

Thank you for your comment, Kimberley Delfino.

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Solar Energy Development PEIS
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First Name: Kimberley
Middle Initial:
Last Name: Delfino
Organization: Defenders of Wildlife
Address: 1303 J Street
Address 2:
Address 3:
City: Sacramento
State: CA
Zip: 95814
Country: USA
Email:
Privacy Preference: Don't withhold name or address from public record
Attachment: Final Solar PEIS Comments.pdf

Comment Submitted:

To Whom it May Concern,

Please accept the attached comments from Defenders of Wildlife on the Notice of Intent of the BLM and DOE to prepare a Programmatic EIS for Solar Energy Development.

Thank you,

Kim Delfino
[See Attachment.](#)



California Office

1303 J Street, Suite 270 | Sacramento, CA 95814 | tel 916.313.5800 | fax 916.313.5812
www.defenders.org

July 15, 2008

Via Electronic Mail and Regular Mail

Solar Energy PEIS Scoping
Argonne National Laboratory
9700 S. Cass Ave. – EVS/900
Argonne, IL 60439
solareiswebmaster@anl.gov

Dear Sir/Madam:

On behalf of Defenders of Wildlife (“Defenders”) and our more than half a million members and supporters in the U.S., I am writing to provide comments on the Notice of Intent of the Bureau of Land Management (“BLM”) and Department of Energy (“DOE”) to Prepare a Programmatic Environmental Impact Statement (“PEIS”) for Solar Energy Development (hereinafter “Solar PEIS”). Defenders is a national conservation organization dedicated to the protection of all native wild animals and plants in their natural communities.

We are providing these comments to assist the BLM and DOE in identifying and addressing the multitude of conservation issues raised by the Solar Energy PEIS. We are also joining in comments filed by the Wilderness Society (“TWS”) on July 15, 2008, under separate cover, and provide these additional comments to focus on wildlife-related issues.

Defenders recognizes that the United States’ energy needs are growing – and that our future depends on finding sustainable ways to meet those needs, free ourselves from dependence on foreign energy suppliers, and reduce our reliance on energy sources that contribute to global warming. Defenders supports renewable energy and believes that solar energy can move forward in the West, but with more than 130 solar applications pending – with 72 applications in California covering more than 600,000 acres of land in the California Desert, we need strong policies in place to minimize negative environmental impacts and protect our public lands and wildlife for future generations.

While solar thermal systems do not have air emissions of criteria pollutants, there can be other significant impacts to the environment. Concentrating solar thermal projects are large installations that require significant amounts of land, anywhere from 5 to 10 acres per megawatt (“MW”). Plants can be wet or dry cooled. Wet cooled plants will use significant amounts of water, roughly 750 to 850 gallons per megawatt hour (“MWh”). Dry cooled plants will use much less water, roughly 20 to 45 gallons per MWh, mostly for mirror (or heliostat) washing. Current solar technology requires that land must be cleared and fenced for installations, which is highly likely to restrict wildlife movement and impact native plant species. Further, there would be significant disturbance to wildlife and the landscape during the construction phase of the solar projects.

National Headquarters

1130 17th Street, N.W.
Washington, D.C. 20036-4604
tel 202.682.9400 | fax 202.682.3331

However, with careful planning through the Solar PEIS, the BLM and DOE can make significant strides towards securing our energy future and the future of our wildlife. Therefore, Defenders is committed to working with federal and state agencies and private energy companies to help craft solutions towards increasing renewable energy production while protecting wildlife and its related habitat requirements. Defenders provides the following comments to assist DOE and BLM in meeting the goal of ensuring that solar energy development on public lands will be truly sustainable for people and wildlife.

I. Environmental Policies & Mitigation Strategies:

The scoping notice for the Solar PEIS states that the proposed action is for BLM and DOE to develop and implement agency-specific programs that would facilitate environmentally responsible utility-scale solar energy development by establishing environmental policies and mitigation strategies for solar development in six western states. Further, the BLM expects to identify BLM-administered land in the six state study area that may be suitable for solar development and land that should be excluded from development.

