

January 23, 2020

Gera Ashton
District Manager
Bureau of Land Management
Southern Nevada District Office
4701 North Torrey Pines Drive
Las Vegas Nevada, 89130

RE: Recommendations for potential new solar Designated Leasing Areas in southern Nevada

Dear Ms. Ashton,

Please accept this letter from The Wilderness Society, The Nature Conservancy, Defenders of Wildlife, and the Natural Resources Defense Council. We understand that the Southern Nevada Bureau of Land Management (BLM) District Office intends to develop a Programmatic Environmental Assessment (EA) to inform the public, stakeholders, and developers on the relative levels of conflict that solar applications will face on different BLM solar variance lands in southern Nevada. We are providing the agency with the following recommendations regarding information and analysis that should be considered in this process and as BLM addresses future solar development in general.

In June of 2019, our organizations submitted comments and recommendations regarding criteria the agency should consider for assessing the relative level of ecological conflict in siting decisions in the Programmatic EA. While we shared general criteria, we did not provide a spatially explicit analysis.

This follow up letter provides a spatially explicit analysis regarding locations in the planning area we feel would be most appropriate for consideration as future Designated Leasing Areas (DLAs) (our preferred approach) or variance areas that should be given first preference for processing project applications. With these recommendations, we also provide site-specific considerations that are important to address.

We have been engaging on these issues and providing BLM with input for years, and the recommendations below build on that experience. Our three most recent joint letters are attached as an appendix.

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I. Context – the importance of responsible renewable energy development on public lands

Our organizations are deeply invested in promoting responsible renewable energy development and durable conservation on our public lands. We have a strong history of working collaboratively with BLM, industry, and other stakeholders to advance “smart from the start” renewable energy development. While the threat of climate change demands an acceleration of renewable energy development, this should not come at the unnecessary expense of the lands, waters, wildlife, and human communities we seek to protect from climate change in the first place. Like any development on public lands, renewable energy projects often result in significant direct and indirect impacts to the resources and values of an area (e.g., wildlife habitat, soils, land connectivity, wilderness-quality lands, cultural resources). Our engagement on BLM planning in southern Nevada comes from our organizations’ efforts to balance the dual goals of accelerating renewable energy transition and conserving the lands and waters upon which all life depends.

We recognize that utility-scale renewable energy development is an appropriate use of public land under the Federal Law and Policy Management Act, and we seek to help the agency appropriately manage that use through smart planning. Our comments provide recommendations to help ensure that this Programmatic EA and the decisions it is intended to support are informed by the best available information and analysis, which will improve outcomes across BLM’s multiple-use mandate.

Over the coming years and decades, we anticipate strong interest in utility-scale solar energy development in southern Nevada due to high-quality solar resources, flat terrain, and increasing demand driven largely by renewable portfolio standards (including Nevada’s new requirement to generate 50% of its electricity from renewable resources by 2030 and aim for 100% carbon-free resources by 2050) and corporate renewable energy goals. In addition to favorable solar energy development characteristics, the planning area also contains habitats and migration corridors that are essential to the survival of species like the Mojave desert tortoise (*Gopherus agassizii*), wilderness-quality lands used for backcountry recreation, and other sensitive resources and values. Accordingly, it is important that BLM designate DLAs (our preferred approach) or identify lower-impact variance areas to be given first preference for processing project applications to help meet growing demand for solar. Alongside these steps to focus solar development in lower-impact locations, BLM must also use its management tools to conserve important wildlife habitat and wild lands over the long term.

a. Dry Lake SEZ – reducing and offsetting impacts while cutting permitting time in half

The success of the Dry Lake Solar Energy Zone (SEZ) demonstrates the importance and value of the smart from the start approach. By ensuring a robust and open public process, the BLM received meaningful input from a wide range of stakeholders. This led to the upfront avoidance of conflicts that otherwise would have complicated and delayed permitting. As a result, the BLM permitted the solar projects in the Dry Lake SEZ in less than half the average time it took the agency to approve prior solar projects on other public lands. This zone-based approach accelerated responsible development, increased permitting efficiency, and offset remaining unavoidable ecological impacts offsite through commitment to a well-developed compensatory mitigation plan. The smart from the start approach at the Dry Lake SEZ provided clarity, consistency, and accountability for both clean energy development

and nature conservation, along with setting a national precedent. We aim to help the BLM's Southern Nevada District Office (SNDO) replicate the high standard they demonstrated with the success of development in Dry Lake SEZ.

b. The need for state-wide planning to meet renewable energy demands

Although this letter is focused on BLM's upcoming Programmatic EA for the Southern Nevada District, we also strongly recommend that BLM's Nevada State Office work proactively in coordination with other federal and state agencies and stakeholders to plan for lower-impact renewable energy development across the state. The burden of planning for Nevada's future renewable energy goals and export market should not fall entirely to the SNDO BLM Office, especially given the particularly complex and competing demands for land use in southern Nevada. Now that Nevada and neighboring states have clearly articulated renewable energy generation goals, a more comprehensive plan is needed at the state level for how to reach those goals. Such planning needs to be spatially explicit and encompass the role of energy efficiency, distributed energy resources, and renewable energy development on already-impacted lands, including mines and brownfield sites.¹ We intend to follow up with stakeholders at the state and federal level in pursuit of this urgent need.

II. Consistency with BLM's planning and permitting framework for solar energy on public lands

BLM established guidance via the 2012 Western Solar Plan and 2016 Solar and Wind Energy Rule on how to best approach the permitting of utility-scale renewable energy across an entire landscape and in a proactive manner, in contrast to a reactive project-by-project permitting approach. This improved approach includes focusing and facilitating development in locations with lower impacts to the environment and other resources and values, including through designation of DLAs, while protecting sensitive and important resources and values from development. BLM must ensure that this Programmatic EA and future solar development in southern Nevada are consistent with the approach required by the 2012 Western Solar Plan and 2016 Solar and Wind Energy Rule. Our previous comments detail the key elements of these programs and how BLM can best ensure consistency with those programs (see Appendix 1).

III. Methods for identifying potential new solar DLAs based on factors affecting developability and environmental impacts

a. High-level approach

The areas we have identified below and in the accompanying maps are based on a combination of geographic information system (GIS) analysis, knowledge gathered through outreach to a variety of stakeholders, and field-based site assessments. They are intended to describe general areas, and are not well-surveyed polygons. Our work focused on a subset of natural resources in the Mojave Desert and, given the multitude of resources in the Mojave and the complexities and broad scale at which these

¹ For an example of this type of analysis for the state of California, see: Power of Place: Land Conservation and Clean Energy Pathways for California. <https://www.nature.org/en-us/about-us/where-we-work/united-states/california/stories-in-california/clean-energy/?vu=cacleanenergy>

analyses were conducted, there is the possibility of uncertainty in the data or information. For this reason, it is important that BLM complete additional analyses and site-specific surveys to inform the agency's ultimate decisions regarding where to focus solar development, as described below.

b. Our recommendations for how BLM should use this information

These are areas we recommend the BLM focus site-based analysis for the purposes of identifying locations where the agency will prioritize new solar development, whether that be in the form of new DLAs designated through a Resource Management Plan (RMP) amendment (our preferred approach) or variance areas given first preference for processing project applications. We believe that designating new DLAs through an RMP amendment is the approach that is most likely to succeed and is most consistent with BLM's policies and renewable energy program; for these reasons, we strongly recommend that BLM pursue this approach.

Important wildlands and wildlife habitat are inappropriate for development of any kind, and BLM should close them to development and manage them for conservation.

c. GIS analysis methods

We limited our analysis to BLM lands open to solar variance application (under the 1998 Las Vegas-Pahrump RMP as amended by the 2012 Solar Programmatic Environmental Impact Statement (PEIS)) with an emphasis on a subset of lands that solar industry representatives indicated were likely viable for development. Note that some lands would require transmission line upgrades or expansions to allow for development. While not an exhaustive list, the following are examples of factors we considered in our analysis to illustrate our approach.

Factors that made lands more likely to be selected included but were not limited to: proximity to existing transmission lines and West-wide Energy Corridors; overlap with The Nature Conservancy's (TNC) Ecoregional Assessment "Highly Degraded" and "Moderately Converted" lands. Factors that made lands less likely to be selected included but were not limited to: overlap with TNC Ecoregional Assessment "Ecologically Intact" or "Ecologically Core" lands; lands modeled as highly suitable Mojave desert tortoise habitat or high connectivity areas; BLM or citizen-inventoried lands with wilderness characteristics; and potential Areas of Critical Environmental Concern.

d. Further refinement based on co-location, potential conflicts with other uses and values, and other important principles

The results of our GIS analyses informed discussion on tradeoffs offered at each potential site. These discussions were heavily shaped by the general principles of seeking first to avoid as many environmentally sensitive resources as possible; and second to co-locate development with other existing or likely future development. By doing so, it is our hope that other remaining large, intact areas of BLM land that are highly valuable for conservation but could be targeted for potential solar development will instead be protected and conserved.

