SOLAR ENERGY DEVELOPMENT:

THE ROLE OF THE NATIONAL PARK SERVICE

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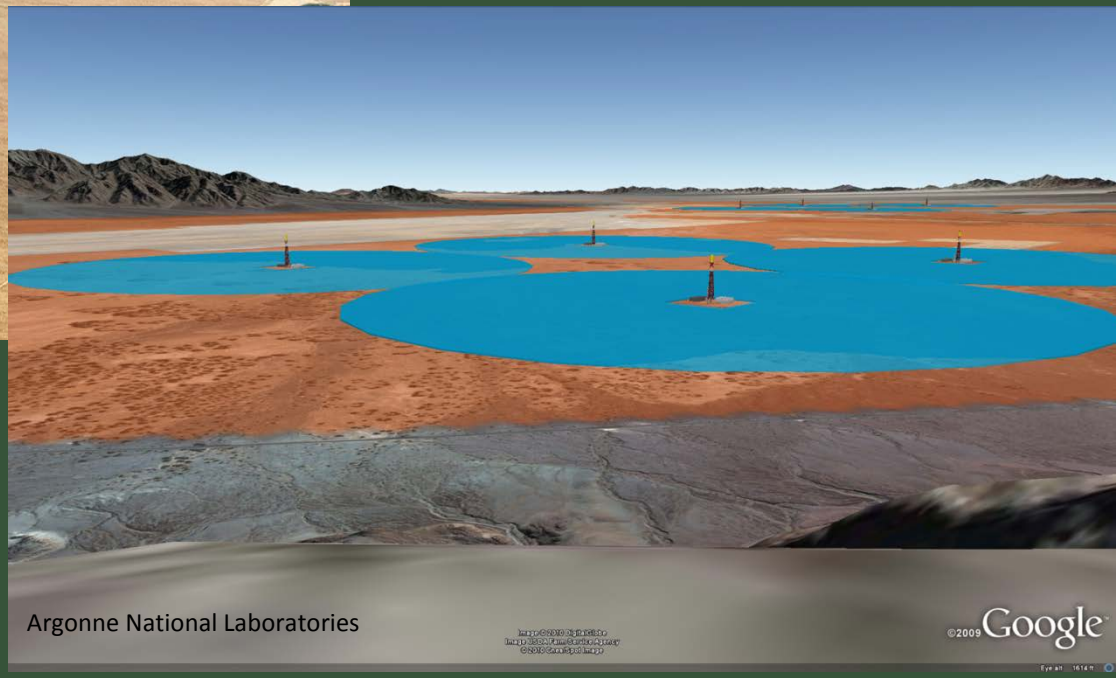
BIA Solar Energy Training – February 2013

NPS Jurisdiction

The National Park System is comprised of 398 areas covering more than 84 million acres in every state (except Delaware), the District of Columbia, American Samoa, Guam, Puerto Rico, and the Virgin Islands.

These areas include national parks, monuments, historic and scenic trails, battlefields, military parks, historical parks, historic sites, lakeshores, seashores, recreation areas, scenic rivers and trails, wilderness areas, Land & Water Conservation Fund Program lands, and other such designations.

Utility Scale = Landscape Level Impacts



Clockwise from left:

1. Simulation of Ivanpah Solar Energy Generation System near Mojave National Preserve
2. Simulation of solar power tower
3. Simulation of concentrated solar thermal project viewed from inside Joshua Tree NP

NPS Resources and Values at Stake

Viewsheds & Air Quality

- Unimpaired views are a hallmark of many parks

Night Skies

- Natural lightscapes, including dark night skies, are a dwindling resource that dominate many parks

Soundscapes

- The acoustical environment includes both natural sounds (wind, water, wildlife) and cultural and historic sounds (quiet reverence) and is an important aspect of the park experience to many visitors

Cultural Resources

- Many parks are rich in cultural and archaeological resources, and have the responsibility to preserve and interpret that history for the American people

Wildlife, Plants, and Habitat

- The majority of parks contain and preserve habitat for and support populations of threatened and endangered species

