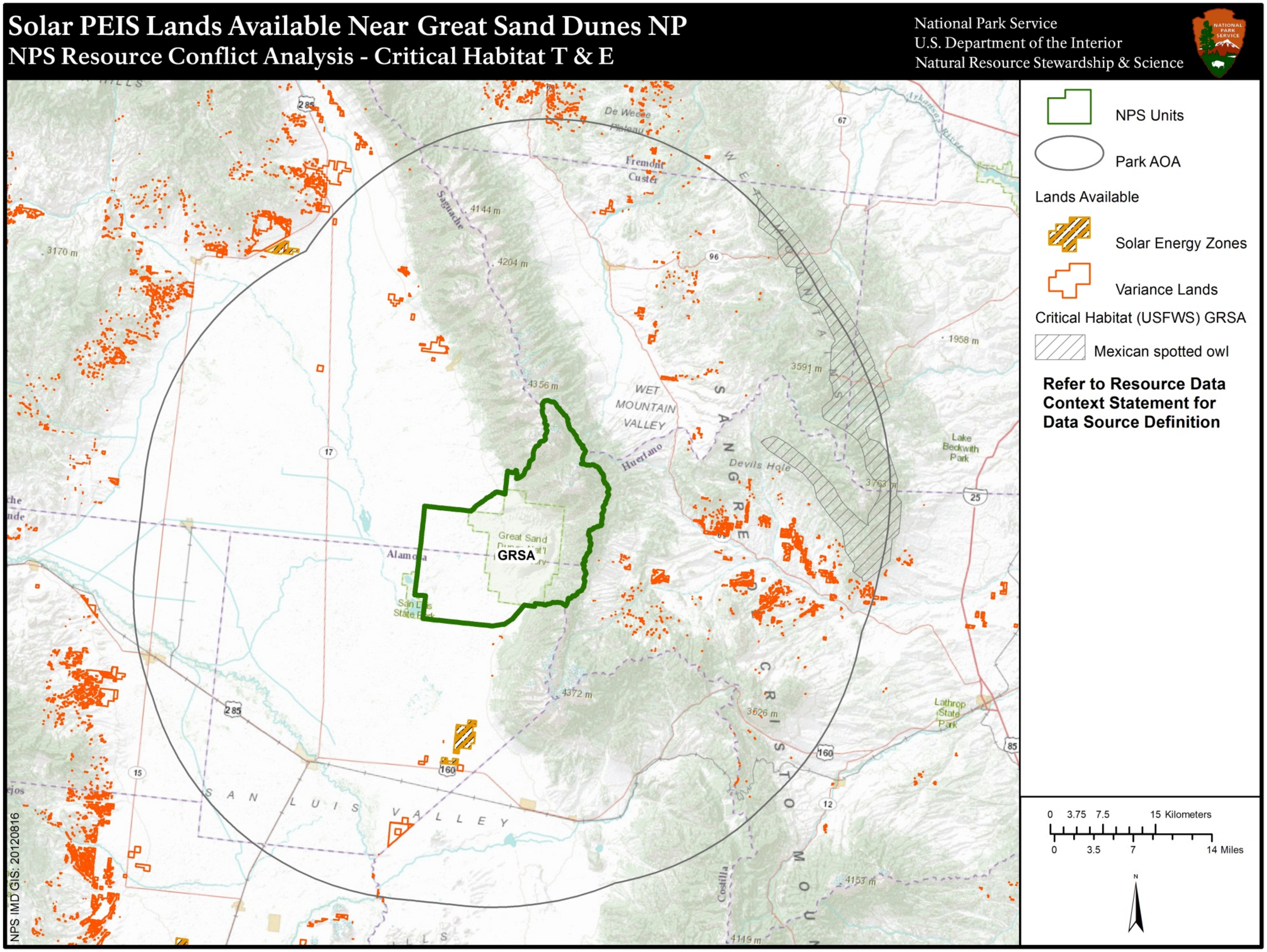
Upstream Watershed

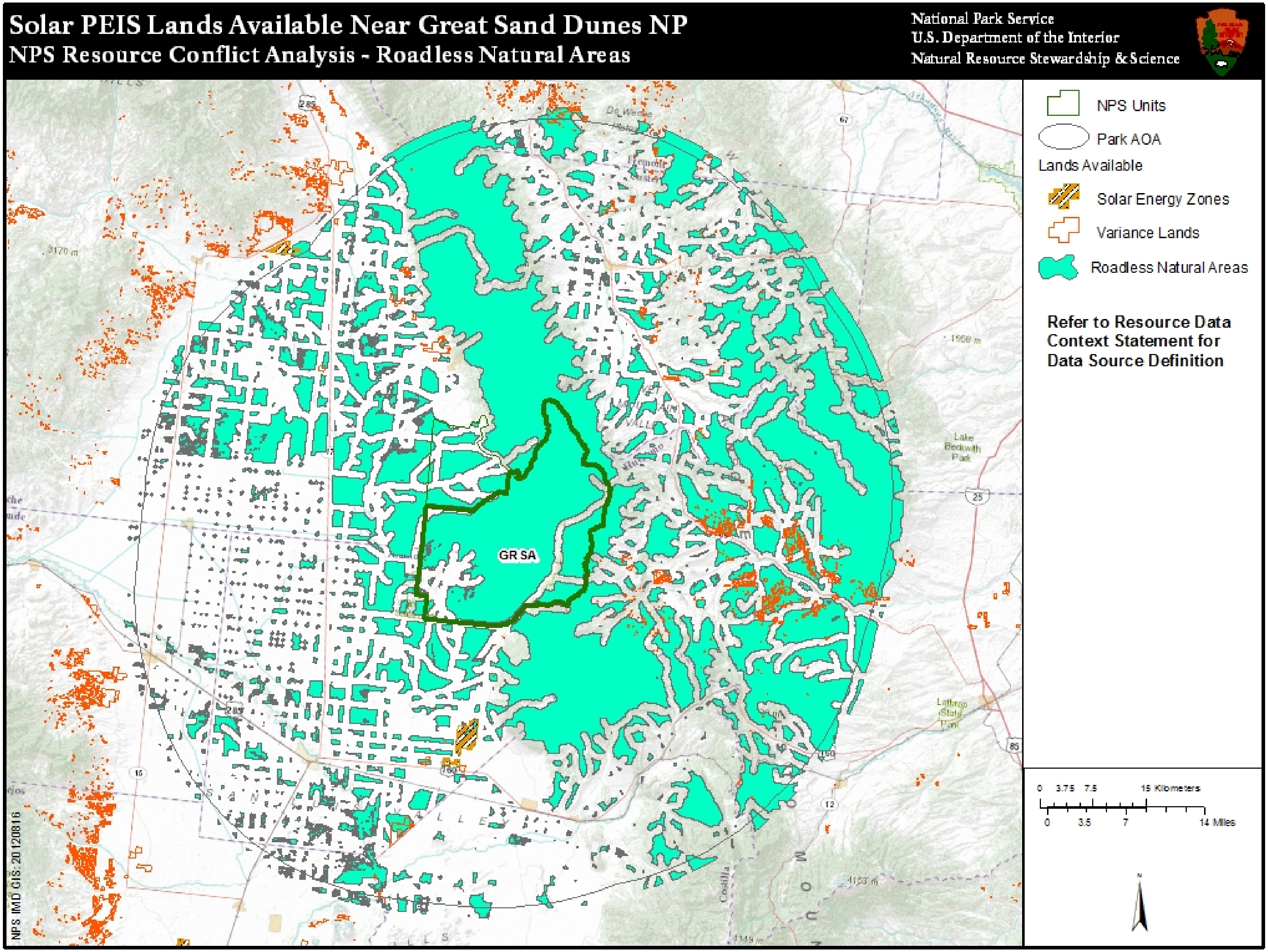


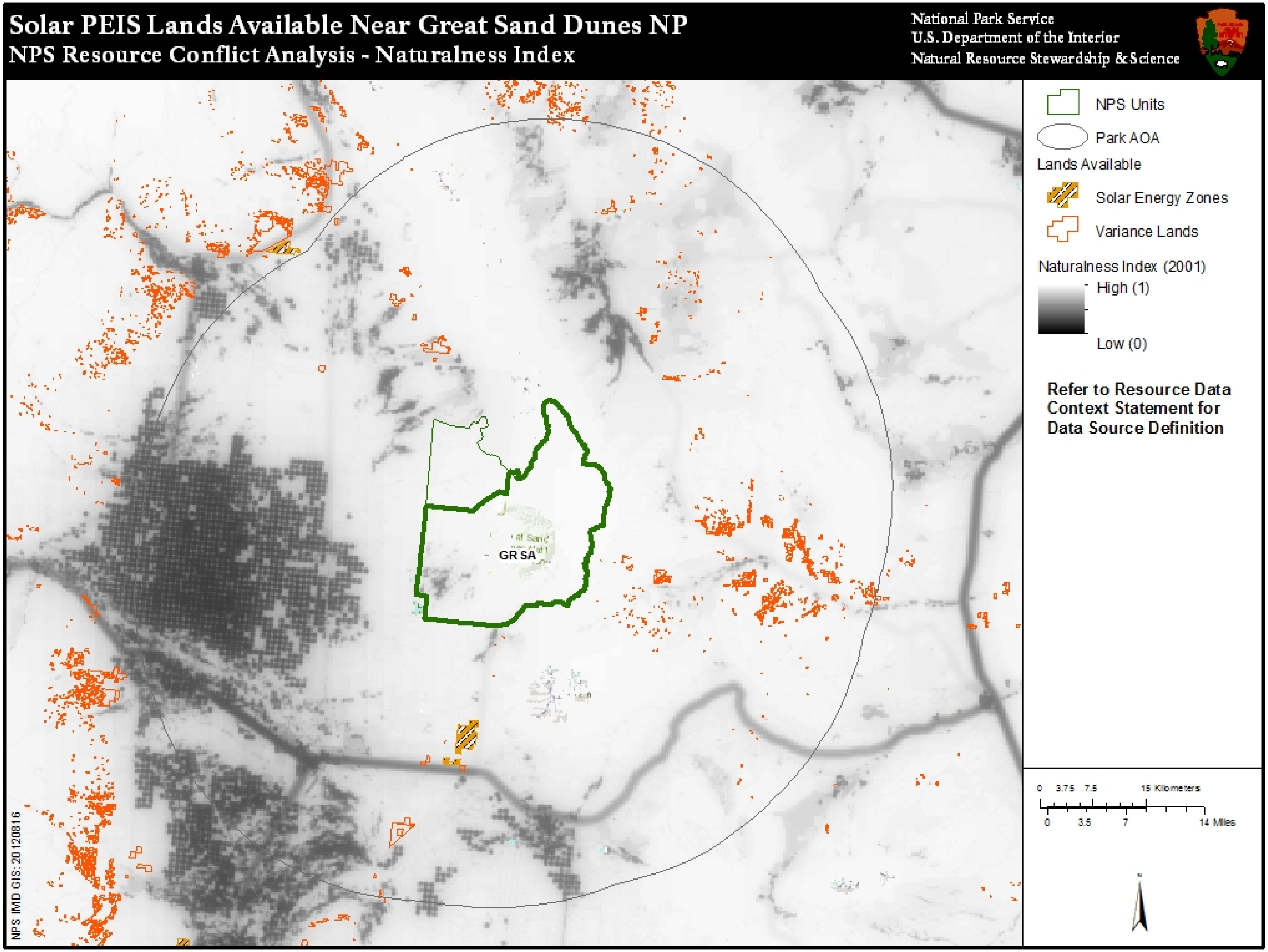
Land Ownership

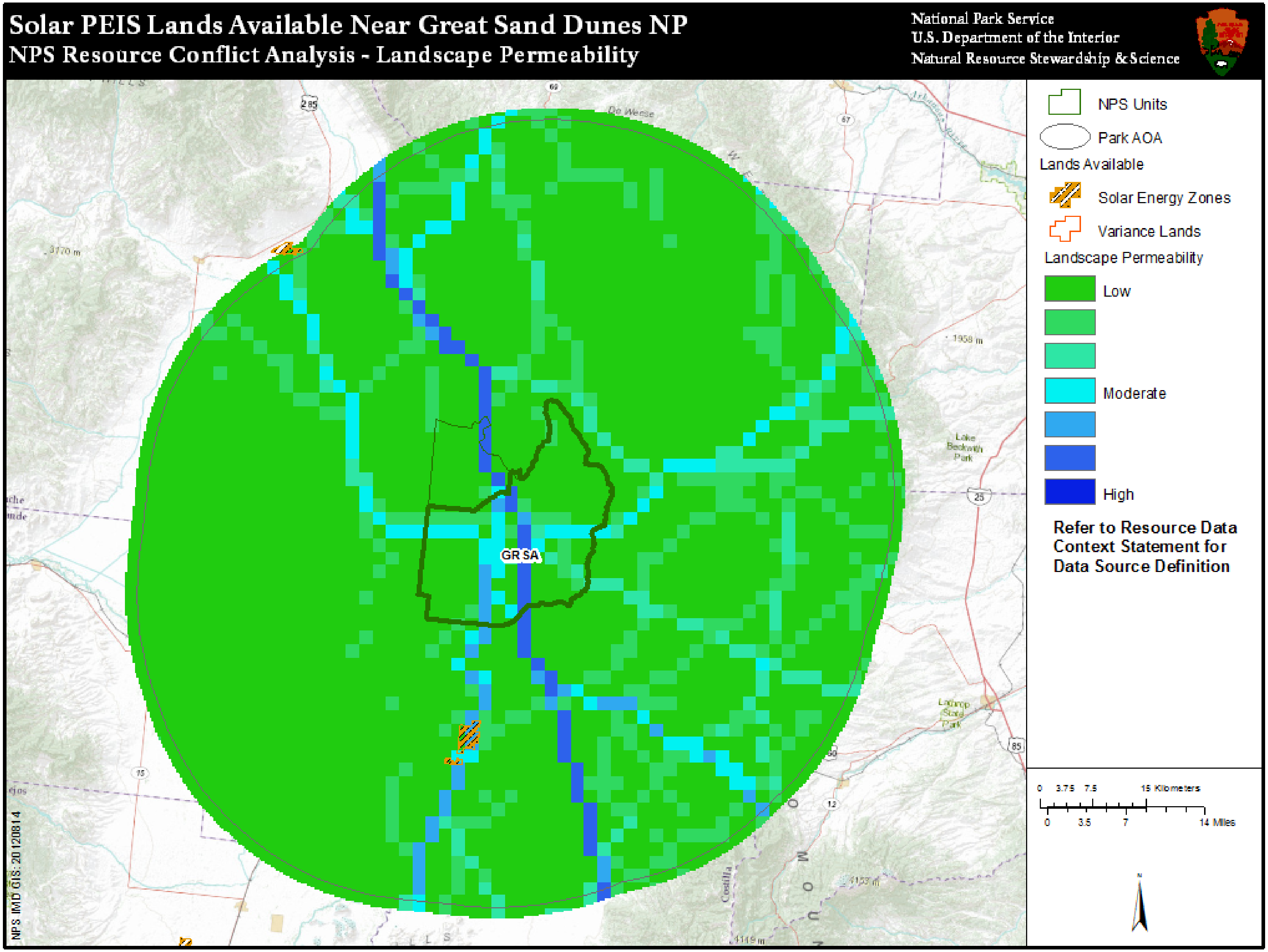


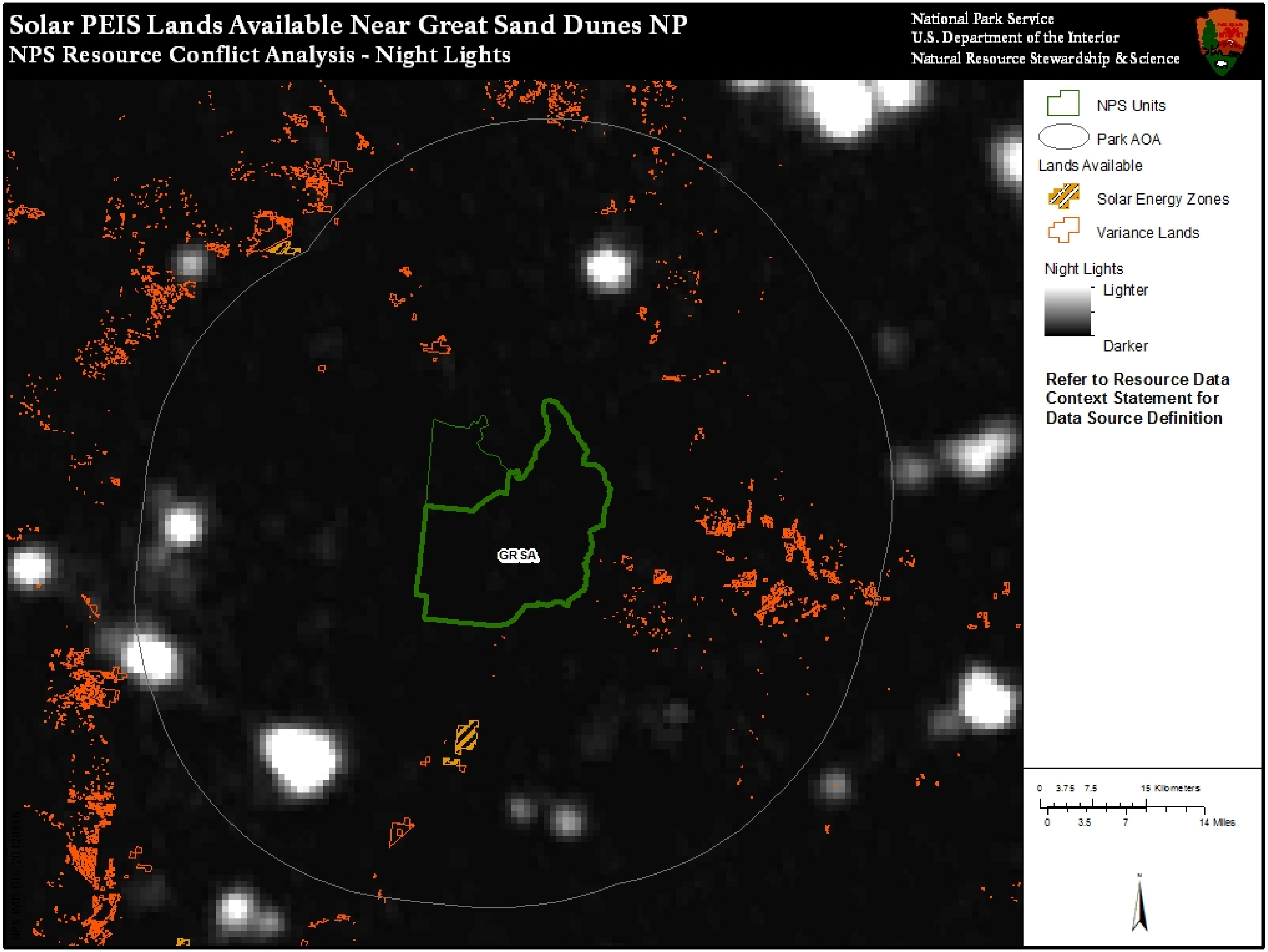

Solar PEIS Lands Available Near Great Sand Dunes NP
NPS Resource Conflict Analysis - Protected Areas
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
PADUS
Protected Areas
GAP Status - 1
GAP Status - 2
Refer to Resource Data Context Statement for Data Source Definition
0 4.75 9.5 Kilometers
0 2.5 5 10 Miles
GRSA
WET MOUNTAIN VALLEY
SAN LUIS VALLEY
NPS IMD GIS 20120816


Solar PEIS Lands Available Near Great Sand Dunes NP
NPS Resource Conflict Analysis - Critical Habitat T & E
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Critical Habitat (USFWS) GRSA
Mexican spotted owl
Refer to Resource Data Context Statement for Data Source Definition
0 3.75 7.5 15 Kilometers
0 3.5 7 14 Miles
GRSA
Great Sand
WET MOUNTAIN VALLEY
S A N L U I S V A L L E Y
NPS IMD GIS: 20120816

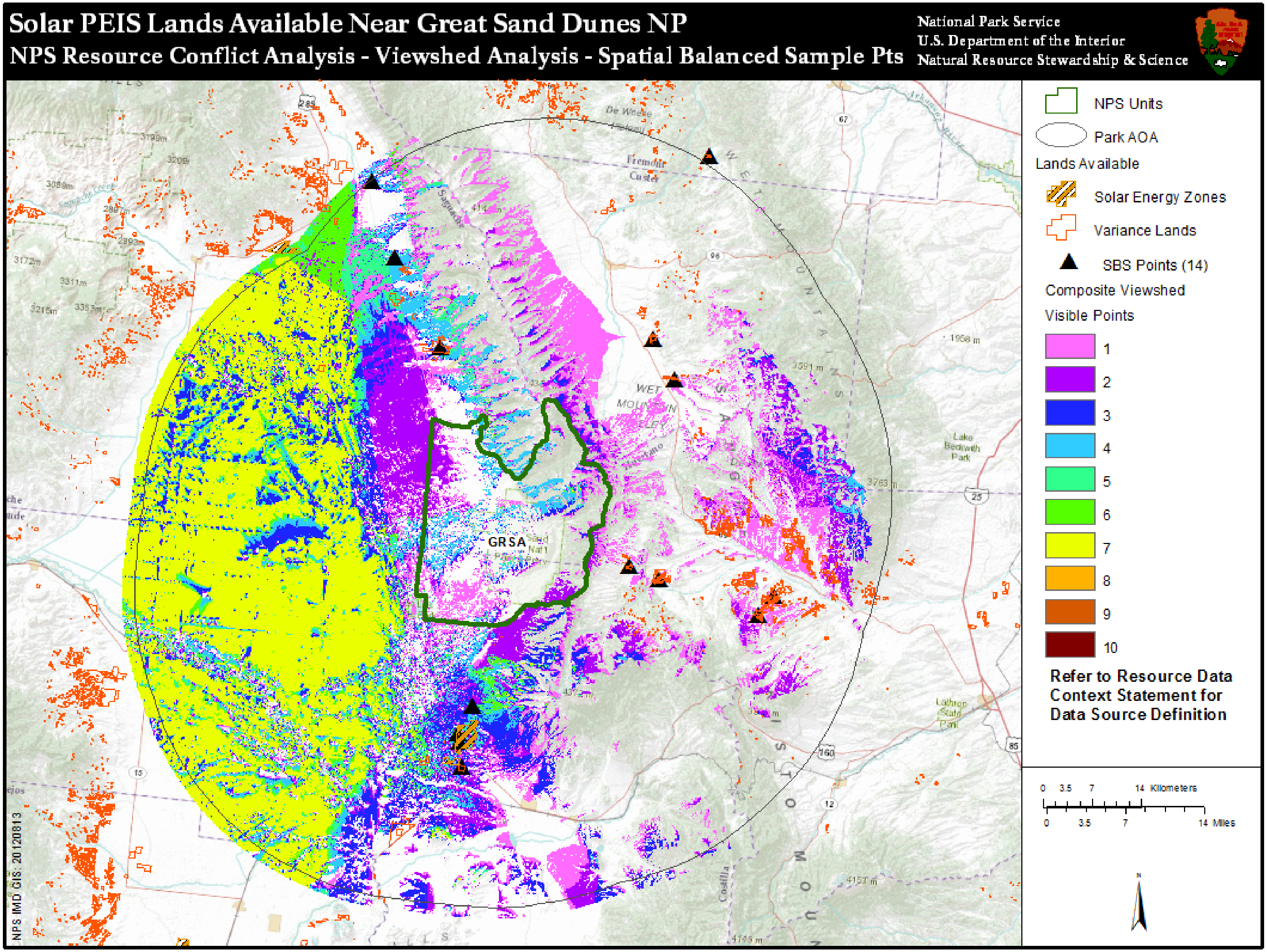

Solar PEIS Lands Available Near Great Sand Dunes NP
NPS Resource Conflict Analysis - Roadless Natural Areas
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Roadless Natural Areas
Refer to Resource Data Context Statement for Data Source Definition
GRSA
0 3.75 7.5 15 Kilometers
0 3.5 7 14 Miles
NPS IMD GIS: 20120816

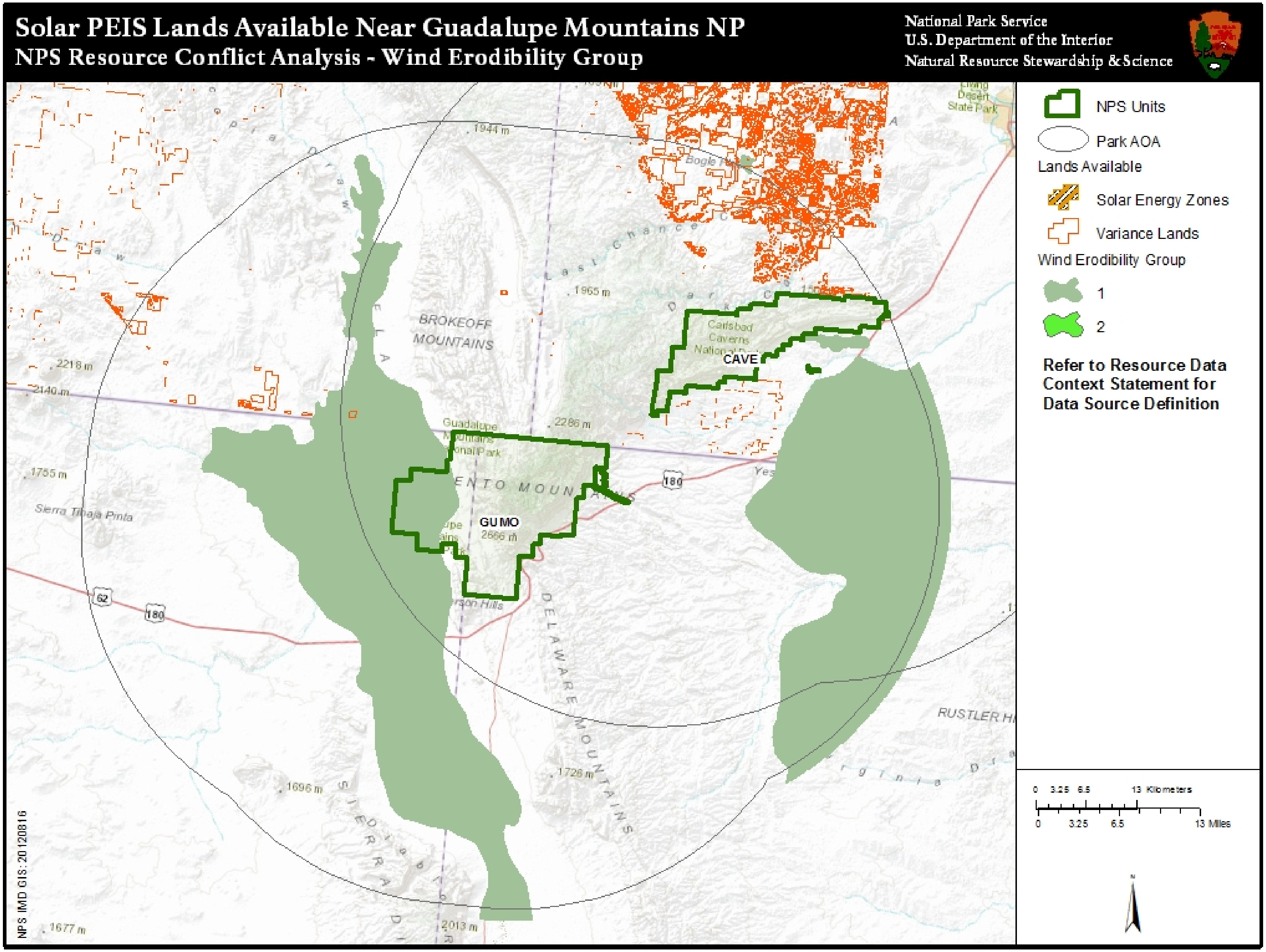

Solar PEIS Lands Available Near Great Sand Dunes NP
NPS Resource Conflict Analysis - Naturalness Index
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Naturalness Index (2001)
High (1)
Low (0)
Refer to Resource Data Context Statement for Data Source Definition
GR SA
0 3.75 7.5 15 Kilometers
0 3.5 7 14 Miles
NPS IMD GIS: 20120816

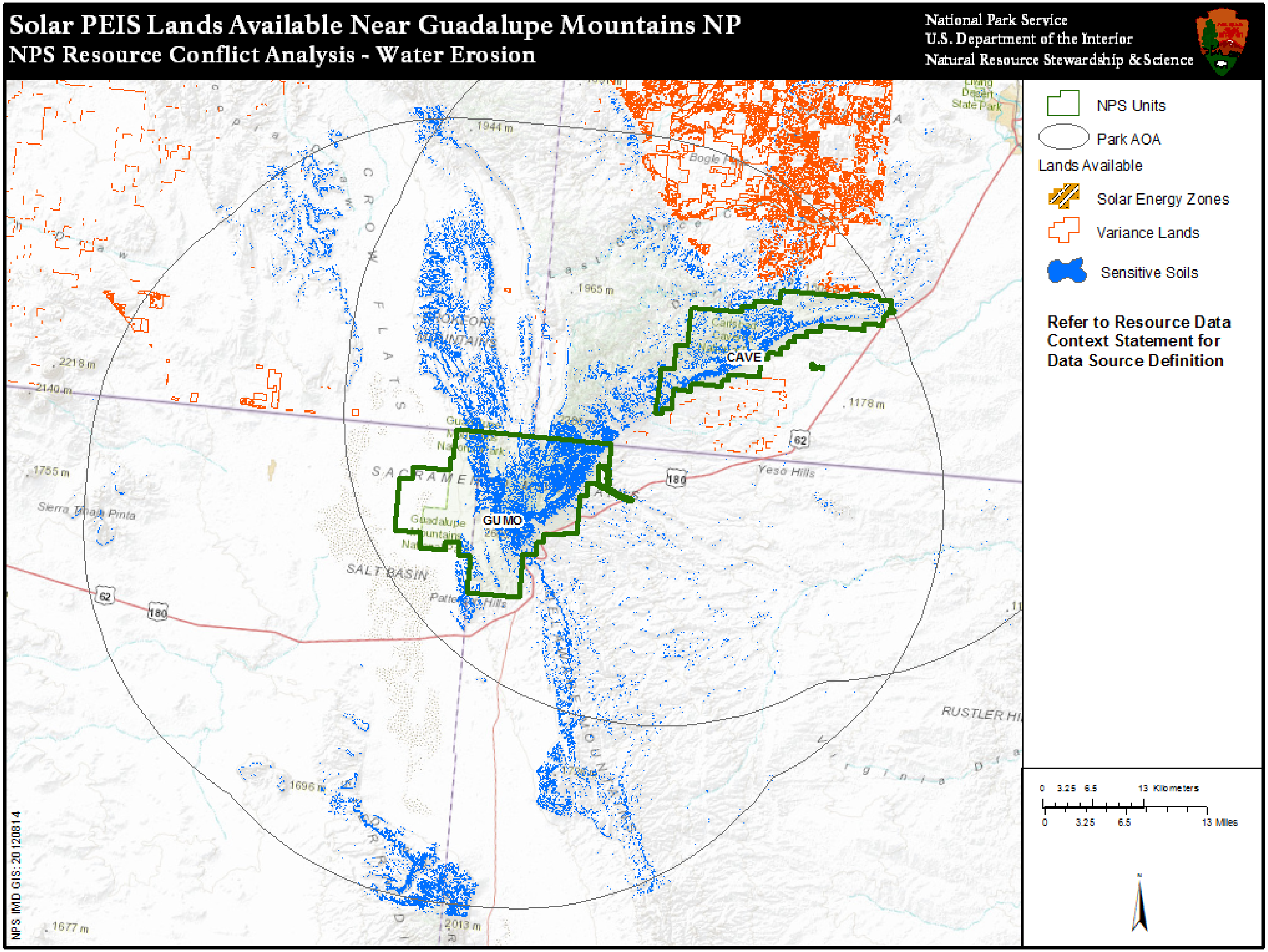

Solar PEIS Lands Available Near Great Sand Dunes NP
NPS Resource Conflict Analysis - Landscape Permeability
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Landscape Permeability
Low
Moderate
High
Refer to Resource Data Context Statement for Data Source Definition
0 3.75 7.5 15 Kilometers
0 3.5 7 14 Miles
GRSA
NPS IMD GIS: 20120814

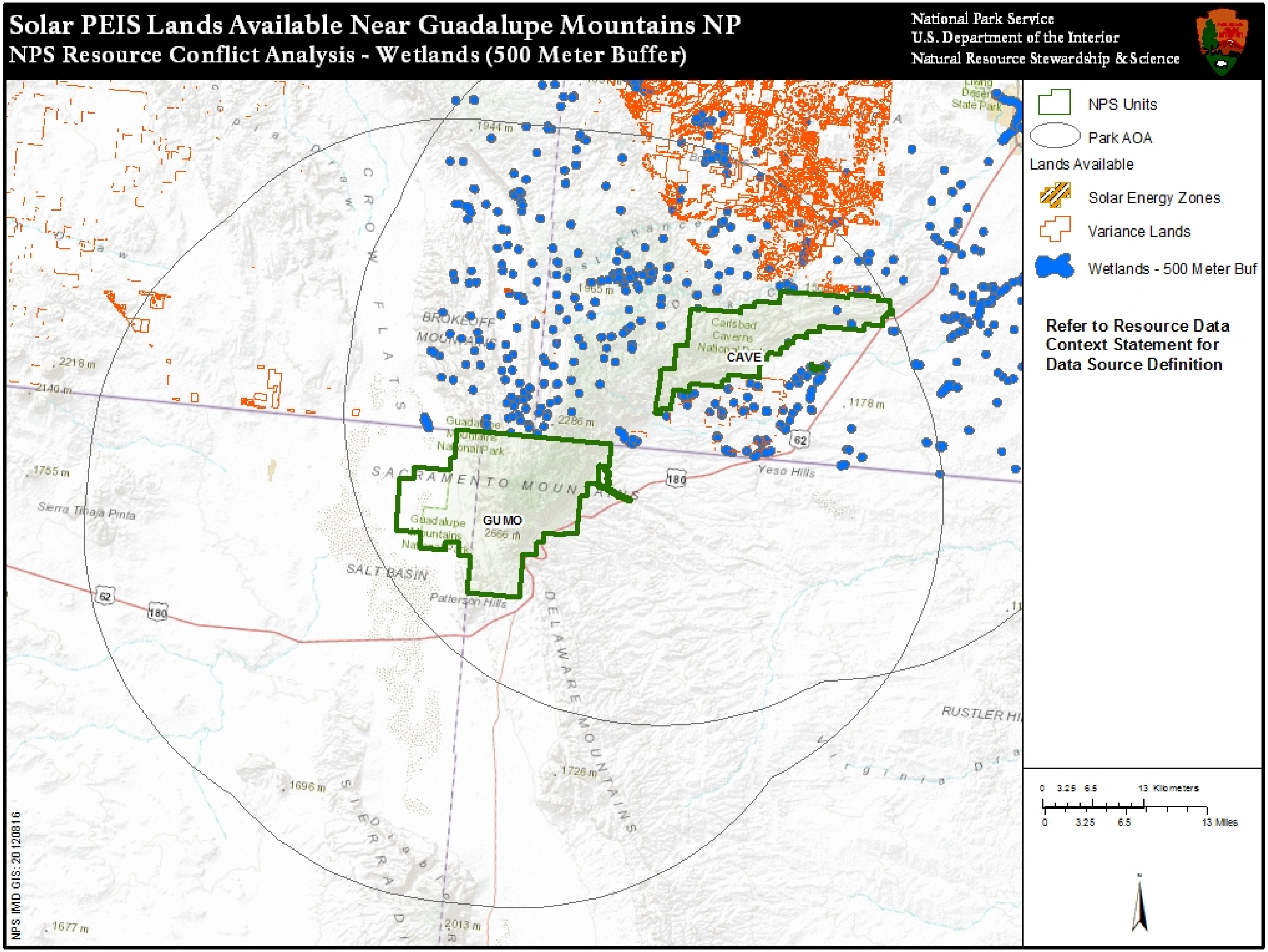

Solar PEIS Lands Available Near Great Sand Dunes NP
NPS Resource Conflict Analysis - Night Lights
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Night Lights
Lighter
Darker
Refer to Resource Data Context Statement for Data Source Definition
GRSA
0 3.75 7.5 15 Kilometers
0 3.5 7 14 Miles

Viewshed – Spatial Balanced Sample

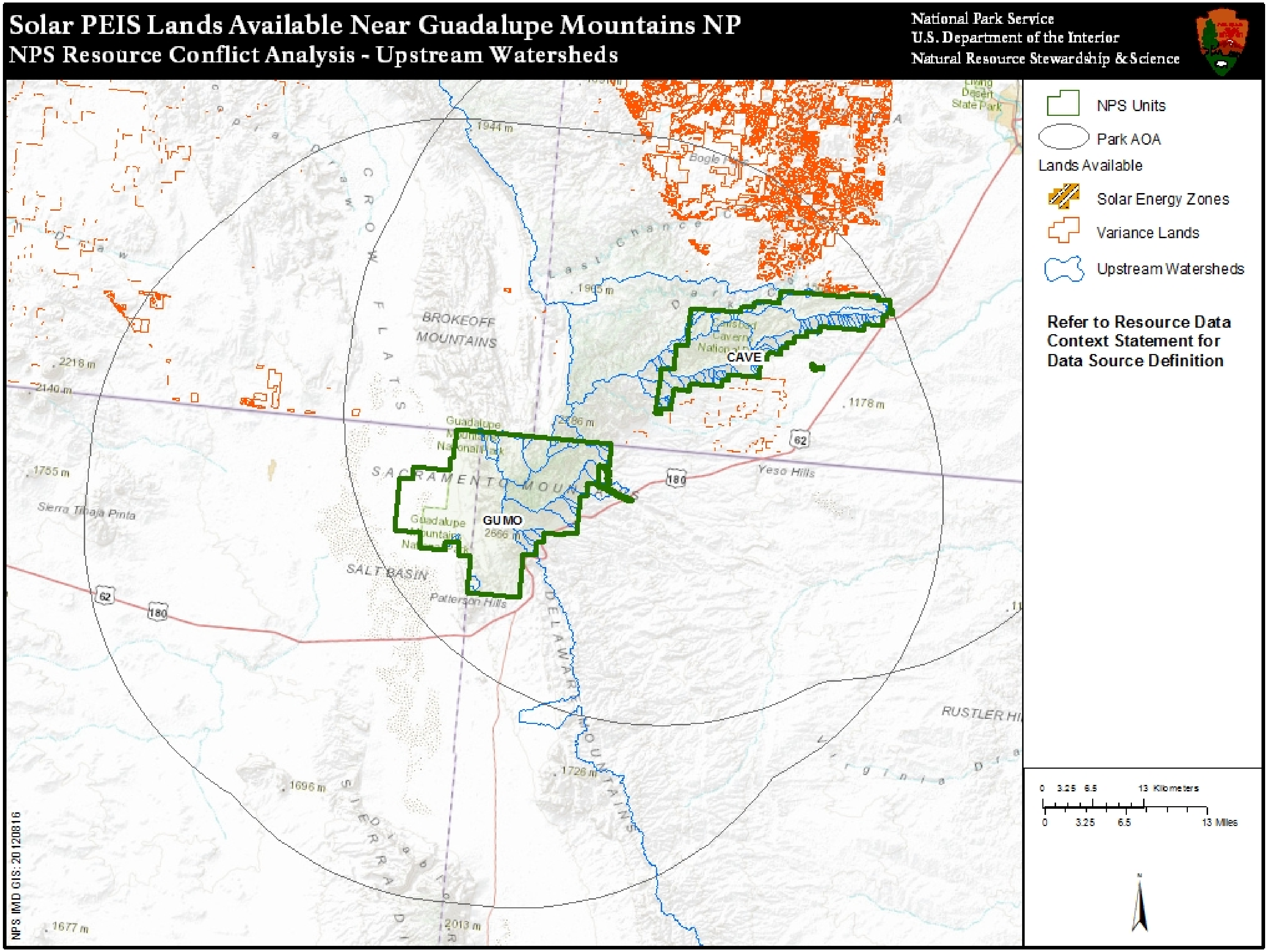



Solar PEIS Lands Available Near Guadalupe Mountains NP
NPS Resource Conflict Analysis - Wind Erodibility Group
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Wind Erodibility Group
1
2
Refer to Resource Data Context Statement for Data Source Definition
0 3.25 6.5 13 Kilometers
0 3.25 6.5 13 Miles
CAVE
GUMO
BROKEOFF MOUNTAINS
DELAWARE MOUNTAINS
RUSTLER HI
NPS IMD GIS: 20120816

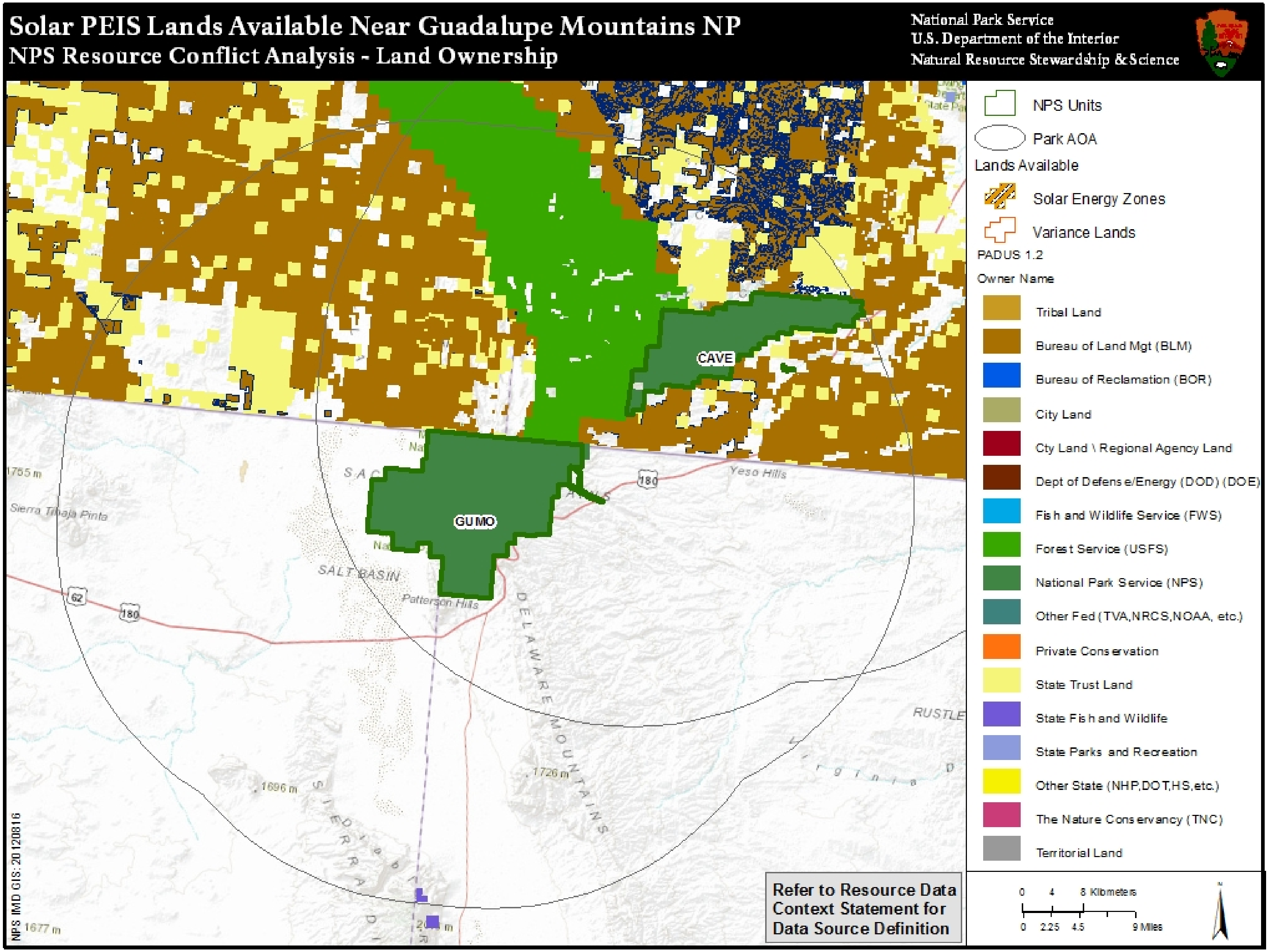

Solar PEIS Lands Available Near Guadalupe Mountains NP
NPS Resource Conflict Analysis - Water Erosion
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Sensitive Soils
Refer to Resource Data Context Statement for Data Source Definition
0 3.25 6.5 13 Kilometers
0 3.25 6.5 13 Miles
CAVE
GUMO
SALT BASIN
Yeso Hills
RUSTLER HI
Sierra Diablo Pinta
NPS IMD GIS: 20120814

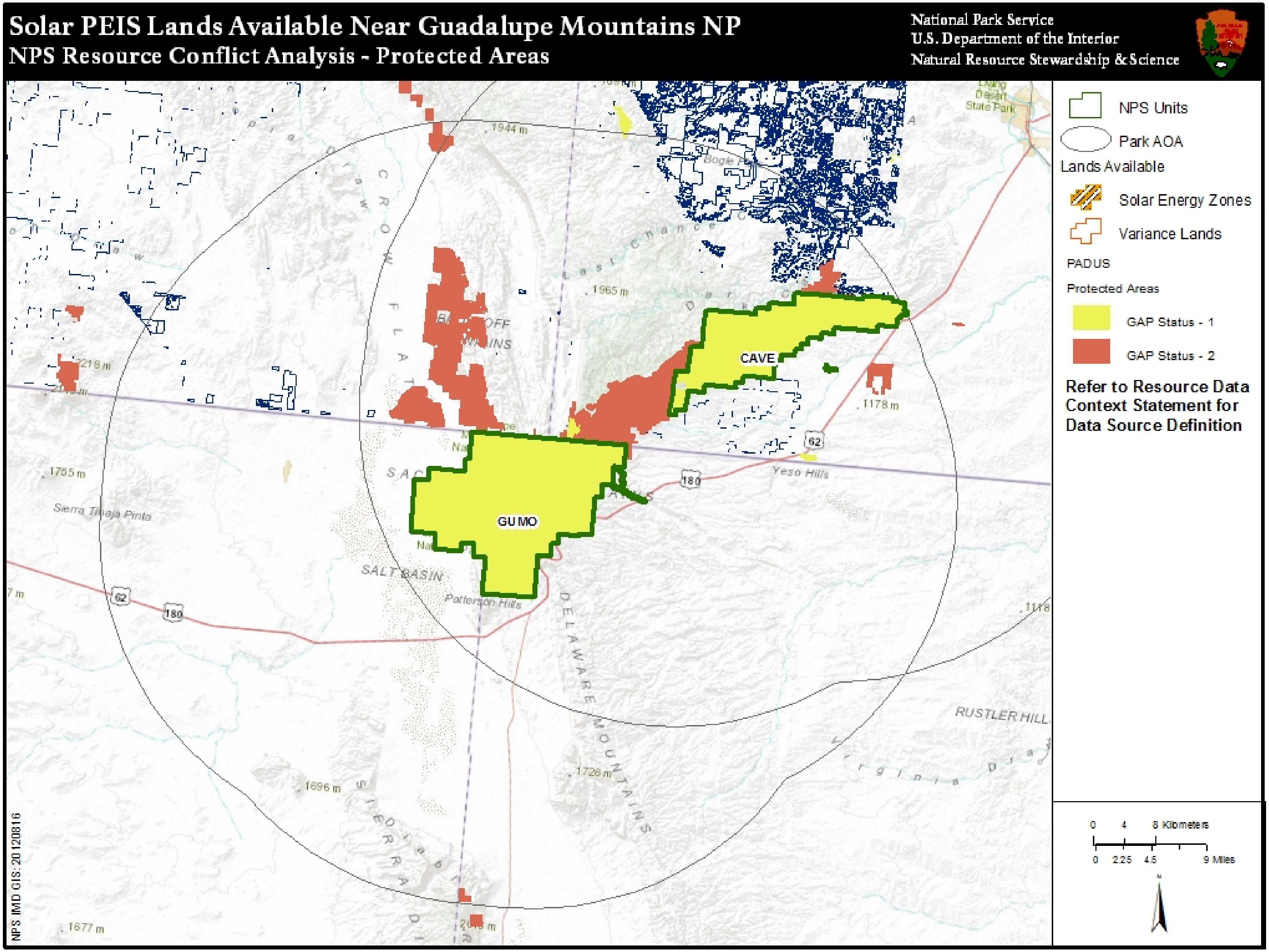

Solar PEIS Lands Available Near Guadalupe Mountains NP
NPS Resource Conflict Analysis - Wetlands (500 Meter Buffer)
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Wetlands - 500 Meter Buf
Refer to Resource Data Context Statement for Data Source Definition
CAVE
GUMO
Carlsbad Caverns
Guadalupe Mountains National Park
BROKEOFF MOUNTAINS
CROW FLATS
SACRAMENTO MOUNTAINS
SALT BASIN
Patterson Hills
DELAWARE MOUNTAINS
RUSTLER HI
Yeso Hills
Sierra Tinaja Pinta
1944 m
1965 m
2218 m
2140 m
2286 m
1178 m
1755 m
2666 m
1726 m
1696 m
1677 m
2013 m
62
180
0 3.25 6.5 13 Kilometers
0 3.25 6.5 13 Miles
NPS IMD GIS: 20120816

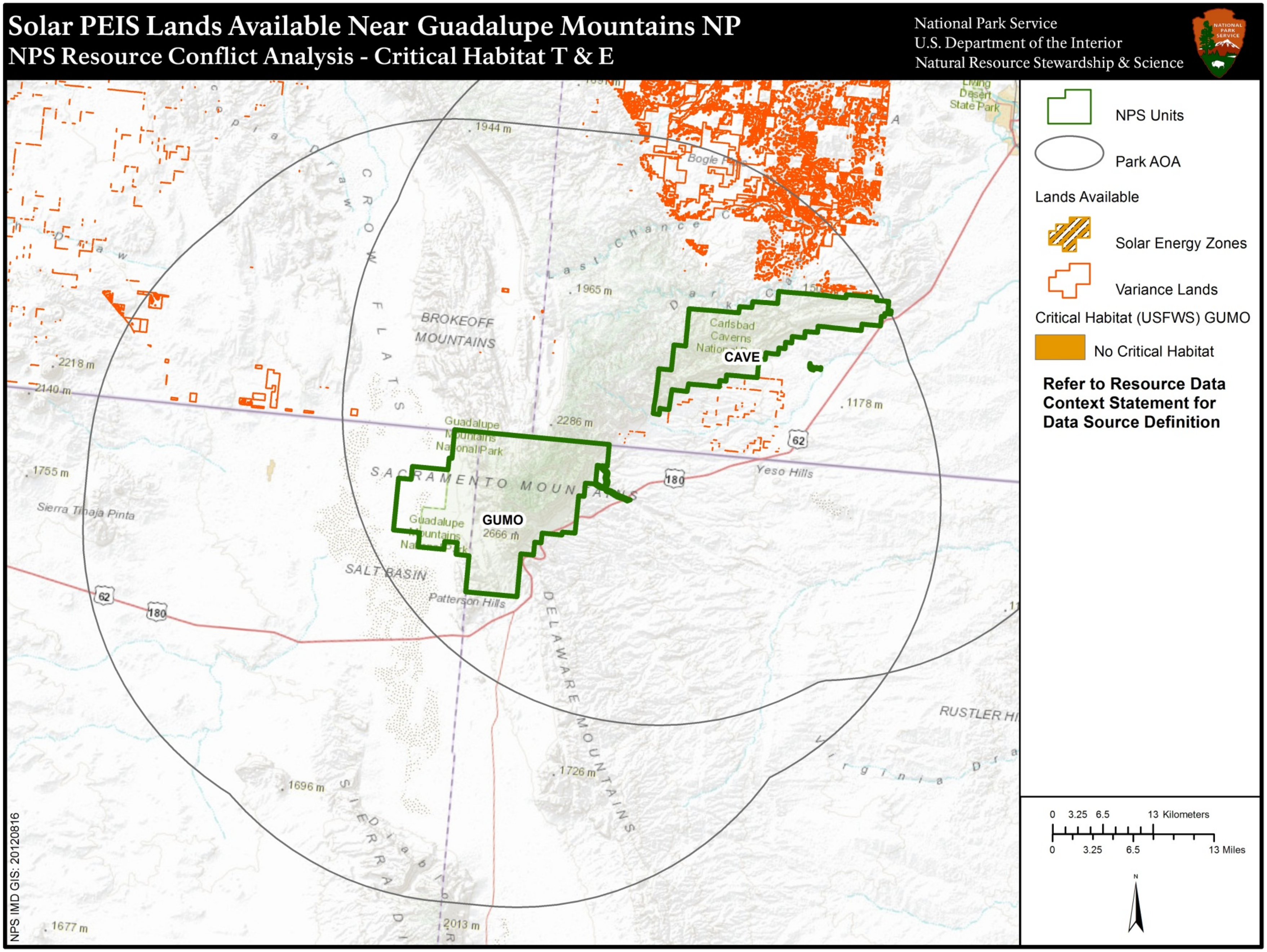
Upstream Watershed

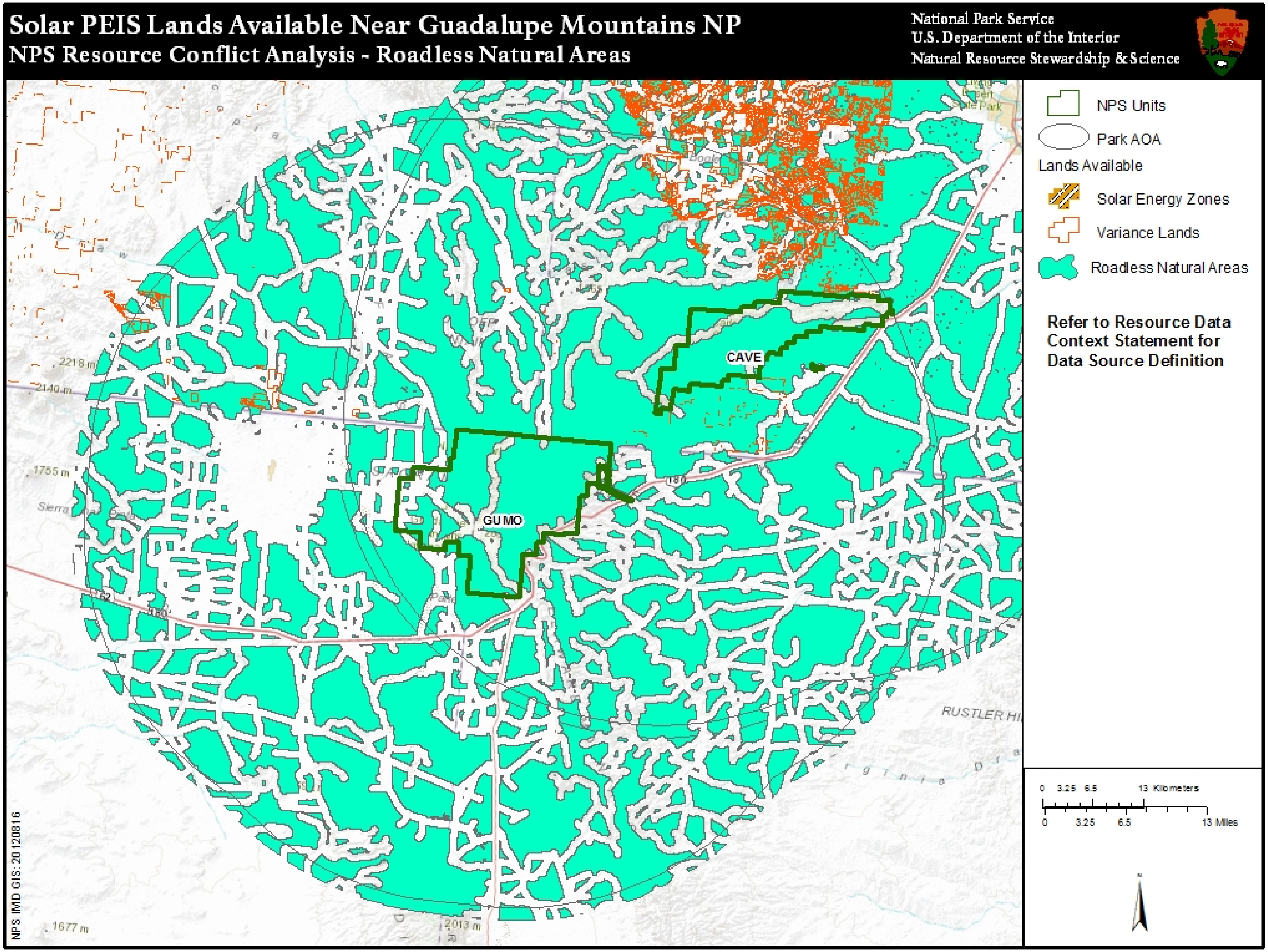


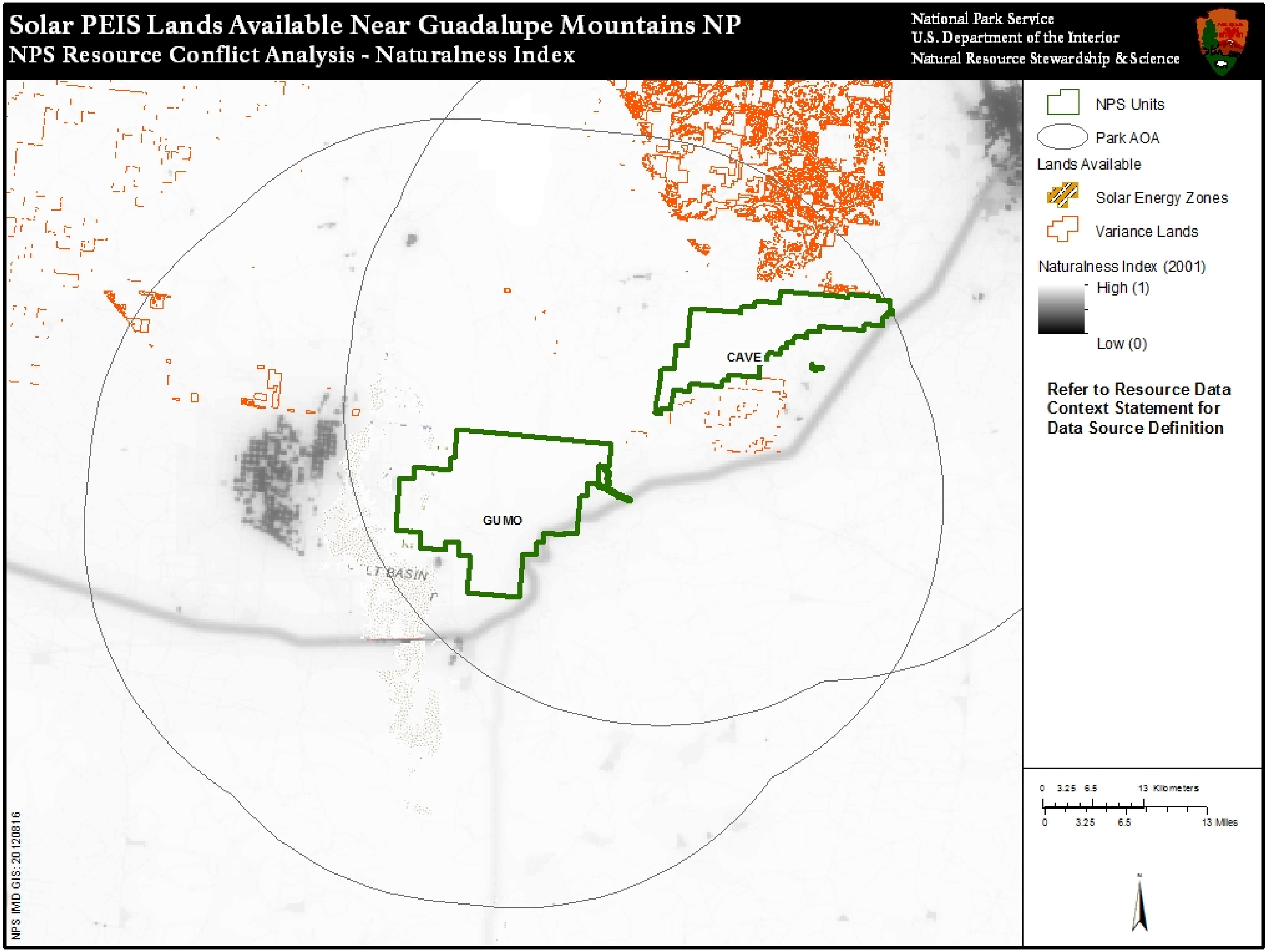
Land Ownership

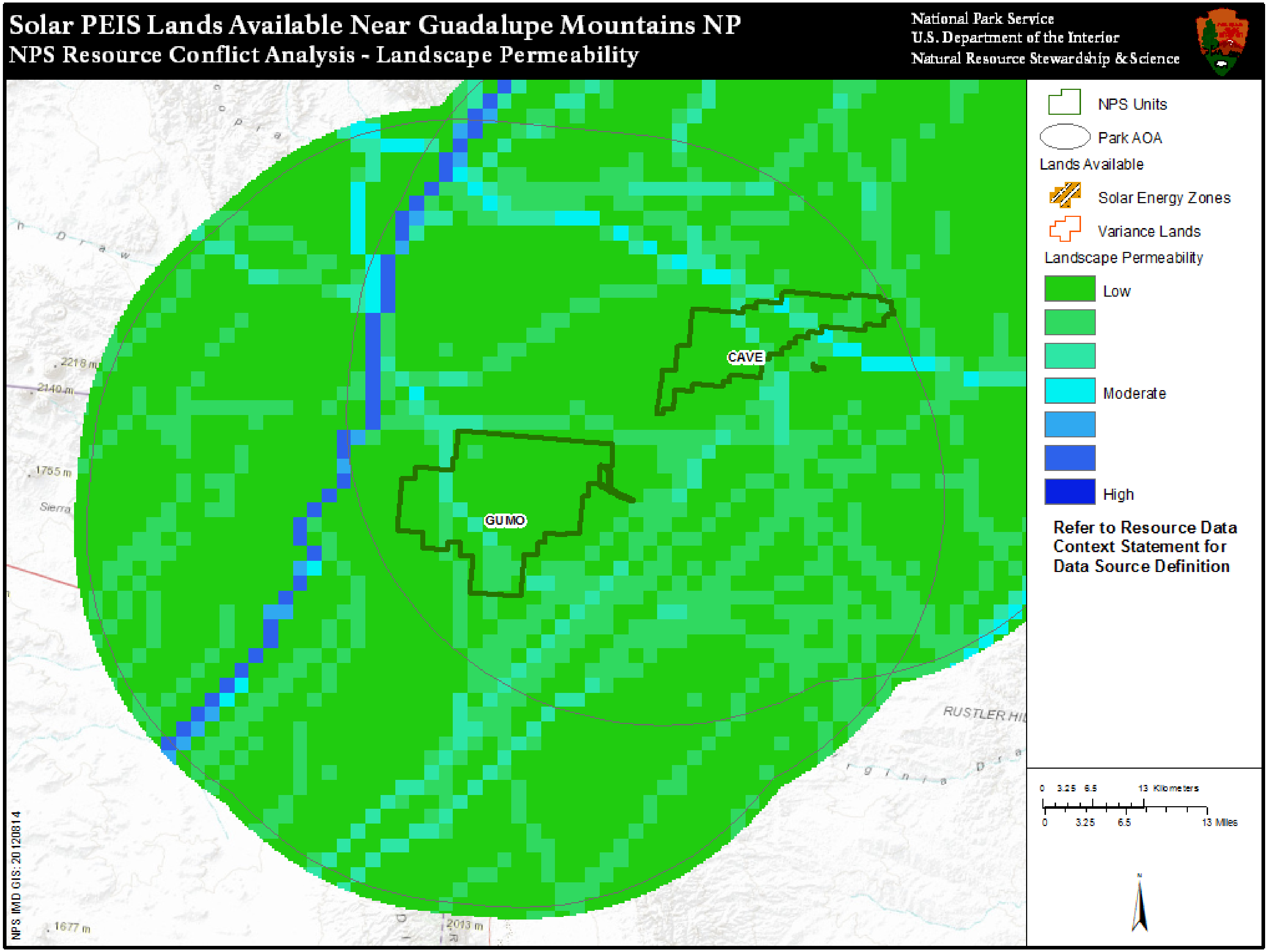


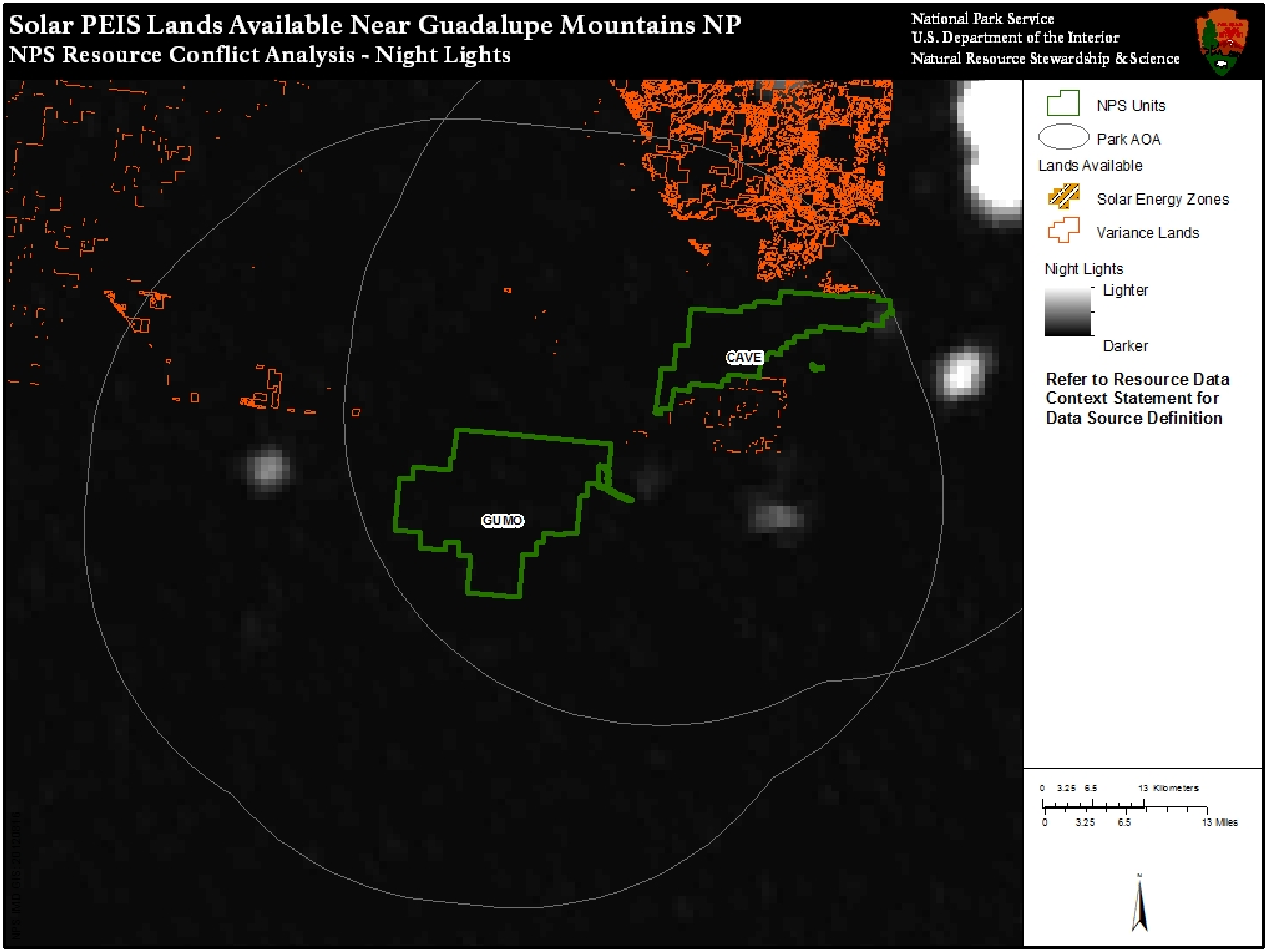

Solar PEIS Lands Available Near Guadalupe Mountains NP
NPS Resource Conflict Analysis - Protected Areas
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
PADUS
Protected Areas
GAP Status - 1
GAP Status - 2
Refer to Resource Data Context Statement for Data Source Definition
0 4 8 Kilometers
0 2.25 4.5 9 Miles
CAVE
GUMO
SALT BASIN
DELAWARE MOUNTAINS
RUSTLER HILLS
Yeso Hills
Patterson Hills
Sierra Tinaja Pinta
NPS IMD GIS: 20120816

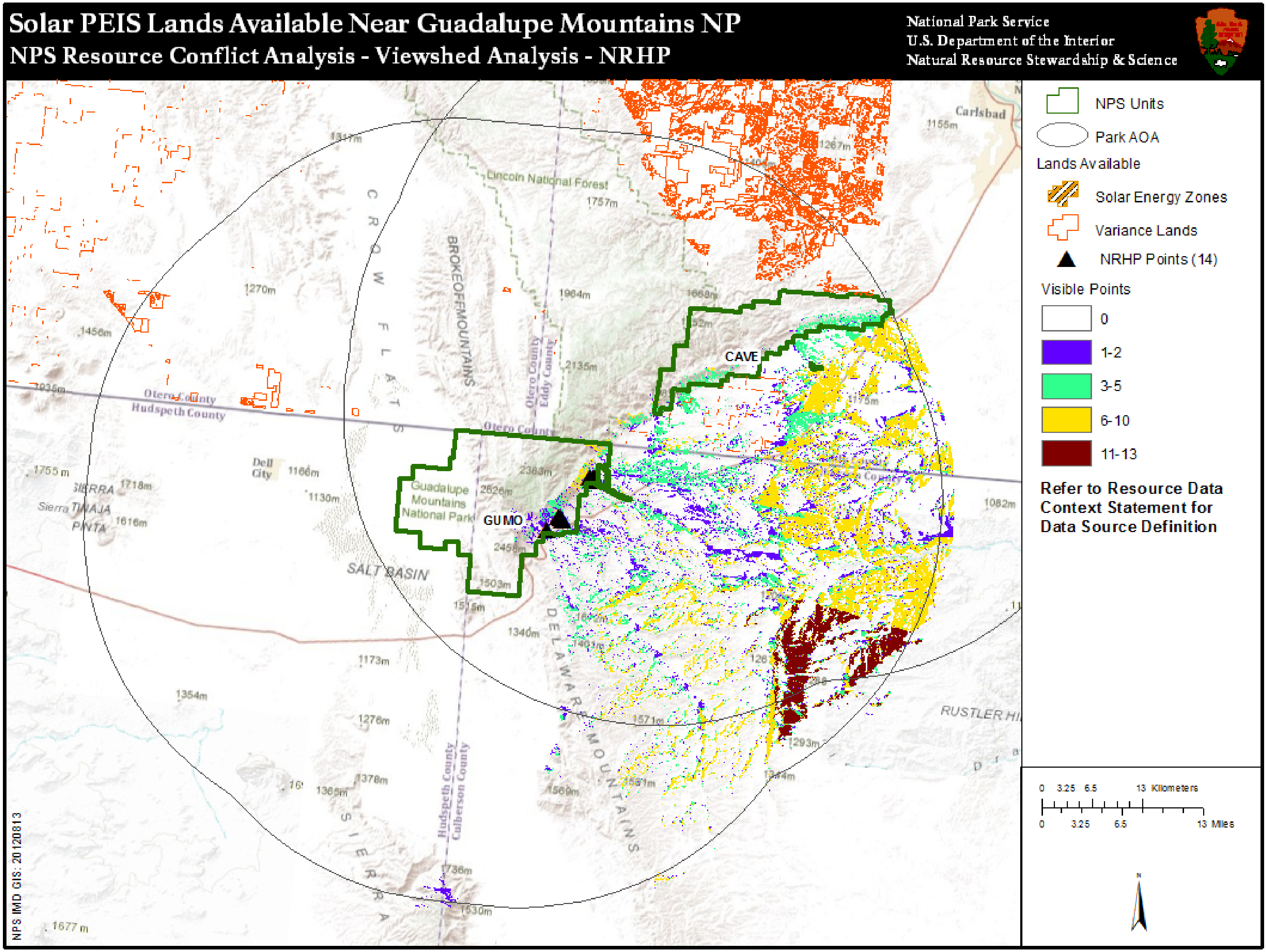

Solar PEIS Lands Available Near Guadalupe Mountains NP
NPS Resource Conflict Analysis - Critical Habitat T & E
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Critical Habitat (USFWS) GUMO
No Critical Habitat
Refer to Resource Data Context Statement for Data Source Definition
0 3.25 6.5 13 Kilometers
0 3.25 6.5 13 Miles
N
NPS IMD GIS: 20120816
GUMO
CAVE
Carlsbad Caverns
Guadalupe Mountains National Park
BROKEOFF MOUNTAINS
SACRAMENTO MOUNTAINS
SALT BASIN
DELAWARE MOUNTAINS
CROW FLATS
Patterson Hills
Yeso Hills
Sierra Tinaja Pinta
RUSTLER HI
1944 m
1965 m
2218 m
2140 m
2286 m
1178 m
1755 m
2666 m
1696 m
1726 m
1677 m
2013 m
62
180

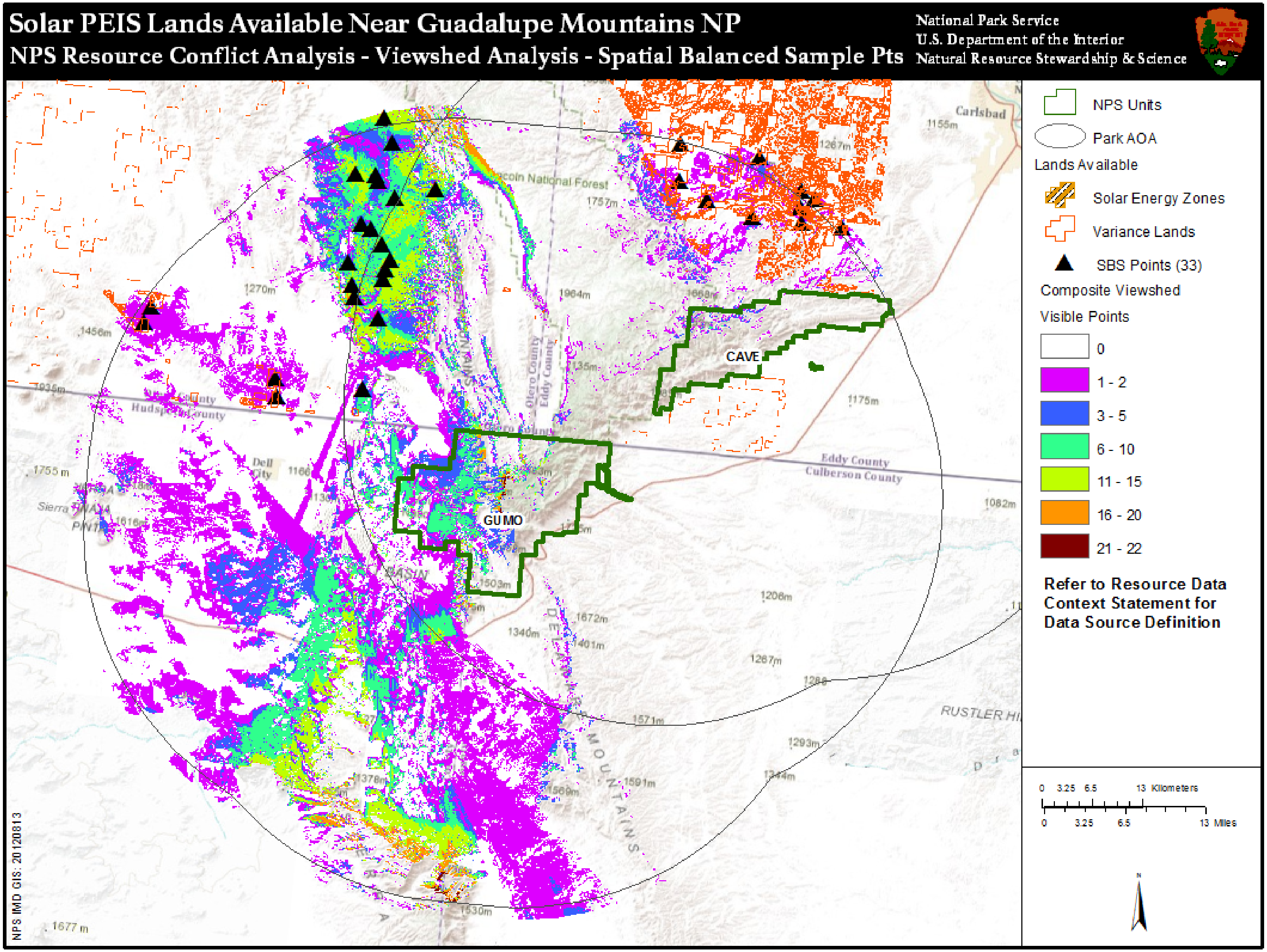

Solar PEIS Lands Available Near Guadalupe Mountains NP
NPS Resource Conflict Analysis - Roadless Natural Areas
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Roadless Natural Areas
Refer to Resource Data Context Statement for Data Source Definition
CAVE
GUMO
RUSTLER HI
0 3.25 6.5 13 Kilometers
0 3.25 6.5 13 Miles
NPS IMD GIS: 20120816


Solar PEIS Lands Available Near Guadalupe Mountains NP
NPS Resource Conflict Analysis - Naturalness Index
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
CAVE
GUMO
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Naturalness Index (2001)
High (1)
Low (0)
Refer to Resource Data Context Statement for Data Source Definition
0 3.25 6.5 13 Kilometers
0 3.25 6.5 13 Miles
NPS IMD GIS: 20120816


Solar PEIS Lands Available Near Guadalupe Mountains NP
NPS Resource Conflict Analysis - Landscape Permeability
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Landscape Permeability
Low
Moderate
High
Refer to Resource Data Context Statement for Data Source Definition
0 3.25 6.5 13 Kilometers
0 3.25 6.5 13 Miles
CAVE
GUMO
RUSTLER HI
NPS IMD GIS: 20120814

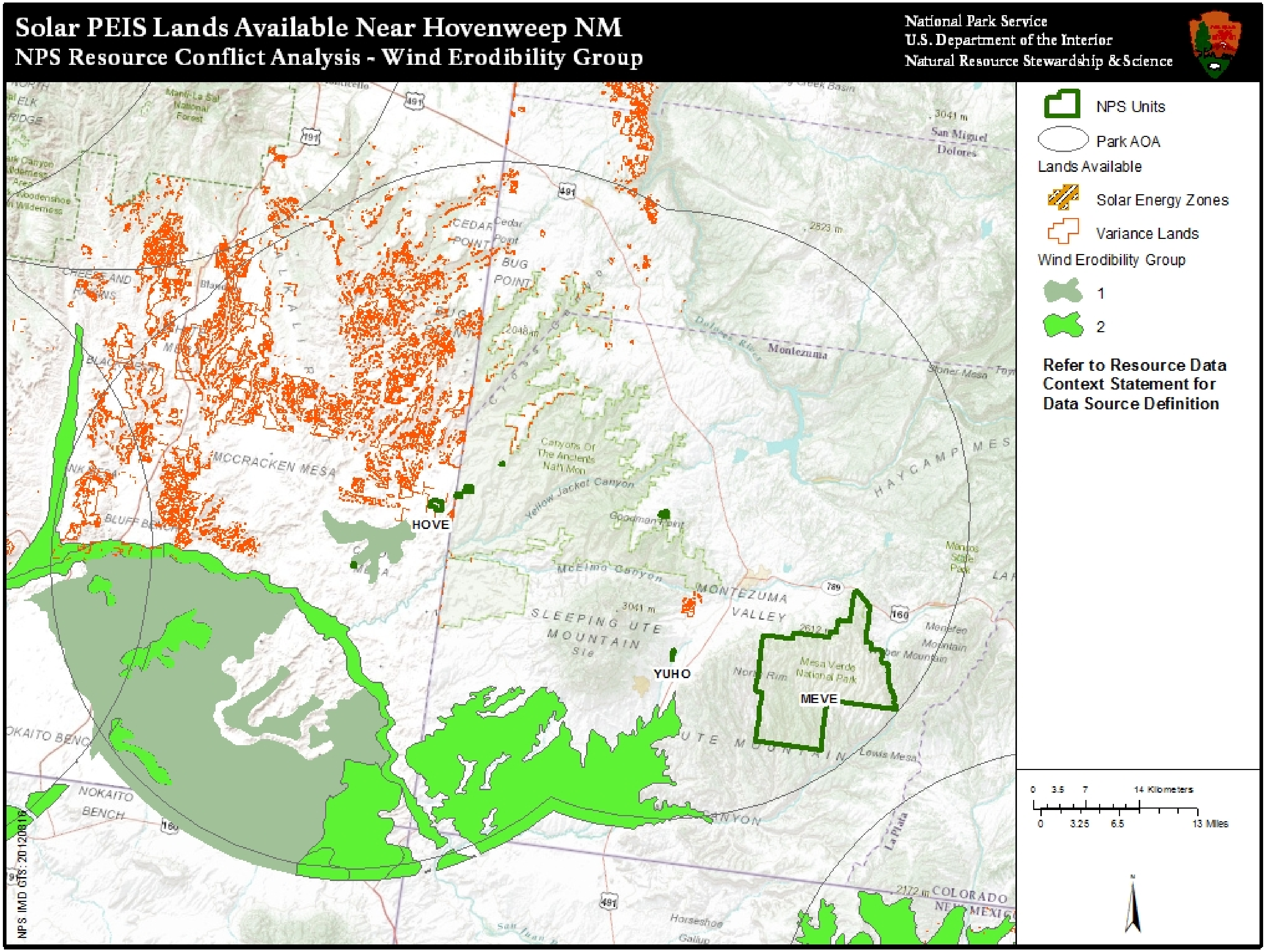

Solar PEIS Lands Available Near Guadalupe Mountains NP
NPS Resource Conflict Analysis - Night Lights
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Night Lights
Lighter
Darker
Refer to Resource Data Context Statement for Data Source Definition
CAVE
GUMO
0 3.25 6.5 13 Kilometers
0 3.25 6.5 13 Miles

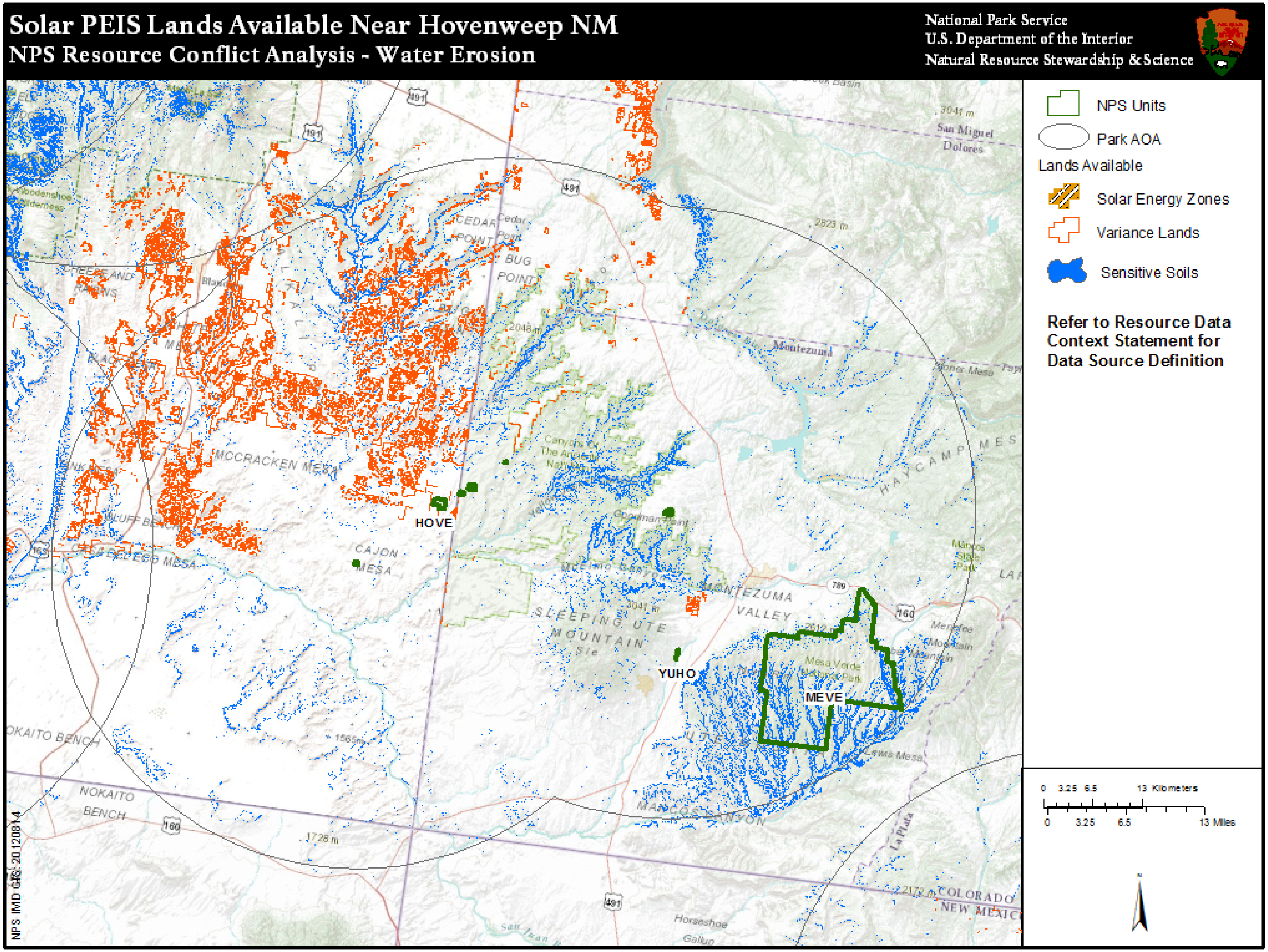

Solar PEIS Lands Available Near Guadalupe Mountains NP
NPS Resource Conflict Analysis - Viewshed Analysis - NRHP
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
NRHP Points (14)
Visible Points
0
1-2
3-5
6-10
11-13
Refer to Resource Data Context Statement for Data Source Definition
CAVE
GUMO
Guadalupe Mountains National Park
Lincoln National Forest
Carlsbad
SALT BASIN
DELAWARE MOUNTAINS
BROKEOFF MOUNTAINS
CROW FLATS
Otero County
Hudspeth County
Eddy County
Culberson County
Dell City
RUSTLER HI
NPS IMD GIS: 20120813



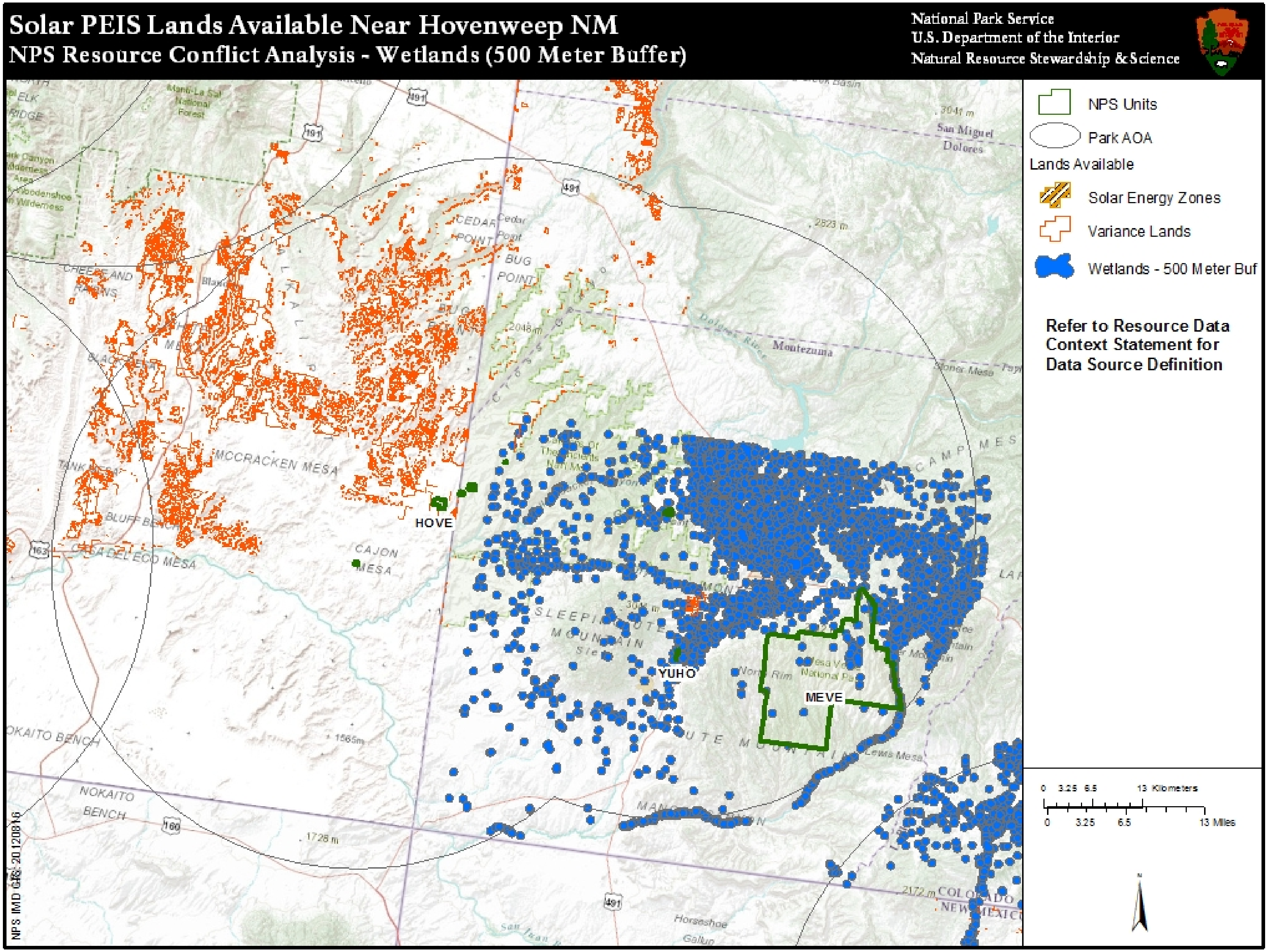
Solar PEIS Lands Available Near Guadalupe Mountains NP
NPS Resource Conflict Analysis - Viewshed Analysis - Spatial Balanced Sample Pts
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
SBS Points (33)
Composite Viewshed
Visible Points
0
1 - 2
3 - 5
6 - 10
11 - 15
16 - 20
21 - 22
Refer to Resource Data Context Statement for Data Source Definition
0 3.25 6.5 13 Kilometers
0 3.25 6.5 13 Miles
CAVE
GUMO
Carlsbad
Eddy County
Culberson County
RUSTLER HI
Lincoln National Forest
NPS IMD GIS: 20120813