We also took into consideration some known pressures for land use (e.g., municipal development interests) in southern Nevada that limit the likelihood that a site will be available for solar development.

e. Caveats and important factors to consider

i. Overlap with some private lands

In some areas, the sites we have indicated as potential DLAs contain private lands. We do not suggest or recommend the agency seize or otherwise contravene private property rights. On the contrary, we are following the guidance in the Solar PEIS for the agency to pursue partnerships with private and non-federal partners to identify suitable areas: “As part of the SEZ identification process, the BLM will take into account opportunities to partner with adjacent Federal and nonfederal landowners (e.g., private, state, tribal, or DoD-withdrawn lands). For example, small SEZs may be appropriate on BLM-administered lands when they are located adjacent to degraded, disturbed, or previously disturbed private lands. This combination of BLM-administered and nonfederal lands could allow for a combined use area, allowing for the expansion of renewable energy development onto well-suited adjacent lands.”²

ii. BLM must address important resources that we have not analyzed, such as cultural resources and areas significant for Native American Tribes

While we endeavored to take into consideration known potential conflicts with other resources, values, and uses of the BLM lands, we have not analyzed these issues in detail. BLM must do so as part of its analysis and ensure that any future solar development avoids, minimizes, and offsets impacts as appropriate. We recognize that there may be issues that we are not currently aware of that make these sites or portions of them inappropriate for development.

iii. Compensatory mitigation must be used appropriately to offset unavoidable impacts

A primary goal of identifying lower-impact potential DLAs is to *avoid* impacts to the most important and sensitive resources and values on public lands. However, development even in lower-impact sites may cause unavoidable impacts that warrant offsets through compensatory mitigation, which is certainly the case with the three potential DLAs we have identified. Compensatory mitigation requirements should be commensurate to the level of impact caused by the development, so higher-impact sites (sites with sensitive and important resources such as high-quality occupied Mojave desert tortoise habitat, habitat for other sensitive species, lands with wilderness characteristics, etc.) should have greater compensatory mitigation requirements than lower-impact sites (sites where the number of types, quality, and quantity of sensitive and important resources is lower).

When done right, clear, effective, and consistent mitigation requirements across the mitigation hierarchy (avoid, minimize, offset through compensatory mitigation) provide valuable opportunities for developers to expedite permitting, garner stakeholder support, and advance conservation and sound land-use decisions. Project-level mitigation requirements are most effective in advancing policy goals when integrated with sound policies that provide for clear, upfront requirements under a holistic, rather than ad-hoc, approach.

Despite recent guidance from BLM in Instruction Memorandum 2019-018 instructing agency staff not to require compensatory mitigation to offset impacts from development on public lands, there is a robust

² B.4.6.6 Opportunities to Combine Other Federal and Nonfederal Lands; Solar PEIS ROD P.174.

legal framework supporting the authority of BLM to require mitigation and in some cases compelling it to do so.

BLM has established a strong approach to compensatory mitigation for solar development in southern Nevada through the Dry Lake Solar Regional Mitigation Strategy (SRMS). The Dry Lake SRMS was created to offset unavoidable impacts from development within the Dry Lake SEZ. BLM should require developers to offset unavoidable impacts (after avoidance and minimization measures have been taken) through compensatory mitigation commensurate with the degree and nature of the impacts of their projects. It is advisable that the agency develop mitigation strategies for each new DLA that it designates, but in the absence of any new mitigation strategies, developers should by default be required to contribute to the existing Dry Lake SRMS to offset unavoidable impacts at the new development. BLM should also provide developers a clear, easy pathway to voluntarily make appropriate financial contributions to support conservation measures that align with the Dry Lake SRMS or any new, equally robust regional mitigation strategies that are developed.

IV. Results – three potential new solar DLAs

We recommend BLM consider potential solar DLAs in three areas of southern Nevada: the Amargosa Valley, Pahrump Southeast, and Dry Lake East. These potential sites encompass significant acreage that, if developed, can make important contributions to Nevada’s renewable energy goals. These three areas include a total of over 40,000 acres of BLM land. If even half of the BLM acres were developed, they could support over 3,000 MW of solar,³ nearly doubling the total existing solar that had been installed in Nevada by the end of 2018.⁴

The fact that we did not identify more sites for potential new DLAs underscores the importance of completing state-wide planning for renewable energy development, as noted earlier in this letter.

Section III of this letter describes the general approach we took to identifying potential new DLAs, including the types of GIS screens we used, site visits, etc. In this section, we provide additional details and context regarding each specific potential DLA that we recommend BLM consider.

a. Amargosa Valley potential solar DLA

The Amargosa Valley has high potential for a large, lower-conflict new DLA on land impacted by prior land uses. The map below shows the general area in the region that could be appropriate for a new DLA, which includes land west of Nevada State Route 373, east of Big Dune, and south of the desert tortoise corridor habitat modeled by the U.S. Fish and Wildlife Service.

The Amargosa Valley potential DLA comprises intermixed private and public lands. Some of the private land has been developed and the majority is irrigated agricultural fields. However, many agricultural fields are no longer farmed and have become fallow. There is an existing 100 MW solar project on private lands, and there are nearby transmission lines that could be upgraded to support future development. The native vegetation is fragmented and typically classified as either Mojave Desert creosote-bursage or saltbush on saline soils. The soils are generally poor soils for burrowing Mojave

³ Based on an estimate of 7.3 acres/MW, see National Renewable Energy Laboratory study “Land-Use Requirements for Solar Power Plants in the United States” p. v (<https://www.nrel.gov/docs/fy13osti/56290.pdf>)

⁴ See <https://www.seia.org/sites/default/files/2019-12/Nevada.pdf>.

desert tortoise, and this area has reduced habitat quality for desert tortoise. It is not known to have other endemic or rare species. In addition to the low-value wildlife habitat, the groundwater in the basin is over-appropriated. Onsite mitigation through purchase and retirement of water rights could help bring the basin into balance and provide an overall ecological benefit, including by improving the long-term water resources for the nearby Amargosa River, as well as providing benefits for other water users.

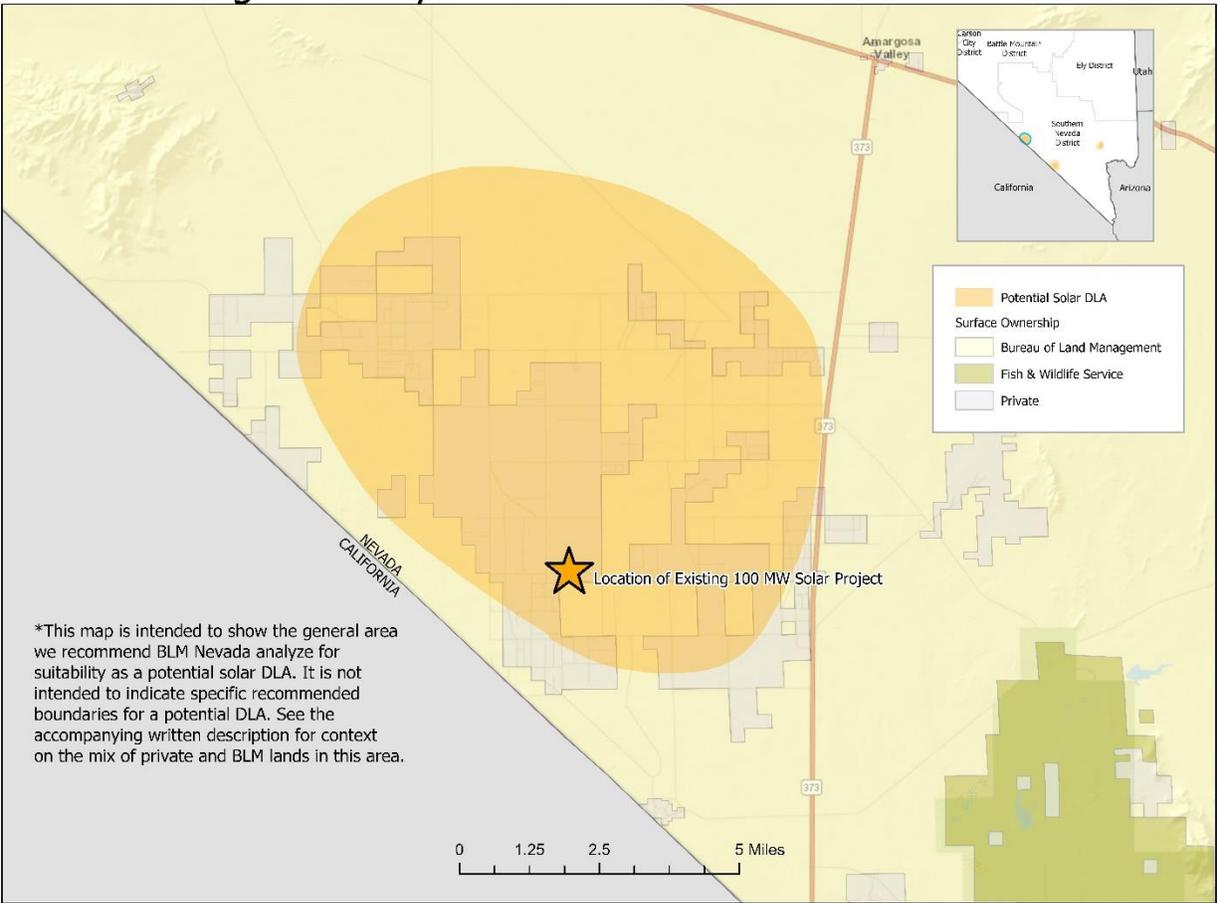
Appropriate development of utility-scale solar in the Amargosa Valley will require addressing and mitigating avian impacts, groundwater consumption, and impacts to the nearby Big Dune Area of Critical Environmental Concern, along with any other unavoidable impacts that are identified and which warrant compensatory mitigation, as described in Section III (e) (iii) of this letter. The proximity of this potential DLA to Ash Meadows National Wildlife Refuge means that solar energy development could potentially have negative impacts on birds.⁵ However, if solar energy development in this area is coupled with the purchase and retirement of water rights, an overall reduction of water use in the Amargosa Valley will likely have a far more significant positive impact on local and regional bird populations. Surface water and riparian habitat are critical for desert birds, particularly as temperatures and moisture stress increases.^{6,7} Reducing groundwater withdrawal will improve the long-term conservation of springs, wetlands, and other groundwater-dependent ecosystems reliant on the aquifer.