A. BLM Should Exclude Lands Currently Protected From Development:

The scoping notice states that the PEIS will not include lands within the National Landscape Conservation System, such as National Conservation Areas, National Monuments, Wilderness Areas, Wilderness Study Areas, Wild and Scenic Rivers, and National Historic and Scenic Trails. The notice also states that the PEIS will not include lands that the BLM has previously identified in its land use plans as environmentally sensitive, such as Areas of Critical Environmental Concern (“ACECs”) or other special management areas, that are inappropriate for or inconsistent with extensive, surface-disturbing uses. An ACEC is a public land designation second only to wilderness in terms of the level of protection afforded to the identified area.

Defenders strongly supports the BLM’s statement in which the agency excludes development on the above-mentioned lands. In particular, we strongly urge that the BLM continues to adhere to the previously agreed upon protections for ACECs within the various BLM desert conservation plans, particularly in Desert Tortoise Management Areas (“DWMAs”) and Mohave Ground Squirrel Conservation Areas. The BLM’s Wind Energy PEIS, released in 2004, excludes ACEC’s from development. Therefore, Defenders expects the BLM to provide the same protections to ACECs from the impacts of solar energy projects as it did for wind energy projects.

B. BLM Should Direct Solar Project Development onto Disturbed and Degraded Lands to Avoid and Minimize Impacts to Wildlife and Habitat Areas.

The scoping notice states that BLM may identify lands suitable for solar energy projects. Defenders urges that such “suitable” lands be defined as previously degraded and disturbed lands, including:

- Abandoned mine sites
- Already developed transportation corridors
- Producing oil and gas fields
- Brownfields
- Lands where other commercial operations on public lands are comparable to the scope of the proposed solar project

- Abandoned/damaged agricultural lands.

These “degraded” areas must be close to existing infrastructure. They must also be lands that have not been identified as in need of restoration or important for wildlife conservation (see below discussion at pp. 4-8).

C. The PEIS Must Take A “Landscape-based” Approach the Solar PEIS.

Defenders’ believes that the PEIS needs to consider ecosystem processes (i.e., climate, primary productivity, hydrological processes, biophysical habitats, interactions between organisms, movements of organisms, and natural disturbance regimes) and solar energy’s impact on them on a “landscape-level” basis. The PEIS needs to look at more than just the various types of lands and species impacted. It must also consider an ecosystem-focused analysis that deals with impacts to specific large geographic areas such as river corridors or major wildlife migration routes. Protecting ACECs is certainly one way to ensure the ability of many of these natural phenomena to continue.

Defenders advocates for a landscape-based approach to wildlife conservation because a focused analysis of the solar development impacts to large geographic areas on BLM lands is crucial to the long-term viability of our species of concern, such as the Mohave ground squirrel and Desert tortoise. We have seen that proposed energy corridors can come close to protected area borders and potentially threaten the overall migratory ability of wildlife endemic to the region.

Key habitat features such as Desert Tortoise Critical Habitat and Desert Wildlife Management Areas are important elements of a conservation program because they contain important habitat, provide buffers and links to conservation areas, and are part of the general landscape that affects aspects of ecosystem health, such as water quality and properly functioning ecological processes. As the BLM is aware, wildlife on public lands are already threatened by traditional uses such as off-highway vehicles, habitat degradation, pollution, and mining due to the agency’s multiple use mandate.

Planning for the overall protection of these species requires a landscape-scale perspective, and this perspective merits an analysis beyond simple protected area avoidance. Indeed, this analysis must include the identification of additional unique habitats within developed areas to conserve, even if they are small, as this contributes to the preservation of whole communities of wildlife and properly functioning ecological processes. If developed and implemented properly, this landscape level approach can prevent species from becoming endangered or threatened, thus avoiding costly recovery efforts and lawsuits.

D. Potential Specific Impacts to Wildlife and Habitat Areas Must be Addressed in Formulating Policies & Mitigation Strategies.