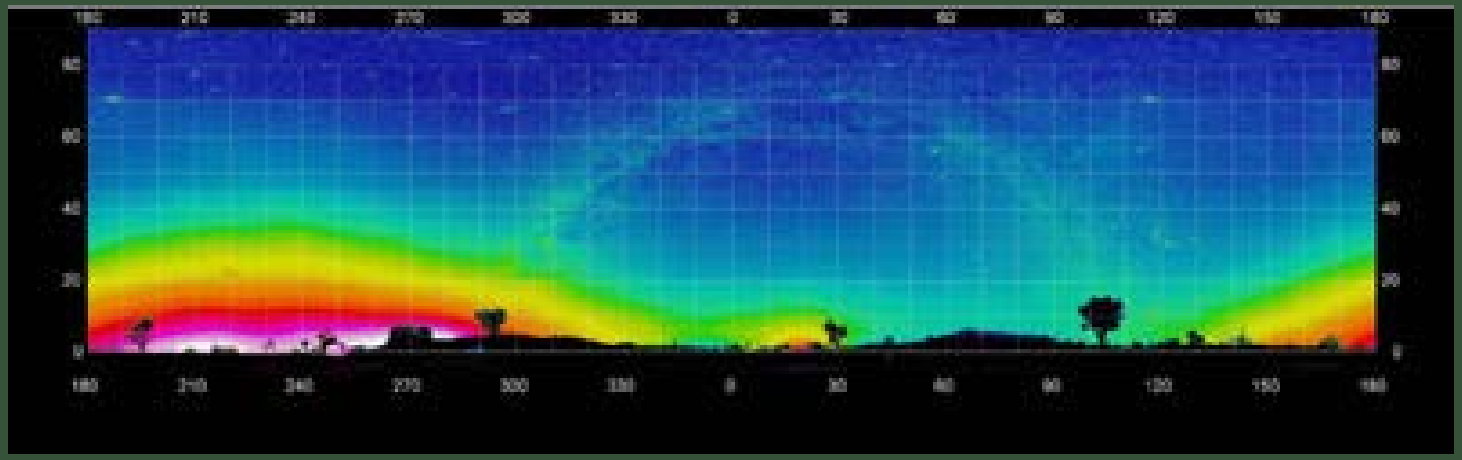
Water Quality and Quantity

- The availability, quality, and clarity of park water resources define the health of park ecosystems