⁵Walston Jr, L.J., K.E. Rollins, LaGory K.E. et al. 2016. A preliminary assessment of avian mortality at utility-scale solar energy facilities in the United States. *Renewable Energy* 92:405-414.

⁶Albright, T.P., D. Mutiibwa, A.R. Gerson, et al. 2017. Mapping evaporative water loss in desert passerines reveals an expanding threat of lethal dehydration. *Proceedings of the National Academy of Sciences* 114:2283-2288.

⁷Ridell E.A., K.J. Ilnayan, B.O. Wolf et al. 2019. Cooling requirements fueled the collapse of a desert bird community from climate change. *Proceedings of the National Academy of Sciences* 116: 21609-21615.

Amargosa Valley Potential Solar DLA - General Area*



b. Pahrump Southeast potential solar DLA

The area on the southeast edge of Pahrump and north of the Tecopa Road has the potential for a DLA. These lands have lower habitat and ecological values in large part because of the proximity to development in Pahrump, Nevada State Route 160 (Hwy 160), and land where BLM is currently evaluating a proposed solar project through an Environmental Impact Statement. The map below shows the general area in the region that could be appropriate for a new DLA.

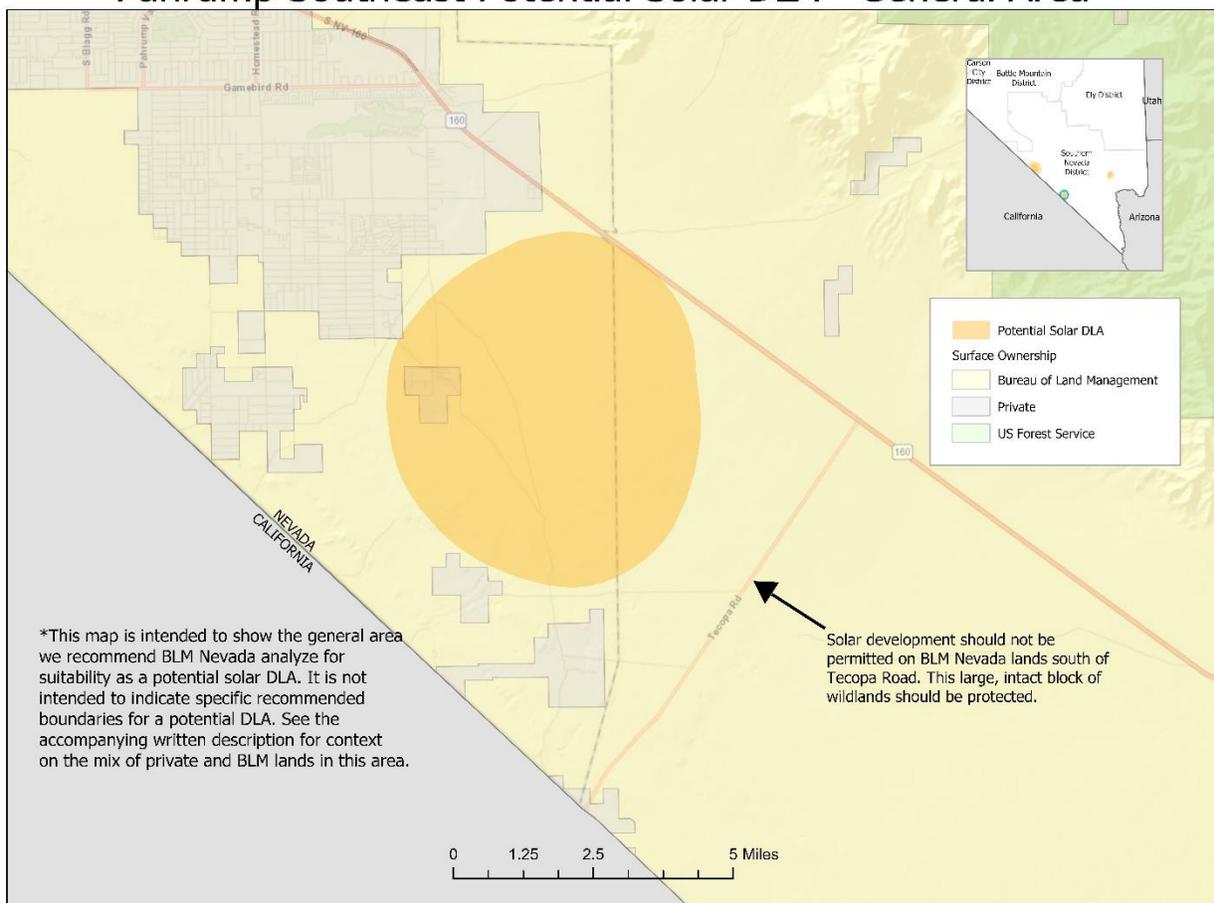
The Pahrump Southeast potential DLA is in the Pahrump Valley in the area southwest of Hwy 160, northwest of Tecopa Road, and southeast of Pahrump. The vegetation is generally classified as Mojave Desert creosote-bursage with significant components of Joshua tree and Mojave yucca. At the lower elevations of the Pahrump Southeast potential DLA, there are saltbush communities and small stands of mesquite. There is high-quality desert tortoise habitat and connectivity in the creosote-bursage vegetation-type. However, various conditions make this area seem less important to the long-term viability of the population, as the habitat is likely degraded since proximity to the town of Pahrump increases tortoise predators such as ravens and coyotes. The potential connectivity value of the area is hampered by proposed development to the south, the town of Pahrump to the north, topography to the west, and Hwy 160 to the east.

A new DLA in this area would provide the opportunity to co-locate future solar development on BLM Nevada lands in the area southwest of Hwy 160, northwest of Tecopa Road, and southeast of Pahrump. This would greatly reduce impacts as compared to allowing scattershot development in multiple areas across the region. The presence of existing transmission lines that could be upgraded increases the potential for the area to support additional solar development.

Regardless of whether BLM identifies a new DLA in the Pahrump Southeast area, BLM should not allow any solar or other infrastructure development southeast of Tecopa Road, also known as the Stump Springs area. This large block of intact wildlands and wildlife habitat should be protected.

Appropriate development of utility-scale solar in the Pahrump Southeast area will require addressing and mitigating impacts to the desert tortoise, along with any other unavoidable impacts that are identified, and warrant compensatory mitigation, as described in Section III (e) (iii) of this letter. Desert tortoise currently in the potential DLA will require translocation should development occur; nearby Stump Springs is a viable translocation area and provides high-quality habitat and population connectivity with other desert tortoise populations.