In order to avoid and minimize impacts to wildlife, plants and animals on public lands, Defenders specifically requesting that the BLM/DOE follow the following recommendations in the formulation of environmental policies and mitigation strategies (“Best Management Practices”) in the PEIS. The BLM/DOE should incorporate these measures into any program or policy adopted by the agencies through the PEIS. Moreover, these measures should be mandatory and apply to ~~every~~ every project application that the BLM/DOE receives

- Avoid steep slopes in order to reduce erosion impacts
- Avoid sensitive and rare natural communities
- Avoid Citizen Proposed Wilderness Areas
- Avoid lands that are designated to protect wilderness characteristics
- Avoid impacts to state parks and state-designated wilderness areas
- Avoid Globally and continentally Important Bird Areas (IBA's)
- Avoid identified wildlife corridors (see, e.g., Missing Linkages Project in California)
- Avoid development within priority areas as established in State comprehensive wildlife strategies, natural community conservation plans (established under California Fish and Game Code §2800, et seq.), habitat conservation plans, and recovery plans for threatened and endangered species
- Avoid development that severs habitat corridors set out in any state or regional connectivity or conservation plans
- Avoid wetland resources (including the upland elements of the watersheds that support the wetlands themselves)
- Avoid impacts to the viability of species of plants and animals listed under the state and federal Endangered Species Acts as well as special status species identified by BLM, or state species of special concern or special status species identified through State comprehensive wildlife conservation strategies.
- Avoid overlap with designated critical habitat for federally listed species
- Analyze, avoid, minimize, and otherwise fully mitigate impacts to wide-ranging species such as bighorn sheep
- Be consistent with actions identified in state and federal recovery plans for listed species
- Be consistent with regional conservation plans (both current and draft) such as the West Mojave Habitat Conservation Plan.
- Minimize the project footprints
- Minimize growth-inducing impacts
- Be consistent with the conservation priorities of existing BLM regional land management plans
- Minimize impacts due to on-going maintenance of the pipelines, transmission lines, or distribution facilities
- Minimize cumulative impacts due to existing and planned development in the region
- Actively restore native vegetation to the project footprints after the infrastructure has been constructed
- Avoid disturbance and harassment of wildlife.
- Existing roads should be used when available and if new roads must be created, they should be designed to minimize impacts to natural and cultural resources.

E. The PEIS Must Require Species Surveys and Monitoring for All Projects.

Responsibility for conducting preliminary site screening for wildlife and wildlife habitats call for preconstruction wildlife surveys and for integrating this information into a design, construction, and operation plan that minimizes harm to species and habitat to the maximum extent possible. Site-specific environmental analyses of wildlife, fish and plant considerations must give detail as to the timing of project initiation, duration and completion. Robust site assessments and pre-construction surveys are critical to addressing the considerations outlined in this comment letter. Referencing a detailed protocol

will present applications with the questions that need to be addressed and the tools to begin doing so early in the application process, prior to investing large amounts of time, effort and money. Sites must ensure that post-construction monitoring take place according to published and accepted protocols at all facilities. Monitoring results must inform ongoing operational decisions such as lighting, land management, invasive species control, etc., in order to minimize adverse impacts to wildlife on an ongoing basis.

F. The PEIS Must Address Specific Species Issues.

The Solar PEIS covers all BLM land in six western states. As discussed above, this PEIS must analyze impacts to biodiversity at the regional and local level. Since Defenders has worked on the issue of siting solar projects within the California Desert during the past couple of years, we wanted to take a moment to highlight a few desert-specific species issues:

1. **Desert Tortoise:**

The Desert tortoise population has decreased by 90% since the 1950's. Recent estimates indicate that there are about 100,000 individual desert tortoises existing in the Mojave and Sonoran deserts. As late as the 1950's the desert tortoise population averaged at least 200 adults per square mile. More recent studies show the level is now between 5-60 adults per square mile. The Desert tortoise can be found in the Mojave and Sonoran Deserts of southern California, Nevada and Utah. They inhabit semi-arid grasslands, desert washes and sandy canyon bottoms below 3,500 ft.