Hovenweep National Monument
Wind Erodibility Group



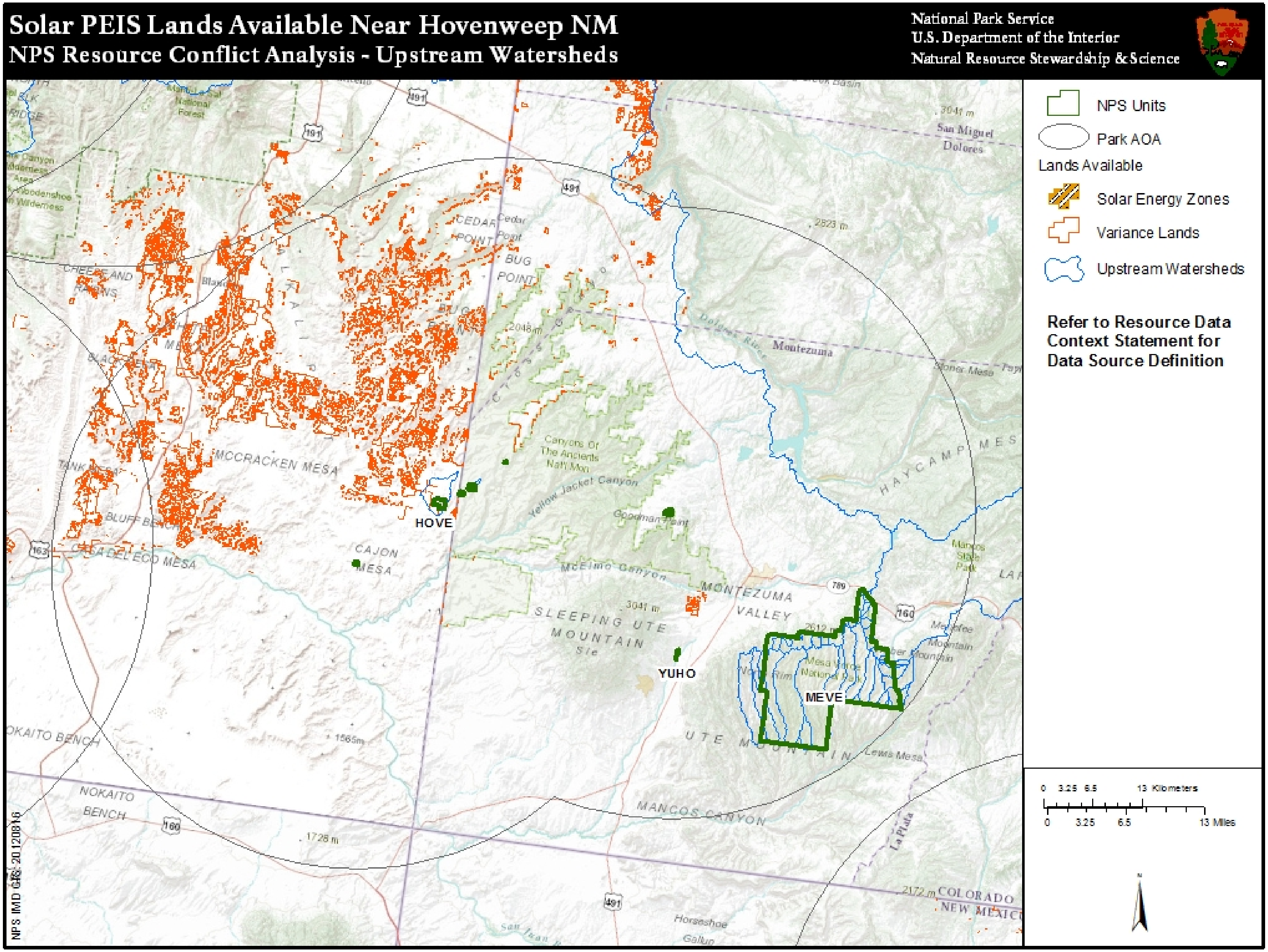

Solar PEIS Lands Available Near Hovenweep NM
NPS Resource Conflict Analysis - Water Erosion
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Sensitive Soils
Refer to Resource Data Context Statement for Data Source Definition
0 3.25 6.5 13 Kilometers
0 3.25 6.5 13 Miles
HOVE
YUHO
MEVE
NPS IMD GIS 20120814

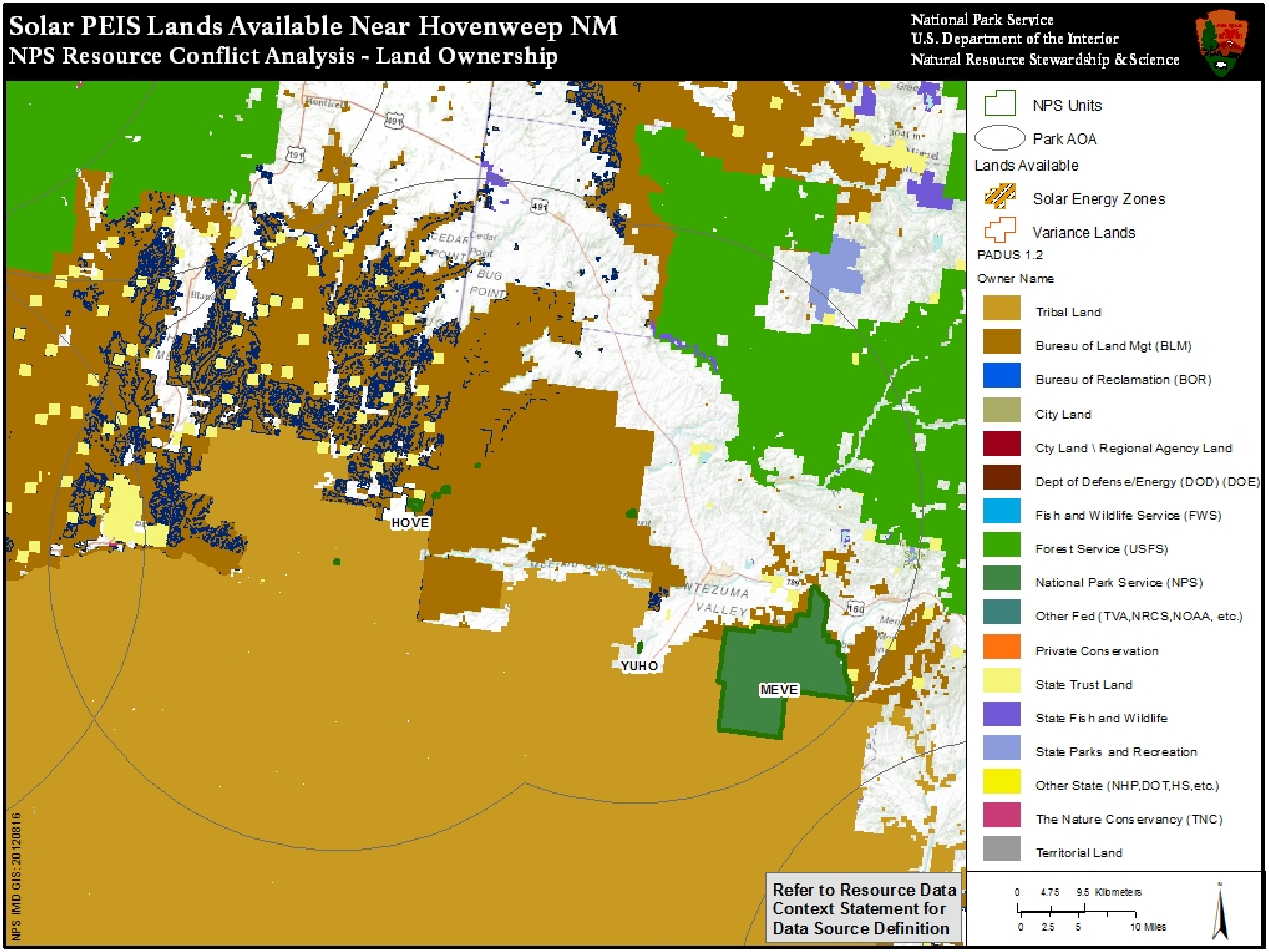
Wetlands

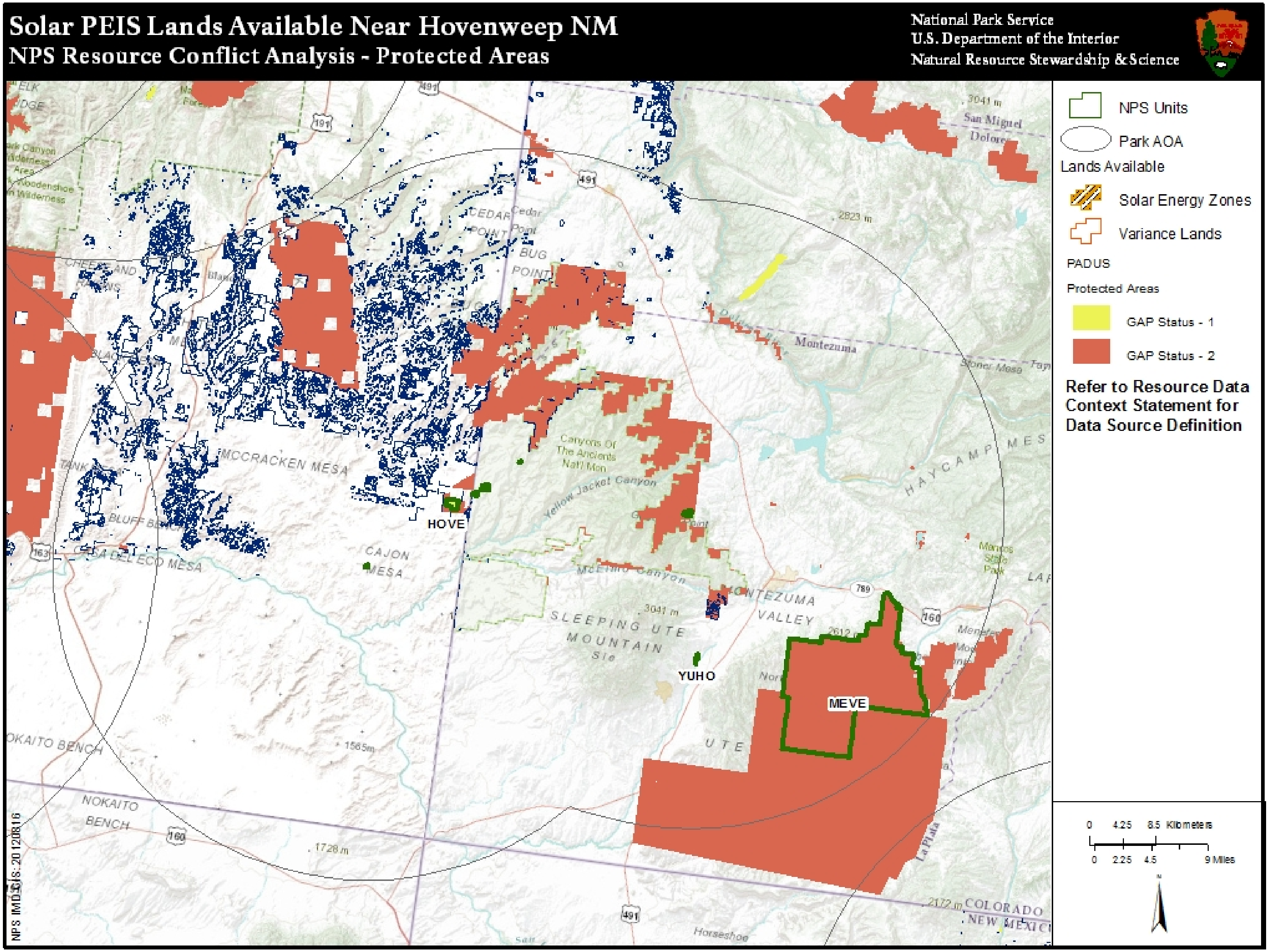


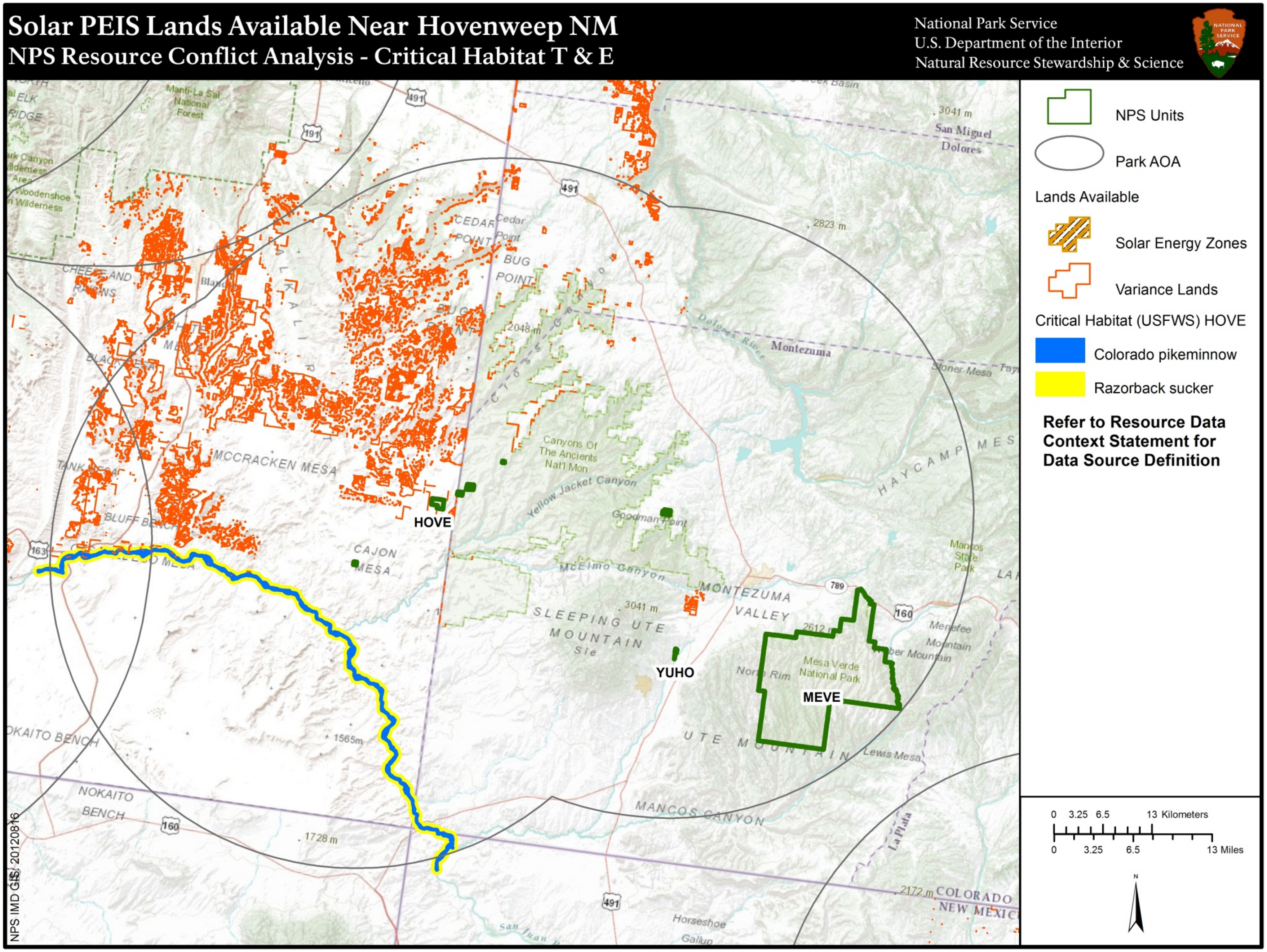
Solar PEIS Lands Available Near Hovenweep NM
NPS Resource Conflict Analysis - Wetlands (500 Meter Buffer)
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Wetlands - 500 Meter Buf
Refer to Resource Data Context Statement for Data Source Definition
0 3.25 6.5 13 Kilometers
0 3.25 6.5 13 Miles
HOVE
YUHO
MEVE
MCCRACKEN MESA
CAJON MESA
SLEEPING UTE MOUNTAIN
UTE MOUNTAIN
Montezuma
Dolores River
San Miguel
Dolores
NOKAITO BENCH
COLORADO
NEW MEXICO
NPS IMD GIS: 20120816

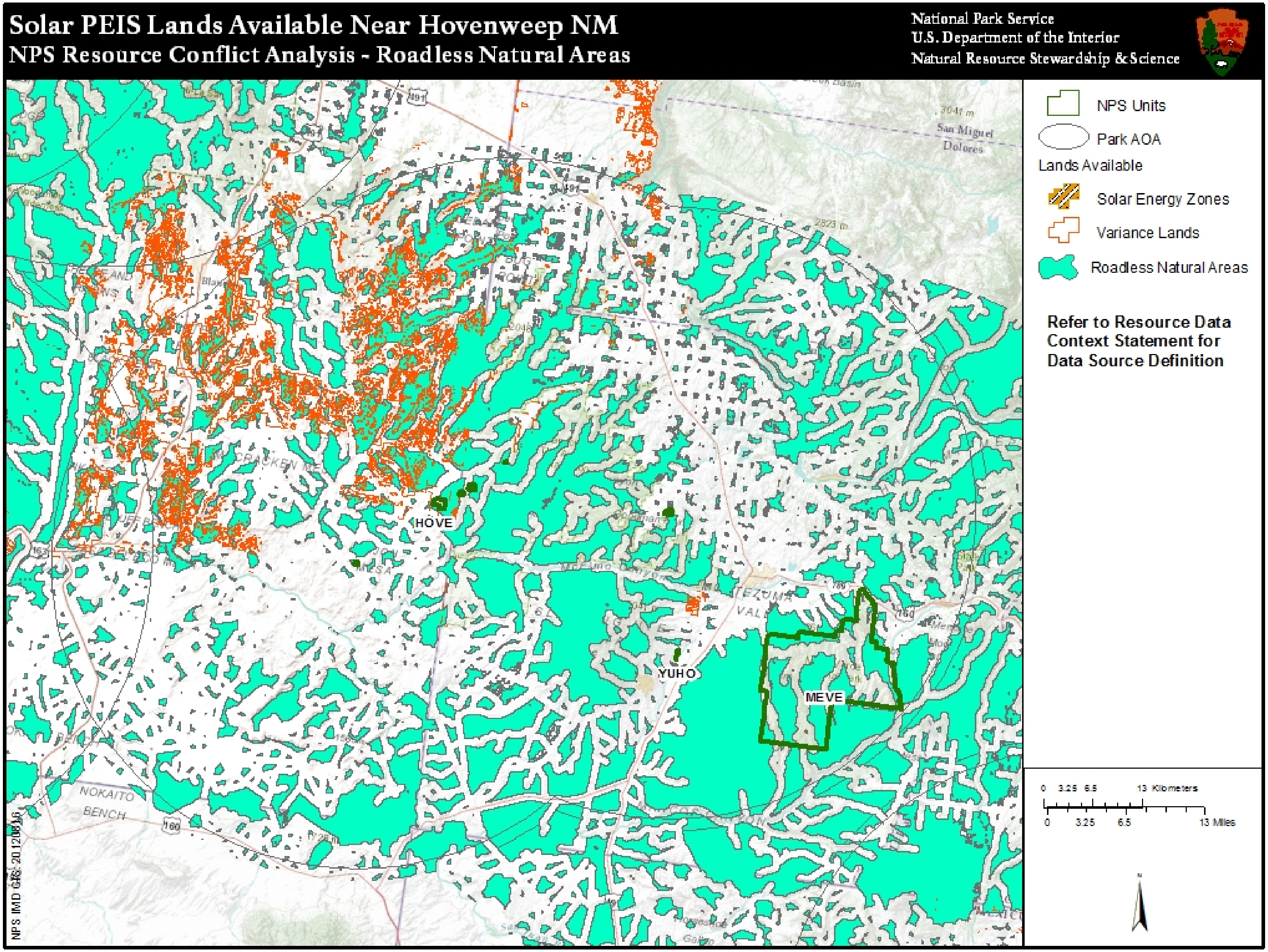
Upstream Watershed

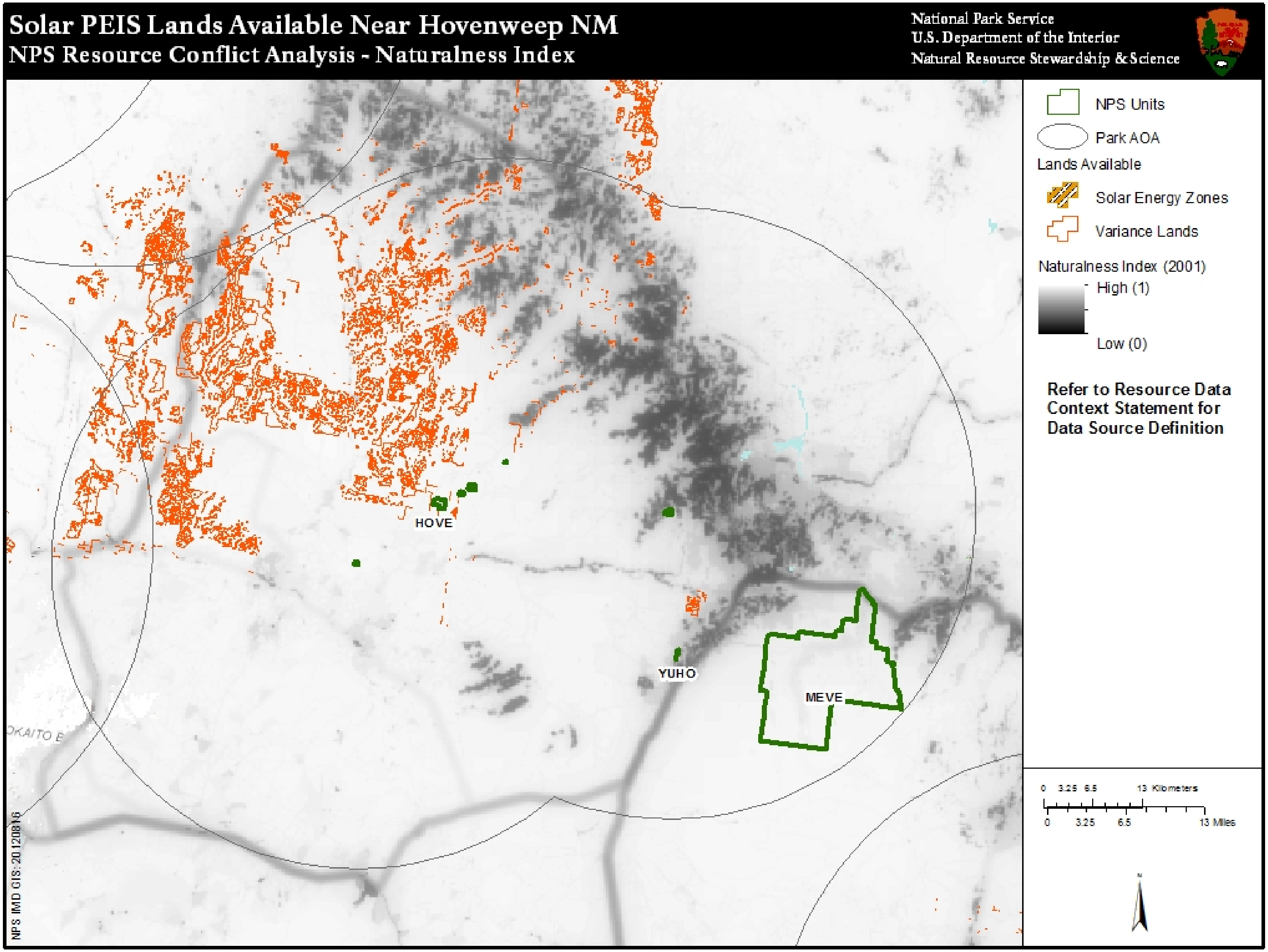


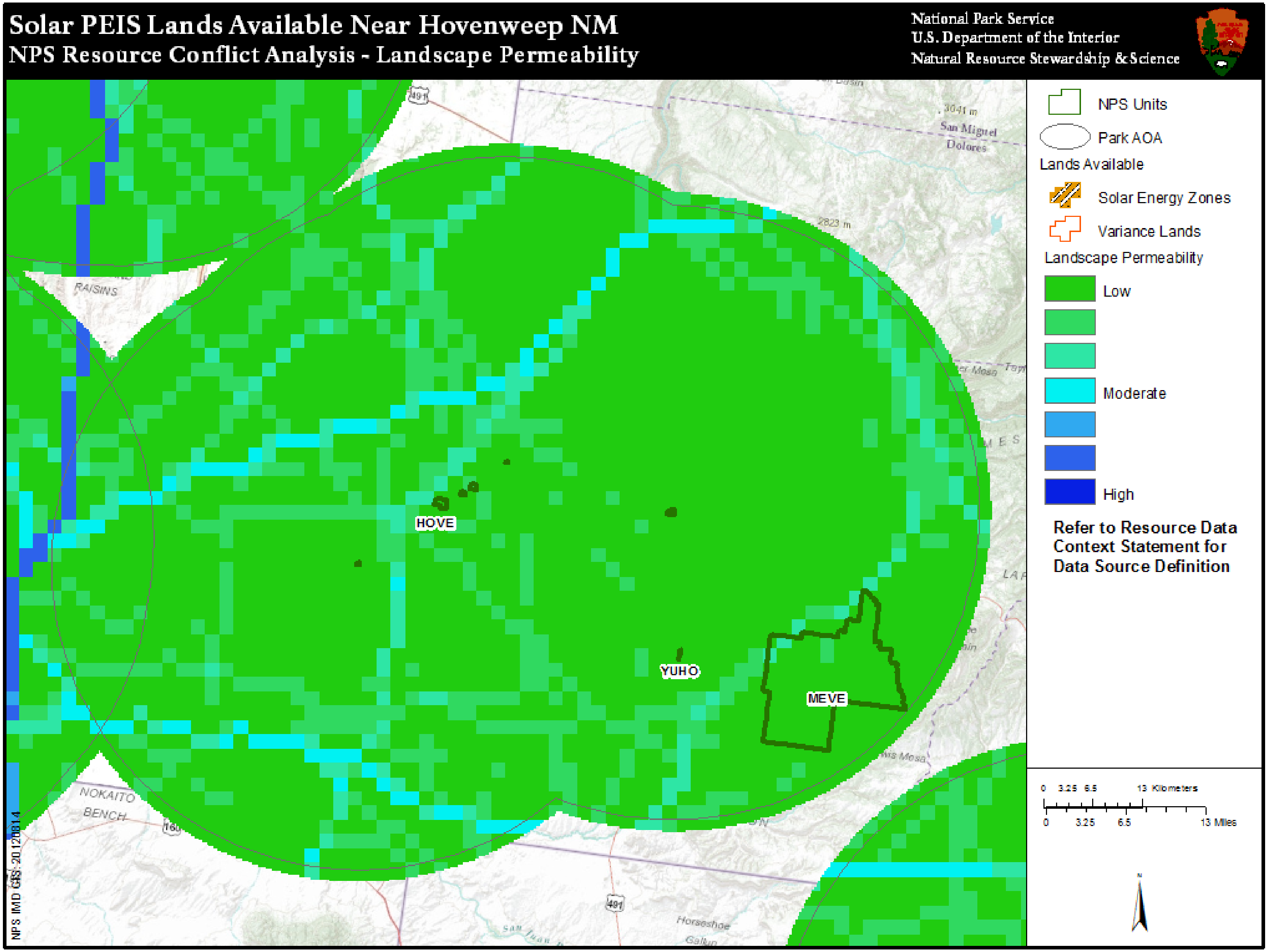

Solar PEIS Lands Available Near Hovenweep NM
NPS Resource Conflict Analysis - Land Ownership
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
PADUS 1.2
Owner Name
Tribal Land
Bureau of Land Mgt (BLM)
Bureau of Reclamation (BOR)
City Land
Cty Land \ Regional Agency Land
Dept of Defense/Energy (DOD) (DOE)
Fish and Wildlife Service (FWS)
Forest Service (USFS)
National Park Service (NPS)
Other Fed (TVA,NRCS,NOAA, etc.)
Private Conservation
State Trust Land
State Fish and Wildlife
State Parks and Recreation
Other State (NHP,DOT,HS,etc.)
The Nature Conservancy (TNC)
Territorial Land
HOVE
YUHO
MEVE
Refer to Resource Data Context Statement for Data Source Definition
0 4.75 9.5 Kilometers
0 2.5 5 10 Miles
NPS IMD GIS: 20120816

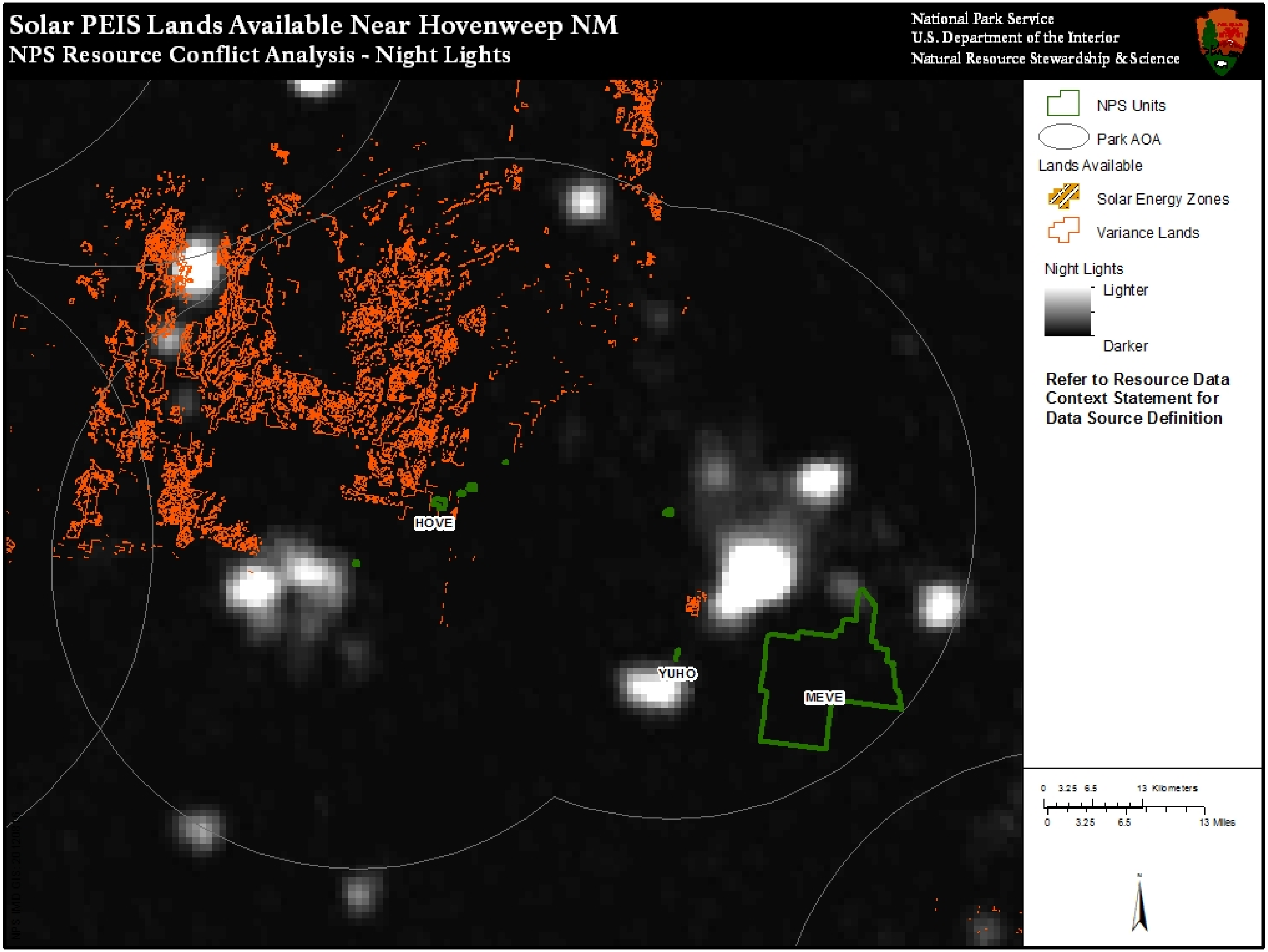

Solar PEIS Lands Available Near Hovenweep NM
NPS Resource Conflict Analysis - Protected Areas
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
PADUS
Protected Areas
GAP Status - 1
GAP Status - 2
Refer to Resource Data Context Statement for Data Source Definition
0 4.25 8.5 Kilometers
0 2.25 4.5 9 Miles
HOVE
YUHO
MEVE
NPS IMD GIS: 20120816

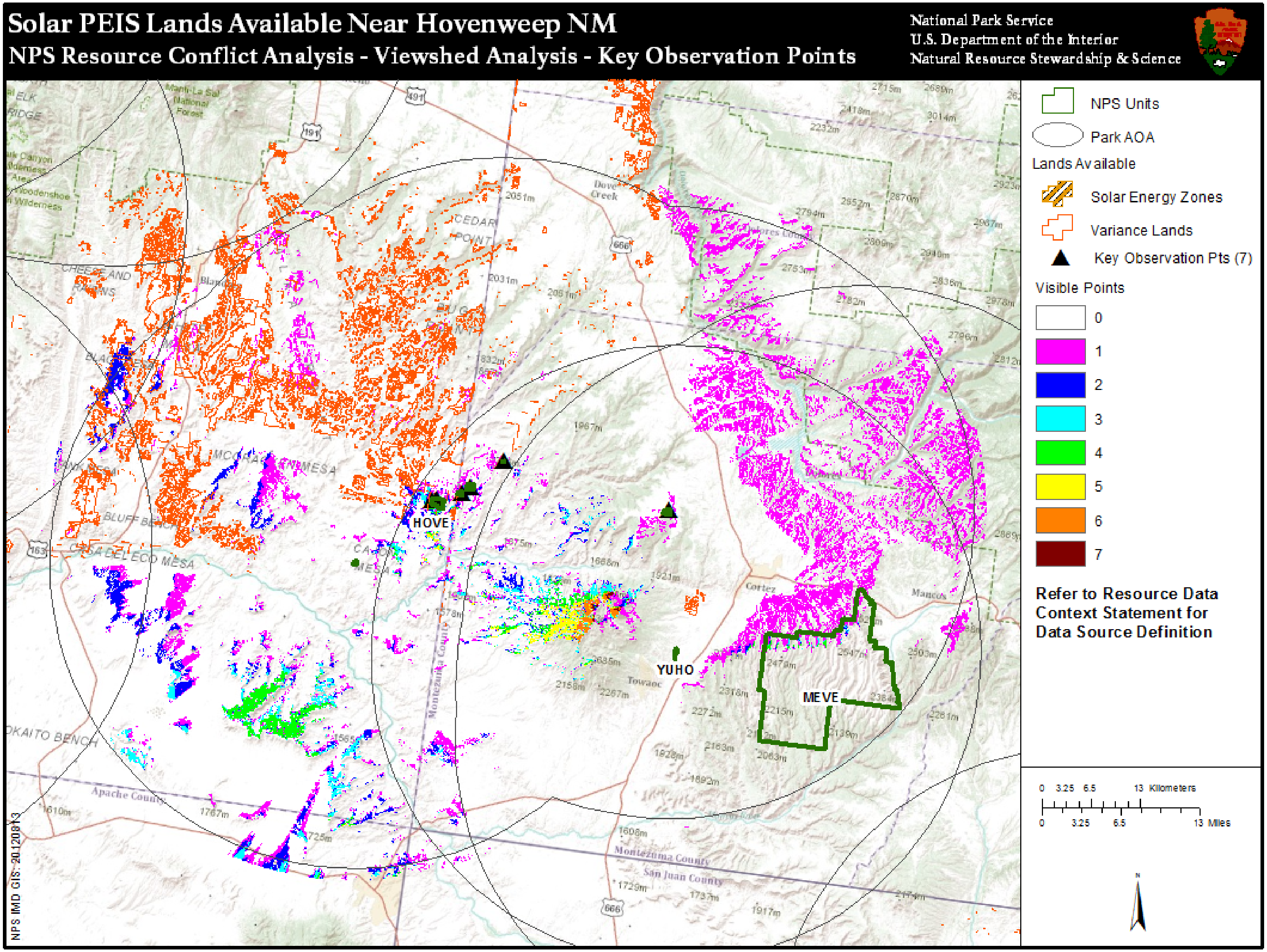

Solar PEIS Lands Available Near Hovenweep NM
NPS Resource Conflict Analysis - Critical Habitat T & E
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Critical Habitat (USFWS) HOVE
Colorado pikeminnow
Razorback sucker
Refer to Resource Data Context Statement for Data Source Definition
0 3.25 6.5 13 Kilometers
0 3.25 6.5 13 Miles
HOVE
YUHO
MEVE
NPS IMD GIS: 20120816


Solar PEIS Lands Available Near Hovenweep NM
NPS Resource Conflict Analysis - Roadless Natural Areas
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Roadless Natural Areas
Refer to Resource Data Context Statement for Data Source Definition
HOVE
YUHO
MEVE
0 3.25 6.5 13 Kilometers
0 3.25 6.5 13 Miles
NPS IMD GIS 20120816

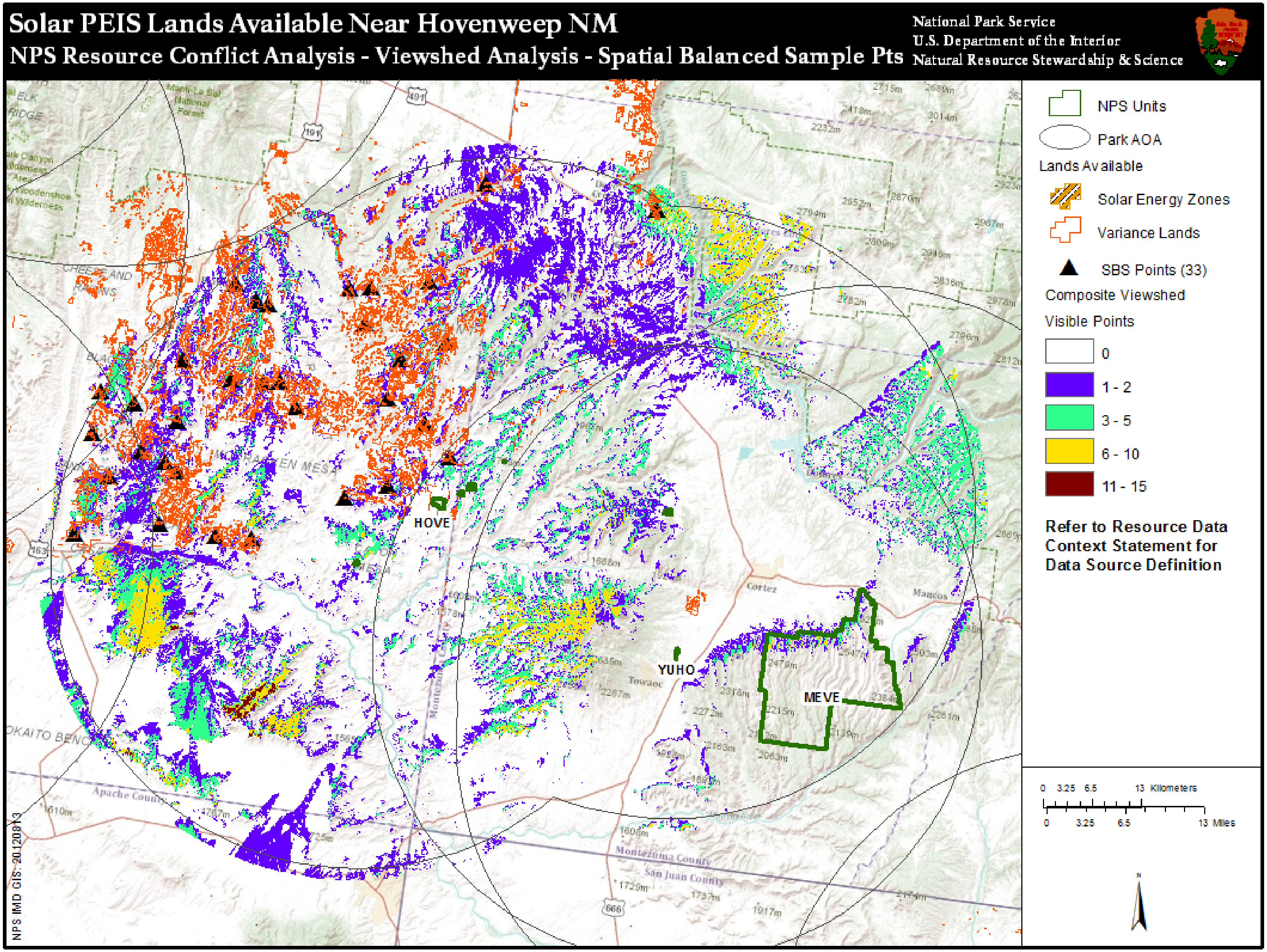

Solar PEIS Lands Available Near Hovenweep NM
NPS Resource Conflict Analysis - Naturalness Index
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Naturalness Index (2001)
High (1)
Low (0)
Refer to Resource Data Context Statement for Data Source Definition
HOVE
YUHO
MEVE
0 3.25 6.5 13 Kilometers
0 3.25 6.5 13 Miles
NPS IMD GIS: 20120816


Solar PEIS Lands Available Near Hovenweep NM
NPS Resource Conflict Analysis - Landscape Permeability
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Landscape Permeability
Low
Moderate
High
Refer to Resource Data Context Statement for Data Source Definition
HOVE
YUHO
MEVE
RAISINS
NOKAITO BENCH
San Miguel
Dolores
0 3.25 6.5 13 Kilometers
0 3.25 6.5 13 Miles
NPS IMD GIS: 20120814

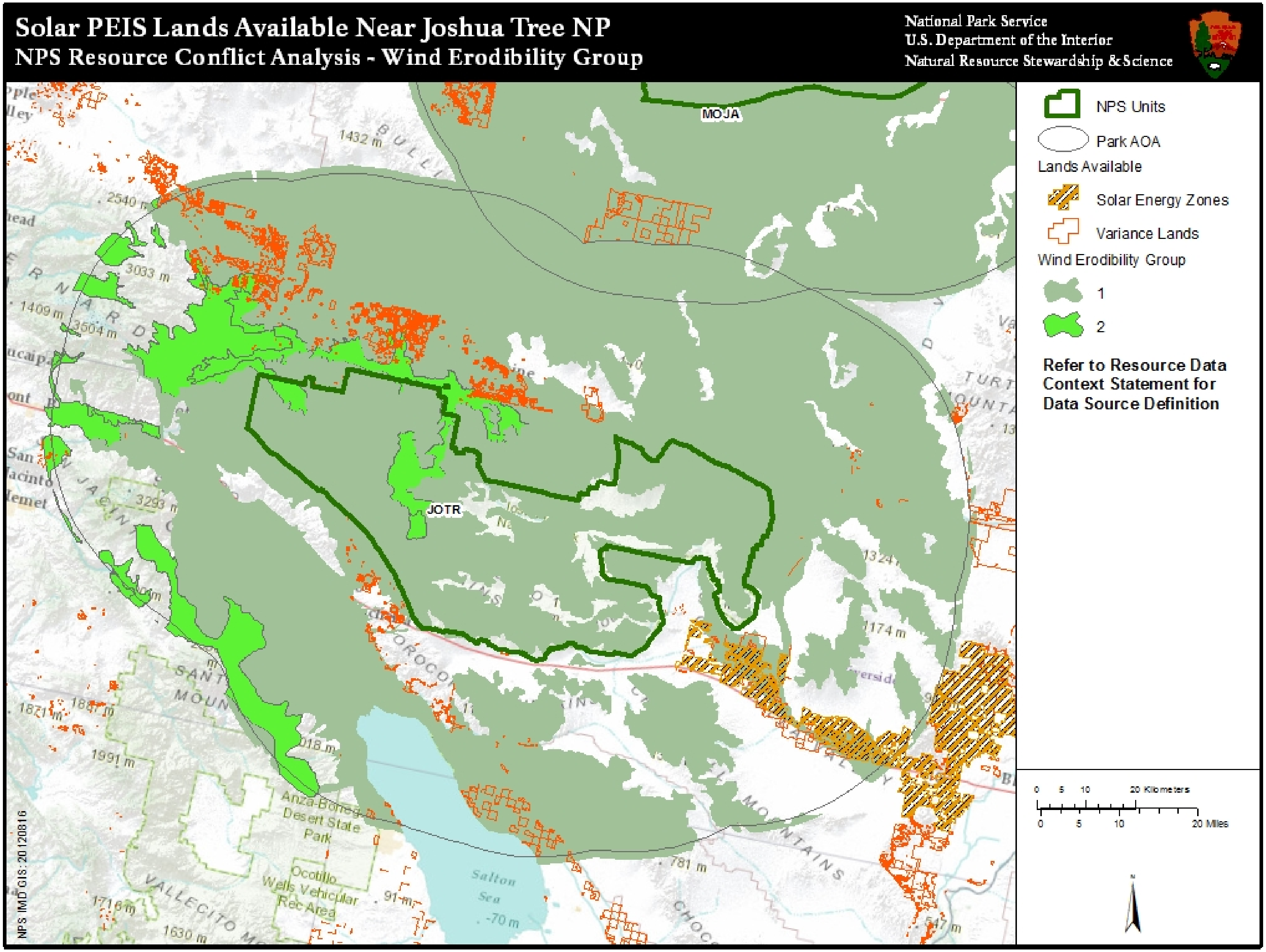

Solar PEIS Lands Available Near Hovenweep NM
NPS Resource Conflict Analysis - Night Lights
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Night Lights
Lighter
Darker
Refer to Resource Data Context Statement for Data Source Definition
0 3.25 6.5 13 Kilometers
0 3.25 6.5 13 Miles
HOVE
YUHO
MEVE

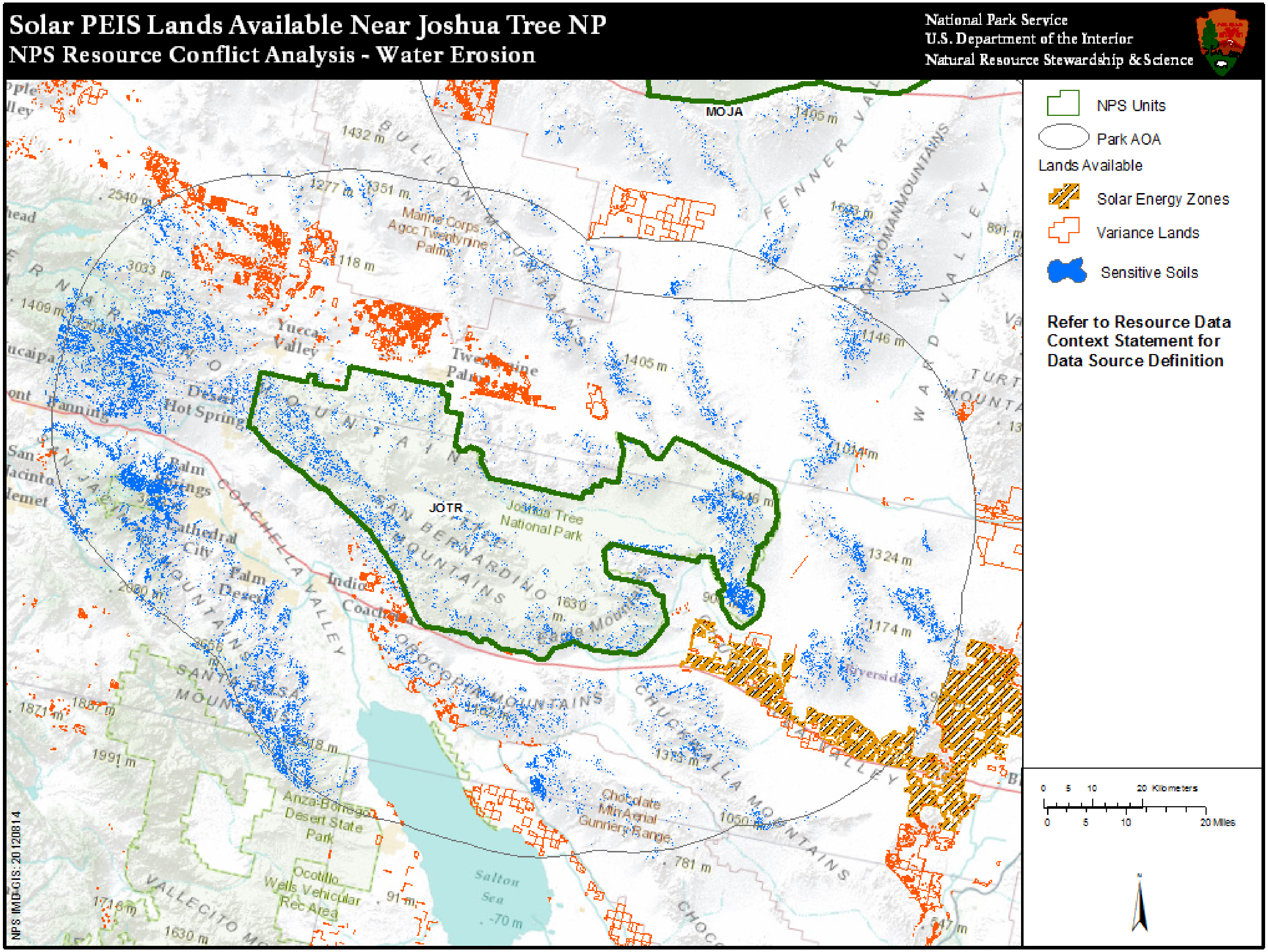

Solar PEIS Lands Available Near Hovenweep NM
NPS Resource Conflict Analysis - Viewshed Analysis - Key Observation Points
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Key Observation Pts (7)
Visible Points
0
1
2
3
4
5
6
7
Refer to Resource Data Context Statement for Data Source Definition
0 3.25 6.5 13 Kilometers
0 3.25 6.5 13 Miles
HOVE
YUHO
MEVE
Cortez
Towaoc
Mancos
Montezuma County
San Juan County
Apache County
NPS IMD GIS: 20120813

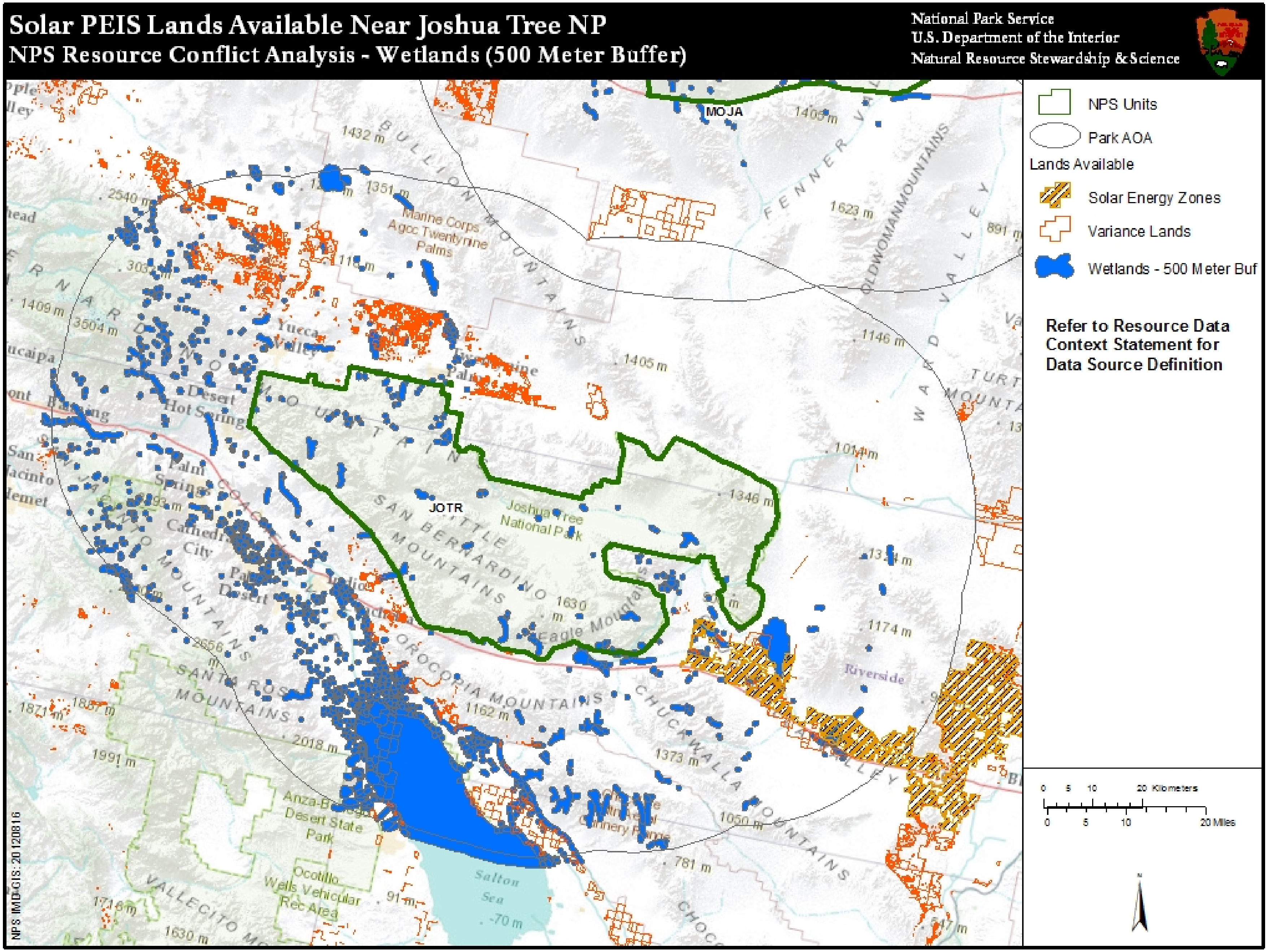
Viewshed – Spatial Balanced Sample



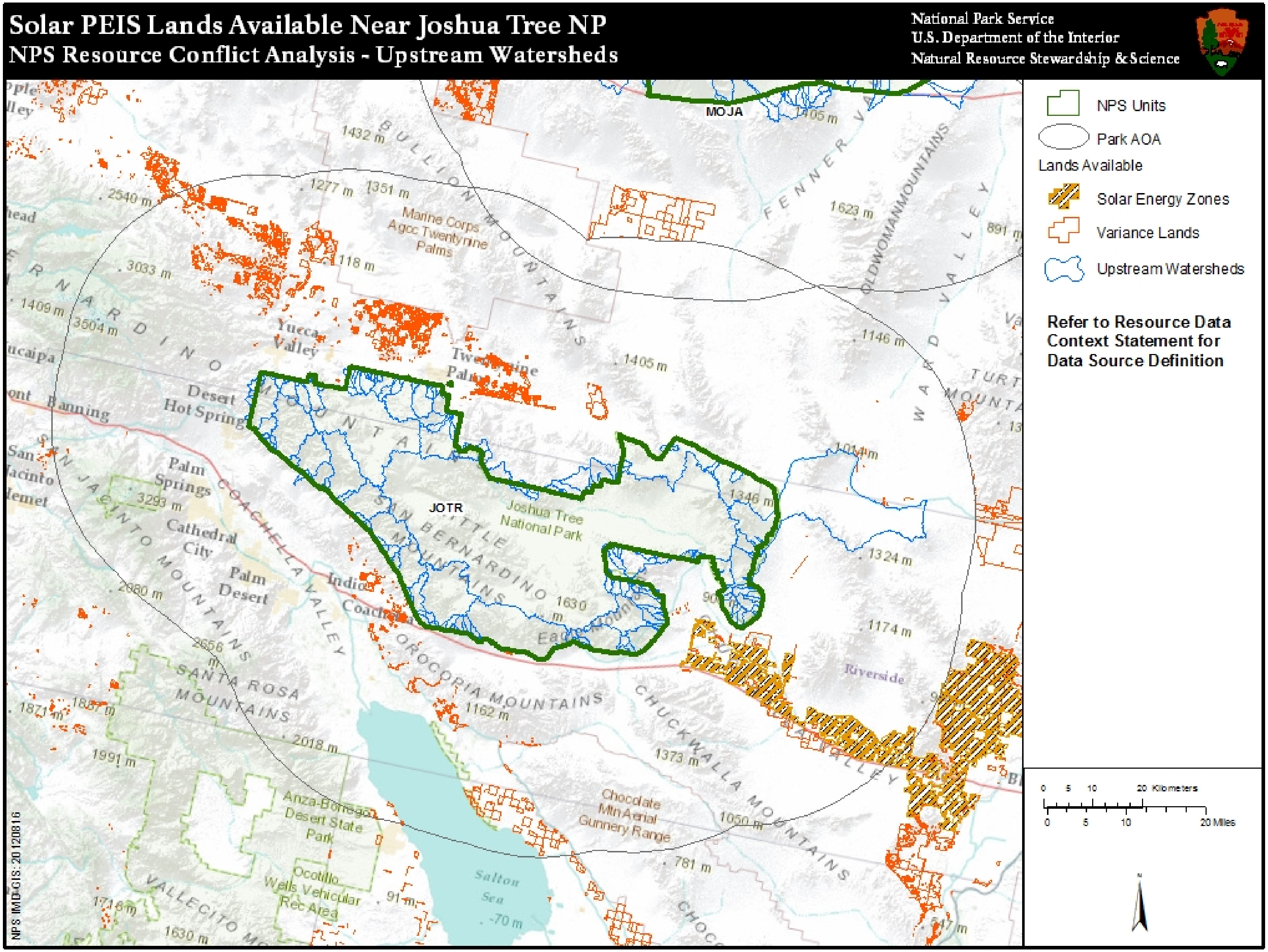
Joshua Tree National Park
Wind Erodibility Group



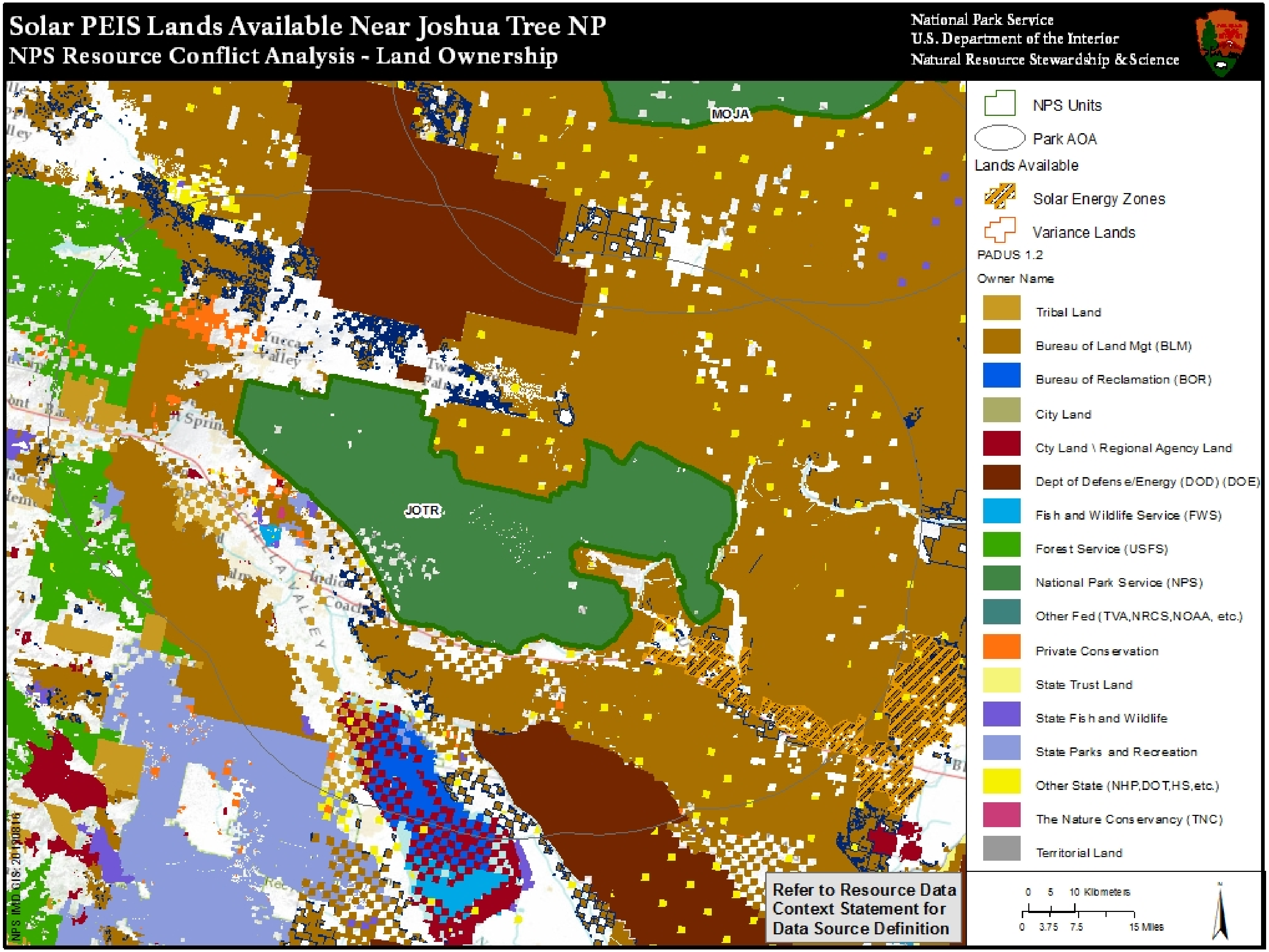

Solar PEIS Lands Available Near Joshua Tree NP
NPS Resource Conflict Analysis - Water Erosion
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Sensitive Soils
Refer to Resource Data Context Statement for Data Source Definition
JOTR
Joshua Tree National Park
MOJA
Marine Corps Agcc Twentynine Palms
Yucca Valley
Twentynine Palms
Desert Hot Springs
Palm Springs
Cathedral City
Palm Desert
Indio
Coachella
Anza-Borrego Desert State Park
Ocotillo Wells Vehicular Rec Area
Chocolate Mtn Aerial Gunnery Range
Salton Sea
-70 m
NPS IMD GIS: 20120814
0 5 10 20 Kilometers
0 5 10 20 Miles

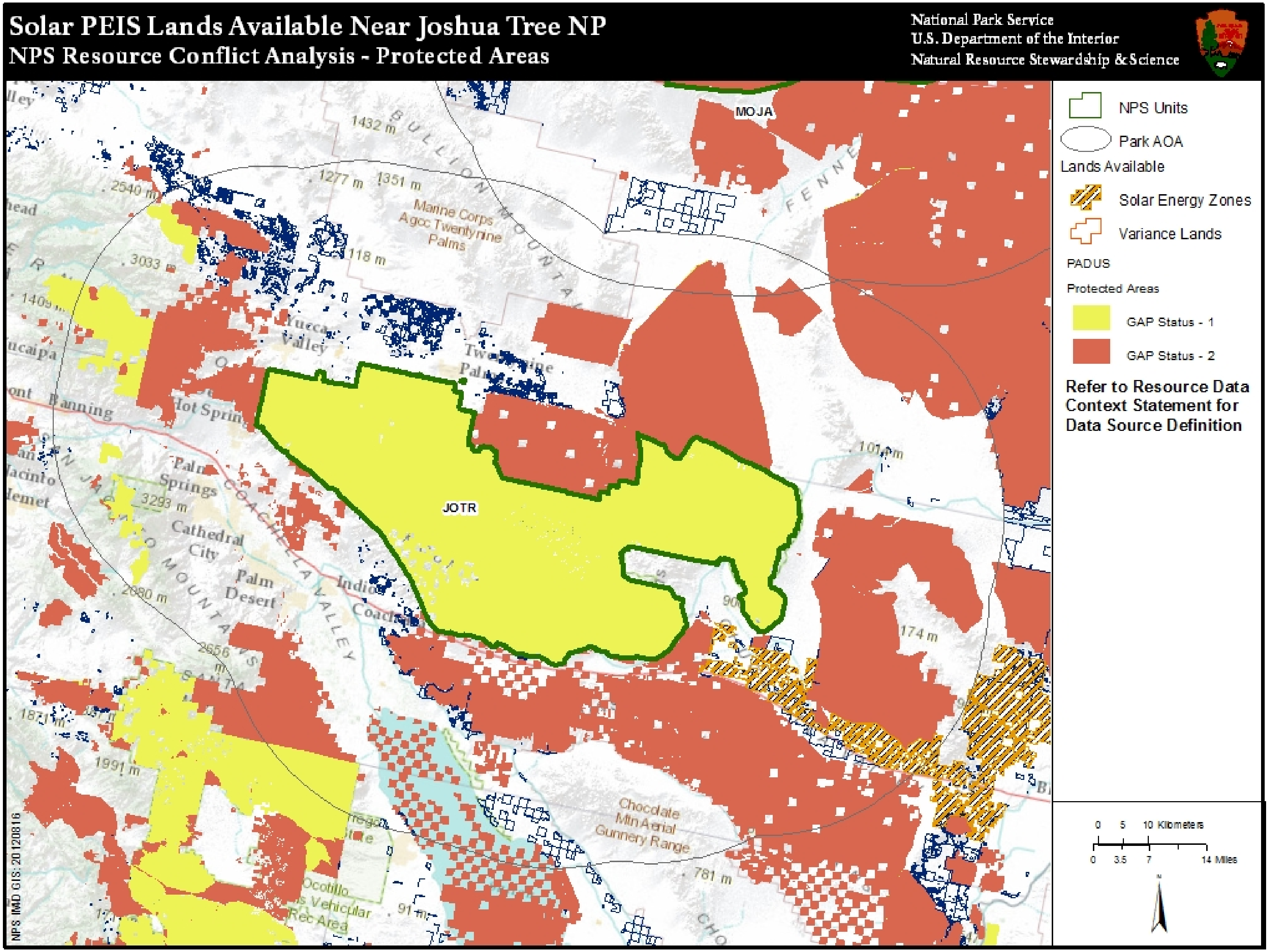

Solar PEIS Lands Available Near Joshua Tree NP
NPS Resource Conflict Analysis - Wetlands (500 Meter Buffer)
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Wetlands - 500 Meter Buf
Refer to Resource Data Context Statement for Data Source Definition
JOTR
MOJA
Joshua Tree National Park
Salton Sea
0 5 10 20 Kilometers
0 5 10 20 Miles
NPS IMD-GIS: 20120816

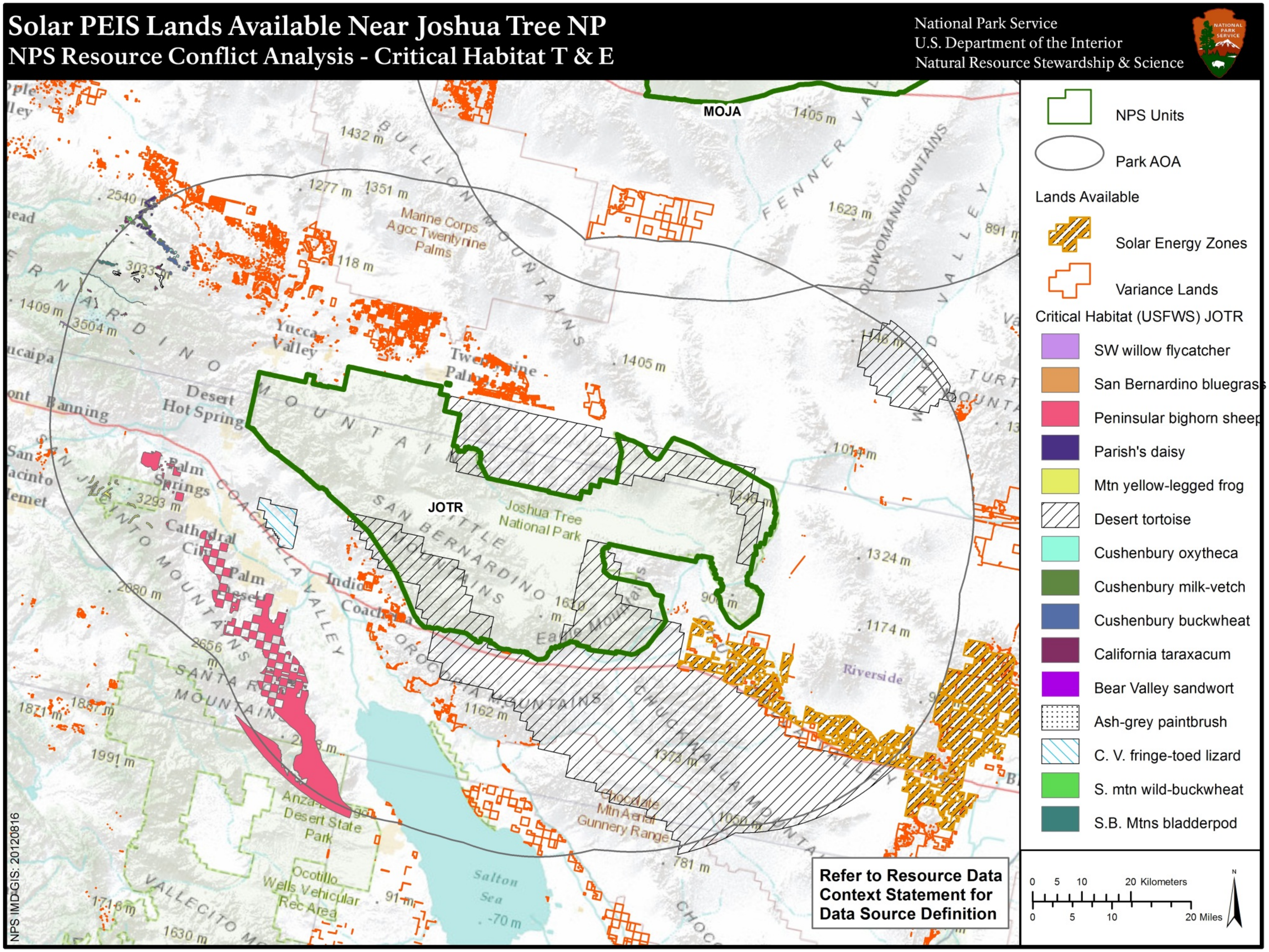
Upstream Watershed

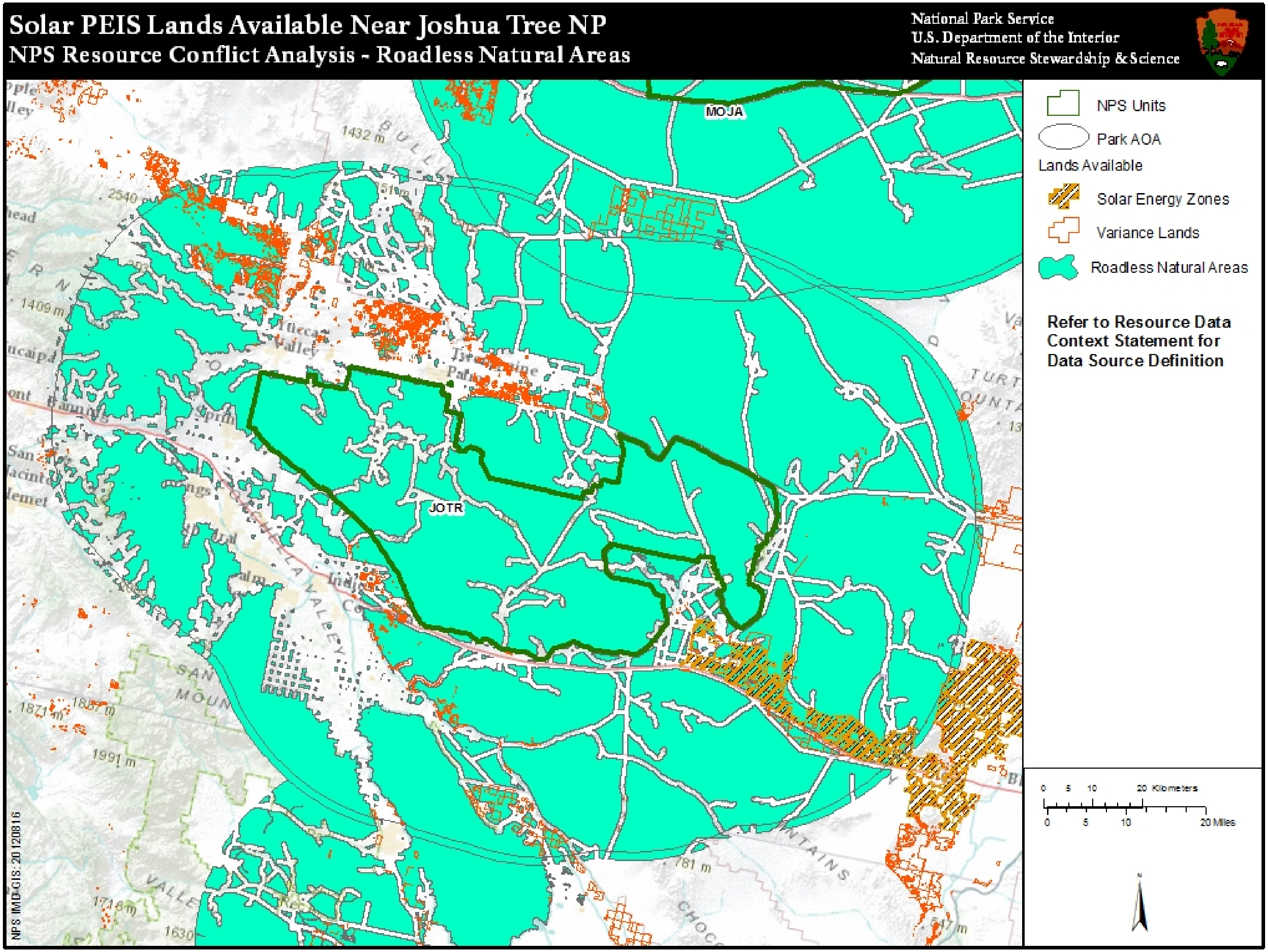


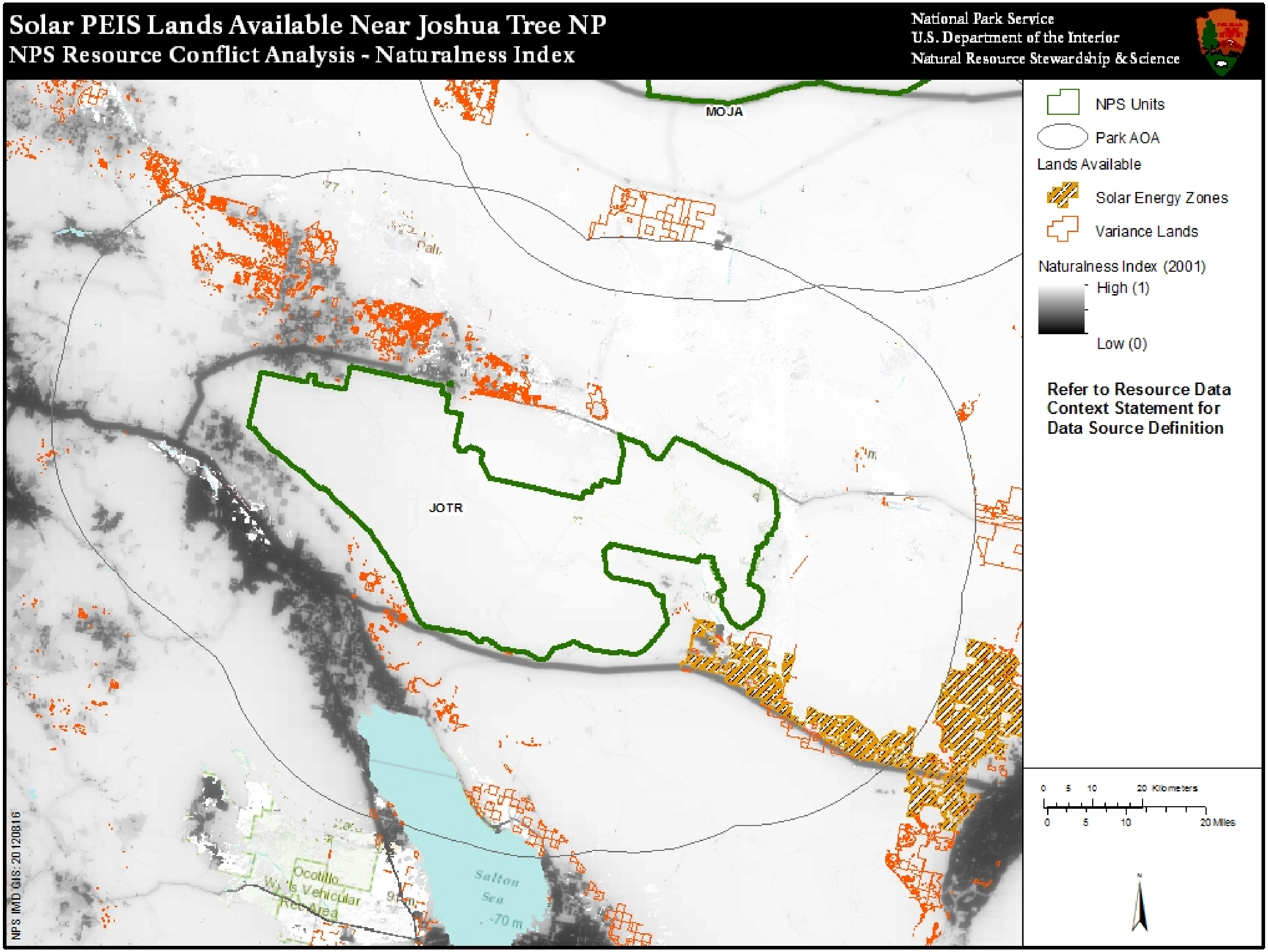
Land Ownership

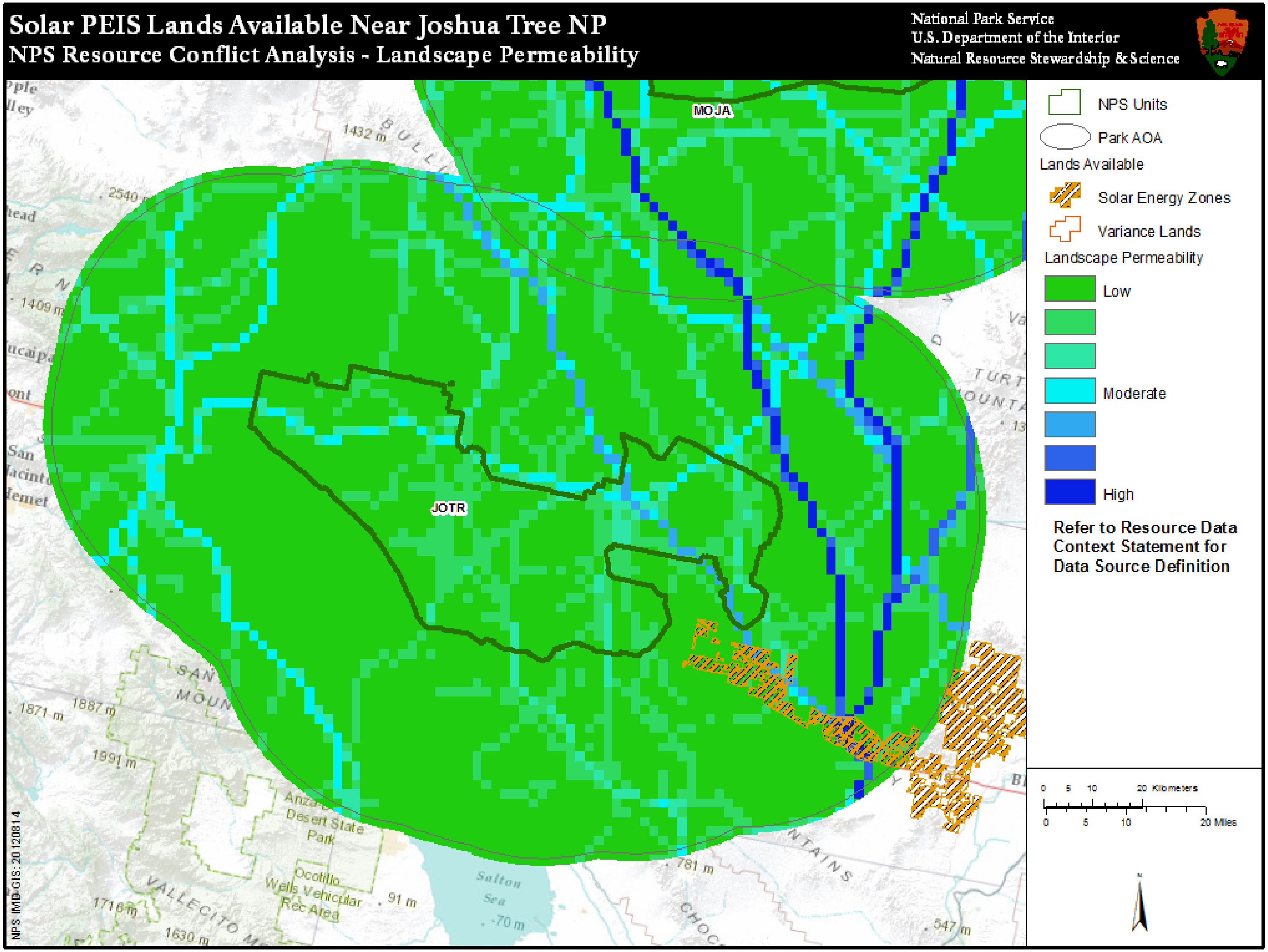


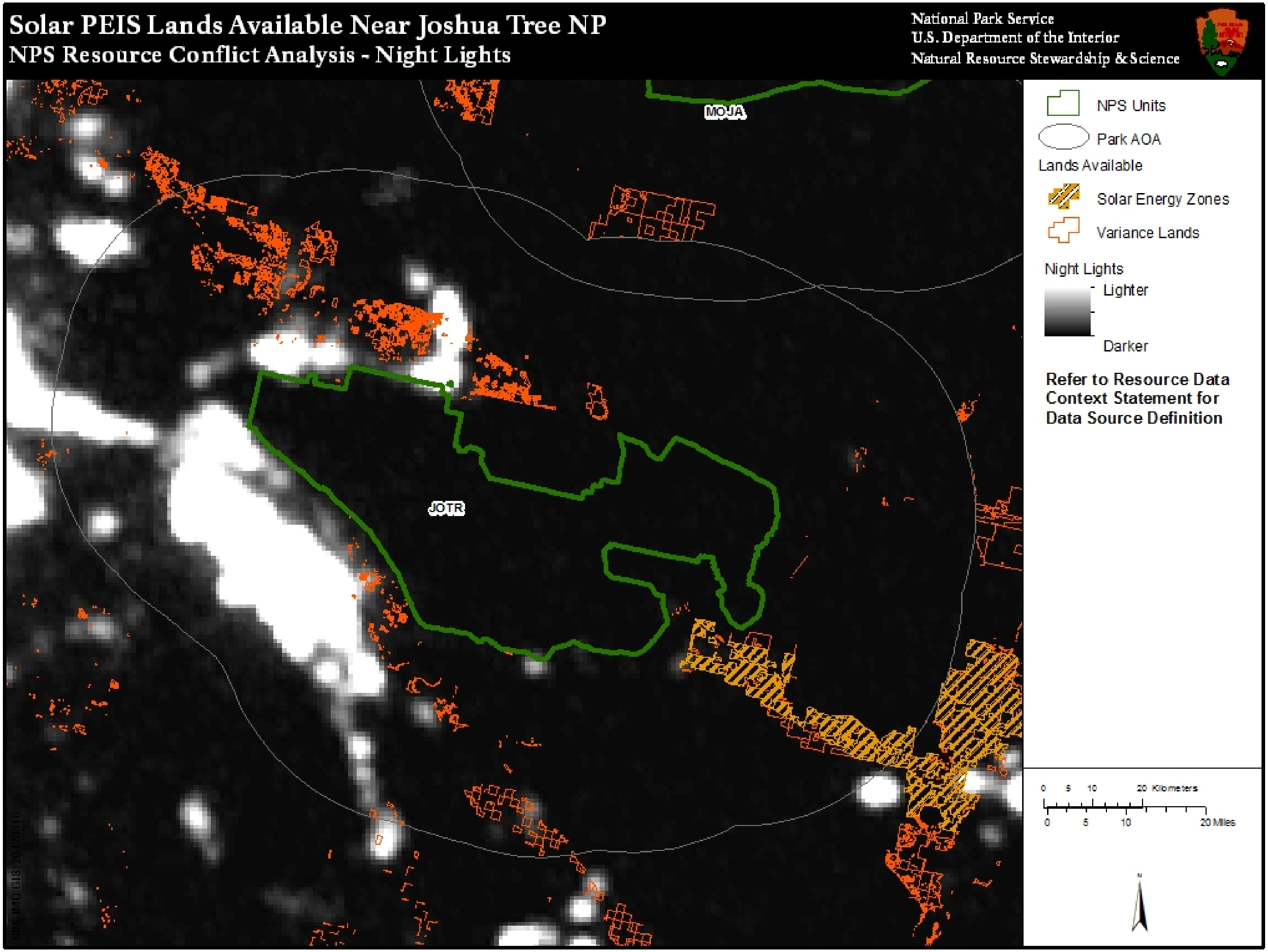

Solar PEIS Lands Available Near Joshua Tree NP
NPS Resource Conflict Analysis - Protected Areas
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
PADUS
Protected Areas
GAP Status - 1
GAP Status - 2
Refer to Resource Data Context Statement for Data Source Definition
0 5 10 Kilometers
0 3.5 7 14 Miles
JOTR
MOJA
Marine Corps Agcc Twentynine Palms
Chocolate Mtn Aerial Gunnery Range
NPS IMD GIS: 20120816

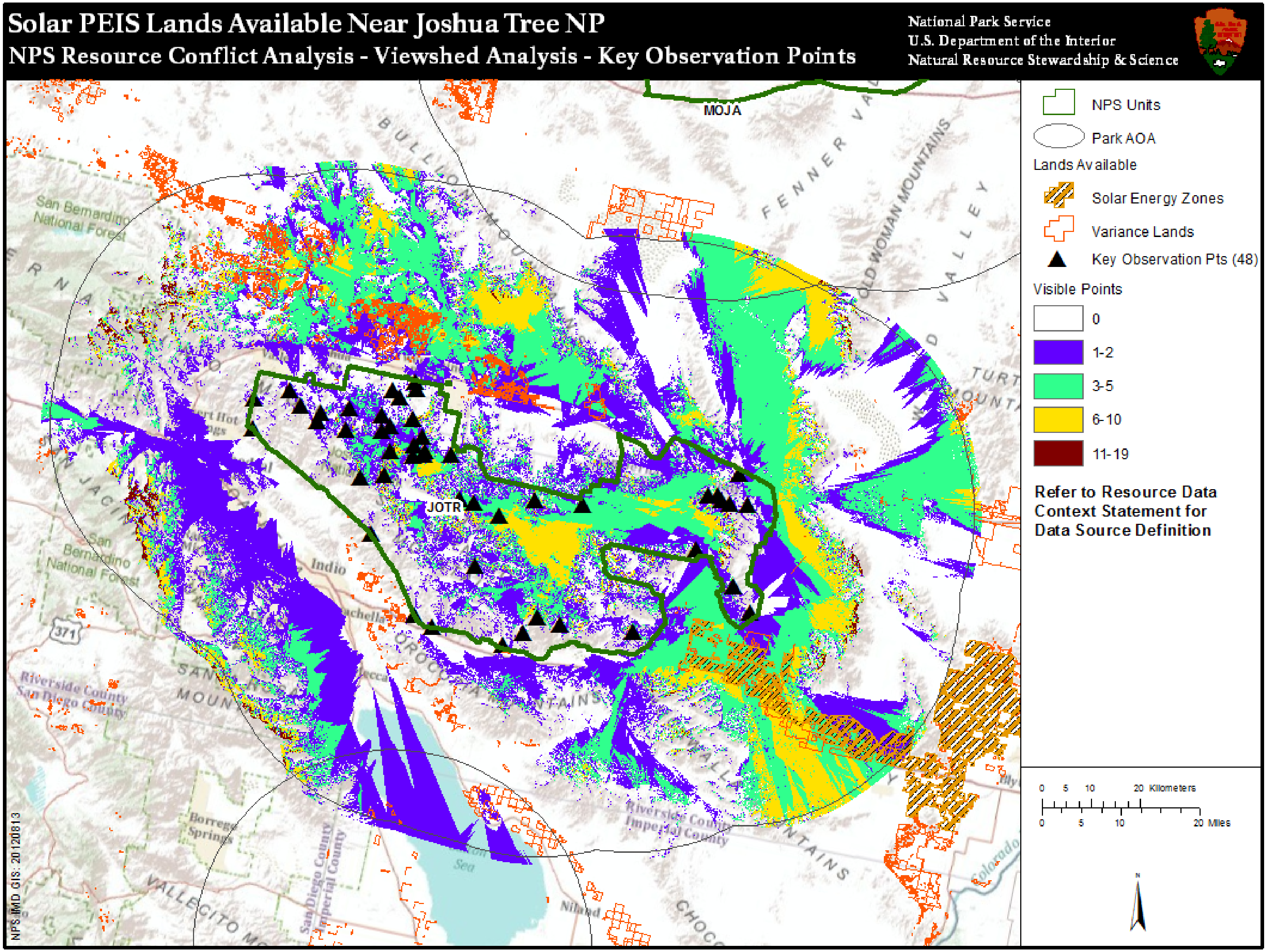

Solar PEIS Lands Available Near Joshua Tree NP
NPS Resource Conflict Analysis - Critical Habitat T & E
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Critical Habitat (USFWS) JOTR
SW willow flycatcher
San Bernardino bluegrass
Peninsular bighorn sheep
Parish's daisy
Mtn yellow-legged frog
Desert tortoise
Cushenbury oxytheca
Cushenbury milk-vetch
Cushenbury buckwheat
California taraxacum
Bear Valley sandwort
Ash-grey paintbrush
C. V. fringe-toed lizard
S. mtn wild-buckwheat
S.B. Mtns bladderpod
Refer to Resource Data Context Statement for Data Source Definition
0 5 10 20 Kilometers
0 5 10 20 Miles
MOJA
JOTR
Joshua Tree National Park
Marine Corps Agcc Twentynine Palms
Yucca Valley
Twentynine Palms
Desert Hot Springs
Palm Springs
Cathedral City
Palm Desert
Indio
Coachella
Salton Sea
Anza-Borrego Desert State Park
Ocotillo Wells Vehicular Rec Area
Chocolate Mtn Aerial Gunnery Range
Riverside
NPS IMD GIS: 20120816

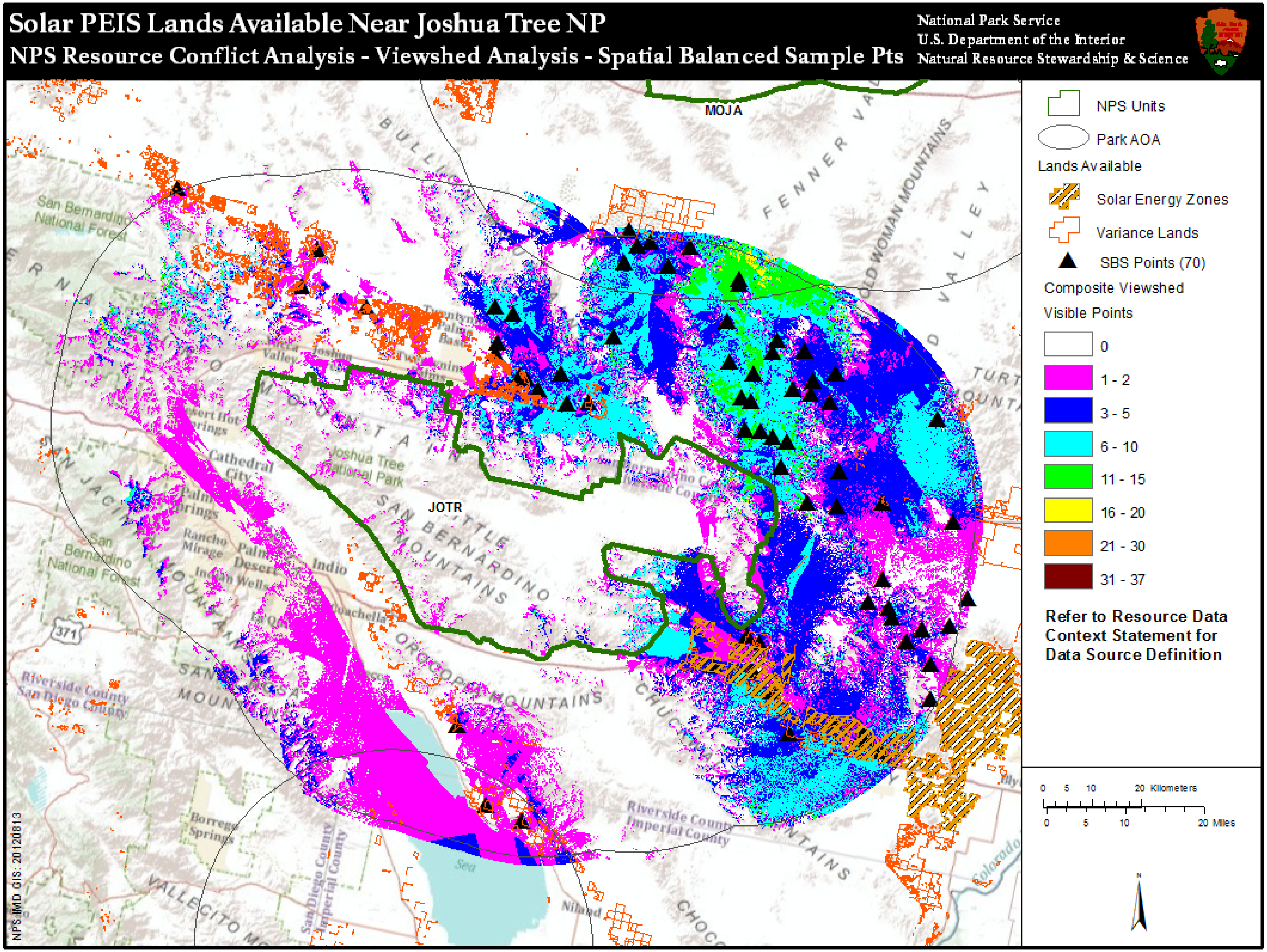

Solar PEIS Lands Available Near Joshua Tree NP
NPS Resource Conflict Analysis - Roadless Natural Areas
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Roadless Natural Areas
Refer to Resource Data Context Statement for Data Source Definition
0 5 10 20 Kilometers
0 5 10 20 Miles
MOJA
JOTR
NPS IMD-GIS: 20120816