Pahrump Southeast Potential Solar DLA - General Area*



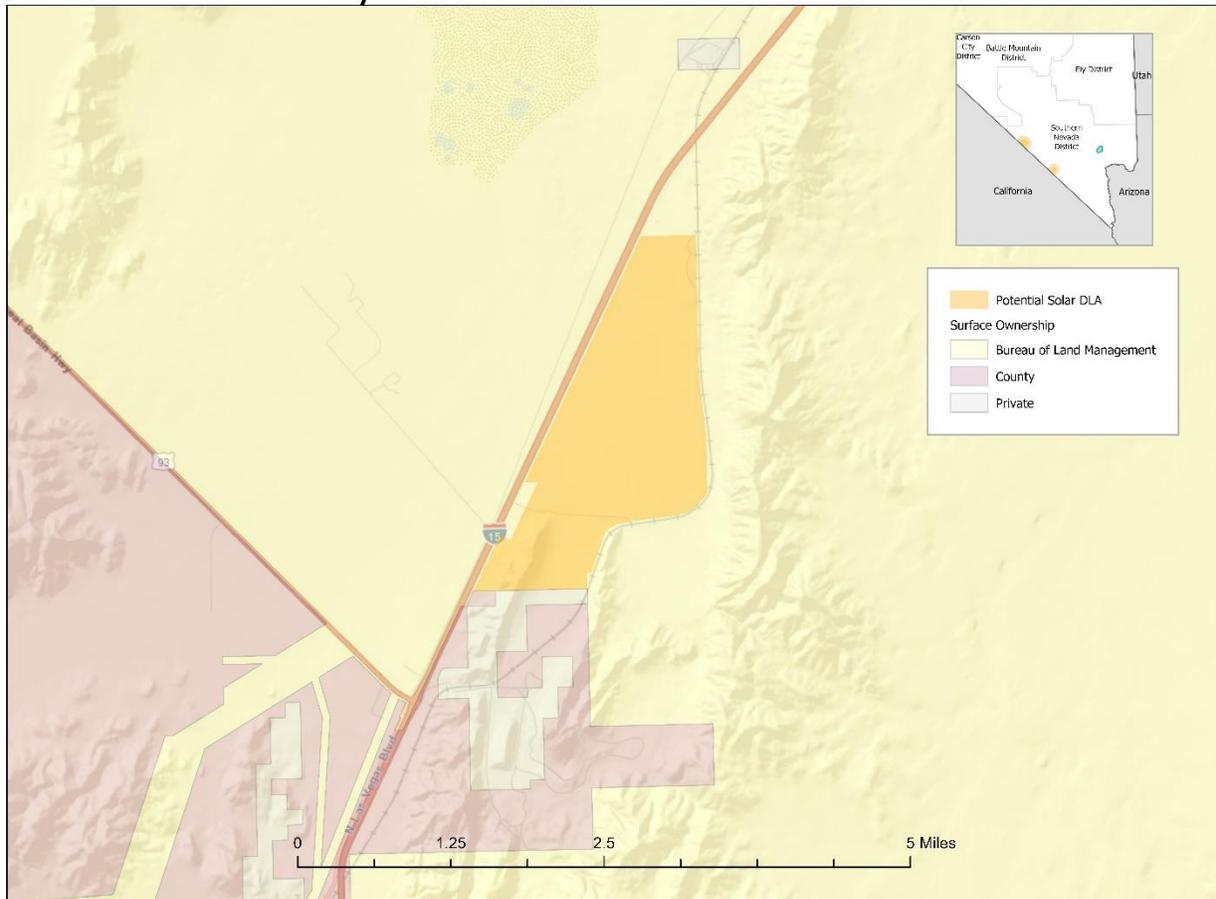
c. Dry Lake East potential solar DLA

The Dry Lake East potential DLA is an isolated fragment of creosote-bursage habitat between I-15 and the Dry Lake Range. Although it does likely include habitat for desert tortoise, it has poor long-term wildlife viability. The fragmented nature of this area and proximity to the Apex landfill and other industrial complexes reduces the value for wildlife as predators such as coyotes and ravens are prevalent. Furthermore, the topography and existing development (i.e., train tracks, I-15) limit tortoise connectivity in the region. The map below shows the general area in the region that has been identified for a new DLA.

BLM is developing an EA to designate this area as the Dry Lake East DLA and, based on the information we currently have regarding potential impacts from development in the area, we support BLM completing the DLA designation.

Appropriate development of utility-scale solar in the Dry Lake East area will require addressing and mitigating impacts to desert tortoise habitat, the Old Spanish Trail, as well as any other unavoidable impacts that are identified and which warrant compensatory mitigation, as described in Section III (e) (iii) of this letter.

Dry Lake East Potential Solar DLA



V. Conclusion

We hope these recommendations will help support responsible solar development alongside conservation of critical resources and values in southern Nevada. BLM should complete its Programmatic EA and include analysis of the sites identified in this letter in the EA. The analysis should include the use of input from other stakeholders and completion of BLM's own inter-disciplinary analysis of environmental and non-environmental impacts, including site-specific surveys of these potential DLAs. After determining which portions of these sites are suitable as DLAs, BLM should make those lands focal areas for solar development on BLM lands in southern Nevada, ideally as new DLAs (our preferred approach), or as variance areas to be given first preference for processing project application. BLM should also protect other lands with important conservation values from development of any kind by managing them for conservation. Finally, BLM should ensure and that all development includes appropriate compensatory mitigation requirements to offset unavoidable impacts. We look forward to following up with you on these recommendations soon.

Sincerely,

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Appendix 1: Recent joint letters from The Wilderness Society, The Nature Conservancy, Defenders of Wildlife and the Natural Resources Defense Council to BLM with recommendations on “smart from the start” solar development on BLM lands in southern Nevada:

- Initial comments on Solar Variance Programmatic EA (6/21/19);⁸
- Comments on potential new DLAs for Las Vegas-Pahrump Revised Draft RMP (3/23/18); and
- Comments on need for new DLAs and recommended process for Las Vegas-Pahrump Revised Draft RMP (2/2/18)

⁸ Note that for brevity we did not include Attachment 2 from this letter (Grey et al. range-wide model of Mojave desert tortoise connectivity (in review)) – it was included in the original letter submission, and is available upon request.

CC: Jon Raby, BLM Nevada State Director
Marci Todd, BLM Nevada Associate State Director
Greg Helseth, BLM Nevada State Renewable Energy Lead
Ian Glander, BLM Southern Nevada Associate District Manager
Shonna Dooman, BLM Las Vegas Field Manager
Chad Corey, BLM Pahrump Field Manager
Herman Pinales, BLM E&I Project Manager
Jeremy Bluma, BLM National Renewable Energy Program Lead

Appendix 1

June 21, 2019

Tim Smith
District Manager
Bureau of Land Management
Southern Nevada District Office
4701 North Torrey Pines Drive
Las Vegas Nevada, 89130

RE: Initial comments on solar variance lands programmatic environmental assessment

Dear Mr. Smith,

We understand that the Southern Nevada Bureau of Land Management (BLM) District Office intends to develop a Programmatic Environmental Assessment (EA) to inform the public, stakeholders, and developers on the relative levels of conflict that solar applications will face on different BLM solar variance lands in southern Nevada. We are providing the agency with the following recommendations regarding information and analysis that should be considered in this process.

Taking a smart and thoughtful approach to energy development and public lands management is important and involves making difficult choices. We recognize that utility scale renewable energy development is a valid use of public land under the Federal Land and Policy Management Act (FLPMA), and we seek to help the agency appropriately manage that use through good planning. Our comments provide recommendations to help ensure that this Programmatic EA and the decisions it is intended to support are informed by the best available information and analysis, which will improve outcomes across BLM's multiple-use mandate.

The BLM established guidance via the 2012 Western Solar Plan and 2016 Solar and Wind Energy Rule on how to best approach the permitting of utility scale renewable energy across an entire landscape and in a proactive manner, in contrast to a reactive project-by-project permitting approach. These approaches were established in the context of identifying "Solar Energy Zones" and "Designated Leasing Areas" (DLA), and, although a different procedure was established for permitting on variance lands, we believe that the generic four step process outlined for identifying suitable Solar Energy Zones is wholly transferrable for purposes of this Programmatic EA.

The process is as follows:

- 1) Assess the demand for new development over different time horizons (immediate demand; short term demand; long term demand);¹
- 2) Establish technical and economic suitability criteria;
- 3) Apply environmental, cultural, and other screening criteria; and
- 4) Analyze proposed areas through a planning and NEPA process.

¹ Note that in 2014-2015 the SNDO BLM worked with NREL to conduct a study on the demand for new utility scale solar generation in southern Nevada. We recommend the agency update this analysis or at a minimum include the previous NREL report as a baseline for planning.

The data sources and information we outline in the letter below fall under step 3, to inform screening criteria for assessing relative levels of environmental conflict across the planning area and prioritizing permitting accordingly.

BLM should also consider these general principles in its decision-making framework:

- To the fullest extent possible, co-locate development to minimize habitat fragmentation and conflict with other uses, and reduce the overall footprint from any given level of development.
- Present a full range of alternatives in its analysis.
- Ensure that transmission planning processes, including the ongoing reviews of the BLM and U.S. Forest Service West-wide Energy Corridors, are linked to the agency's process for prioritizing areas for permitting. The approach taken by the California Renewable Energy Transmission Initiative may be a useful resource for how the agency can better interlink current prioritization of solar permitting with future transmission planning (see: <https://www.energy.ca.gov/reti/>).

Although this letter is focused on BLM's upcoming Programmatic EA for the Southern Nevada District, we also strongly recommend that BLM Nevada work proactively in coordination with other federal and state agencies and stakeholders to plan for lower-impact renewable energy development across the state.

I. Lower/Higher/Highest conflicts analysis: BLM should use the 2016 Solar and Wind Rule screening criteria as a *baseline* for conflicts analysis

The 2016 Solar and Wind Rule established screening criteria for solar and wind applications outside of DLAs and requires BLM to give high-priority applications processing priority over medium- and low-priority applications and highlights that low-priority applications may not be feasible to authorize (see Attachment 1).² We recommend that BLM use these screening criteria as a baseline for the conflicts analysis, and build on and strengthen them, as detailed in section II. We also underscore the importance of BLM consulting with Native American tribes to ensure any areas with important cultural resources are also characterized appropriately in BLM's screens.

II. BLM should *build on and strengthen* the 2016 Solar and Wind Rule screening criteria for conflicts analysis

BLM should build on and strengthen the 2016 Solar and Wind Rule screening criteria by adding the following screens:

Lower-conflict

Solar development is most appropriate in lower-conflict areas. As detailed in Section IV, BLM should prioritize and facilitate solar development in lower-conflict areas, including by designating some lower-conflict areas as DLAs. Lower-conflict areas should also include:

² 43 CFR Part 2800 § 2804.35

1. TNC Ecoregional Assessment – Highly Converted;
2. TNC Ecoregional Assessment – Moderately Degraded; or
3. Brownfields and other contaminated sites in in EPA’s RE-Powering database.

Higher-conflict

Development on some higher-conflict areas may be appropriate so long as BLM can appropriately address impacts by requiring strong commitments to minimizing impacts onsite and offsetting unavoidable impacts through compensatory mitigation. Higher-conflict areas should also include:

1. TNC Ecoregional Assessment – Ecologically Intact;
2. Areas considered to be suitable desert tortoise habitat or desert tortoise habitat connectivity corridors, based on the best available science;³
3. Citizen-Inventoried lands with wilderness characteristics that BLM has not yet inventoried; or
4. Nominated Areas of Critical Environmental Concern (ACECs) that BLM has not yet reviewed and made determinations regarding the relevance and importance criteria.