Desert tortoise are very sensitive to human disturbances, and this has led to the decimation of many of its populations throughout the desert southwest. Increased urban development in the deserts of California and other states have fragmented and reduced suitable habitat. Certain fatal diseases appear to be spreading among tortoise populations. Poaching, the use of off-highway vehicles within tortoise habitat and crushing by automobiles have also continued to threaten tortoise populations. Ravens cause significant levels of juvenile tortoise predation in some areas of the Mojave Desert with more prevalence of human disturbances and the availability of water sources.

Despite effort to recover this species, the tortoise continues to decline in the California Desert. The 1994 Desert Tortoise Recovery Plan recommended the creation of Desert Wildlife Management Areas ("DWMA's") within BLM lands in order to concentrate recovery efforts for the desert tortoise. The BLM has formalized DWMA's through its planning process and now manages them as Areas of Critical Environmental Concern. DWMA's can provide sufficient buffering from demographic stochastic and genetic problems and would be sufficiently large to support recovered populations with a reasonable probability of persistence. (Fish and Wildlife Service, 1994). It is important to note that DWMA's were originally intended as areas where human activities would be restricted. Clearly, the development of potentially thousands of acres of solar projects in DWMA's will have significant direct, indirect and cumulative impacts on this species.

Defenders strongly urge that the PEIS follow the recommendations found in the current Desert Tortoise Recovery Plan for avoidance and minimization measures. In addition, the PEIS should fully analyze and address impacts to tortoises such as new water sources that attract predators, impacts to tortoise water sources from proposed groundwater pumping, impacts from roads, and impacts from vegetation management.

Roads lead to direct and indirect impacts on desert tortoise including roadkill mortality, destruction of burrows, dispersion of invasive plants, predators, development, recreation, and possibly disease (Boarman 2002). Roads and highways tend to fragment wildlife habitat and reduce the movement of animals through the landscape (Tsunokawa and Hoban 1997, Evink 2002). Road kill is the greatest human-caused source of direct mortality to vertebrate wildlife in the United States with an estimated one million vertebrates killed per day on roads in America (Forman and Alexander 1998, Kline and Swan 1998). The cumulative impact of habitat fragmentation on desert tortoise is exacerbated by roads and the amount of habitat that they degrade (Boarman 2002).

Finally, Defenders urges that if translocation of desert tortoises is considered as part of any mitigation strategy, translocation must be in conjunction with the preservation of habitat. Further, the any translocation plan or policy must comply with the recommendations of the FWS 1994 Desert Tortoise Recovery Plan, including

- a) No experimental translocations into Desert Wildlife Management Areas (“DWMAs”).
- b) Translocations should be made to appropriate habitat; the PEIS will need to define the habitat to be used and justify this selection.
- c) Areas into which desert tortoises are to be relocated should be surrounded by a desert tortoise-proof fence or similar barrier. The fence will contain the desert tortoises while they are establishing home ranges and a social structure.
- d) The best translocations into empty habitat involves desert tortoises in all age classes, in the proportions in which they occur in a stable population.
- e) The number of desert tortoises introduced should not exceed the pre-decline density.
- f) All potential translocatees should be medically evaluated in terms of general health and indications of disease, using the latest available technology, before they are moved.
- g) If desert tortoises are to be moved into an area that already supports a population—even one that is well below carrying capacity—the recipient population should be monitored for at least 2 years prior to the introduction. Necessary data include the density and age structure of the recipient population, home ranges of resident desert tortoises, and general ecological conditions of the habitat. Any translocation sites should be isolated by a desert tortoise barrier fence or similar barrier next to the highway or road.

2. Mohave Ground Squirrel:

The Mohave ground squirrel is endemic to the West Mojave Desert in California. Confined to the northwestern corner of the Mojave Desert, its territory is bounded on the south and west by the San Gabriel, Tehachapi, and Sierra Nevada Mountains. On the northeast, it is bounded by Owens Lake and a series of small mountain ranges, including the Coso, Argus, Slate, Quail, Granite, and Avawatz Mountains. On the southeast, the range of the Mohave ground squirrel abuts a portion of the range of the closely related round-tailed ground squirrel (*Spermophilus tereticaudis*). The current geographic range of the Mohave ground squirrel includes about 19,800 km² (7,640 mi²) in the western portion of the Mojave Desert in California. This is the smallest range among the ground squirrel species found in the United States (Defenders of Wildlife, 2005).