Solar PEIS Lands Available Near Joshua Tree NP
NPS Resource Conflict Analysis - Naturalness Index
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Naturalness Index (2001)
High (1)
Low (0)
Refer to Resource Data Context Statement for Data Source Definition
0 5 10 20 Kilometers
0 5 10 20 Miles
MOJA
JOTR
Salton Sea
-70 m
NPS IMD GIS: 20120816

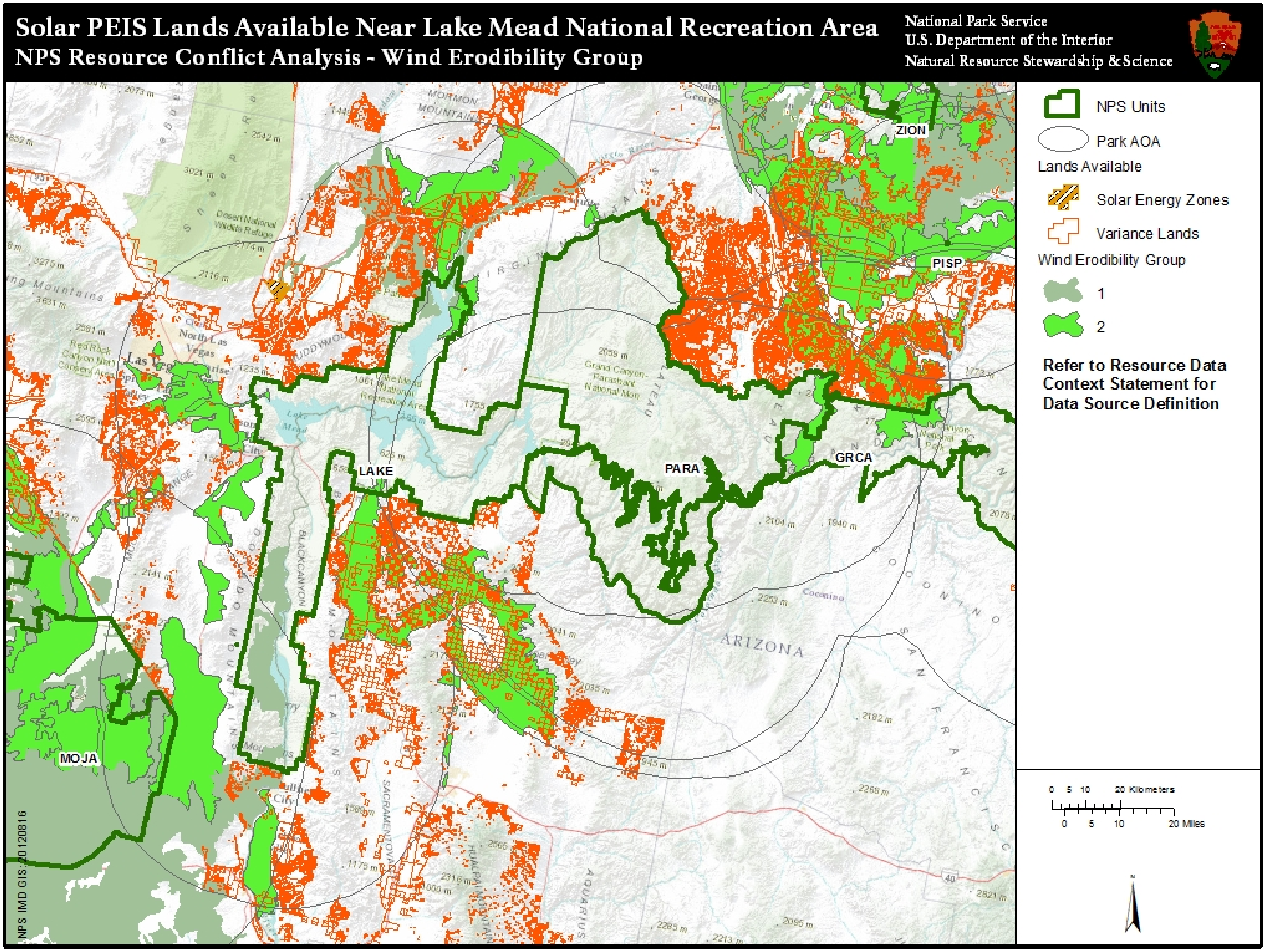

Solar PEIS Lands Available Near Joshua Tree NP
NPS Resource Conflict Analysis - Landscape Permeability
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
MOJA
JOTR
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Landscape Permeability
Low
Moderate
High
Refer to Resource Data Context Statement for Data Source Definition
0 5 10 20 Kilometers
0 5 10 20 Miles
NPS IMD GIS: 20120814

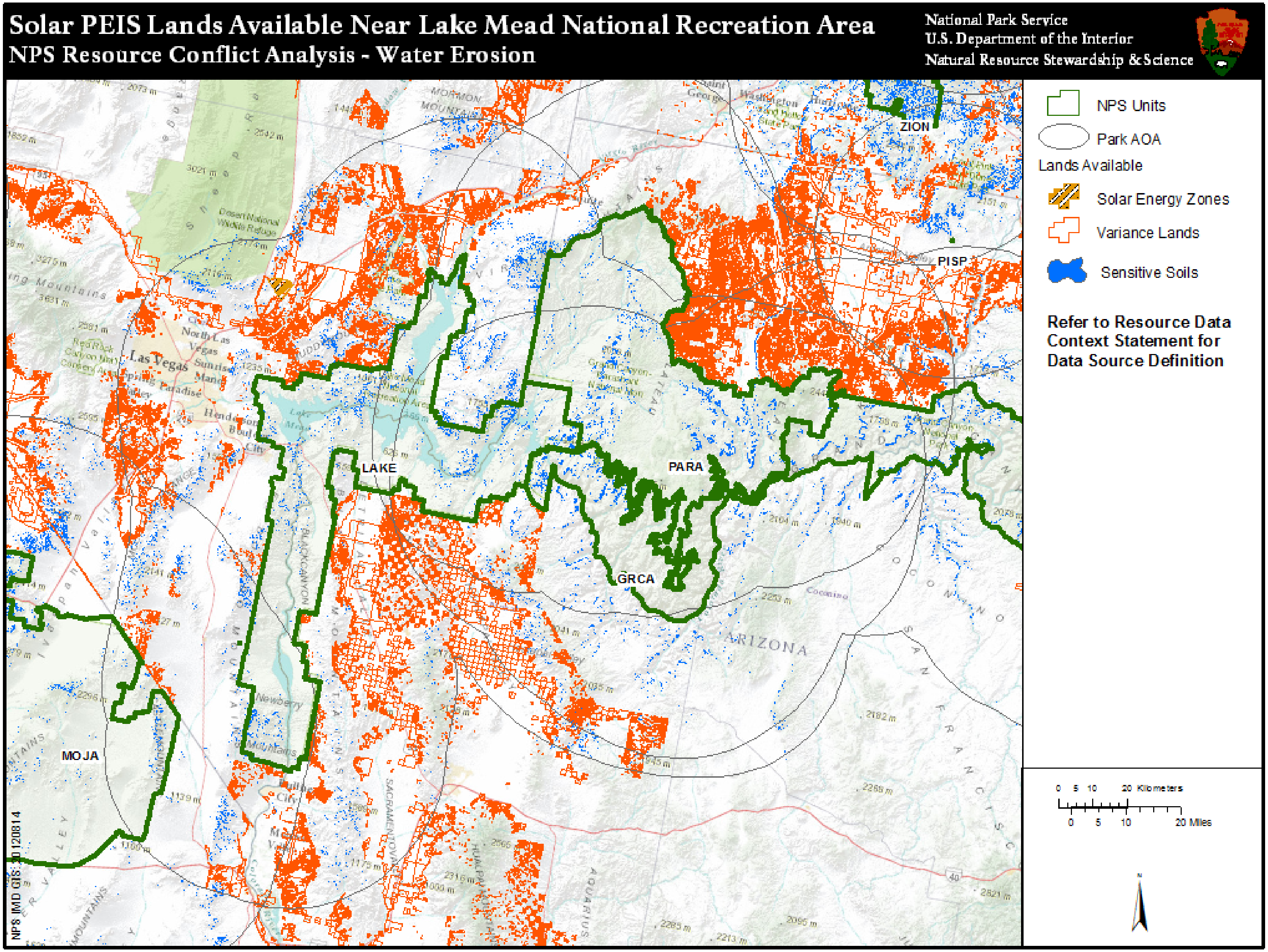

Solar PEIS Lands Available Near Joshua Tree NP
NPS Resource Conflict Analysis - Night Lights
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
MOJA
JOTR
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Night Lights
Lighter
Darker
Refer to Resource Data Context Statement for Data Source Definition
0 5 10 20 Kilometers
0 5 10 20 Miles

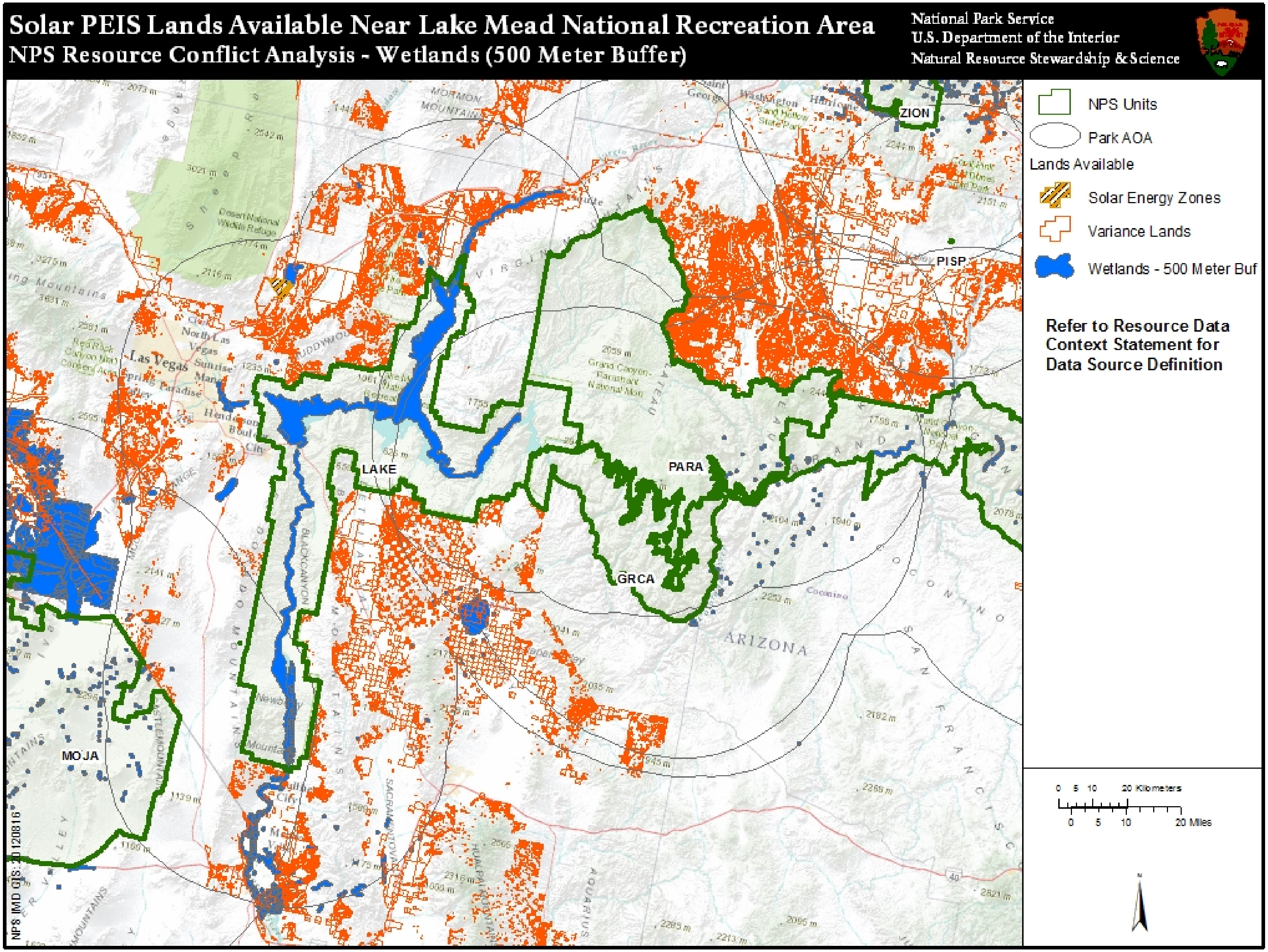

Solar PEIS Lands Available Near Joshua Tree NP
NPS Resource Conflict Analysis - Viewshed Analysis - Key Observation Points
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Key Observation Pts (48)
Visible Points
0
1-2
3-5
6-10
11-19
Refer to Resource Data Context Statement for Data Source Definition
MOJA
JOTR
Indio
0 5 10 20 Kilometers
0 5 10 20 Miles
NPS IMD GIS: 20120813

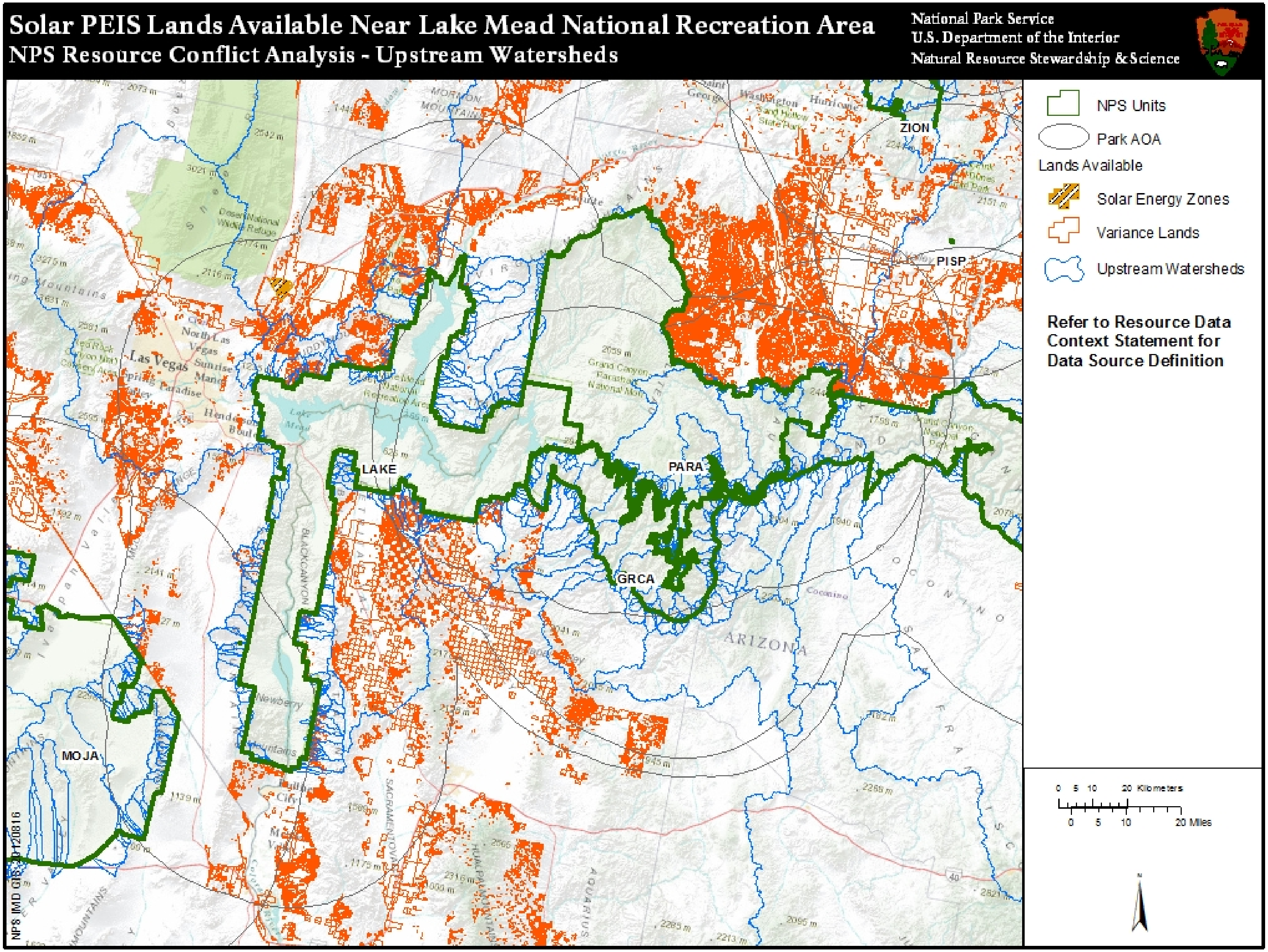

Solar PEIS Lands Available Near Joshua Tree NP
NPS Resource Conflict Analysis - Viewshed Analysis - Spatial Balanced Sample Pts
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
SBS Points (70)
Composite Viewshed
Visible Points
0
1 - 2
3 - 5
6 - 10
11 - 15
16 - 20
21 - 30
31 - 37
Refer to Resource Data Context Statement for Data Source Definition
0 5 10 20 Kilometers
0 5 10 20 Miles
MOJA
JOTR
NPS IMD GIS: 20120813

Lake Mead National Recreation Area
Wind Erodibility Group

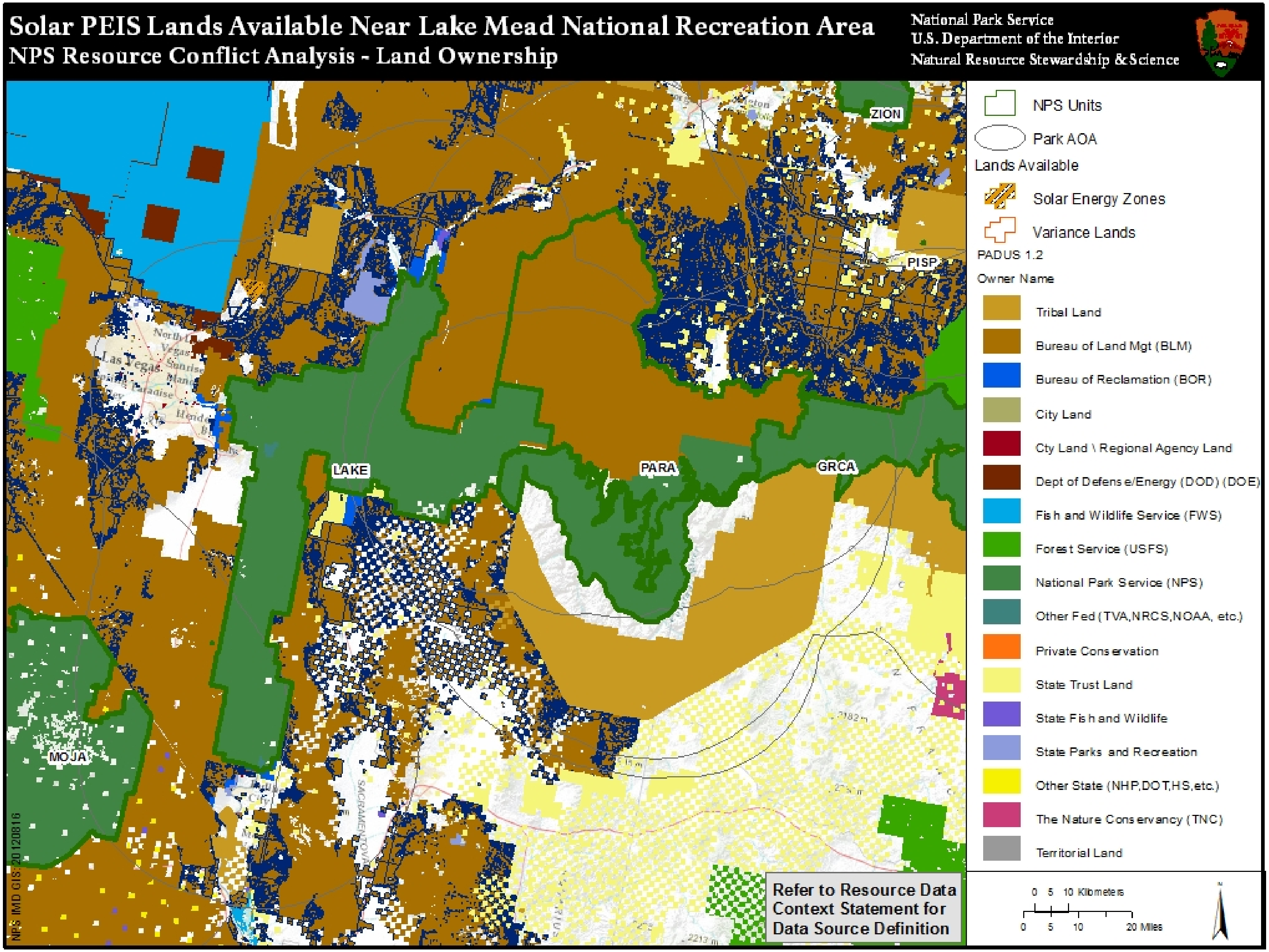


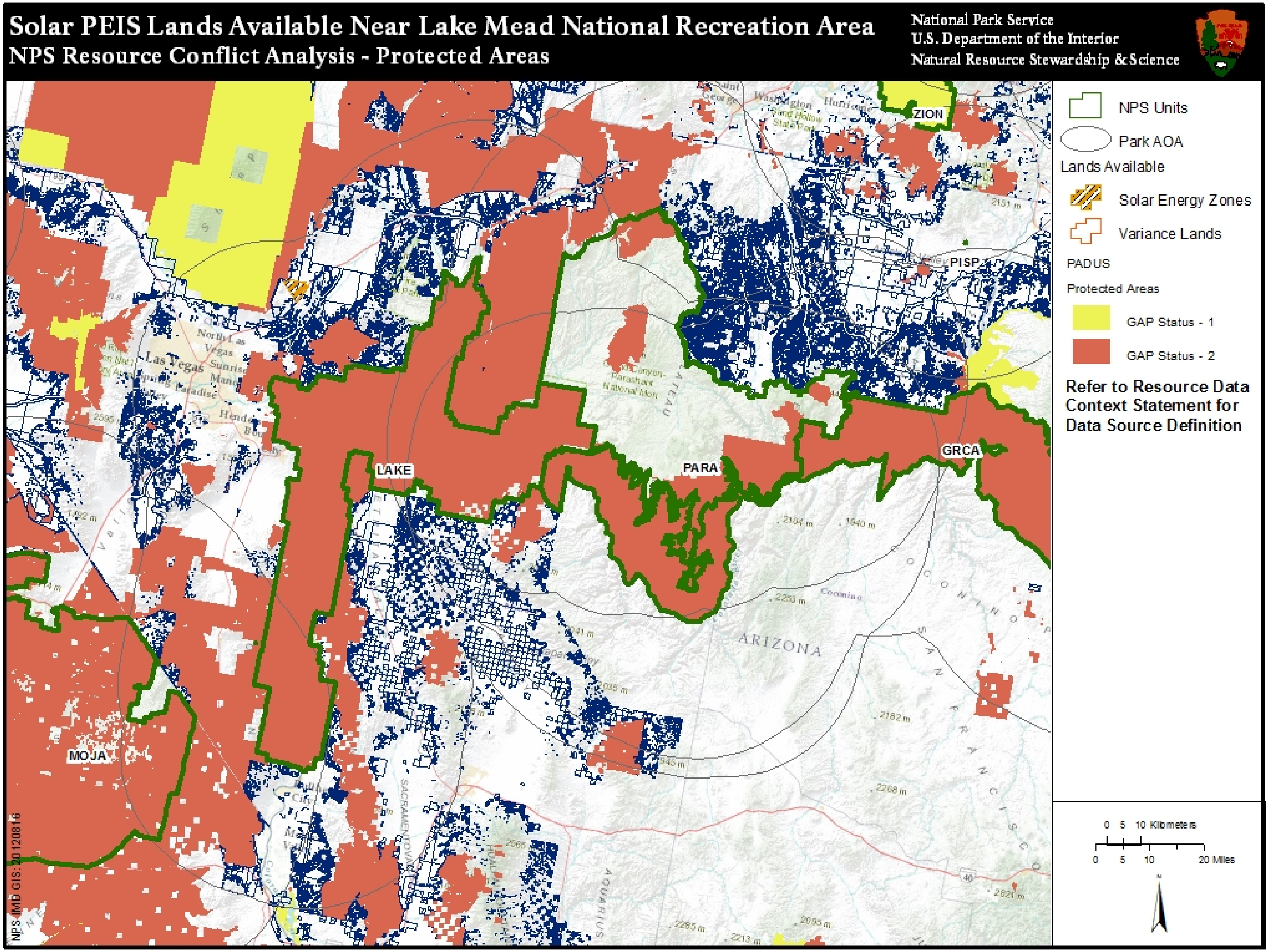

Solar PEIS Lands Available Near Lake Mead National Recreation Area
NPS Resource Conflict Analysis - Water Erosion
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Sensitive Soils
Refer to Resource Data Context Statement for Data Source Definition
ZION
PISP
LAKE
PARA
GRCA
MOJA
ARIZONA
Las Vegas
0 5 10 20 Kilometers
0 5 10 20 Miles

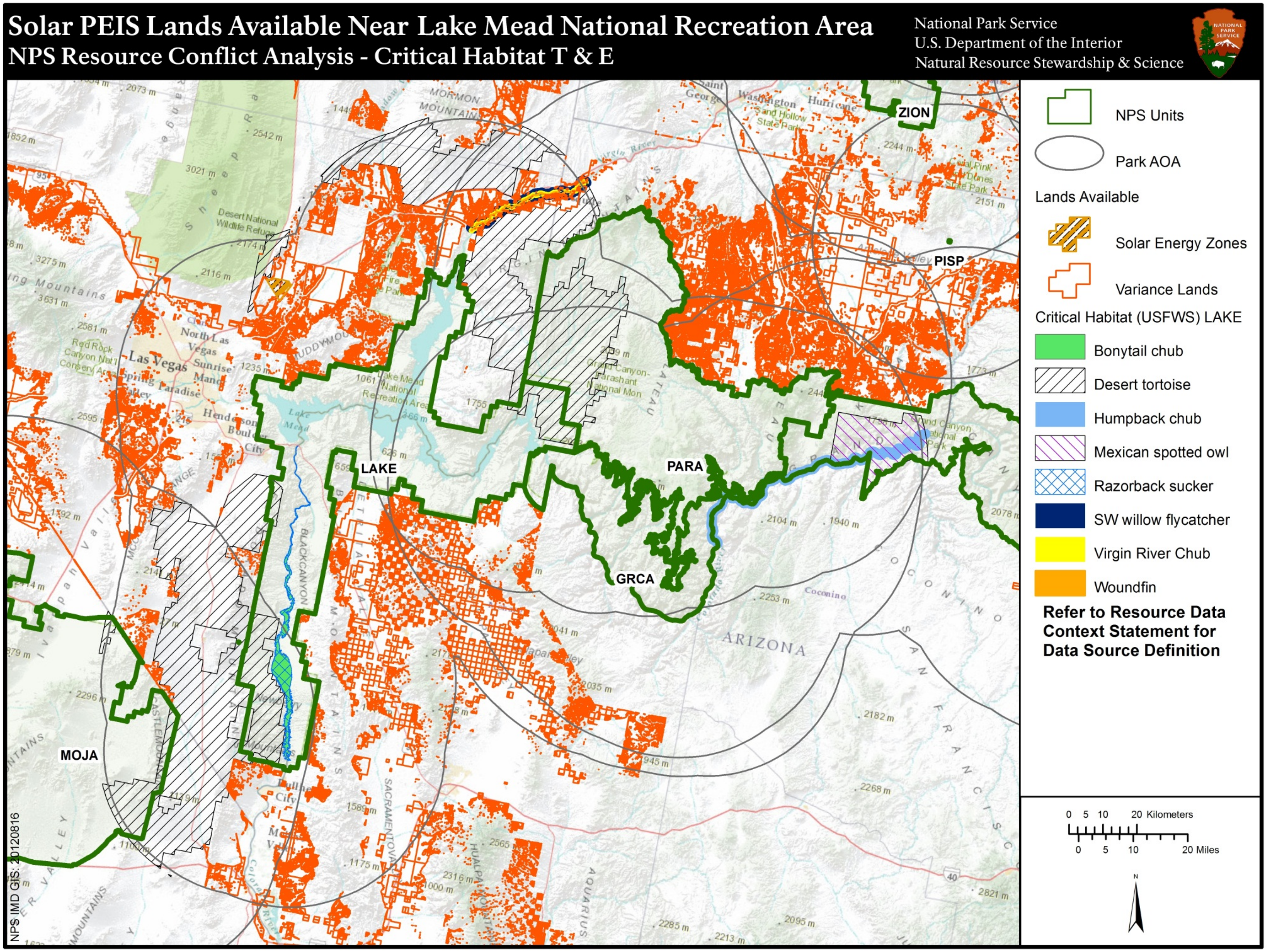

Solar PEIS Lands Available Near Lake Mead National Recreation Area
NPS Resource Conflict Analysis - Wetlands (500 Meter Buffer)
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Wetlands - 500 Meter Buf
Refer to Resource Data Context Statement for Data Source Definition
0 5 10 20 Kilometers
0 5 10 20 Miles
ZION
PISP
LAKE
PARA
GRCA
MOJA
ARIZONA
Las Vegas
NPS IMD GIS: 20120816

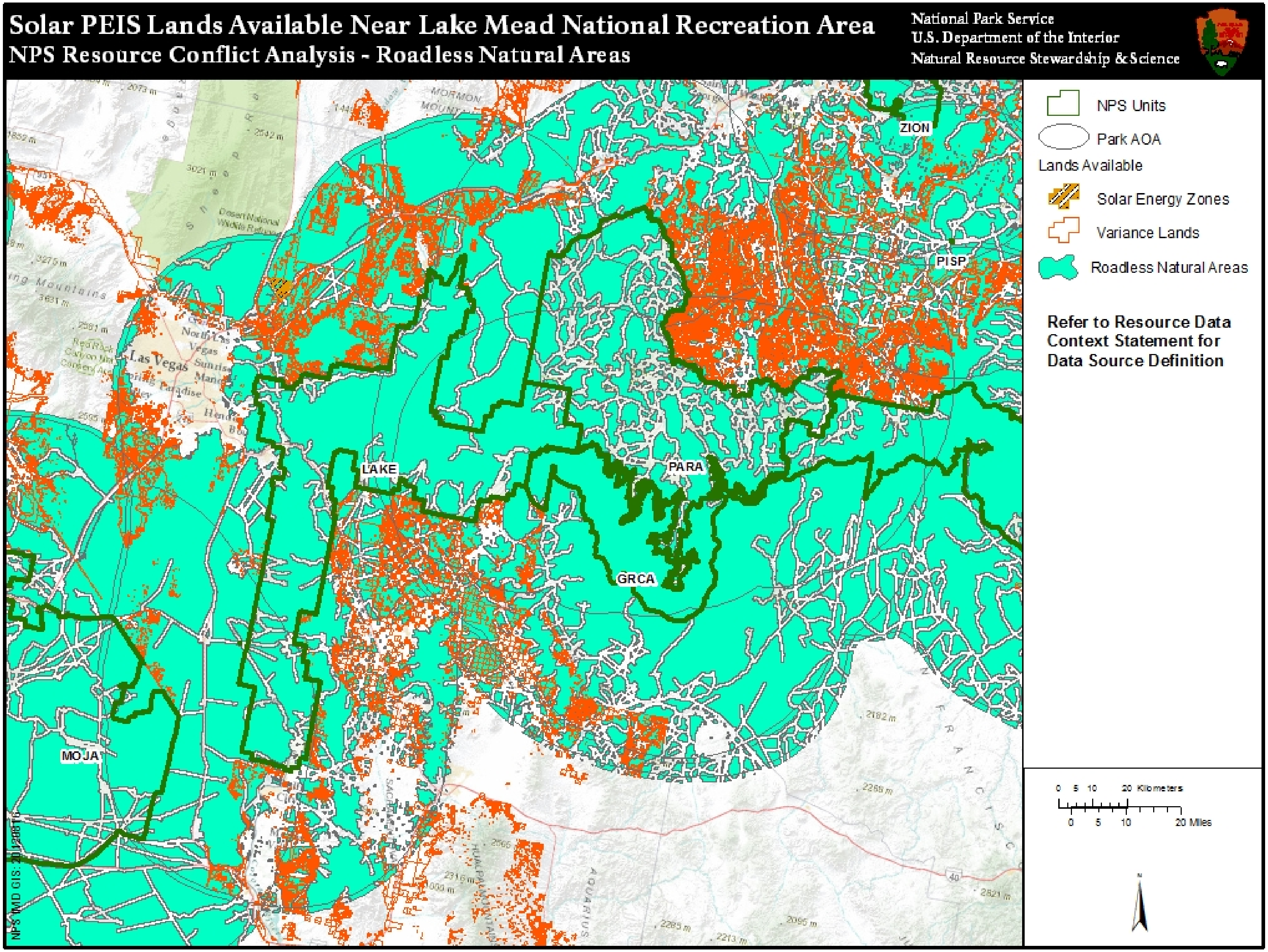

Solar PEIS Lands Available Near Lake Mead National Recreation Area
NPS Resource Conflict Analysis - Upstream Watersheds
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Upstream Watersheds
Refer to Resource Data Context Statement for Data Source Definition
ZION
PISP
LAKE
PARA
GRCA
MOJA
ARIZONA
Las Vegas
0 5 10 20 Kilometers
0 5 10 20 Miles

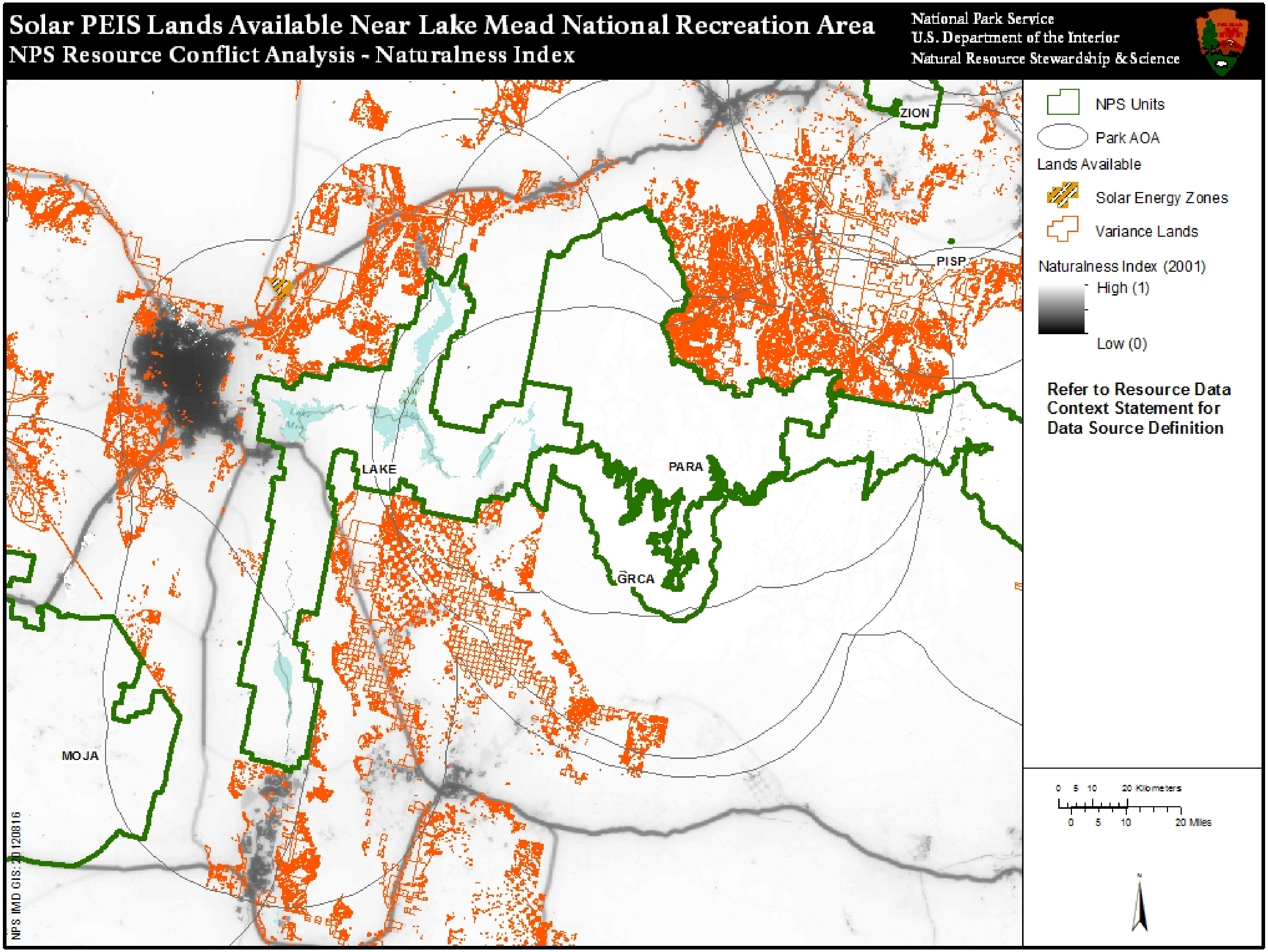
Land Ownership



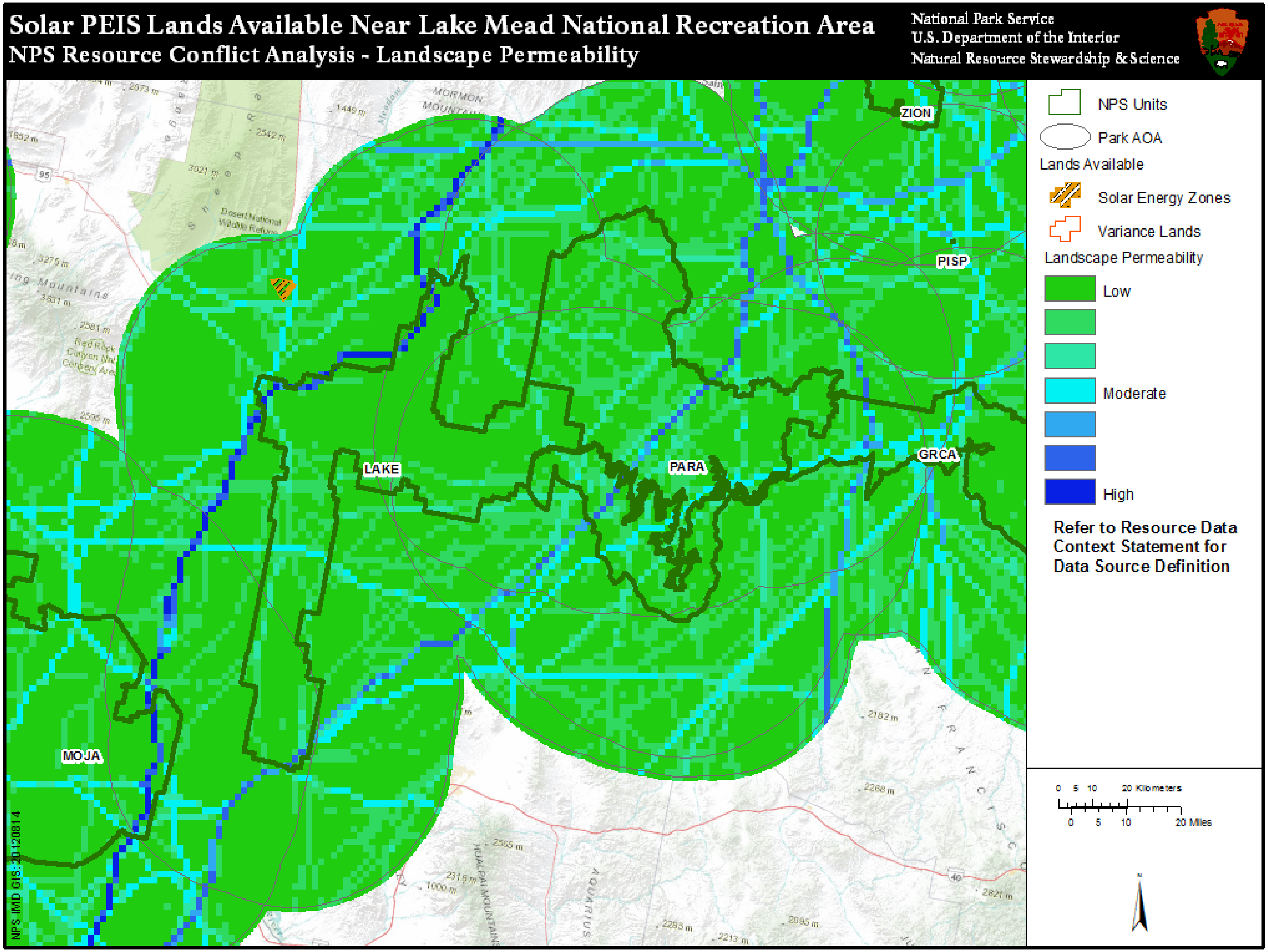

Solar PEIS Lands Available Near Lake Mead National Recreation Area
NPS Resource Conflict Analysis - Protected Areas
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
PADUS
Protected Areas
GAP Status - 1
GAP Status - 2
Refer to Resource Data Context Statement for Data Source Definition
ZION
PISP
LAKE
PARA
GRCA
MOJA
ARIZONA
Las Vegas
0 5 10 Kilometers
0 5 10 20 Miles
NPS IMD GIS: 20120816

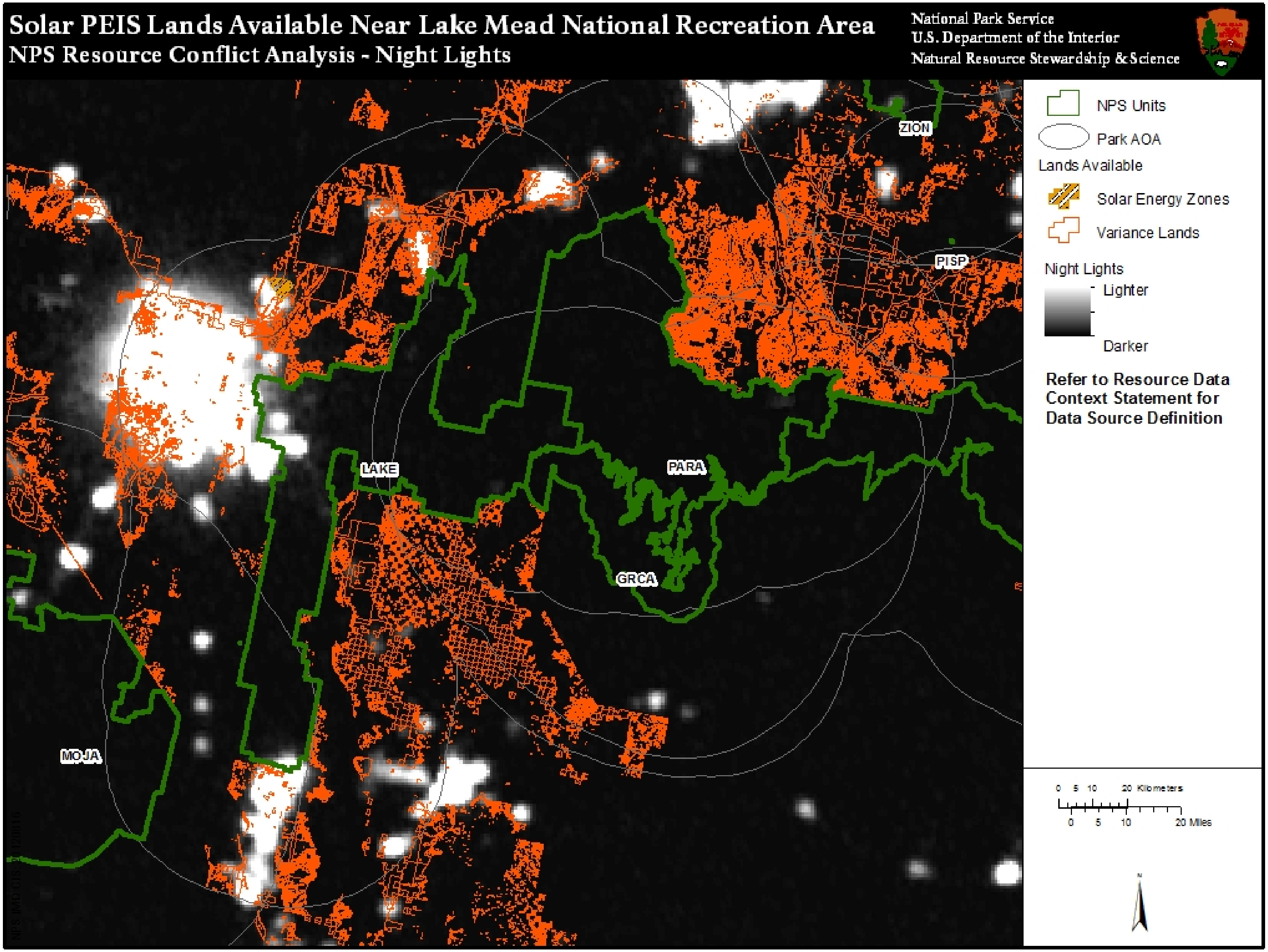

Solar PEIS Lands Available Near Lake Mead National Recreation Area
NPS Resource Conflict Analysis - Critical Habitat T & E
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Critical Habitat (USFWS) LAKE
Bonytail chub
Desert tortoise
Humpback chub
Mexican spotted owl
Razorback sucker
SW willow flycatcher
Virgin River Chub
Woundfin
Refer to Resource Data Context Statement for Data Source Definition
0 5 10 20 Kilometers
0 5 10 20 Miles
ZION
PISP
LAKE
PARA
GRCA
MOJA
ARIZONA
NPS IMD GIS: 20120816

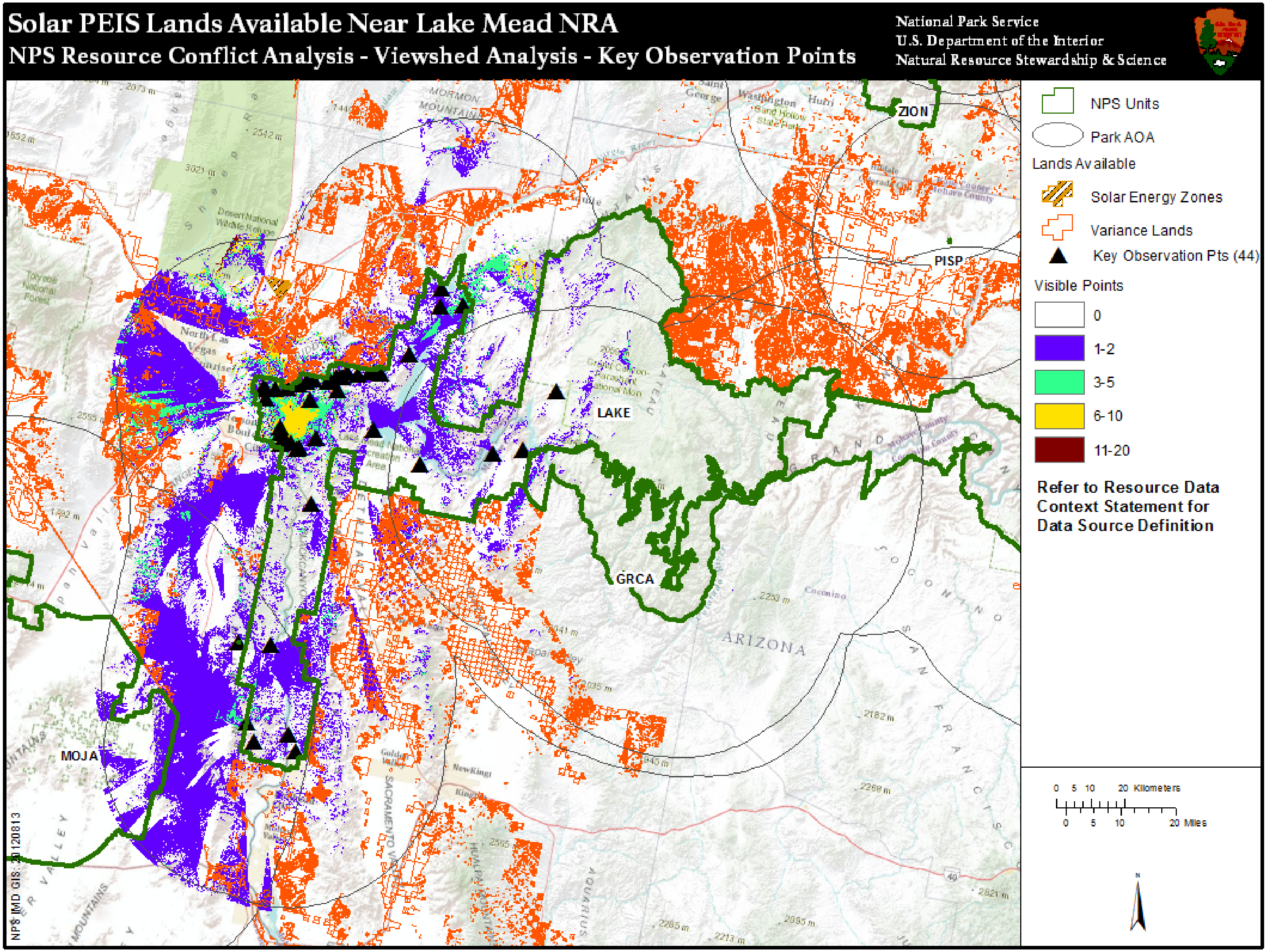

Solar PEIS Lands Available Near Lake Mead National Recreation Area
NPS Resource Conflict Analysis - Roadless Natural Areas
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Roadless Natural Areas
Refer to Resource Data Context Statement for Data Source Definition
ZION
PISP
LAKE
PARA
GRCA
MOJA
Las Vegas
0 5 10 20 Kilometers
0 5 10 20 Miles



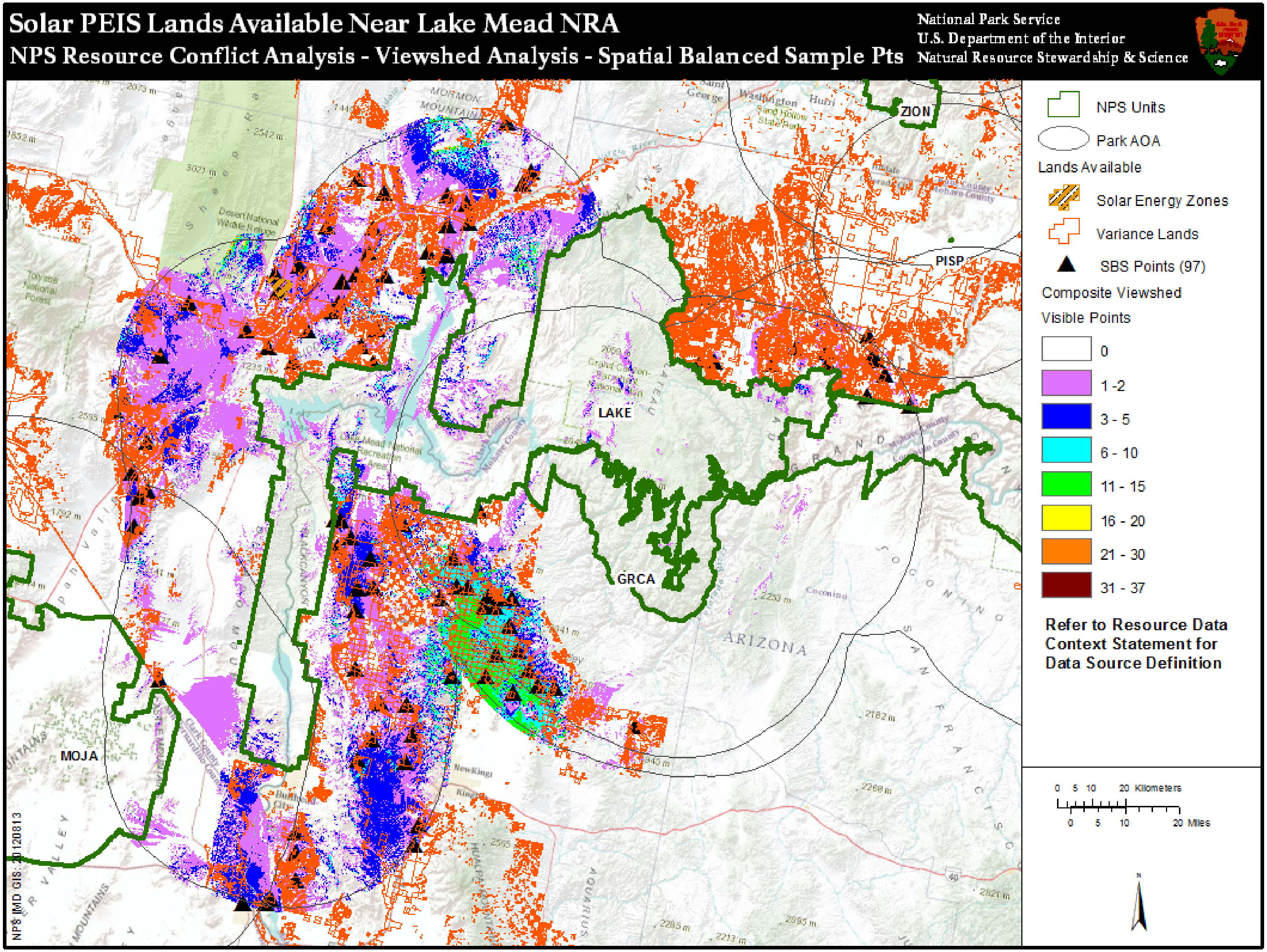
Solar PEIS Lands Available Near Lake Mead National Recreation Area
NPS Resource Conflict Analysis - Naturalness Index
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
ZION
PISP
LAKE
PARA
GRCA
MOJA
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Naturalness Index (2001)
High (1)
Low (0)
Refer to Resource Data Context Statement for Data Source Definition
0 5 10 20 Kilometers
0 5 10 20 Miles
NPS IMD GIS: 20120816


Solar PEIS Lands Available Near Lake Mead National Recreation Area
NPS Resource Conflict Analysis - Landscape Permeability
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Landscape Permeability
Low
Moderate
High
Refer to Resource Data Context Statement for Data Source Definition
ZION
PISP
LAKE
PARA
GRCA
MOJA
0 5 10 20 Kilometers
0 5 10 20 Miles
NPS IMD GIS: 20120814

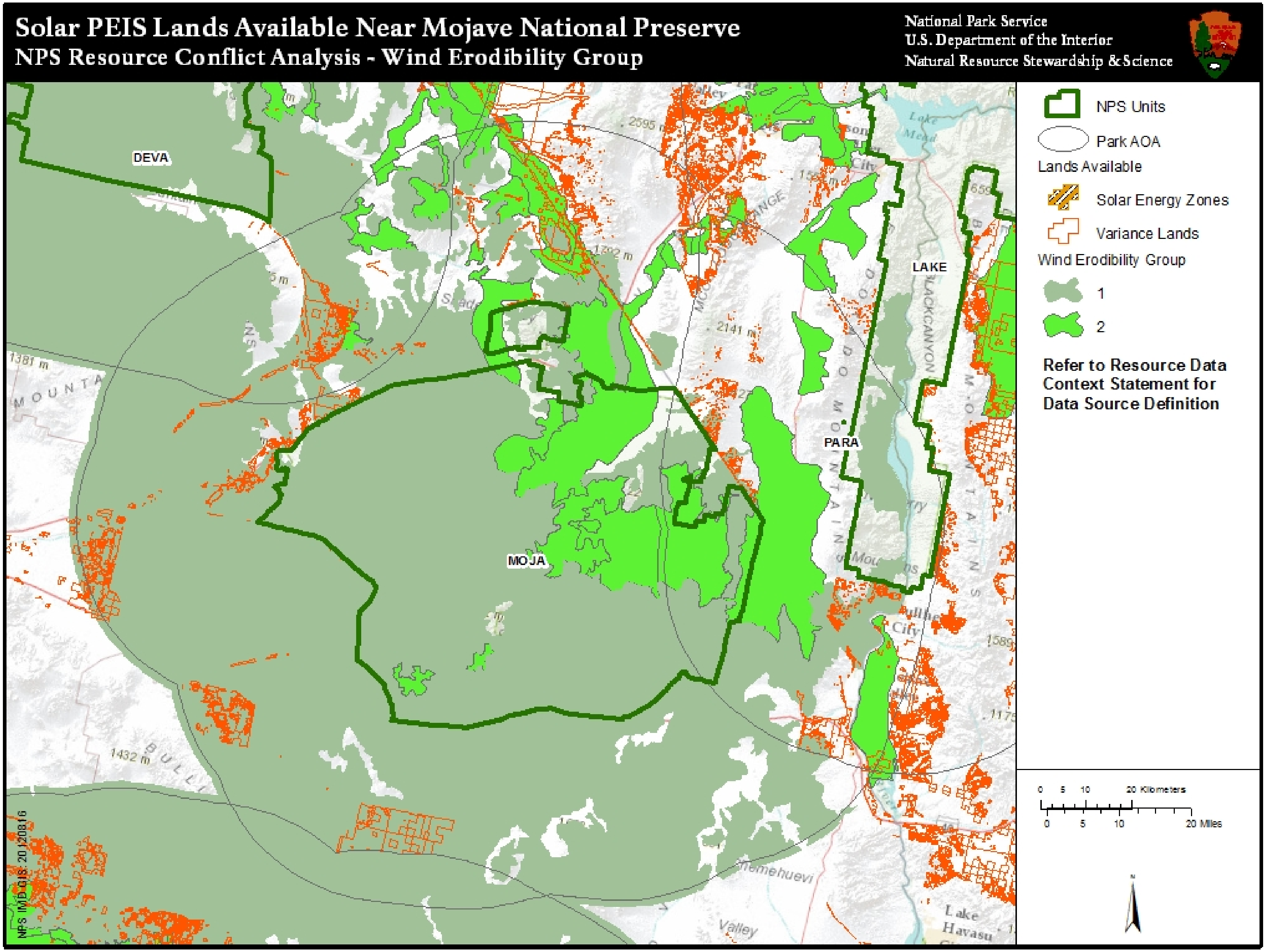

Solar PEIS Lands Available Near Lake Mead National Recreation Area
NPS Resource Conflict Analysis - Night Lights
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Night Lights
Lighter
Darker
Refer to Resource Data Context Statement for Data Source Definition
ZION
PISP
LAKE
PARA
GRCA
MOJA
0 5 10 20 Kilometers
0 5 10 20 Miles

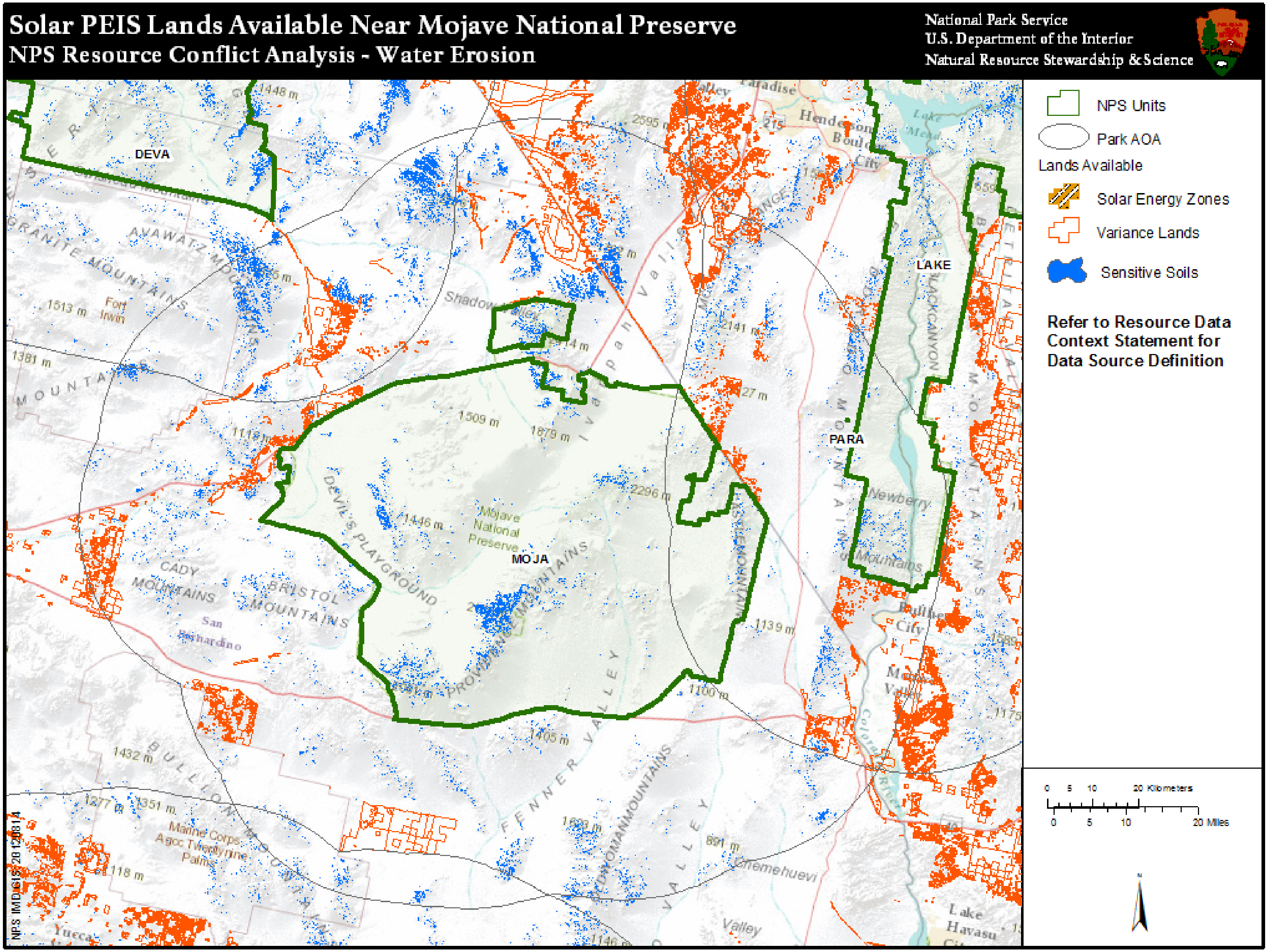


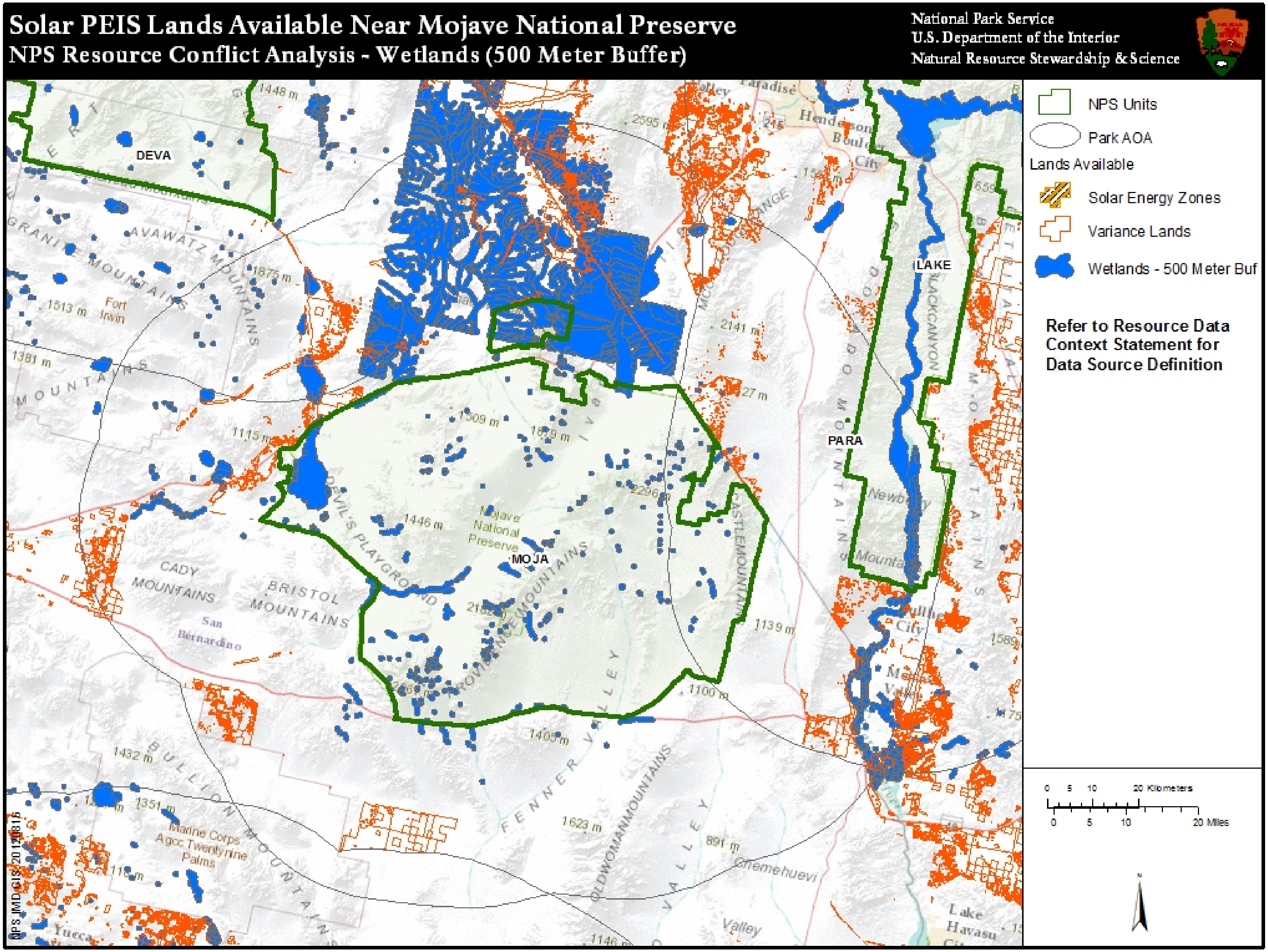
Solar PEIS Lands Available Near Lake Mead NRA
NPS Resource Conflict Analysis - Viewshed Analysis - Key Observation Points
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Key Observation Pts (44)
Visible Points
0
1-2
3-5
6-10
11-20
Refer to Resource Data Context Statement for Data Source Definition
ZION
PISP
LAKE
GRCA
MOJA
ARIZONA
0 5 10 20 Kilometers
0 5 10 20 Miles
NPS IMD GIS: 20120813


Solar PEIS Lands Available Near Lake Mead NRA
NPS Resource Conflict Analysis - Viewshed Analysis - Spatial Balanced Sample Pts
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
SBS Points (97)
Composite Viewshed
Visible Points
0
1 -2
3 - 5
6 - 10
11 - 15
16 - 20
21 - 30
31 - 37
Refer to Resource Data Context Statement for Data Source Definition
0 5 10 20 Kilometers
0 5 10 20 Miles
ZION
PISP
LAKE
GRCA
MOJA
ARIZONA
NPS IMD GIS: 20120813

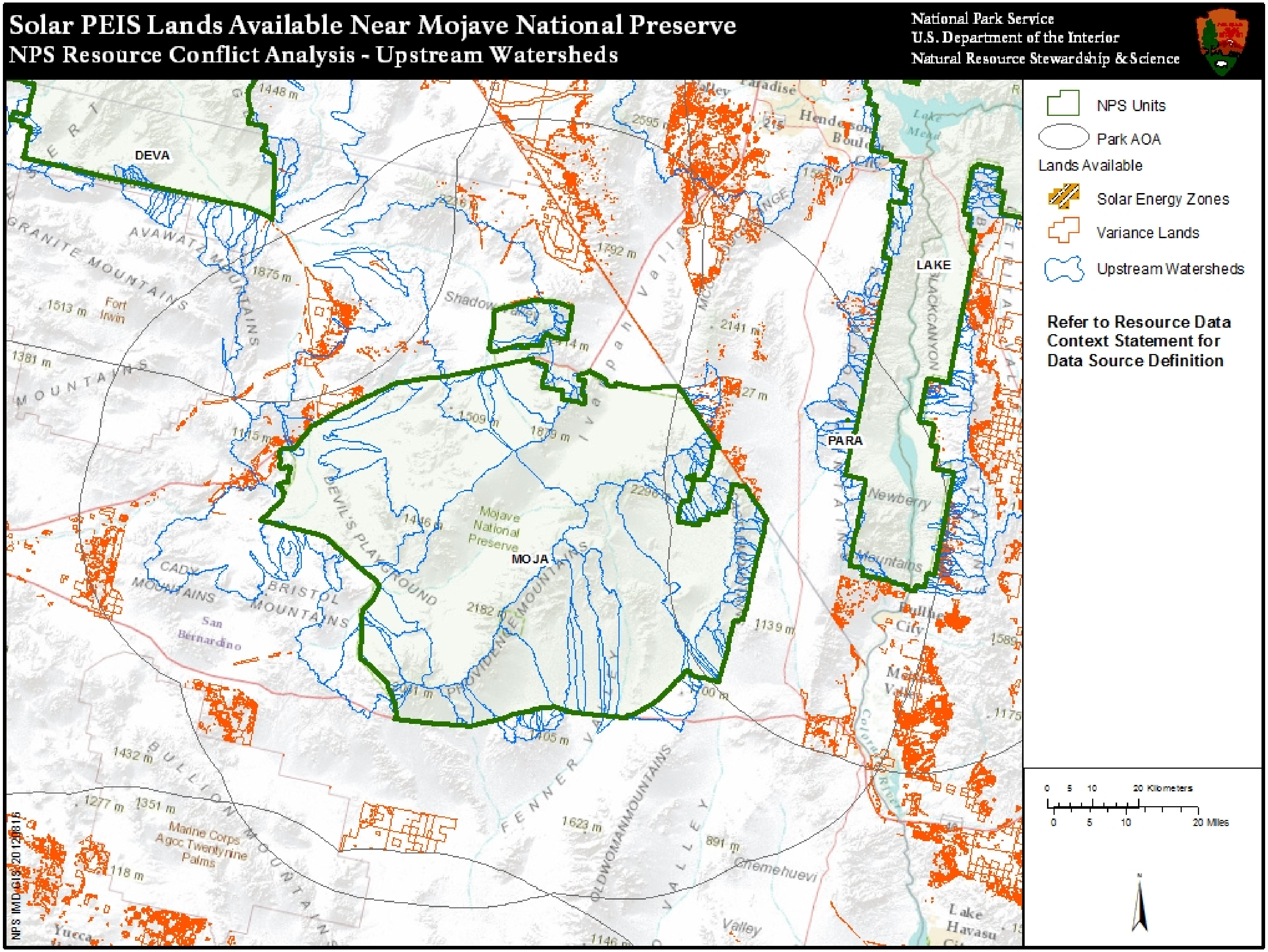
Mojave National Preserve
Wind Erodibility Group



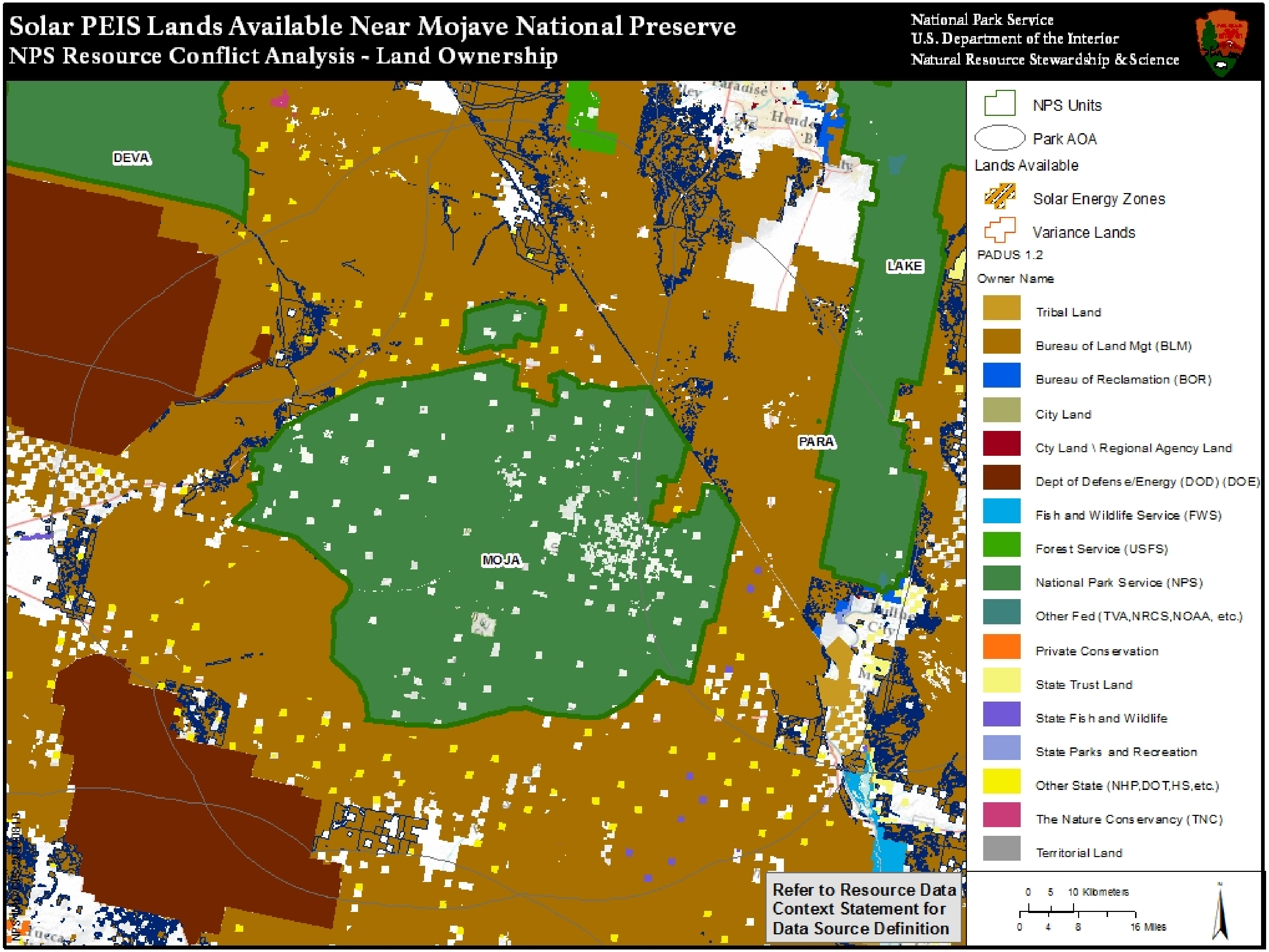

Solar PEIS Lands Available Near Mojave National Preserve
NPS Resource Conflict Analysis - Water Erosion
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Sensitive Soils
Refer to Resource Data Context Statement for Data Source Definition
DEVA
MOJA
PARA
LAKE
Mojave National Preserve
0 5 10 20 Kilometers
0 5 10 20 Miles
NPS IMD GIS 20120814

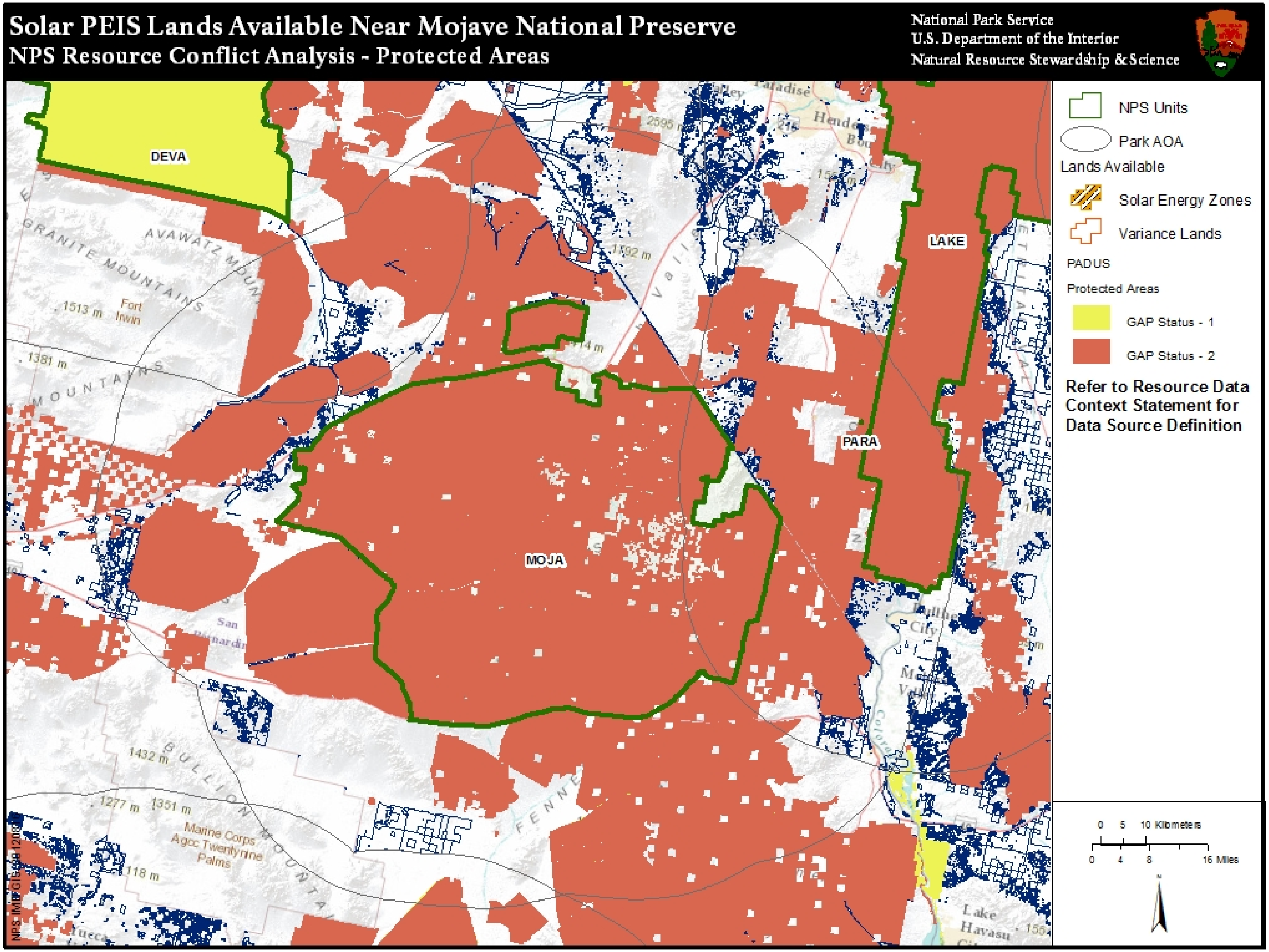

Solar PEIS Lands Available Near Mojave National Preserve
NPS Resource Conflict Analysis - Wetlands (500 Meter Buffer)
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Wetlands - 500 Meter Buf
Refer to Resource Data Context Statement for Data Source Definition
DEVA
MOJA
PARA
LAKE
Mojave National Preserve
0 5 10 20 Kilometers
0 5 10 20 Miles

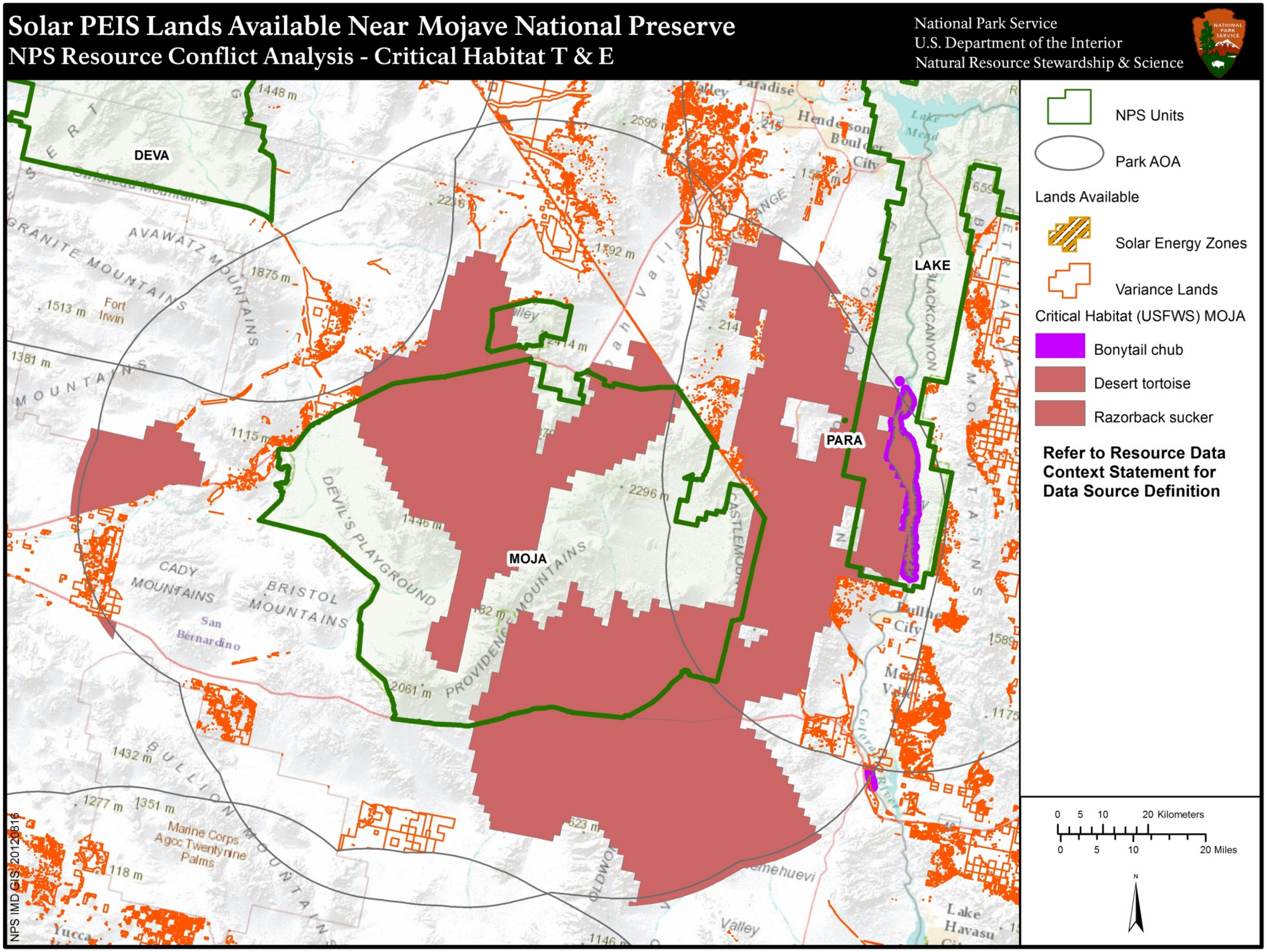
Upstream Watershed

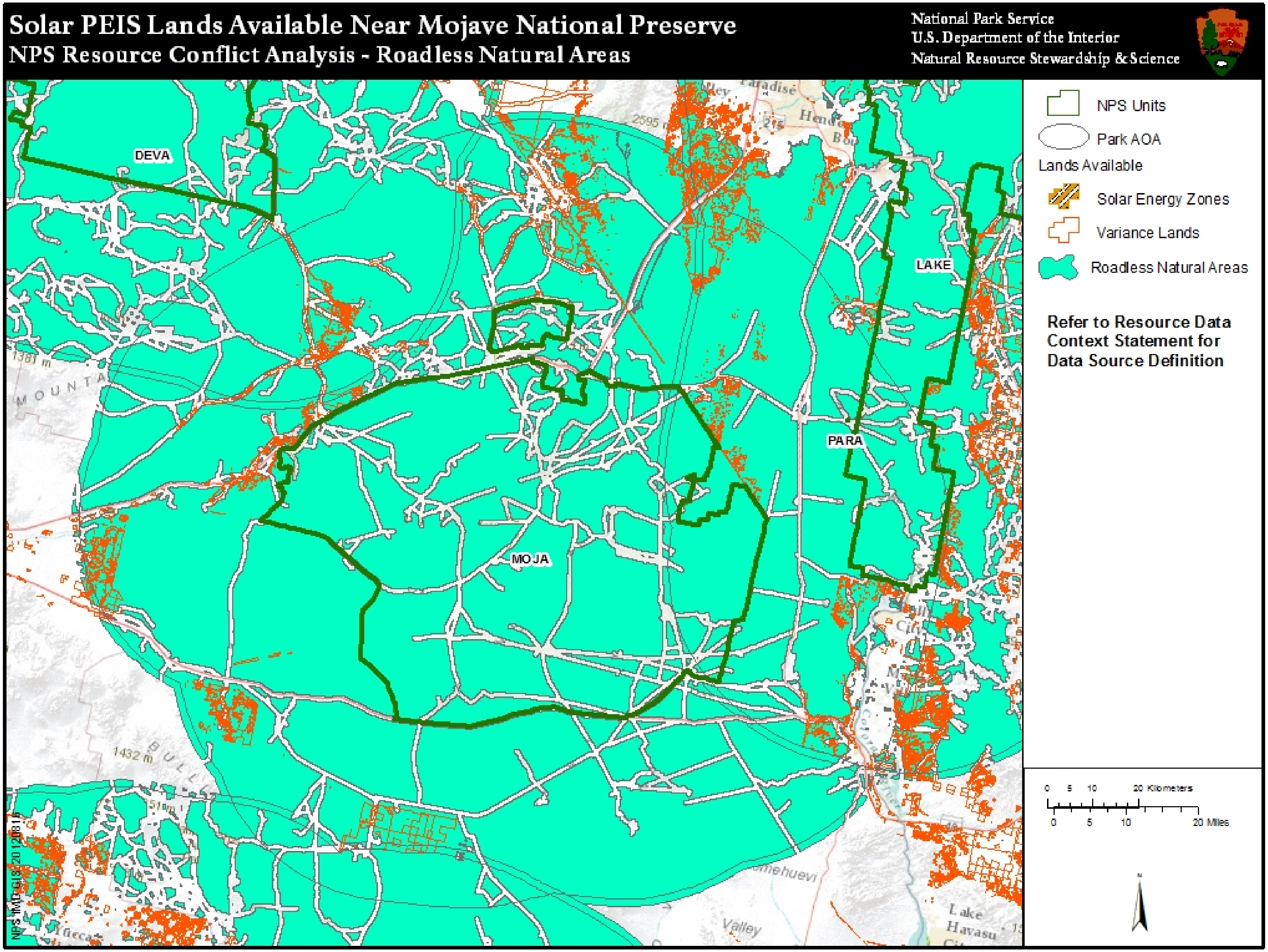


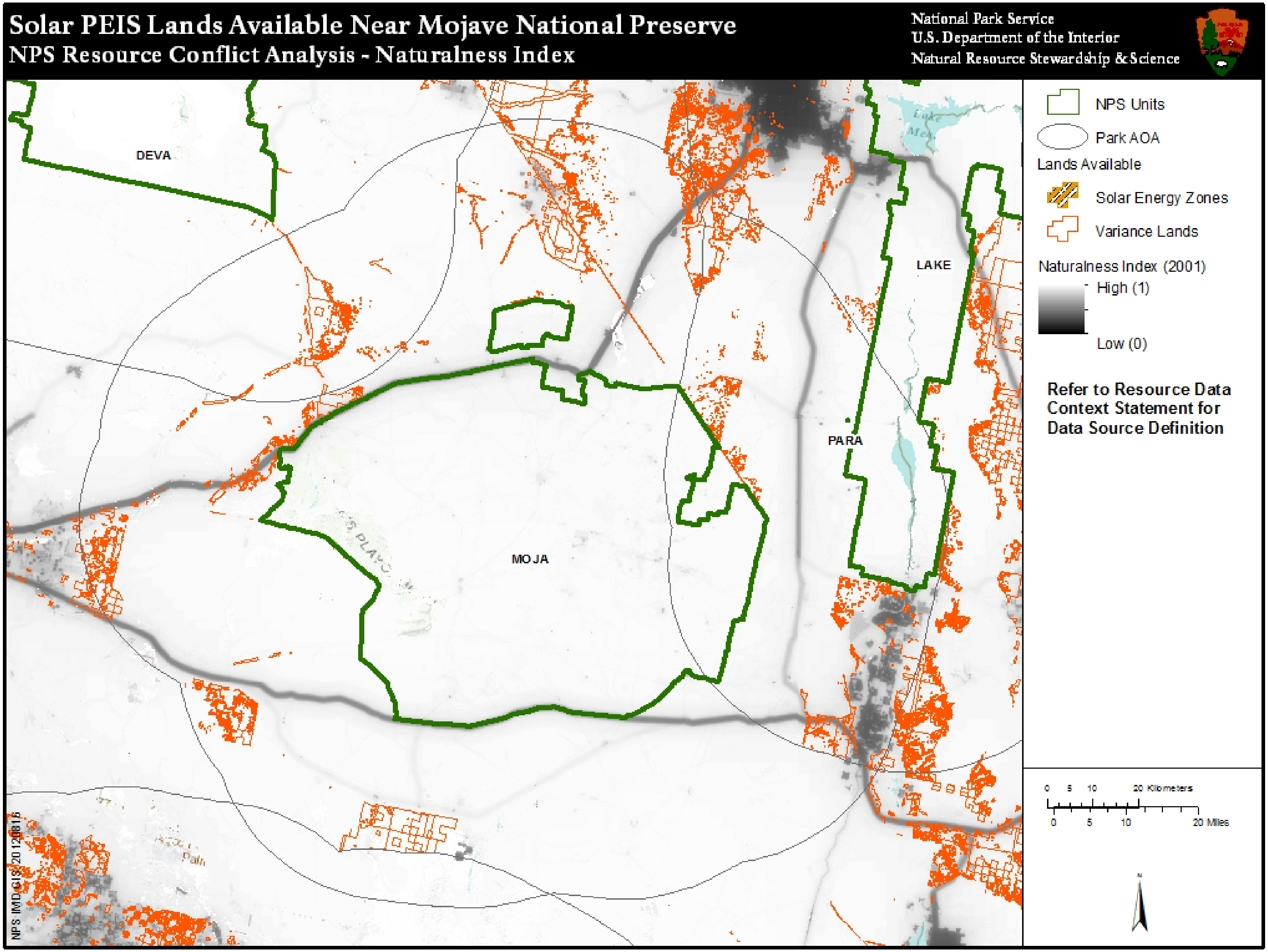
Land Ownership

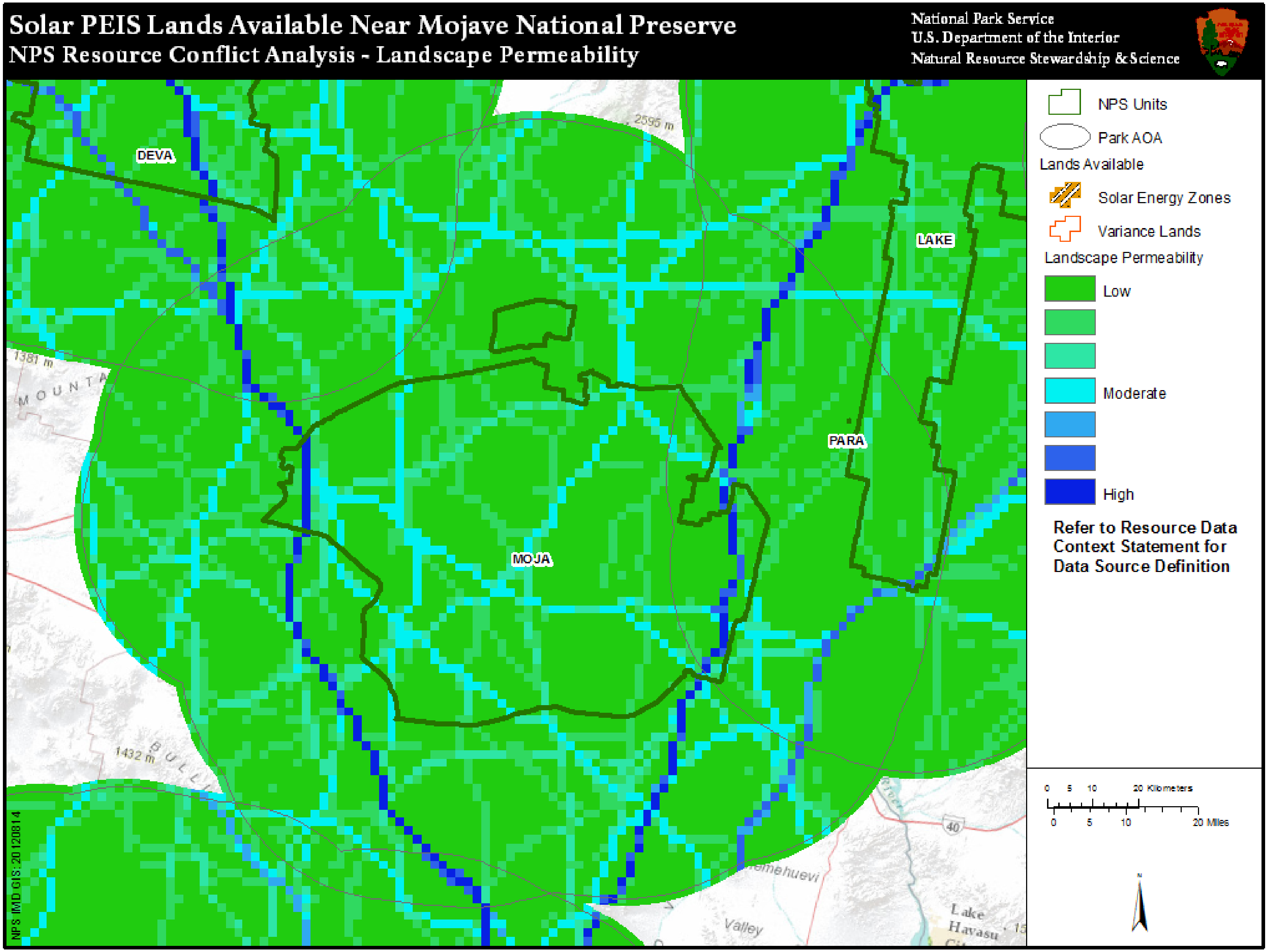


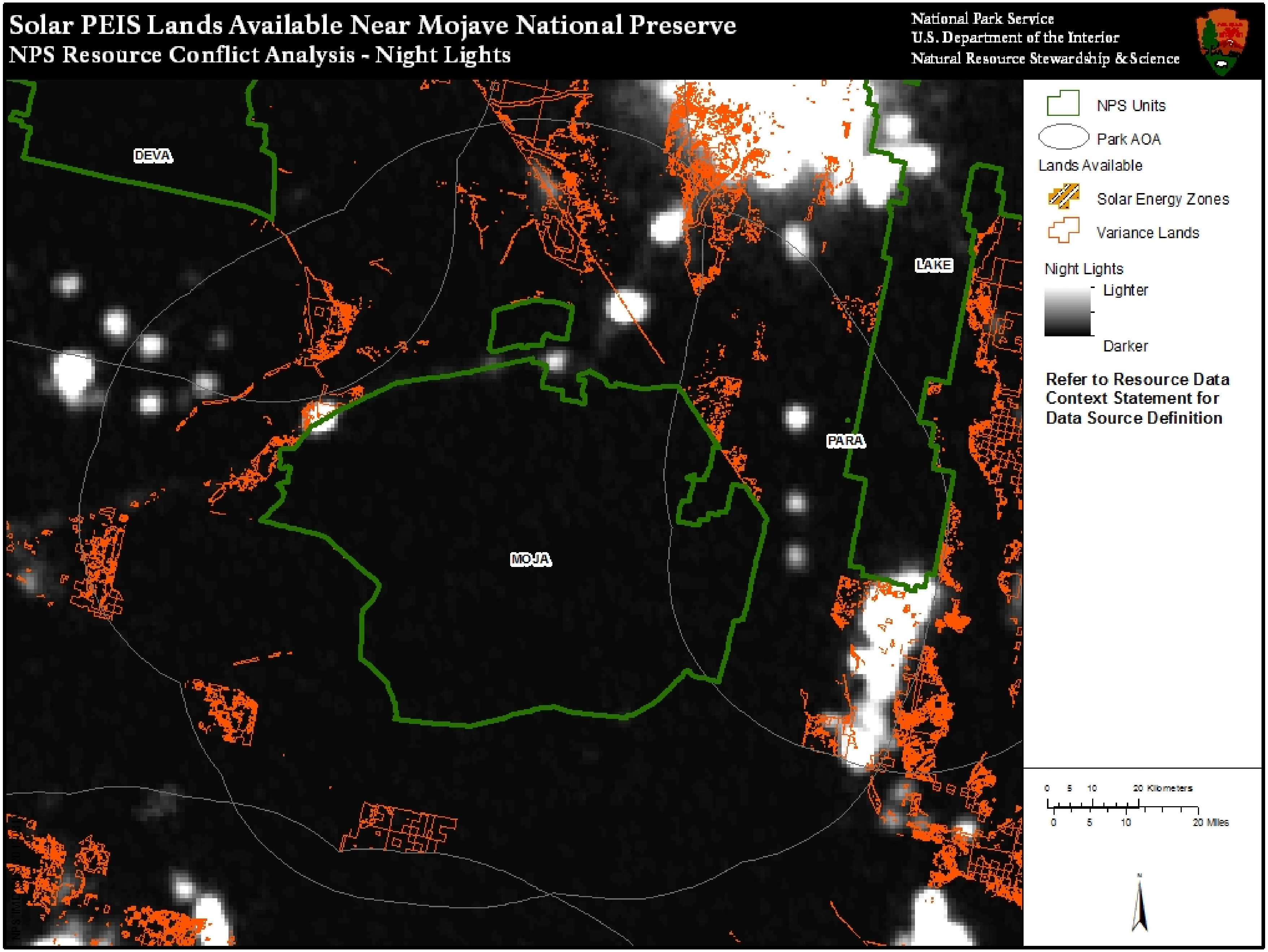

Solar PEIS Lands Available Near Mojave National Preserve
NPS Resource Conflict Analysis - Protected Areas
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
DEVA
LAKE
PARA
MOJA
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
PADUS
Protected Areas
GAP Status - 1
GAP Status - 2
Refer to Resource Data Context Statement for Data Source Definition
0 5 10 Kilometers
0 4 8 16 Miles