Highest-conflict⁴

Highest-conflict areas are not appropriate for solar development. As detailed in Section IV, BLM should close highest-conflict lands to solar development and proactively manage key highest-conflict areas for conservation. Highest-conflict areas should also include:

1. Sensitive habitat areas, including important species use areas, riparian areas, or areas of importance for Federal or State sensitive species;
2. Identified and managed wildlife corridors and other critical cores and linkages for wildlife habitat, such as those identified by state wildlife Agencies through State Comprehensive Wildlife Conservation Strategies or identified by states under Secretarial Order 3362;⁵
3. BLM-inventoried lands with wilderness characteristics, regardless of whether they are being managed for protection in a Resource Management Plan (RMP);
4. ACECs;
5. Potential ACECs (areas that BLM has found meet the relevance and importance criteria for ACEC designation);
6. TNC Ecoregional Assessment – Ecologically Core;

³ We will make recommendations on specific thresholds in a subsequent letter.

⁴ Note that some conservation lands are closed to solar development by law, including National Monuments, Wilderness Areas, Wilderness Study Areas, National Conservation Areas and other lands in the National Conservation Lands System.

⁵ For example, the Arizona Game and Fish Department has identified the Kaibab-Paunsaugunt wildlife corridor as a critical linkage for migrating mule deer between southern Utah and northern Arizona’s Kaibab Plateau. See: Carrel, William K., Richard A. Ockenfels, and Raymond E. Schweinsburg. 1999. An Evaluation of Annual Migration Patterns of the Paunsaugunt Mule Deer Herd Between Utah and Arizona. Arizona Game and Fish Department Technical Report 29. Phoenix.

7. Areas considered to be critical for desert tortoise habitat or desert tortoise habitat connectivity corridors, based on the best available science.
8. Areas proposed for Wilderness designation or other conservation management in a legislative process;
9. All areas that have been proposed for conservation designation in pending legislation;
10. National Wild and Scenic Rivers and Recreational Rivers, as well as suitable, study and eligible rivers and segments;
11. Designated conservation areas (administrative) including, but not limited to, Special Interest Areas and Research Natural Areas;

III. Key conservations priorities that BLM should address through this process

a. Desert tortoise habitat suitability

The Mojave desert tortoise (*Gopherus agassizii*) is protected by the federal Endangered Species Act and is a BLM special status species. Despite nearly three decades of protection, tortoise populations continue to decline, driven, in part, by loss of habitat. Solar energy development generally results in the loss of tortoise habitat within the development footprint and can cause the degradation of surrounding habitat. Responsibly developing solar energy within the Mojave requires understanding how important different areas are to supporting and sustaining the species so that important areas can be preserved and properly managed for recovery.

Species distribution modeling is a useful approach for evaluating habitat suitability over large geographic areas based on our understanding of spatially explicit wildlife-habitat relationships. Defenders of Wildlife worked with NatureServe to create a high-resolution species distribution model for the Mojave desert tortoise. The output from this model is a 30-meter resolution projected spatial grid of tortoise habitat suitability (scored 0-1) for the entire Mojave ecoregion. This new tortoise habitat suitability model is over 1,000 times finer resolution than the existing 2009 USGS model and takes advantage of newer satellite imagery from Landsat 8 (launched in 2013), higher spatial and temporal resolution climate data, as well as NatureServe's proprietary tortoise observation data. This dataset can be downloaded [here](https://osf.io/vmhuf/download) (<https://osf.io/vmhuf/download>).

b. Desert tortoise habitat connectivity

Ecological connectivity is one of the most important aspects of biodiversity and landscape-level conservation (Taylor et al. 1993, Noon et al. 2009) and serves to facilitate the flow of multiple ecological processes, such as animal dispersal, migration, and gene flow (Dickson et al. 2017). The maintenance of ecological connectivity also provides critical capacity for adaptation to future climate change (Heller and Zavaleta 2009, Dawson et al. 2011). Indeed, the Mojave desert tortoise occupies a region impacted by rapid solar energy development, land-use conversion, and ongoing climate change, including key habitat areas important for facilitating connectivity among populations occupying or otherwise separated by BLM lands (e.g., Lovich and Ennen 2011, Sadoti et al. 2017). The Wilderness Society and Defenders of Wildlife contracted Conservation Science Partners to develop new, range-wide models of Mojave desert tortoise habitat connectivity (Gray et al. in review, see Attachment 1) that could be used to accurately reflect important areas for tortoise movement and to help improve management decisions that have the potential to influence the connectedness and conservation of desert tortoise populations. These

models are theoretically based and draw on contemporary, high-resolution spatial data on landscape condition, as well as large amounts of ground data on tortoise movements. Model outputs are flexible, easily interpreted, and capable of providing empirically-based thresholds that can help to reveal zones and levels of potential conflict.

c. BLM lands with wilderness characteristics (LWC) and citizen-inventoried LWC

Wilderness-quality lands managed by BLM, which include BLM-inventoried LWC and citizen-inventoried LWC, are a valuable public lands resource that is irreparably damaged or destroyed by solar development. Wilderness resources on our public lands are finite and they contribute critically to the agency's ability to meet its multiple use and sustained yield mandate.

LWC are one of the resources of the public lands that must be inventoried under FLPMA. 43 U.S.C. § 1711(a); see also *Ore. Natural Desert Ass'n v. BLM*, 625 F.3d 1092, 1122 (9th Cir. 2008) (holding that "wilderness characteristics are among the 'resource and other values' of the public lands to be inventoried under § 1711"). BLM's guidance for implementing this requirement of FLPMA is currently set forth in BLM Manual 6310. BLM must ensure that all LWC inventories are conducted compliant with this manual, including the documentation of the inventory findings. Manual 6310 reiterates that, "[r]egardless of past inventory, the BLM must maintain and update as necessary, its inventory of wilderness resources on public lands." BLM Manual 6310 at .06(A).

In addition to FLPMA requiring the agency to maintain an inventory of LWC, an accurate and comprehensive inventory of LWC is necessary to inform management alternatives, impact analysis, and decision-making under NEPA. NEPA, 42 U.S.C. § 4321 *et seq.*, requires agencies to "describe the environment of the areas to be affected or created by the alternatives under consideration." 40 C.F.R. § 1502.15; see also *Half Moon Bay Fisherman's Marketing Ass'n v. Carlucci*, 857 F.2d 505, 510 (9th Cir. 1988) ("without establishing . . . baseline conditions . . . there is simply no way to determine what effect [an action] will have on the environment, and consequently, no way to comply with NEPA").

LWC are inappropriate for energy development, including solar energy, because of the sensitive and important resources and values they provide, such as opportunities for solitude and primitive, unconfined recreation, as well as wildlife habitat, scenic visual resources, opportunities for scientific study, protection for cultural and historic resources, and other values.

For these reasons, BLM should classify BLM-inventoried LWC as highest-conflict, regardless of their management status. BLM should classify citizen-inventoried LWC as higher-conflict until BLM completes its own inventory of the lands. Citizen-inventoried LWC are important to address in the context of potential solar energy development because BLM would be required to respond to citizen inventories and inventory those lands for wilderness characteristics through any NEPA process.

d. ACECs

ACECs are one of BLM's primary tools for protecting sensitive environmental resources. For this reason, BLM's Western Solar Plan closed all ACECs to solar development.

In addition to managing existing ACECs, BLM is required to review nominations for new ACECs. BLM's ACEC manual directs the agency to review ACEC nominations as they are received: "Nominations may be

made at any time and must receive a preliminary evaluation...” BLM Manual 1613 § .06.41. As detailed in section IV, we recommend that BLM ultimately conduct a land use plan amendment to address solar development and conservation, which would provide an avenue for ACEC designation. The BLM Manual 1613 states that ACECs are to be designated in resource management plans “or in a plan amendment.” Id. § .06.2. Stakeholders have already nominated some ACECs and will be nominating more in the coming months.

For these reasons, BLM should classify existing and potential ACECs as highest-conflict and ACEC nominations as higher-conflict. Once BLM completes its assessment and finds that an ACEC nomination meets the relevance and importance criteria, thus identifying the area as a potential ACEC, BLM should classify it as highest-conflict.

e. National Parks

The Agencies should address potential direct and indirect impacts to units of the National Parks System from solar development as part of this EA. This should include close coordination with the National Park Service.

IV. BLM should ultimately complete a land use plan amendment to establish Designated Leasing Areas in some lower-conflict lands and close most high-conflict lands to solar development

Two important issues that BLM needs to complete additional land use planning for are solar energy development and conservation, including the district’s new lands with wilderness characteristics inventory, potential new ACECs, and other conservation issues. These issues should be evaluated and planned for in context of one another: for example, solar energy development should avoid wilderness-quality lands and those lands can also mitigate impacts from solar energy development to backcountry recreation, wildlife habitat, cultural and visual resources, and other resources. **We recommend that BLM initiate a land use plan amendment to further guide solar energy development to lower-conflict areas, by designating additional DLAs and refining the variance lands available to solar energy, including changing variance lands with important and sensitive resources that are incompatible with solar energy development to exclusion areas.** In order to take a holistic approach to managing energy development in the Southern Nevada District, the amendment must also identify areas that will be managed for conservation including lands with wilderness characteristics, ACECs, and other conservation designations as necessary to offset industrial development on our public lands. This approach will facilitate responsible and efficient solar energy development while protecting natural resources. The RMP amendment should be informed by analysis and stakeholder input gathered as part of this Programmatic EA.