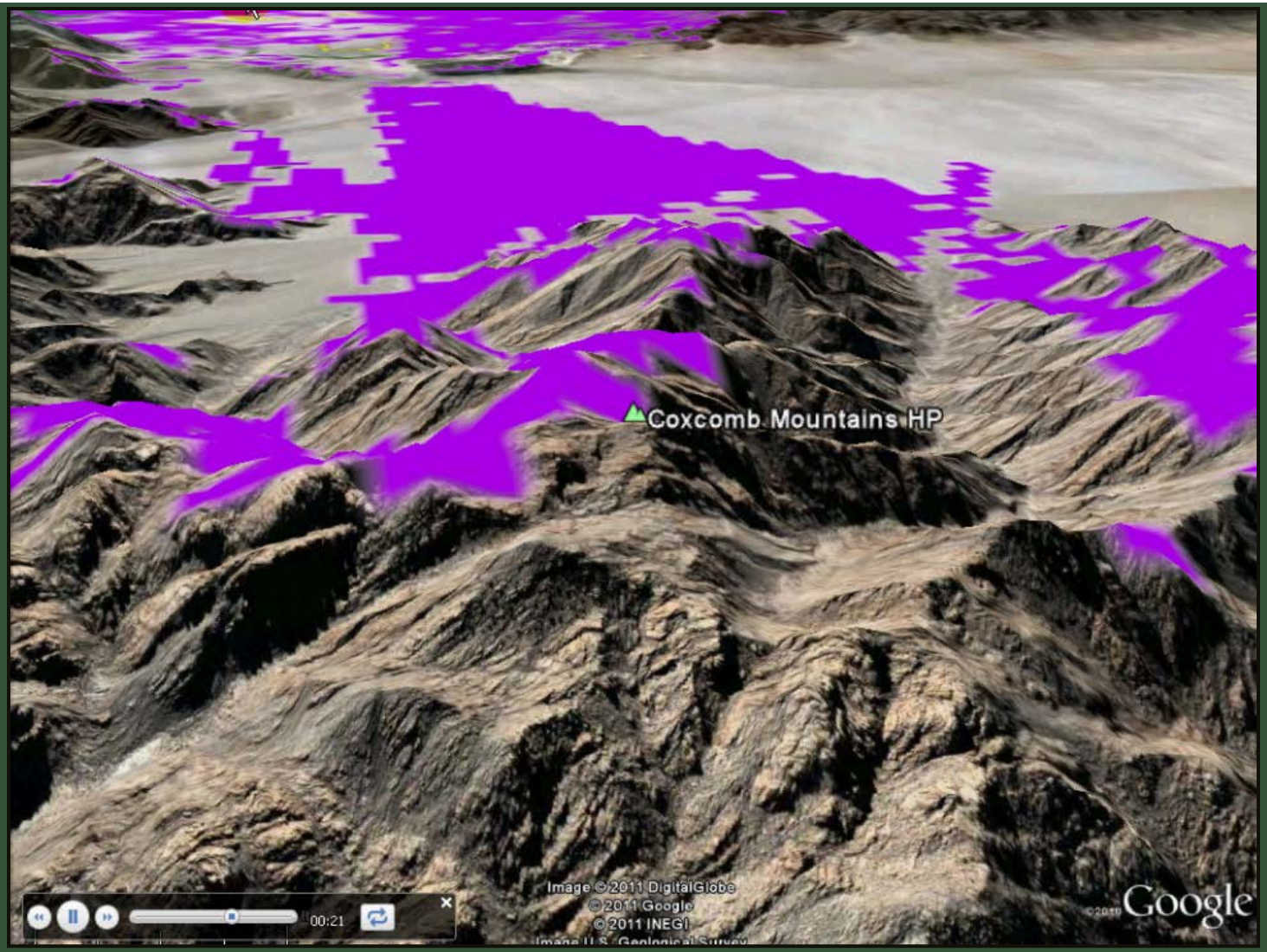
Visitor Experience

- The visiting public has a high expectation of unimpaired resources and park-related tourism is an important economic factor for surrounding communities

Natural Lightscapes



Geospatial Project Example – Visual Resources



Program Objectives

President Obama and Secretary Salazar have committed to a renewable energy program that is

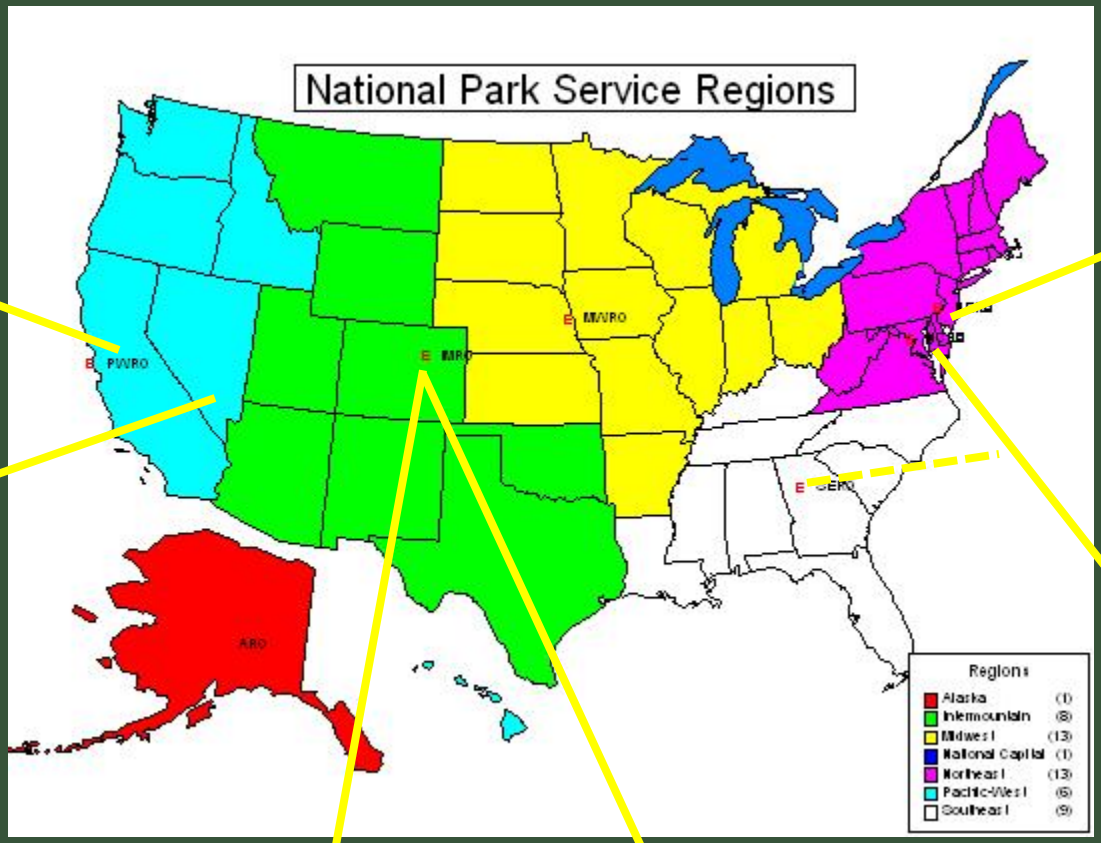
"Smart from the Start"