Solar PEIS Lands Available Near Mojave National Preserve
NPS Resource Conflict Analysis - Critical Habitat T & E
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Critical Habitat (USFWS) MOJA
Bonytail chub
Desert tortoise
Razorback sucker
Refer to Resource Data Context Statement for Data Source Definition
0 5 10 20 Kilometers
0 5 10 20 Miles
N
DEVA
LAKE
PARA
MOJA
NPS IMD GIS 20120816

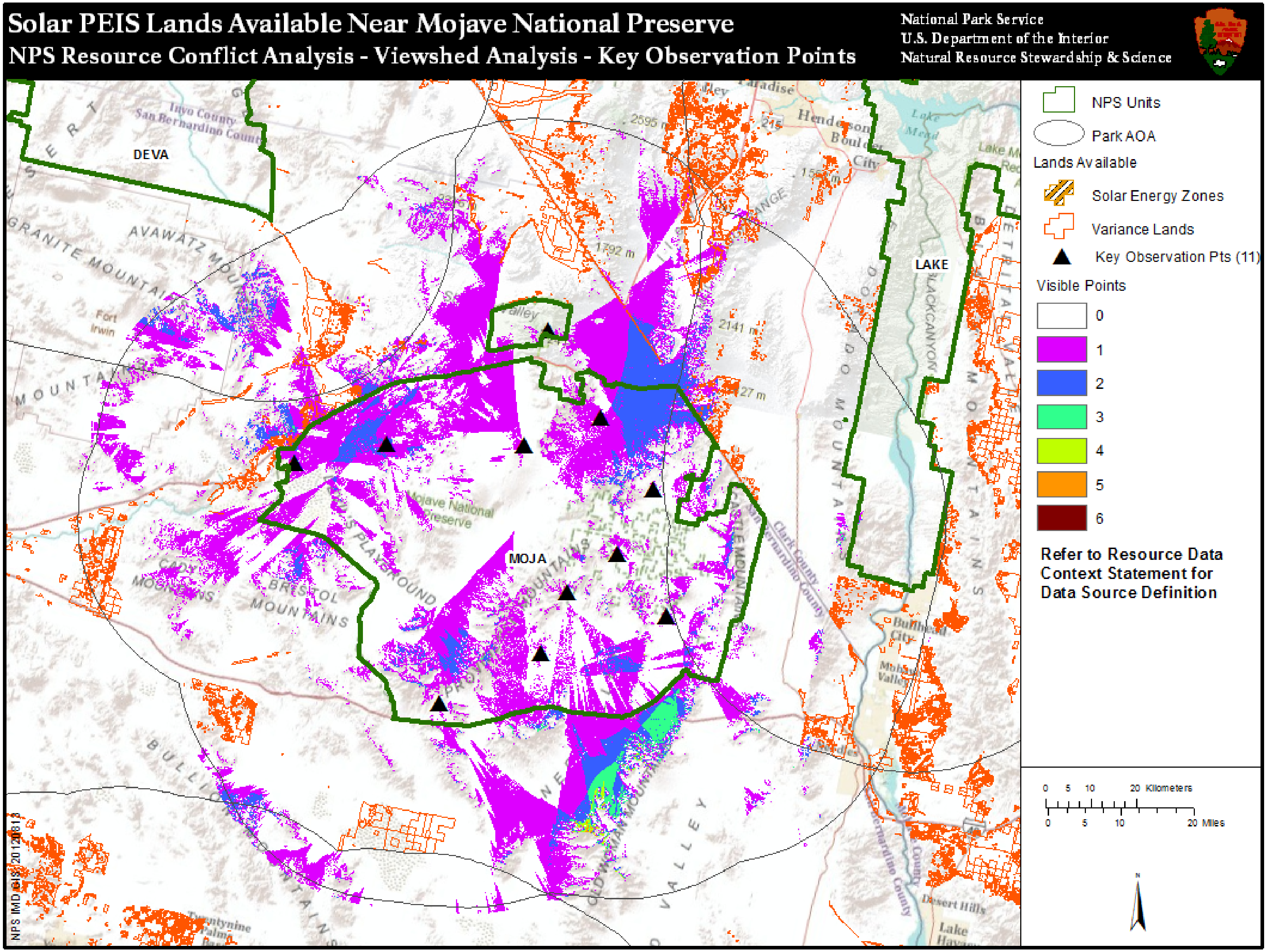

Solar PEIS Lands Available Near Mojave National Preserve
NPS Resource Conflict Analysis - Roadless Natural Areas
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Roadless Natural Areas
Refer to Resource Data Context Statement for Data Source Definition
0 5 10 20 Kilometers
0 5 10 20 Miles
DEVA
LAKE
PARA
MOJA

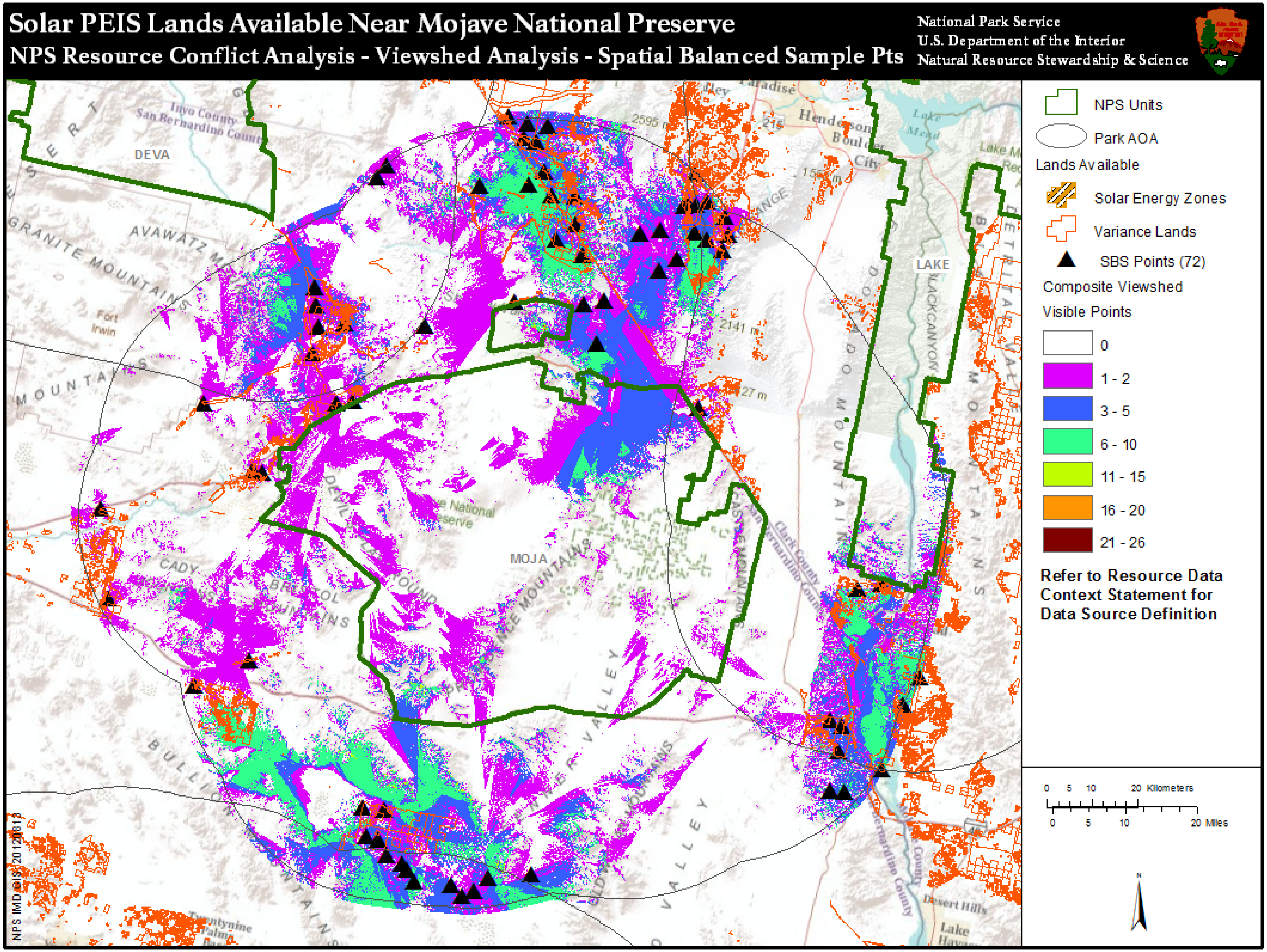

Solar PEIS Lands Available Near Mojave National Preserve
NPS Resource Conflict Analysis - Naturalness Index
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Naturalness Index (2001)
High (1)
Low (0)
Refer to Resource Data Context Statement for Data Source Definition
DEVA
LAKE
PARA
MOJA
0 5 10 20 Kilometers
0 5 10 20 Miles


Solar PEIS Lands Available Near Mojave National Preserve
NPS Resource Conflict Analysis - Landscape Permeability
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
DEVA
LAKE
PARA
MOJA
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Landscape Permeability
Low
Moderate
High
Refer to Resource Data Context Statement for Data Source Definition
20 Kilometers
20 Miles
NPS IMD GIS: 20120814



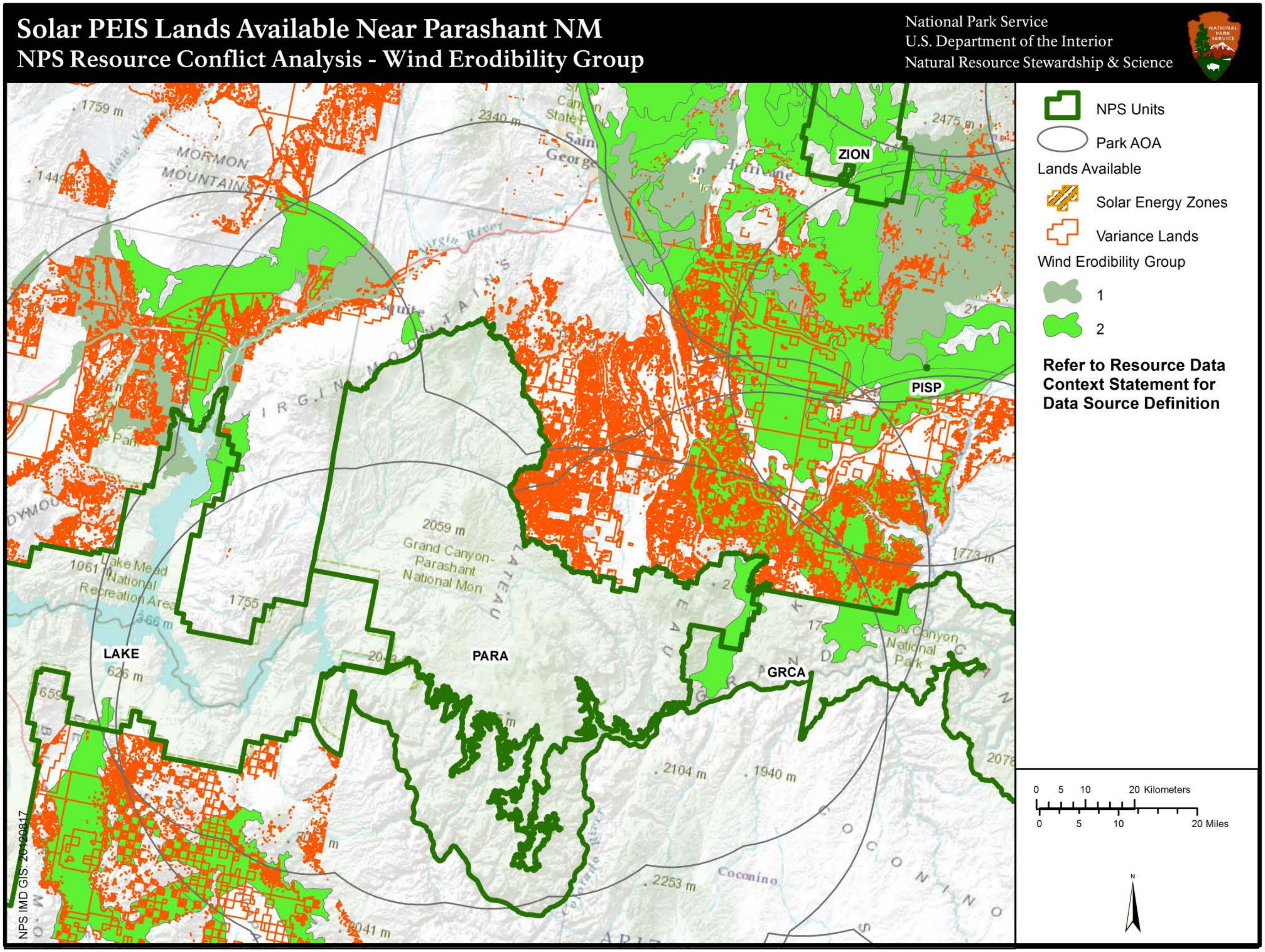
Solar PEIS Lands Available Near Mojave National Preserve
NPS Resource Conflict Analysis - Night Lights
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
DEVA
LAKE
PARA
MOJA
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Night Lights
Lighter
Darker
Refer to Resource Data Context Statement for Data Source Definition
0 5 10 20 Kilometers
0 5 10 20 Miles

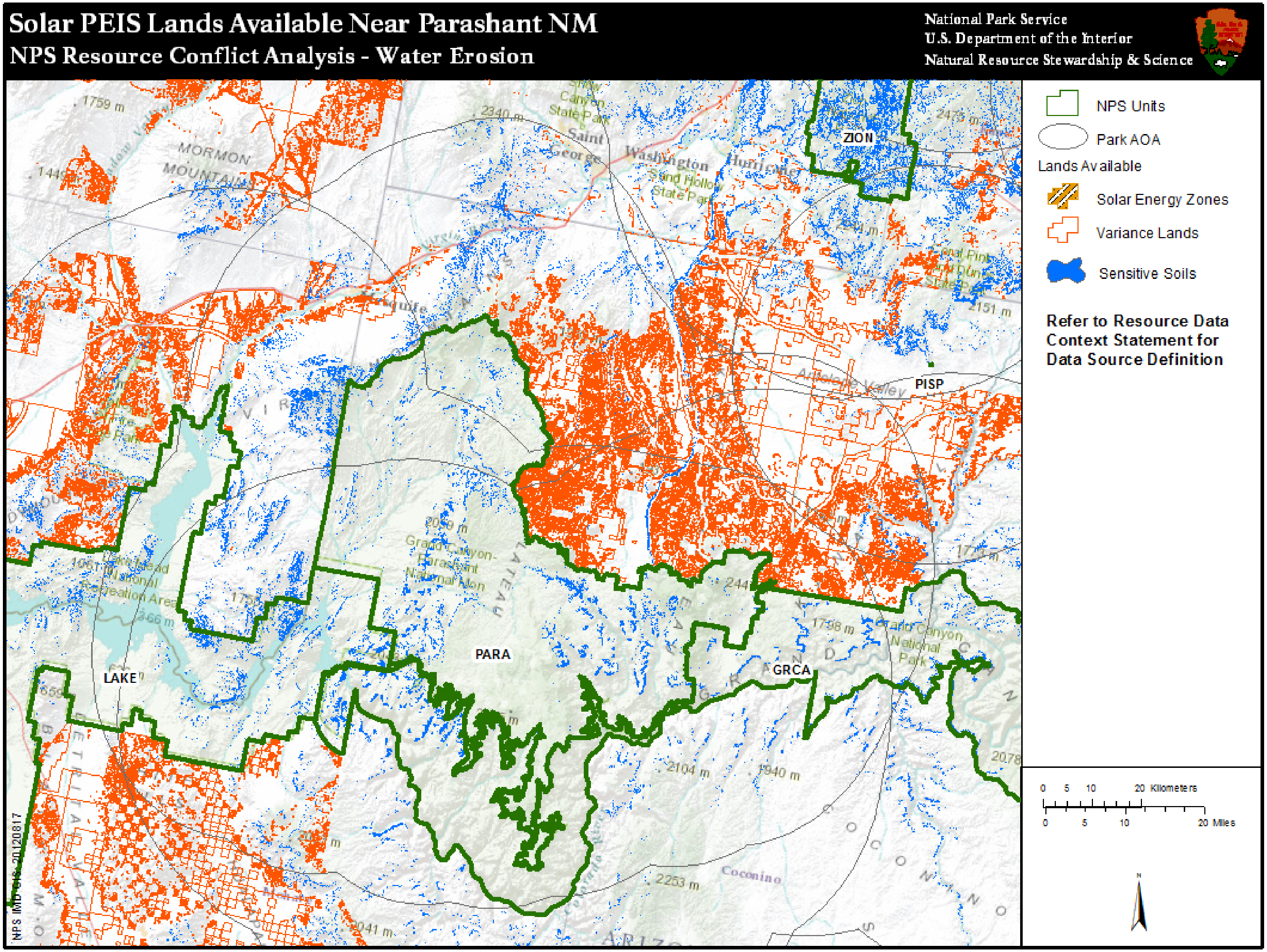

Solar PEIS Lands Available Near Mojave National Preserve
NPS Resource Conflict Analysis - Viewshed Analysis - Key Observation Points
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Key Observation Pts (11)
Visible Points
0
1
2
3
4
5
6
Refer to Resource Data Context Statement for Data Source Definition
0 5 10 20 Kilometers
0 5 10 20 Miles
DEVA
MOJA
LAKE
Mojave National Preserve
Henderson
Boulder City
Bullhead City
Inyo County
San Bernardino County
Clark County
BRISTOL MOUNTAINS
PROVIDENCE MOUNTAINS
GRANITE MOUNTAINS
Fort Irwin
Twentynine Palms
Lake Havasu
Desert Hills
Lake Mead
1792 m
2141 m
2595 m
NPS IMD GIS 20120813



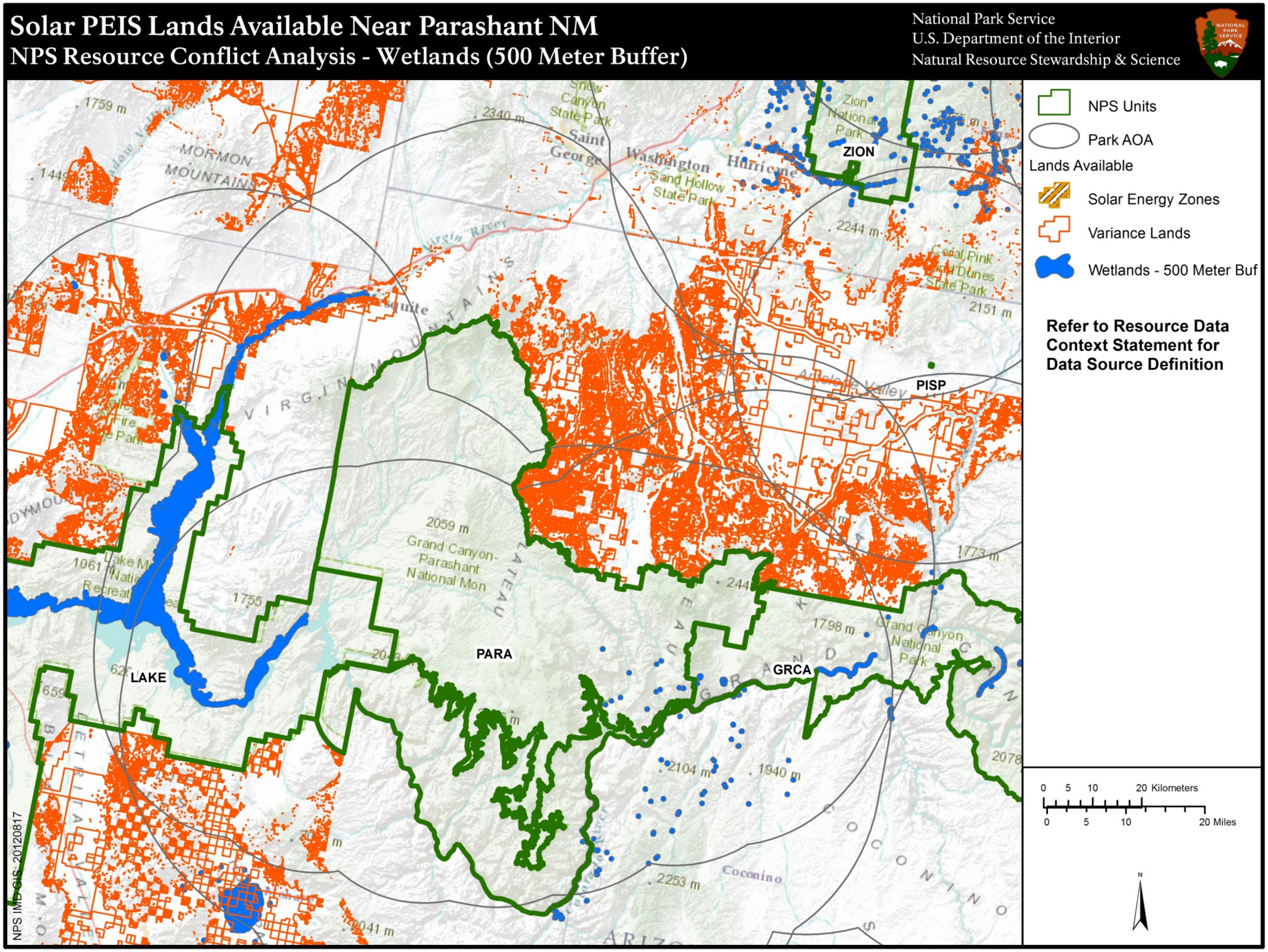
Solar PEIS Lands Available Near Mojave National Preserve
NPS Resource Conflict Analysis - Viewshed Analysis - Spatial Balanced Sample Pts
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
SBS Points (72)
Composite Viewshed
Visible Points
0
1 - 2
3 - 5
6 - 10
11 - 15
16 - 20
21 - 26
Refer to Resource Data Context Statement for Data Source Definition
0 5 10 20 Kilometers
0 5 10 20 Miles

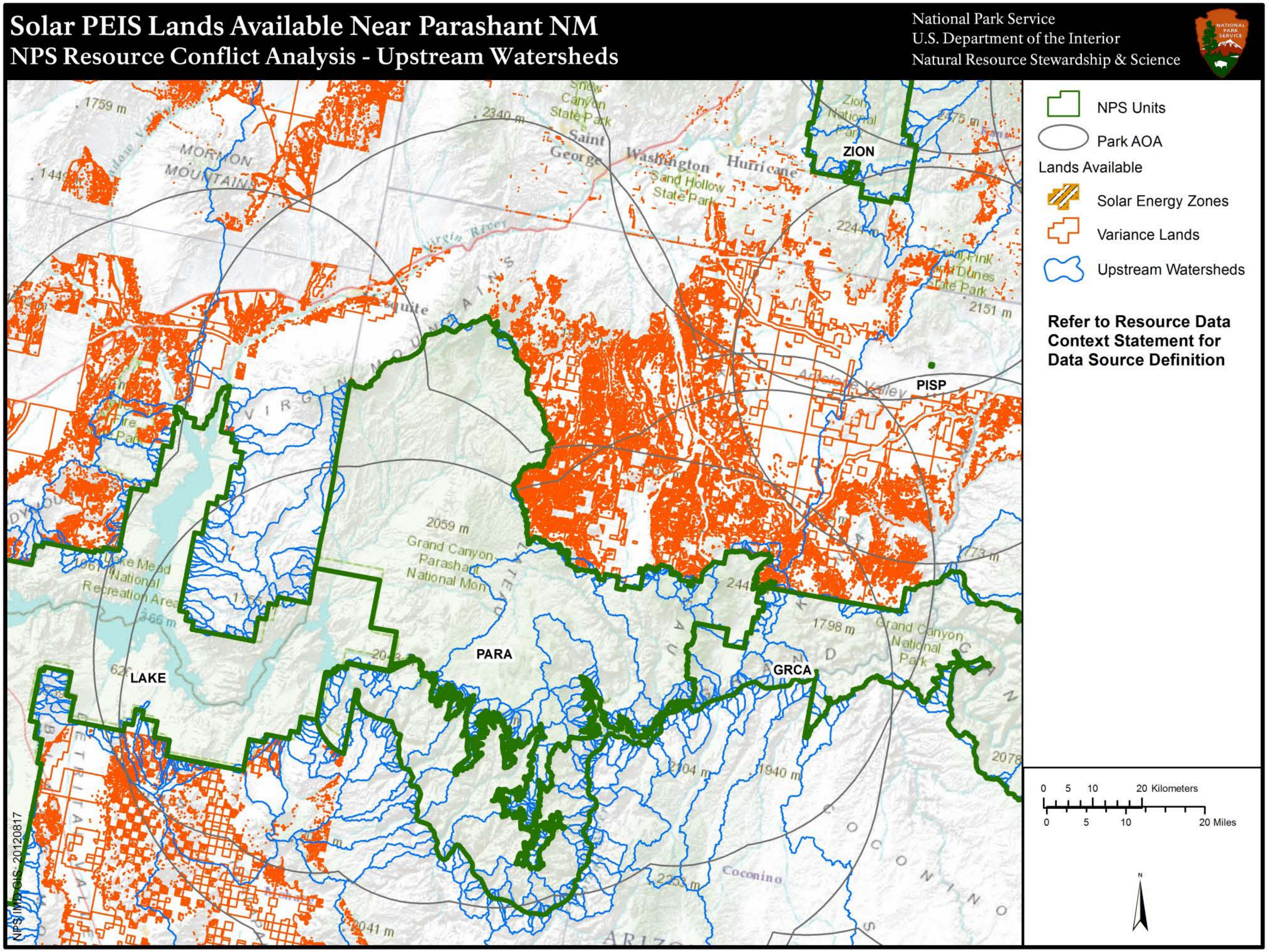
Parachant National Monument
Wind Erodibility Group



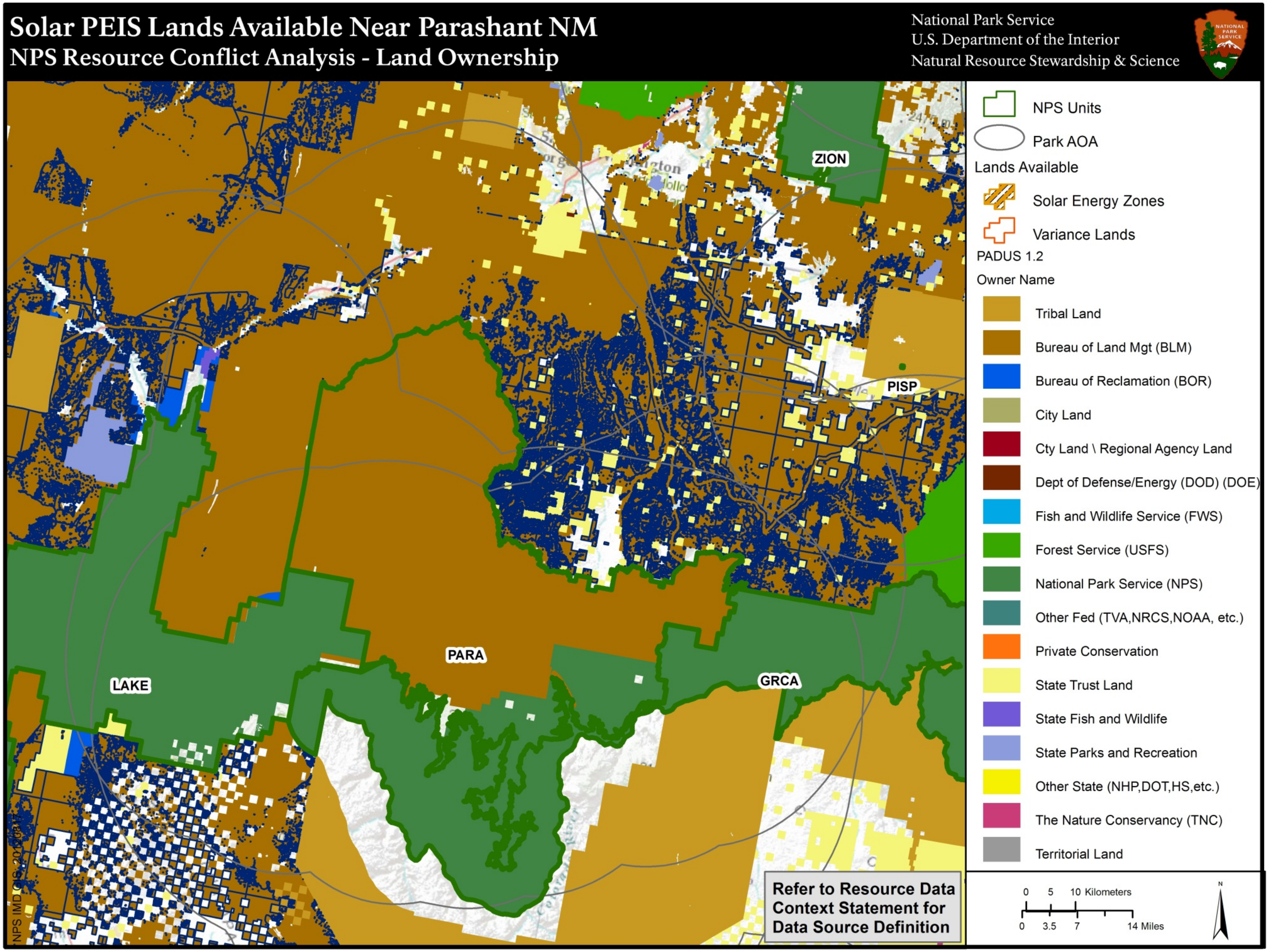


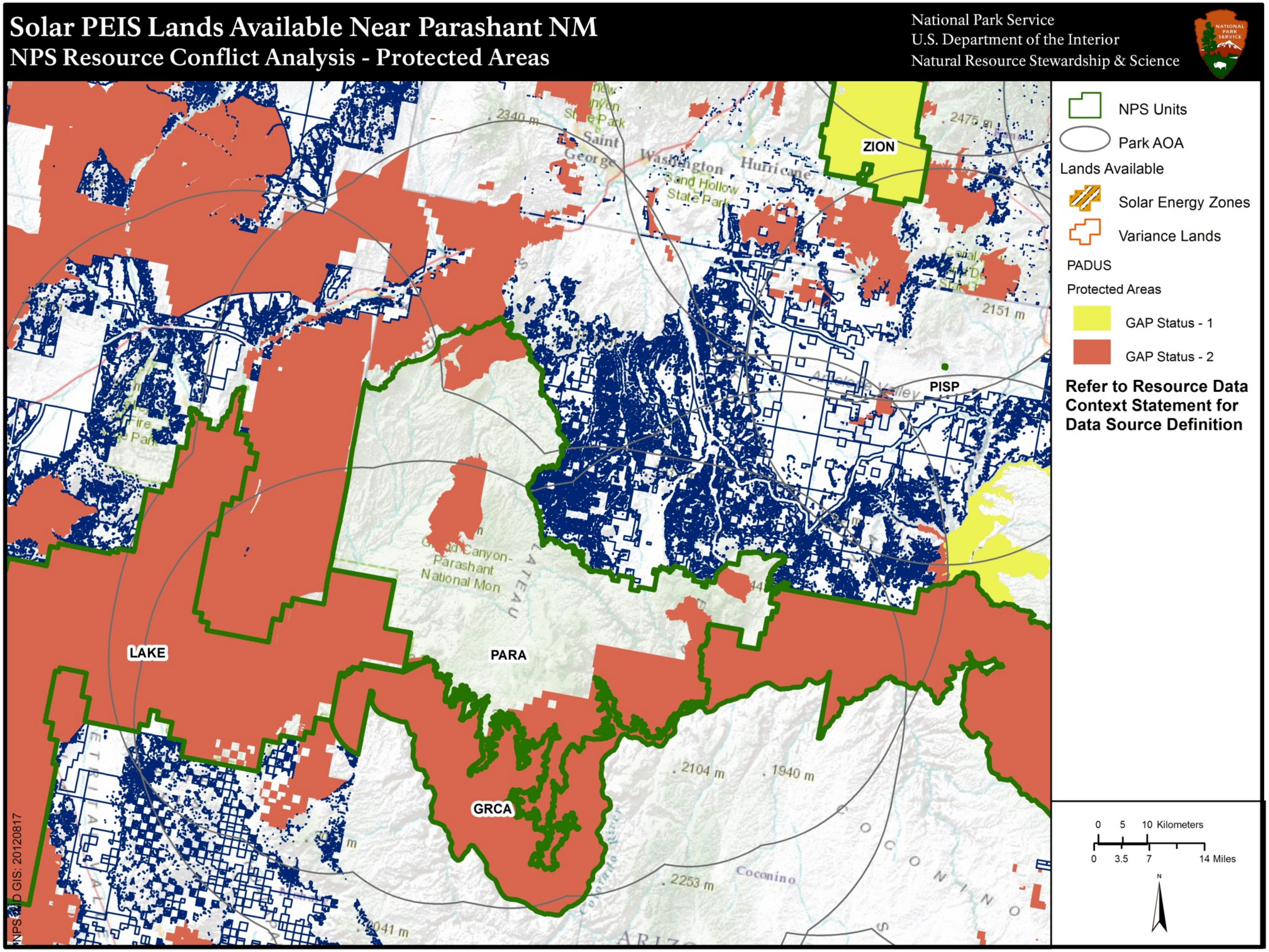
Solar PEIS Lands Available Near Parashant NM
NPS Resource Conflict Analysis - Water Erosion
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Sensitive Soils
Refer to Resource Data Context Statement for Data Source Definition
0 5 10 20 Kilometers
0 5 10 20 Miles
ZION
PISP
PARA
LAKE
GRCA
NPS IMD GIS 20120817

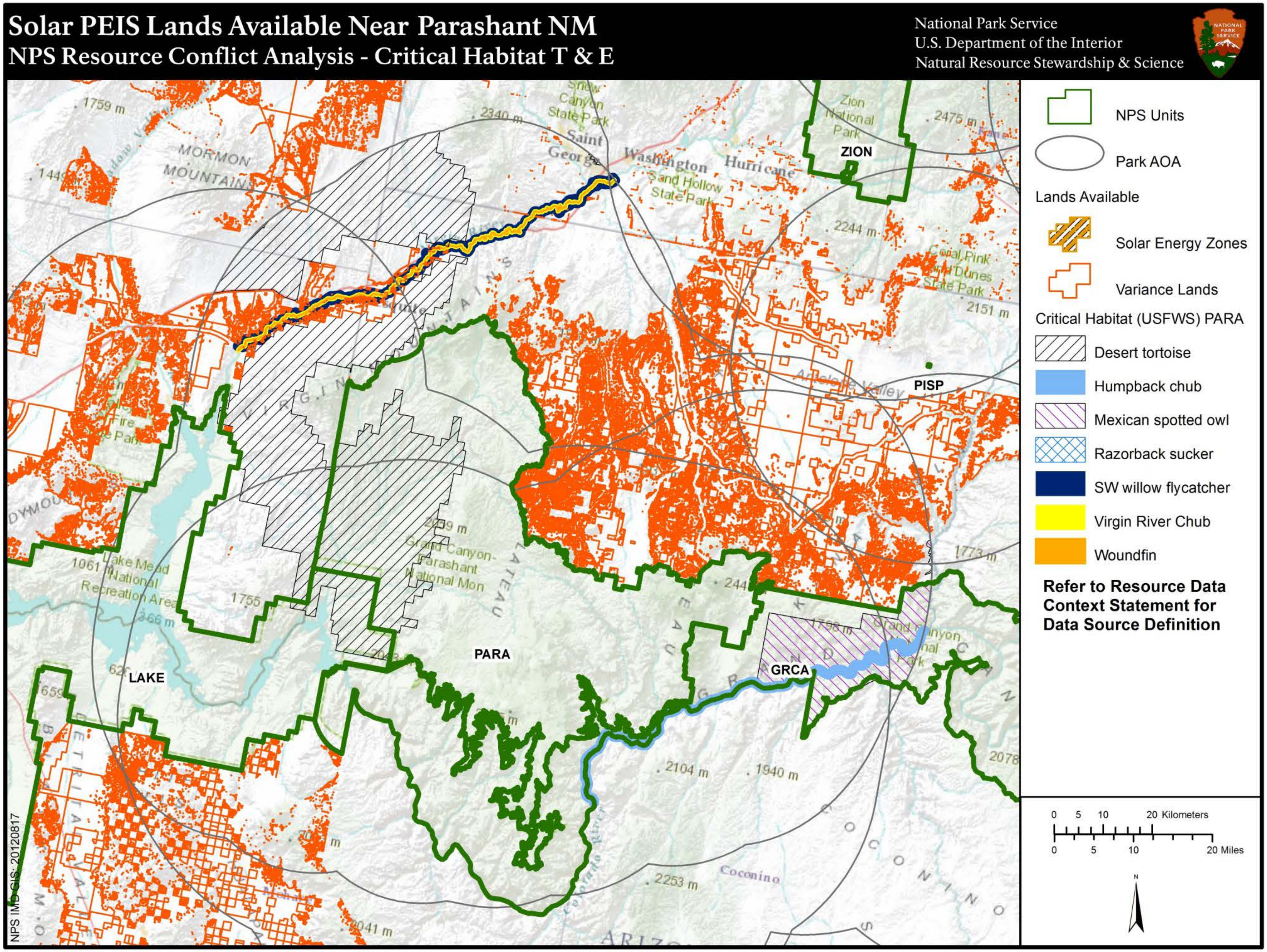

Solar PEIS Lands Available Near Parashant NM
NPS Resource Conflict Analysis - Wetlands (500 Meter Buffer)
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Wetlands - 500 Meter Buf
Refer to Resource Data Context Statement for Data Source Definition
0 5 10 20 Kilometers
0 5 10 20 Miles
ZION
PISP
PARA
LAKE
GRCA
Grand Canyon-Parashant National Mon
Grand Canyon National Park
Zion National Park
Saint George
Washington
Hurricane
Sand Hollow State Park
Coral Pink Sand Dunes State Park
Snow Canyon State Park
Virgin River
MORMON MOUNTAINS
V I R G I N M O U N T A I N S
Coconino
NPS IMD GIS: 20120817

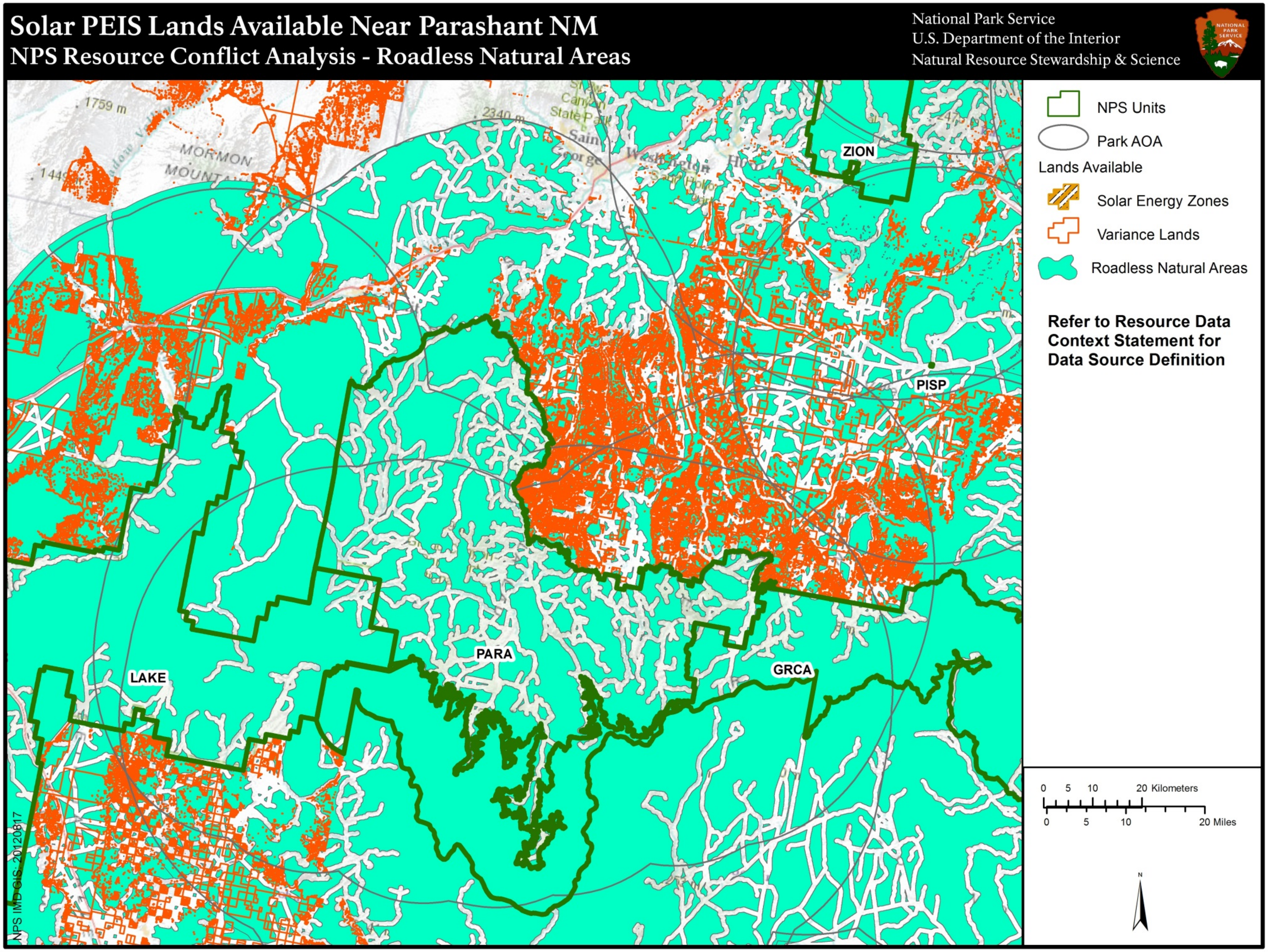

Solar PEIS Lands Available Near Parashant NM
NPS Resource Conflict Analysis - Upstream Watersheds
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Upstream Watersheds
Refer to Resource Data Context Statement for Data Source Definition
0 5 10 20 Kilometers
0 5 10 20 Miles
ZION
PISP
PARA
LAKE
GRCA
Grand Canyon Parashant National Mon
Lake Mead National Recreation Area
Grand Canyon National Park
Saint George
Washington
Hurricane
Sand Hollow State Park
Snow Canyon State Park
Zion National Park
Mormon Mountains
Virgin Mountains
Coconino
NPS IMD GIS: 20120817

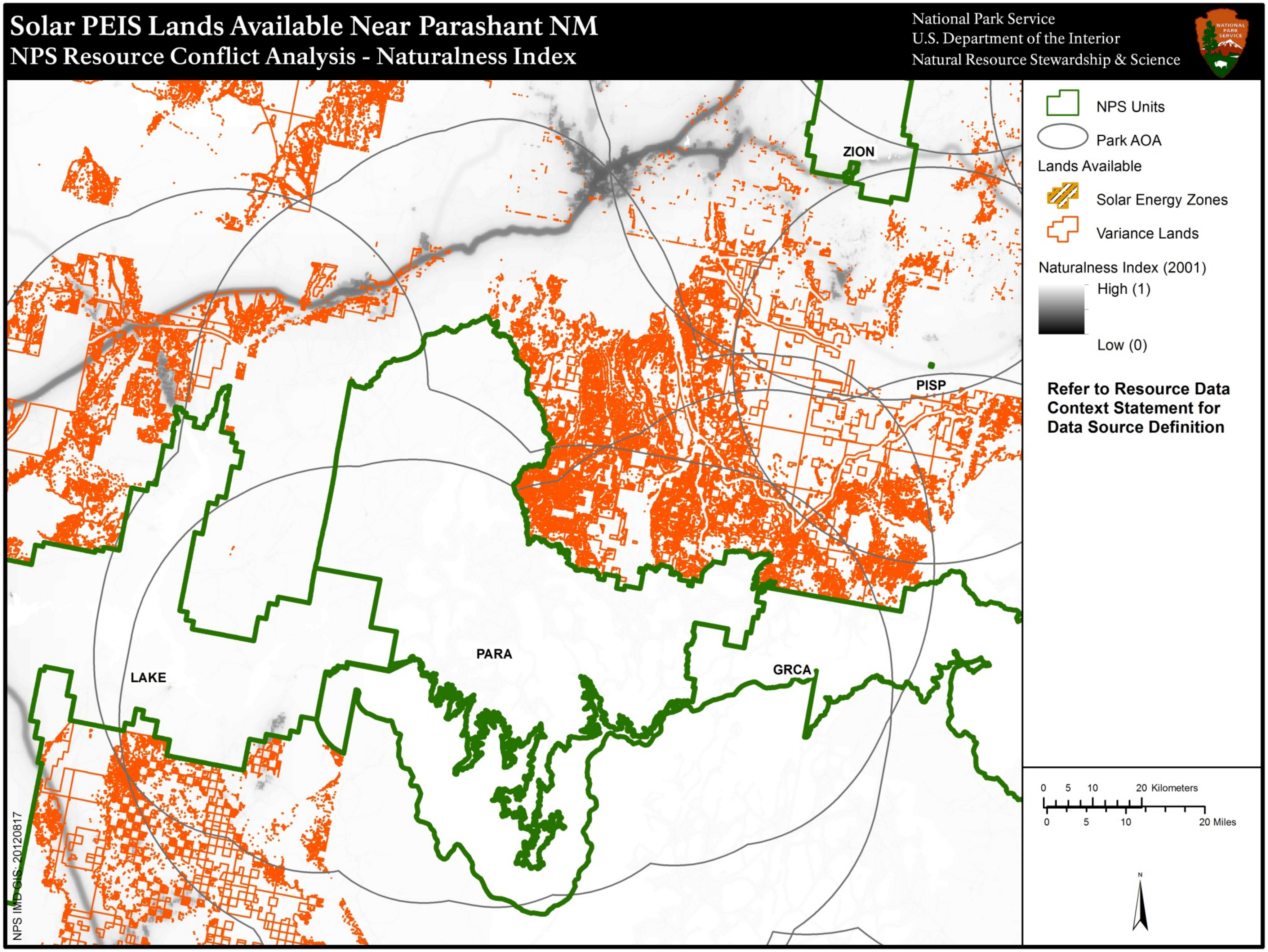
Land Ownership

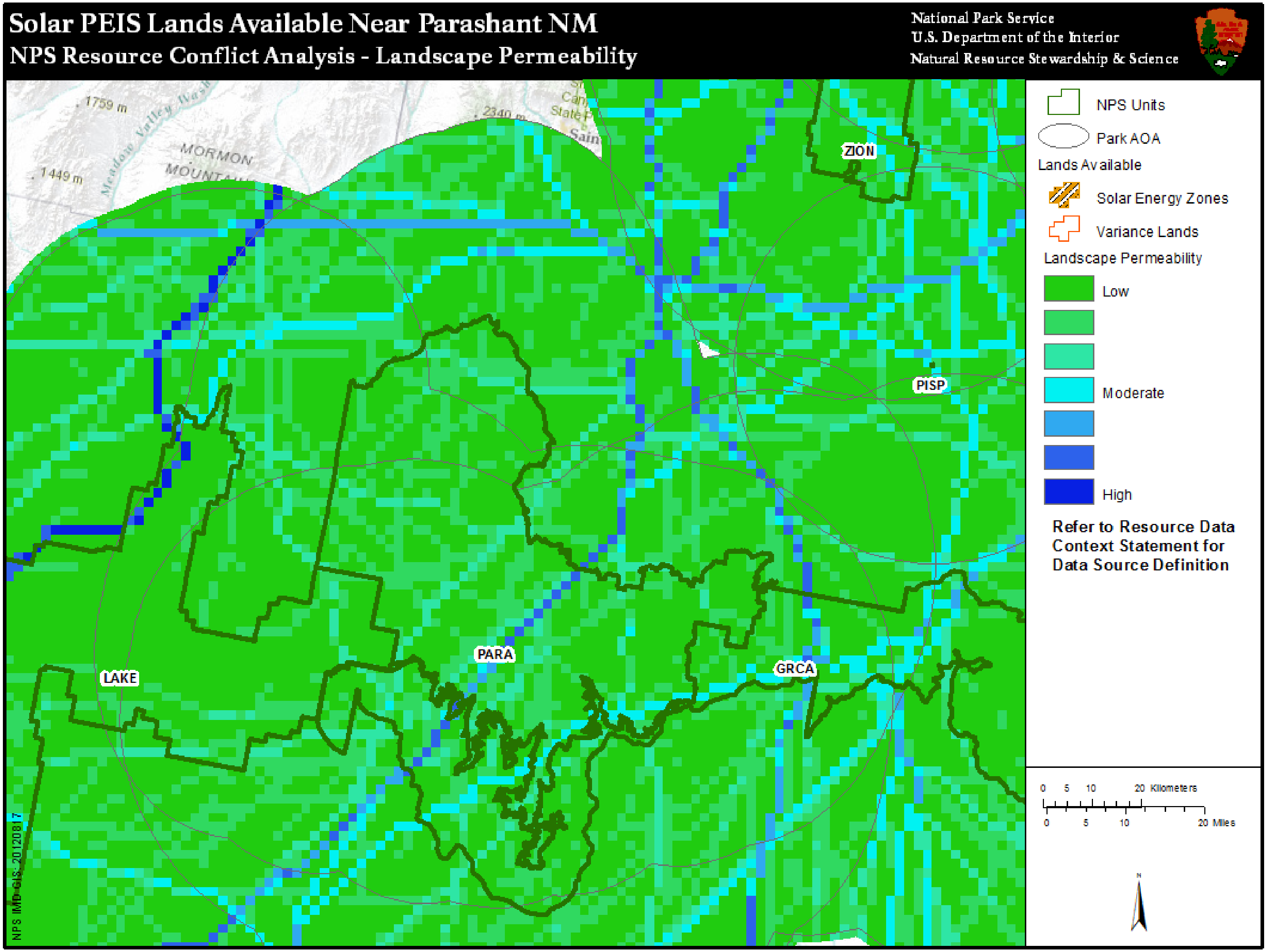


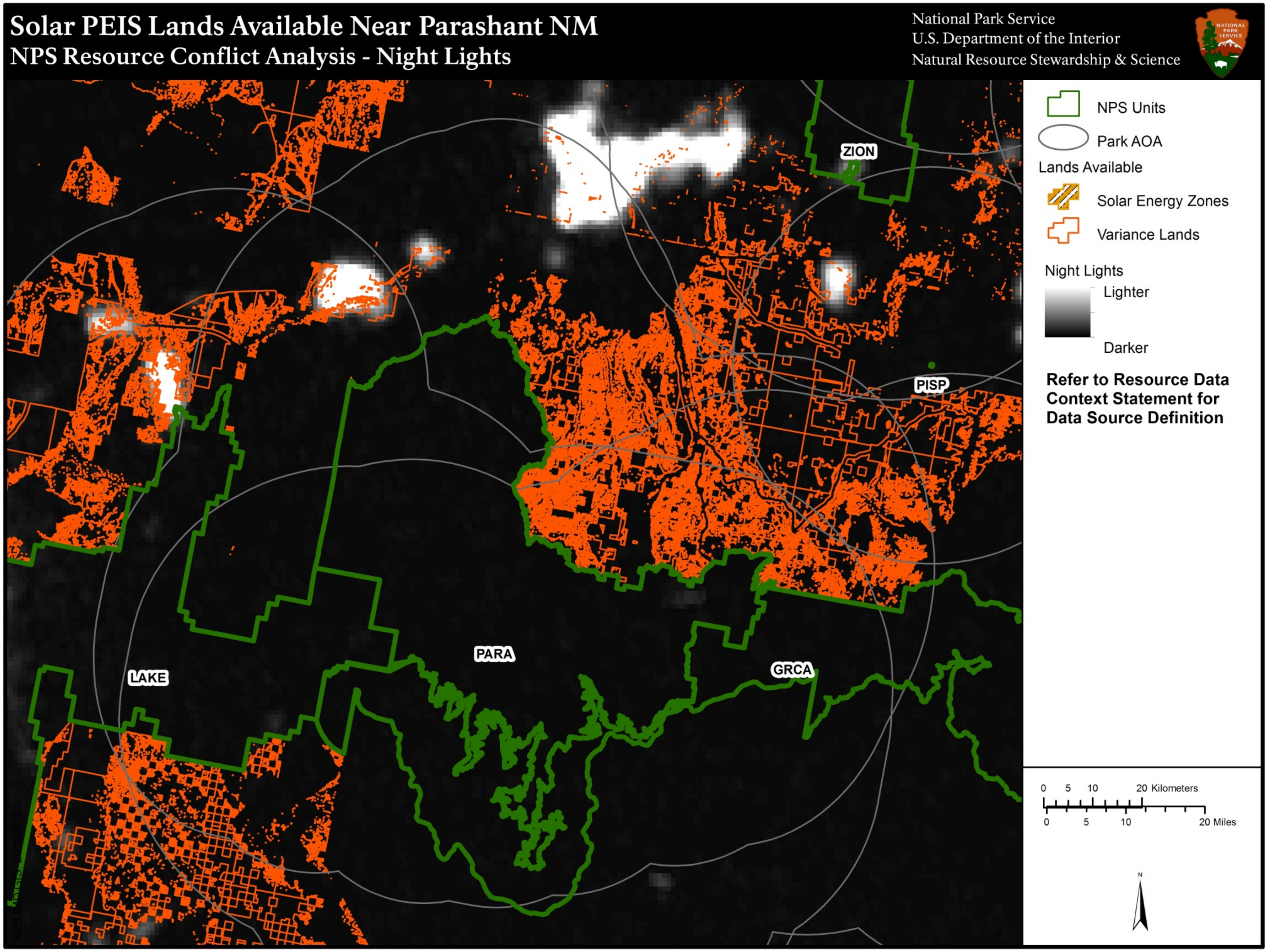

Solar PEIS Lands Available Near Parashant NM
NPS Resource Conflict Analysis - Protected Areas
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
PADUS
Protected Areas
GAP Status - 1
GAP Status - 2
Refer to Resource Data Context Statement for Data Source Definition
ZION
PISP
LAKE
PARA
GRCA
Grand Canyon-Parashant National Mon
Saint George
Washington
Hurricane
Sand Hollow State Park
Coconino
0 5 10 Kilometers
0 3.5 7 14 Miles
NPS NRD GIS: 20120817

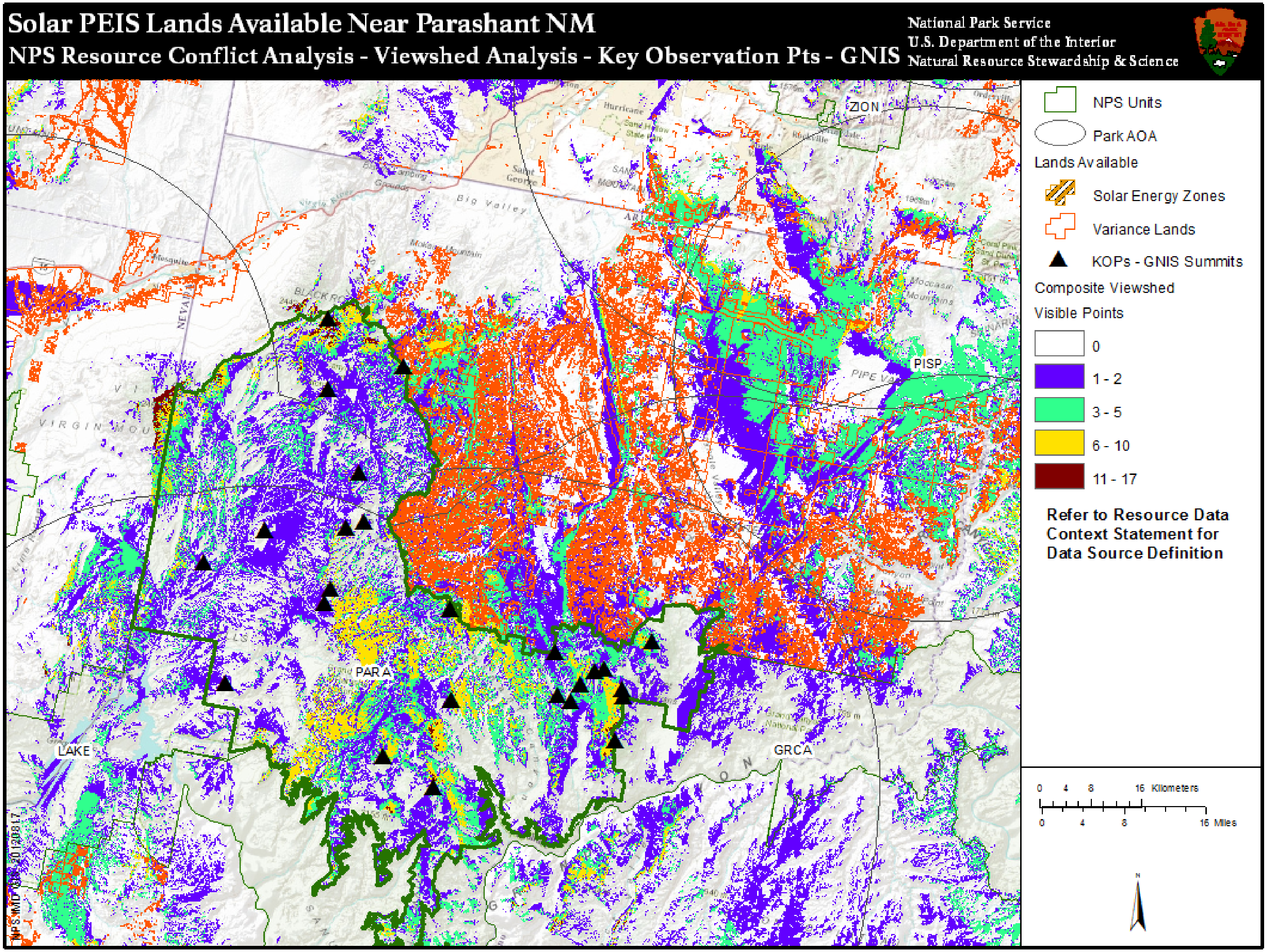

Solar PEIS Lands Available Near Parashant NM
NPS Resource Conflict Analysis - Critical Habitat T & E
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Critical Habitat (USFWS) PARA
Desert tortoise
Humpback chub
Mexican spotted owl
Razorback sucker
SW willow flycatcher
Virgin River Chub
Woundfin
Refer to Resource Data Context Statement for Data Source Definition
0 5 10 20 Kilometers
0 5 10 20 Miles
ZION
PISP
PARA
LAKE
GRCA
NPS IMD GIS: 20120817


Solar PEIS Lands Available Near Parashant NM
NPS Resource Conflict Analysis - Roadless Natural Areas
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Roadless Natural Areas
Refer to Resource Data Context Statement for Data Source Definition
ZION
PISP
PARA
LAKE
GRCA
MORMON MOUNTAINS
0 5 10 20 Kilometers
0 5 10 20 Miles
N
NPS IMD GIS: 20120817

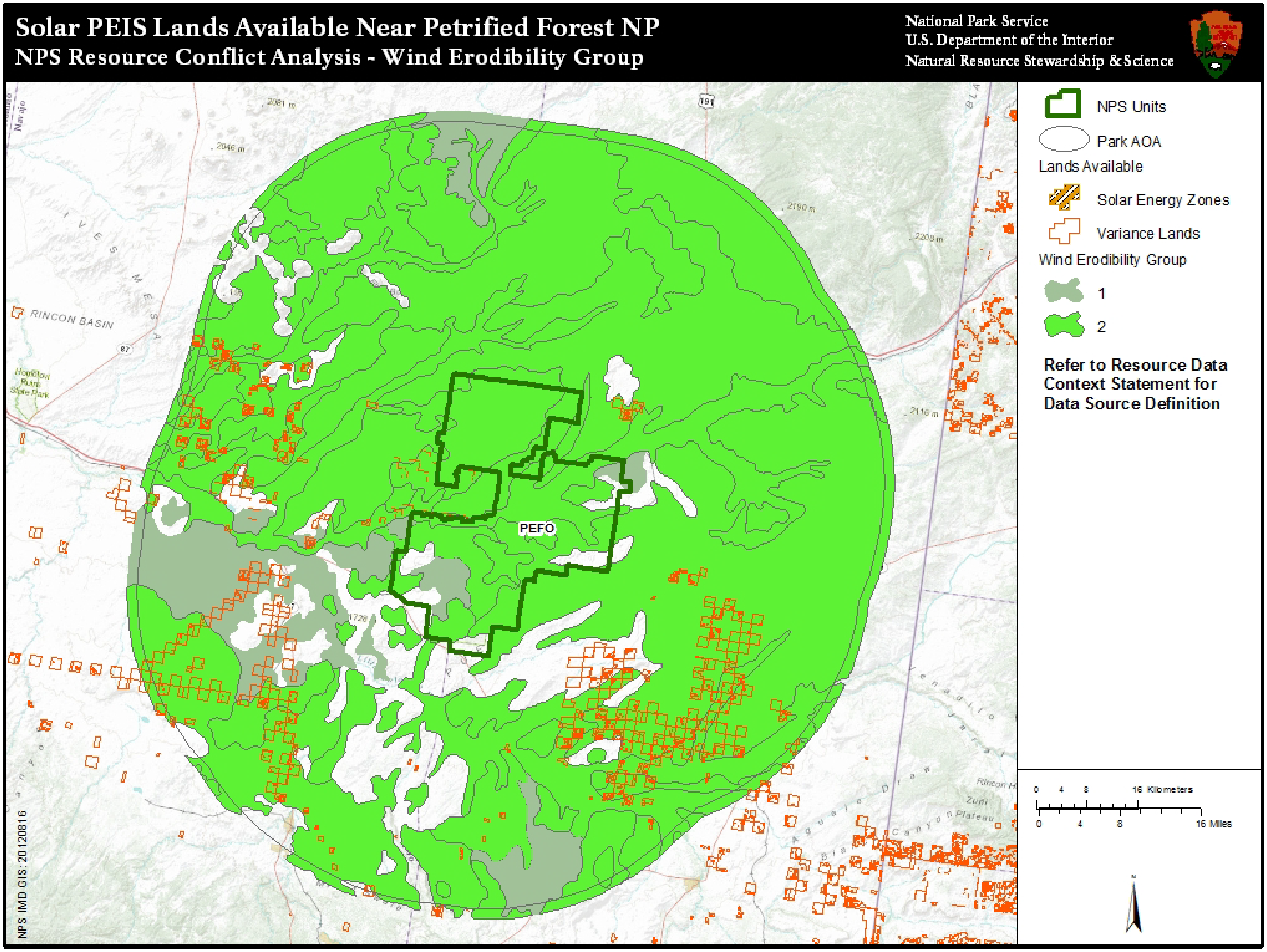

Solar PEIS Lands Available Near Parashant NM
NPS Resource Conflict Analysis - Naturalness Index
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
ZION
PISP
PARA
LAKE
GRCA
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Naturalness Index (2001)
High (1)
Low (0)
Refer to Resource Data Context Statement for Data Source Definition
0 5 10 20 Kilometers
0 5 10 20 Miles
N
NPS IMD GIS: 20120817

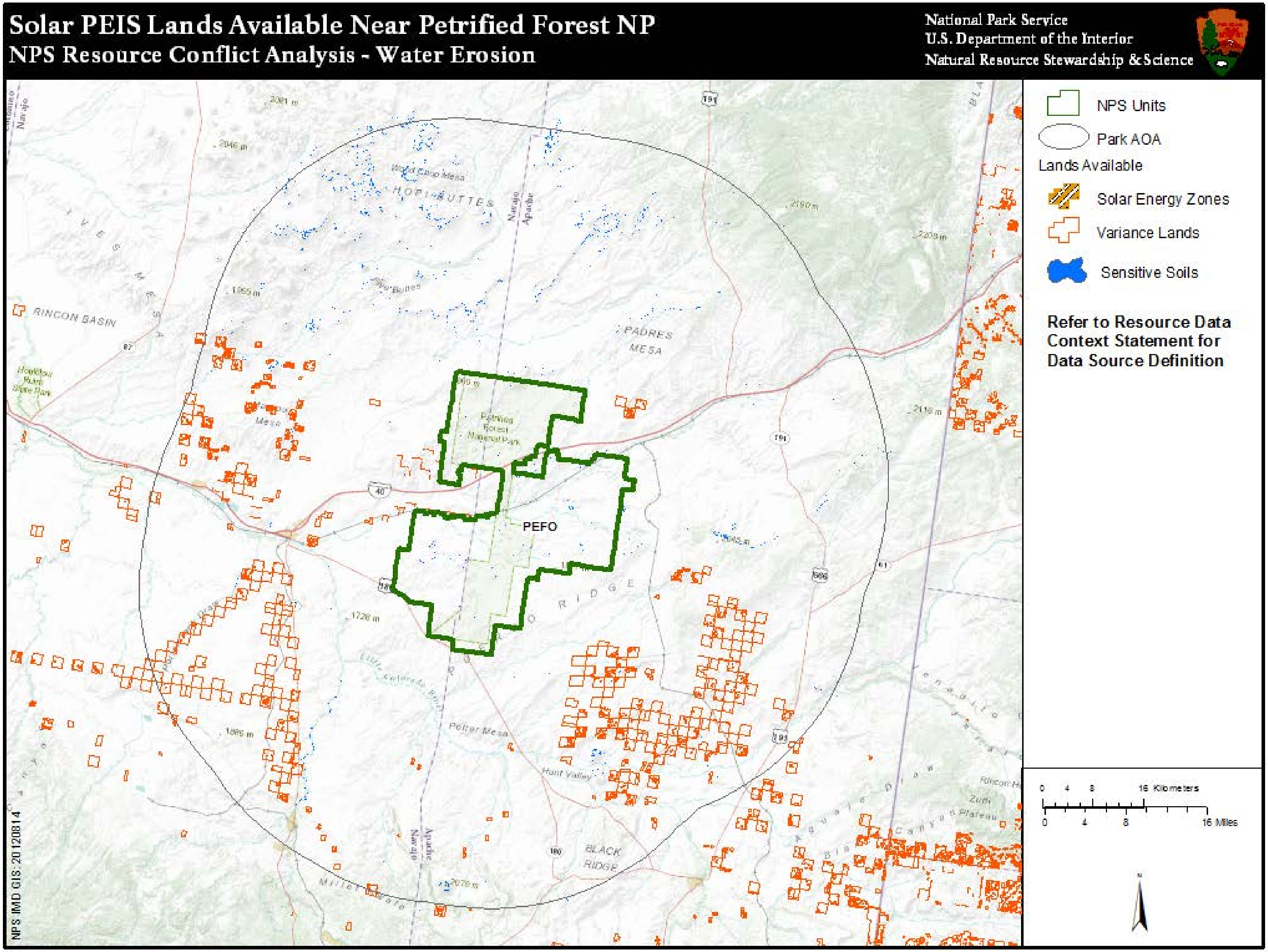

Solar PEIS Lands Available Near Parashant NM
NPS Resource Conflict Analysis - Landscape Permeability
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Landscape Permeability
Low
Moderate
High
Refer to Resource Data Context Statement for Data Source Definition
0 5 10 20 Kilometers
0 5 10 20 Miles
ZION
PISP
PARA
LAKE
GRCA
MORMON
1759 m
1449 m
2340 m
NPS IMD-GIS: 20120817

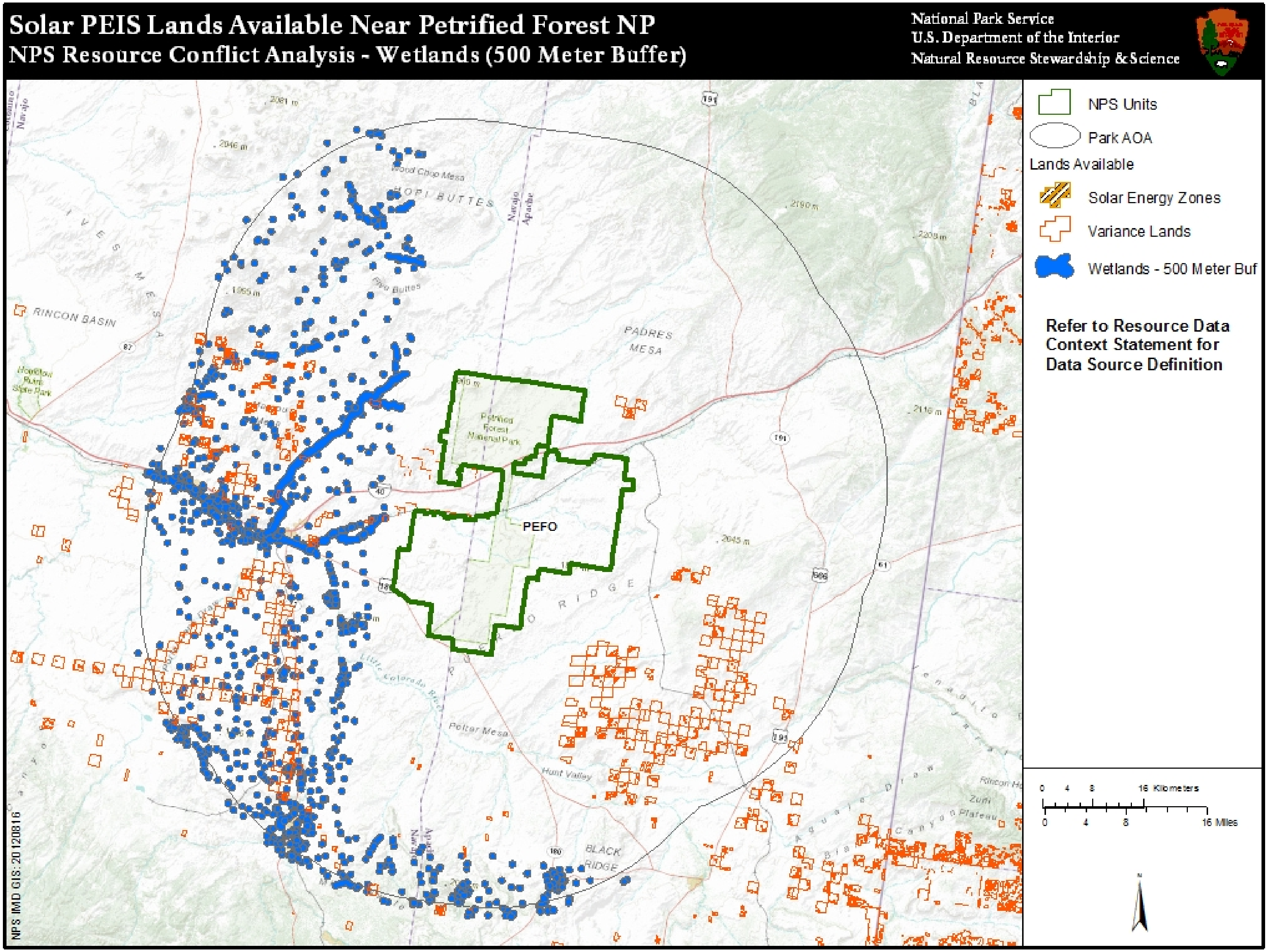

Solar PEIS Lands Available Near Parashant NM
NPS Resource Conflict Analysis - Night Lights
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Night Lights
Lighter
Darker
Refer to Resource Data Context Statement for Data Source Definition
ZION
PISP
PARA
LAKE
GRCA
0 5 10 20 Kilometers
0 5 10 20 Miles
N

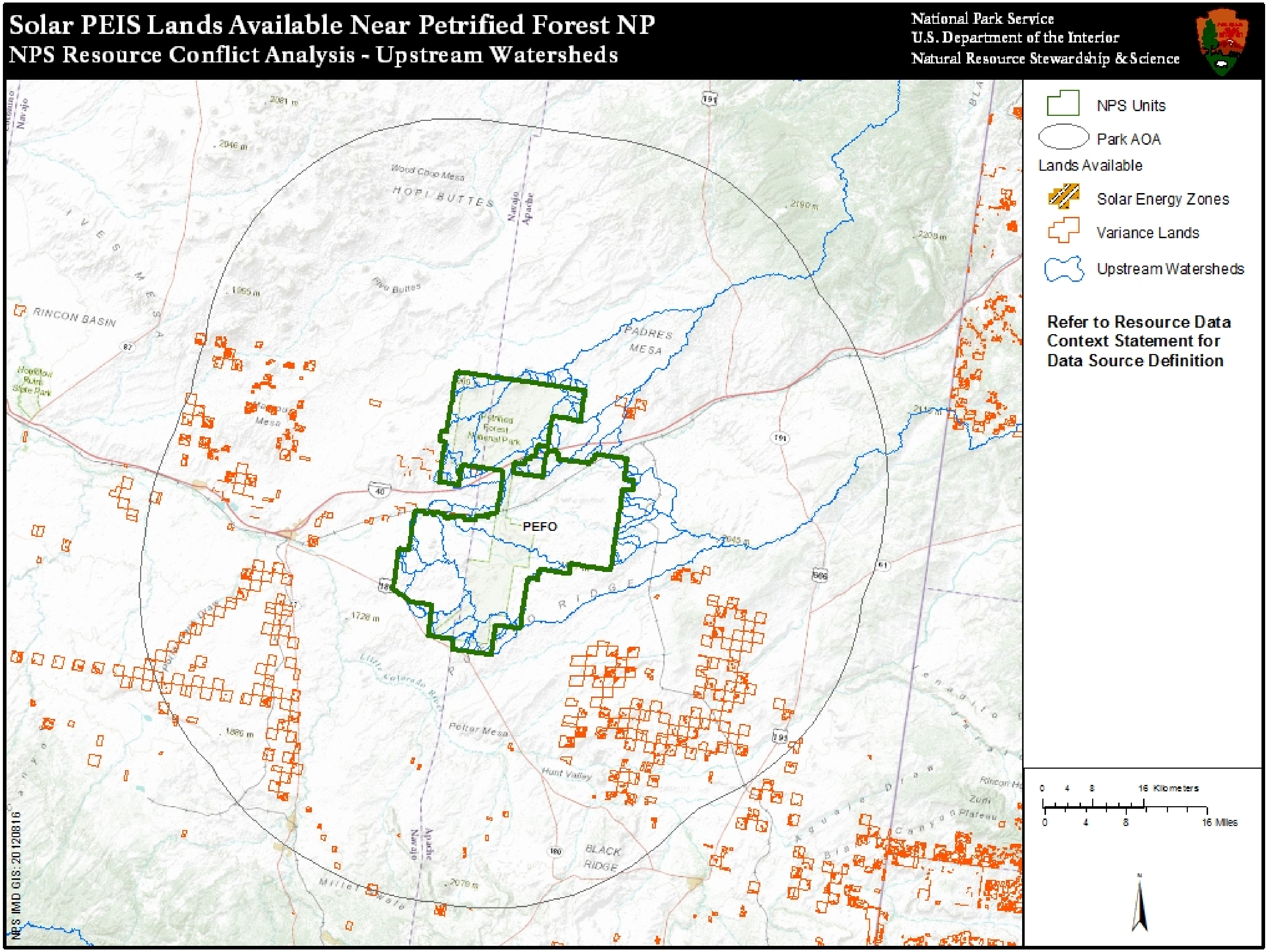

Solar PEIS Lands Available Near Parashant NM
NPS Resource Conflict Analysis - Viewshed Analysis - Key Observation Pts - GNIS
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
KOPs - GNIS Summits
Composite Viewshed
Visible Points
0
1 - 2
3 - 5
6 - 10
11 - 17
Refer to Resource Data Context Statement for Data Source Definition
0 4 8 16 Kilometers
0 4 8 16 Miles
ZION
PISP
PARA
LAKE
GRCA
Big Valley
VIRGIN MOU
NEVAD

Petrified Forest National Park
Wind Erodibility Group

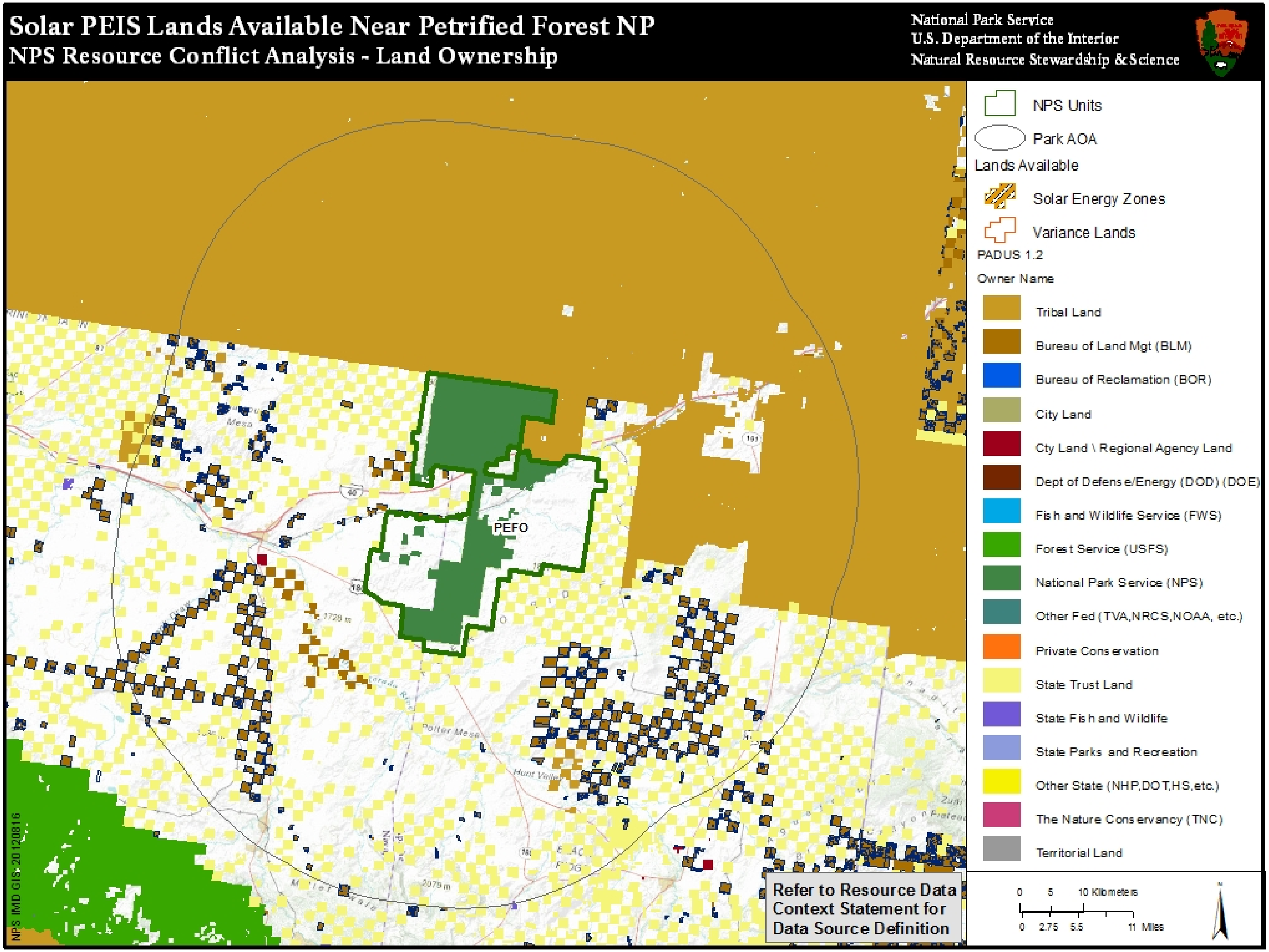



Solar PEIS Lands Available Near Petrified Forest NP
NPS Resource Conflict Analysis - Water Erosion
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Sensitive Soils
Refer to Resource Data Context Statement for Data Source Definition
PEFO
0 4 8 16 Kilometers
0 4 8 16 Miles
NPS IMD GIS: 20120814

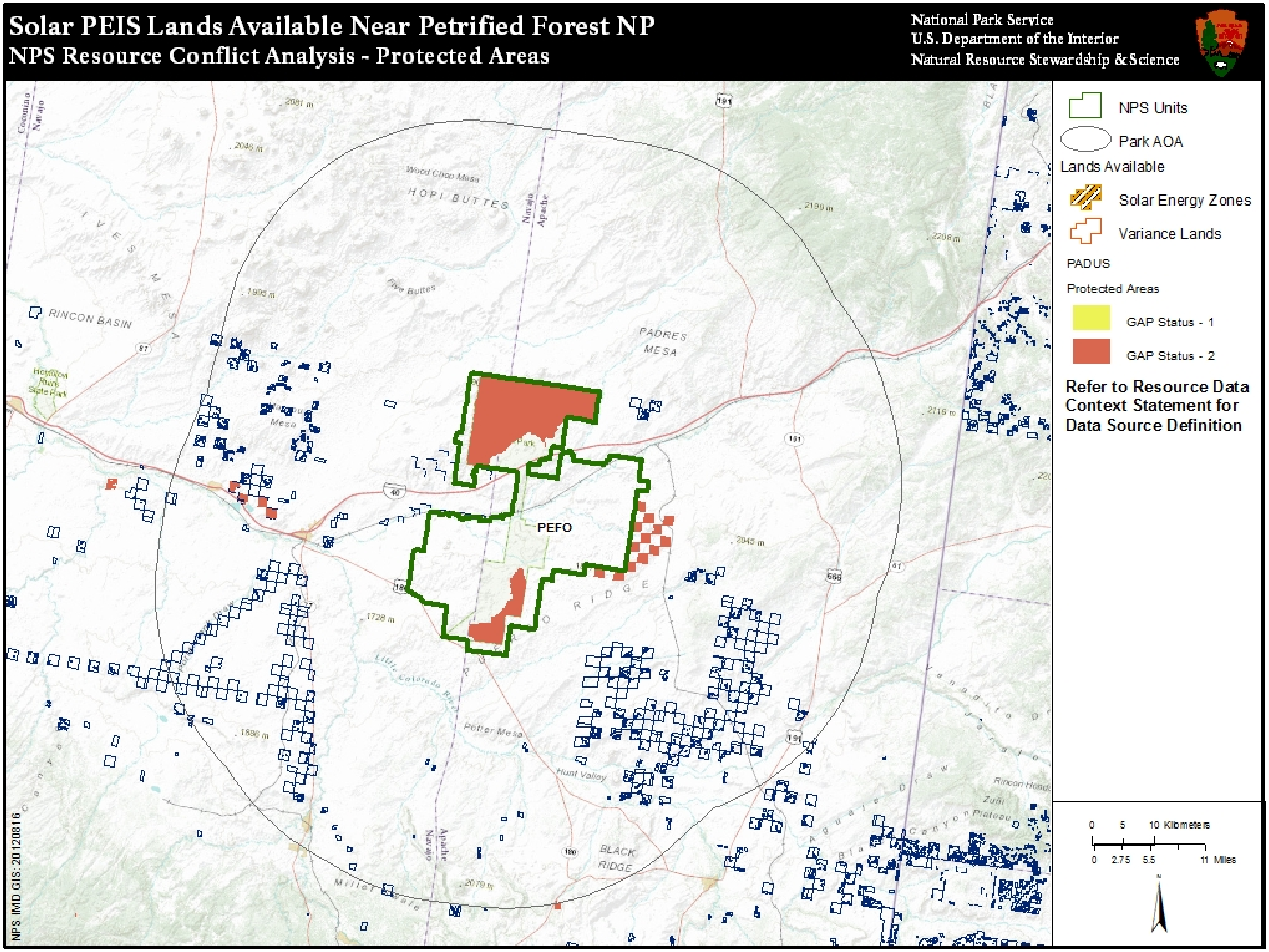

Solar PEIS Lands Available Near Petrified Forest NP
NPS Resource Conflict Analysis - Wetlands (500 Meter Buffer)
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Wetlands - 500 Meter Buf
Refer to Resource Data Context Statement for Data Source Definition
0 4 8 16 Kilometers
0 4 8 16 Miles
PEFO
Petrified Forest National Park
HOPI BUTTES
RINCON BASIN
PADRES MESA
Wood Chop Mesa
Pilot Mesa
Hunt Valley
BLACK RIDGE
Little Colorado River
NPS IMD GIS: 20120816