V. BLM should create an online mapping tool to support its conflicts analysis

Through this EA, BLM must identify resources and values that drive classification of lands as lower/higher/highest conflict. BLM should also map these areas based on the best currently available data. However, because data for several key resources (e.g. desert tortoise habitat suitability, lands with

wilderness characteristics, etc.) continues to evolve based on new inventory work or emerging science, BLM should create an online mapping tool that displays the best currently available data and is updated on a regular basis. The Argonne National Laboratory online mapping tool for the West-wide Energy Corridors is a good example.⁶

We look forward to following up with BLM regarding these recommendations soon.

Sincerely,

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Attachments:

- Attachment 1: BLM 2016 Solar and Wind Energy Rule application screening criteria
- Attachment 2: Grey et al. range-wide model of Mojave desert tortoise connectivity (in review)

⁶ <http://corridoreis.anl.gov/>

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Attachment 1: BLM 2016 Solar and Wind Rule screening criteria

High-priority for processing applications (i.e. relatively lower-conflict):

1. Lands specifically identified as appropriate for solar or wind energy development, other than designated leasing areas – *note that we specifically interpret this as NOT to mean all variance lands, but rather other lands specifically identified for solar or wind energy development, such as the solar and wind emphasis areas identified in the Grand Junction Resource Management Plan;*⁷
2. Previously disturbed sites or areas adjacent to previously disturbed or developed sites;
3. Lands currently designated as Visual Resource Management Class IV; or
4. Lands identified as suitable for disposal in BLM land use plans.

Medium-priority for processing applications (i.e. relatively higher-conflict) applications:

1. BLM special management areas that provide for limited development, including recreation sites and facilities;
2. Areas where a project may adversely affect conservation lands, including lands with wilderness characteristics that have been identified in an updated wilderness characteristics inventory;
3. Right-of-way avoidance areas;
4. Areas where project development may adversely affect resources and properties listed nationally such as the National Register of Historic Places, National Natural Landmarks, or National Historic Landmarks;
5. Sensitive habitat areas, including important species use areas, riparian areas, or areas of importance for Federal or State sensitive species;
6. Lands currently designated as Visual Resource Management Class III;
7. Department of Defense operating areas with land use or operational mission conflicts; or
8. Projects with proposed groundwater uses within groundwater basins that have been allocated by State water resource agencies.

Low-priority for processing applications (i.e. relatively highest-conflict):

1. Lands near or adjacent to lands designated by Congress, the President, or the Secretary for the protection of sensitive viewsheds, resources, and values (*e.g.*, units of the National Park System, Fish and Wildlife Service Refuge System, some National Forest System units, and the BLM National Landscape Conservation System), which may be adversely affected by development;
2. Lands near or adjacent to Wild, Scenic, and Recreational Rivers and river segments determined suitable for Wild or Scenic River status, if project development may have significant adverse effects on sensitive viewsheds, resources, and values;
3. Designated critical habitat for federally threatened or endangered species, if project development may result in the destruction or adverse modification of that critical habitat;
4. Lands currently designated as Visual Resource Management Class I or Class II;
5. Right-of-way exclusion areas; or
6. Lands currently designated as no surface occupancy for oil and gas development in BLM land use plans.

⁷ <https://eplanning.blm.gov/epl-front-office/projects/lup/55944/67731/73684/4. GJFO Approved RMP.pdf>, p. 174.

March 23, 2018

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RE: Input on appropriate siting for new Designated Leasing Areas for solar energy on BLM lands in southern Nevada.

Dear Mr. Kirk:

On behalf of The Nature Conservancy, Defenders of Wildlife, The Wilderness Society, and The Natural Resources Defense Council and our millions of members, we thank the Bureau of Land Management (BLM) for the opportunity to provide the following comments and recommendations on the revision of the Draft Resource Management Plan (RMP) and Environmental Impact Statement for the lands managed by the Southern Nevada District Office. Our goal with these comments is to assist the BLM in the identification of new Designated Leasing Areas (DLAs) for photovoltaic solar energy in southern Nevada with the least amount of environmental conflict. While our organizations have previously submitted comments on this topic, the present comments are based on new information and analyses. These comments add to, but do not replace, any previous comments submitted collectively or individually by our respective organizations. **We request that the BLM include the present and previous recommendations in the range of alternatives to be developed in the draft revision of the Southern Nevada RMP.**

For discussion purposes, we have divided the planning area into regions, based on the breakdown used during the BLM's DLA Siting Forum on March 13, 2018 (see Figure 1). Each of these regions share certain characteristics in terms of ecological and development considerations.

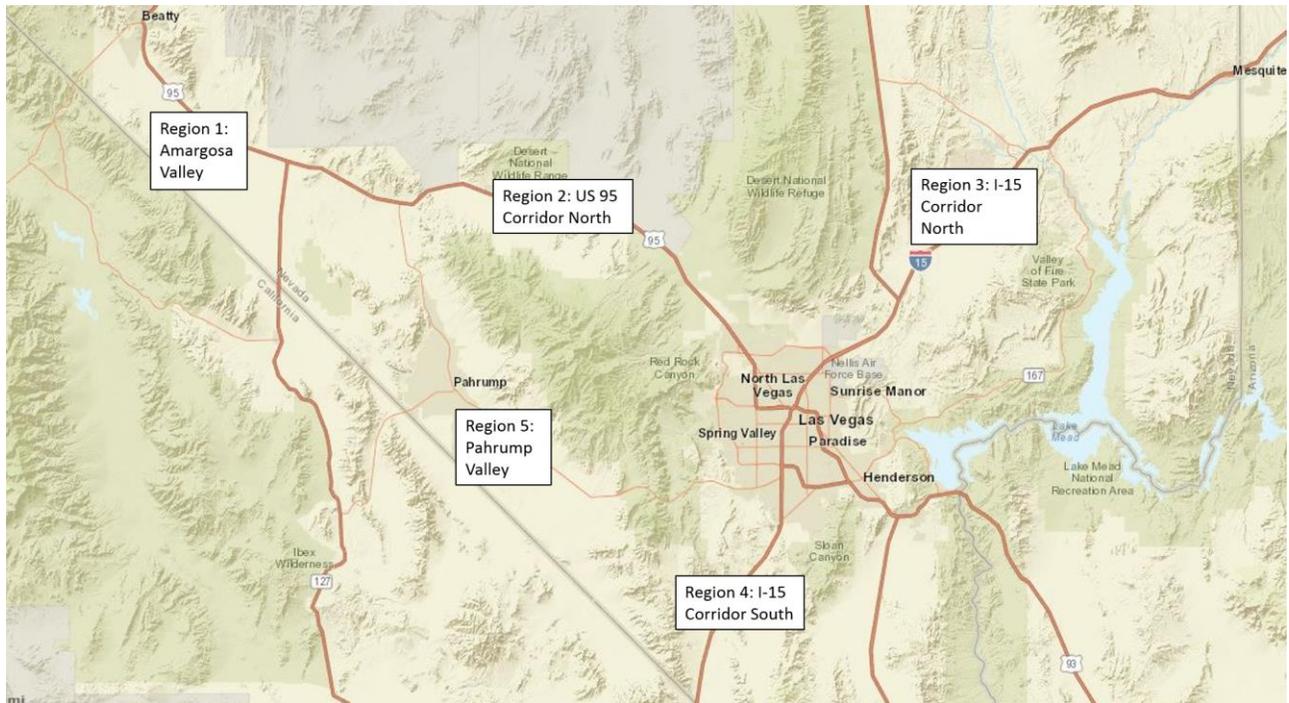


Figure 1. Map of generalized regions of interest for conservation planning and solar energy development on BLM lands in southern Nevada.

General recommendations for all alternatives:

- Consistent with the BLM's Western Solar Plan, **the agency should require design criteria to minimize ecological impacts from any new solar energy facilities and transmission**, to the fullest extent possible. This includes measures to minimize avian mortality, reduce soil loss, avoid land conversion, and minimize fragmentation to and disruption of wildlife habitats. Such measures are already employed at some existing solar energy facilities, including a 17.5 MW solar facility in the Valley Electric Association service area near Pahrump, which was constructed with raised panels and without blading the vegetation and soil, with the express purpose of minimizing impacts to the federally threatened Mojave desert tortoise. Measures such as these should be applied programmatically throughout the RMP planning area.
- It has been nearly six years since the Record of Decision for the Solar Programmatic Environmental Impact Statement (Solar PEIS) was signed. Since the Solar PEIS was finalized, projects have gone through the entire process from bidding to construction inside of a Solar Energy Zone (SEZ). Therefore, projects that were "grandfathered" in the PEIS, but have not yet commenced construction, may be speculative or not commercially viable at this time. The BLM should apply the relevant development benchmark criteria and follow their prescribed policy to advise project proponents who are delinquent that they are not meeting development benchmarks. **In order to streamline the permitting for solar development, we recommend that the agency focus on processing applications from the competitive bidding processes inside of DLAs. If there is no more available space**

in DLAs, BLM should proactively undertake a public process to identify new DLAs before processing applications for projects outside of DLAs. The five-year review process outlined in the Solar PEIS for identification of new SEZs is worth continuing as a provision in the RMP for determining need and location for new DLAs in light of changing conditions in the future.

- Given the unique ecology of the arid Mojave Desert, reclaiming and restoring sites developed for solar energy to pre-construction conditions is likely not achievable. For this reason, in addition to responsible decommissioning plans, **we recommend that the agency require a plan for off-site actions to remediate impacts caused by construction and operation of solar facilities inside of DLAs.** Such actions should be planned on a regional basis for the entire DLA, according to the unique characteristics of the impacts across the DLA and the region of remediation.