The species is listed as threatened under the California Endangered Species Act. Identified threats to this species include urban and rural development, livestock grazing, OHV use, agricultural practices, military operations, energy production, and transportation infrastructure. With nearly two-thirds of the range in federal ownership, state listing does not ensure conservation. Recent GIS analysis reveals that only 9%

of the suitable habitat within the historic Mohave ground squirrel range exists in a protected state and that more than 78% of the habitat within the species' range is either naturally unavailable, severely degraded, or in a threatened land use (Defenders of Wildlife, 2005).

Given the precarious nature of the Mohave ground squirrel, Defenders urges BLM to continue to adhere to its existing policy of allowing only 1% of the area within a Mohave Ground Squirrel Conservation Area to be developed or disturbed.

3. Burrowing Owl:

The PEIS must acknowledge and address any impacts to the burrowing owl. In addition to being a Species of Special Concern, the burrowing owl is protected under the California Fish and Game Code Section 3503.5 and the Migratory Bird Treaty Act. Impacts to burrowing owls must be assessed in the PEIS. If impacts are found to exist, we urge the BLM to following the California Department of Fish and Game Burrowing Owl Survey Protocol and Mitigation Guidelines:

- Occupied burrows should not be disturbed during the nesting season (February 1 through August 31) unless a qualified biologist approved by the Department of Fish and Game determines that the adult birds have not begun egg-laying and the juveniles from the occupied burrows are foraging independently and capable of independent survival.
- As compensation for the direct loss of burrowing owl nesting and foraging habitat, the project proponent should mitigate by permanently protecting known burrowing owl nesting and foraging habitat.
- A Burrowing Owl Mitigation and Monitoring Plan should be submitted for review and approval prior to relocation of owls describing the proposed relocation and monitoring plans. The plan shall include the number and location of occupied burrow sites and details on adjacent or nearby suitable habitat available to owls for relocation. If no suitable habitat is available nearby for relocation, details regarding the creation of artificial burrows (numbers, location, and type of burrows) will also need to be included in the plan

4. Plant diversity

The Mojave Desert is an area with 250 ephemeral plant species, 90 of which are unique to the region. We urge the BLM/DOE to review the existing BLM management plans to assess potential impacts to plant species and to review the plant databases in each state. For example, in California, the BLM should review the California Natural Diversity Database and the Department of Fish and Game's "Atlas of the Biodiversity of California," which includes maps of plant rarity and richness on public lands. See, <http://www.dfg.ca.gov/biogeodata/atlas/>.

G. The PEIS Must Avoid and Minimize Impact to the West's Water Supply.

Solar projects should not occur in a manner that exhausts the already depleted water sources of the West (e.g., groundwater, desert seeps, rivers, streams, wetlands, etc.). Construction of concentrated solar requires scraping, blasting and drilling. Wet cooled plants and washing thousands of mirrors uses millions of gallons of precious water each year and contaminates ground water aquifers. The California Energy Commission (CEC) has stated it will approve the use of fresh water for cooling purposes by solar power plants it licenses **only** where alternative water supply sources and alternative cooling

technologies are shown to be “environmentally undesirable” or “economically unsound.” Defenders urges that the BLM require dry cooling for all proposed solar projects if the use of the water supply is found to be environmentally undesirable.

H. The Designation of Additional Electricity Transmission Corridors Should Be Conducted in the Context of Other Planning Efforts & Adequately Address Impacts to Wildlife.

The notice of intent states that the PEIS would consider whether designation by BLM of additional electricity transmission corridors on BLM land is necessary to facilitate utility-scale solar energy projects. Defenders urges the PEIS to consider not only existing transmission, but also the proposed transmission planned by the West-Wide Energy Corridor PEIS, the CEC’s Renewable Energy Transmission Initiative, and the Western Governors’ Association Renewable Energy Zone Project.