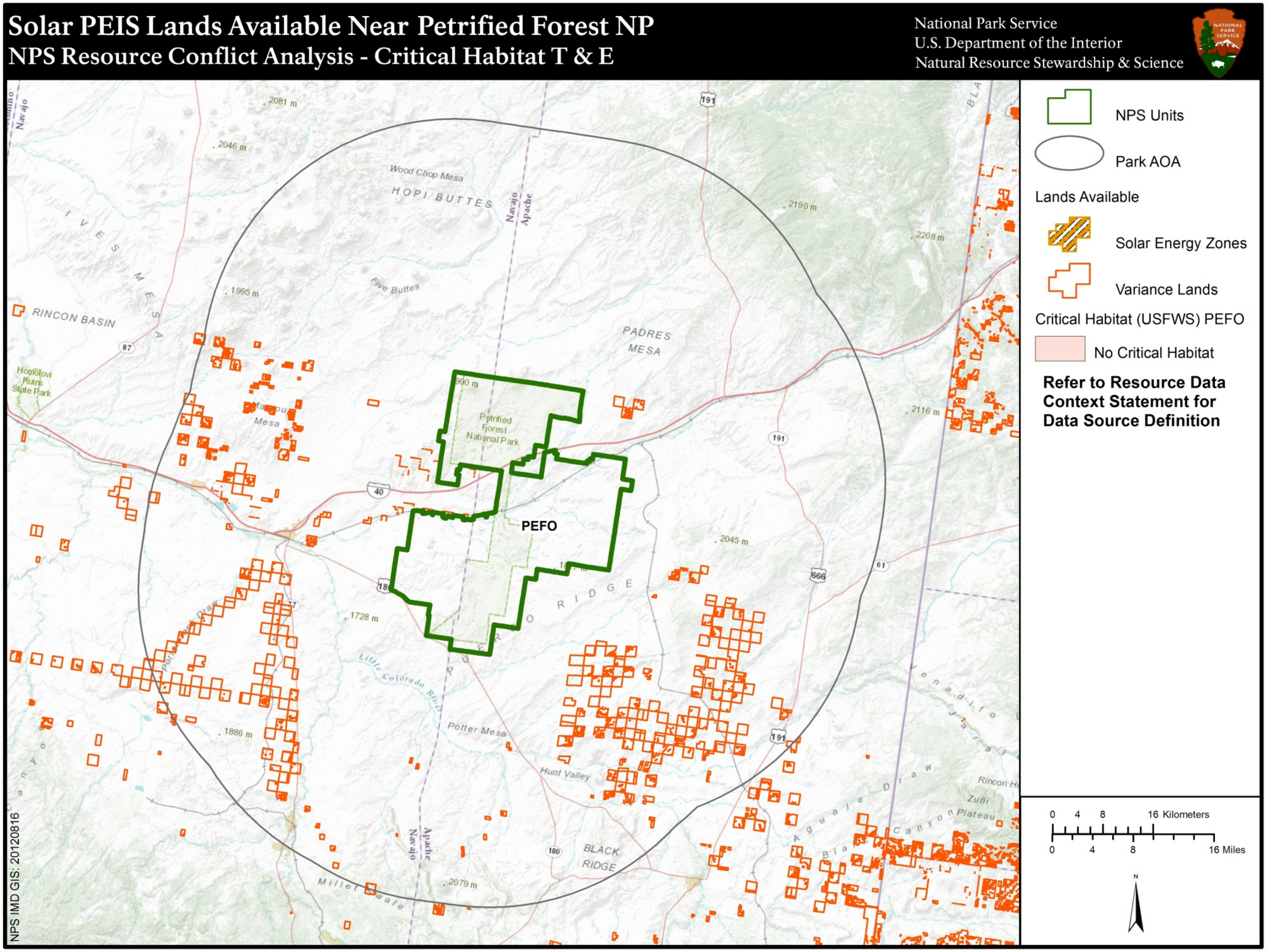

Solar PEIS Lands Available Near Petrified Forest NP
NPS Resource Conflict Analysis - Upstream Watersheds
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Upstream Watersheds
Refer to Resource Data Context Statement for Data Source Definition
0 4 8 16 Kilometers
0 4 8 16 Miles
PEFO
HOPI BUTTES
RINCON BASIN
PADRES MESA
BLACK RIDGE
Petrified Forest National Park
NPS IMD GIS: 20120816

Land Ownership

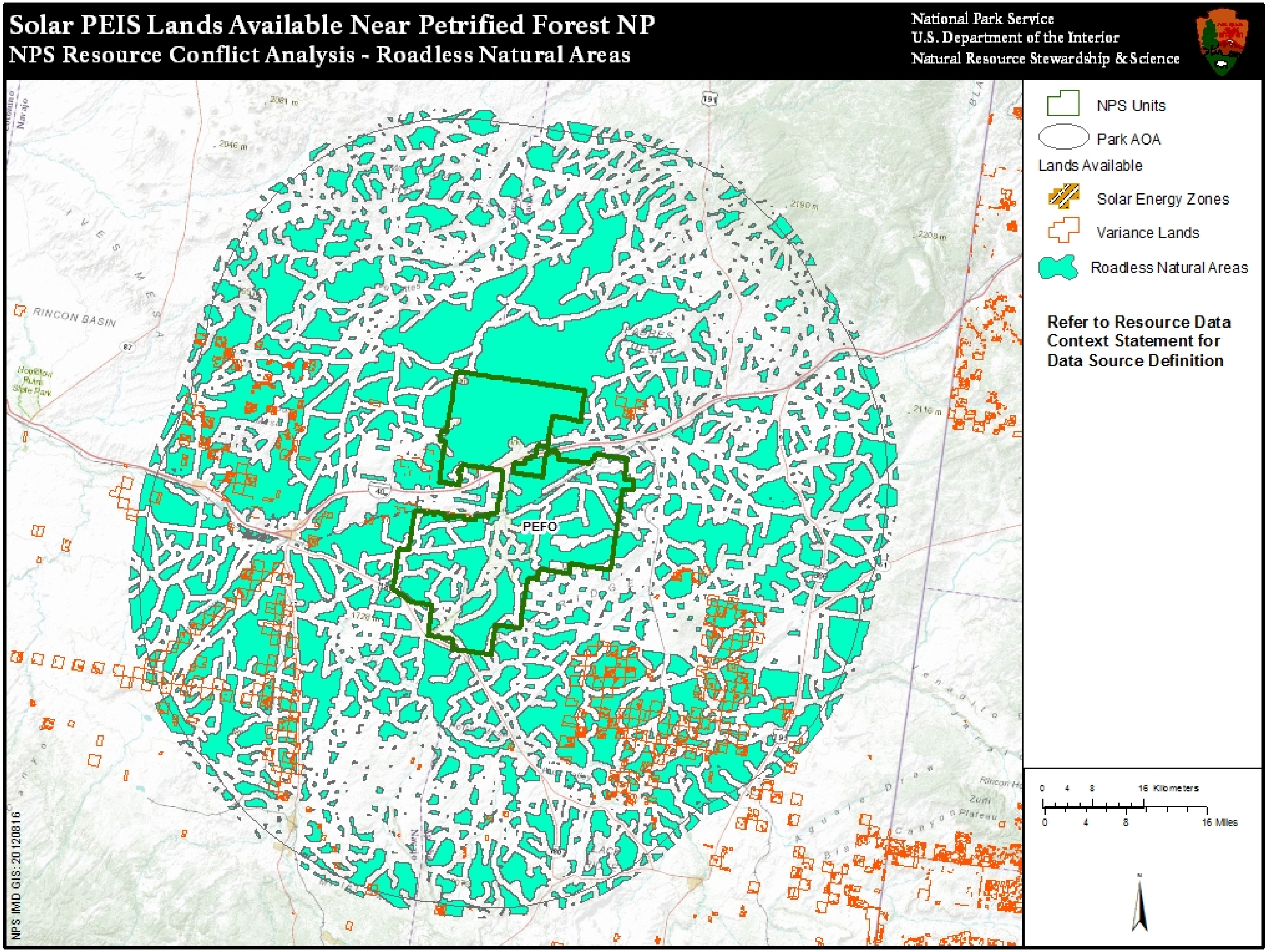


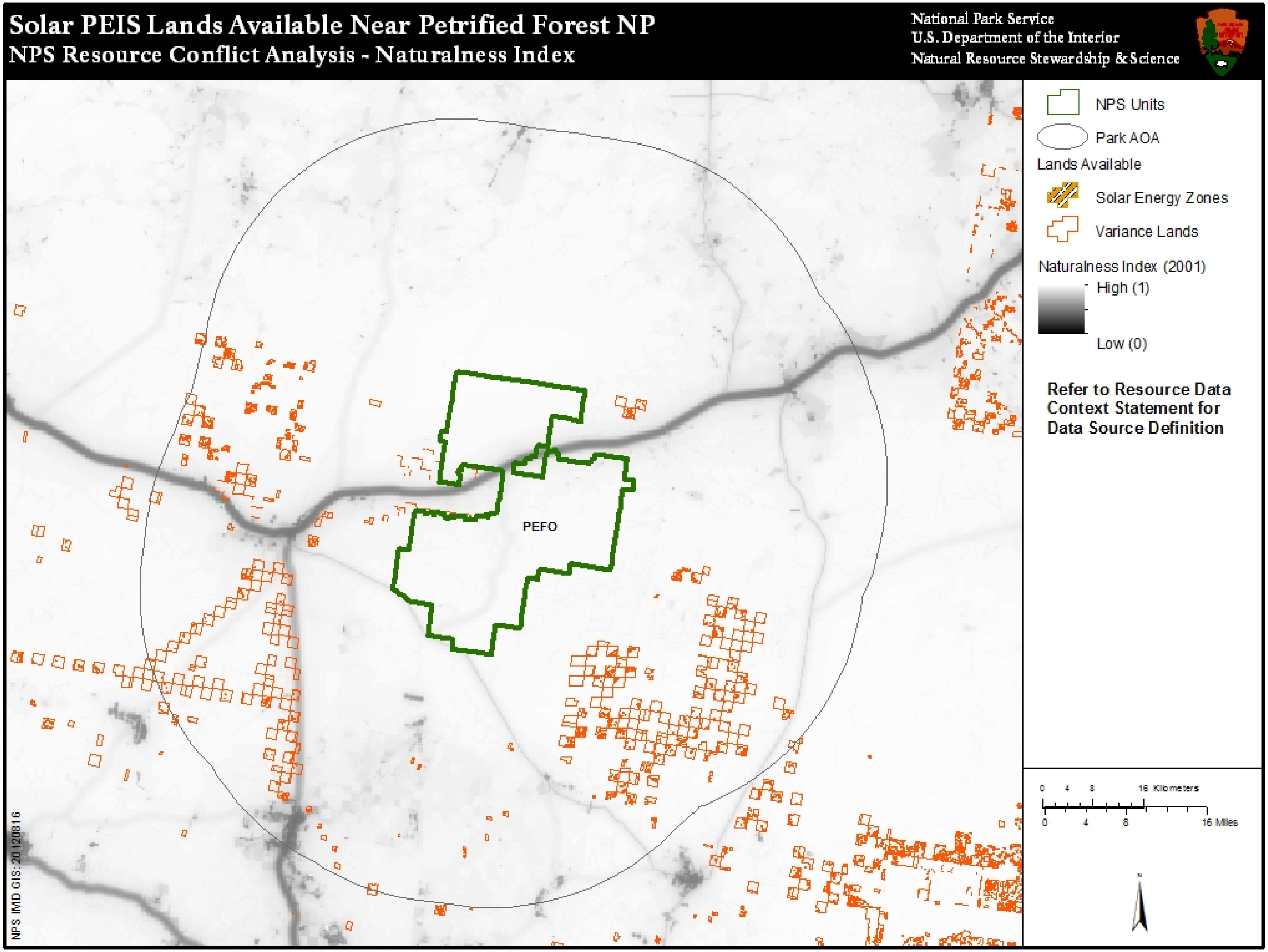
Protected Areas

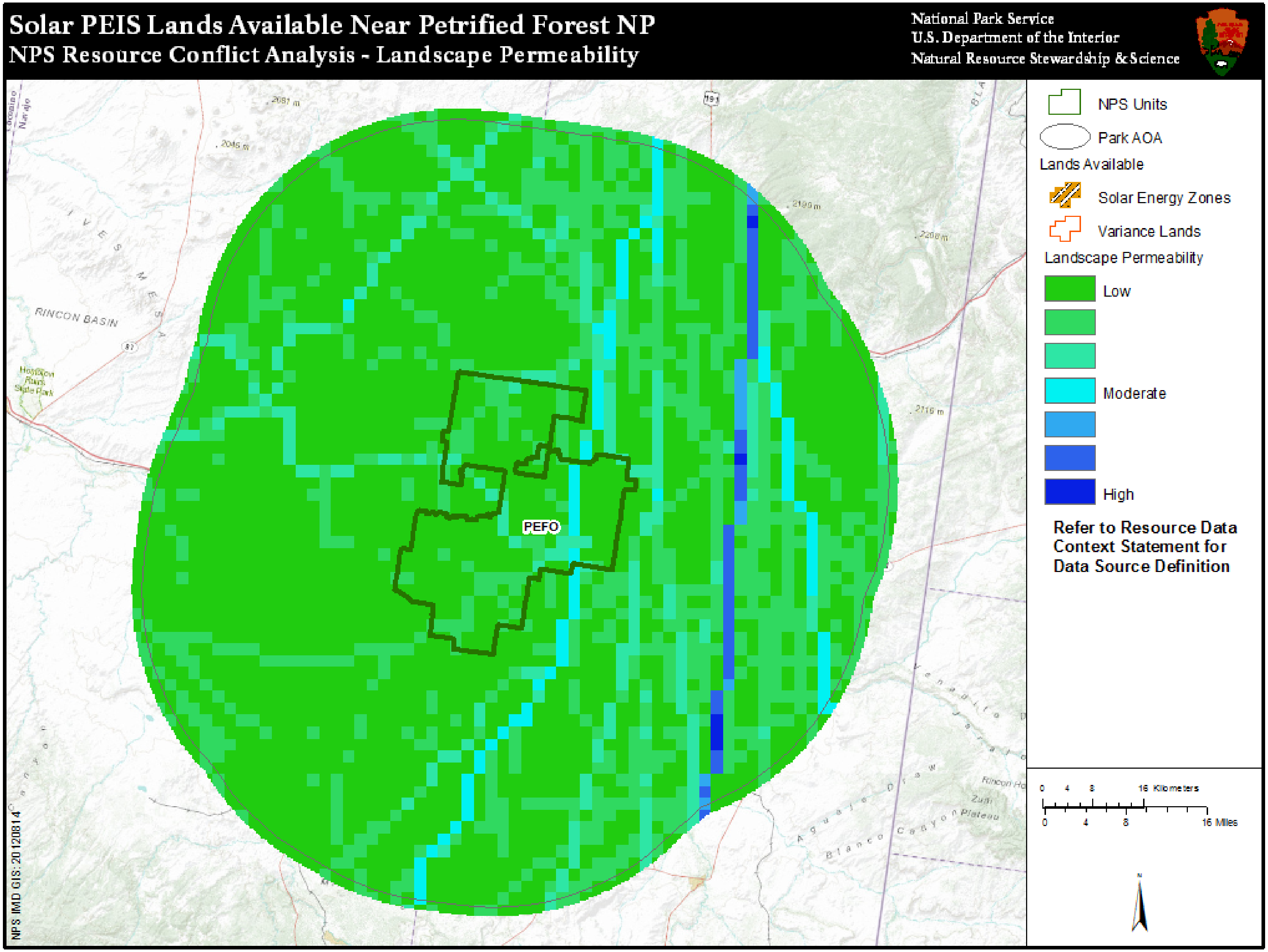


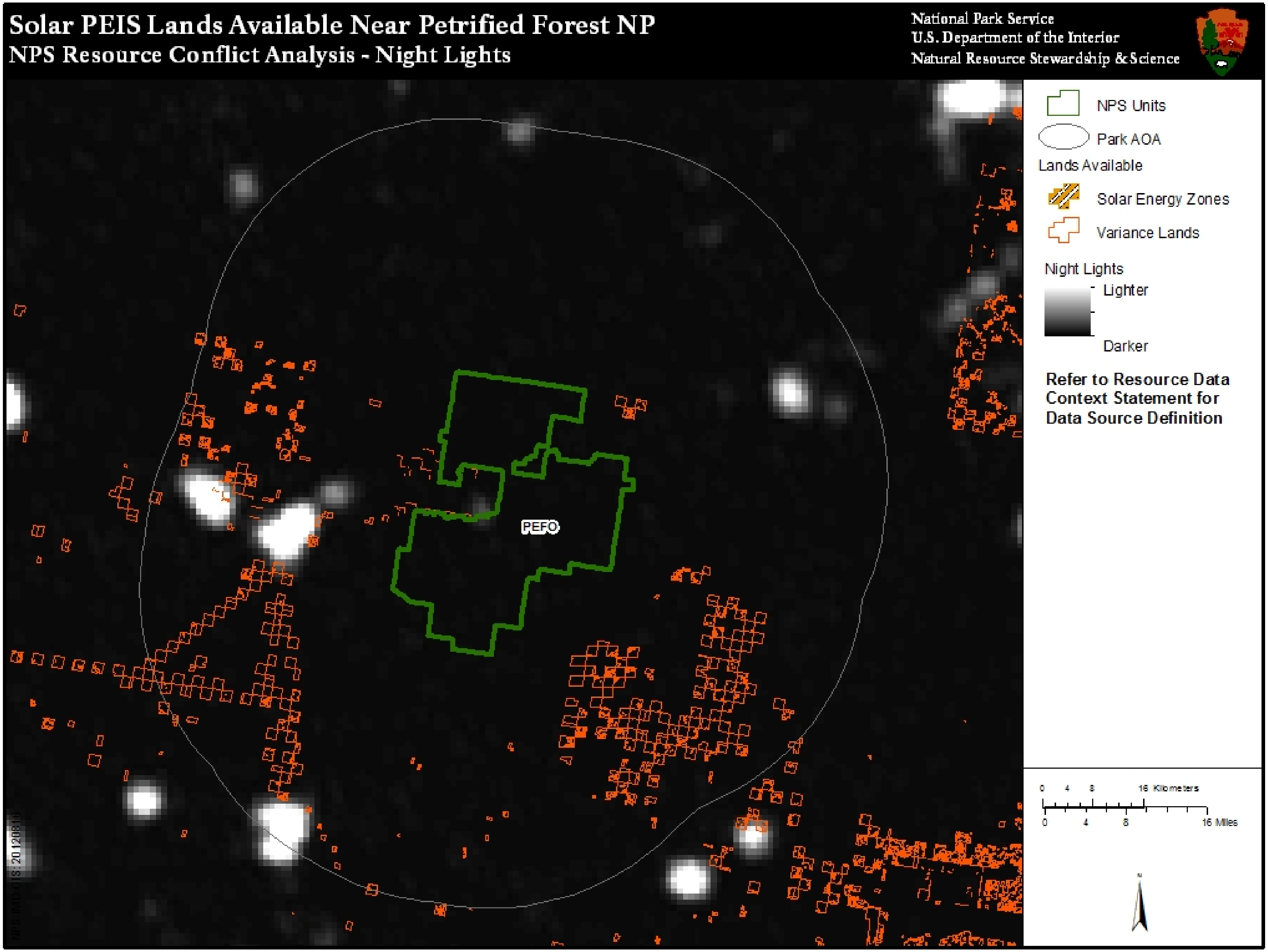


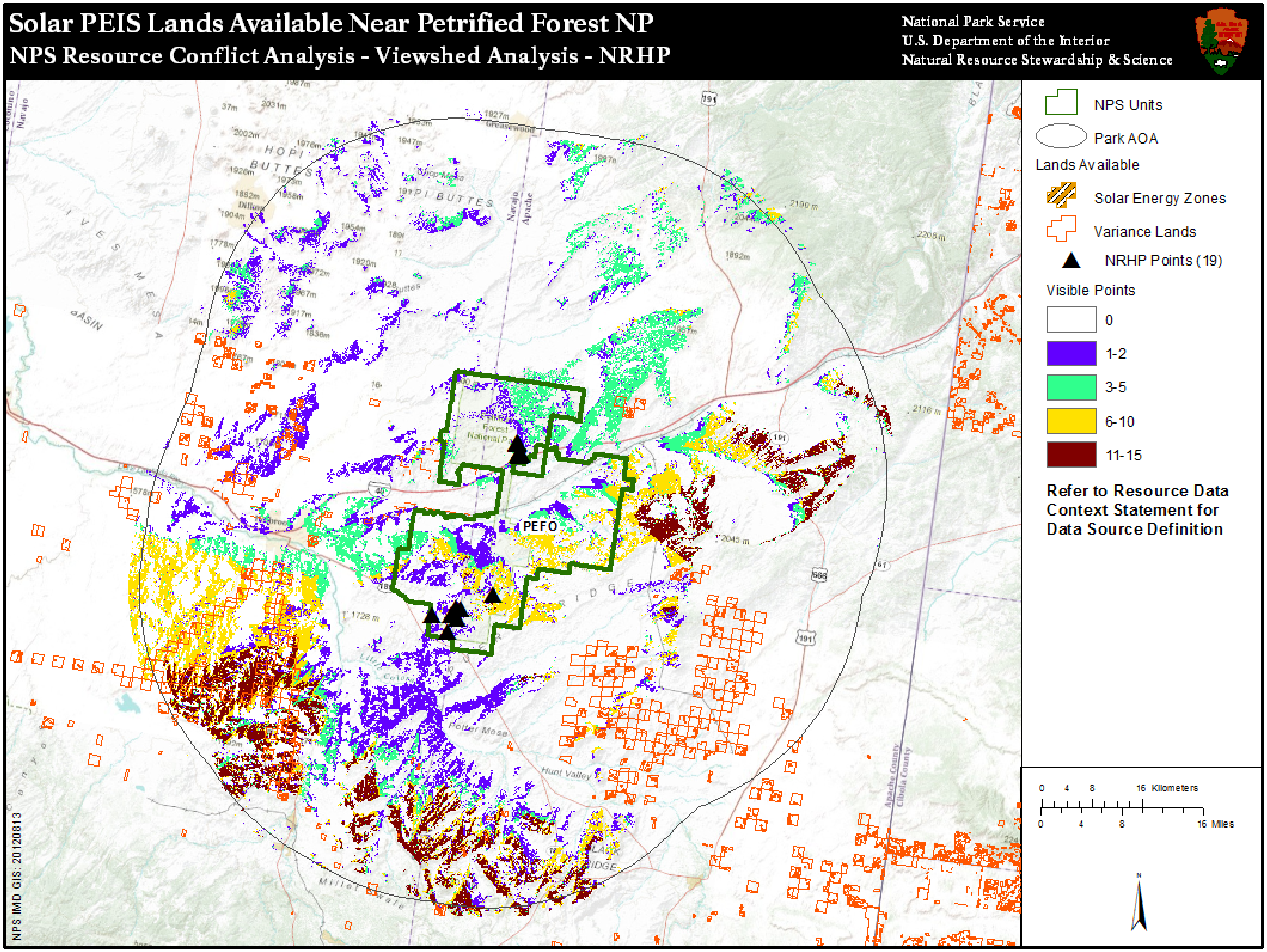
Solar PEIS Lands Available Near Petrified Forest NP
NPS Resource Conflict Analysis - Critical Habitat T & E
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Critical Habitat (USFWS) PEFO
No Critical Habitat
Refer to Resource Data Context Statement for Data Source Definition
0 4 8 16 Kilometers
0 4 8 16 Miles
PEFO
Petrified Forest National Park
HOPI BUTTES
Wood Chop Mesa
Five Buttes
PADRES MESA
RINCON BASIN
Homolovi Ruins State Park
Little Colorado River
Potter Mesa
Hunt Valley
BLACK RIDGE
Navajo
Apache
NPS IMD GIS: 20120816


Solar PEIS Lands Available Near Petrified Forest NP
NPS Resource Conflict Analysis - Roadless Natural Areas
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Roadless Natural Areas
Refer to Resource Data Context Statement for Data Source Definition
PEFO
RINCON BASIN
0 4 8 16 Kilometers
0 4 8 16 Miles
NPS IMD GIS: 20120816


Solar PEIS Lands Available Near Petrified Forest NP
NPS Resource Conflict Analysis - Naturalness Index
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Naturalness Index (2001)
High (1)
Low (0)
Refer to Resource Data Context Statement for Data Source Definition
PEFO
0 4 8 16 Kilometers
0 4 8 16 Miles
NPS IMD GIS: 20120816

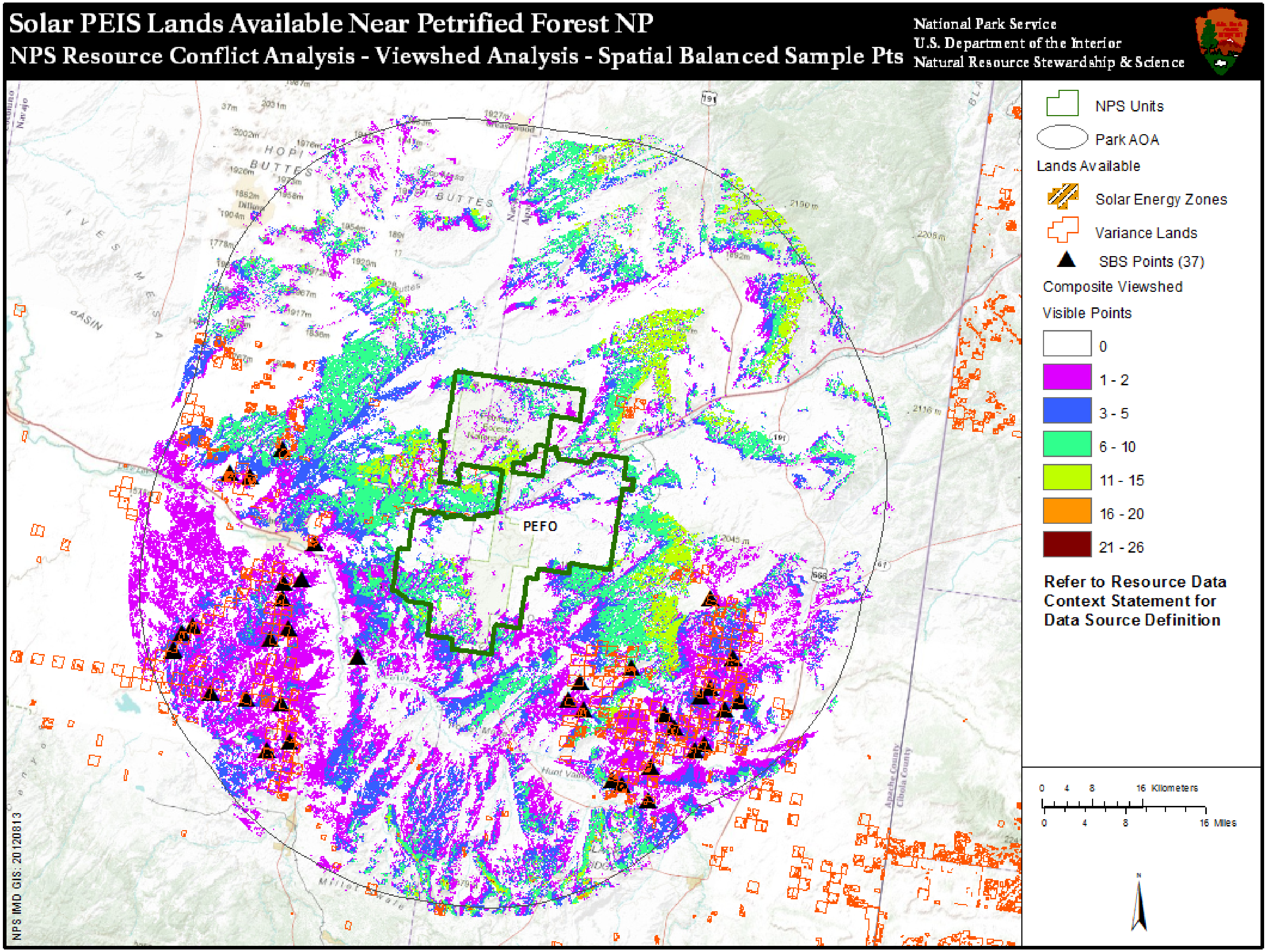

Solar PEIS Lands Available Near Petrified Forest NP
NPS Resource Conflict Analysis - Landscape Permeability
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Landscape Permeability
Low
Moderate
High
Refer to Resource Data Context Statement for Data Source Definition
PEFO
RINCON BASIN
0 4 8 16 Kilometers
0 4 8 16 Miles
NPS IMD GIS: 20120814


Solar PEIS Lands Available Near Petrified Forest NP
NPS Resource Conflict Analysis - Night Lights
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Night Lights
Lighter
Darker
Refer to Resource Data Context Statement for Data Source Definition
PEFO
0 4 8 16 Kilometers
0 4 8 16 Miles

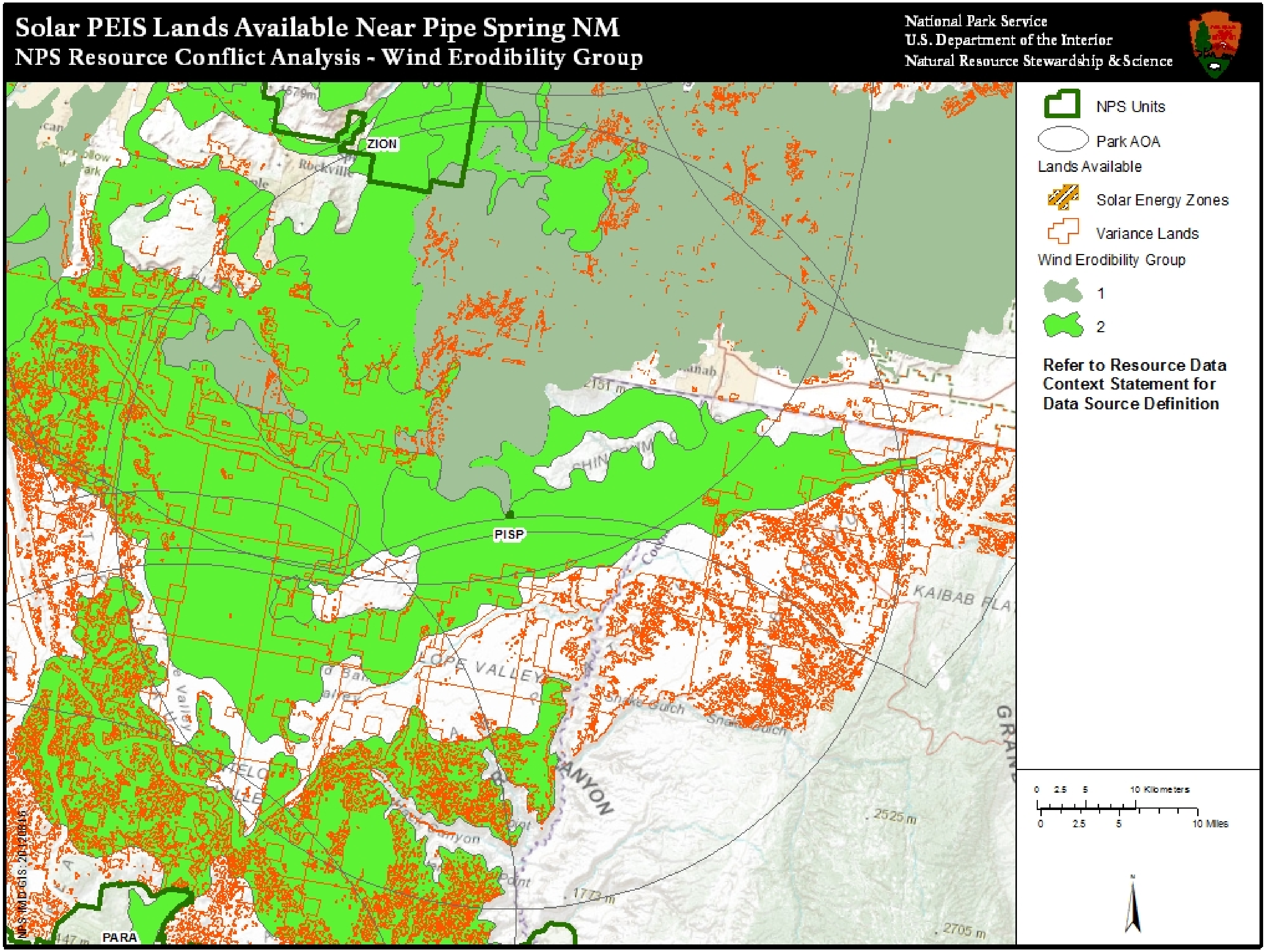


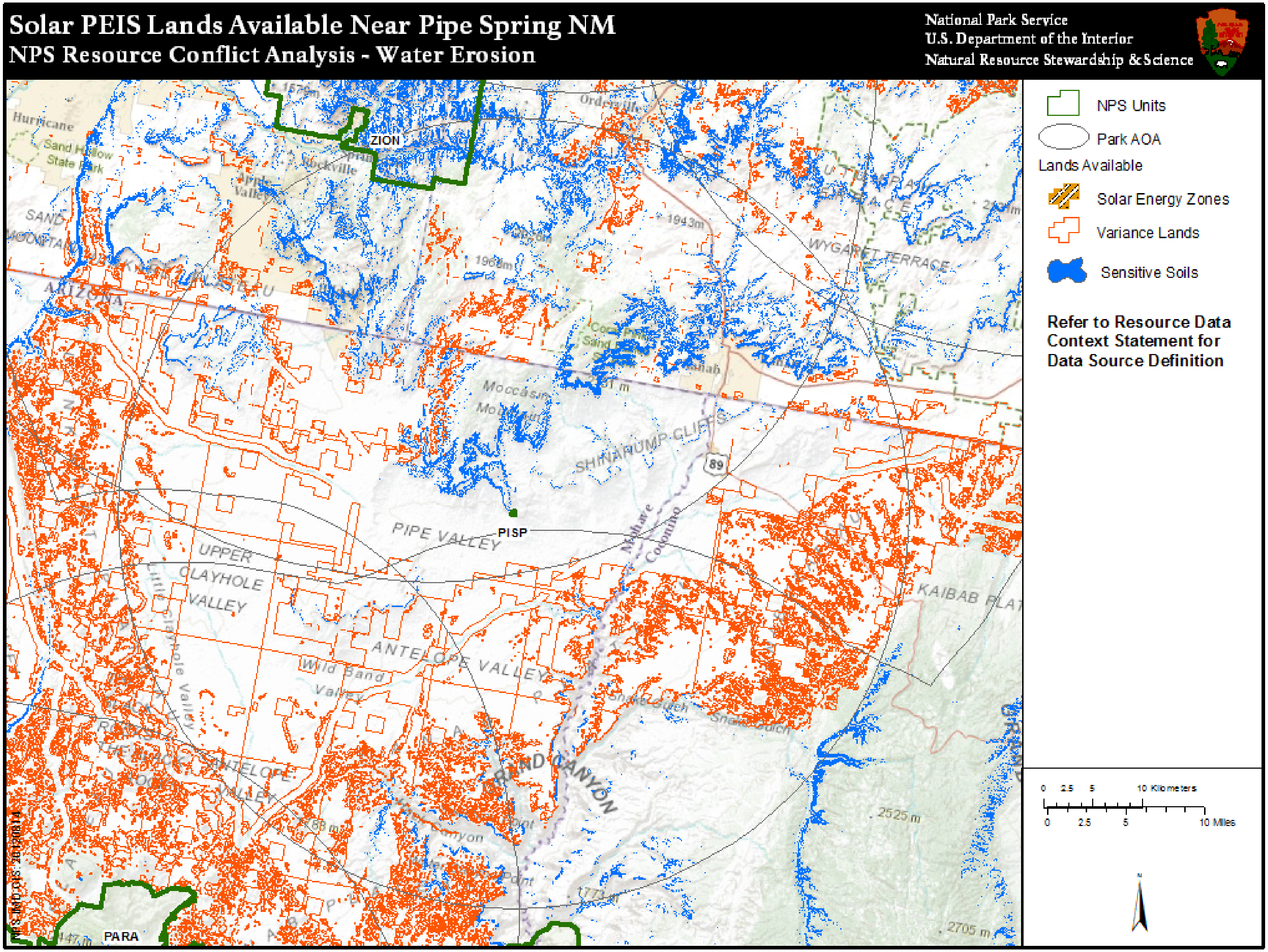
Solar PEIS Lands Available Near Petrified Forest NP
NPS Resource Conflict Analysis - Viewshed Analysis - NRHP
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
NRHP Points (19)
Visible Points
0
1-2
3-5
6-10
11-15
Refer to Resource Data Context Statement for Data Source Definition
0 4 8 16 Kilometers
0 4 8 16 Miles
PEFO
NPS IMD GIS: 20120813

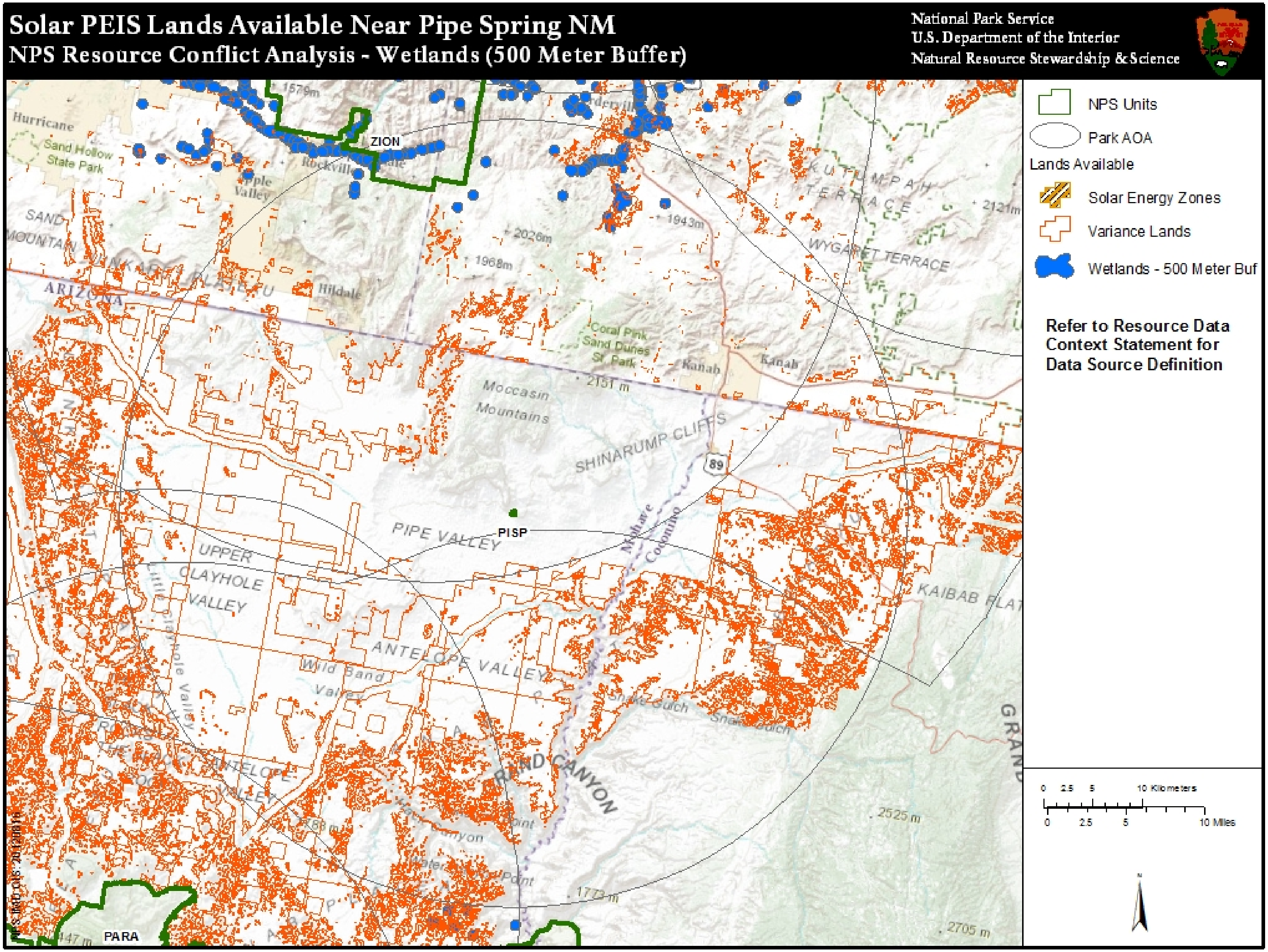
Viewshed – Spatial Balanced Sample



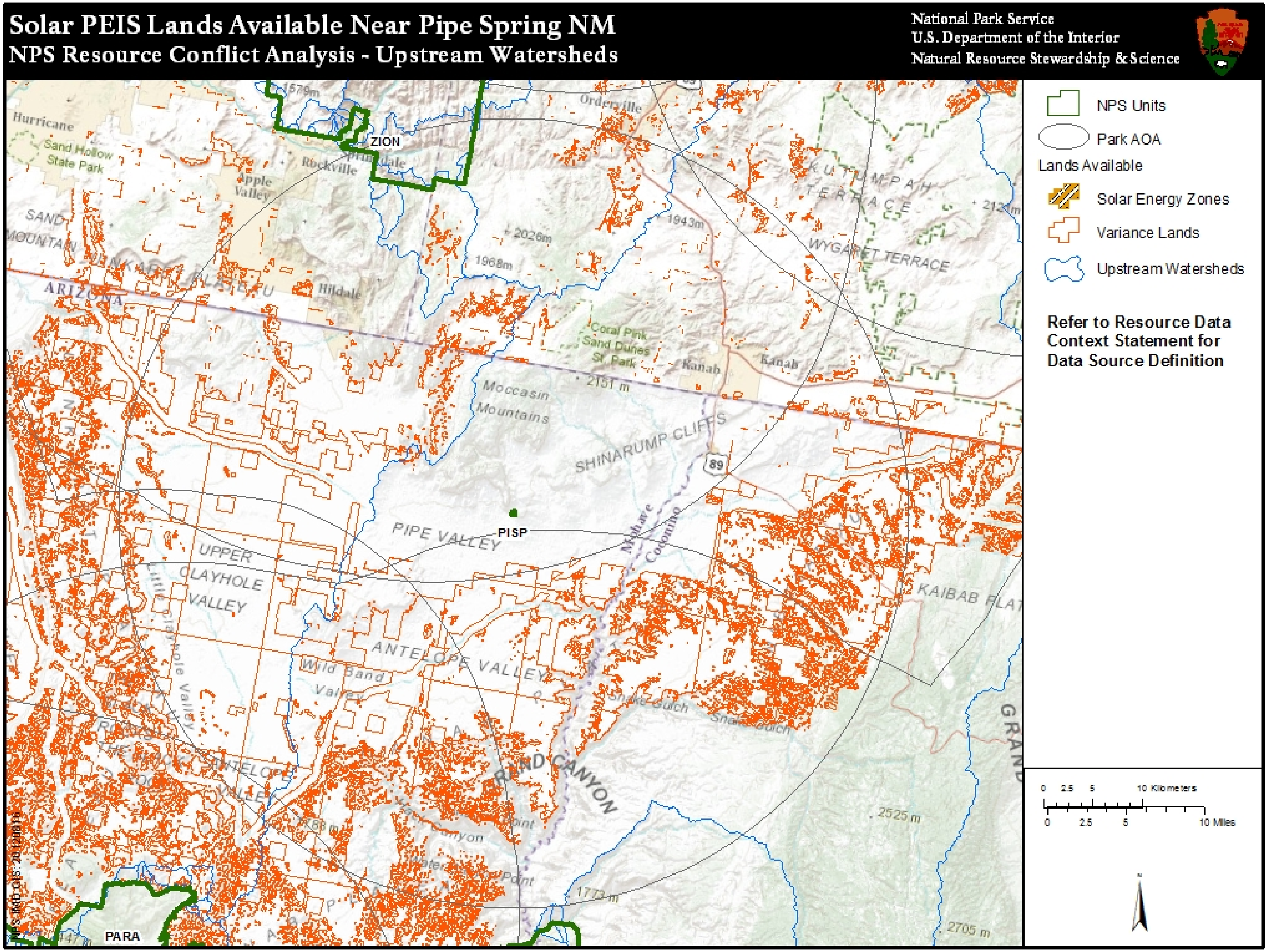
Pipe Spring National Monument
Wind Erodibility Group



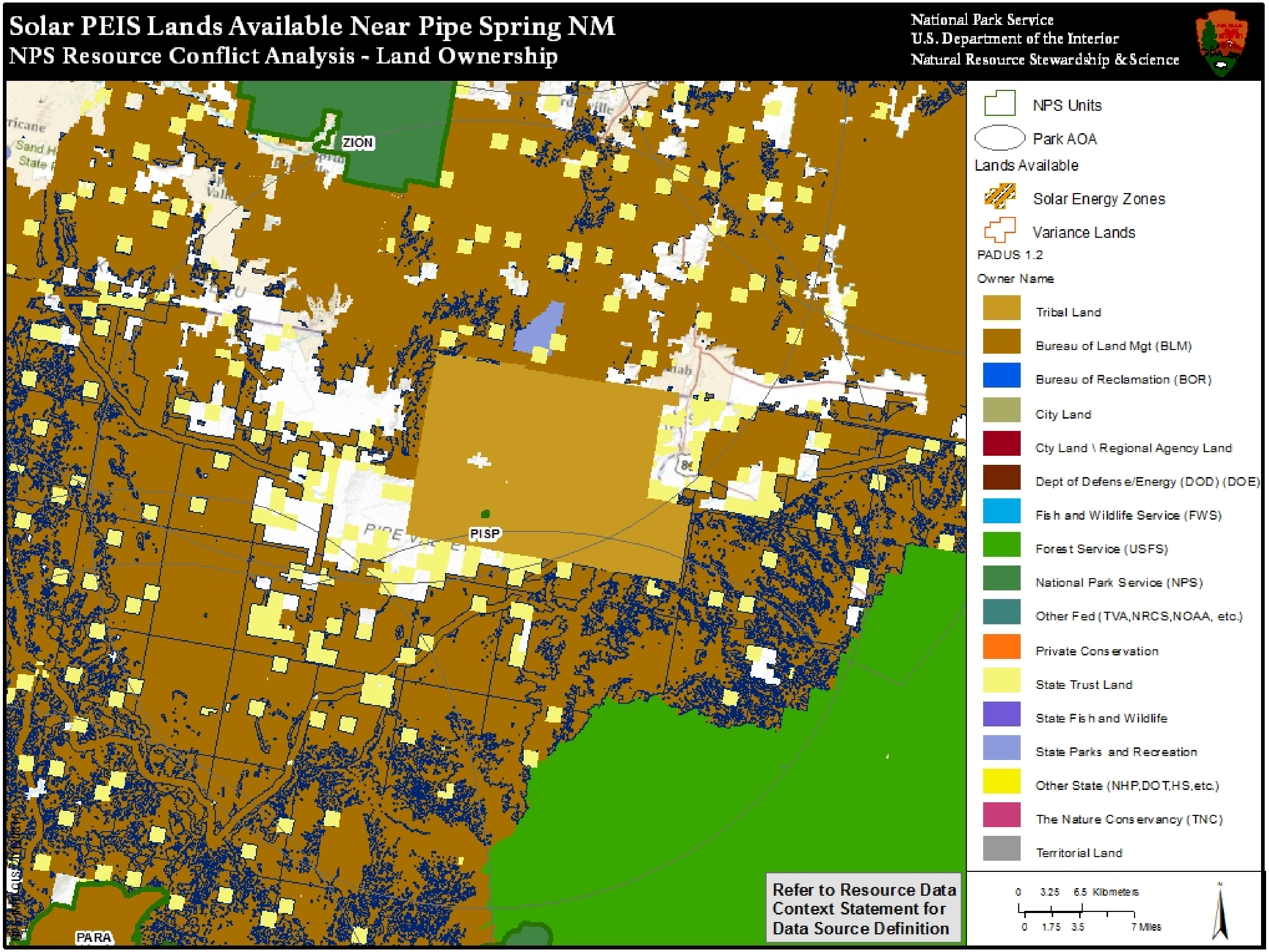

Solar PEIS Lands Available Near Pipe Spring NM
NPS Resource Conflict Analysis - Water Erosion
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Sensitive Soils
Refer to Resource Data Context Statement for Data Source Definition
ZION
PISP
PARA
PIPE VALLEY
UPPER CLAYHOLE VALLEY
ANTELOPE VALLEY
KAIBAB PLAT
SHINARUMP CLIFFS
ARIZONA
Hurricane
Moccasin
89
0 2.5 5 10 Kilometers
0 2.5 5 10 Miles

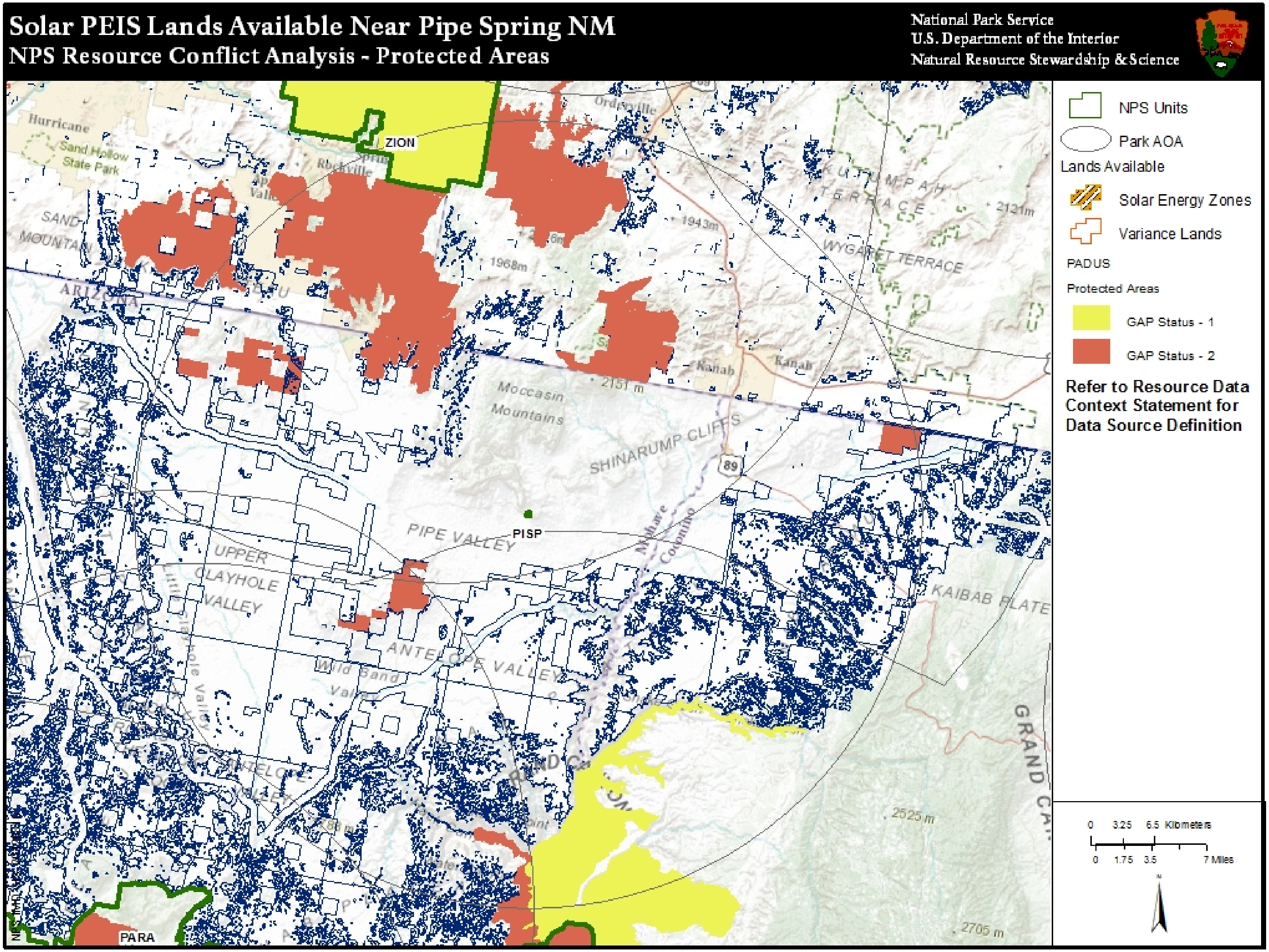

Solar PEIS Lands Available Near Pipe Spring NM
NPS Resource Conflict Analysis - Wetlands (500 Meter Buffer)
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Wetlands - 500 Meter Buf
Refer to Resource Data Context Statement for Data Source Definition
ZION
PISP
PARA
PIPE VALLEY
UPPER CLAYHOLE VALLEY
ANTELOPE VALLEY
SHINARUMP CLIFFS
KAIBAB PLAT
Moccasin Mountains
Coral Pink Sand Dunes St. Park
Kanab
Hurricane
Sand Hollow State Park
ARIZONA
WYGARET TERRACE
10 Kilometers
10 Miles

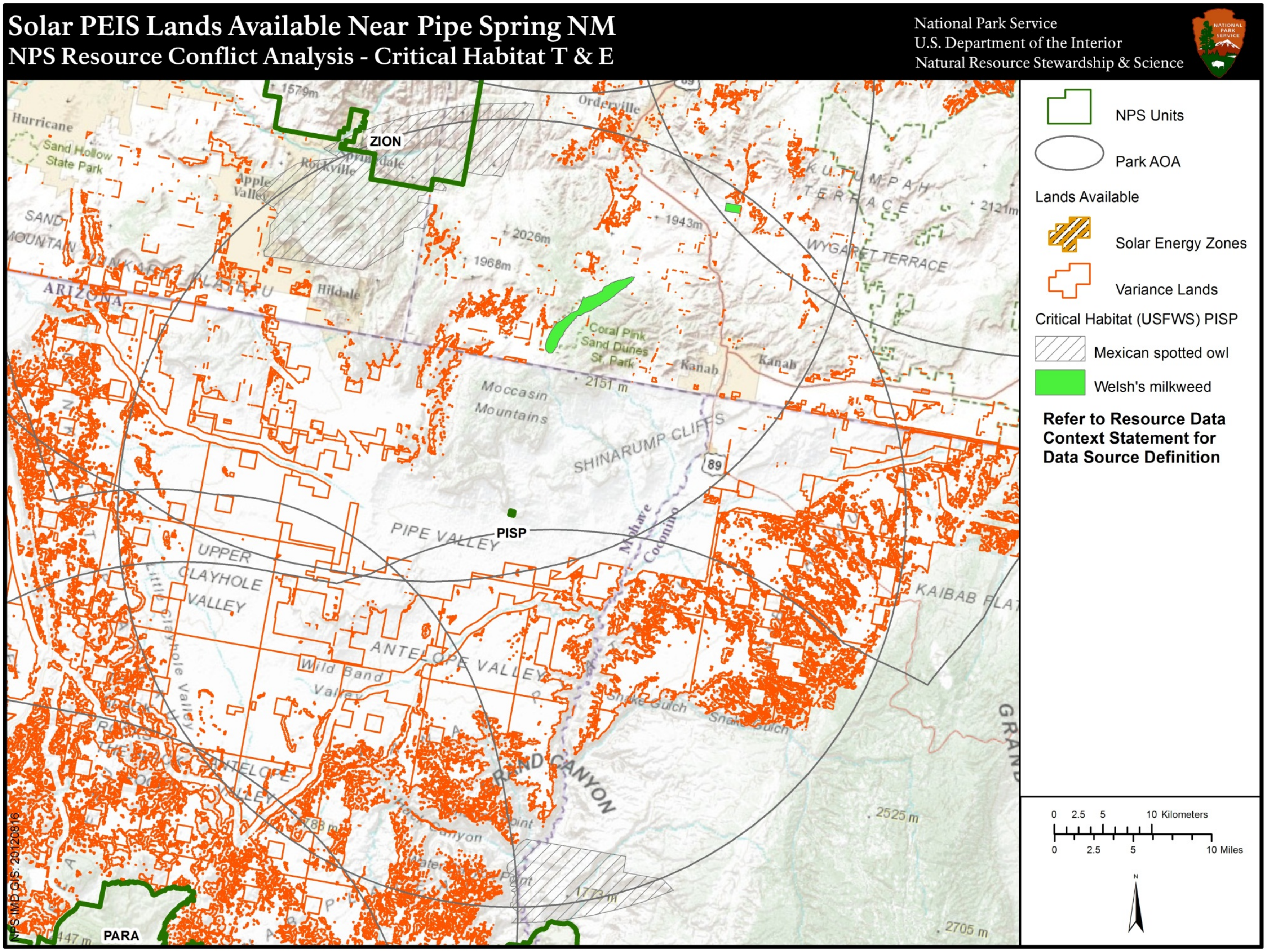
Upstream Watershed

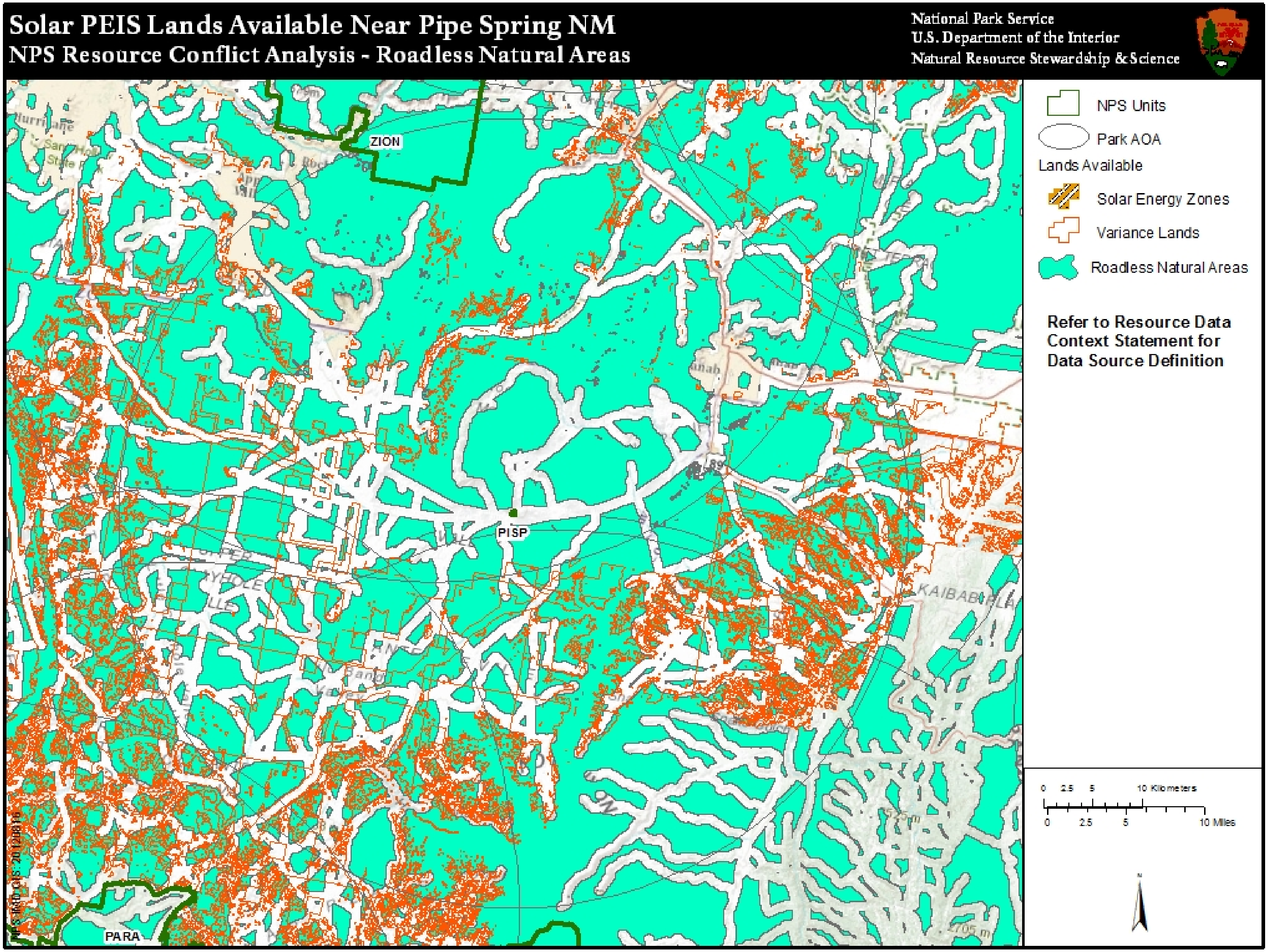


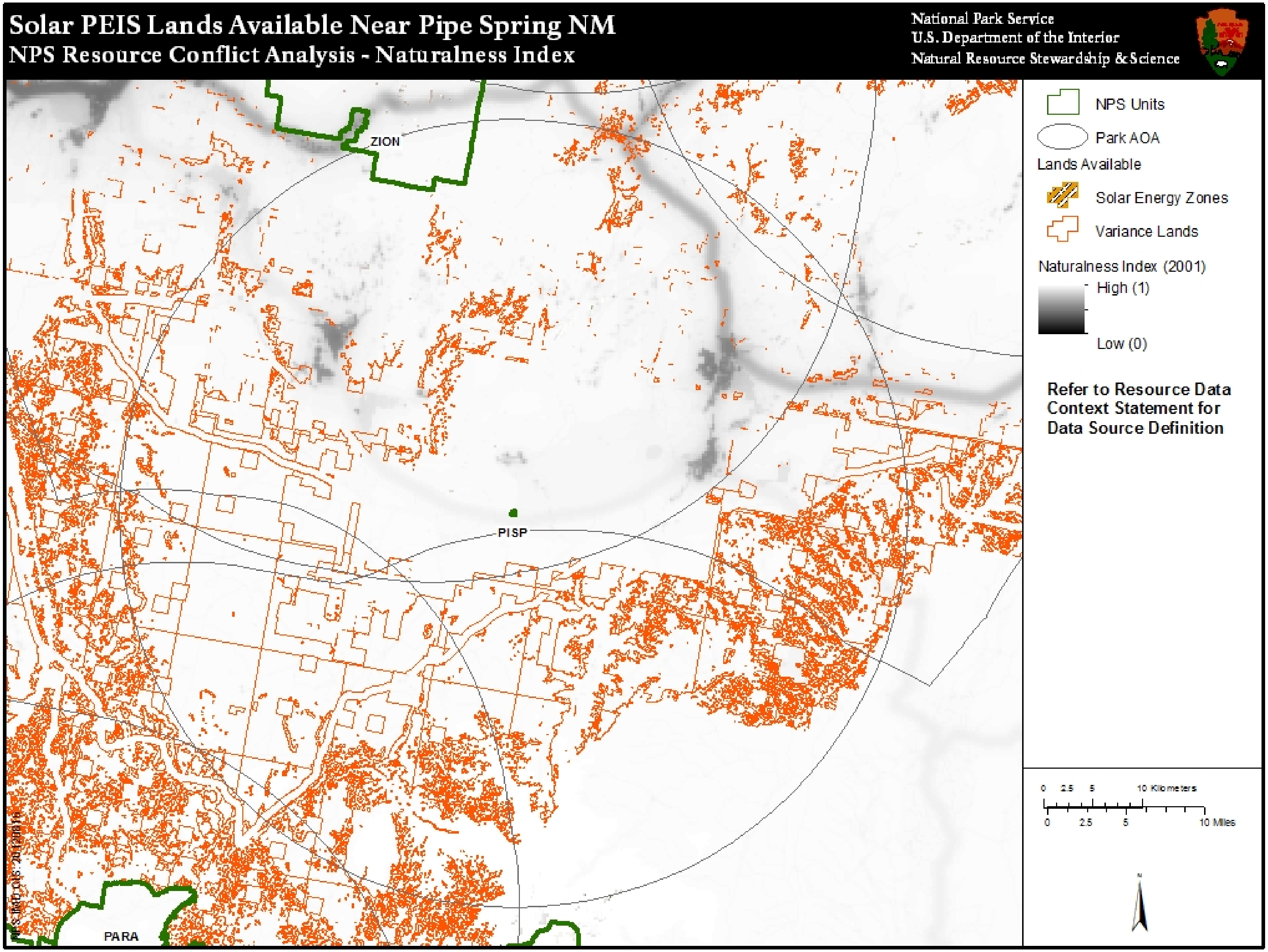
Land Ownership



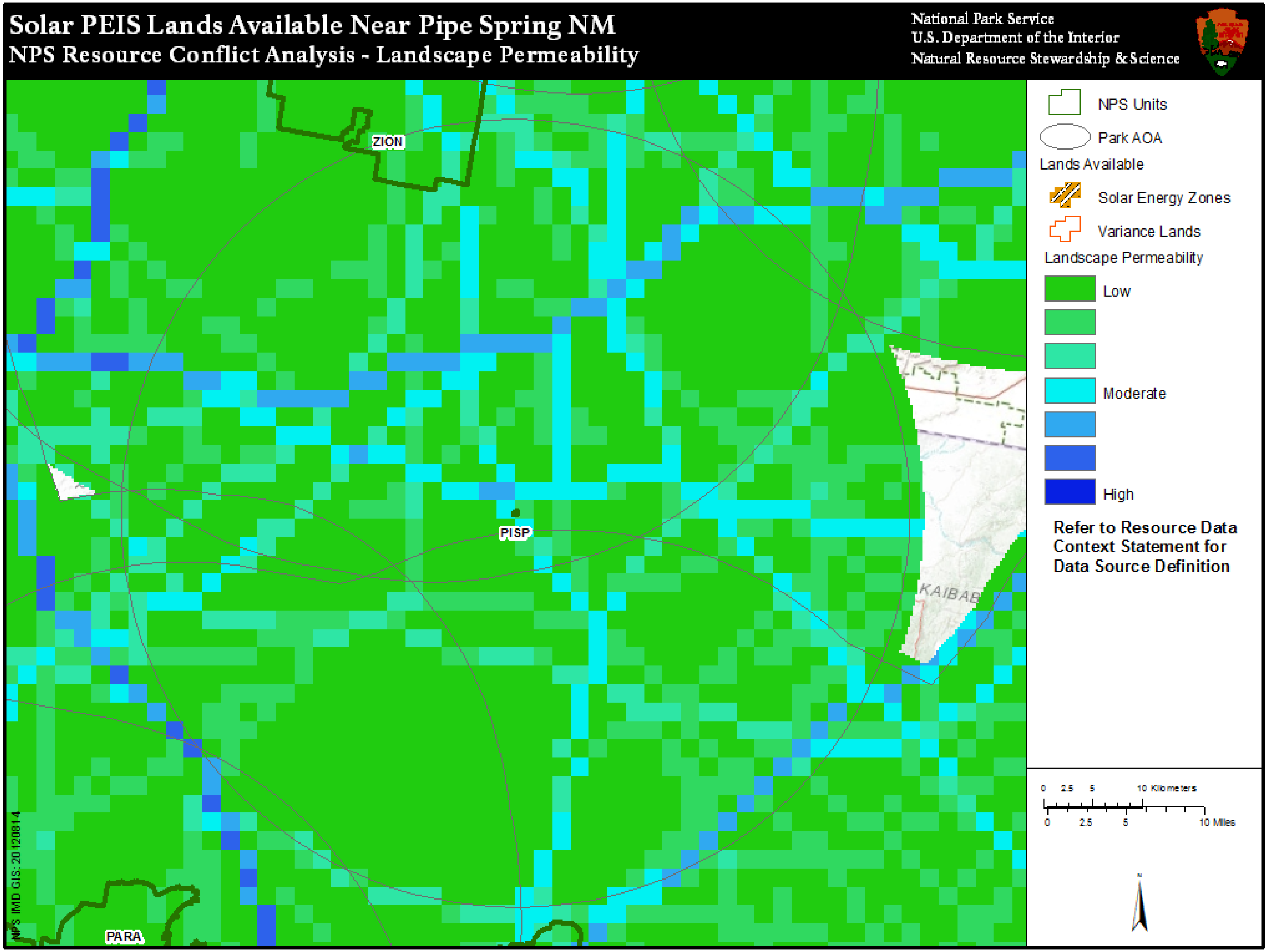

Solar PEIS Lands Available Near Pipe Spring NM
NPS Resource Conflict Analysis - Protected Areas
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
PADUS
Protected Areas
GAP Status - 1
GAP Status - 2
Refer to Resource Data Context Statement for Data Source Definition
0 3.25 6.5 Kilometers
0 1.75 3.5 7 Miles
ZION
PISP
PARA
Hurricane
Sand Hollow State Park
Rockville
Kanab
SHINARUMP CLIFFS
PIPE VALLEY
UPPER CLAYHOLE VALLEY
ANTELOPE VALLEY
KAIBAB PLATEAU
WYGARET TERRACE
Moccasin Mountains
ARIZONA
89


Solar PEIS Lands Available Near Pipe Spring NM
NPS Resource Conflict Analysis - Critical Habitat T & E
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Critical Habitat (USFWS) PISP
Mexican spotted owl
Welsh's milkweed
Refer to Resource Data Context Statement for Data Source Definition
0 2.5 5 10 Kilometers
0 2.5 5 10 Miles
N
ZION
PISP
PARA
Hurricane
Sand Hollow State Park
Rockville
Apple Valley
Hildale
Orderville
Kanab
Coral Pink Sand Dunes St. Park
Moccasin Mountains
SHINARUMP CLIFFS
PIPE VALLEY
UPPER CLAYHOLE VALLEY
ANTELOPE VALLEY
Wild Band Valley
KAIBAB PLAT
Snake Gulch
GRAND CANYON
WYGARET TERRACE
ARIZONA
89
1579m
1943m
2026m
1968m
2121m
2151 m
2525 m
2705 m
1773 m
NPS IMD GIS 20120816

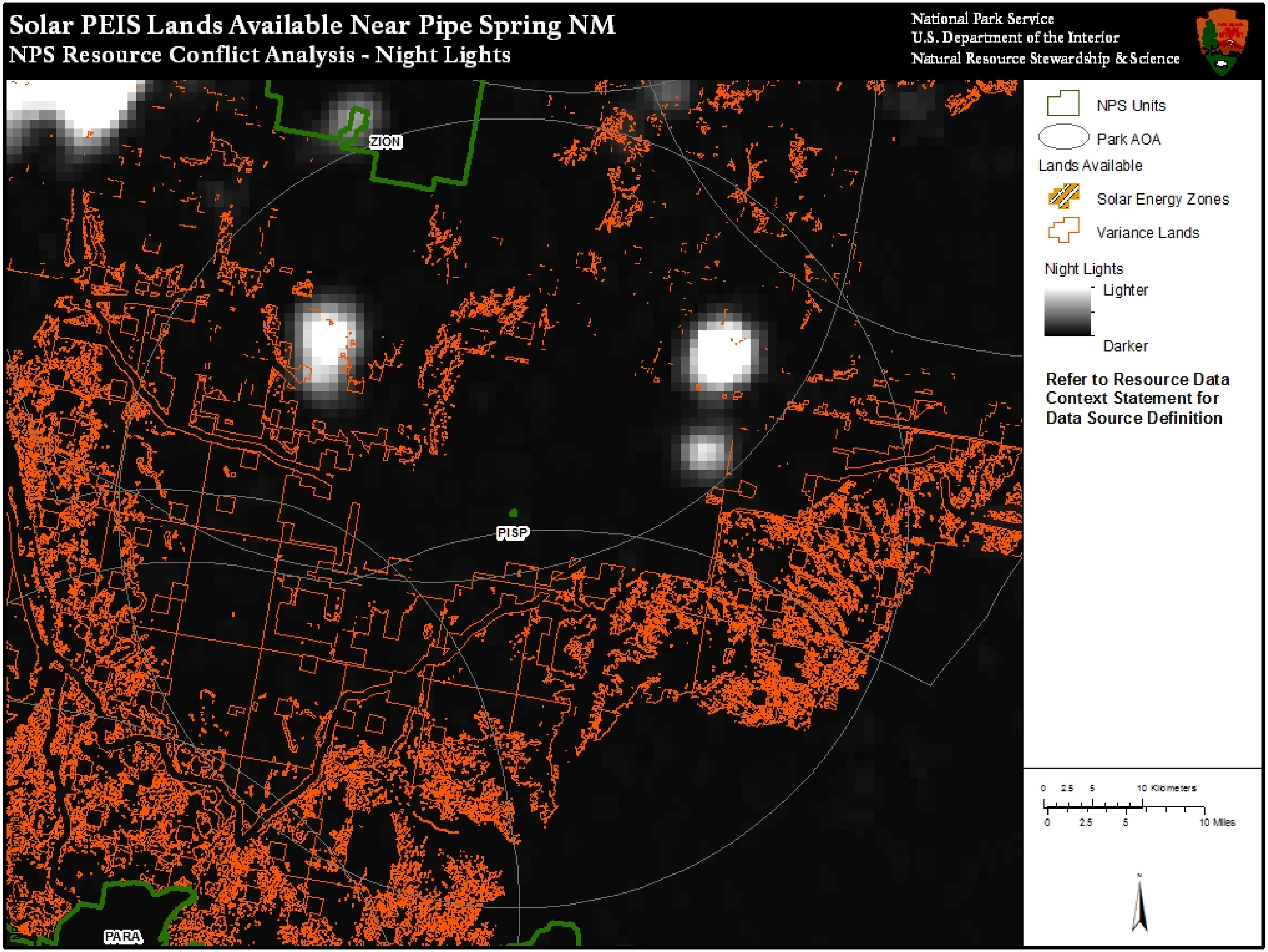

Solar PEIS Lands Available Near Pipe Spring NM
NPS Resource Conflict Analysis - Roadless Natural Areas
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Roadless Natural Areas
Refer to Resource Data Context Statement for Data Source Definition
0 2.5 5 10 Kilometers
0 2.5 5 10 Miles
ZION
PISP
PARA
KAIBAB PLA

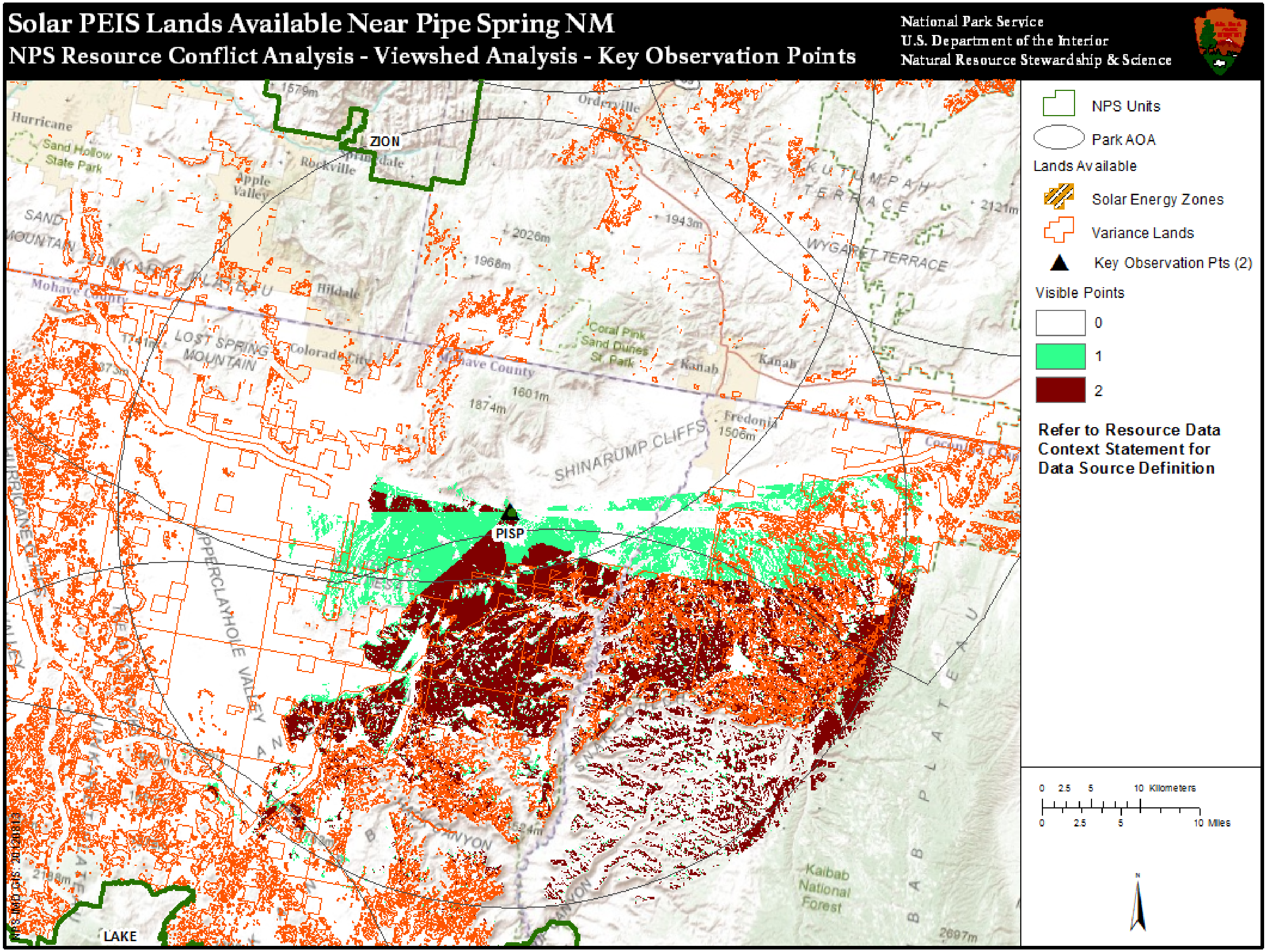


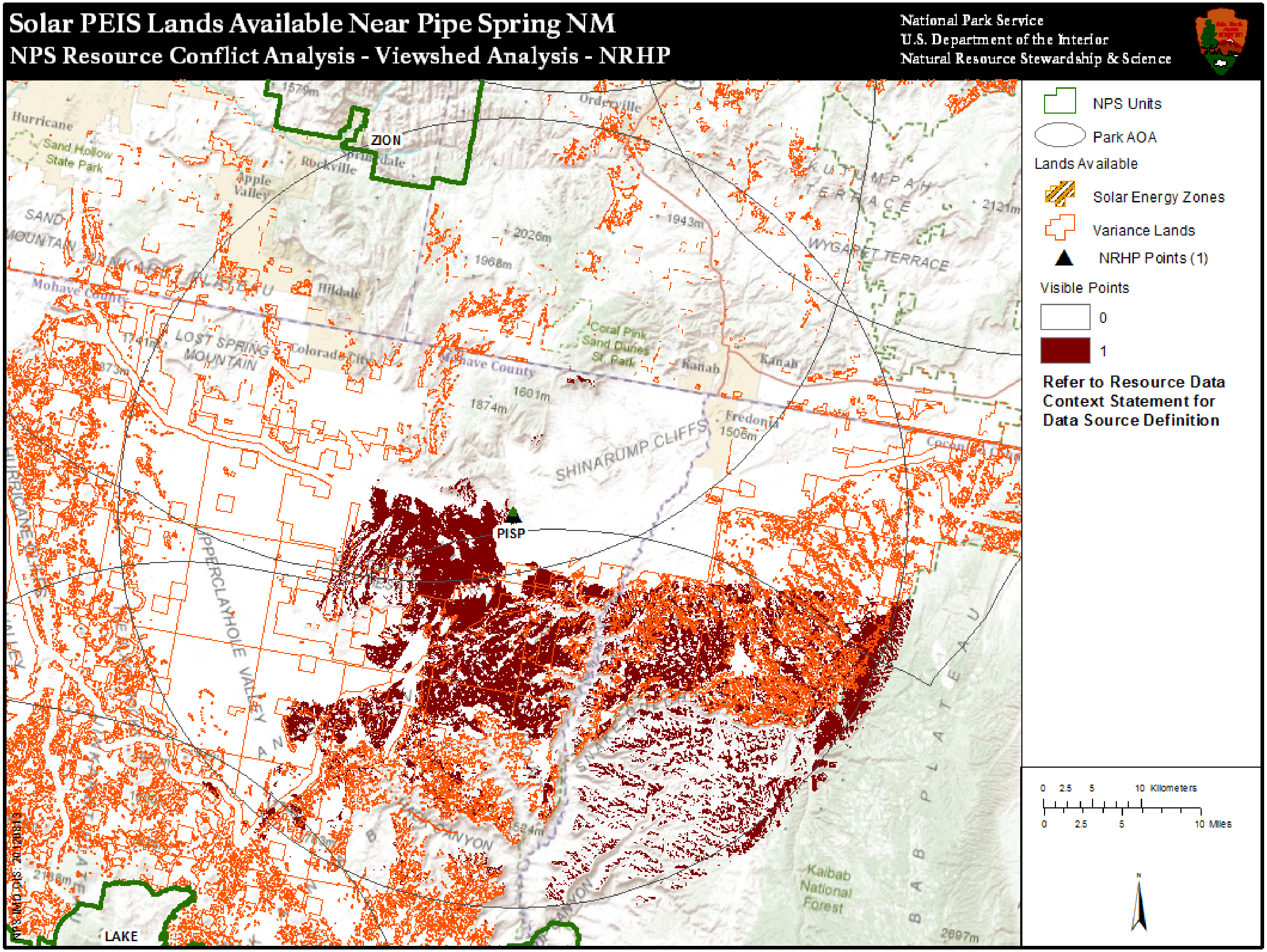
Solar PEIS Lands Available Near Pipe Spring NM
NPS Resource Conflict Analysis - Naturalness Index
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Naturalness Index (2001)
High (1)
Low (0)
Refer to Resource Data Context Statement for Data Source Definition
0 2.5 5 10 Kilometers
0 2.5 5 10 Miles
ZION
PISP
PARA

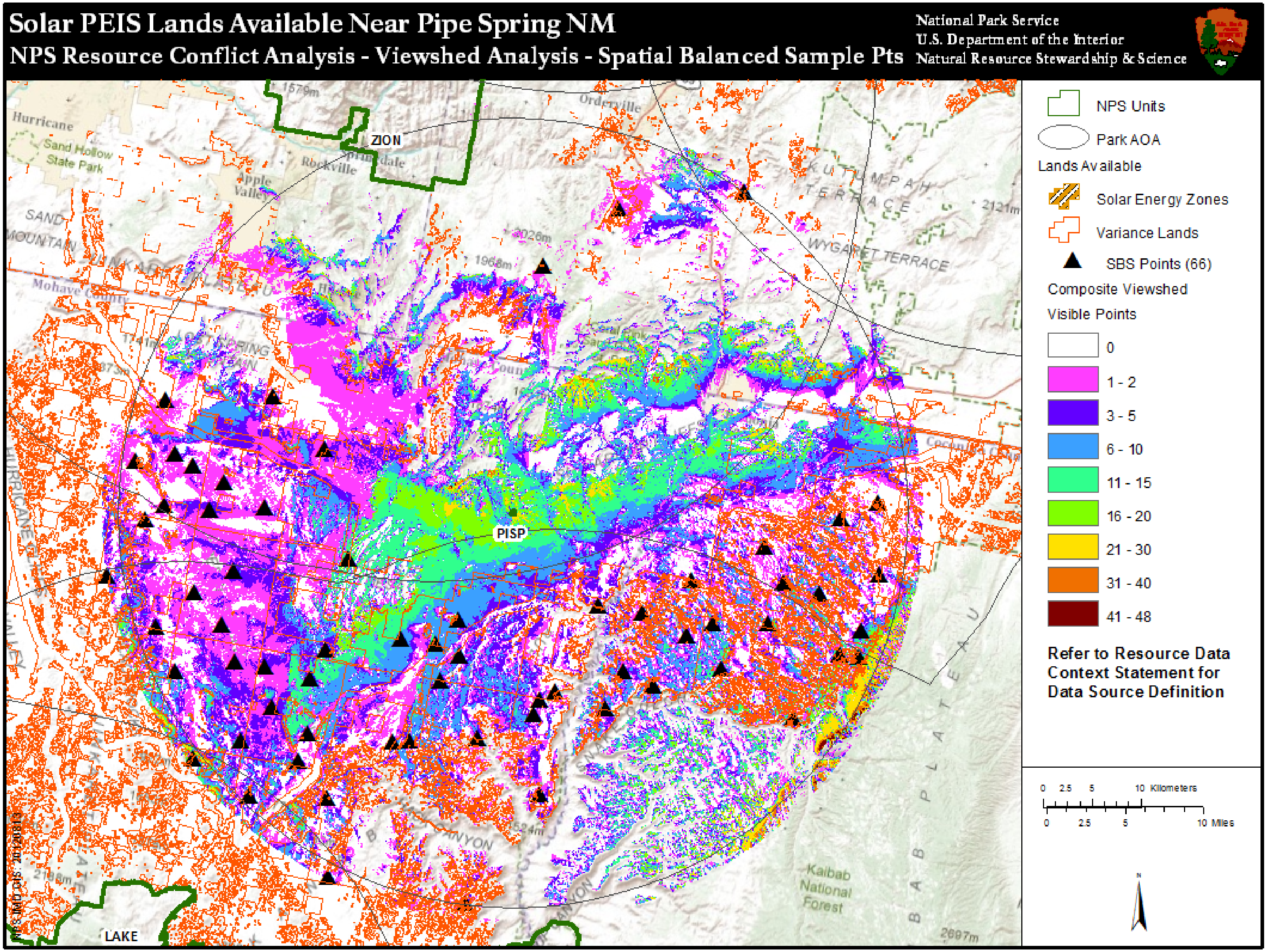


Solar PEIS Lands Available Near Pipe Spring NM
NPS Resource Conflict Analysis - Landscape Permeability
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
ZION
PISP
KAIBAB
PARA
NPS IMD GIS: 20120814
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Landscape Permeability
Low
Moderate
High
Refer to Resource Data Context Statement for Data Source Definition
0 2.5 5 10 Kilometers
0 2.5 5 10 Miles

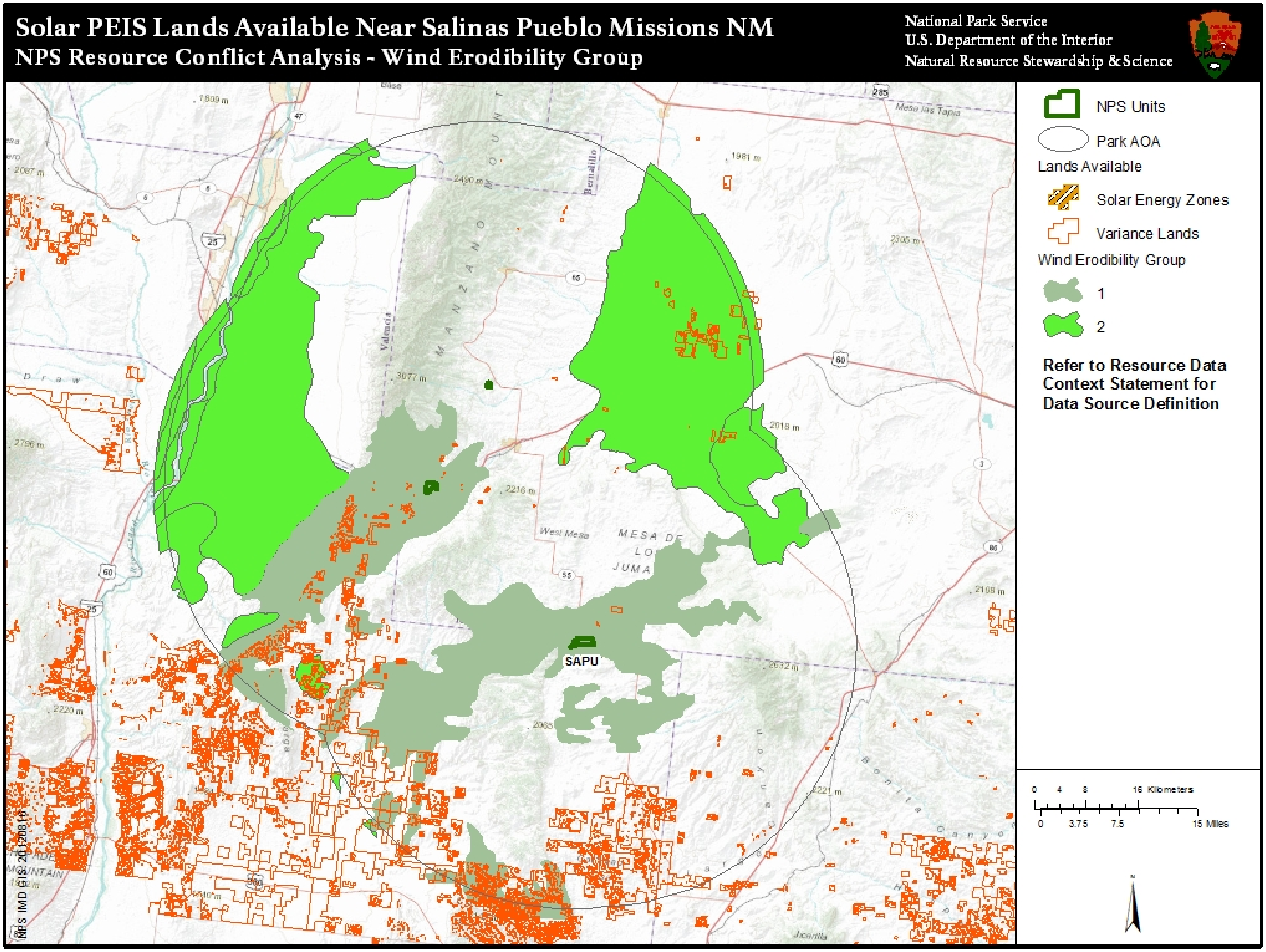

Solar PEIS Lands Available Near Pipe Spring NM
NPS Resource Conflict Analysis - Night Lights
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
ZION
PISP
PARA
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Night Lights
Lighter
Darker
Refer to Resource Data Context Statement for Data Source Definition
0 2.5 5 10 Kilometers
0 2.5 5 10 Miles