1. Avoidance through appropriate *siting*
2. Minimization through use of *design features*
3. Offset of impacts through *mitigation*
4. Increased understanding by *monitoring*

Program Mission

- Ensure NPS meets its trust responsibility to the public to protect the scenery, natural and cultural resources, and enjoyment of those resources unimpaired for future generations (NPS Organic Act)
- Ensure the fundamental purposes for which park units are created by Congress, as outlined in their enabling legislation, are protected as Congress intended
- Ensure the DOI meets its legal obligation to protect parks against an external development threat that is "direct, specific, and credible" and which "relates to a fundamental value or purpose of the park" (DOI Solicitor's Opinion "Doe Run" at 24)
- Ensure consideration of impacts to NPS resources and values through the planning and permitting processes under NEPA

6 New Renewable Energy (RE) Specialists



<u>Zach Church</u>
Regional Coordinator
Pacific West Region
San Francisco, CA

<u>Amee Howard</u>
RE Specialist
Pacific West Region
Lake Mead, NV

Midwest, Alaska, and National Capitol Regions receive support from team

<u>Lara Rozzell</u>
RE Specialist
Intermountain Region
Denver, CO

<u>Mark Meyer</u>
RE Visual Resource Specialist
Washington Support Office (Air Resources)
Denver, CO

<u>Mary Krueger</u>
RE Specialist
Northeast Region
Boston, MA

<u>Bryan Faehner</u>
RE Specialist
Southeast Region
Washington, D.C.

Legal Protection of NPS Resources and Values

- The DOI Solicitor's Office Memorandum *Doe Run* states *the Secretary has a legal obligation to protect parks against an external development threat* that is "direct, specific, and credible" and which "relates to a fundamental value or purpose of the park" (Doe Run at 24)
- There must be consideration of impacts to NPS resources and values through the NEPA process (Doe Run at 25)
- The enabling legislation of park units outlines the purposes for which the park was created by Congress, and must be protected