In addition, as discussed above at pp. 4-7, the BLM must consider and address the wide range of impacts to plants, fish and animals from transmission corridors. In addition, Defenders wants to emphasize the impacts of transmission corridors – in the form of above-ground power lines – to birds in the form of collisions and electrocutions. Raptors and large birds are electrocuted through phase-to-phase and phase-to-ground contacts while small birds are killed by bushings and transformers as well as other pole hardware. Nationally, researchers have documented fatal impacts from power lines for hundreds of species (Manville 2005) with a rough estimate ranging from tens of thousands to 1.5 million collisions (Erickson 2002; and current research indicates that the number of deaths is drastically underestimated). These mortalities have contributed to declines in local and regional populations. As part of the Pacific flyway, California is a critical movement corridor for a large number of wintering birds that utilize our Refuges and flooded agricultural fields. Electrocutions most often occur on distribution line less than 70kV and collisions are most likely to occur on lines carrying a greater amount of voltage. Collisions are most likely to occur when the transmission lines are within the daily use areas of the birds – areas that they move amongst to roost and forage – and when they are migrating through an area. Body size, maneuverability, and height of flight also contribute to collision risk.

We request that the BLM and DOE follow the Avian Protection Plan Guidelines set forth by the Edison Electric Institute’s Avian Power Line Interaction Committee and the U.S. Fish and Wildlife Service in April 2005. This document can be found on the internet and details construction design standards, nest management procedures, an avian reporting system, risk assessment methodology, mortality reduction measures, avian enhancement options, and quality control.

In addition, specific recommendations that should be included in the PEIS are: site analysis and plant and wildlife use surveys to avoid problems; site according to topographic features; minimum spacing of 60 inches between phases and phase to ground; cover or insulate ground wires and cover conductors; and changing cross arms and installing perch guards. The agencies must tailor avoidance measures to the specific location and species of concern as current research indicates varying success of different techniques. For example, a study in Colorado demonstrated that perch guards might shift raptors to unsafe portions of a power pole (Harness 1999).

I. The PEIS Must Identify Minimum Mandatory Mitigation and Demonstrate the Effectiveness of the Mandatory Mitigation Practices.

The PEIS must avoid simply listing potential mitigation measures. Instead, the PEIS must include a list of mandatory mitigation measures so it is clear what the minimum standard for mitigation of a solar

project or transmission line should be. Again, the Wind Energy PEIS set forth a list of minimum mandatory best management practices for all projects.

In addition, the PEIS must analyze the mitigation practices for effectiveness. NEPA requires just such an analysis. See, “Forty Most Asked Questions Concerning CEQ’s National Environmental Policy Act Regulations,” 48 Fed. Reg. 18,026 (March 16, 1981).

J. Mitigation and Management Actions Must be Monitored and Adaptively Managed.

Defenders urges that the BLM/DOE require solar development to be phased in order to allow time to observe the impacts of such development to the specific area before further disturbance occurs. Further, any management actions designed to avoid, minimize, or otherwise mitigate impacts to wildlife and habitat must be monitored adequately to demonstrate success. Not only will the monitoring and adjustment of management measures improve the effectiveness of mitigation and management techniques, it will also provide critical data to inform the agencies of the knowledge on effective mitigation and management methods that can be employed in other areas. The PEIS must require that agencies require project proponents to implement and monitor contingency plans and create adaptive management measures in order to identify and address the potential environmental impacts.

K. The PEIS Must Address Legal Standards for Wildlife Conservation.

In terms of wildlife impacts, the PEIS must address several impacts, including impacts stemming from the construction, on-going use, and maintenance of the solar energy projects, including infrastructure, and transmission lines. As such, the PEIS must meet the legal standards set forth by the Migratory Bird Treaty Act, the Bald and Golden Eagle Protection Act, and Federal Endangered Species Acts. Additionally, private entities proposing to build new energy infrastructure on federal lands must follow state law. In California, this includes meeting the “minimize and mitigate” standard set out by CEQA as well as the “fully mitigate” standard under the California Endangered Species Act.