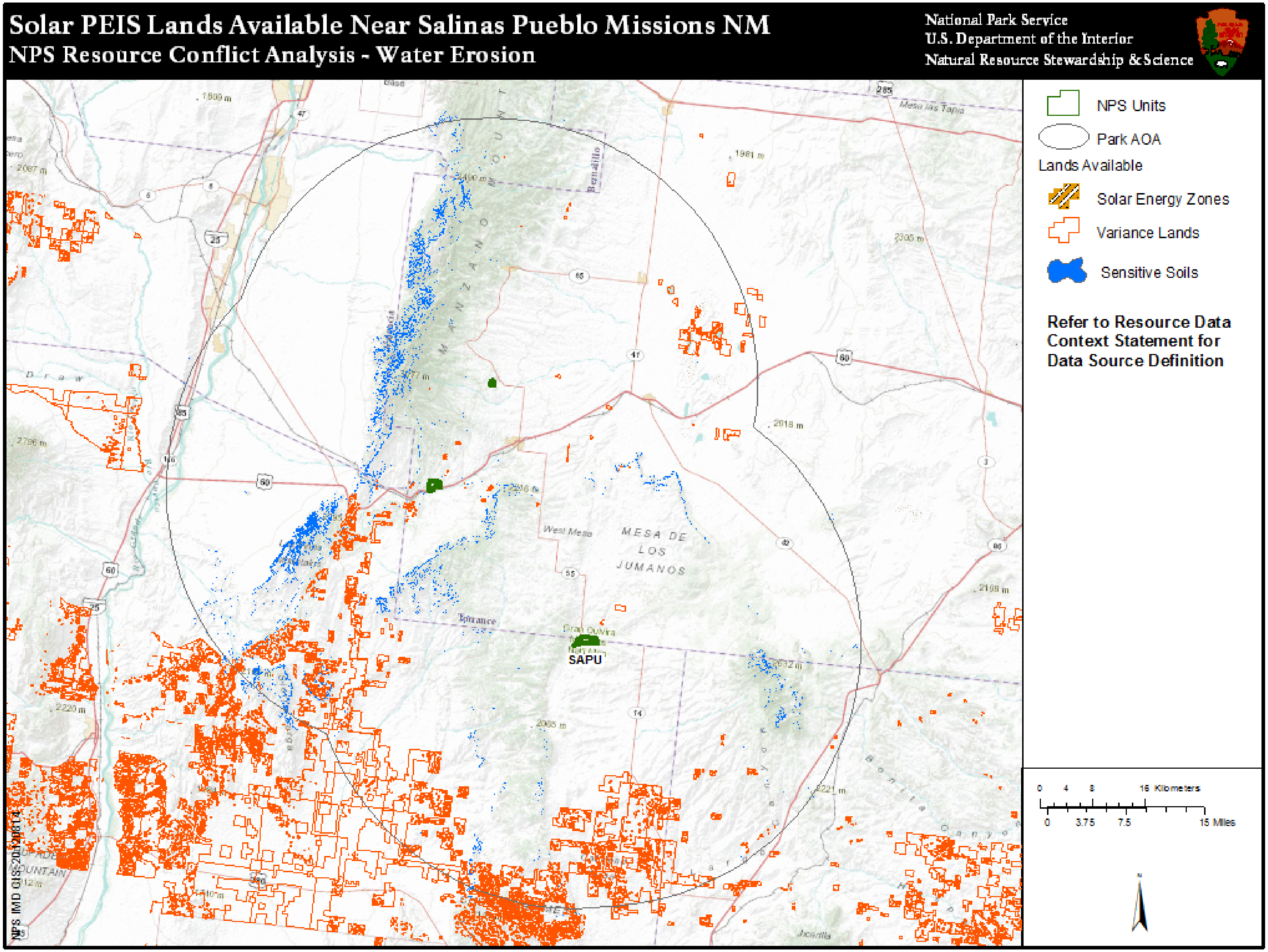

Solar PEIS Lands Available Near Pipe Spring NM
NPS Resource Conflict Analysis - Viewshed Analysis - Key Observation Points
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Key Observation Pts (2)
Visible Points
0
1
2
Refer to Resource Data Context Statement for Data Source Definition
0 2.5 5 10 Kilometers
0 2.5 5 10 Miles
ZION
PISP
Hurricane
Sand Hollow State Park
Rockville
Apple Valley
Hildale
Colorado City
Mohave County
LOST SPRING MOUNTAIN
Coral Pink Sand Dunes St. Park
Kanab
Fredonia
SHINARUMP CLIFFS
KUTUMPAH TERRACE
WYGARET TERRACE
Orderville
Kaibab National Forest
LAKE
2026m
1968m
1943m
2121m
1601m
1874m
1506m
1579m
2697m

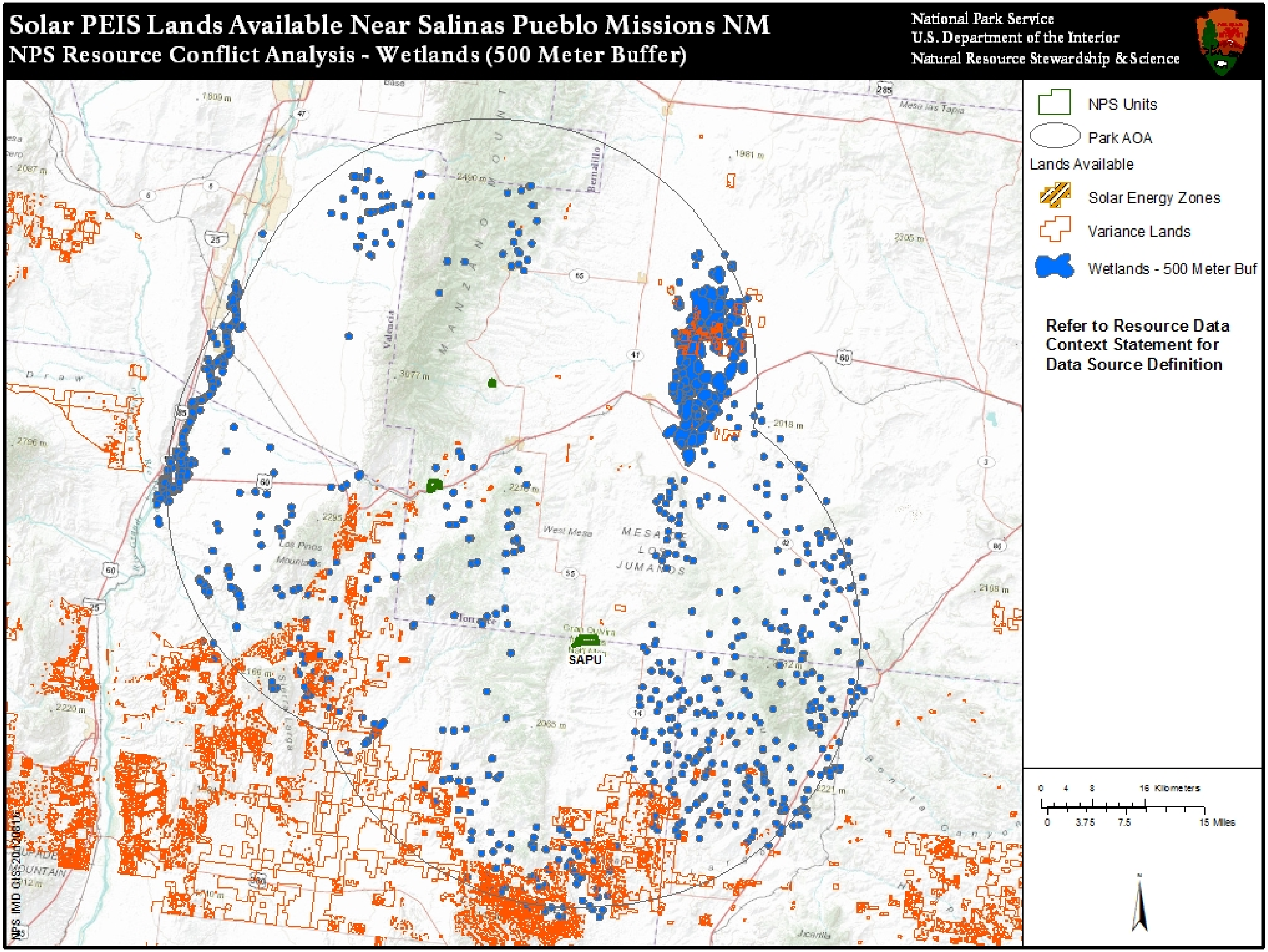

Solar PEIS Lands Available Near Pipe Spring NM
NPS Resource Conflict Analysis - Viewshed Analysis - NRHP
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
NRHP Points (1)
Visible Points
0
1
Refer to Resource Data Context Statement for Data Source Definition
0 2.5 5 10 Kilometers
0 2.5 5 10 Miles
ZION
PISP
LAKE
Hurricane
Sand Hollow State Park
Rockville
Springdale
Apple Valley
Hildale
Colorado City
Mohave County
LOST SPRING MOUNTAIN
Coral Pink Sand Dunes St. Park
Kanab
Fredonia
SHINARUMP CLIFFS
VERMILION CLIFFS
Orderville
WYGARET TERRACE
Kaibab National Forest
KAIBAB PLATEAU


Solar PEIS Lands Available Near Pipe Spring NM
NPS Resource Conflict Analysis - Viewshed Analysis - Spatial Balanced Sample Pts
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
SBS Points (66)
Composite Viewshed
Visible Points
0
1 - 2
3 - 5
6 - 10
11 - 15
16 - 20
21 - 30
31 - 40
41 - 48
Refer to Resource Data Context Statement for Data Source Definition
0 2.5 5 10 Kilometers
0 2.5 5 10 Miles
ZION
PISP
LAKE
Hurricane
Sand Hollow State Park
Rockville
Springdale
Orderville
KAIBAB PLATEAU
Kaibab National Forest
Mohave County

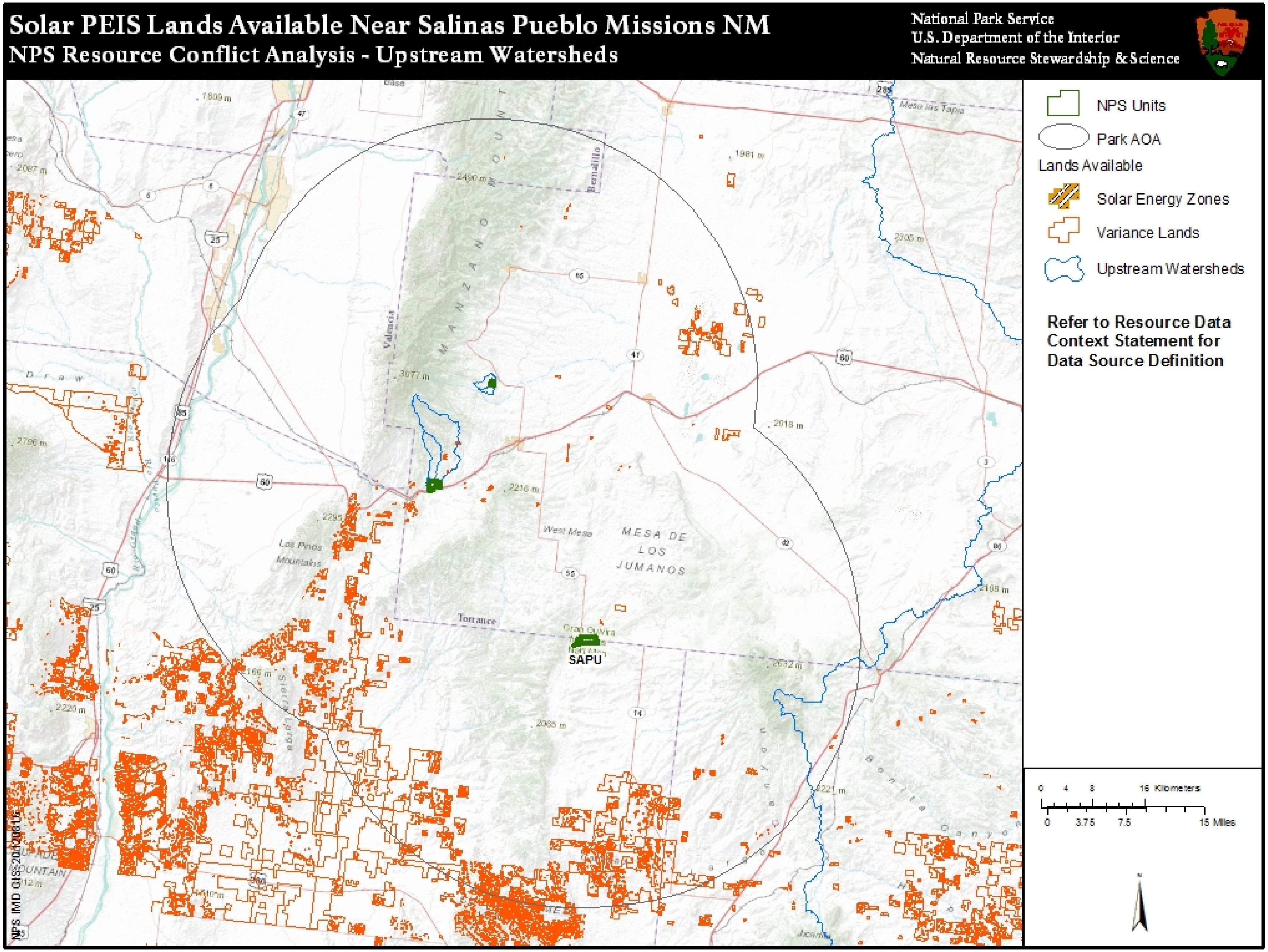
Salinas Pueblo Missions National Monument
Wind Erodibility Group



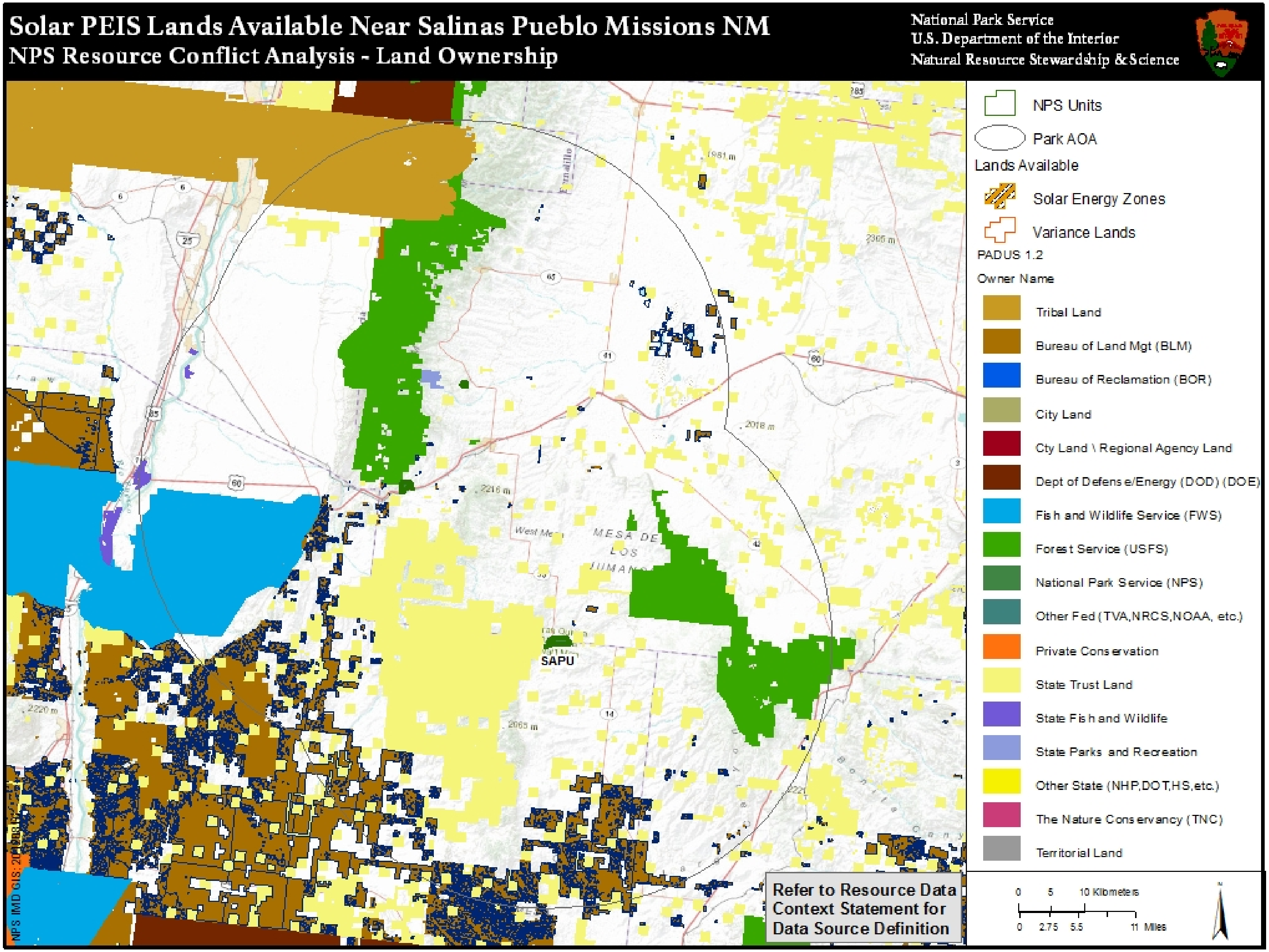

Solar PEIS Lands Available Near Salinas Pueblo Missions NM
NPS Resource Conflict Analysis - Water Erosion
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Sensitive Soils
Refer to Resource Data Context Statement for Data Source Definition
0 4 8 16 Kilometers
0 3.75 7.5 15 Miles
MESA DE LOS JUMANOS
SAPU
NPS IMD GIS 20120814

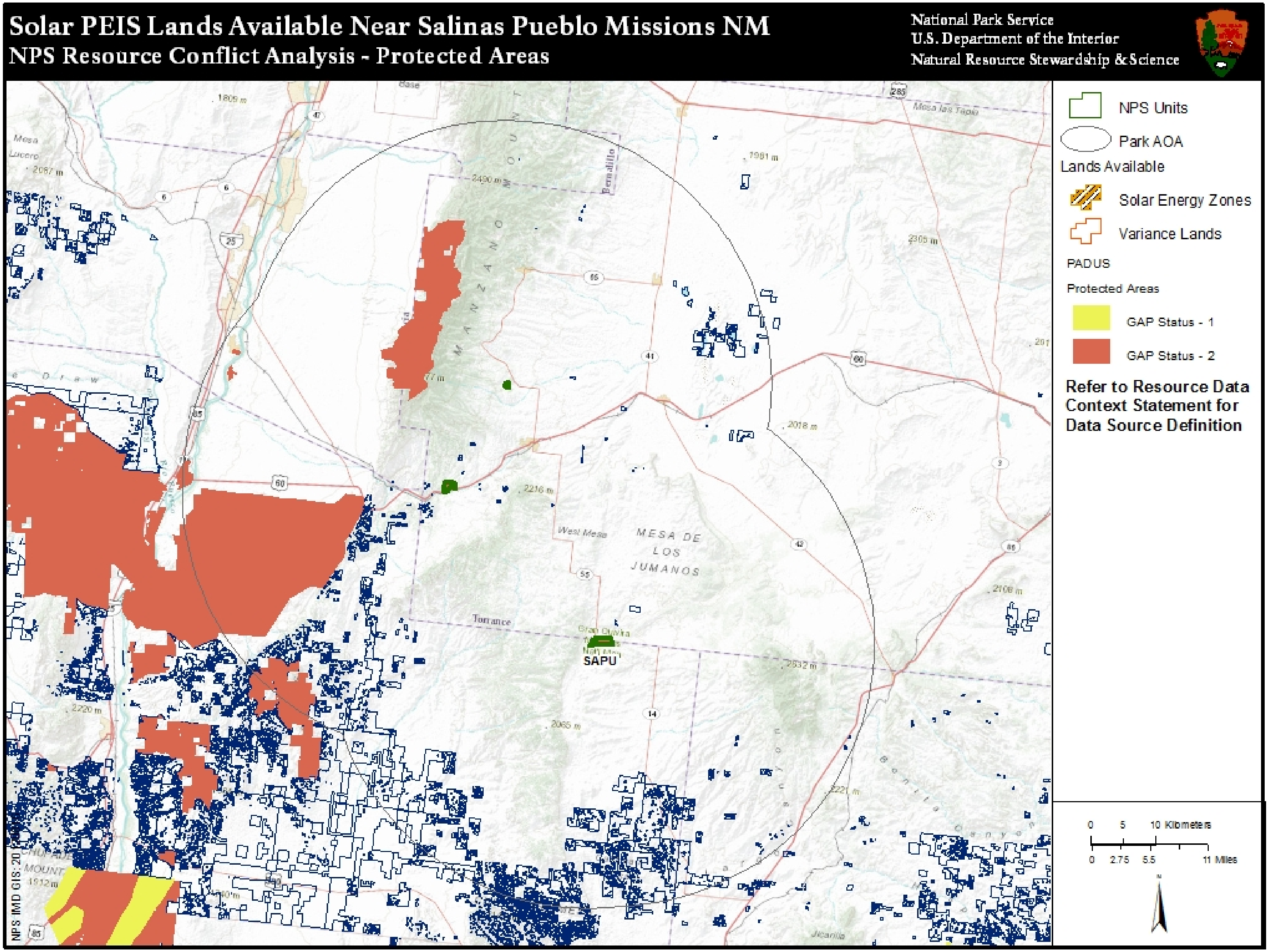

Solar PEIS Lands Available Near Salinas Pueblo Missions NM
NPS Resource Conflict Analysis - Wetlands (500 Meter Buffer)
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Wetlands - 500 Meter Buf
Refer to Resource Data Context Statement for Data Source Definition
0 4 8 16 Kilometers
0 3.75 7.5 15 Miles
SAPU
MESA LOS JUMANOS
Los Pinos Mountains
West Mesa

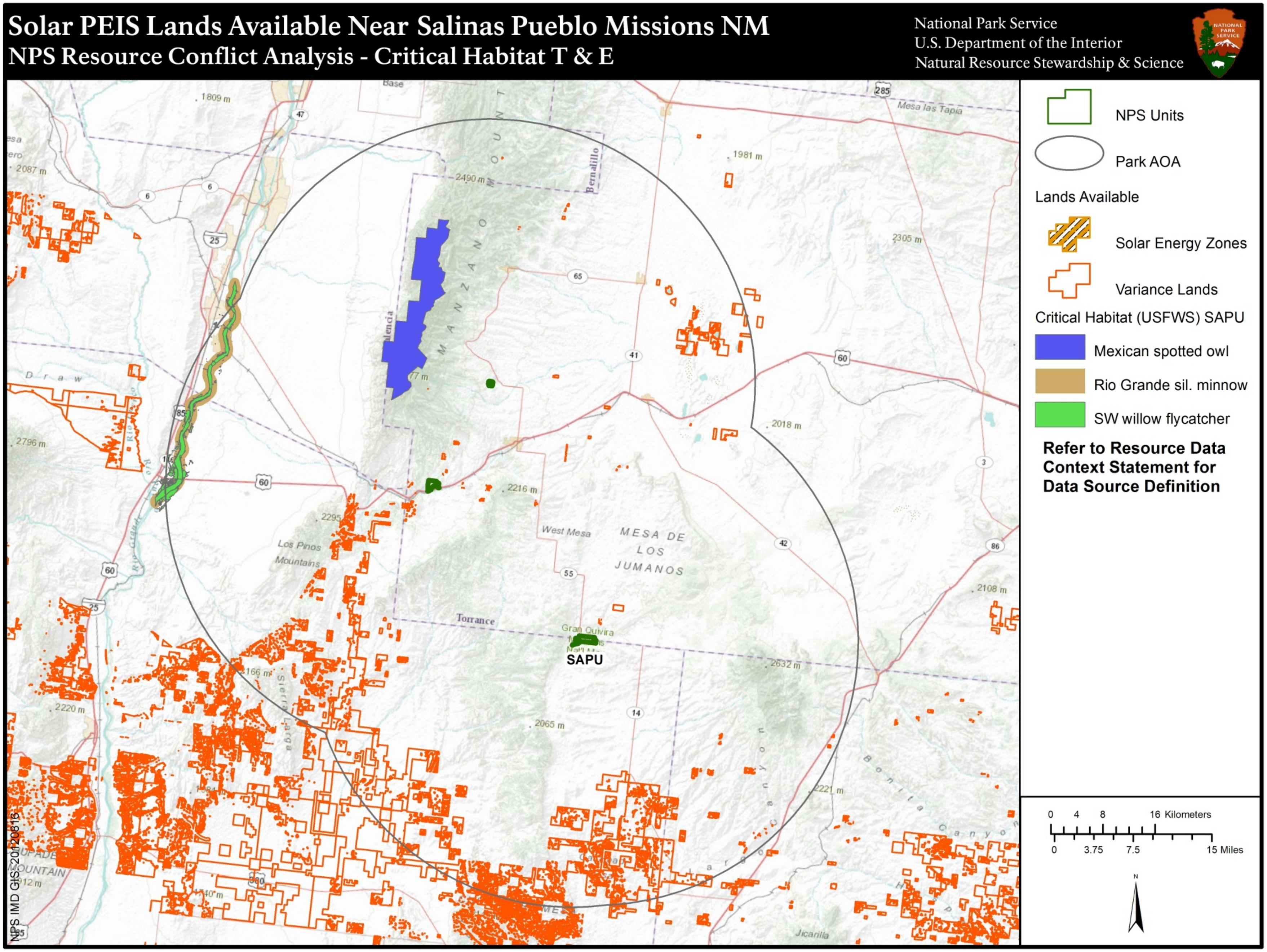
Upstream Watershed

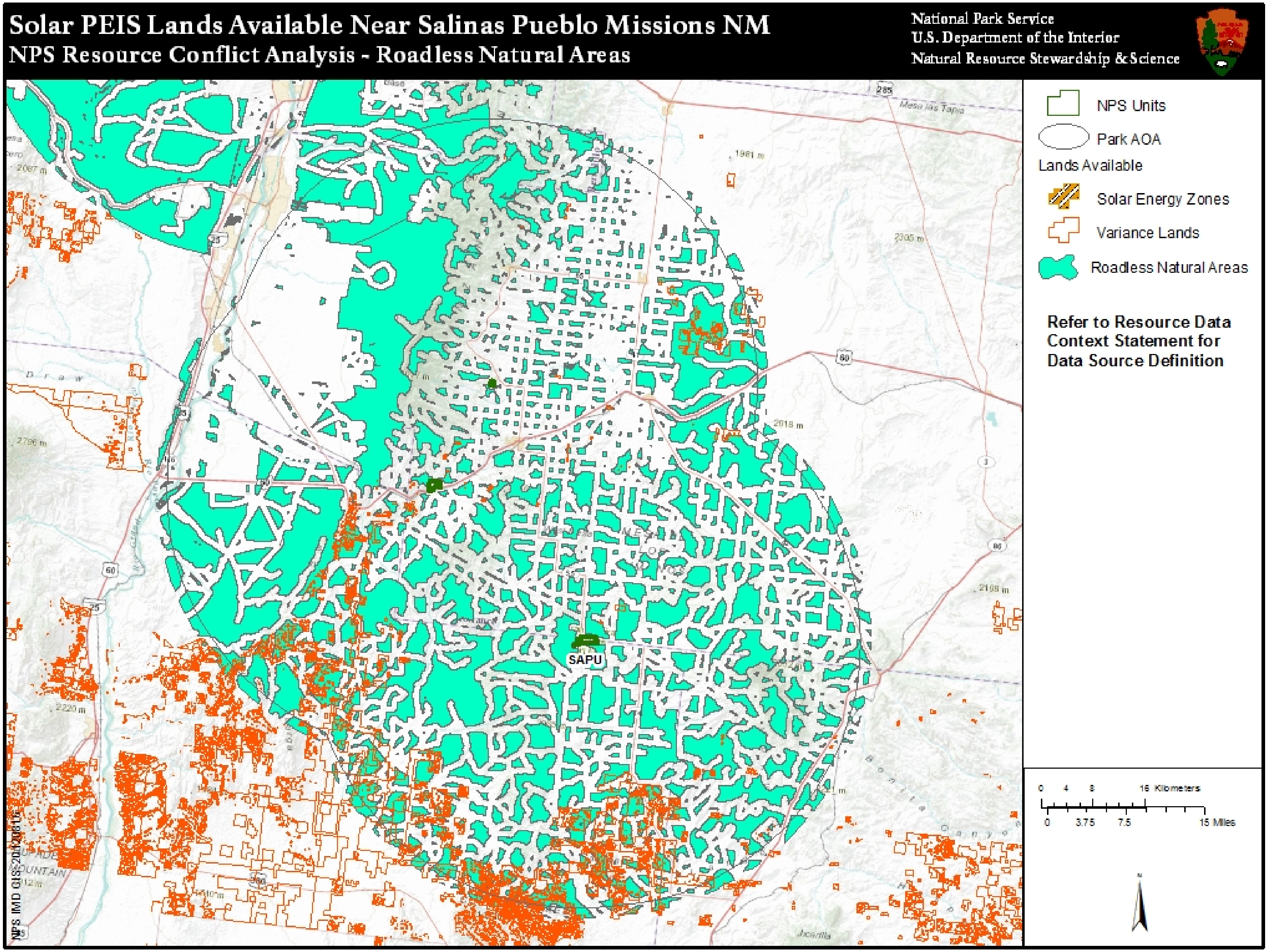


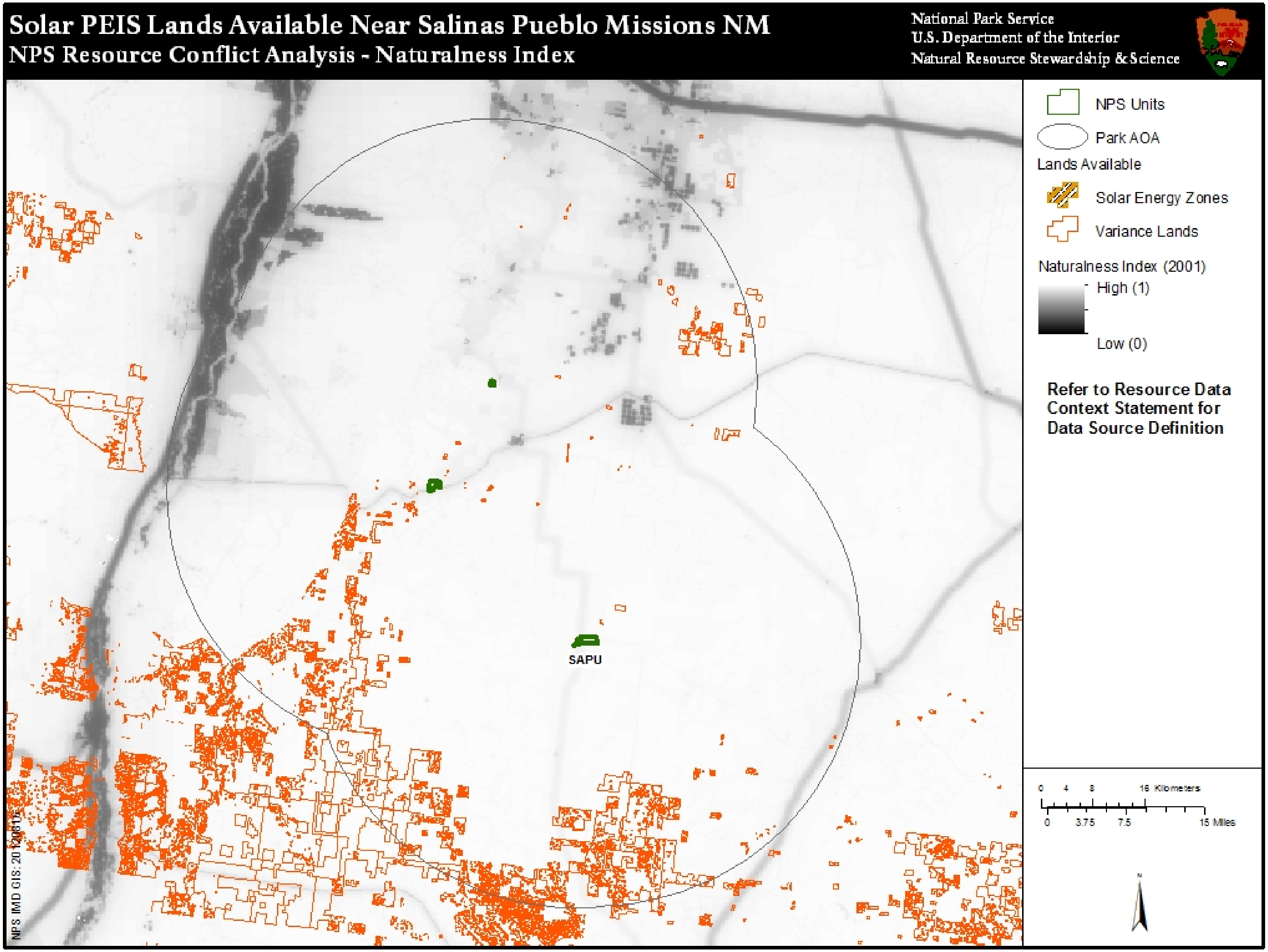
Land Ownership

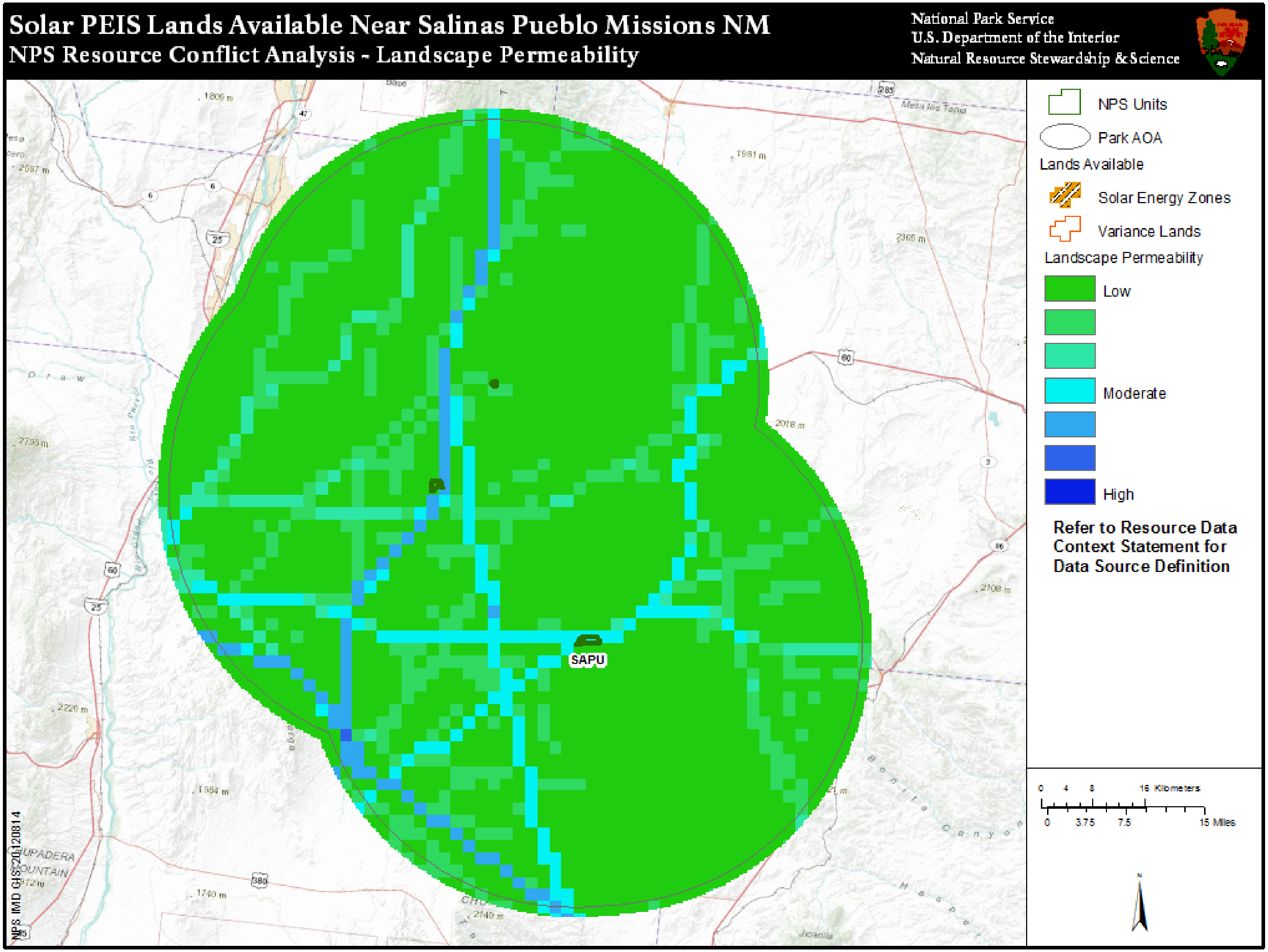


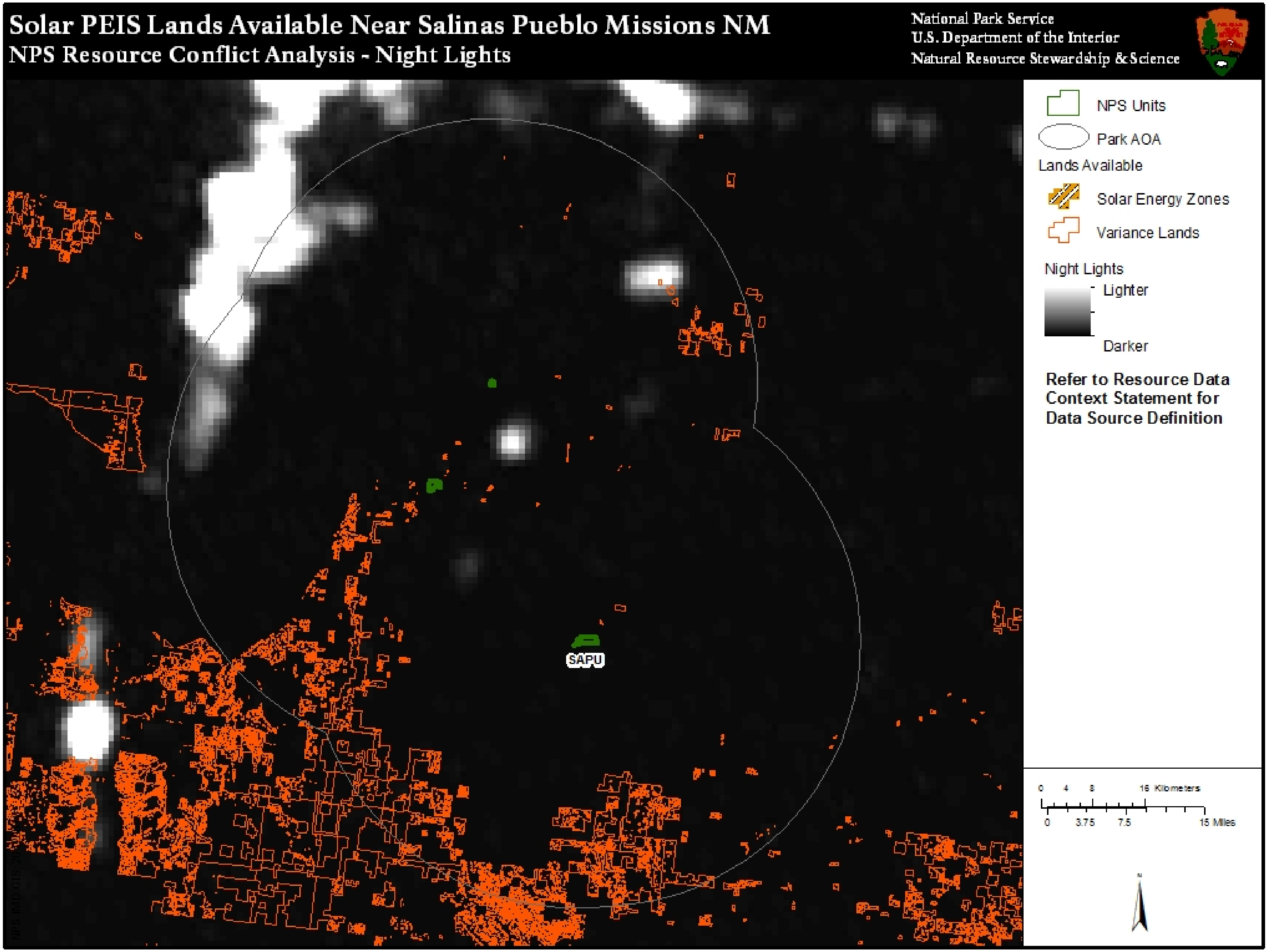

Solar PEIS Lands Available Near Salinas Pueblo Missions NM
NPS Resource Conflict Analysis - Protected Areas
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
PADUS
Protected Areas
GAP Status - 1
GAP Status - 2
Refer to Resource Data Context Statement for Data Source Definition
0 5 10 Kilometers
0 2.75 5.5 11 Miles
SAPU
MESA DE LOS JUMANOS
Torrance
NPS IMD GIS: 20

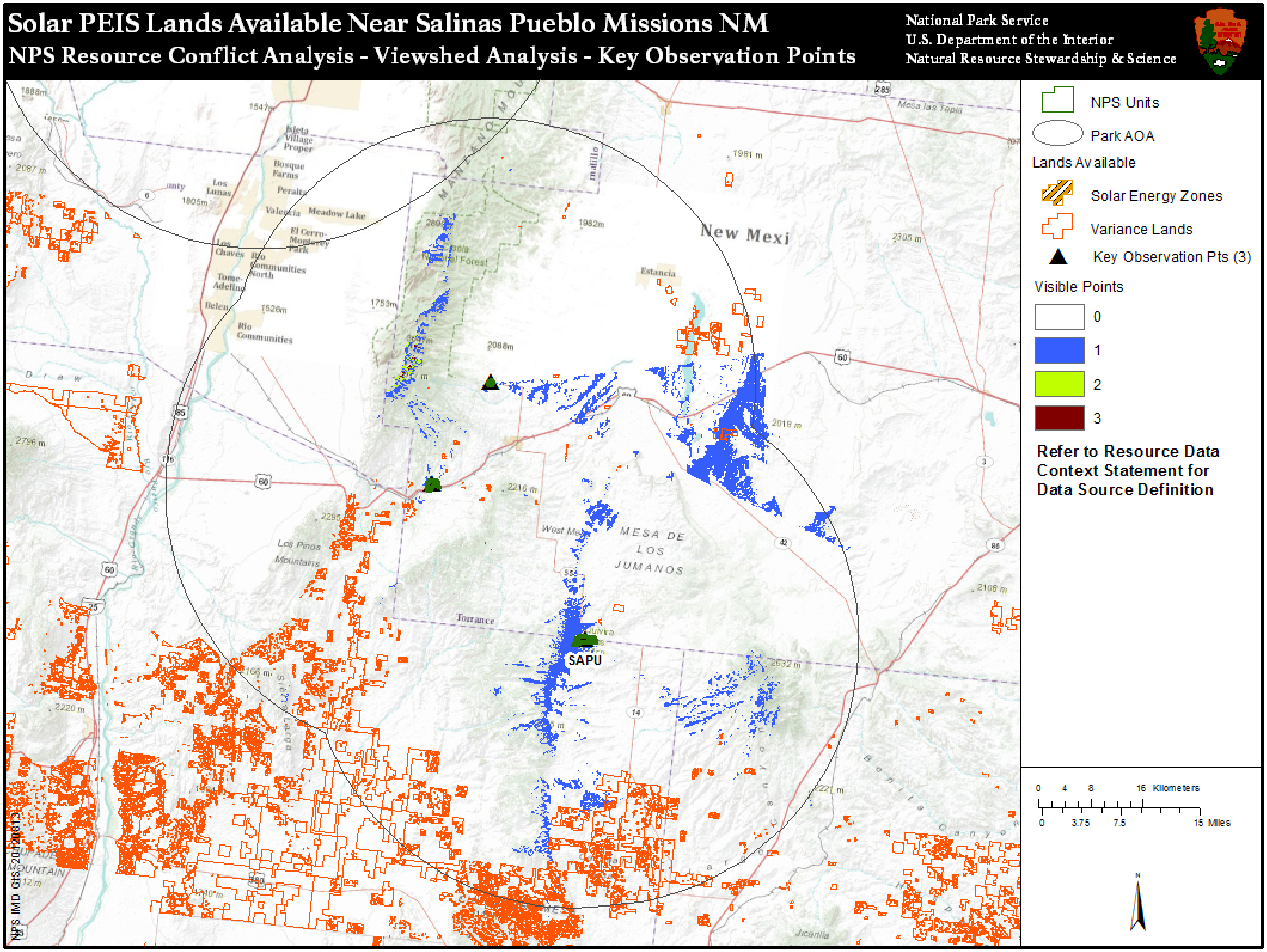

Solar PEIS Lands Available Near Salinas Pueblo Missions NM
NPS Resource Conflict Analysis - Critical Habitat T & E
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Critical Habitat (USFWS) SAPU
Mexican spotted owl
Rio Grande sil. minnow
SW willow flycatcher
Refer to Resource Data Context Statement for Data Source Definition
0 4 8 16 Kilometers
0 3.75 7.5 15 Miles
N
SAPU
Gran Quivira
MESA DE LOS JUMANOS
West Mesa
Torrance
Bernalillo
Los Pinos Mountains
MANZANO MOUNTAINS
NPS IMD GIS 20120816

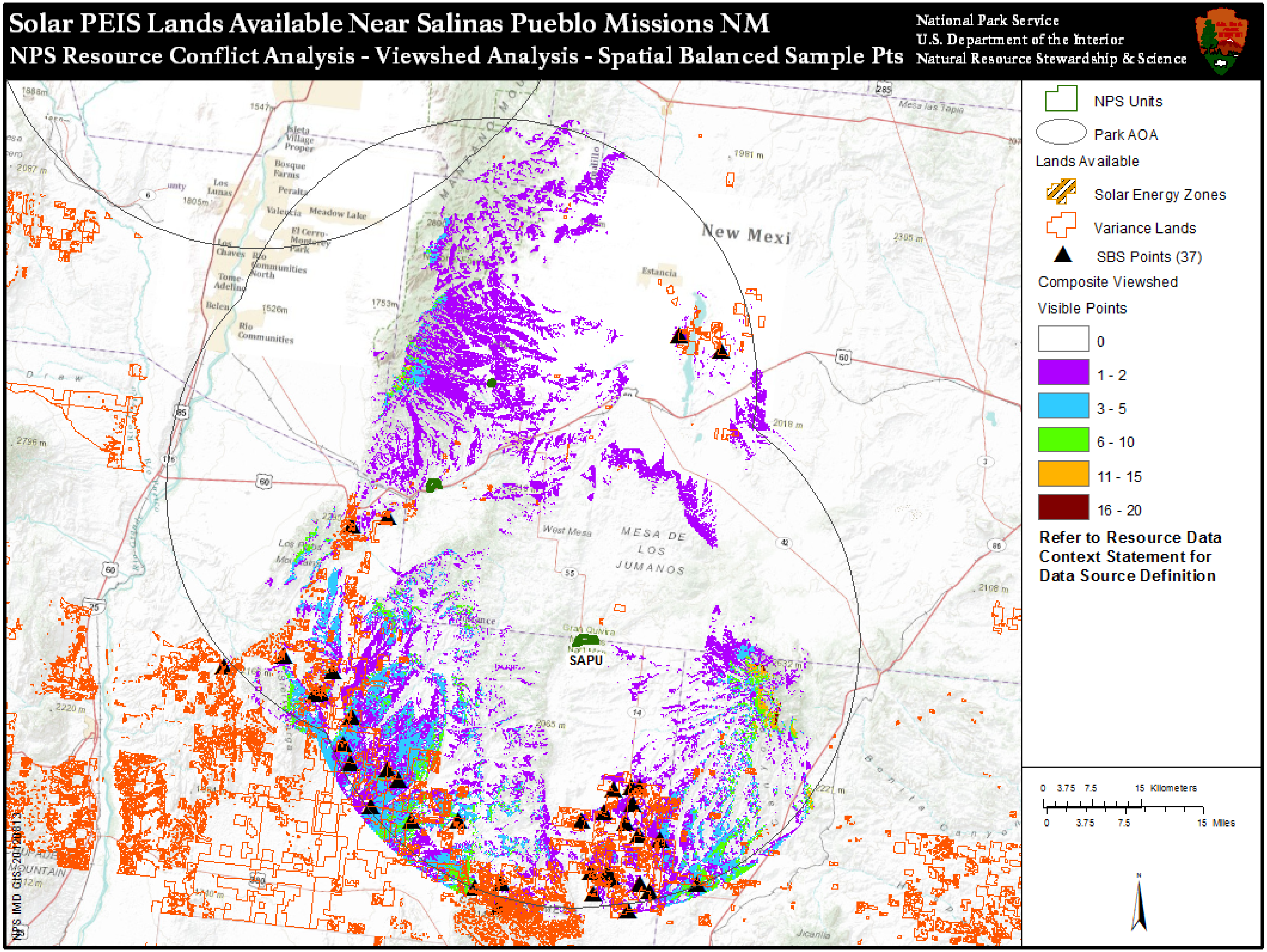

Solar PEIS Lands Available Near Salinas Pueblo Missions NM
NPS Resource Conflict Analysis - Roadless Natural Areas
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Roadless Natural Areas
Refer to Resource Data Context Statement for Data Source Definition
0 4 8 16 Kilometers
0 3.75 7.5 15 Miles
SAPU


Solar PEIS Lands Available Near Salinas Pueblo Missions NM
NPS Resource Conflict Analysis - Naturalness Index
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Naturalness Index (2001)
High (1)
Low (0)
Refer to Resource Data Context Statement for Data Source Definition
0 4 8 16 Kilometers
0 3.75 7.5 15 Miles
SAPU
NPS IMD GIS: 20120815

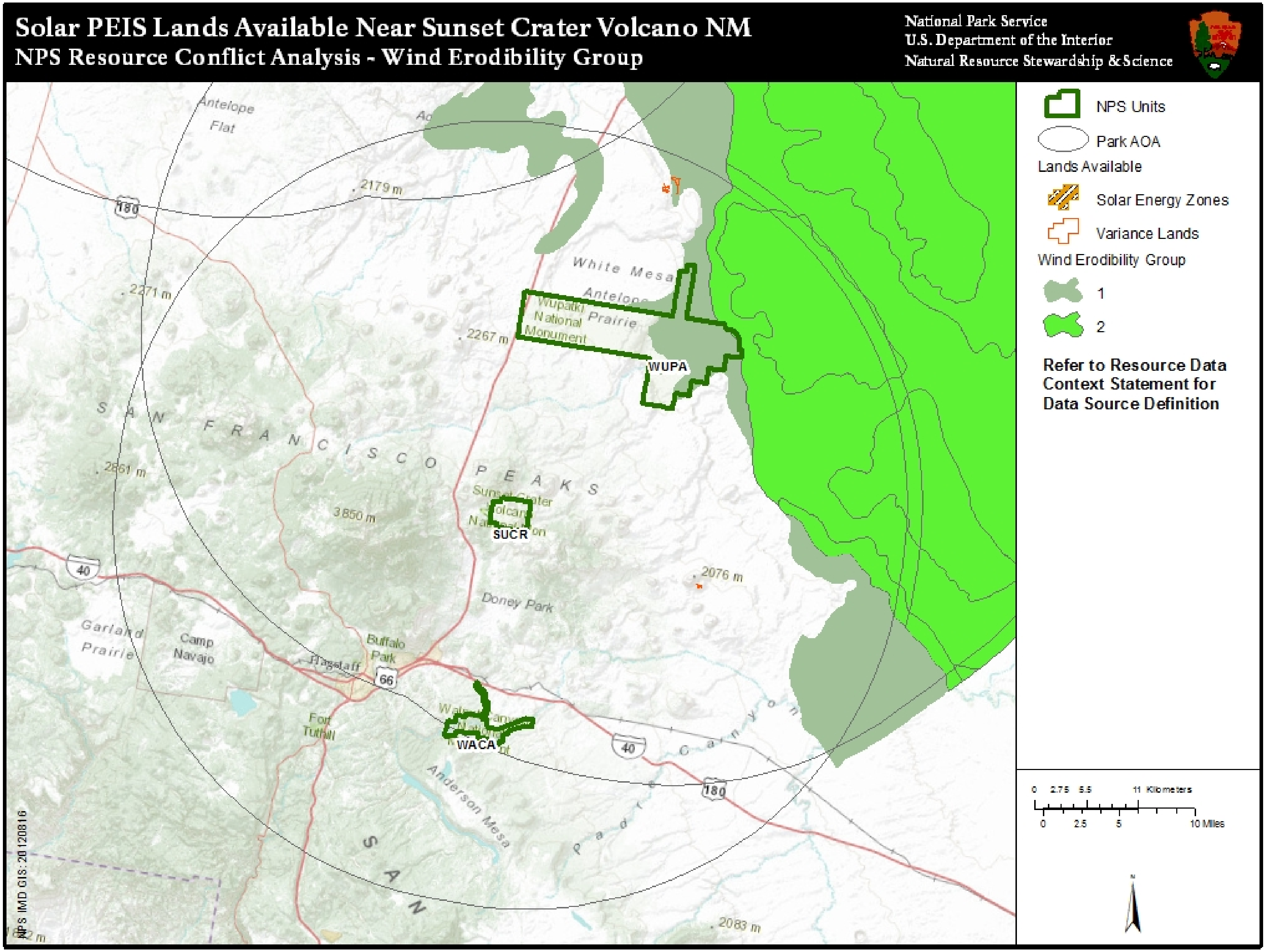

Solar PEIS Lands Available Near Salinas Pueblo Missions NM
NPS Resource Conflict Analysis - Landscape Permeability
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Landscape Permeability
Low
Moderate
High
Refer to Resource Data Context Statement for Data Source Definition
SAPU
0 4 8 16 Kilometers
0 3.75 7.5 15 Miles
NPS IMD GIS 20120814

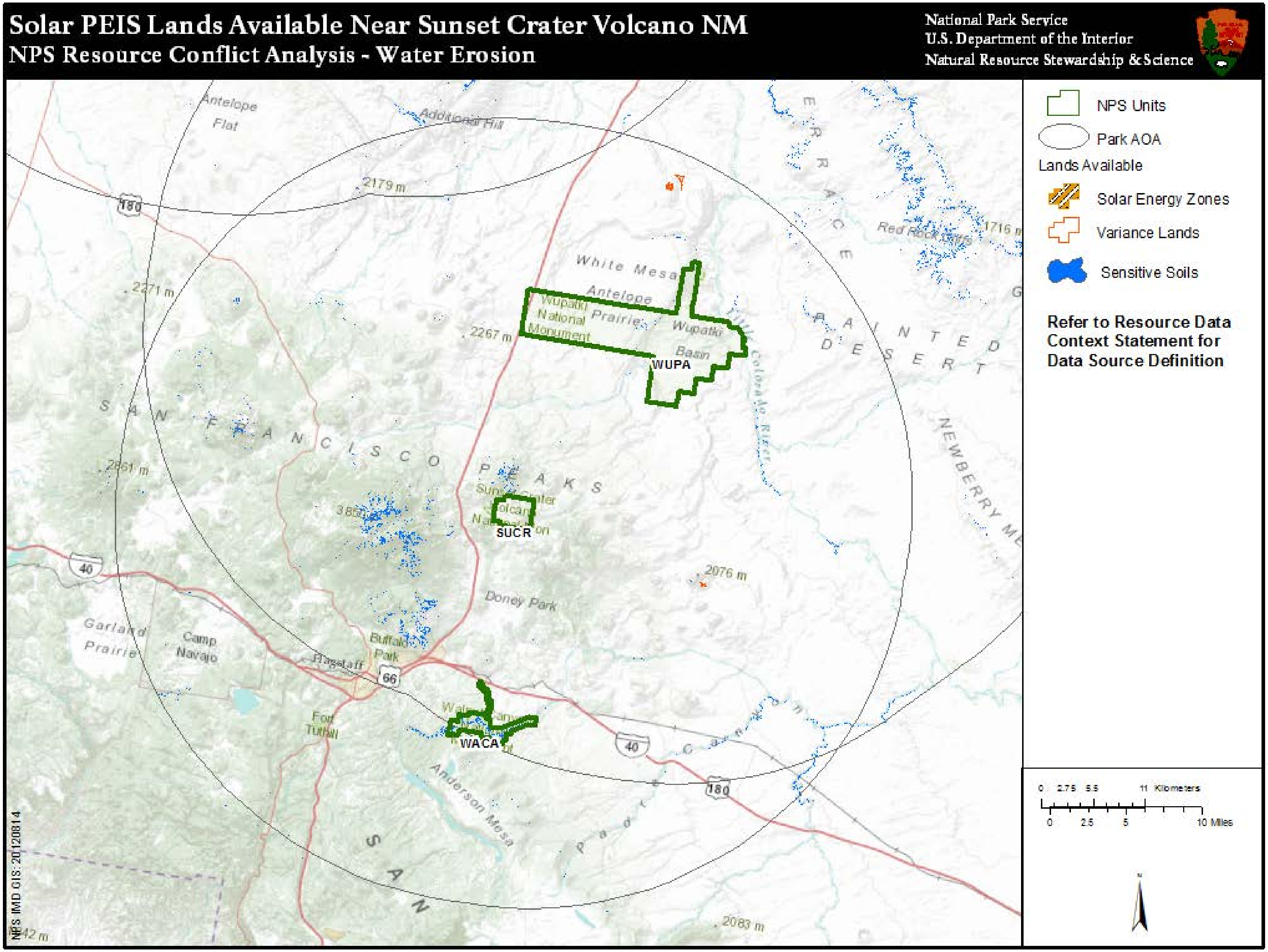

Solar PEIS Lands Available Near Salinas Pueblo Missions NM
NPS Resource Conflict Analysis - Night Lights
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Night Lights
Lighter
Darker
Refer to Resource Data Context Statement for Data Source Definition
SAPU
0 4 8 16 Kilometers
0 3.75 7.5 15 Miles

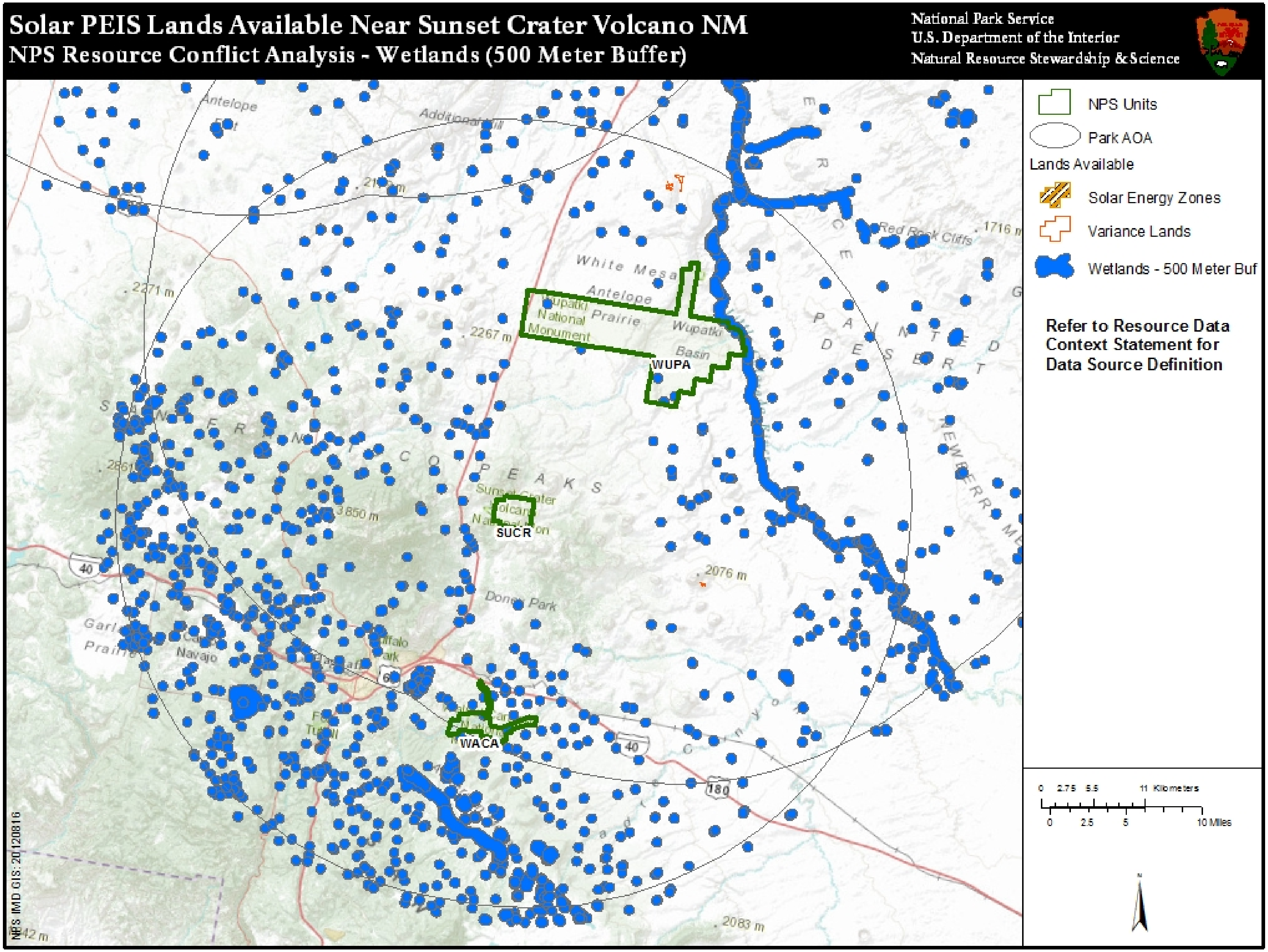

Solar PEIS Lands Available Near Salinas Pueblo Missions NM
NPS Resource Conflict Analysis - Viewshed Analysis - Key Observation Points
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Key Observation Pts (3)
Visible Points
0
1
2
3
Refer to Resource Data Context Statement for Data Source Definition
0 4 8 16 Kilometers
0 3.75 7.5 15 Miles
SAPU
New Mexi
MESA DE LOS JUMANOS
Estancia
Torrance


Solar PEIS Lands Available Near Salinas Pueblo Missions NM
NPS Resource Conflict Analysis - Viewshed Analysis - Spatial Balanced Sample Pts
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
SBS Points (37)
Composite Viewshed
Visible Points
0
1 - 2
3 - 5
6 - 10
11 - 15
16 - 20
Refer to Resource Data Context Statement for Data Source Definition
0 3.75 7.5 15 Kilometers
0 3.75 7.5 15 Miles
New Mexi
SAPU
MESA DE LOS JUMANOS
Estancia
NPS IMD GIS 20120813

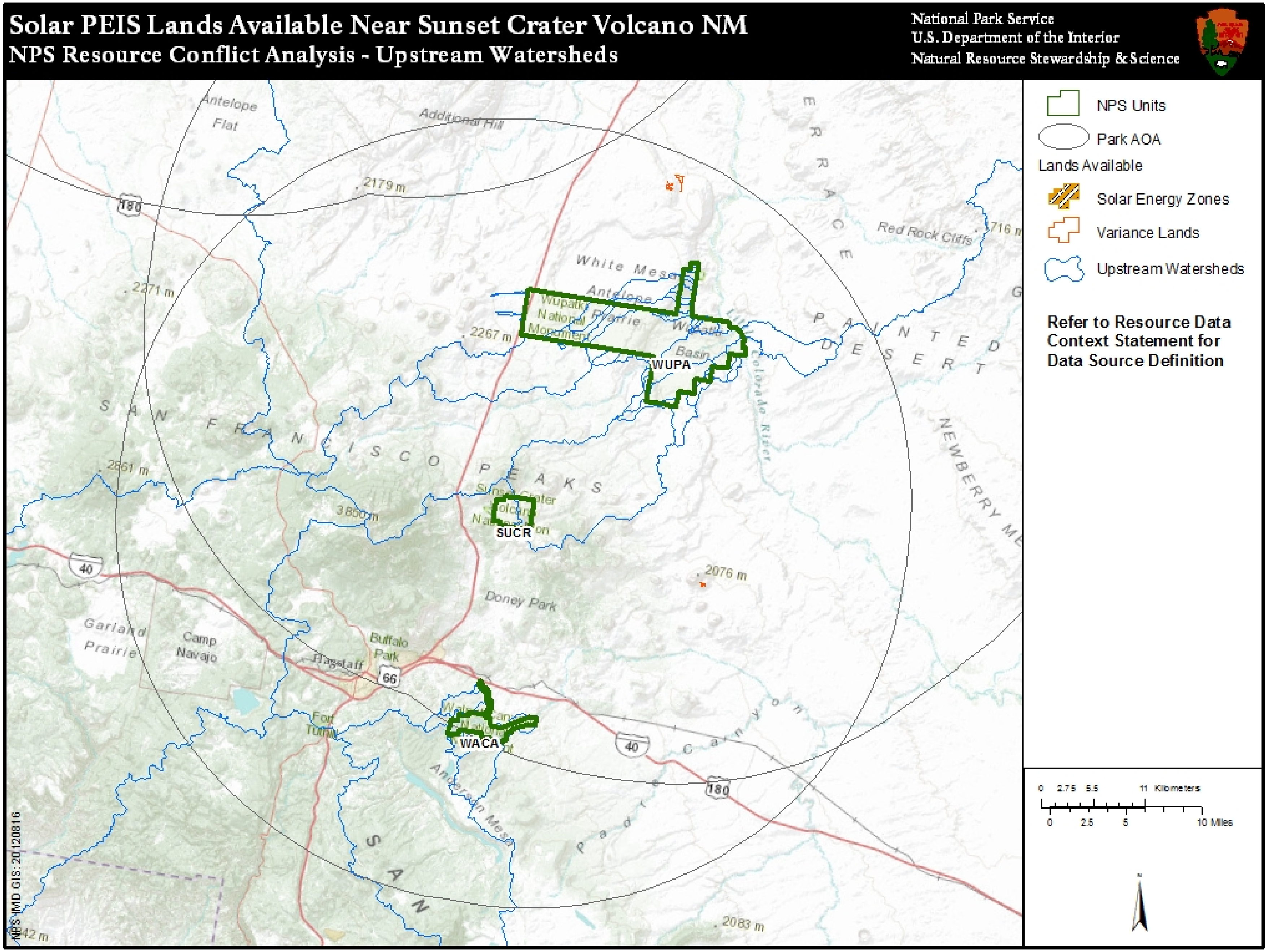
Sunset Crater Volcano National Monument
Wind Erodibility Group

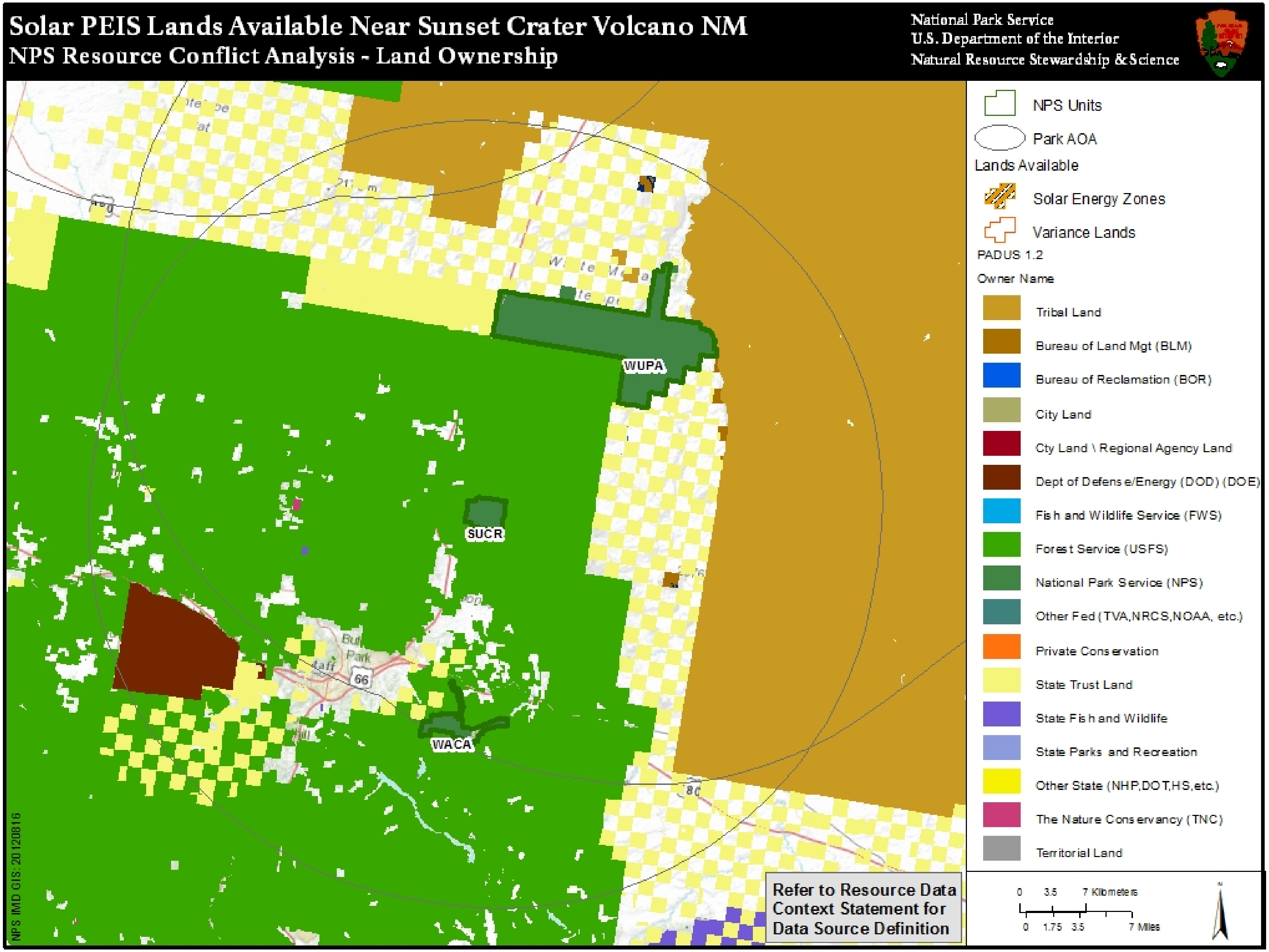


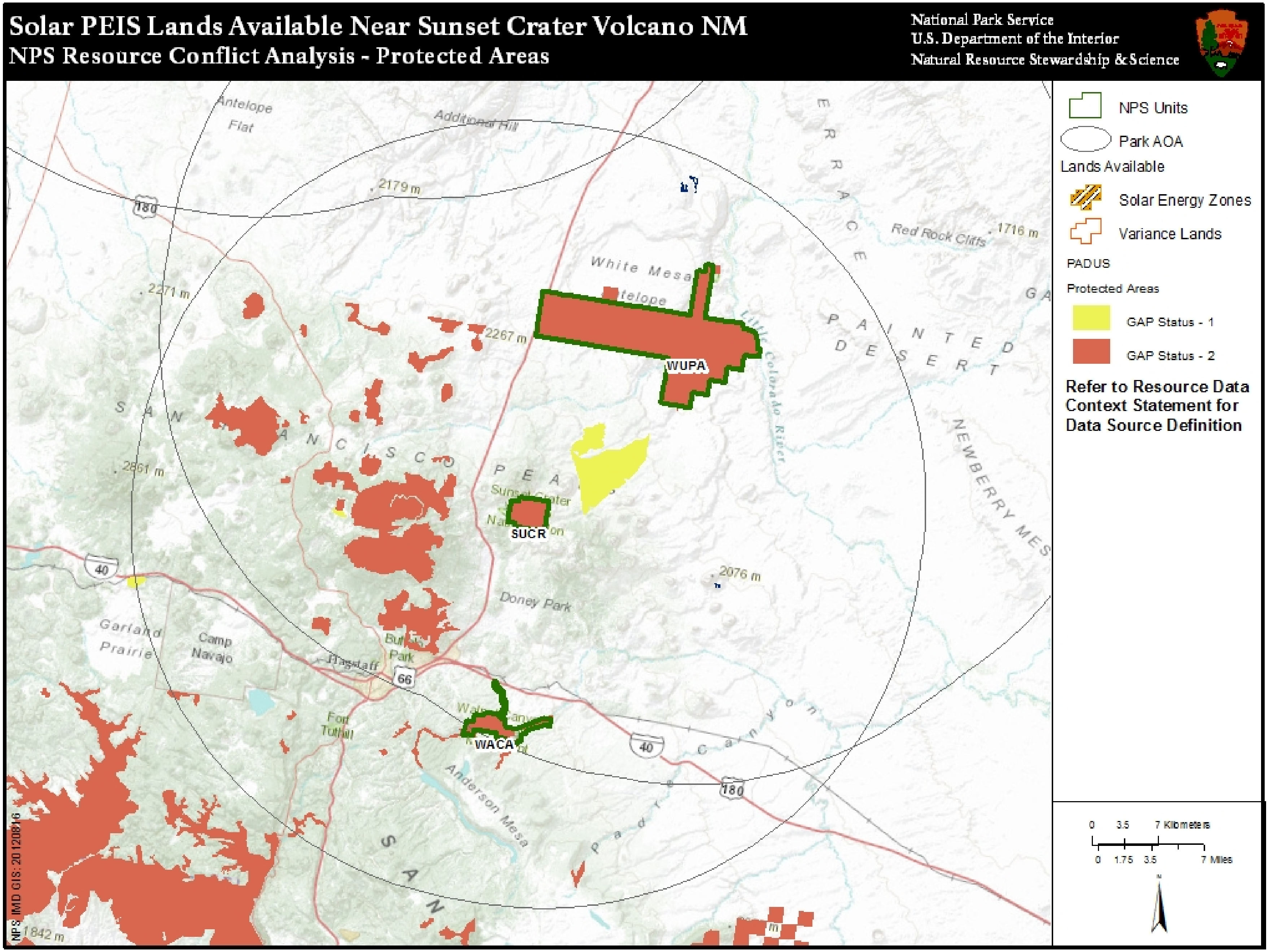

Solar PEIS Lands Available Near Sunset Crater Volcano NM
NPS Resource Conflict Analysis - Water Erosion
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Sensitive Soils
Refer to Resource Data Context Statement for Data Source Definition
0 2.75 5.5 11 Kilometers
0 2.5 5 10 Miles
WUPA
SUCR
WACA
Wupatki National Monument
Sunset Crater Volcano National Monument
White Mesa
Antelope Prairie
Wupatki Basin
Colorado River
Painted Desert
San Francisco Peaks
Doney Park
Flagstaff
Buffalo Park
Camp Navajo
Garland Prairie
Fort Tuthill
Anderson Mesa
Antelope Flat
Additional Hill
Red Rock Cliffs
Newberry Mesa
NPS IMD GIS: 20120814


Solar PEIS Lands Available Near Sunset Crater Volcano NM
NPS Resource Conflict Analysis - Wetlands (500 Meter Buffer)
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Wetlands - 500 Meter Buf
Refer to Resource Data Context Statement for Data Source Definition
WUPA
SUCR
WACA
0 2.75 5.5 11 Kilometers
0 2.5 5 10 Miles
NPS IMD GIS: 20120816

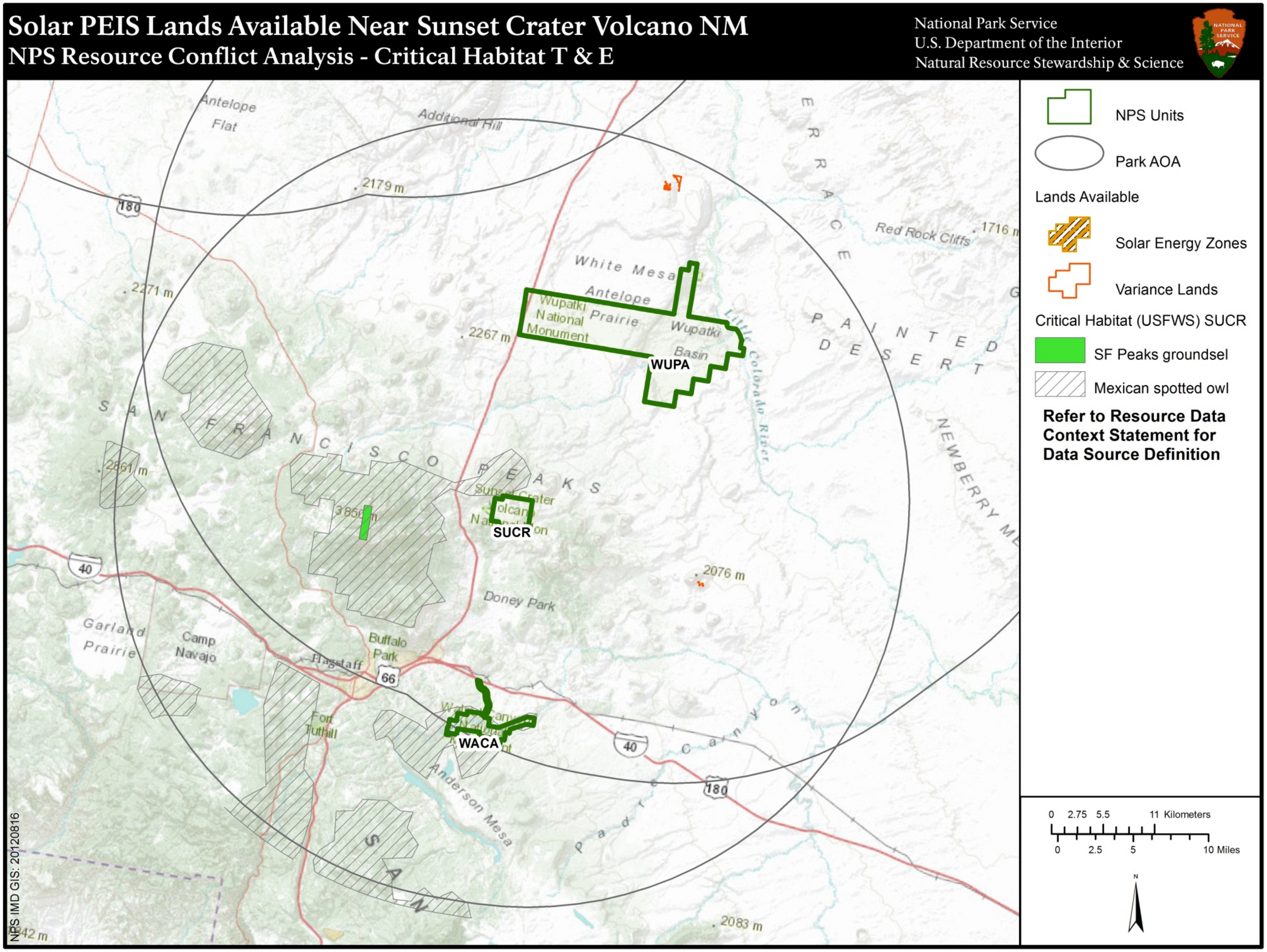
Upstream Watershed

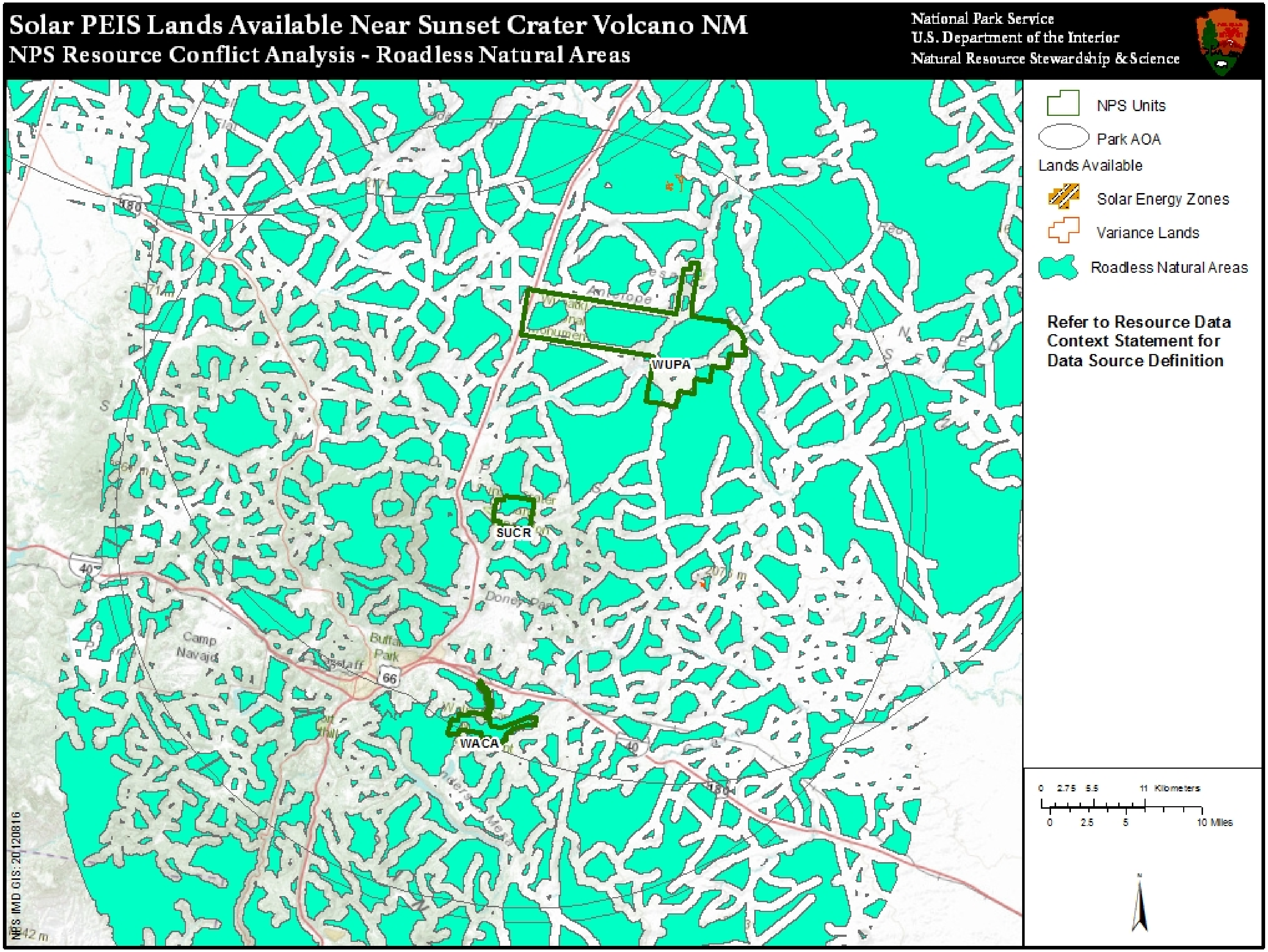


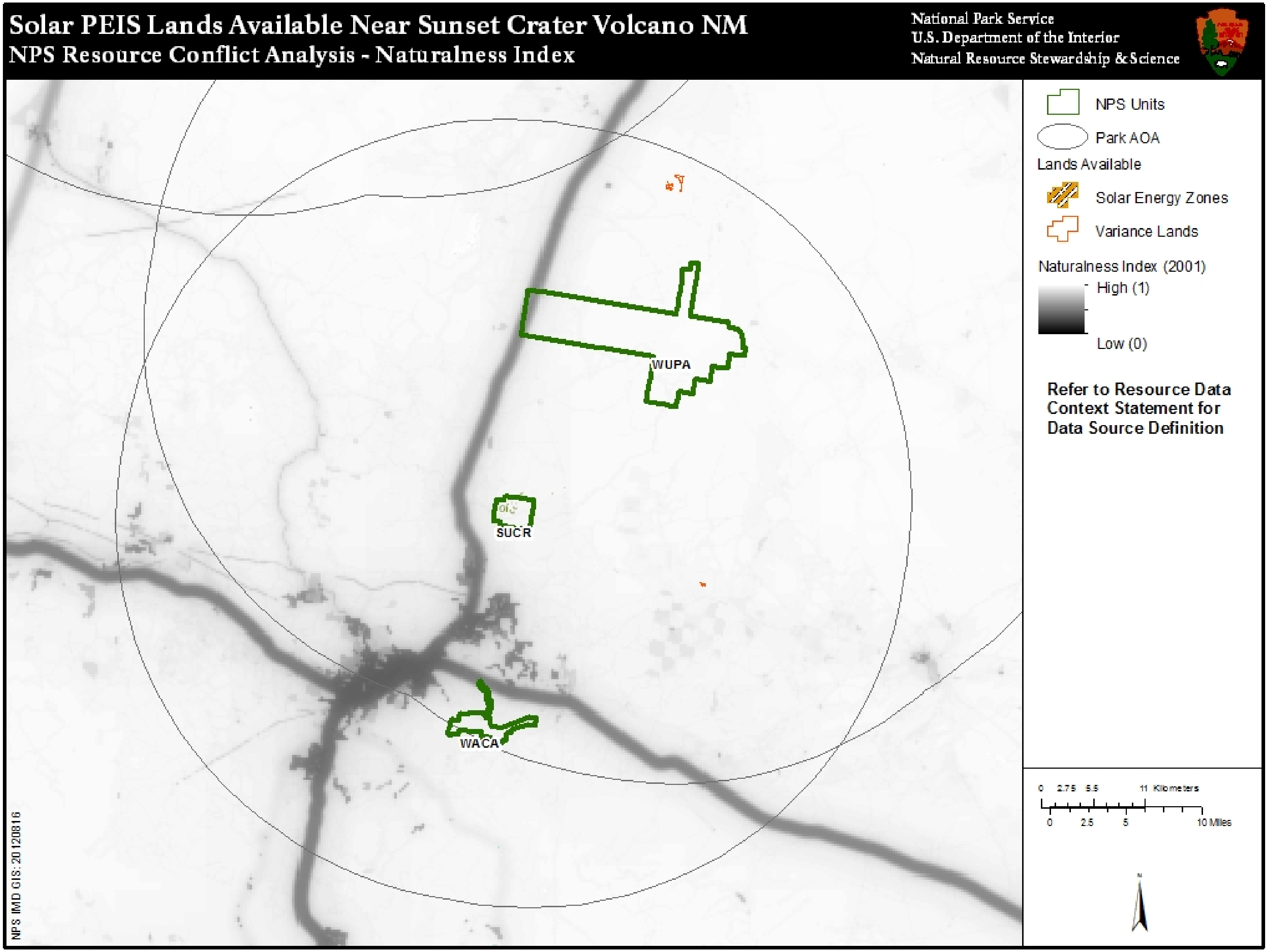

Solar PEIS Lands Available Near Sunset Crater Volcano NM
NPS Resource Conflict Analysis - Land Ownership
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
WUPA
SUCR
WACA
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
PADUS 1.2
Owner Name
Tribal Land
Bureau of Land Mgt (BLM)
Bureau of Reclamation (BOR)
City Land
Cty Land \ Regional Agency Land
Dept of Defense/Energy (DOD) (DOE)
Fish and Wildlife Service (FWS)
Forest Service (USFS)
National Park Service (NPS)
Other Fed (TVA,NRCS,NOAA, etc.)
Private Conservation
State Trust Land
State Fish and Wildlife
State Parks and Recreation
Other State (NHP,DOT,HS,etc.)
The Nature Conservancy (TNC)
Territorial Land
Refer to Resource Data Context Statement for Data Source Definition
0 3.5 7 Kilometers
0 1.75 3.5 7 Miles
NPS IMD GIS: 20120816

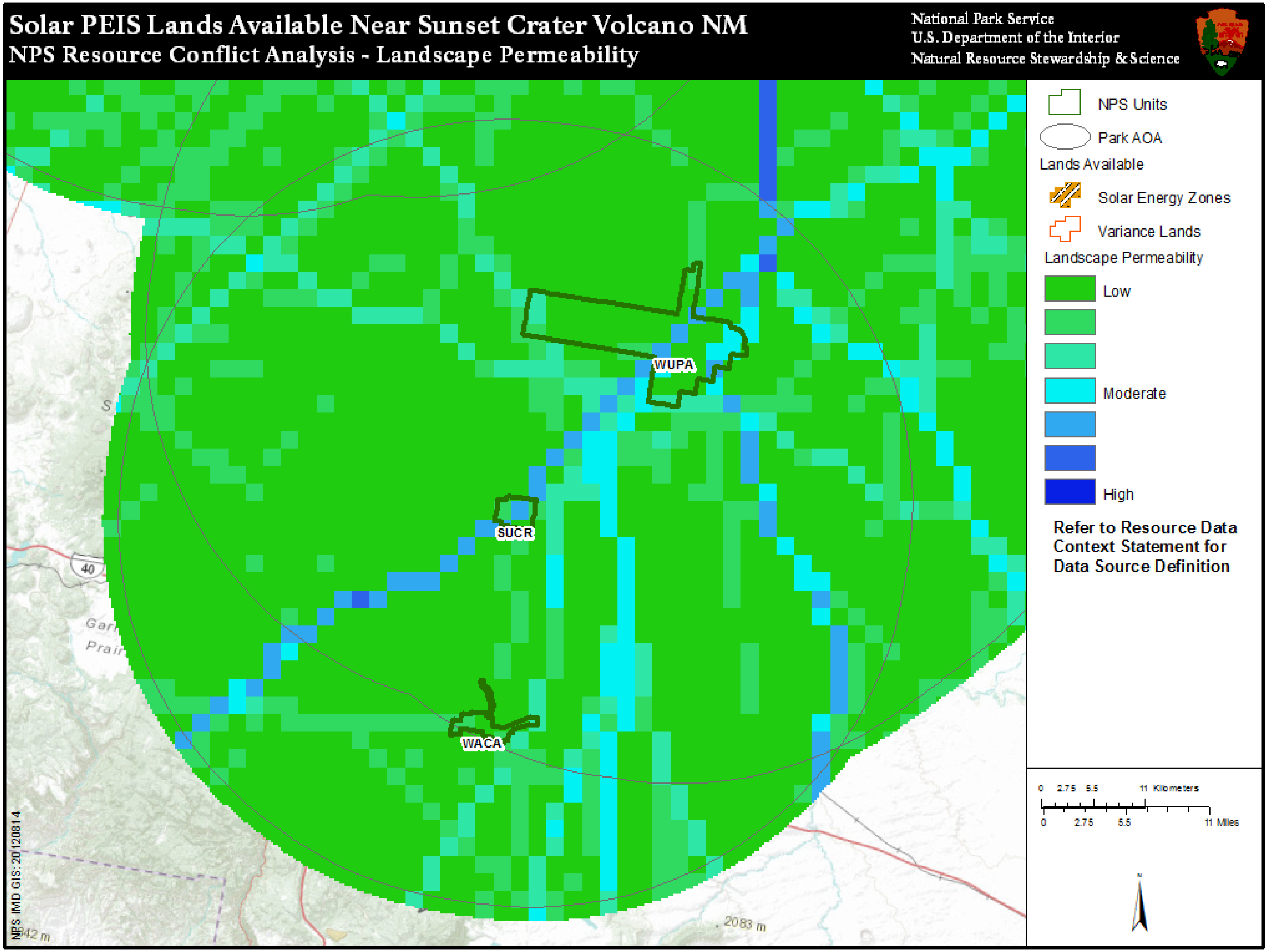

Solar PEIS Lands Available Near Sunset Crater Volcano NM
NPS Resource Conflict Analysis - Protected Areas
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
PADUS
Protected Areas
GAP Status - 1
GAP Status - 2
Refer to Resource Data Context Statement for Data Source Definition
WUPA
SUCR
WACA
NPS IMD GIS: 20120816
0 3.5 7 Kilometers
0 1.75 3.5 7 Miles