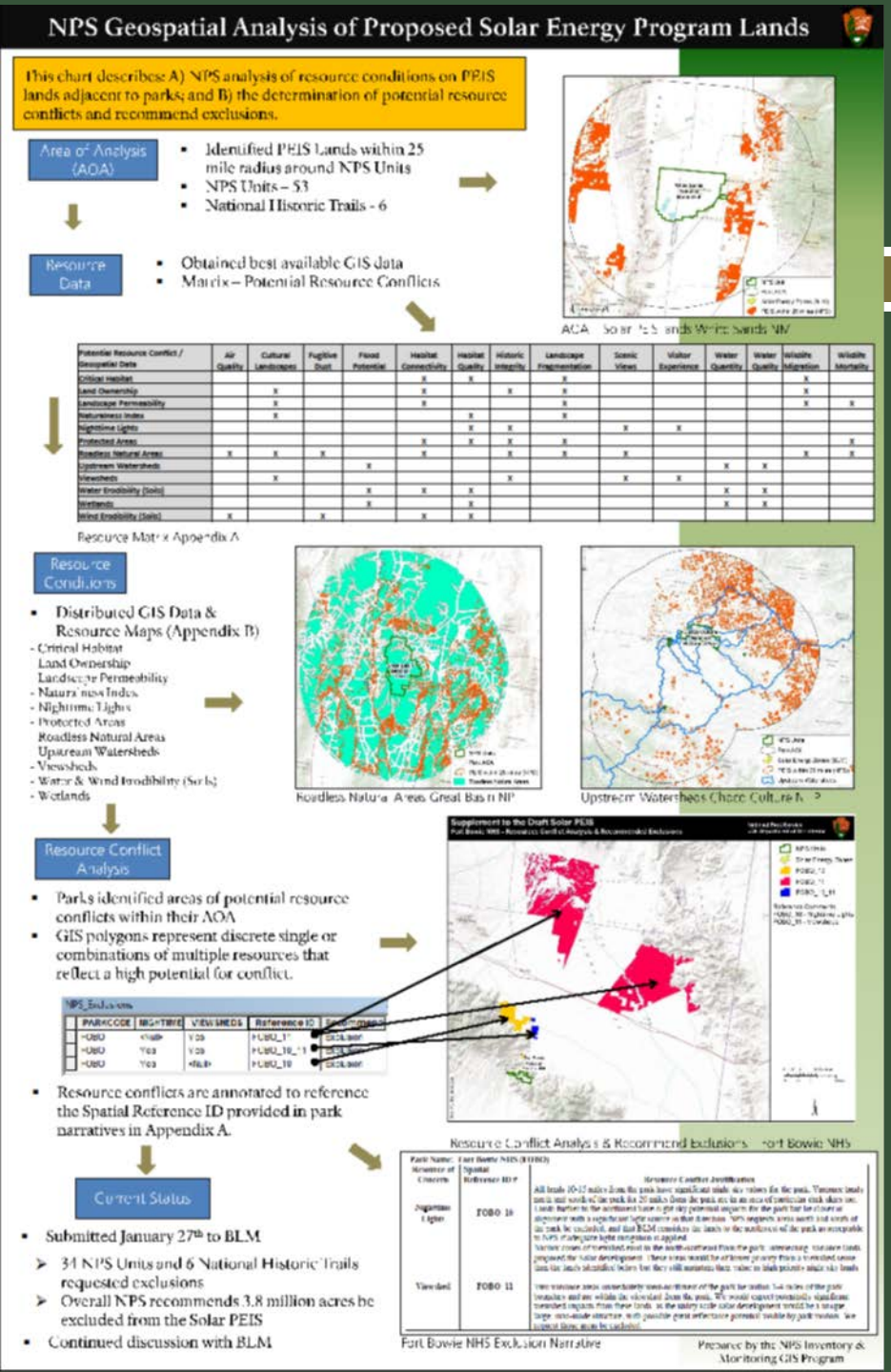
NPS Directives and Agreements

- Director's Memo "Renewable Energy Development near Units of the National Park System" (August 2010)
  - Directs parks to become involved in the renewable energy planning and permitting decision-making processes of other agencies to avoid and/or mitigate impacts to parks

- Director's Memo "Implementation Guidance for the Interagency Transmission Memorandum of Understanding"(May 2010)
  - Outlines NPS procedures to implement nine-agency October 2009 MOU "Regarding Coordination in Federal Agency Review of Electric Transmission Facilities on Federal Land", and directs parks to engage on electric transmission projects and become a cooperating agency when appropriate

NEPA – Cooperating Agency Status

- Appropriate when park has either "jurisdiction by law" (e.g. transmission through park) or "special expertise" (e.g. park resources and values) (see 42 USC §§ 4331(a), 4332(2) and 40 CFR §§ 1501.6, 1508.5)
- Role in siting and alternatives development
- Allows for early identification of potential impacts, data and analysis needs and modeling needs
- More time to develop alternative configurations, design features and mitigation measures to protect park resources and values



Example: NPS Geospatial Analysis for BLM Solar PEIS

Pilot project for 53 park units within BLM Solar Energy PEIS planning area

Problem to be addressed: which areas *outside park boundaries* are most sensitive for cross-boundary impacts *inside park boundaries*

