

Explanation of Resource Conflict Analysis Used to Determine

NPS-Identified Areas of High Potential for Resource Conflict

There are 53 units of the National Park System and six national historic trails administered by the NPS in the six-state area of the Solar Energy Program (Solar PEIS study area). The NPS developed a systematic and objective methodology for identifying solar program lands having the potential for direct and landscape scale cumulative impacts on NPS values and resources. A risk-based threats analysis termed Resource Conflict Analysis (RCA) was performed to facilitate further discussion with BLM regarding additional protective measures that would more fully protect NPS-administered resources from potential landscape-scale and local-scale effects of utility-scale solar energy development.

The analysis relied on geospatial information available at regional levels or other surrogate information to represent NPS interests or concerns. Given that development of utility-scale solar energy facilities creates the potential for landscape and local-scale resource conflicts, the RCA focused on potential cross-boundary effects such as: increased loading of fine particulates (criteria pollutants: PM 2.5 and PM 10) and reduced visibility in Class I and sensitive Class II areas; vulnerability of sensitive cultural sites and landscapes, loss of historical interpretative value due to destruction or vandalism; reduced habitat quality and integrity, and wildlife movement and/or migration corridors; increased isolation and mortality of key species; fragmentation of natural landscapes; diminished wilderness, scenic viewsheds, and night sky qualities on landscapes within and beyond boundaries of areas administered by the NPS; and altered water quantity and quality. To establish a reasonable analysis extent, the NPS examined the conditions of key resource indicators from 0-25 miles from each park's boundary, called the Area of Analyses (AOA).

A data harvesting exercise to assess resource conditions and their indication of potential cross-boundary effects resulted in the compilation of 12 geospatial datasets which were intended to address a range of potential resource conflicts. Maps depicting the physical setting, land use/cover, protection status, threatened and endangered species (critical habitat), wildlife habitat (connectivity and fragmentation), viewsheds, nighttime lights, watersheds, and wetlands were developed for each NPS unit. [Note: Due to the length of the six national trails and the Solar PEIS schedule, the NPS has an ongoing effort to produce a similar set of standard output layers for the national trails in the Solar PEIS study area.] The NPS area-specific resource condition datasets and maps were distributed to park units for a determination of the areas posing a high potential for resource conflict within the unit's AOA. Available expert knowledge (at national, regional and/or park levels) was applied to review the maps and identify areas where there exists a high potential for direct and cumulative cross-boundary effects with NPS administered resources. Any BLM-administered parcel (or polygon) identified as land available in the Solar Energy Program (Preferred Alternative) that intersects the identified areas is geospatially attributed as an Area of High Potential for Resource Conflict (AHPRC). The conflict associated with the AHPRC is annotated on a park unit-specific reference map and summarized in narrative form. An AHPRC may alternatively reflect a high potential for a single resource conflict, or a combination of multiple resources that reflect a high potential for conflict.

In summary, the NPS-identified AHPRCs are geo-referenced and explained in associated narratives. A compiled GIS database with standardized NPS area-specific AHPRC maps cross-referenced with

geospatial attributes and justifying narratives is provided. The database will be updated periodically to incorporate new information or additional areas administered by the NPS.