Critical Habitat

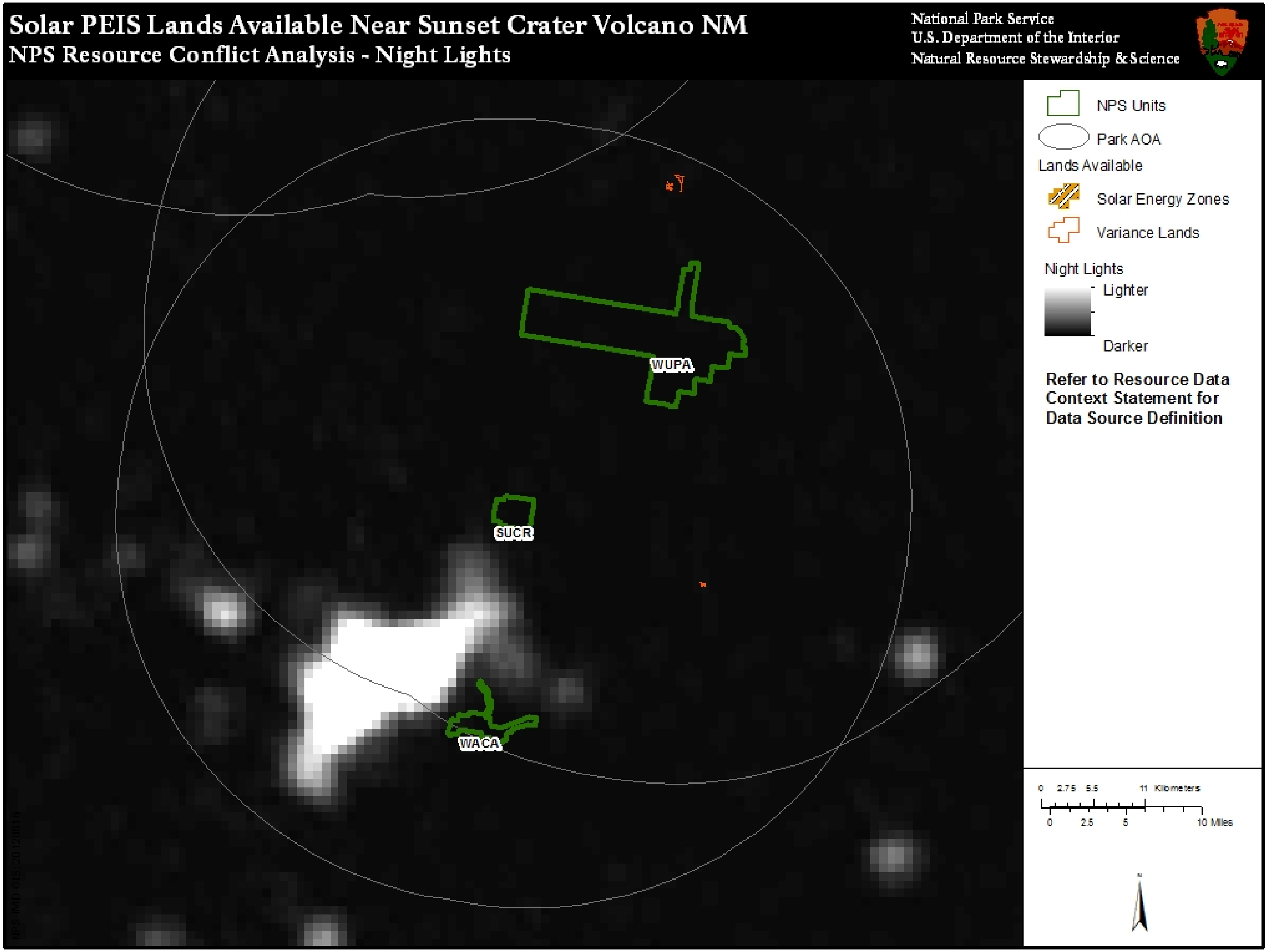


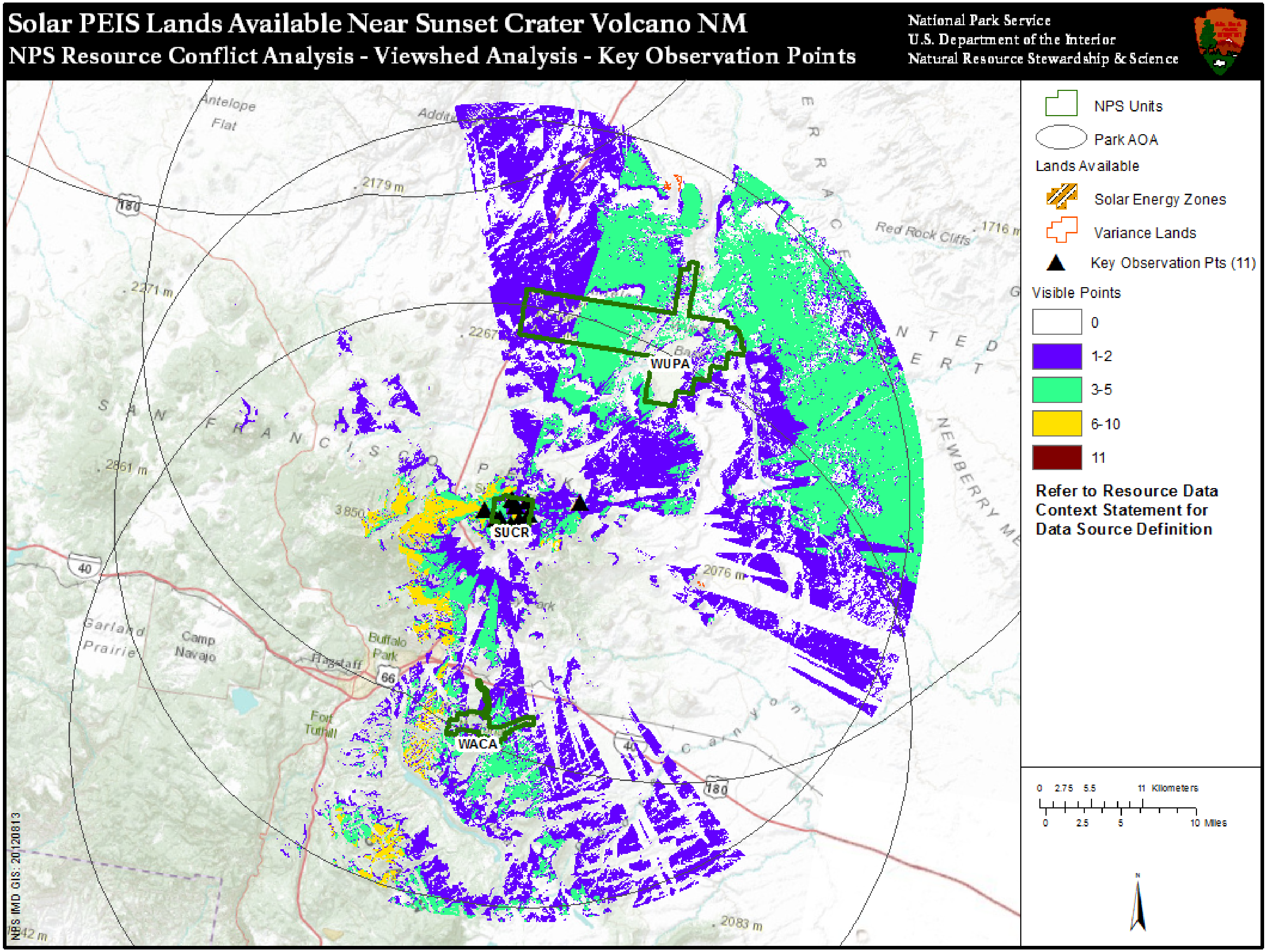

Solar PEIS Lands Available Near Sunset Crater Volcano NM
NPS Resource Conflict Analysis - Roadless Natural Areas
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Roadless Natural Areas
Refer to Resource Data Context Statement for Data Source Definition
0 2.75 5.5 11 Kilometers
0 2.5 5 10 Miles
WUPA
SUCR
WACA
Camp Navajo
40
66
180
NPS IMD GIS: 20120816


Solar PEIS Lands Available Near Sunset Crater Volcano NM
NPS Resource Conflict Analysis - Naturalness Index
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Naturalness Index (2001)
High (1)
Low (0)
Refer to Resource Data Context Statement for Data Source Definition
WUPA
SUCR
WACA
0 2.75 5.5 11 Kilometers
0 2.5 5 10 Miles
NPS IMD GIS: 20120816



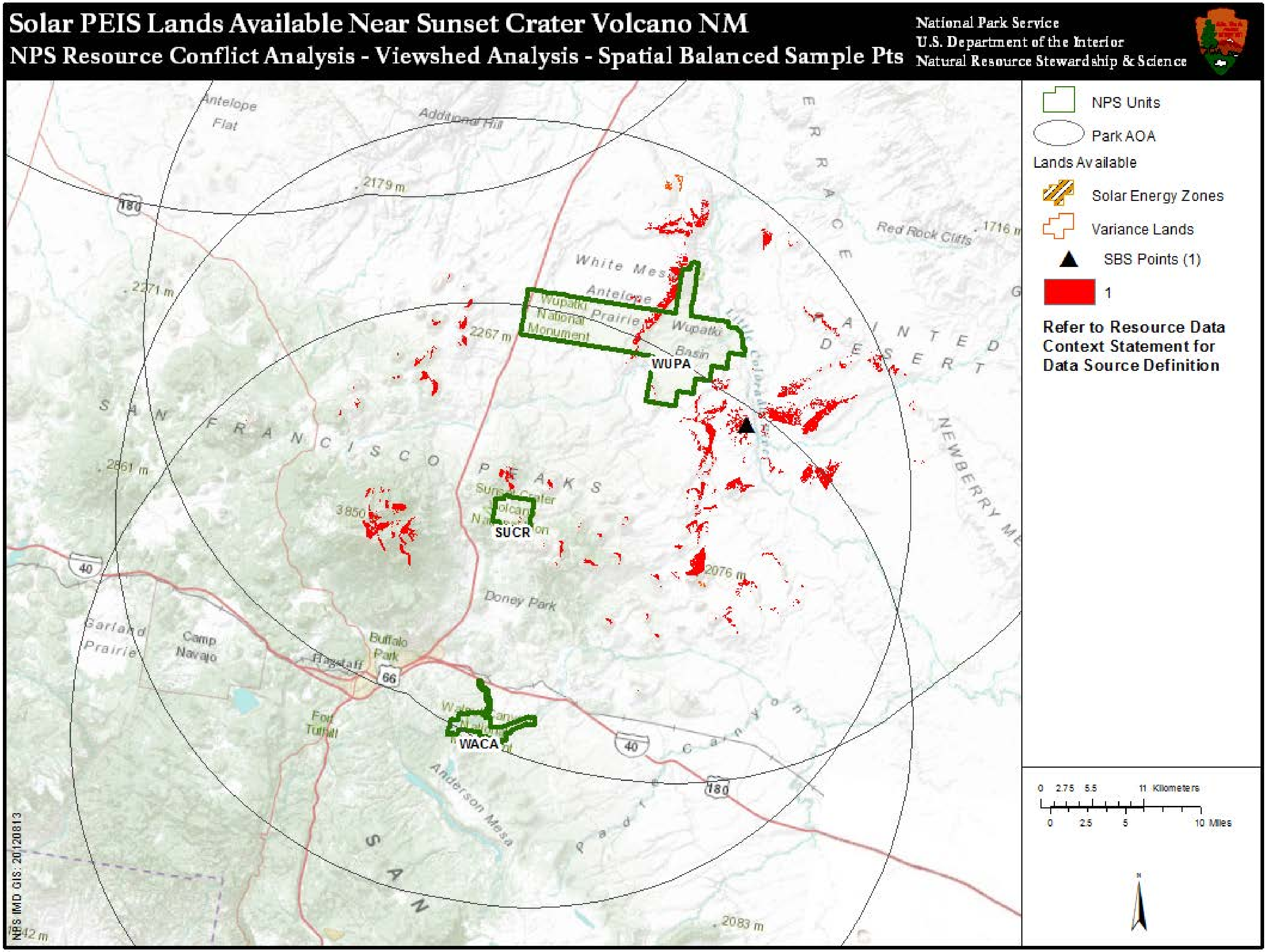
Solar PEIS Lands Available Near Sunset Crater Volcano NM
NPS Resource Conflict Analysis - Landscape Permeability
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Landscape Permeability
Low
Moderate
High
Refer to Resource Data Context Statement for Data Source Definition
0 2.75 5.5 11 Kilometers
0 2.75 5.5 11 Miles
WUPA
SUCR
WACA
40
2083 m
NPS IMD GIS: 20120814


Solar PEIS Lands Available Near Sunset Crater Volcano NM
NPS Resource Conflict Analysis - Night Lights
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Night Lights
Lighter
Darker
Refer to Resource Data Context Statement for Data Source Definition
WUPA
SUCR
WACA
0 2.75 5.5 11 Kilometers
0 2.5 5 10 Miles

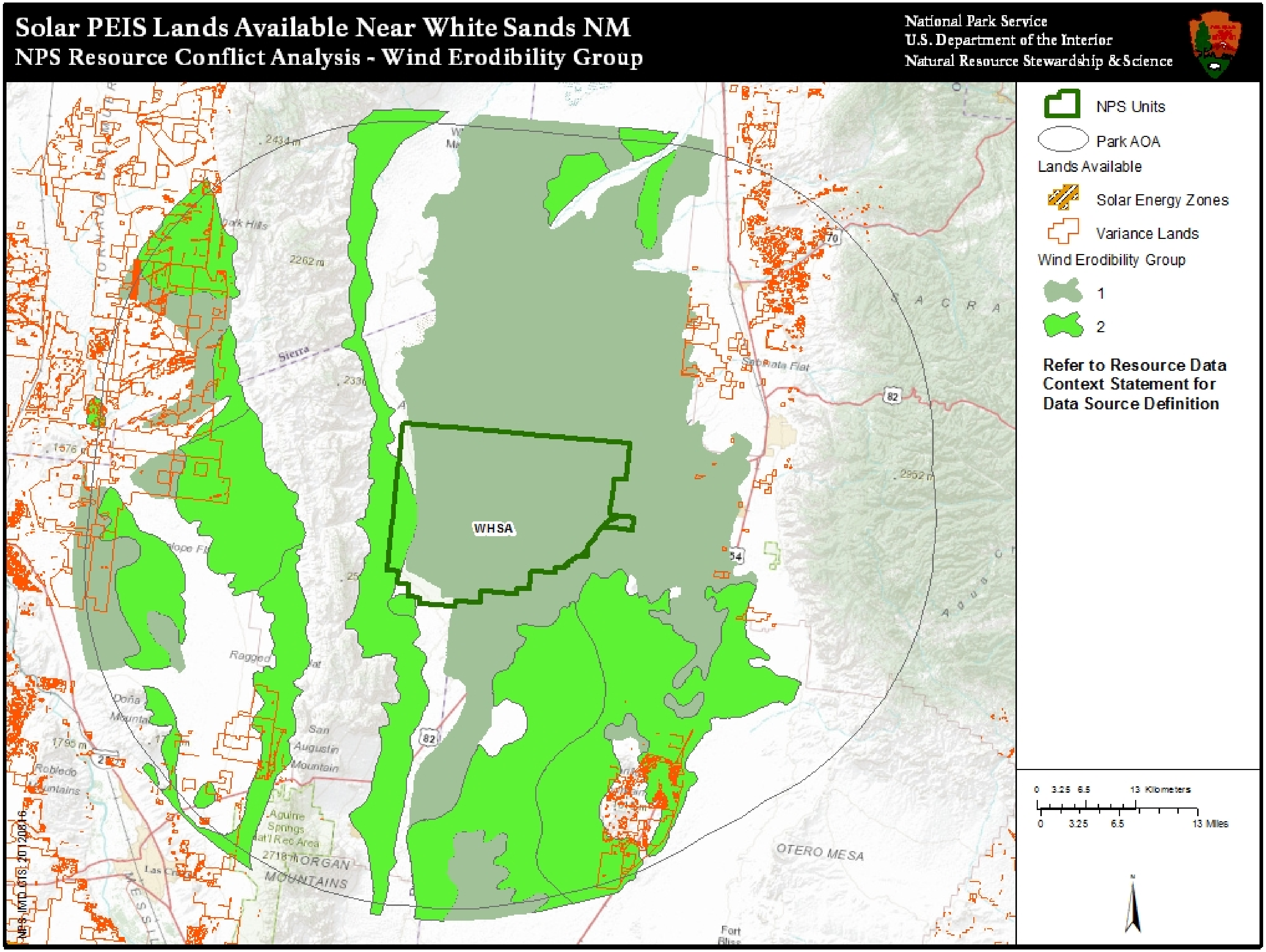


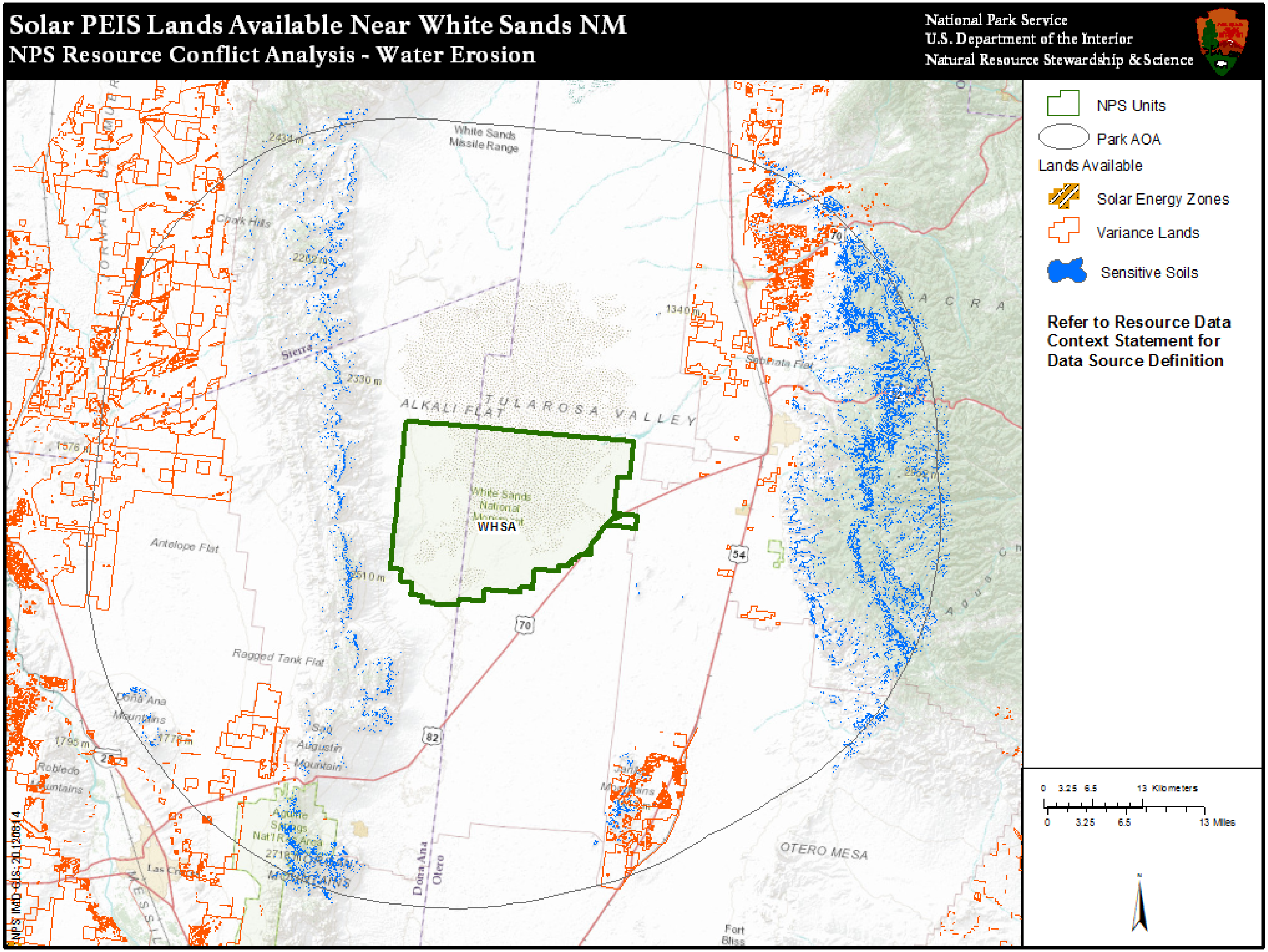
Solar PEIS Lands Available Near Sunset Crater Volcano NM
NPS Resource Conflict Analysis - Viewshed Analysis - Key Observation Points
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Key Observation Pts (11)
Visible Points
0
1-2
3-5
6-10
11
Refer to Resource Data Context Statement for Data Source Definition
0 2.75 5.5 11 Kilometers
0 2.5 5 10 Miles
WUPA
SUCR
WACA
Flagstaff
Buffalo Park
Camp Navajo
Garland Prairie
Fort Tuthill
Antelope Flat
Red Rock Cliffs
NPS IMD GIS: 20120813

Viewshed – Spatial Balanced Sample

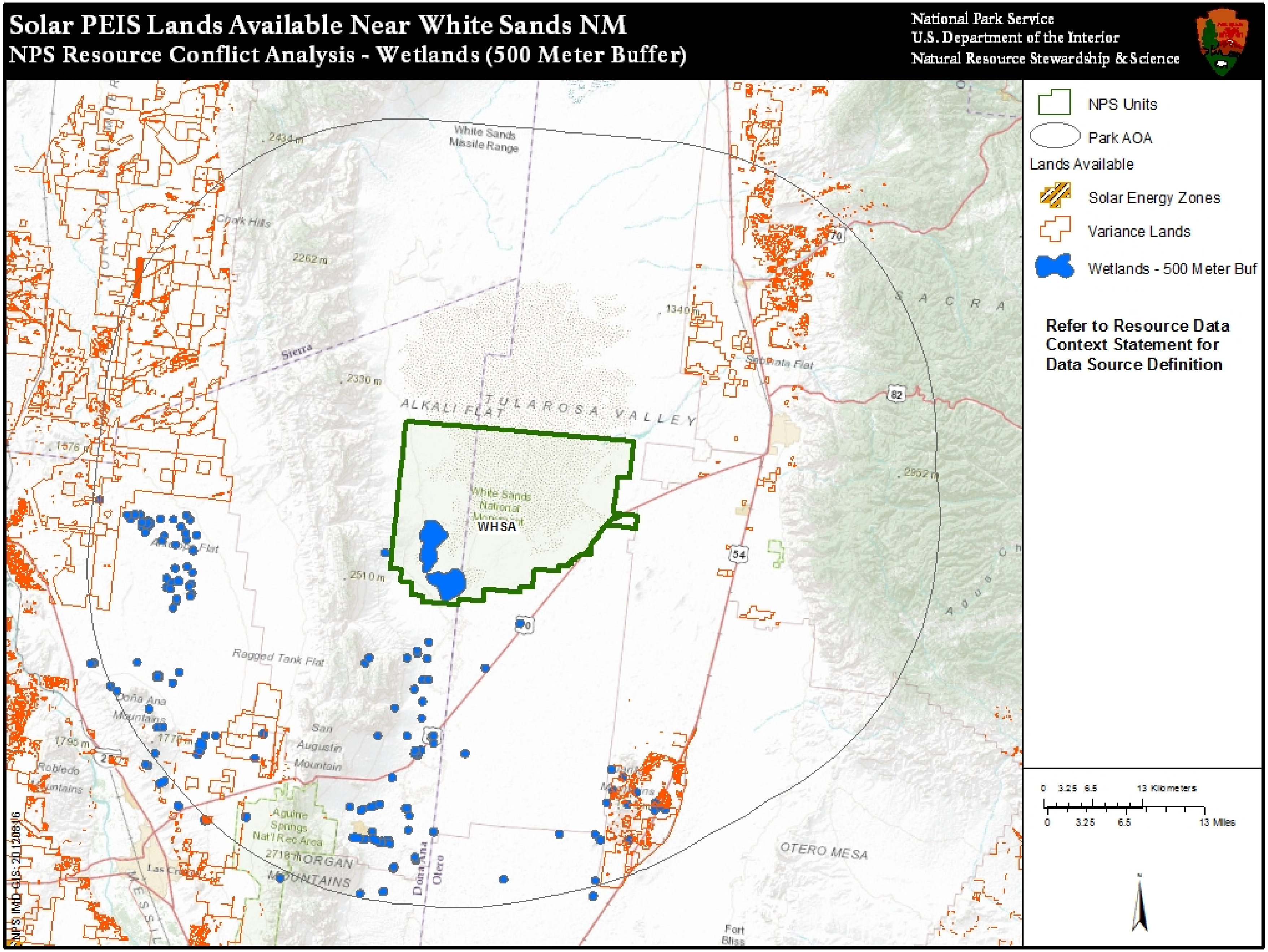


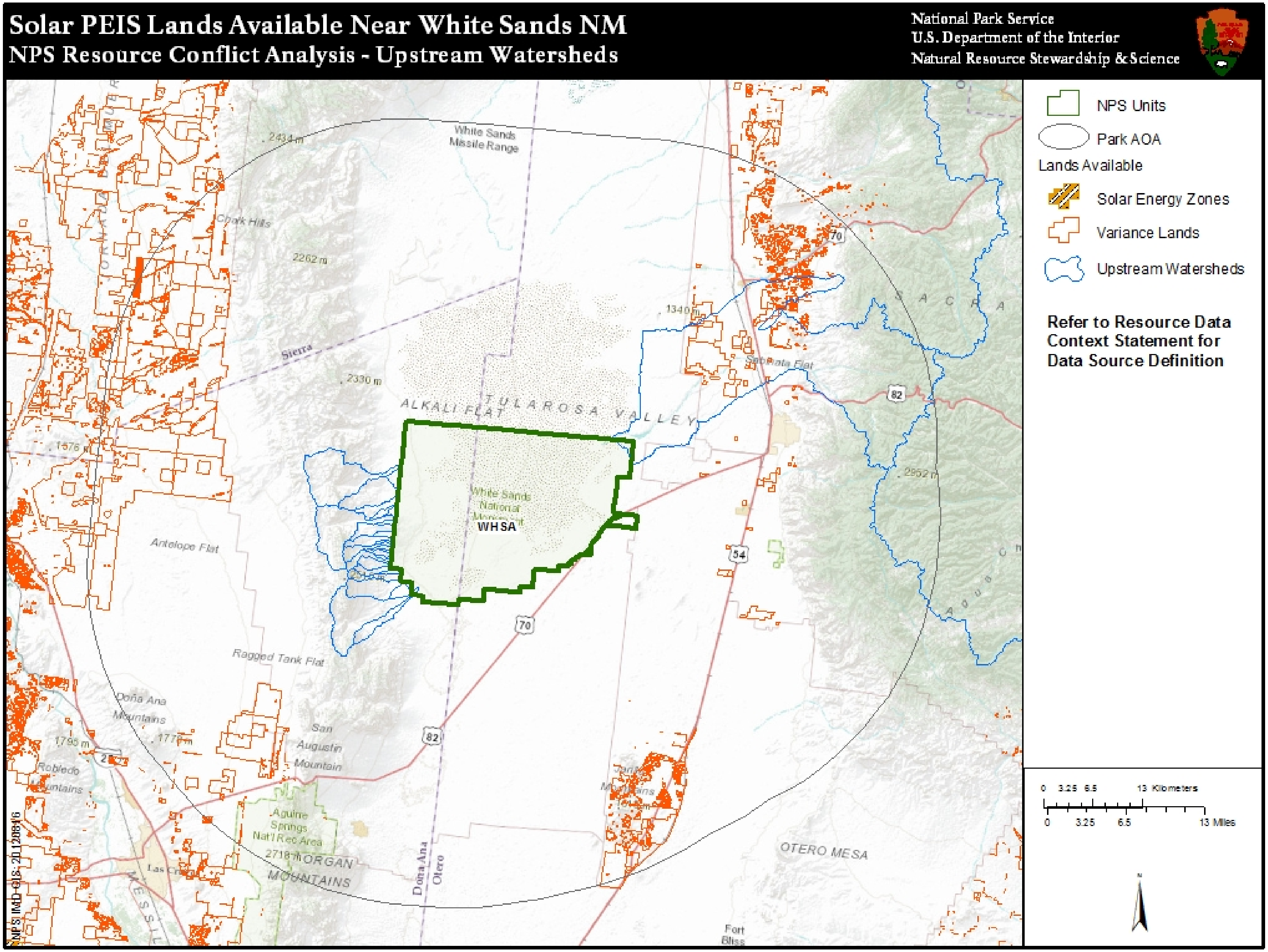
White Sands National Monument
Wind Erodibility Group



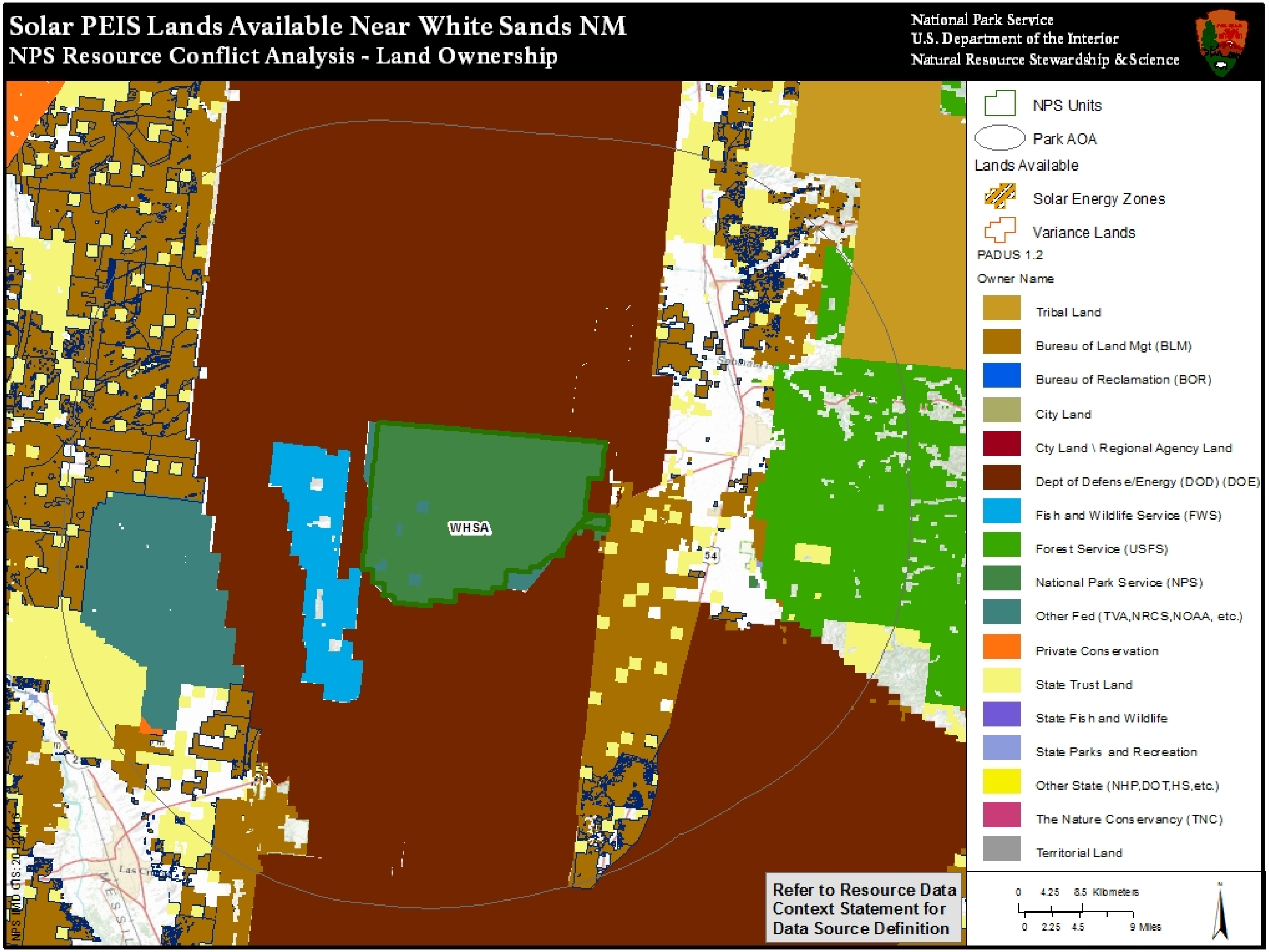


Solar PEIS Lands Available Near White Sands NM
NPS Resource Conflict Analysis - Water Erosion
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Sensitive Soils
Refer to Resource Data Context Statement for Data Source Definition
White Sands Missile Range
TULAROSA VALLEY
ALKALI FLAT
WHSA
Antelope Flat
Ragged Tank Flat
OTERO MESA
0 3.25 6.5 13 Kilometers
0 3.25 6.5 13 Miles
NPS IMD GIS: 20120814

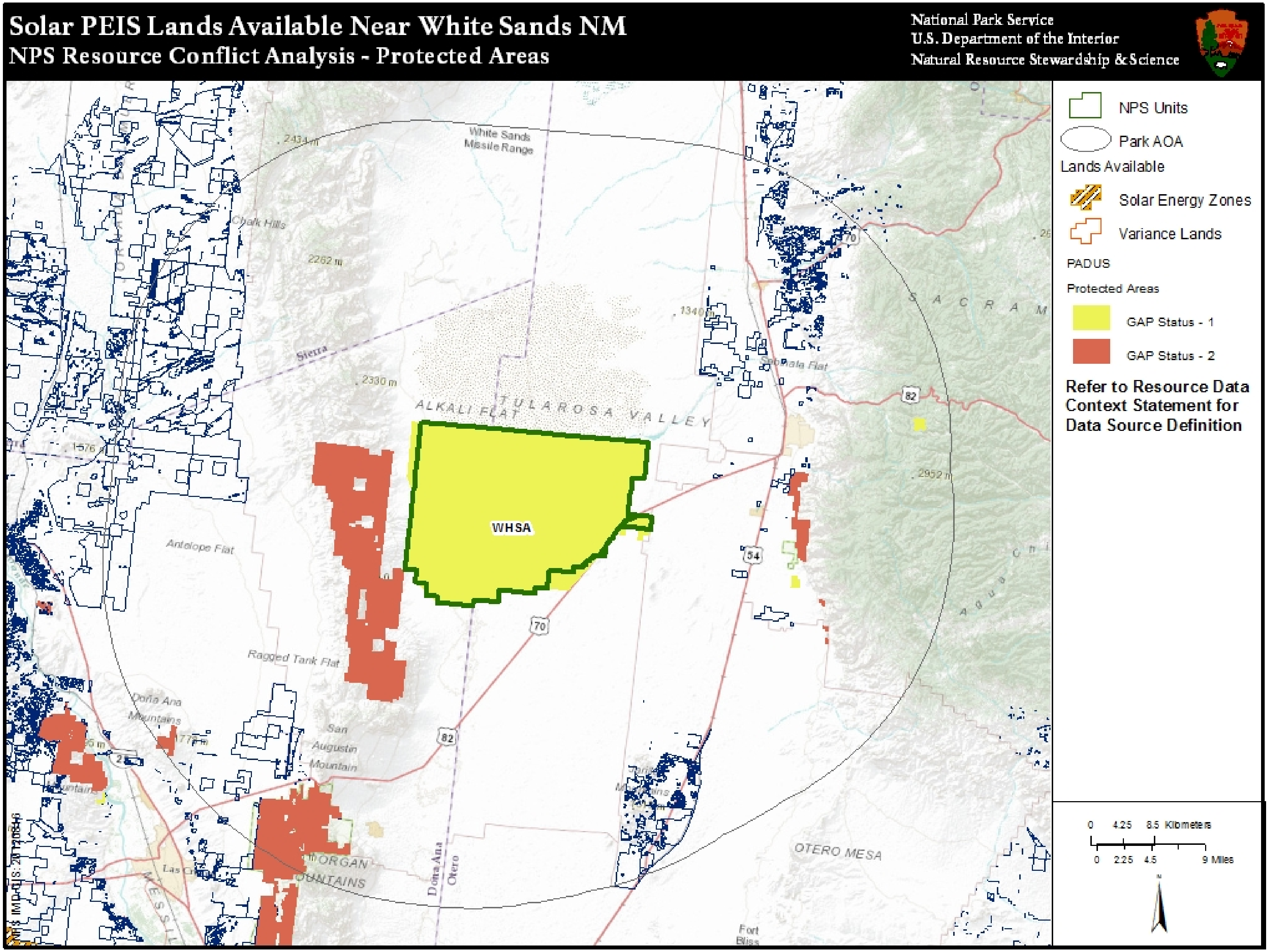

Solar PEIS Lands Available Near White Sands NM
NPS Resource Conflict Analysis - Wetlands (500 Meter Buffer)
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Wetlands - 500 Meter Buf
Refer to Resource Data Context Statement for Data Source Definition
0 3.25 6.5 13 Kilometers
0 3.25 6.5 13 Miles
WHSA
White Sands National Monument
White Sands Missile Range
TULAROSA VALLEY
ALKALI FLAT
OTERO MESA
Ragged Tank Flat
San Augustin Mountain
Doña Ana Mountains
Aguirre Springs Nat'l Rec Area
ORGAN MOUNTAINS
Chalk Hills
Sierra
Doña Ana
Otero
Fort Bliss
NPS IMD-GIS: 20120816

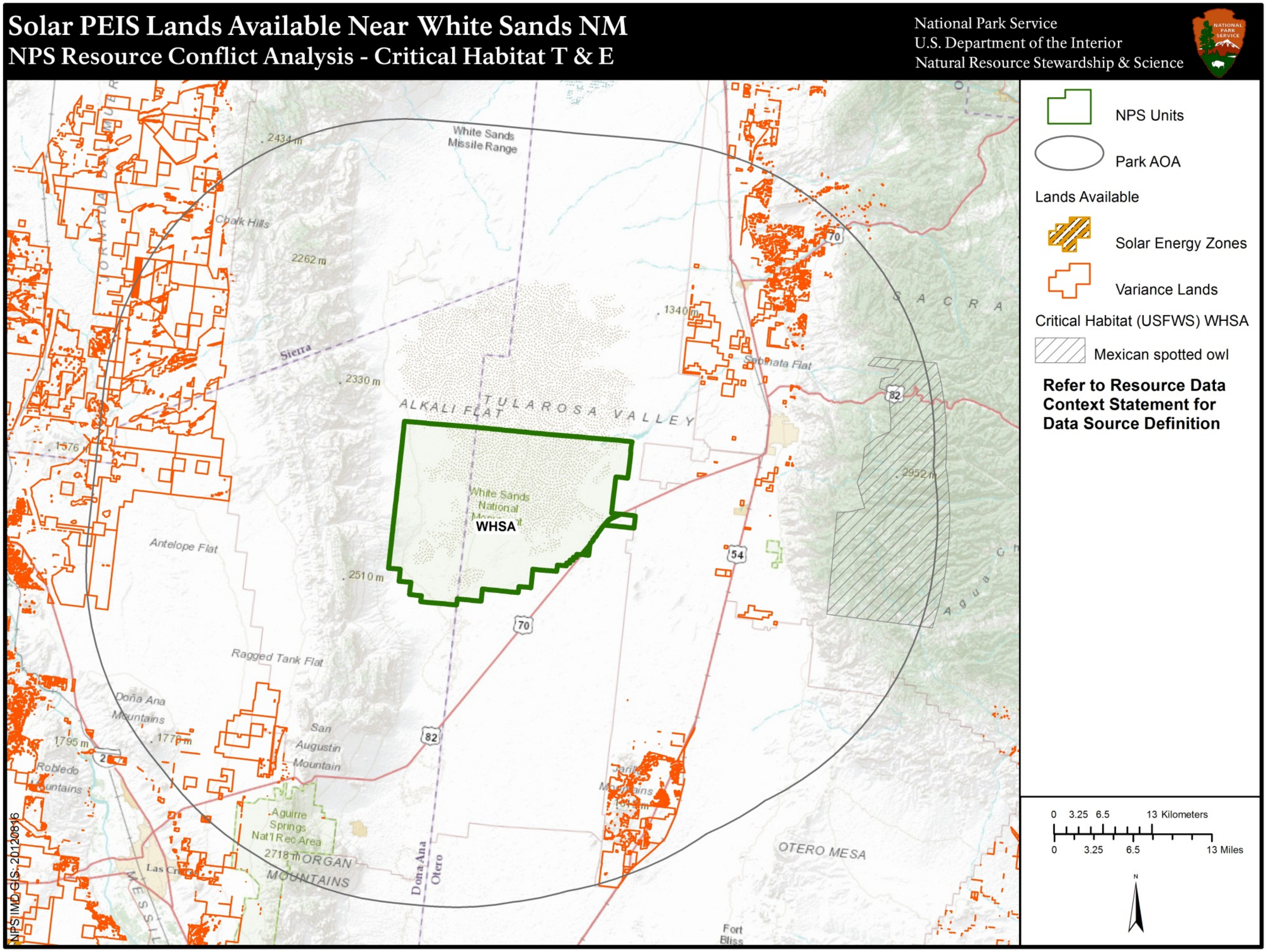


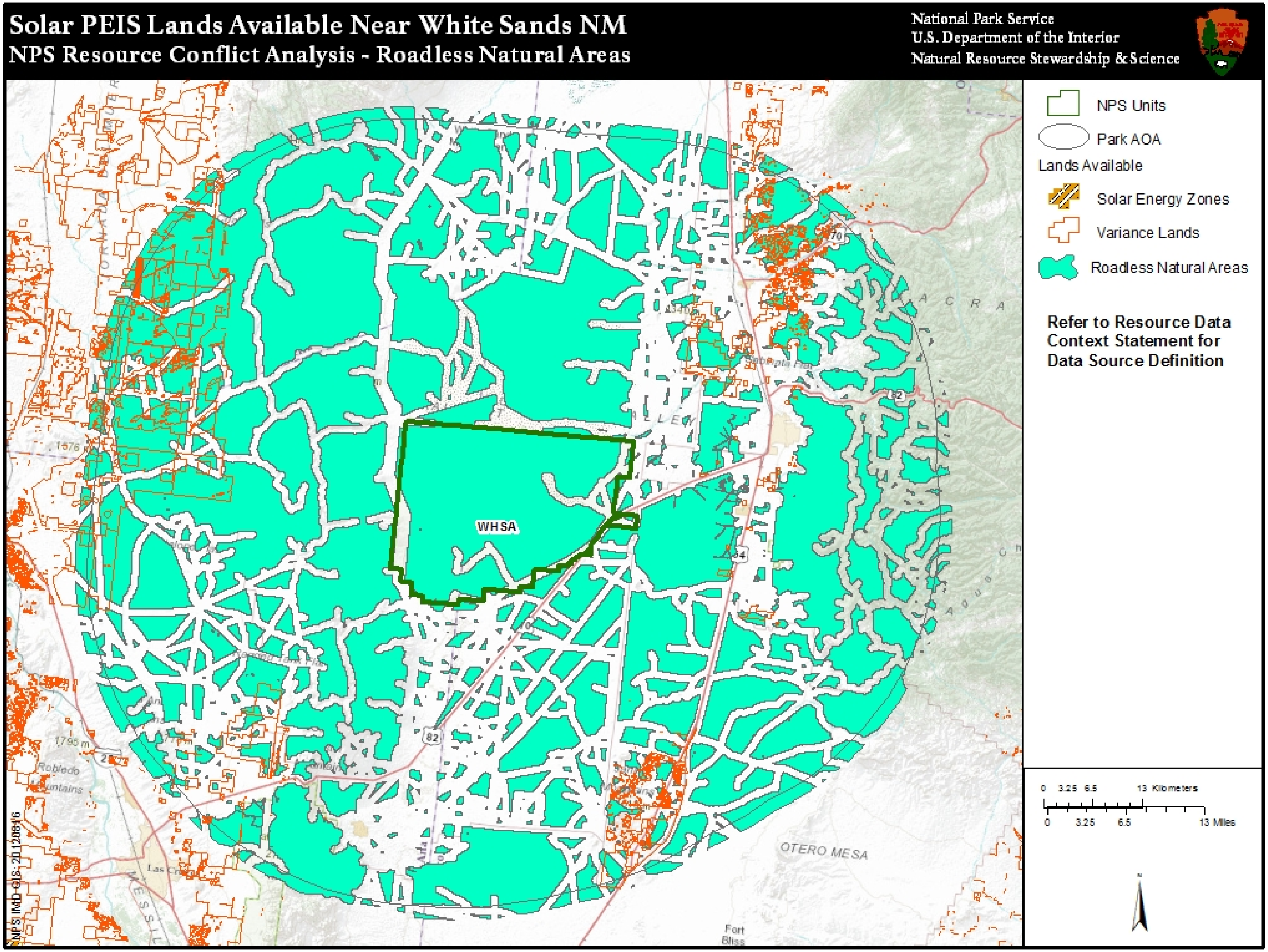
Solar PEIS Lands Available Near White Sands NM
NPS Resource Conflict Analysis - Upstream Watersheds
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Upstream Watersheds
Refer to Resource Data Context Statement for Data Source Definition
WHSA
White Sands National Monument
White Sands Missile Range
TULAROSA VALLEY
ALKALI FLAT
Antelope Flat
Ragged Tank Flat
OTERO MESA
Aguirre Springs Nat'l Rec Area
ORGAN MOUNTAINS
Doña Ana Mountains
San Augustin Mountain
Fort Bliss
0 3.25 6.5 13 Kilometers
0 3.25 6.5 13 Miles
NPS IMD-GIS: 20120816

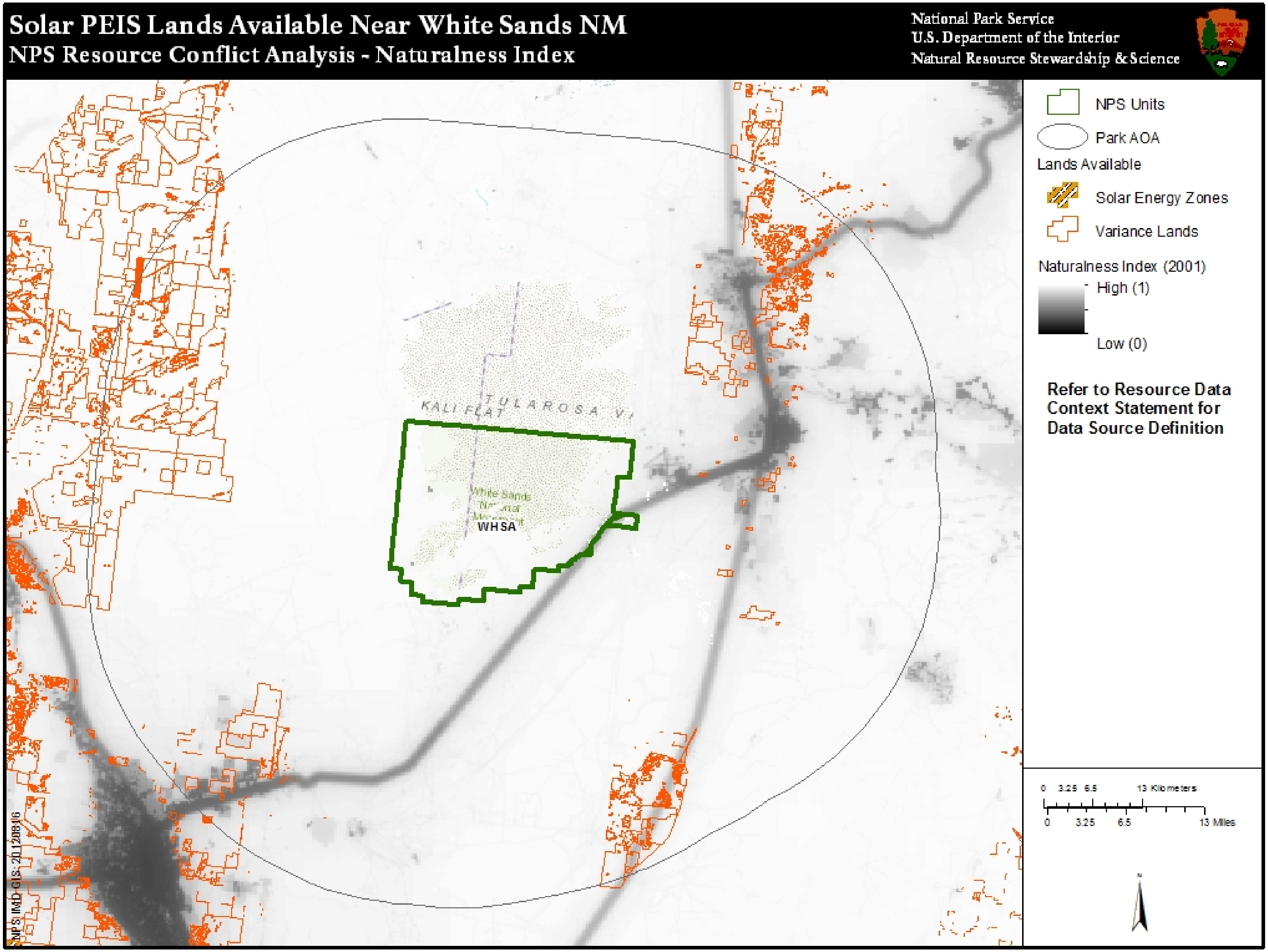


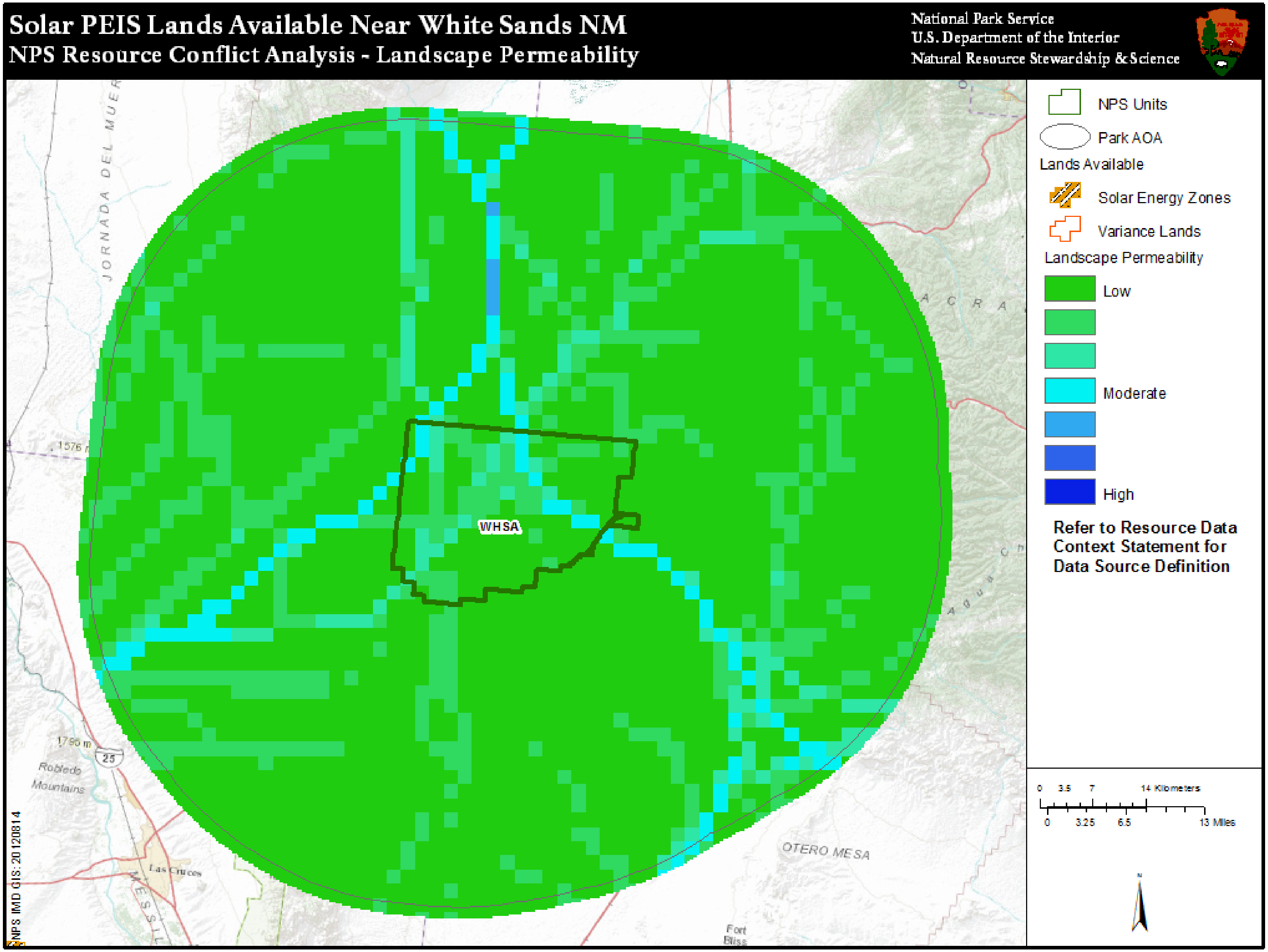
Solar PEIS Lands Available Near White Sands NM
NPS Resource Conflict Analysis - Land Ownership
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
PADUS 1.2
Owner Name
Tribal Land
Bureau of Land Mgt (BLM)
Bureau of Reclamation (BOR)
City Land
Cty Land \ Regional Agency Land
Dept of Defense/Energy (DOD) (DOE)
Fish and Wildlife Service (FWS)
Forest Service (USFS)
National Park Service (NPS)
Other Fed (TVA,NRCS,NOAA, etc.)
Private Conservation
State Trust Land
State Fish and Wildlife
State Parks and Recreation
Other State (NHP,DOT,HS,etc.)
The Nature Conservancy (TNC)
Territorial Land
WHSA
54
Refer to Resource Data Context Statement for Data Source Definition
0 4.25 8.5 Kilometers
0 2.25 4.5 9 Miles


Solar PEIS Lands Available Near White Sands NM
NPS Resource Conflict Analysis - Protected Areas
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
PADUS
Protected Areas
GAP Status - 1
GAP Status - 2
Refer to Resource Data Context Statement for Data Source Definition
0 4.25 8.5 Kilometers
0 2.25 4.5 9 Miles
WHSA
White Sands Missile Range
Chalk Hills
Sierra
ALKALI FLAT
TULAROSA VALLEY
Antelope Flat
Ragged Tank Flat
Dona Ana Mountains
San Augustin Mountain
ORGAN MOUNTAINS
OTERO MESA
Fort Bliss
Dona Ana
Otero
SACRAM
2434 m
2262 m
2330 m
1340 m
2952 m
1576
70
82
54

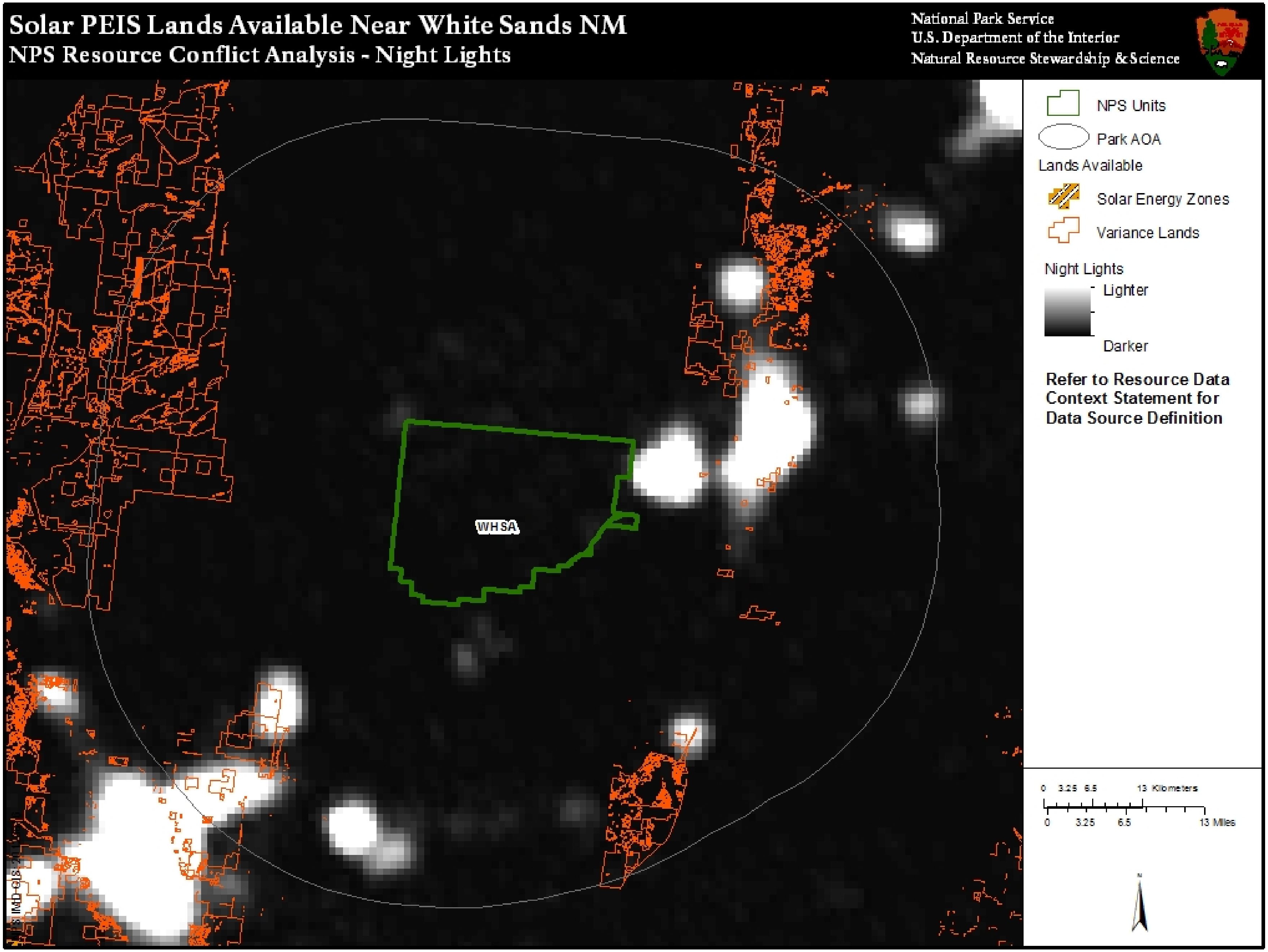

Solar PEIS Lands Available Near White Sands NM
NPS Resource Conflict Analysis - Critical Habitat T & E
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Critical Habitat (USFWS) WHSA
Mexican spotted owl
Refer to Resource Data Context Statement for Data Source Definition
0 3.25 6.5 13 Kilometers
0 3.25 6.5 13 Miles
WHSA
White Sands Missile Range
TULAROSA VALLEY
ALKALI FLAT
Antelope Flat
Ragged Tank Flat
Chalk Hills
Doña Ana Mountains
San Augustin Mountain
Aguirre Springs Nat'l Rec Area
ORGAN MOUNTAINS
OTERO MESA
Fort Bliss
Doña Ana
Otero
NPS IMD GIS: 20120816

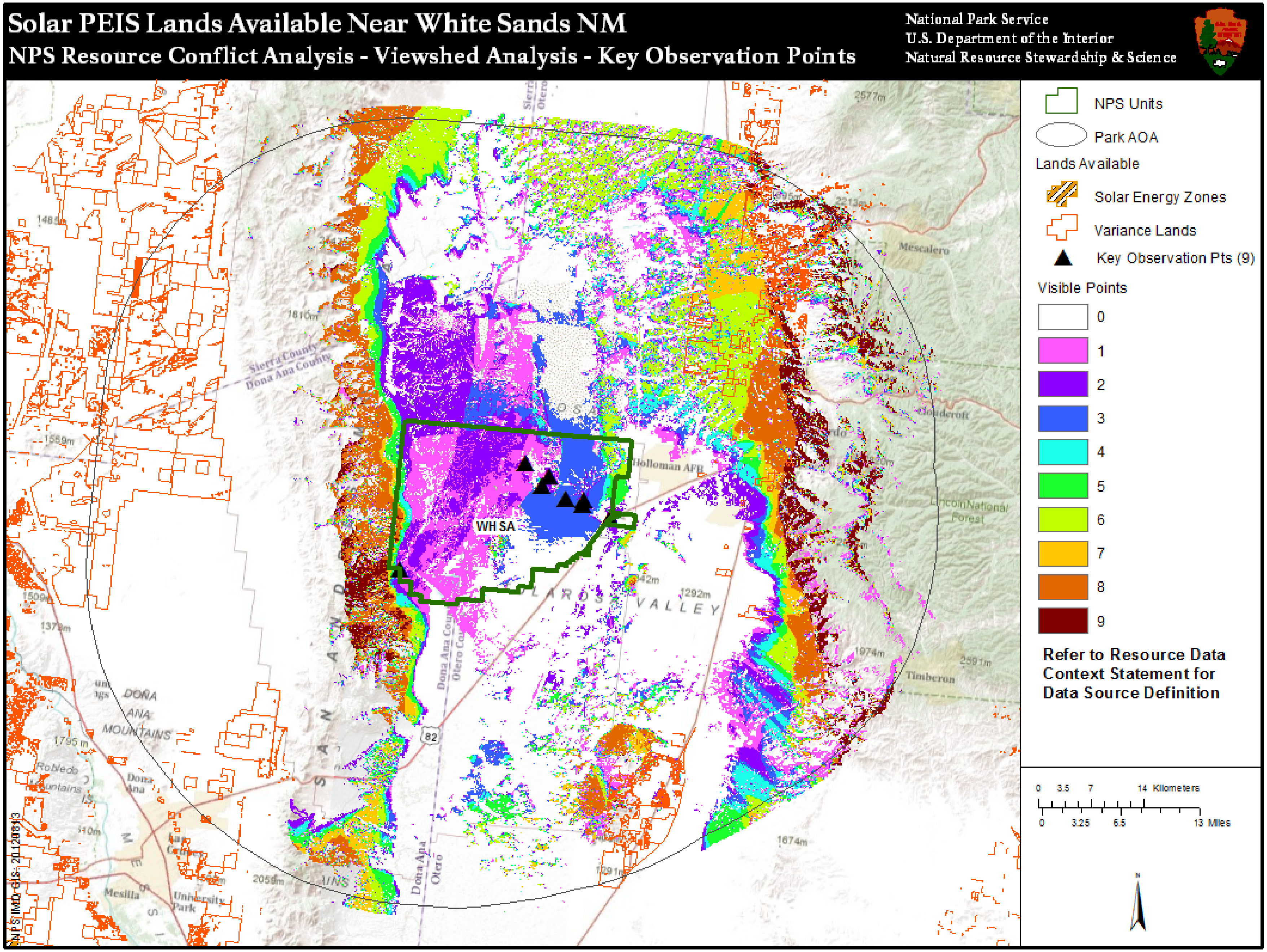

Solar PEIS Lands Available Near White Sands NM
NPS Resource Conflict Analysis - Roadless Natural Areas
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Roadless Natural Areas
Refer to Resource Data Context Statement for Data Source Definition
0 3.25 6.5 13 Kilometers
0 3.25 6.5 13 Miles
WHSA
OTERO MESA
Robledo Mountains
Fort Bliss
NPS IMD-GIS: 20120816


Solar PEIS Lands Available Near White Sands NM
NPS Resource Conflict Analysis - Naturalness Index
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Naturalness Index (2001)
High (1)
Low (0)
Refer to Resource Data Context Statement for Data Source Definition
0 3.25 6.5 13 Kilometers
0 3.25 6.5 13 Miles
KALI FLAT
TULAROSA V
WHSA
NPS IMD-GIS: 20120816

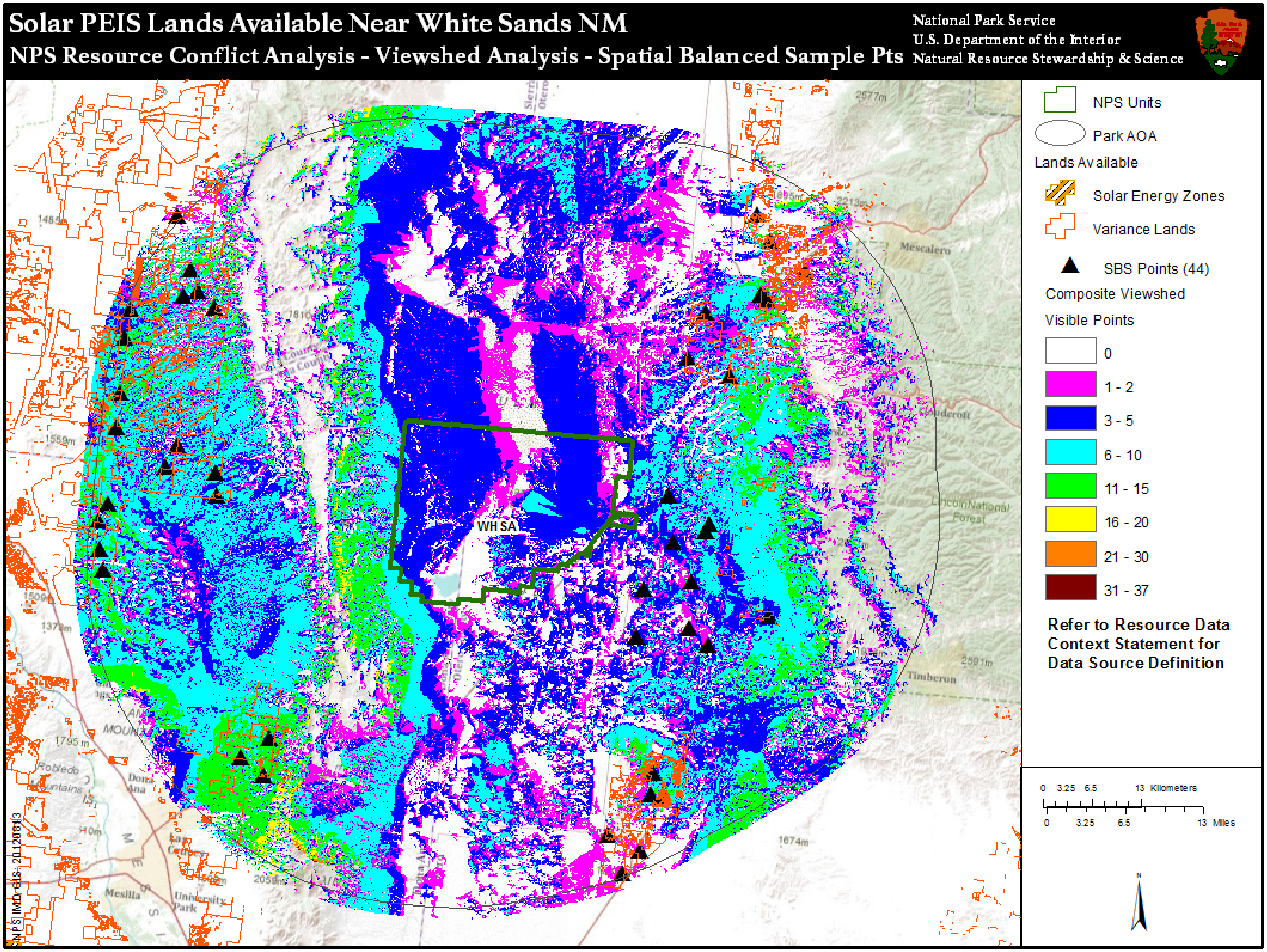


Solar PEIS Lands Available Near White Sands NM
NPS Resource Conflict Analysis - Landscape Permeability
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Landscape Permeability
Low
Moderate
High
Refer to Resource Data Context Statement for Data Source Definition
WHSA
OTERO MESA
Las Cruces
Robledo Mountains
JORNADA DEL MUERTO
NPS IMD GIS: 20120814

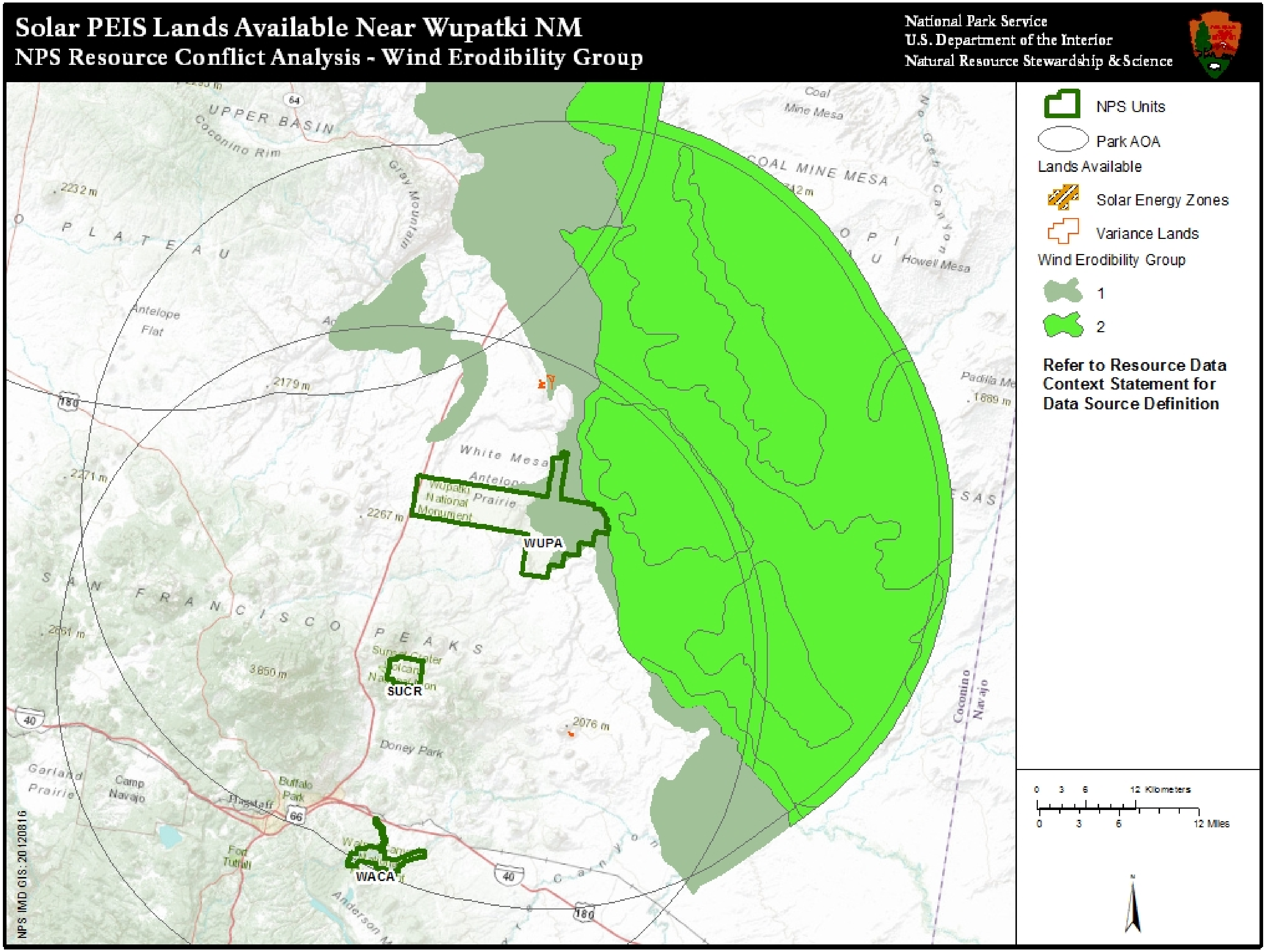

Solar PEIS Lands Available Near White Sands NM
NPS Resource Conflict Analysis - Night Lights
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
WHSA
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Night Lights
Lighter
Darker
Refer to Resource Data Context Statement for Data Source Definition
0 3.25 6.5 13 Kilometers
0 3.25 6.5 13 Miles

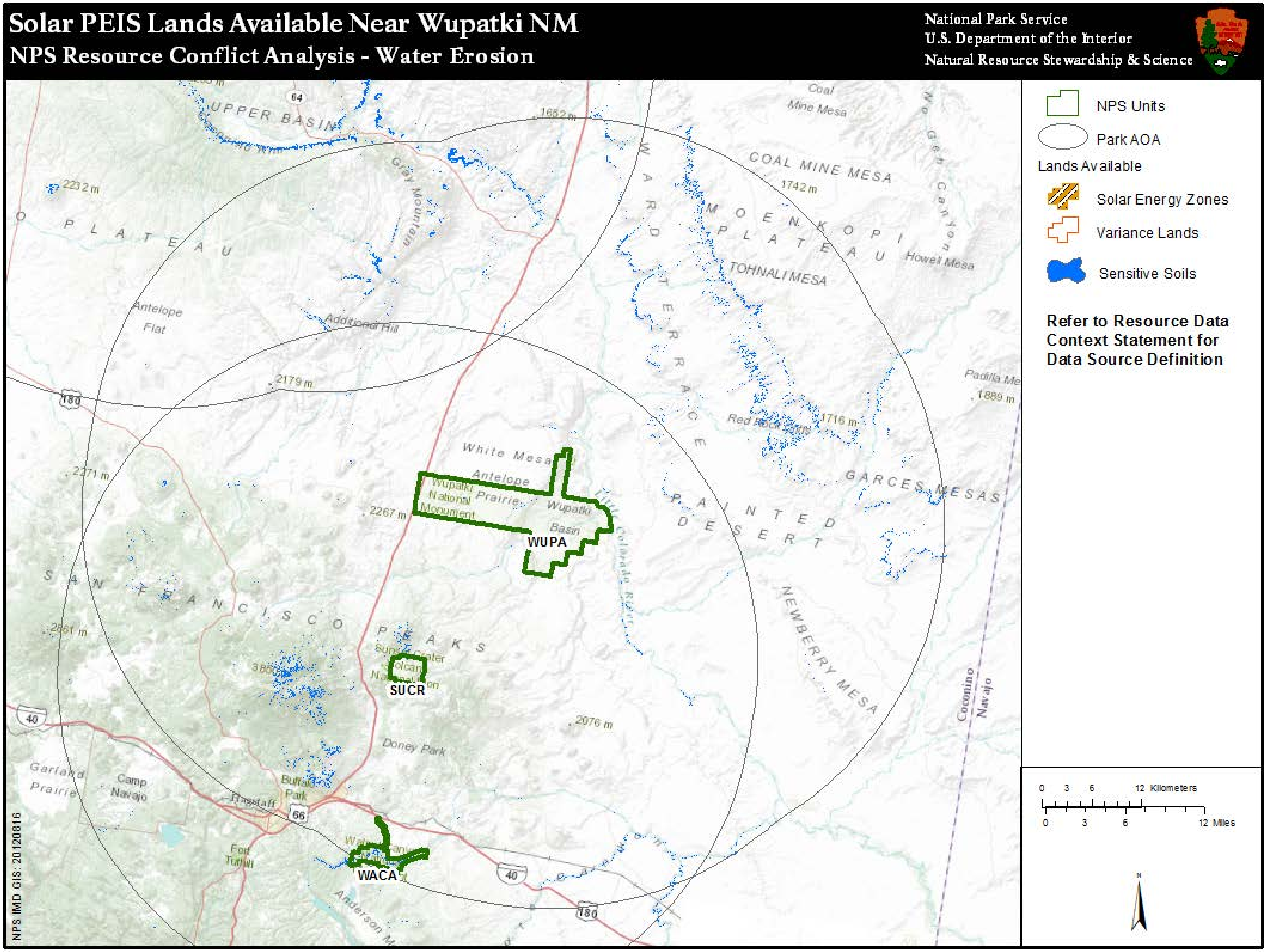

Solar PEIS Lands Available Near White Sands NM
NPS Resource Conflict Analysis - Viewshed Analysis - Key Observation Points
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Key Observation Pts (9)
Visible Points
0
1
2
3
4
5
6
7
8
9
Refer to Resource Data Context Statement for Data Source Definition
0 3.5 7 14 Kilometers
0 3.25 6.5 13 Miles
WHSA
Holloman AFB
Mescalero
Cloudcroft
Lincoln National Forest
Timberon
DONA ANA MOUNTAINS
Mesilla
University Park
Sierra County
Dona Ana County
Otero County
82
NPS IMD GIS: 20120813

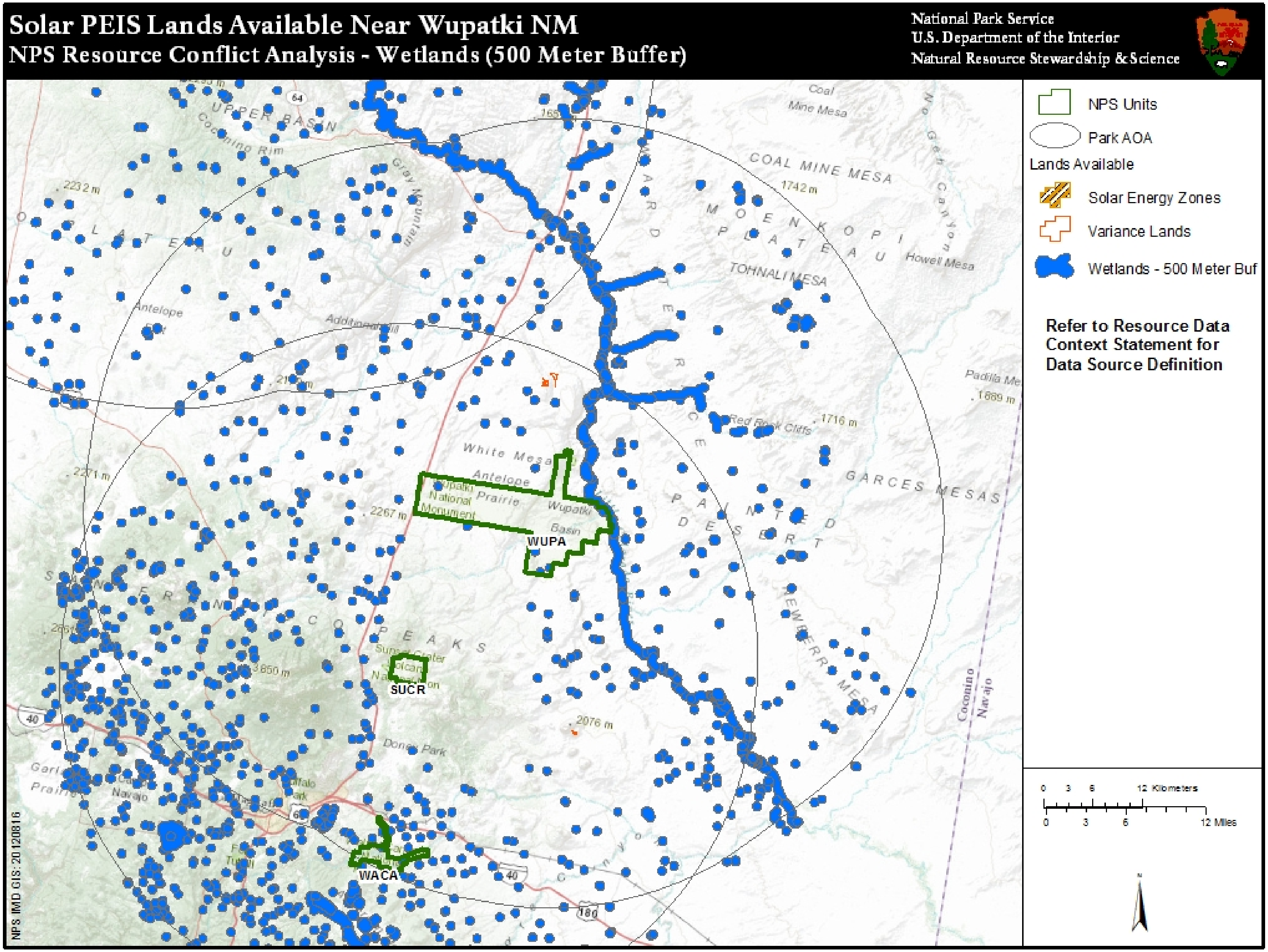
Viewshed – Spatial Balanced Sample



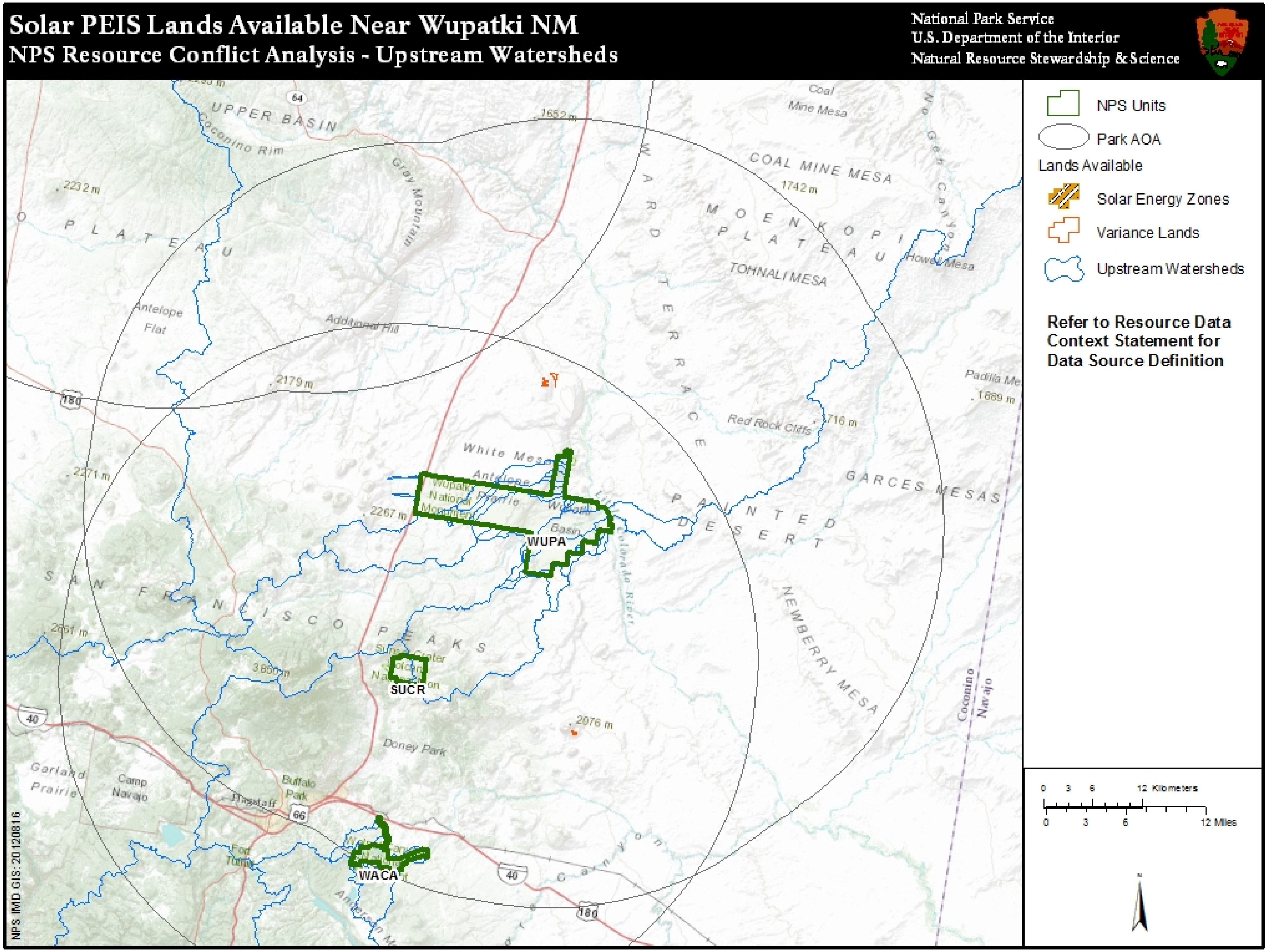
Wupatki National Monument
Wind Erodibility Group



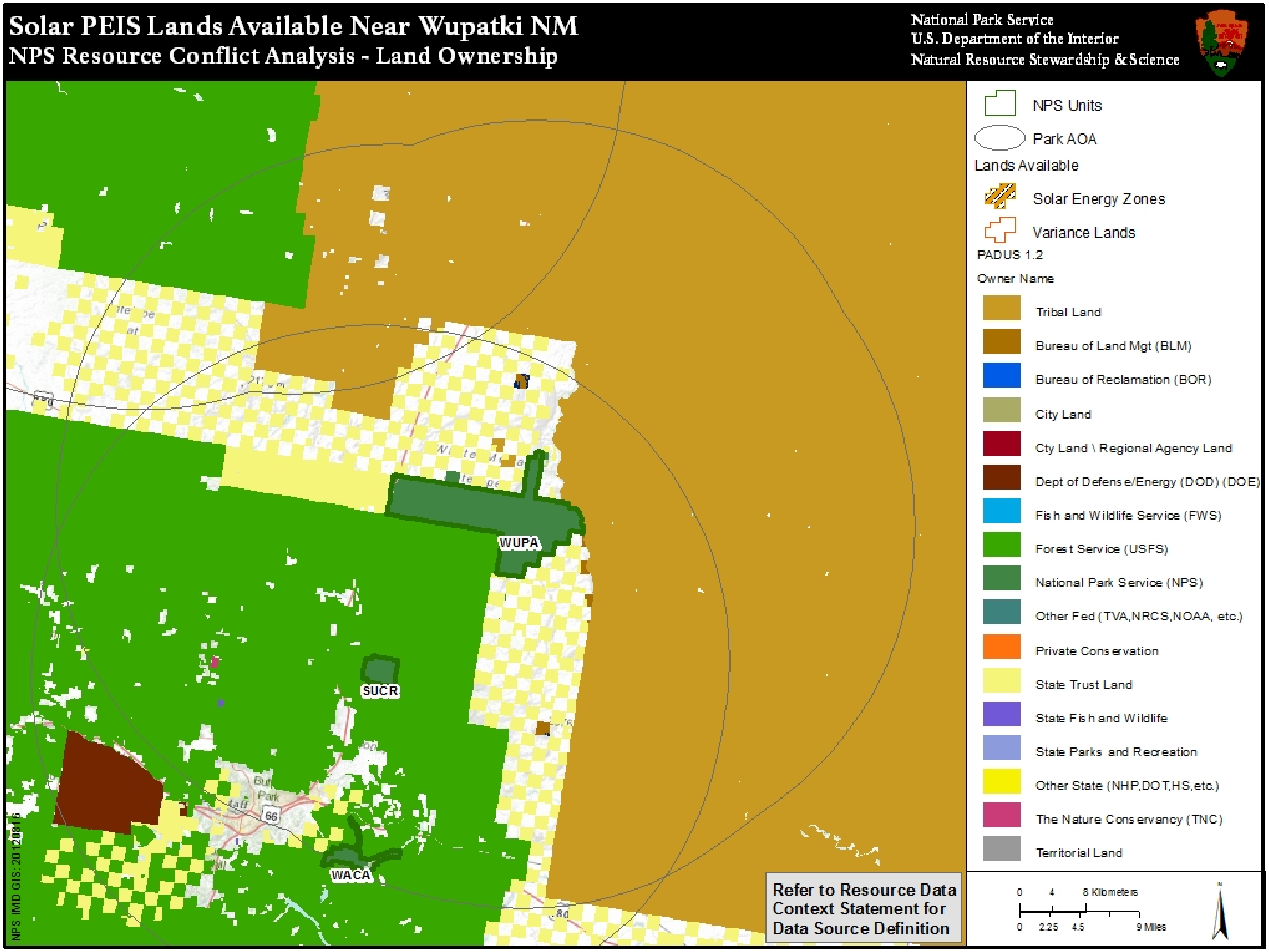

Solar PEIS Lands Available Near Wupatki NM
NPS Resource Conflict Analysis - Water Erosion
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Sensitive Soils
Refer to Resource Data Context Statement for Data Source Definition
0 3 6 12 Kilometers
0 3 6 12 Miles
NPS IMD GIS: 20120816
WUPA
SUCR
WACA
Wupatki National Monument
COAL MINE MESA
MOENKOPI PLATEAU
TOHNALI MESA
GARCES MESAS
PAINTED DESERT
NEWBERRY MESA
SAN FRANCISCO PEAKS
WARD TERRACE
UPPER BASIN
Antelope Flat
Additional Hill
White Mesa
Antelope Prairie
Wupatki Basin
Doney Park
Garland Prairie
Camp Navajo
Flagstaff
Coconino
Navajo
2232 m
2179 m
2271 m
2267 m
2076 m
1742 m
1716 m
1889 m
180
40
66
64

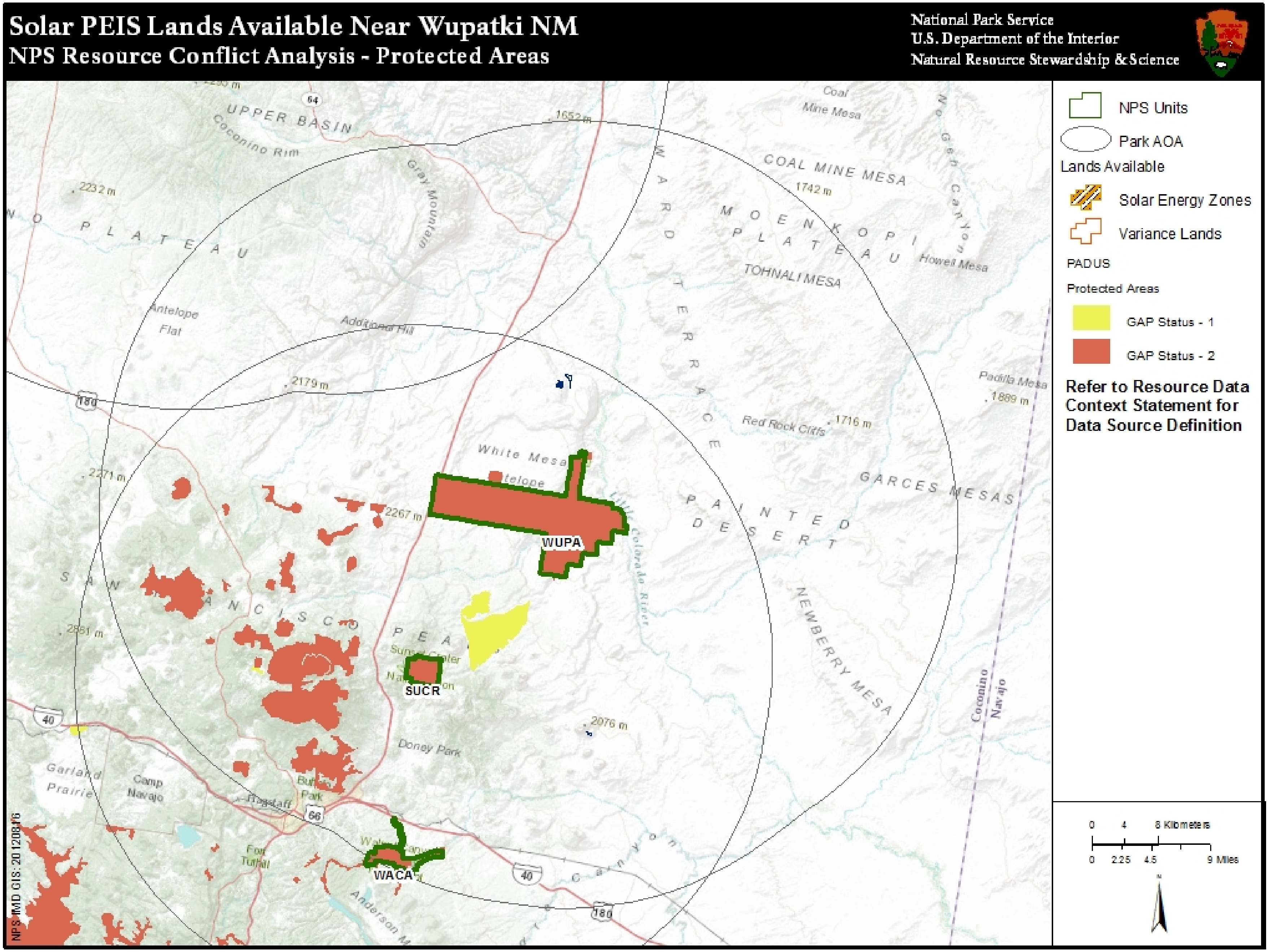

Solar PEIS Lands Available Near Wupatki NM
NPS Resource Conflict Analysis - Wetlands (500 Meter Buffer)
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Wetlands - 500 Meter Buf
Refer to Resource Data Context Statement for Data Source Definition
0 3 6 12 Kilometers
0 3 6 12 Miles
NPS IMD GIS: 20120816
WUPA
SUCR
WACA
COAL MINE MESA
MOENKOPI PLATEAU
TOHNALI MESA
GARCES MESAS
PAINTED DESERT
White Mesa
Wupatki Basin
Red Rock Cliffs
Howell Mesa
Coconino
Navajo