In addition, Defenders urges the BLM and DOE to conduct formal consultation under the ESA with the U.S. Fish and Wildlife Service. Section 7 of the ESA requires that each federal agency insure that any action authorized, funded or carried out by that agency is not likely to jeopardize the continued existence of any threatened or endangered species or result in the destruction or adverse modification of critical habitat for any threatened or endangered species. 16 U.S.C. §1536(a)(2). In meeting this duty, an agency shall consult with the appropriate Secretary so that the Secretary can determine if the action will jeopardize the species or cause adverse modification or destruction of critical habitat. Id. at §1536(b)(3). An agency shall review its actions at the earliest possible time to determine if the action may affect listed species or critical habitat. 50 C.F.R. 402.14.

Since the PEIS may result in the amendment of BLM Resource Management Plans, we believe that the BLM/DOE must consult with the federal wildlife agencies pursuant to Section 7 of the ESA. Indeed, the Wind Energy PEIS underwent consultation pursuant to Section 7.

II. NEPA Issues:

A. The PEIS Must Adequately Analyze and Address Impacts to Species and Habitats at the Landscape Level of Analysis.

Solar projects, with the accompanying roads and other infrastructure, present a particular challenge to wildlife in the form of habitat fragmentation. Continued habitat fragmentation forces wildlife to live on ever-shrinking islands of habitat, where it is more difficult for them to find food, water, shelter, mates, and protection from predators. Genetic problems such as inbreeding appear, and populations become more susceptible to catastrophic events such as wildfire. The resulting fragmented habitat inevitably leads to smaller populations of wildlife, and extinction of populations or species becomes more likely

As discussed above at p. 3, Defenders strongly urges that the PEIS analyze the impacts of the placement of solar projects on public lands at the “landscape” level. We do not believe that a general discussion of the various types of lands and species impacts provide sufficient “ecosystem” focused analysis. Instead, we urge that PEIS analyze impacts across geographic ranges, including wildlife corridors and river corridors.

III. BLM Planning Criteria & Wildlife

The notice of intent for the Solar PEIS identifies a list of planning criteria to be used by the BLM for analysis of potential plan amendments. Most of these criteria will be important to the proper analysis of solar development and plan amendments, but there are some additional issues to consider.

A. Coordination with Other Governments and Agencies:

In addition to the previously identified solar and energy transmission initiatives, Defenders also urges BLM to coordinate with state land and wildlife agencies, local conservation planning efforts, and tribes. In particular, Defenders strongly urges that the PEIS is coordinated and consistent with each State’s Comprehensive Wildlife Conservation Strategy.

B. Use Geospatial Data in a Geographic Information System (GIS) to Identify and Address Impacts to Wildlife and Habitat.

We strongly encourage the use of GIS data to analyze impacts to wildlife and habitats. In addition to the information available through federal agencies and NatureServe, many state wildlife agencies have significant GIS data on wildlife, habitat areas, and vegetation. Moreover, many local and regional conservation planning efforts (e.g., NCCPs, HCPs, and Wildlife Corridor Plans) and transportation planning efforts also contain a significant amount of GIS data that should be included in the BLM’s review and analysis. In addition, in California, the Environmental Working Group of the RETI process is currently undertaking a GIS analysis of sensitive lands and wildlife ranges to determine the location of transmission corridors. We urge BLM to utilize all of this data in its PEIS.

C. Wildlife and Habitat Protection Must Be Identified as Separate Planning Criteria.

The scoping notice’s list of proposed planning criteria does not include specific criteria associated with plant and animal species. Given the scope of lands under analysis, and given the potential for adverse impacts to critical biological resources within the planning area, we suggest that the PEIS specifically

address the potential impacts of solar energy development on plant and animal populations, communities and associated habitats. Specifically, we request that the agencies consider the effects of solar energy development on the viability of plants and animals found within the planning area. We request that the agency develop alternatives for analysis that minimize negative effects to species viability.

IV. CONCLUSION

We thank you for the opportunity to provide comments on the Solar PEIS. We support the BLM and DOE's efforts to address the siting and management of utility-scale solar projects at the programmatic level. We look forward to working with the agencies in the development of the PEIS. Please add Defenders to any distribution lists for the PEIS and all notices associated with this project. If you have any questions or comments, please do not hesitate to contact me at (916) 313-5800 ex. 109.

Sincerely,



Kim Delfino
California Program Director

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