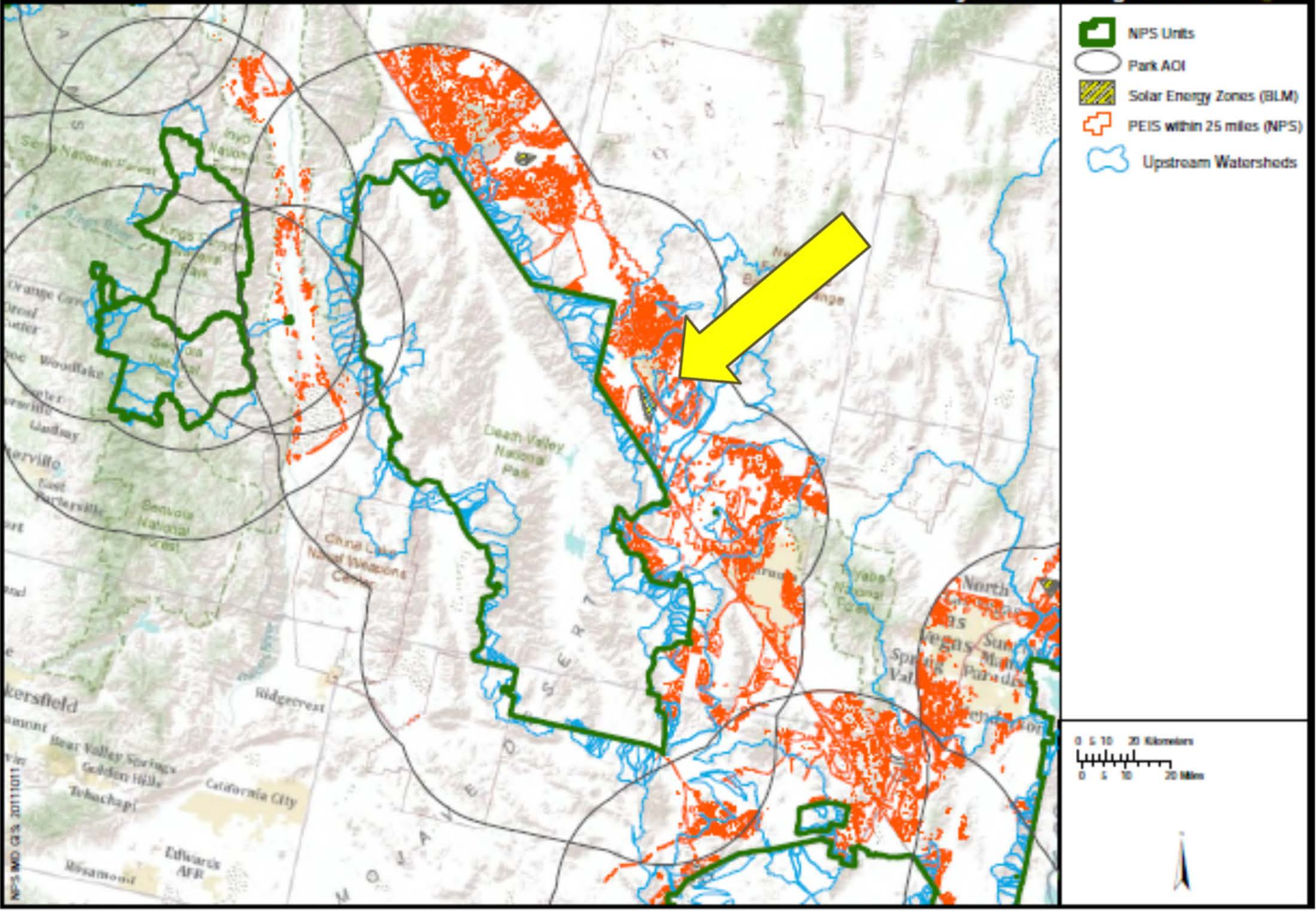
Geospatial analysis of various resources (e.g. watersheds, critical habitat) based on available data

Area of analysis 25 mile radius from park boundaries – this area defined for issue identification only, and does *not* represent any NPS-advocated "buffer"