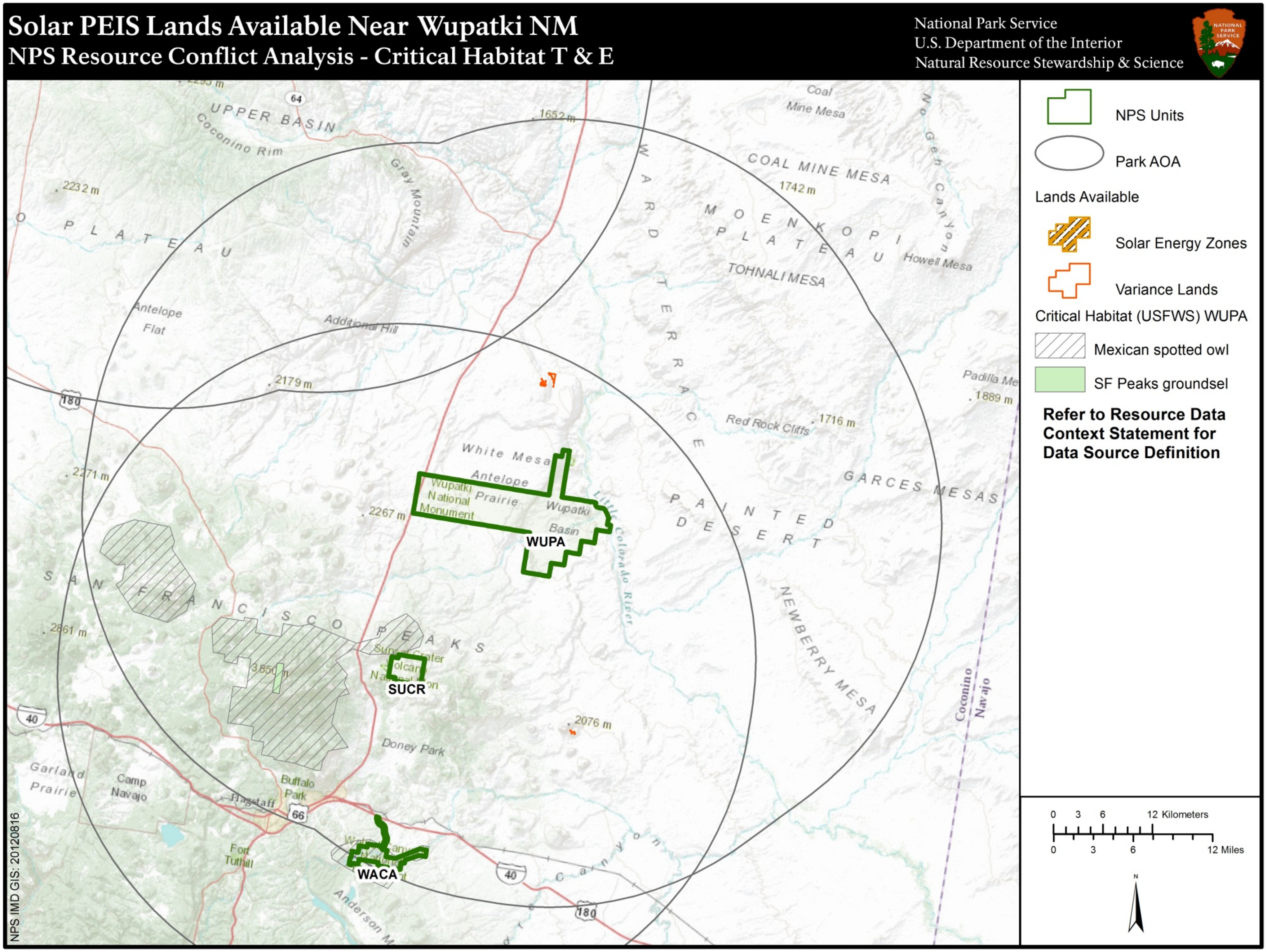
Upstream Watershed

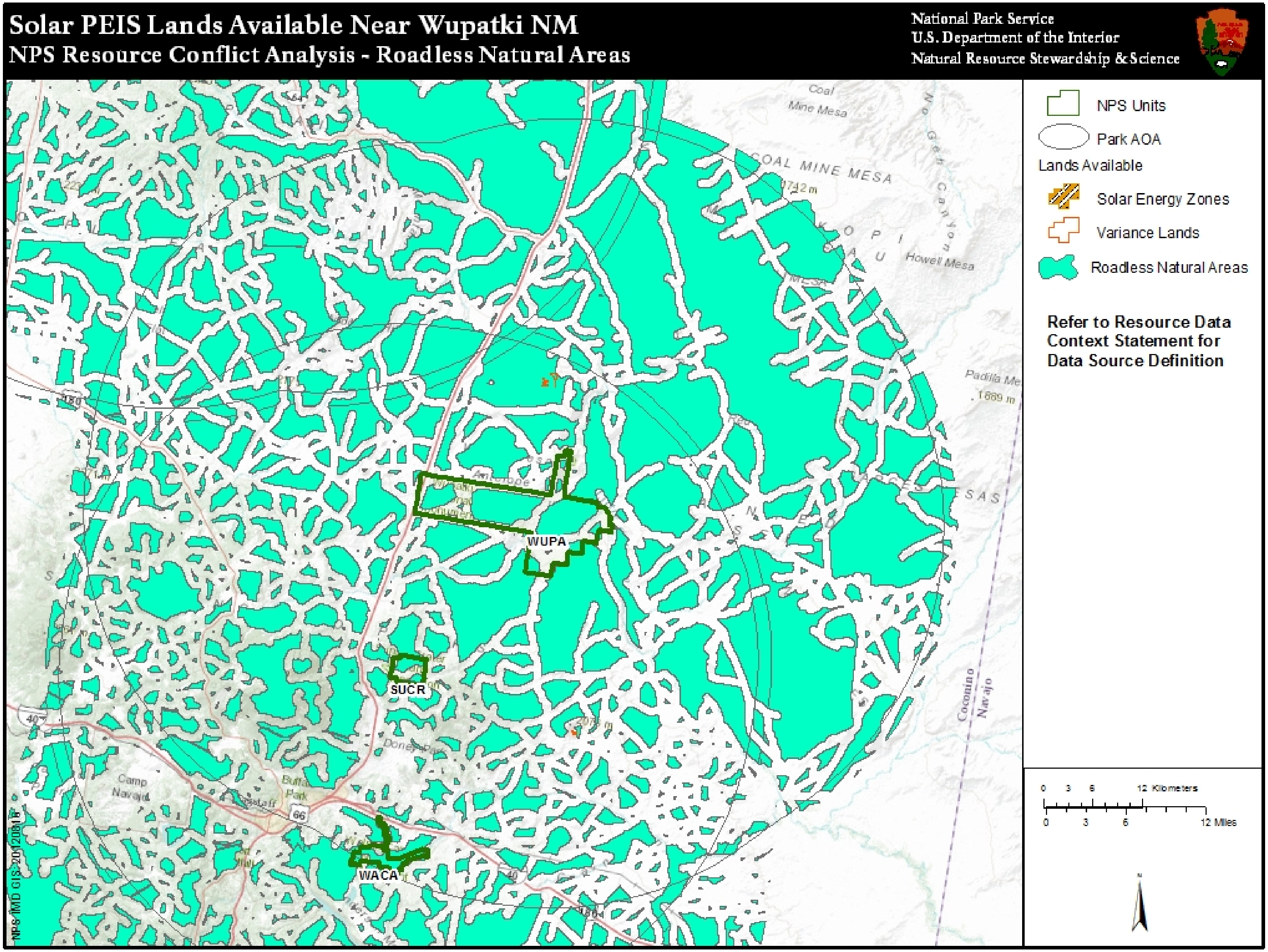


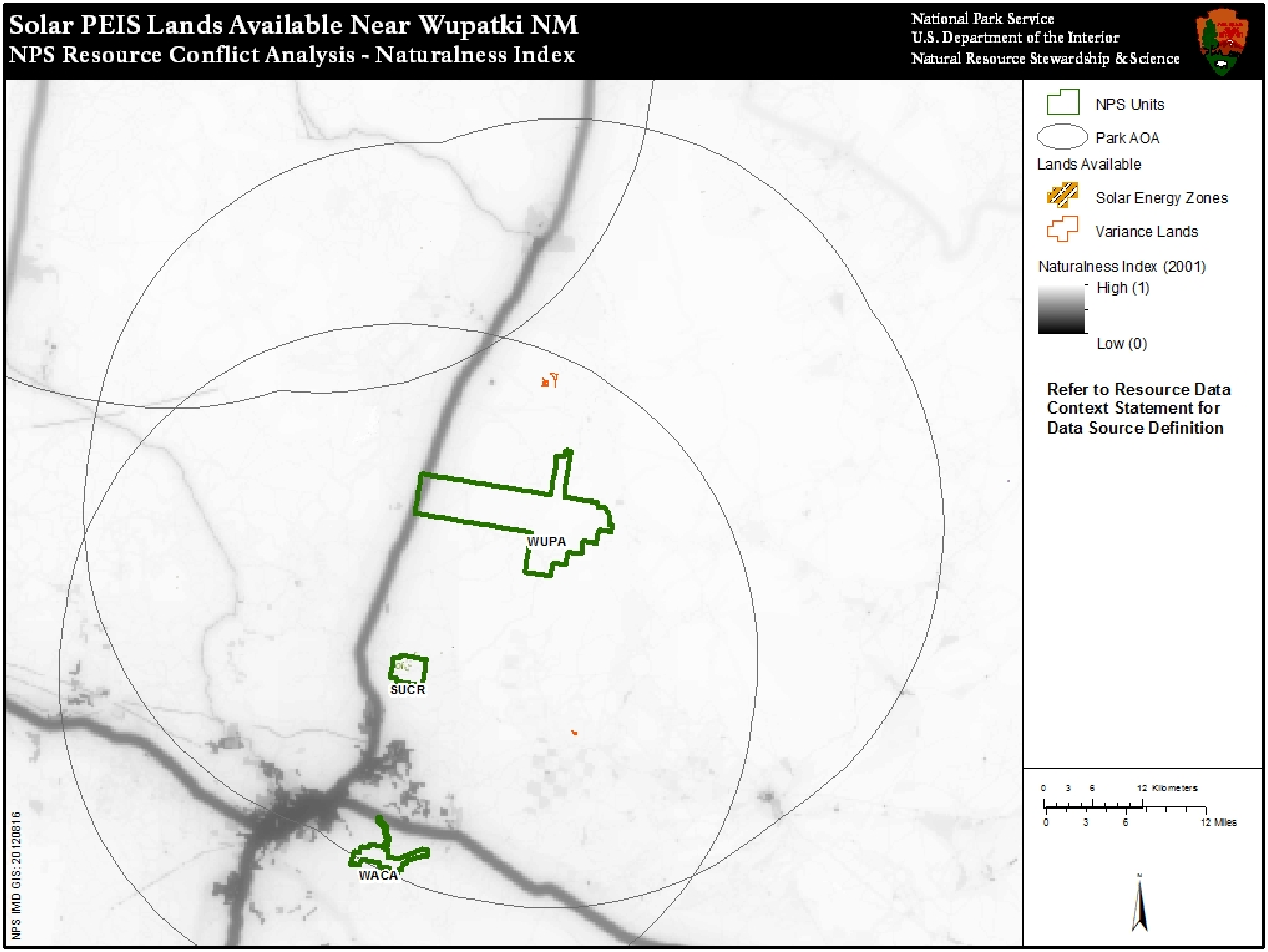
Land Ownership

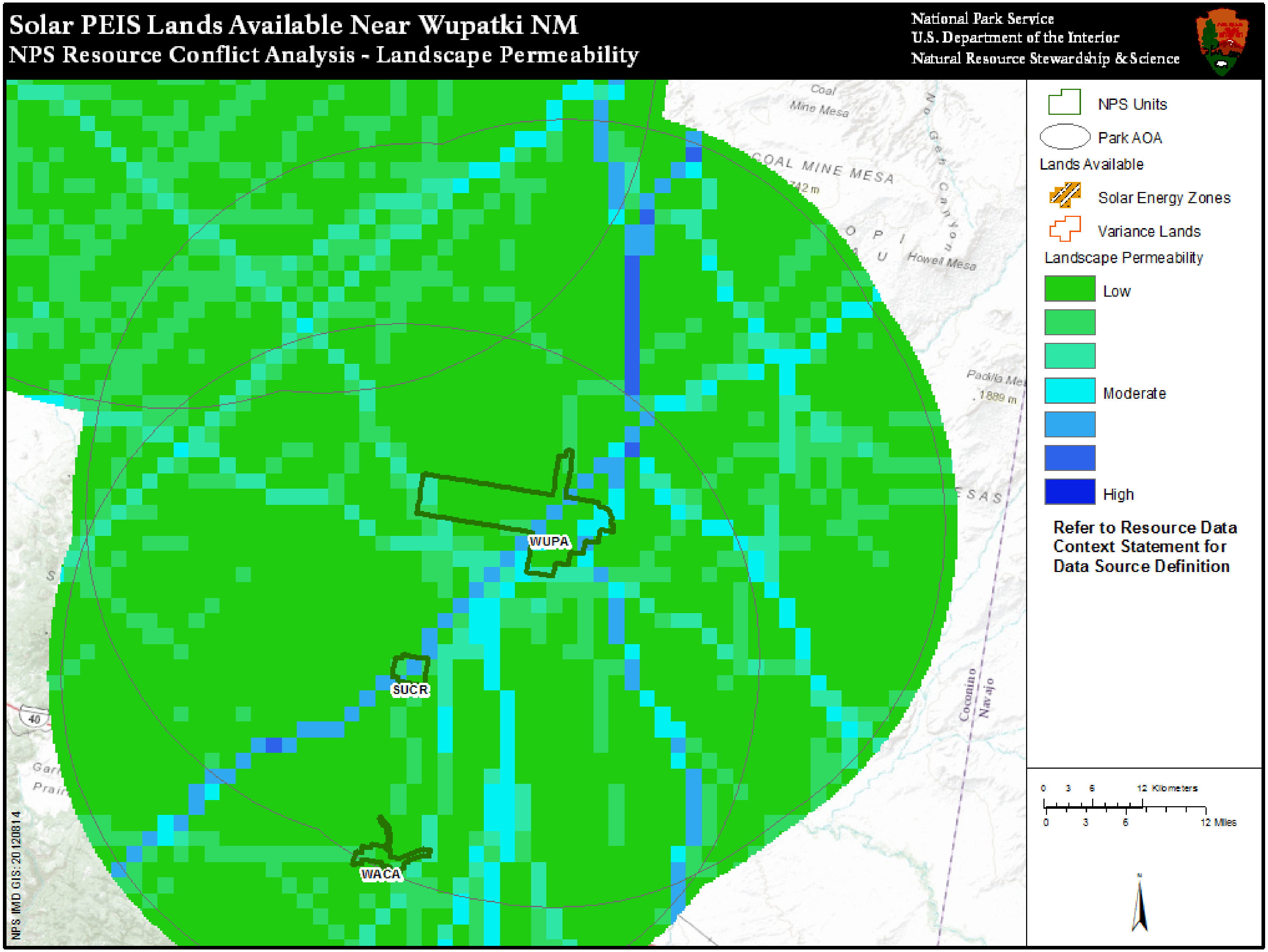



Solar PEIS Lands Available Near Wupatki NM
NPS Resource Conflict Analysis - Protected Areas
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
PADUS
Protected Areas
GAP Status - 1
GAP Status - 2
Refer to Resource Data Context Statement for Data Source Definition
WUPA
SUCR
WACA
0 4 8 Kilometers
0 2.25 4.5 9 Miles
NPS IMD GIS: 20120816
UPPER BASIN
COAL MINE MESA
MOENKOPI PLATEAU
TOHNALI MESA
GARCES MESAS
PAINTED DESERT
NEWBERRY MESA
White Mesa
Red Rock Cliffs
Doney Park
Flagstaff
Coconino
Navajo

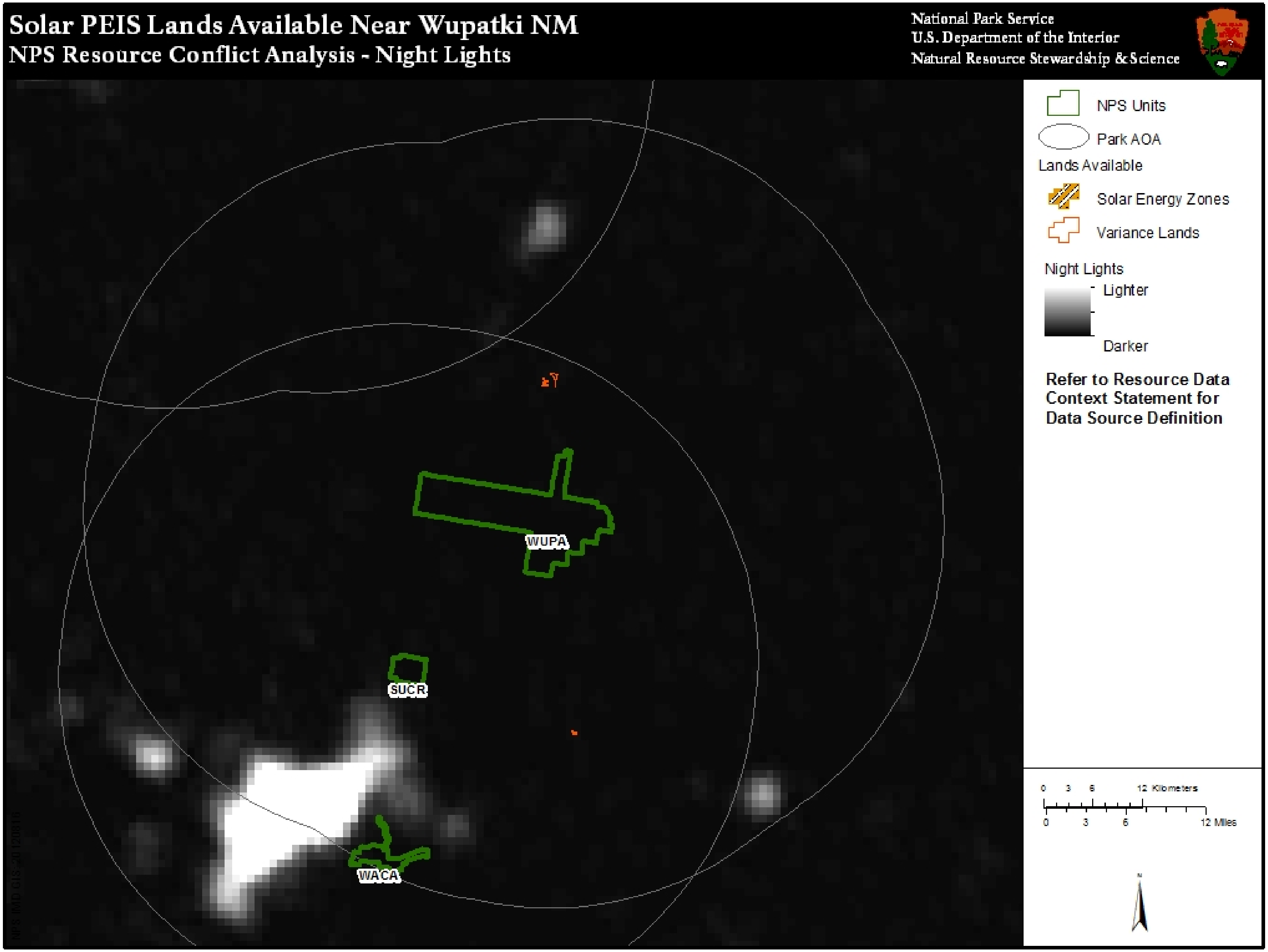

Solar PEIS Lands Available Near Wupatki NM
NPS Resource Conflict Analysis - Critical Habitat T & E
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Critical Habitat (USFWS) WUPA
Mexican spotted owl
SF Peaks groundsel
Refer to Resource Data Context Statement for Data Source Definition
0 3 6 12 Kilometers
0 3 6 12 Miles
WUPA
SUCR
WACA
NPS IMD GIS: 20120816

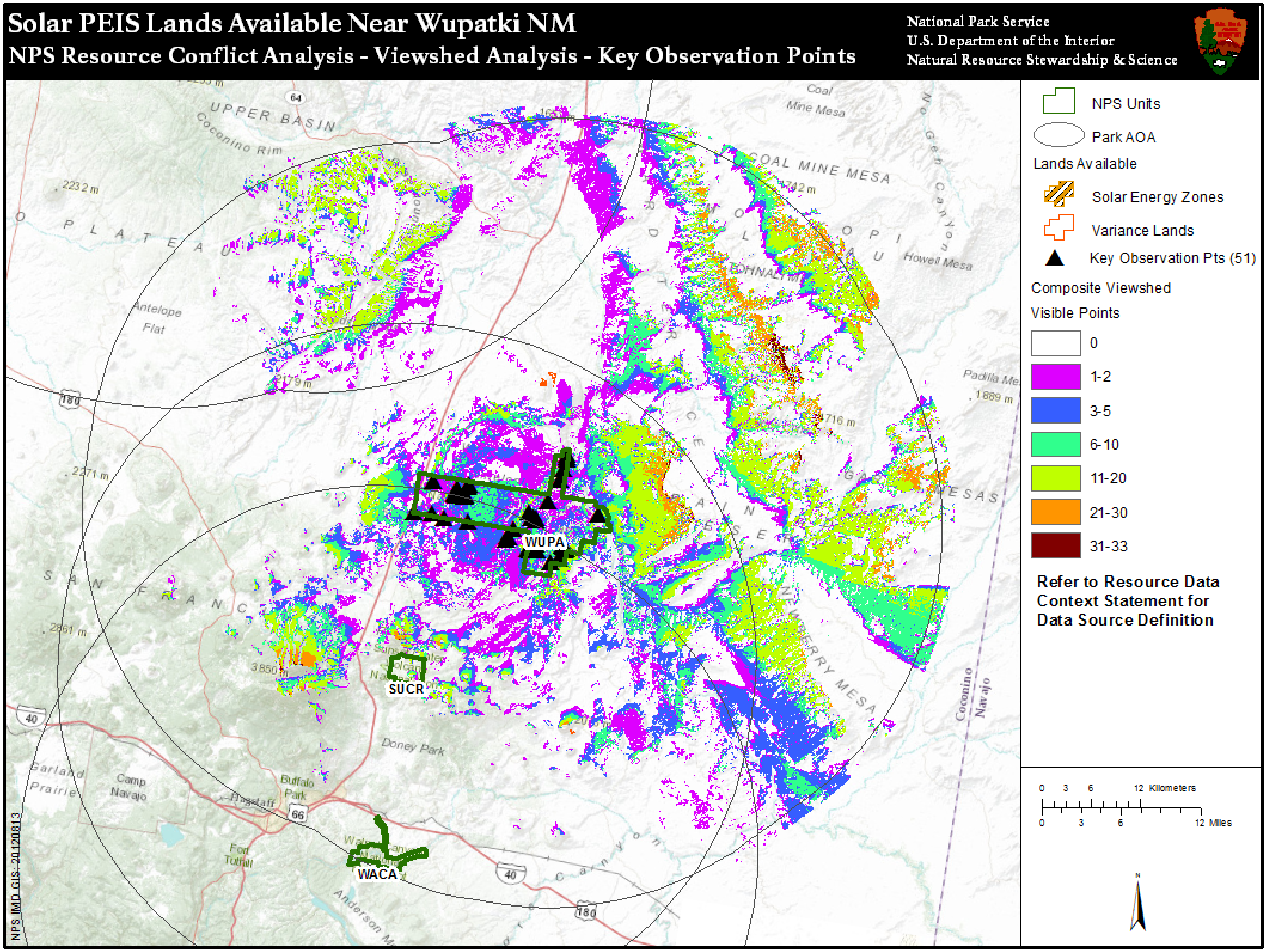

Solar PEIS Lands Available Near Wupatki NM
NPS Resource Conflict Analysis - Roadless Natural Areas
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Roadless Natural Areas
Refer to Resource Data Context Statement for Data Source Definition
0 3 6 12 Kilometers
0 3 6 12 Miles
WUPA
SUCR
WACA
Coconino
Navajo
COAL MINE MESA
Howell Mesa
Camp Navajo
NPS IMD GIS 20120816

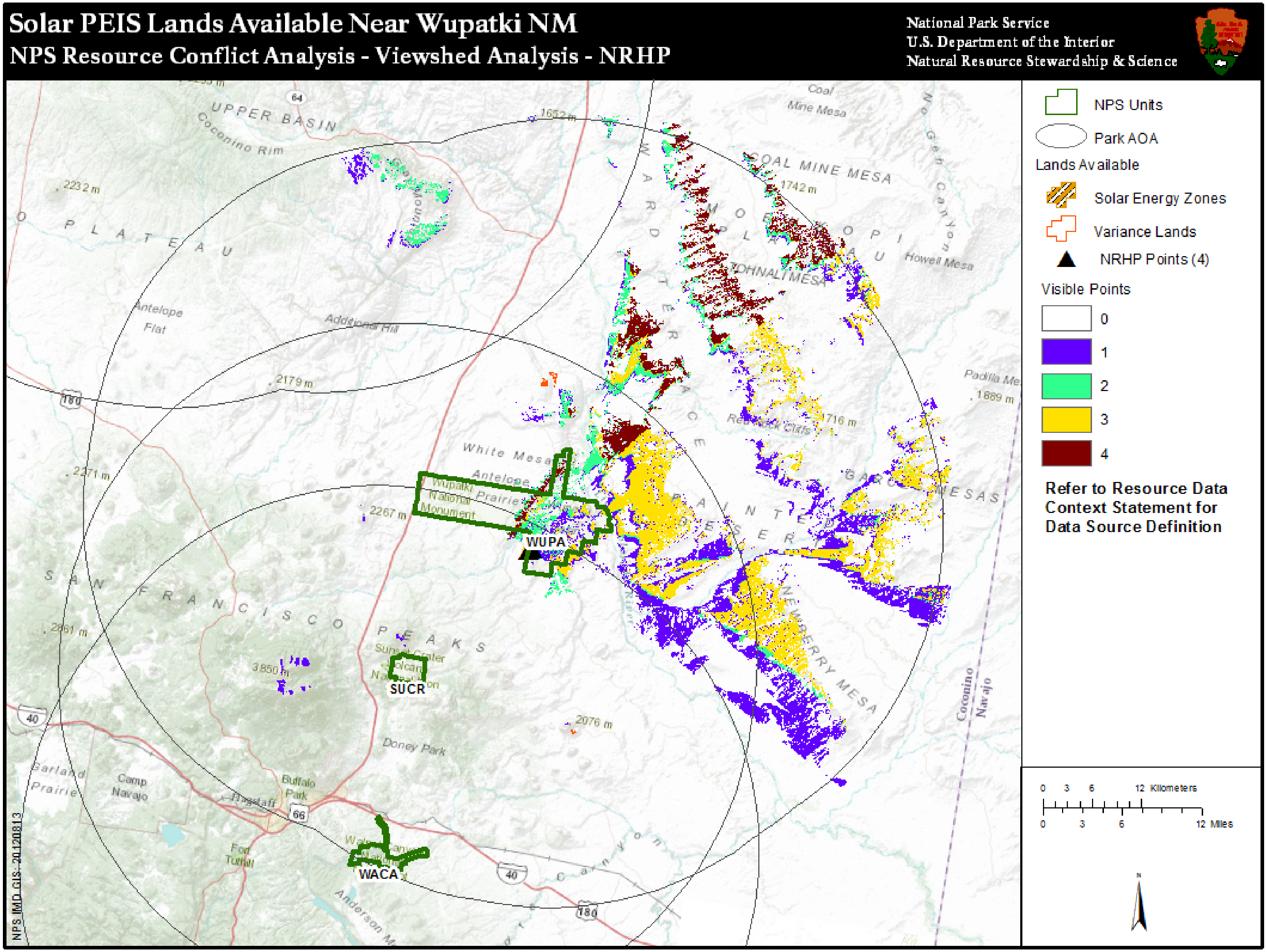

Solar PEIS Lands Available Near Wupatki NM
NPS Resource Conflict Analysis - Naturalness Index
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Naturalness Index (2001)
High (1)
Low (0)
Refer to Resource Data Context Statement for Data Source Definition
WUPA
SUCR
WACA
0 3 6 12 Kilometers
0 3 6 12 Miles
NPS IMD GIS: 20120816



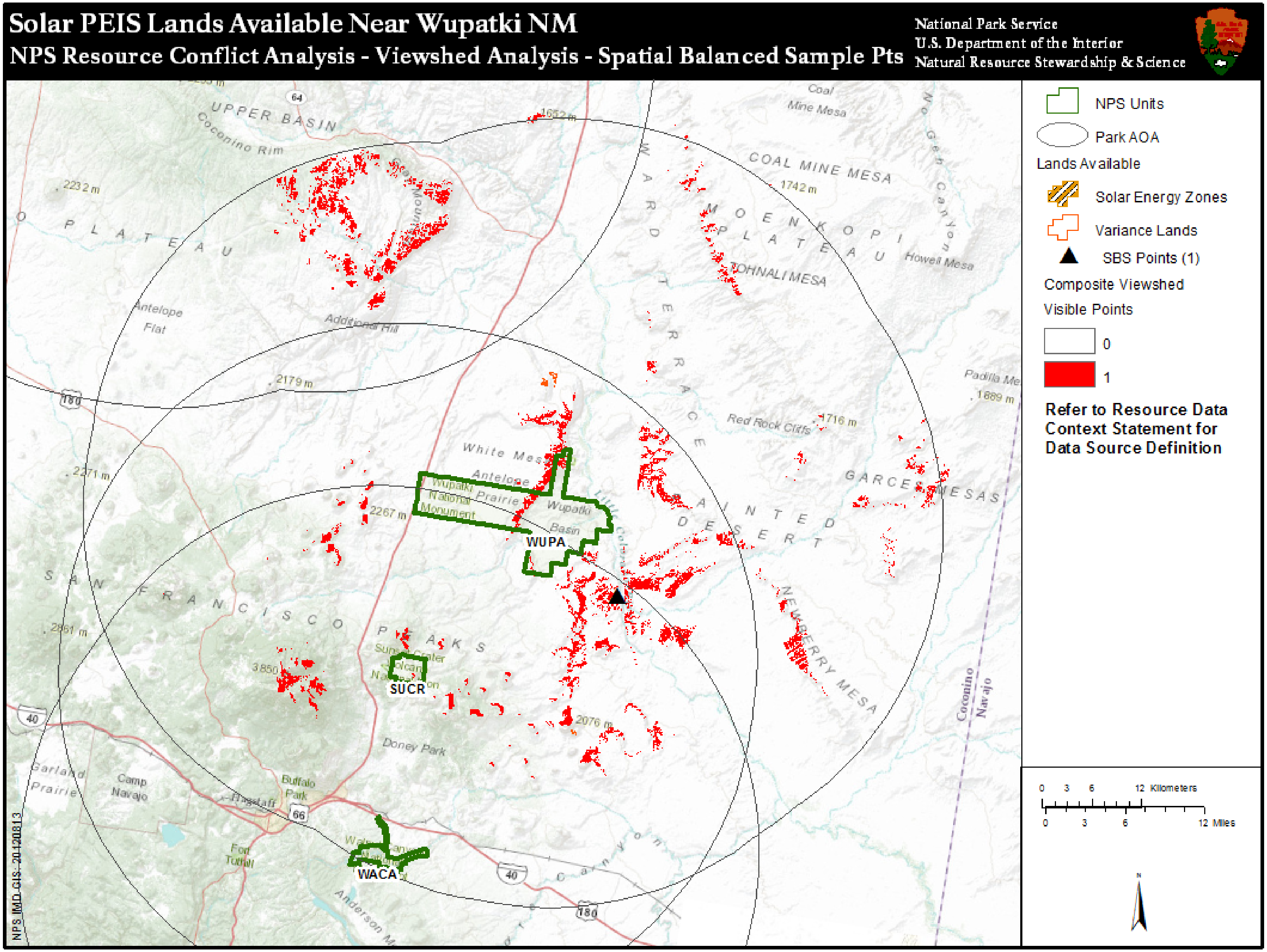
Solar PEIS Lands Available Near Wupatki NM
NPS Resource Conflict Analysis - Landscape Permeability
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Landscape Permeability
Low
Moderate
High
Refer to Resource Data Context Statement for Data Source Definition
WUPA
SUCR
WACA
COAL MINE MESA
Coal Mine Mesa
Howel Mesa
Padilla Mesa
1889 m
Coconino
Navajo
40
0 3 6 12 Kilometers
0 3 6 12 Miles
NPS IMD GIS: 20120814


Solar PEIS Lands Available Near Wupatki NM
NPS Resource Conflict Analysis - Night Lights
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Night Lights
Lighter
Darker
Refer to Resource Data Context Statement for Data Source Definition
WUPA
SUCR
WACA
0 3 6 12 Kilometers
0 3 6 12 Miles

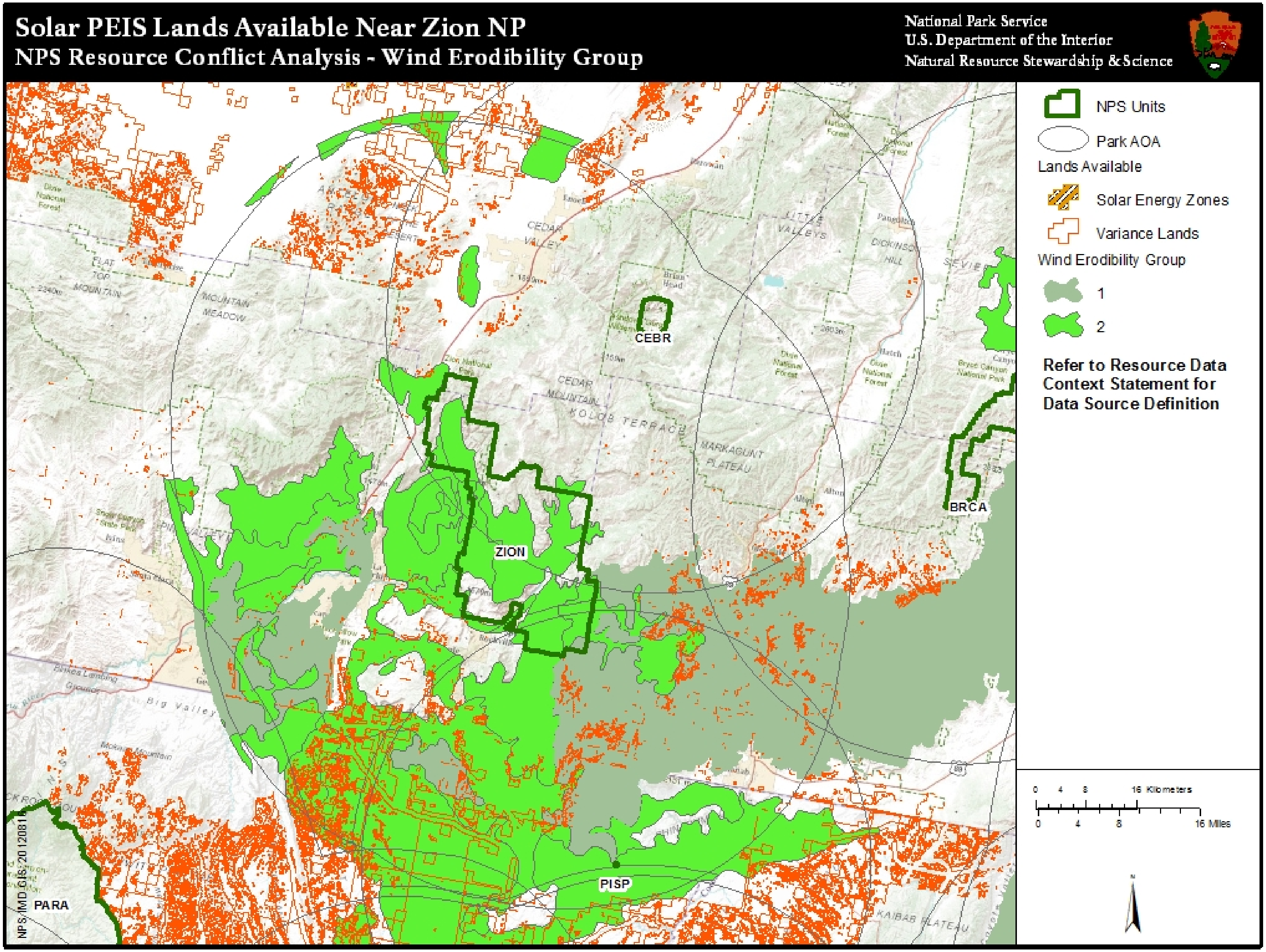

Solar PEIS Lands Available Near Wupatki NM
NPS Resource Conflict Analysis - Viewshed Analysis - Key Observation Points
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Key Observation Pts (51)
Composite Viewshed
Visible Points
0
1-2
3-5
6-10
11-20
21-30
31-33
Refer to Resource Data Context Statement for Data Source Definition
0 3 6 12 Kilometers
0 3 6 12 Miles
WUPA
SUCR
WACA
NPS IMD GIS 20120813

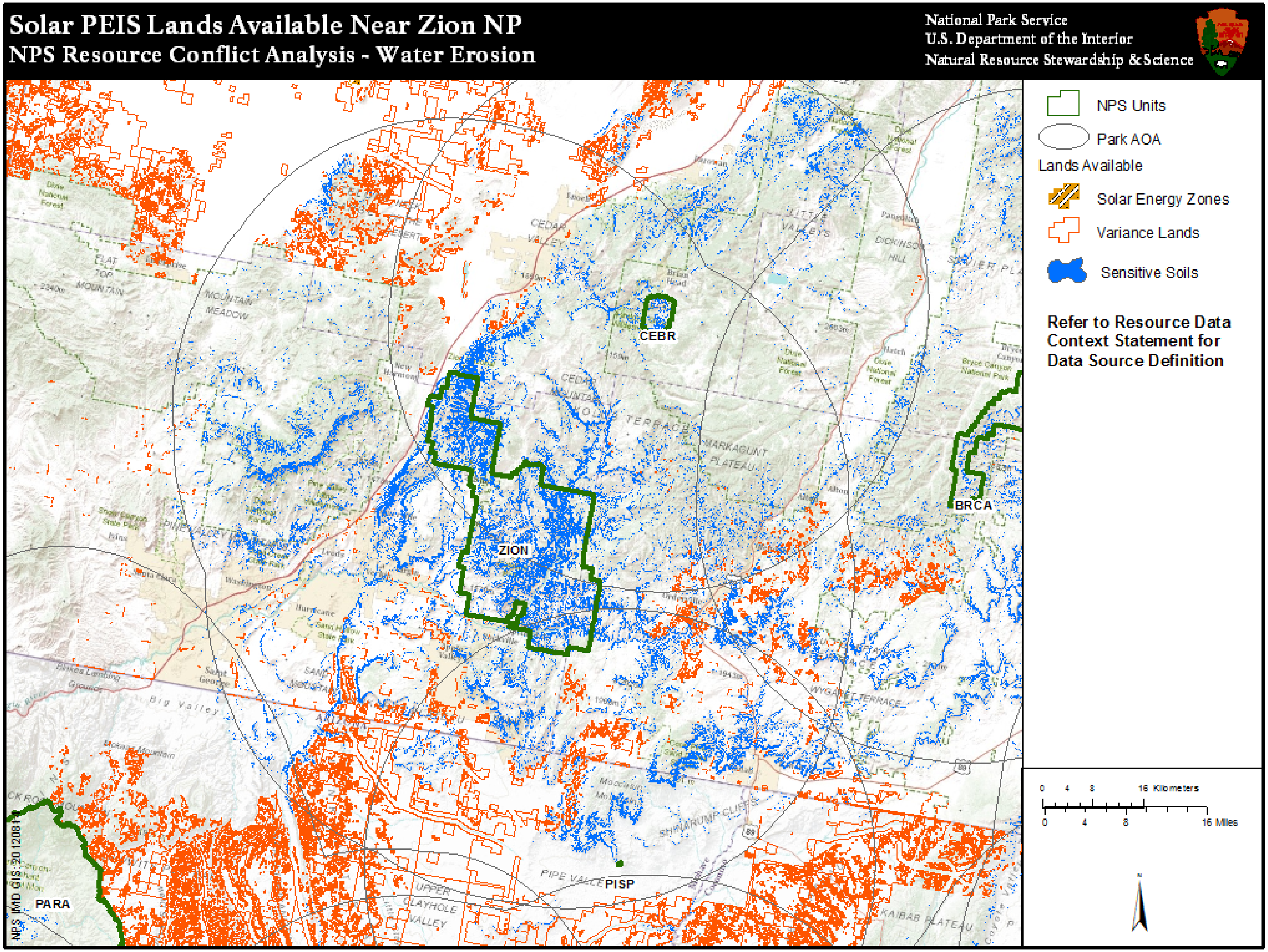

Solar PEIS Lands Available Near Wupatki NM
NPS Resource Conflict Analysis - Viewshed Analysis - NRHP
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
NRHP Points (4)
Visible Points
0
1
2
3
4
Refer to Resource Data Context Statement for Data Source Definition
0 3 6 12 Kilometers
0 3 6 12 Miles
WUPA
SUCR
WACA
Wupatki National Monument
COAL MINE MESA
MOENKOPI PLATEAU
PAINTED DESERT
WARD TERRACE
SAN FRANCISCO PEAKS
COCONINO PLATEAU
UPPER BASIN
White Mesa
Antelope Prairie
Antelope Flat
Additional Hill
Doney Park
Flagstaff
Camp Navajo
Garland Prairie
Buffalo Park
Fort Tuthill
Coconino
Navajo
NPS IMD GIS - 20120813

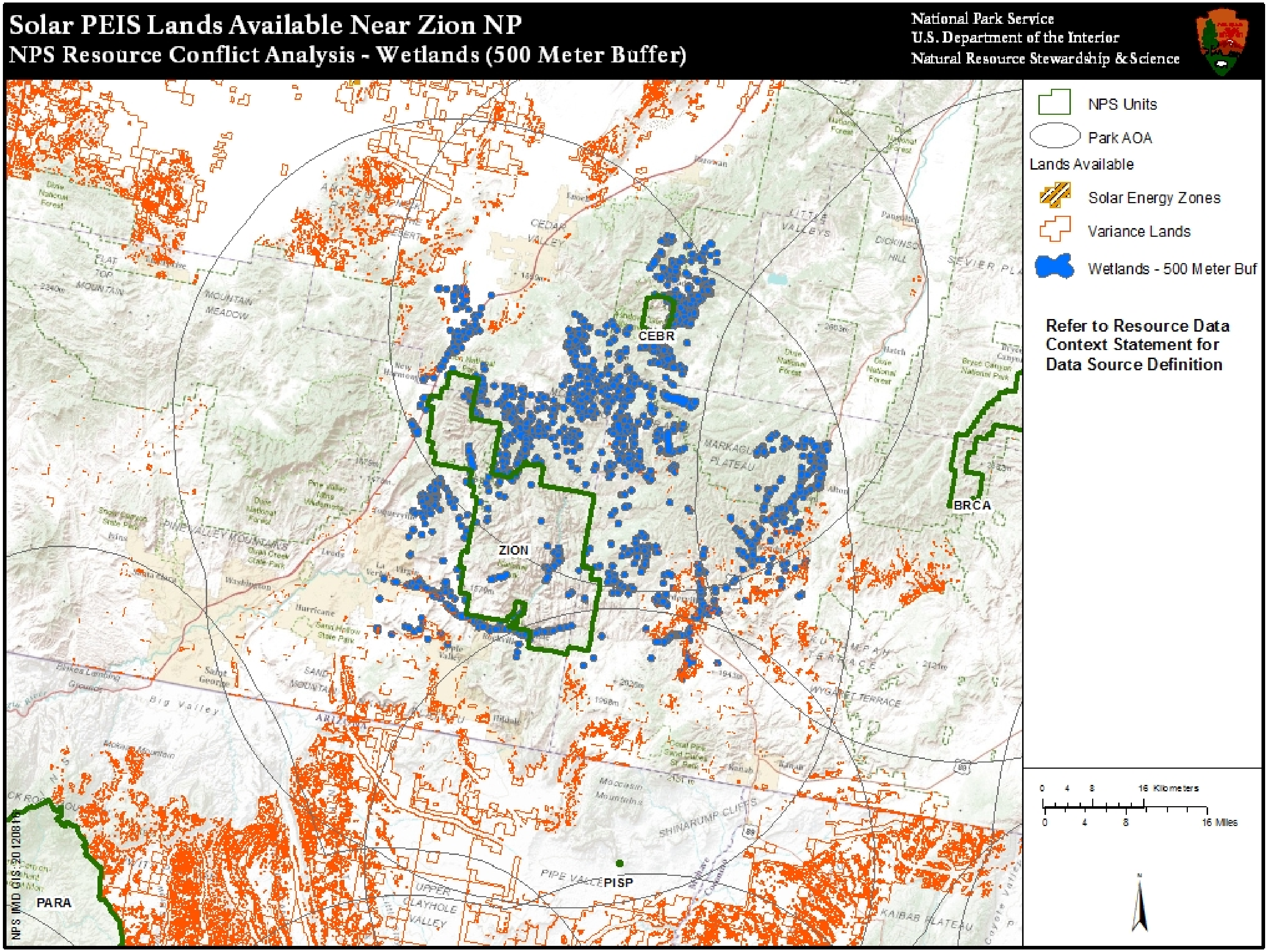
Viewshed – Spatial Balanced Sample

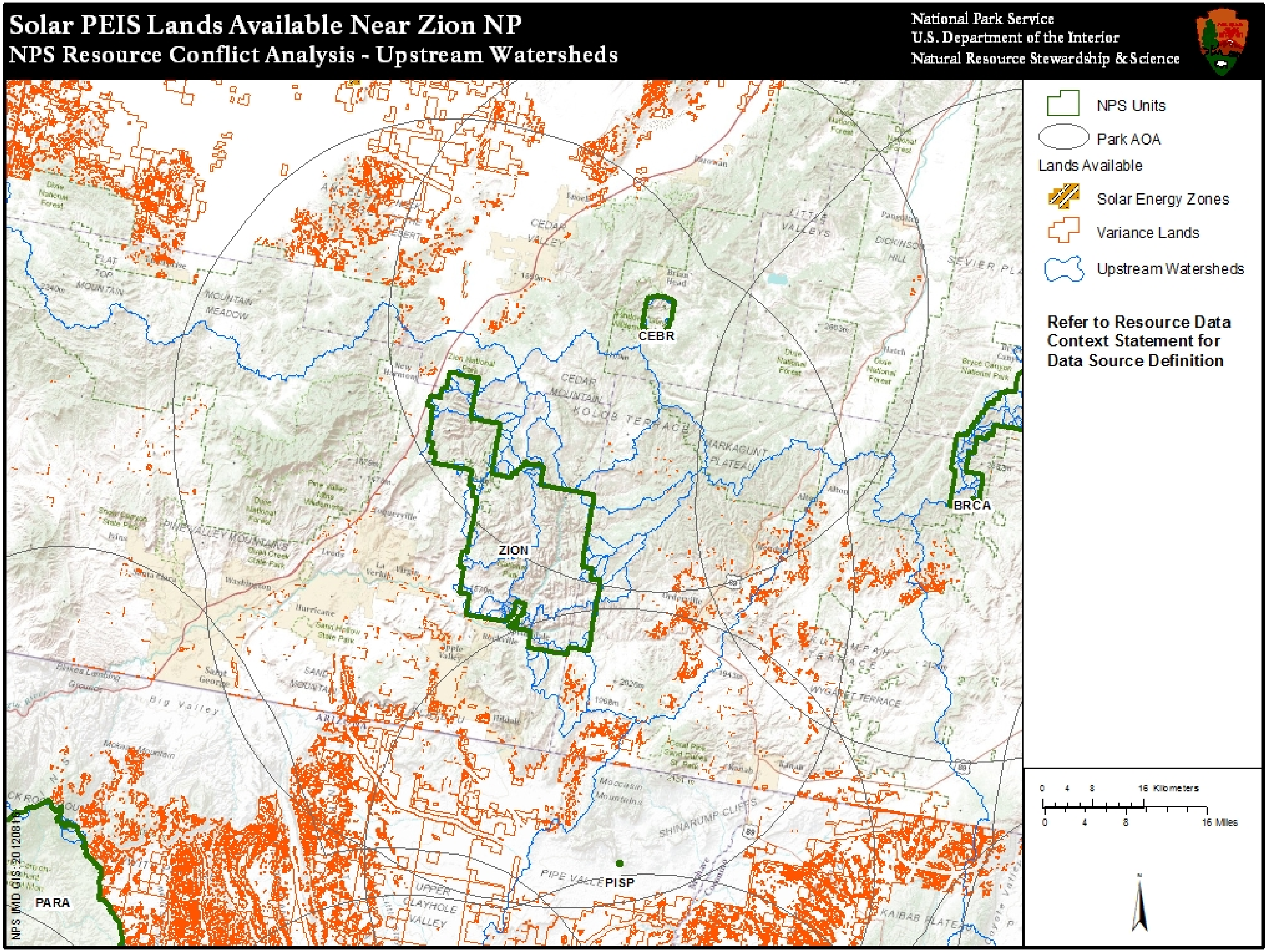


Zion National Park
Wind Erodibility Group

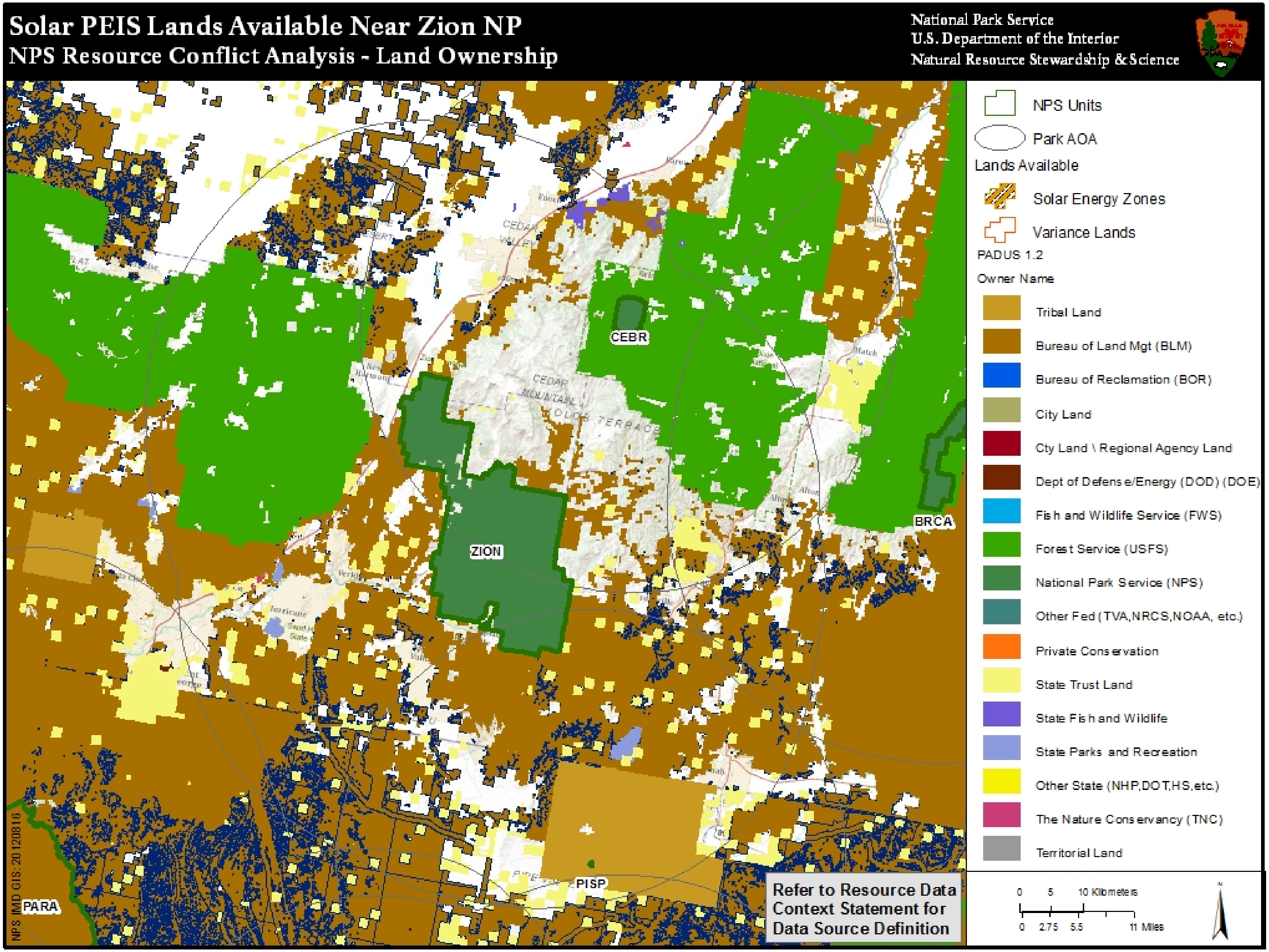


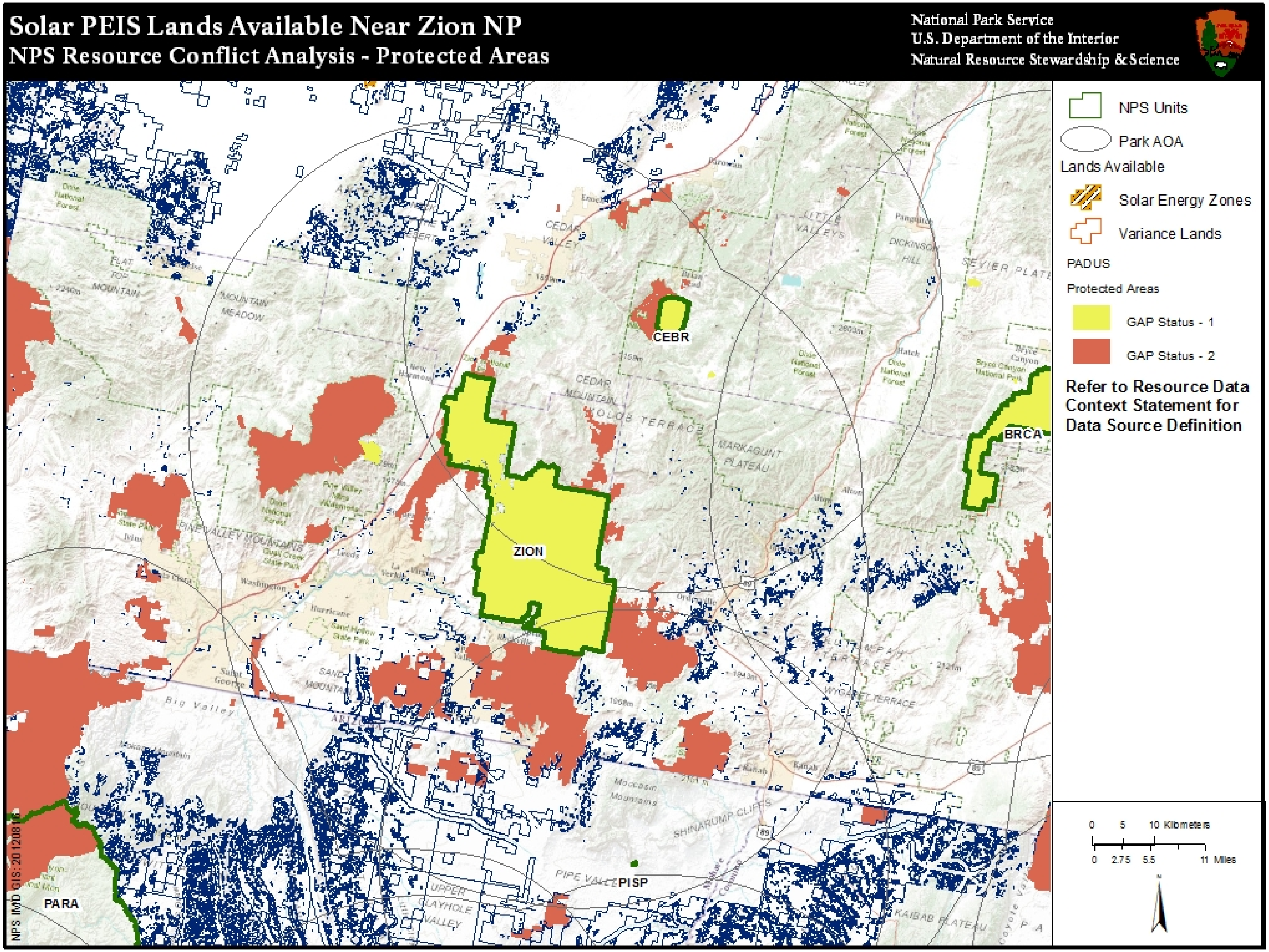

Solar PEIS Lands Available Near Zion NP
NPS Resource Conflict Analysis - Water Erosion
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Sensitive Soils
Refer to Resource Data Context Statement for Data Source Definition
0 4 8 16 Kilometers
0 4 8 16 Miles
CEBR
ZION
BRCA
PISP
PARA
NPS IMD GIS 20120815

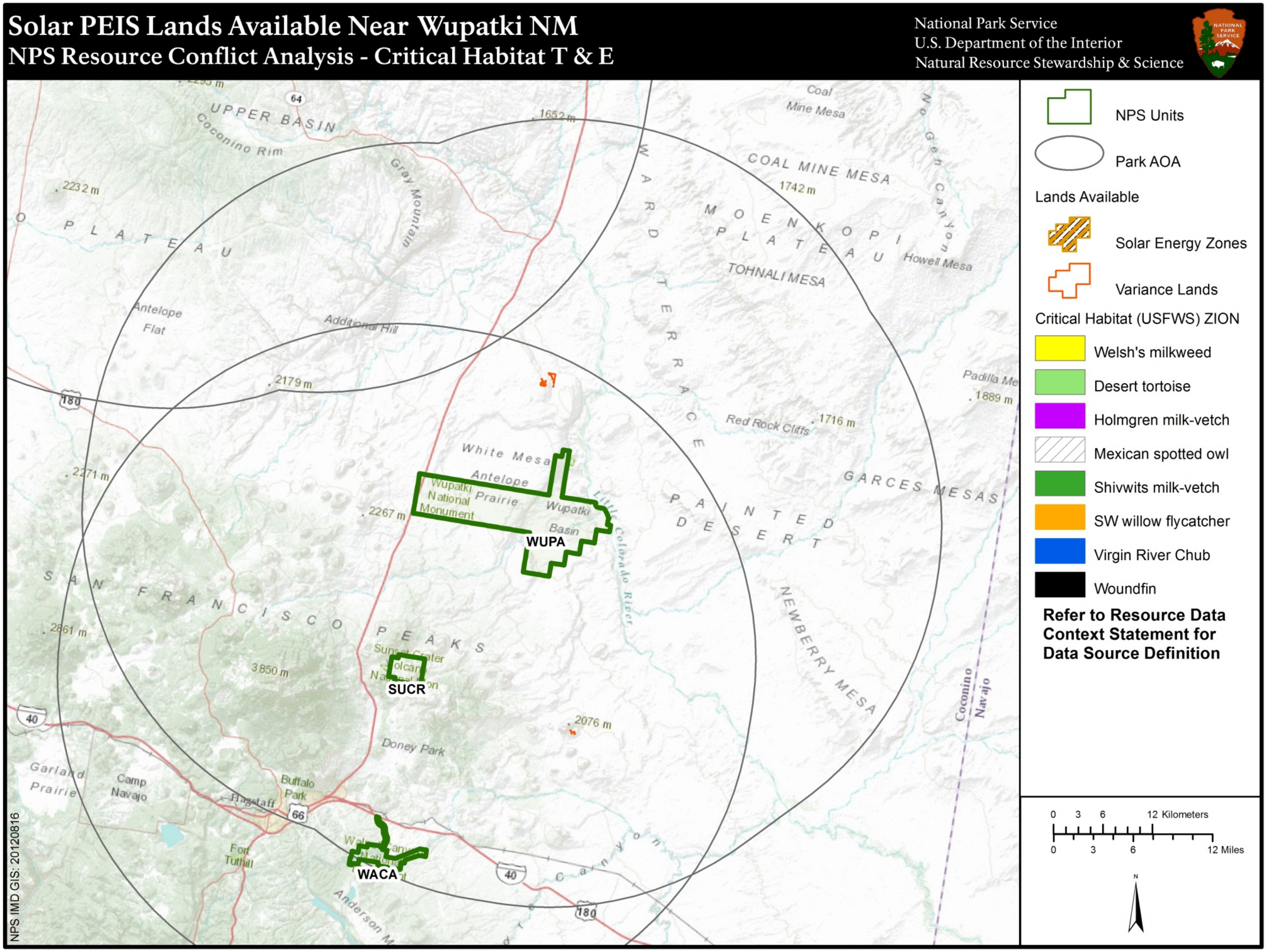

Solar PEIS Lands Available Near Zion NP
NPS Resource Conflict Analysis - Wetlands (500 Meter Buffer)
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Wetlands - 500 Meter Buf
Refer to Resource Data Context Statement for Data Source Definition
CEBR
ZION
BRCA
PARA
PISP
0 4 8 16 Kilometers
0 4 8 16 Miles
NPS IMD GIS 20120816

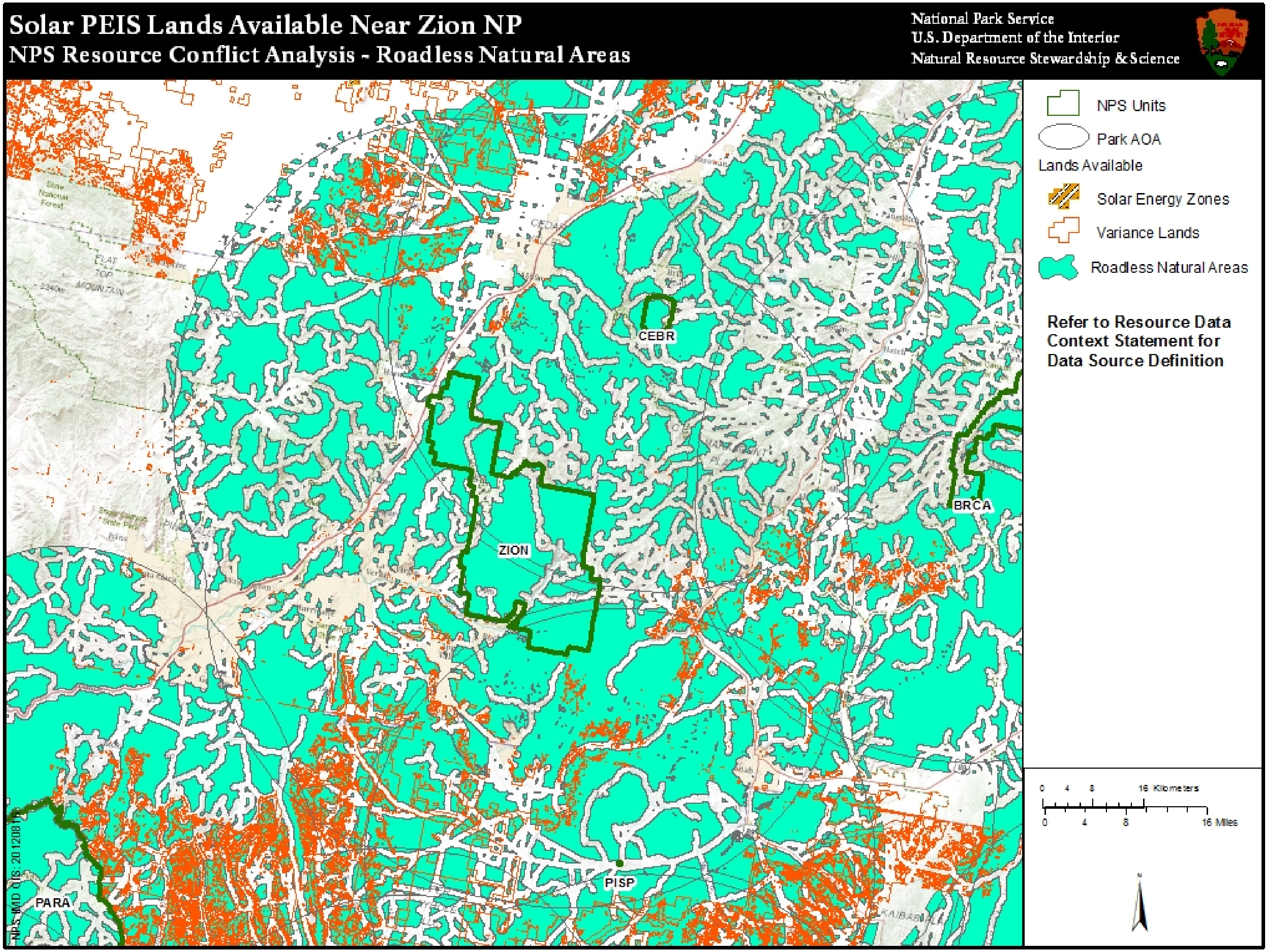


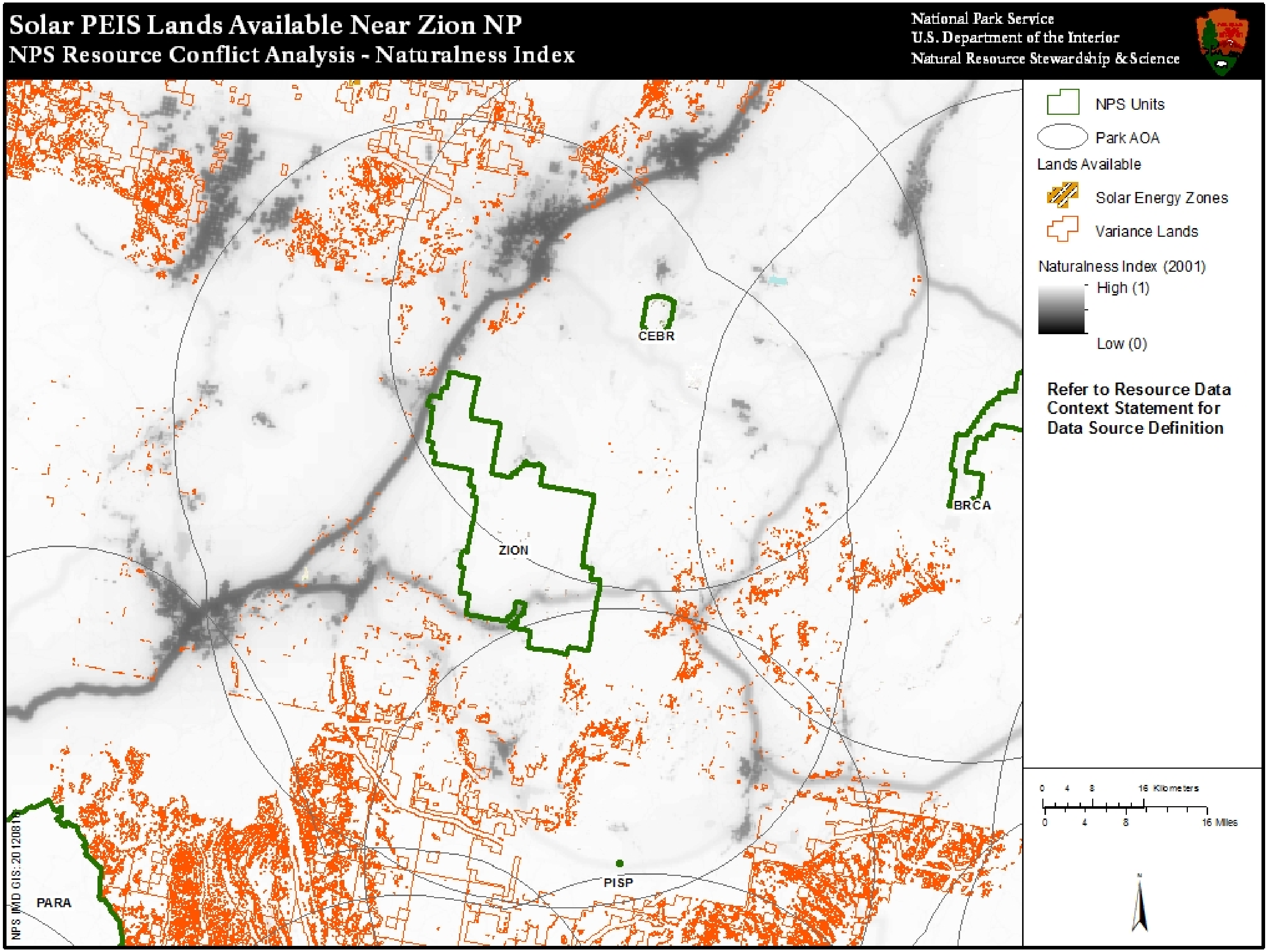
Solar PEIS Lands Available Near Zion NP
NPS Resource Conflict Analysis - Upstream Watersheds
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Upstream Watersheds
Refer to Resource Data Context Statement for Data Source Definition
0 4 8 16 Kilometers
0 4 8 16 Miles
CEBR
ZION
BRCA
PARA
PISP
NPS IMD GIS 20120815

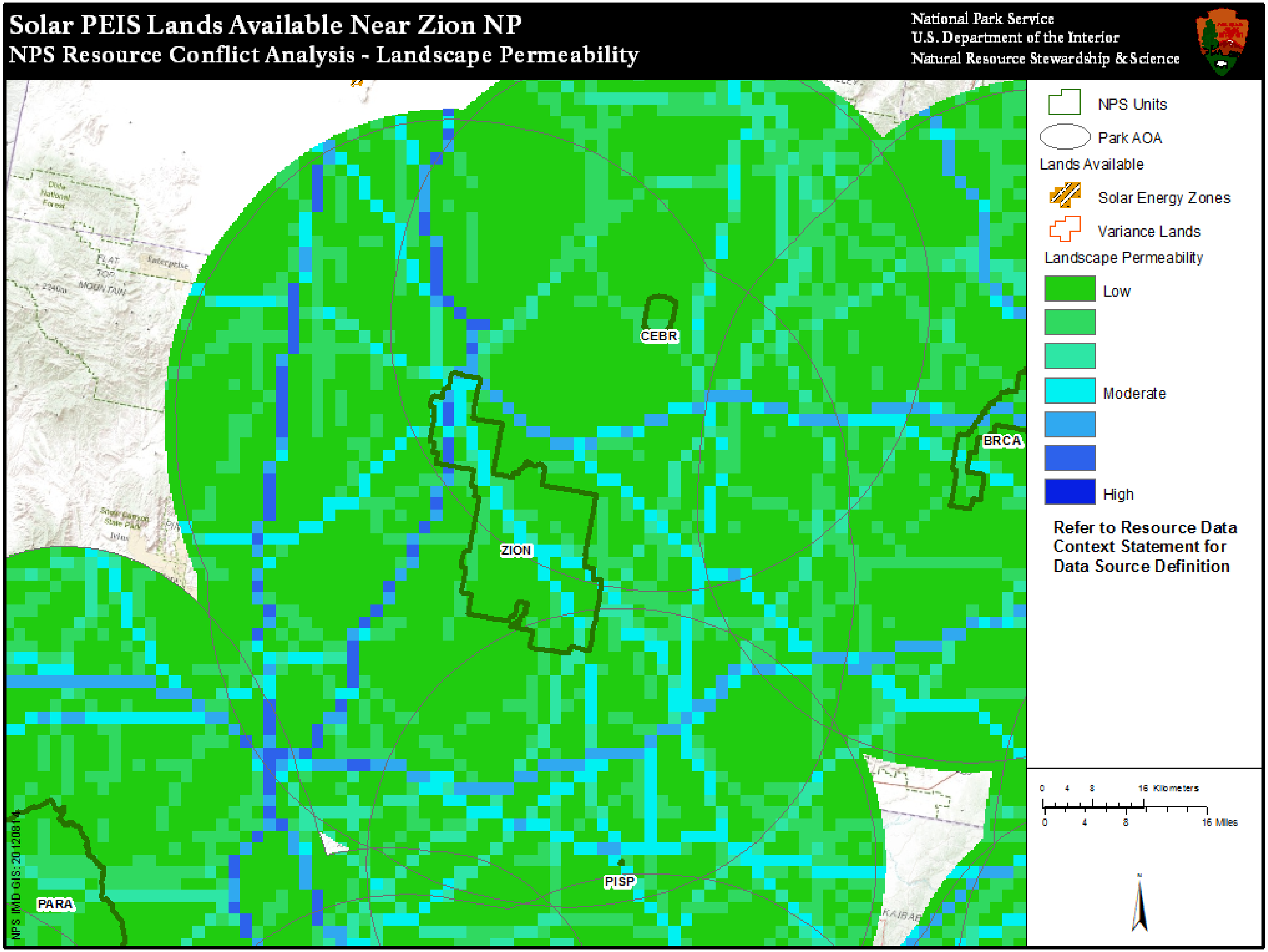

Solar PEIS Lands Available Near Zion NP
NPS Resource Conflict Analysis - Land Ownership
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
PADUS 1.2
Owner Name
Tribal Land
Bureau of Land Mgt (BLM)
Bureau of Reclamation (BOR)
City Land
Cty Land \ Regional Agency Land
Dept of Defense/Energy (DOD) (DOE)
Fish and Wildlife Service (FWS)
Forest Service (USFS)
National Park Service (NPS)
Other Fed (TVA,NRCS,NOAA, etc.)
Private Conservation
State Trust Land
State Fish and Wildlife
State Parks and Recreation
Other State (NHP,DOT,HS,etc.)
The Nature Conservancy (TNC)
Territorial Land
CEBR
ZION
BRCA
PISP
PARA
Refer to Resource Data Context Statement for Data Source Definition
0 5 10 Kilometers
0 2.75 5.5 11 Miles
NPS IMD GIS: 20120816

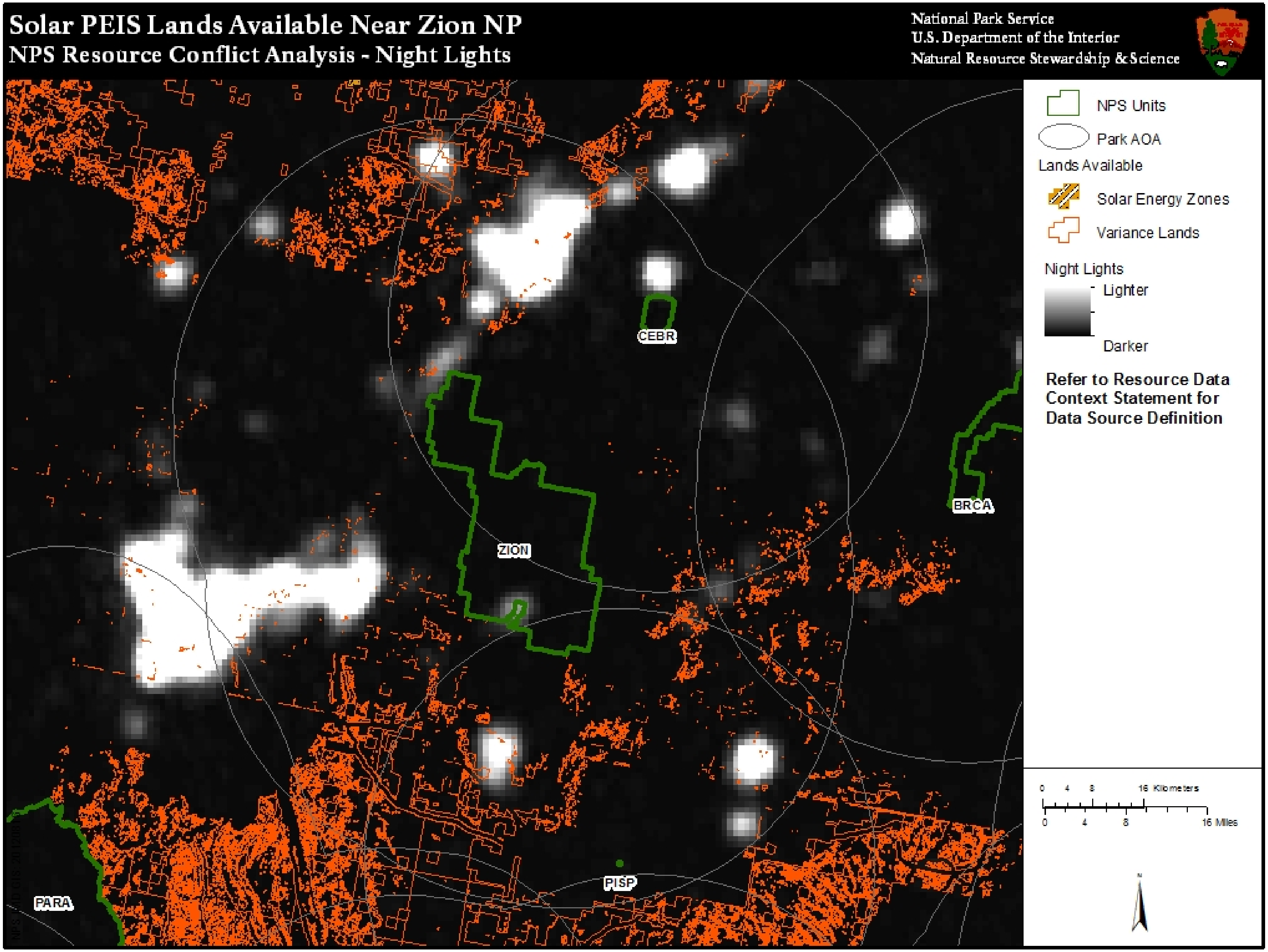

Solar PEIS Lands Available Near Zion NP
NPS Resource Conflict Analysis - Protected Areas
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
PADUS
Protected Areas
GAP Status - 1
GAP Status - 2
Refer to Resource Data Context Statement for Data Source Definition
CEBR
ZION
BRCA
PARA
PISP
0 5 10 Kilometers
0 2.75 5.5 11 Miles

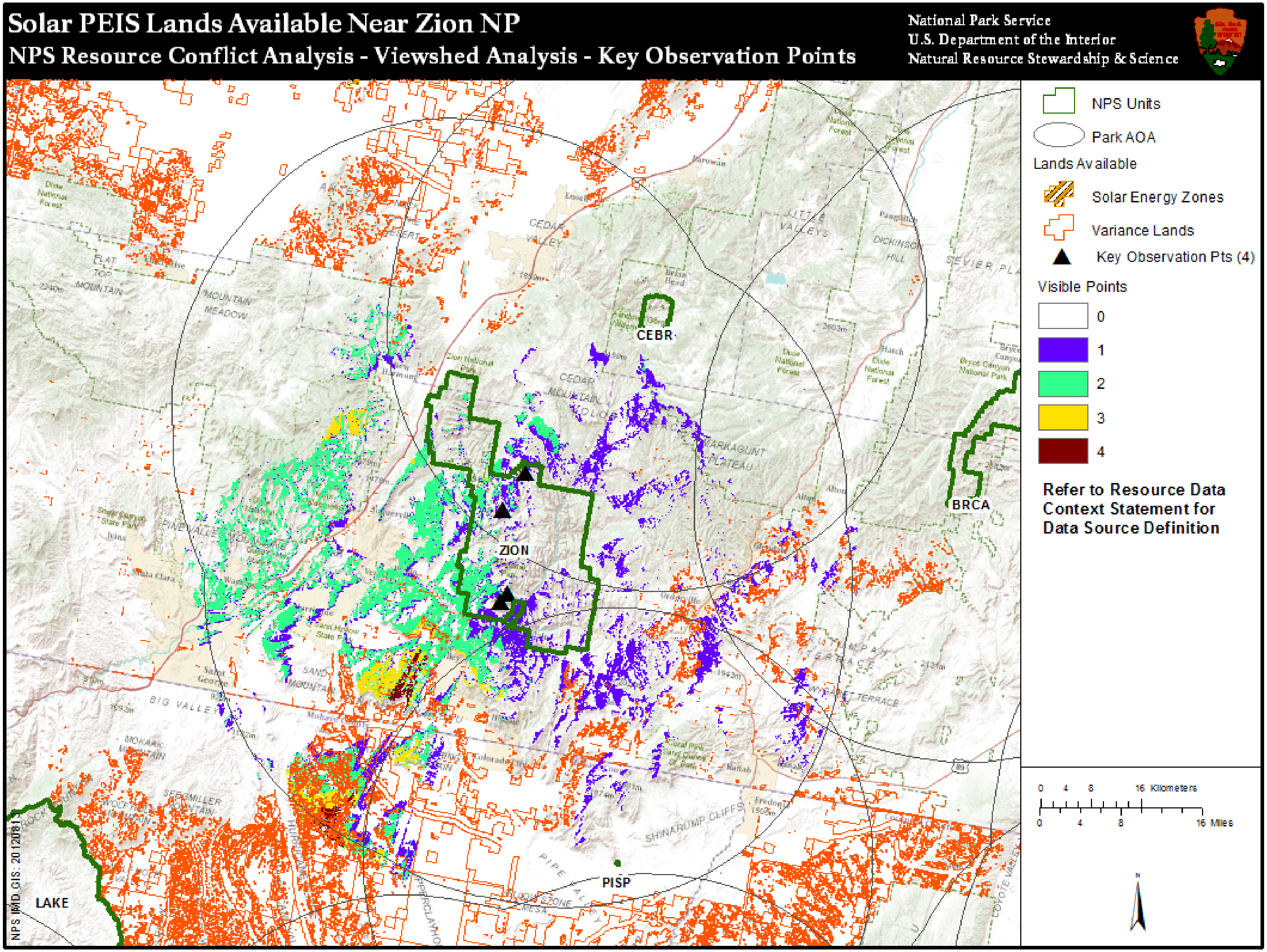

Solar PEIS Lands Available Near Wupatki NM
NPS Resource Conflict Analysis - Critical Habitat T & E
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Critical Habitat (USFWS) ZION
Welsh's milkweed
Desert tortoise
Holmgren milk-vetch
Mexican spotted owl
Shivwits milk-vetch
SW willow flycatcher
Virgin River Chub
Woundfin
Refer to Resource Data Context Statement for Data Source Definition
0 3 6 12 Kilometers
0 3 6 12 Miles
N
NPS IMD GIS: 20120816
WUPA
SUCR
WACA
Wupatki National Monument
White Mesa
Antelope Prairie
Wupatki Basin
Little Colorado River
UPPER BASIN
Coconino Rim
Gray Mountain
COAL MINE MESA
Coal Mine Mesa
MOENKOPI PLATEAU
TOHNALI MESA
Howell Mesa
Red Rock Cliffs
GARCES MESAS
PAINTED DESERT
NEWBERRY MESA
WARD TERRACE
PLATEAU
Antelope Flat
Additional Hill
SAN FRANCISCO PEAKS
Doney Park
Garland Prairie
Camp Navajo
Flagstaff
Buffalo Park
Fort Tuthill
Coconino
Navajo
1652 m
1742 m
2232 m
2179 m
1889 m
1716 m
2271 m
2267 m
2861 m
3850 m
2076 m
64
180
40
66


Solar PEIS Lands Available Near Zion NP
NPS Resource Conflict Analysis - Roadless Natural Areas
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Roadless Natural Areas
Refer to Resource Data Context Statement for Data Source Definition
CEBR
ZION
BRCA
PISP
PARA
0 4 8 16 Kilometers
0 4 8 16 Miles

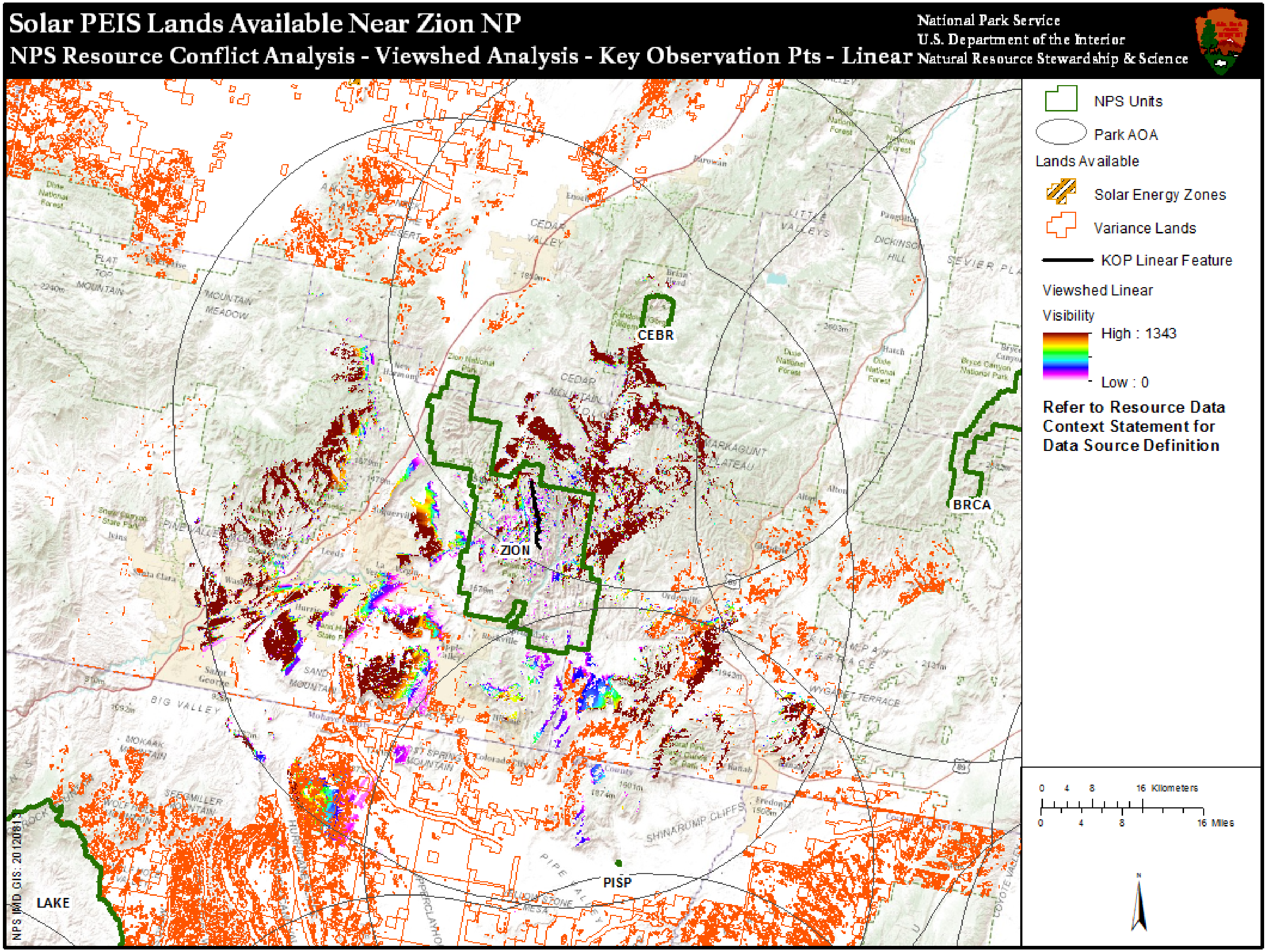

Solar PEIS Lands Available Near Zion NP
NPS Resource Conflict Analysis - Naturalness Index
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Naturalness Index (2001)
High (1)
Low (0)
Refer to Resource Data Context Statement for Data Source Definition
CEBR
ZION
BRCA
PISP
PARA
NPS IMD GIS: 20120813
0 4 8 16 Kilometers
0 4 8 16 Miles

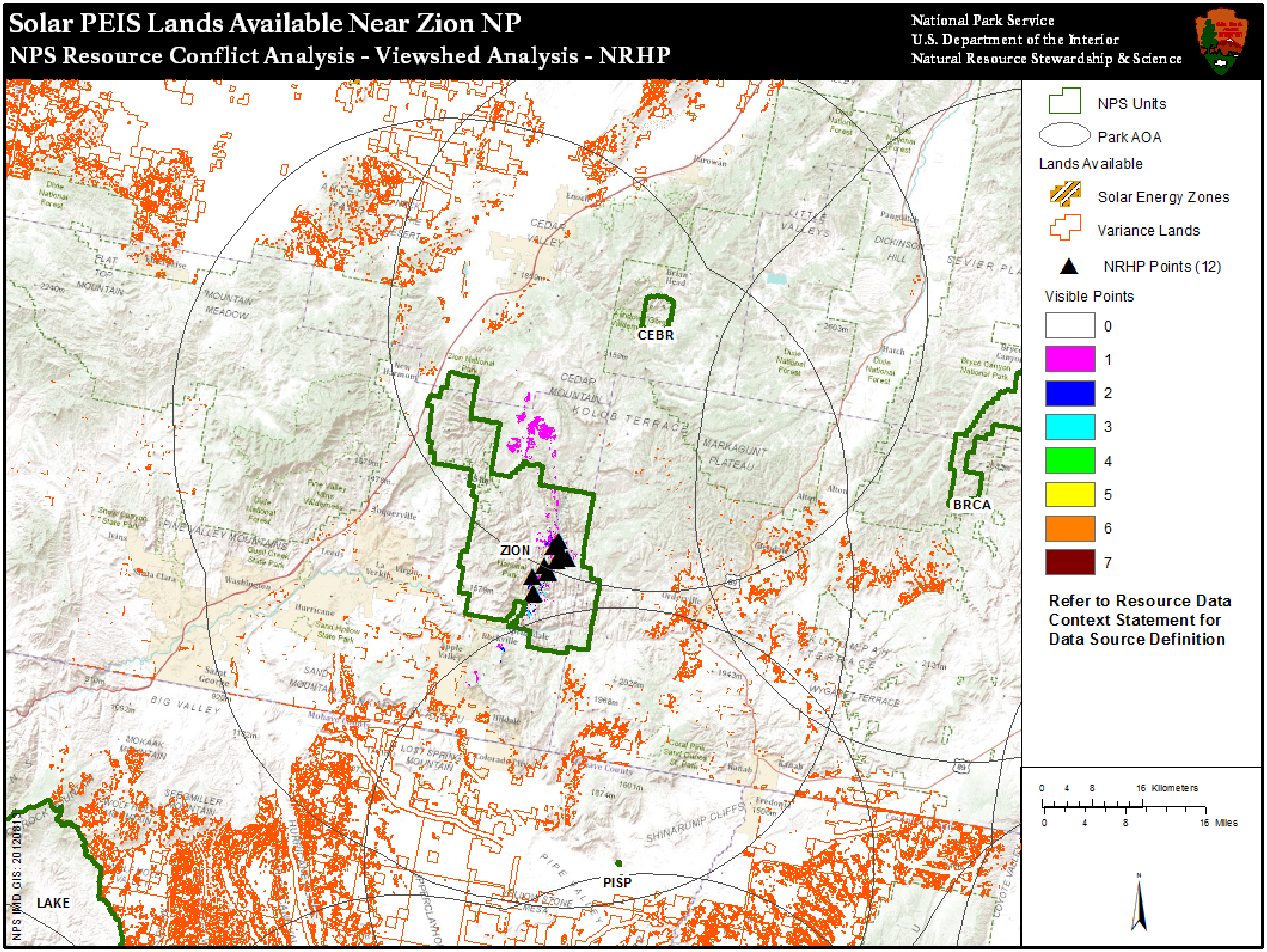

Solar PEIS Lands Available Near Zion NP
NPS Resource Conflict Analysis - Landscape Permeability
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Landscape Permeability
Low
Moderate
High
Refer to Resource Data Context Statement for Data Source Definition
CEBR
ZION
BRCA
PISP
PARA
0 4 8 16 Kilometers
0 4 8 16 Miles
NPS IMD GIS: 20120814


Solar PEIS Lands Available Near Zion NP
NPS Resource Conflict Analysis - Night Lights
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Night Lights
Lighter
Darker
Refer to Resource Data Context Statement for Data Source Definition
0 4 8 16 Kilometers
0 4 8 16 Miles
CEBR
ZION
BRCA
PISP
PARA


Solar PEIS Lands Available Near Zion NP
NPS Resource Conflict Analysis - Viewshed Analysis - Key Observation Points
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
Key Observation Pts (4)
Visible Points
0
1
2
3
4
Refer to Resource Data Context Statement for Data Source Definition
0 4 8 16 Kilometers
0 4 8 16 Miles
CEBR
ZION
BRCA
PISP
LAKE
NPS IMD GIS: 20120817

Viewshed – Key Observation Points - Linear




Solar PEIS Lands Available Near Zion NP
NPS Resource Conflict Analysis - Viewshed Analysis - NRHP
National Park Service
U.S. Department of the Interior
Natural Resource Stewardship & Science
NPS Units
Park AOA
Lands Available
Solar Energy Zones
Variance Lands
NRHP Points (12)
Visible Points
0
1
2
3
4
5
6
7
Refer to Resource Data Context Statement for Data Source Definition
0 4 8 16 Kilometers
0 4 8 16 Miles
CEBR
ZION
BRCA
PISP
LAKE
NPS IMD GIS: 20120816

Viewshed – Spatial Balanced Sample