Regional planning for DLAs across the RMP area:

Given all of the competing uses of BLM lands, it is important that the agency avoid designating new DLAs in a way that results in scattered, diffuse, “postage-stamp” development. Effective regional planning requires proactive co-location of new infrastructure in order to reduce the cumulative impacts to recreation, wildlife, cultural and visual resources, and the many other resources that the BLM is entrusted to manage. To guide our discussion, we will discuss specific recommendations and concerns by region (delineated in Figure 1).

It is important that the agency plan and prioritize across regions and utility service areas. In our analysis, we identified areas in Regions #1 and #3 that seem appropriate for new DLAs, in light of both ecological and development considerations, pending site-specific analysis. In all areas, DLAs should be sited extremely carefully to avoid habitat fragmentation to the fullest extent possible.

Region #1: Amargosa Valley

The Amargosa Valley has high potential for a large, low-conflict new DLA on land impacted by prior land uses. Figures 2 and 3 identify general areas in the region that could be appropriate for new DLAs. **We recommend prioritizing the identification of a DLA in the Amargosa Valley as it seems to be the lowest conflict area within the planning area, with regards to natural resources, for utility-scale photovoltaic solar facilities.** Successfully developing utility-scale solar in the Amargosa Valley will require addressing and mitigating avian impacts, groundwater consumption, and impacts to the nearby Big Dune Area of Critical Environmental Concern (ACEC).

Region #2: US 95 Corridor North

US 95 North has large areas of intact and undeveloped habitat for desert tortoise and other wildlife. Given the contiguous habitat with a gradual elevational gradient to the Spring

Mountains, this region is key to maintaining the potential for Mojave flora and fauna to adapt to long term environmental changes. The area also has wilderness-quality lands and proposed ACECs. Designating a DLA and developing utility-scale solar in this area would require careful, site-specific analysis to ensure that any development avoids fragmentation of the large core habitat areas and maintains connectivity for wildlife across US 95. At this time, we cannot recommend any areas in this region that would be appropriate for DLA designation.

Region #3: I-15 Corridor North

Our organizations support the BLM's proposed expansion of the Dry Lake SEZ for photovoltaic solar energy projects,¹ provided that site-specific analysis does not reveal any significant, unmitigable environmental issues. Any new DLAs in this area, and elsewhere, should leverage what BLM has learned from the procedural success of Dry Lake SEZ. Given the presence of existing transmission and solar energy projects (within Dry Lake SEZ, Moapa Southern Paiute Solar Project), we know that there is considerable interest in additional development in this region. This region represents some of the highest quality Mojave desert tortoise habitat within the RMP area, so Defenders of Wildlife and The Wilderness Society have contracted Conservation Science Partners to develop a desert tortoise connectivity model (complementing Defenders' new Mojave desert tortoise habitat suitability model from NatureServe) to help determine whether and where areas can be developed without causing disproportionate and unanticipated negative impacts to the larger desert tortoise network.²

Region #4: I-15 Corridor South

I-15 South has some potential to accommodate new DLAs but is limited by competing land uses (OHV use, urban expansion) and ecological considerations (e.g., rare plant habitats, desert tortoise translocation sites, desert tortoise connectivity corridors). At this time, we cannot recommend any areas in this region that would be appropriate for DLA designation.

Region #5: I-15 Pahrump Valley

The Pahrump Valley has large, ecologically intact expanses of Mojave Desert scrub and is a locus for desert tortoise translocation. Similar to Region #2, this region forms a core wildlife habitat area with longitudinal connectivity to the Spring Mountains. Both The Nature Conservancy and Clark County have formally nominated much of this area for protection as an ACEC. If it is conclusively demonstrated that demand for large-scale solar can only be accommodated in this general region, then future DLAs should be designated only following careful, site-specific analysis, and focused north of the Tecopa Road, as close to the existing footprint of Pahrump as possible. At this time, we cannot recommend any areas in this region that would be appropriate for DLA designation.

¹ This area was proposed as a SEZ in Alternative 3 of the 2014 Draft Southern Nevada RMP.

² This work will cover the entire Mojave ecoregion, not just Region #3 and will be shared with the BLM when completed.

Sub-regional planning for new DLAs:

Based on our data analyses and field-based recon, areas of the Amargosa Valley (Region #1) and Dry Lake Expansion (also known as Dry Lake East, within Region #3) identified below in Figure 2 are among the lowest environmental conflict locations for solar energy development on BLM lands. We recommend that the BLM consider these areas for further analyses when formulating alternatives for DLAs in the draft RMP revision. The areas identified in Figure 2 below are intended to indicate a general area of interest where large new DLAs may be viable; they do not represent formal proposals for DLAs themselves.

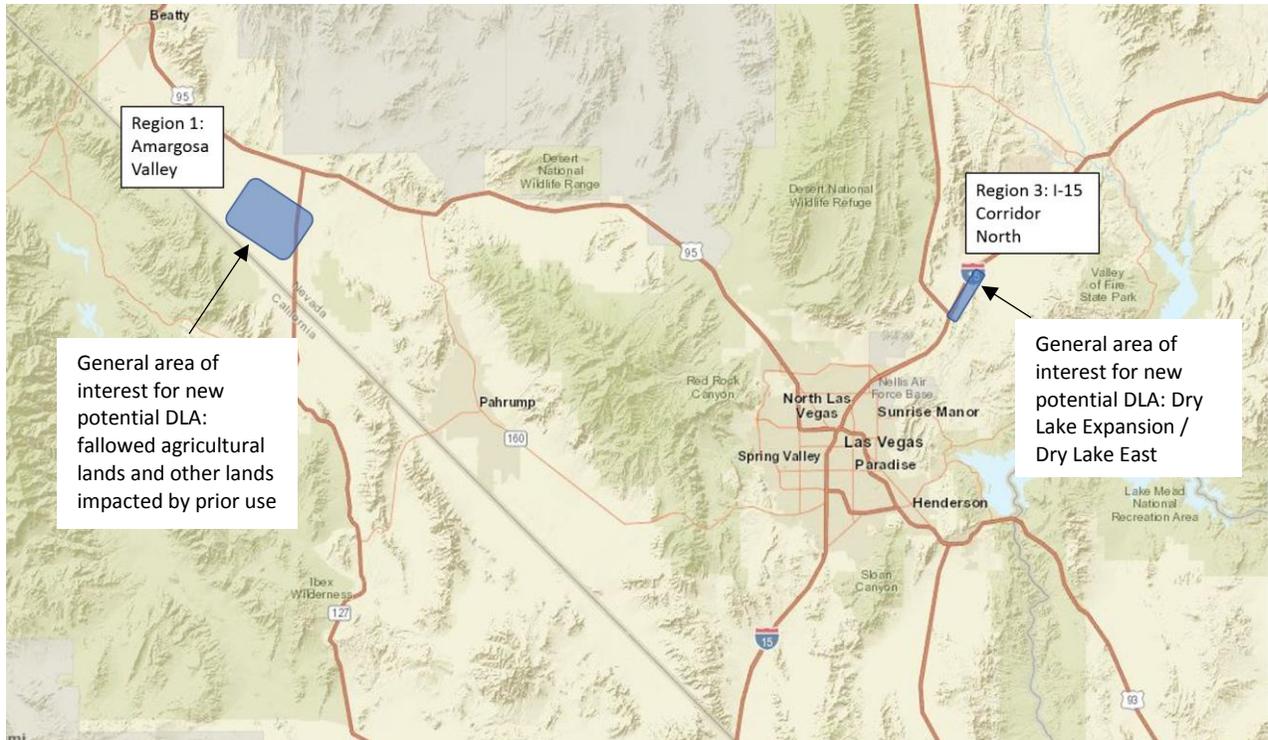


Figure 2. Map of potentially viable areas for new, low-conflict DLAs within the planning area.