Death Valley NP - Draft PEIS Resources Map

Upstream Watersheds

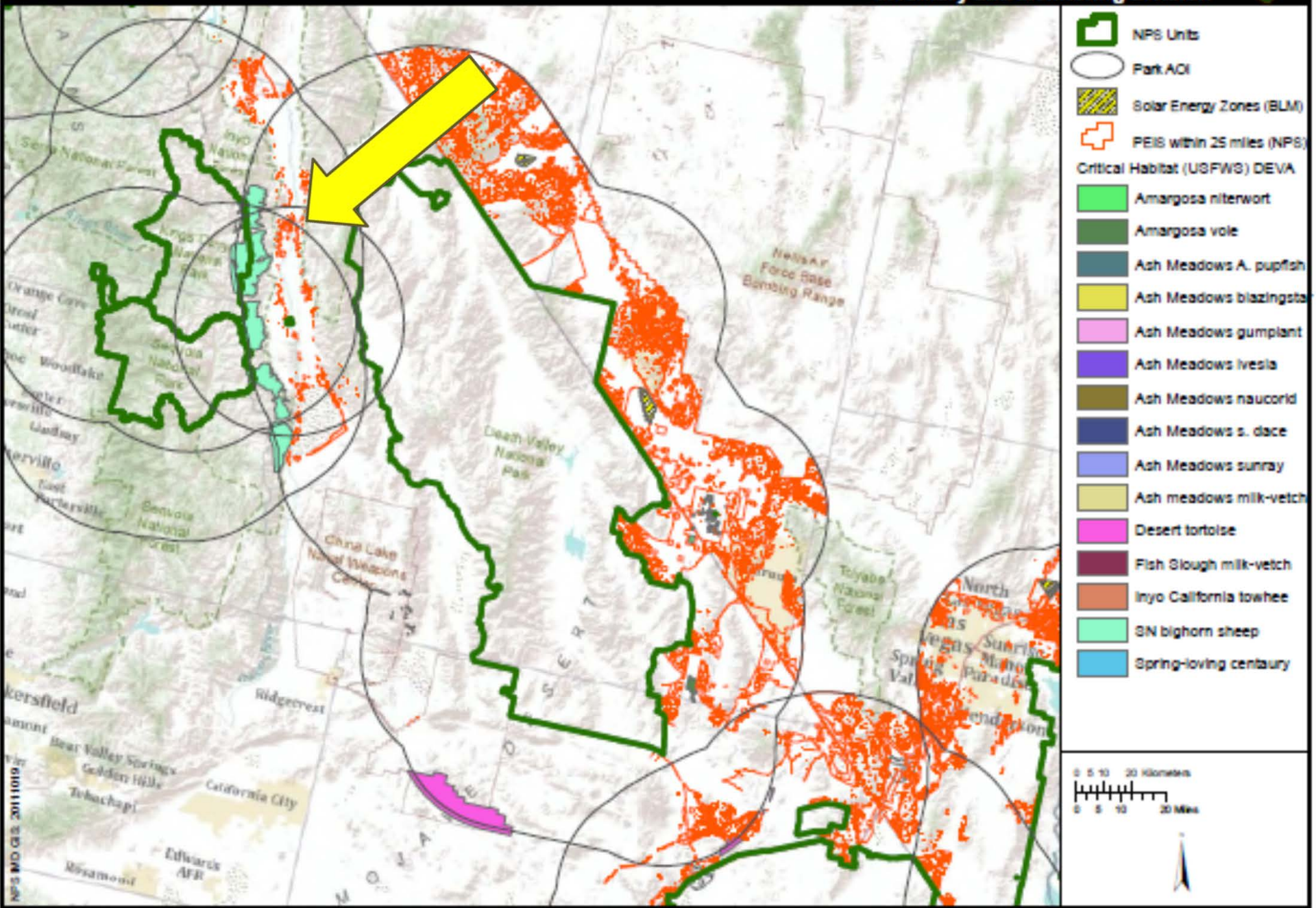
National Park Service
U.S. Department of the Interior
Inventory and Monitoring Division



Death Valley NP - Draft PEIS Resources Map

Critical Habitat T & E - U.S. Fish and Wildlife Service

National Park Service
U.S. Department of the Interior
Inventory and Monitoring Division



NPS MO GIS 20111019

Key Points for Coordinating with the NPS

- Park resources and values can be greatly affected by cross-boundary impacts.
- Need to engage with potentially affected parks as early as possible in the process to allow for meaningful contribution.
- NPS specialists can provide knowledge and expertise pertaining to parks and surrounding areas important for understanding and analyzing impacts.
- Transmission and related infrastructure through parks requires a Special Use Permit. Authority for permitting is limited to findings by the NPS that no impairment to park resources and "not incompatible with the public interest." 16 USC 5 & 79, and Director's Order #53
- Need to establish avoidance strategies, identify minimization techniques, and design mitigation measures to eliminate, reduce, and offset park impacts.

Questions?

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