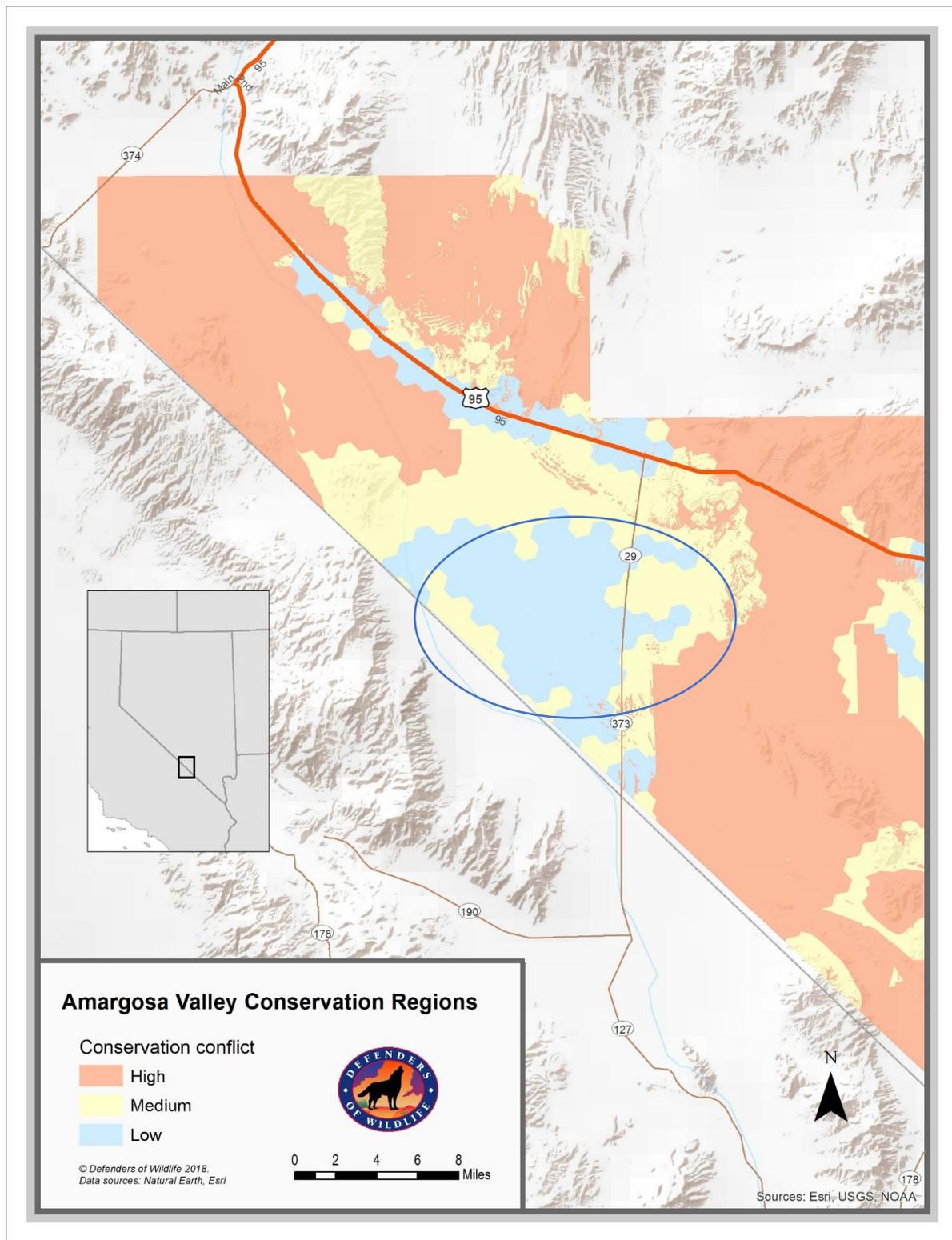


Figure 3. Map of relative level of conservation conflict in the Amargosa Valley sub-region. The degree of conflict is determined by the extent to which the lands identified overlap with the conservation priorities of The Nature Conservancy (as identified in the Mojave Ecoregional Assessment), Defenders of Wildlife, and The Wilderness Society. Note that although there are patches of land identified as 'low' or 'medium' conflict surrounded by high conflict lands, the

general principles of conservation biology favor focusing development in a single large area to avoid fragmentation and edge effects. The blue circle represents the general area that may be most promising for DLA designation.³

Summary of recommendations and conclusion:

Our organizations have drafted these recommendations with the intent of helping the BLM formulate productive alternatives for planning large-scale solar energy development on BLM lands in southern Nevada. The present comments are based on the information available and the analyses we have performed to date. We are continuing to develop new data, notably on Mojave desert tortoise, and we will share this new information with the BLM as it becomes available. We are always open to reconsidering these recommendations based on further discussion and new information from stakeholders and the BLM. Notwithstanding, we recommend that the BLM include our recommendations in at least one alternative in the revised draft RMP.

- We recommend that the agency prioritize solar energy development to those applications that are engaging in the competitive bidding processes inside of DLAs and that the BLM avoid processing variance or grandfathered applications while development within DLAs remains feasible. If there is no more available space within DLAs, the agency should proactively undertake a public process to identify new ones before processing applications for projects outside of DLAs.
- We recommend that the agency require design criteria to minimize ecological impacts from any new solar development facilities and transmission. In areas where groundwater depletion is a serious concern, we recommend the agency restrict development to photovoltaic technology.
- We recommend that the agency include at least one alternative in the revised draft RMP that reflects the regional prioritization for new DLAs we have identified above by designating Dry Lake East as a DLA and by designating a DLA on degraded lands in Amargosa Valley.

Thank you for your consideration. Please contact us if you have any questions.

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³ We understand that the circle encompasses non-BLM land as well as BLM lands and that DLA consideration is restricted to BLM lands.

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February 2, 2018

Transmitted via email to SNDO_RMP_Revision@blm.gov

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Re: Revised Draft Resource Management Plan/Environmental Impact Statement for the Las Vegas and Pahrump Field Offices

Please accept the following comments submitted on behalf of Defenders of Wildlife, The Natural Resources Defense Council, The Nature Conservancy and The Wilderness Society regarding the Bureau of Land Management's (BLM) planned revision of the Draft Las Vegas Resource Management Plan (RMP)/Environmental Impact Statement (DEIS). Our organizations are deeply invested in actions that will promote responsible renewable energy development and durable conservation on our public lands, and we have a strong history of working collaboratively with BLM, industry and other stakeholders to advance "smart from the start" renewable energy development. While each group has submitted separate, more detailed comments covering a range of issues, this joint comment letter focuses on the need, as well as our recommendations, for a robust stakeholder process for this RMP revision to ensure the final plan contains viable Designated Leasing Areas (DLAs) (also referred to as Solar Energy Zones (SEZs)) that yield responsible renewable energy development projects consistent with demand and fewer conflicts with important natural resources.

We wholly support BLM's decision to "revisit viable locations for renewable energy projects based on stakeholder inputs received" through this process. Over the next several decades, we anticipate growing interest in utility-scale solar energy development in southern Nevada due to high quality solar resources, flat terrain, and increasing demand driven largely by renewable portfolio standards and corporate renewable energy goals. In addition to favorable solar energy development characteristics, the planning area also contains important habitat and corridors for imperiled wildlife species (including significant critical habitat acreage for the threatened Mojave desert tortoise), wilderness-quality lands used for backcountry recreation, and other sensitive resources and values. Accordingly, it is crucial that the final RMP designate DLAs that meet this growing demand (both near- and longer-term) while conserving important wildlife habitat and wild lands for future generations.

The success of the Dry Lake SEZ demonstrated the tremendous benefits of BLM's Solar Energy Program. Dry Lake's success also highlighted the critical importance of, and challenges associated with, strategically siting DLAs. Accordingly, BLM's success in the regard depends on a robust, diverse stakeholder process, which solicits and gathers meaningful input from a range of stakeholders to inform BLM's analysis.

To this end, we note that under the Federal Land Policy and Management Act, BLM must “manage the public lands under principles of multiple use and sustained yield, in accordance with the [applicable] land use plans...”¹ The BLM’s Solar Programmatic EIS (Solar PEIS) was specifically drafted to set up a comprehensive solar program and guide RMPs, including this one, to adopt “elements of the new Solar Energy Program that pertain to land use planning” with a goal of allowing “the permitting of future solar energy development projects on public lands to proceed in a more efficient, standardized, and environmentally responsible manner.”² To achieve this aim, the Solar Energy Program prescribes a detailed four step process: 1) Assess the demand for new or expanded SEZs; 2) Establish technical and economic suitability criteria; 3) Apply environmental, cultural and other screening criteria; and 4) Analyze proposed SEZs through a planning and National Environmental Policy Act (NEPA) process. As part of this process, we urge BLM to initiate a series of public workshops or public meetings to transparently address steps 1-3 in a collaborative forum. Doing so will provide stakeholders the opportunity to provide input, deliberate on and make recommendations for new or revised DLAs—including much needed, up-to-date demand analysis and suitability and screening criteria.

We have experience working collaboratively with BLM and other stakeholders in similar processes that could be used as a model, including the Dry Lake SEZ Solar Regional Mitigation Strategy and Master Leasing Plans for oil and gas development. We also have been diligently gathering new information to inform and facilitate this stakeholder process. We completed an interactive geospatial “Conservation Blueprint” tool, which incorporates important information and some of the best available science related to natural resource, wildlife, and wildland characteristics throughout the planning area. This tool and the underlying information will greatly enhance and support a process for the conservation community, BLM, and industry to collaboratively identify appropriate areas for development and evaluate lowest impact scenarios for meeting demand. This tool incorporates TNC’s Mojave Desert Ecoregional Assessment, which was specifically referenced in the Solar PEIS as a useful resource for future SEZ planning, as well as an updated desert tortoise habitat suitability model and human footprint map recently completed by NatureServe.³

We believe that gathering input from groups like ours and other stakeholders, using creative tools like the “Conservation Blueprint” and employing a mix of public meetings and webinars will maximize BLM’s success in this endeavor while minimizing expenses and staff time. The key component and our priority for this effort is ensuring that BLM is working with the best available information on market demand, economic suitability and resource impacts.

¹ 43 U.S.C. § 1732(a).

² Solar PEIS front matter at page 1 and 2 (*available at* https://energy.gov/sites/prod/files/EIS-0403-FEIS-Volume1-2012_0.pdf).

³ NatureServe’s habitat suitability model, originally conceived and designed by Defenders, is a much-needed update to the 2009 United States Geological Survey (USGS) tortoise model that is currently in use. NatureServe’s updated model was done at much finer resolution (30 meters versus 1 kilometer), incorporates new satellite imagery from LANDSAT 8 (launched in 2013), includes higher spatial and temporal resolution climate data, and utilizes NatureServe’s own tortoise observation data collected through their heritage programs in California, Arizona and Nevada. NatureServe’s human footprint provides additional information on existing human disturbance features across the planning area such as roads that had not yet been “classified” or captured in existing geospatial products.

We are firmly committed to helping facilitate and participating in an efficient and transparent stakeholder process surrounding responsible solar development in southern Nevada, and welcome the opportunity for further discussion. Please do not hesitate to reach out to any of us for further questions.

Sincerely,

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