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September 30, 2024

Submitted by:

Amargosa Conservancy, with formal endorsement from

Amargosa Valley Town Board
Beatty Town Advisory Board

Attention:

Jeremy Bluma
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Tracy Stone-Manning
Director
Bureau of Land Management
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Re: Protest of Final Utility-Scale Solar Energy Programmatic Environmental Impact Statement and Proposed Resource Management Plan Amendments (also known as the proposed updated Western Solar Plan)

Submitted through https://eplanning.blm.gov/eplanning-ui/project/2022371/530

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Senior Advisor Bluma and Director Stone-Manning:

The following protest is submitted on behalf of Amargosa Conservancy (AC), Amargosa Valley Town Board, and Beatty Town Advisory Board regarding the Final Utility-Scale Solar Energy Programmatic Environmental Impact Statement and Proposed Resource Management Plan Amendments (also known as the proposed updated Western Solar Plan/WSP) published August 29th, 2024. This protest is based on numerous concerns about the sufficiency of the analysis, the alternatives considered, and procedural deficiencies.

INTRODUCTION

In the face of intensifying climate change, the urgency for our nation to shift away from fossil fuel dependence and embrace cleaner energy sources like solar power is undeniable.

In response to this climate crisis, the Bureau of Land Management has accelerated planning to prioritize public lands in 11 western states for solar energy development. The updated Western Solar Plan marks a critical step toward decarbonizing our society and mitigating the worst impacts of climate change.

Amargosa Conservancy strongly supports the development of sustainable and equitable renewable energy development. However, it is imperative that this energy transition be carefully considered and planned so as to avoid significant and unmitigable impacts to biologically and culturally sensitive landscapes such as the Amargosa River watershed.

The FEIS for the Western Solar Plan indicates that nearly 220,000 acres of the Amargosa River watershed have been left open to potential industrial-scale solar development. The large-scale industrialization required for solar projects threatens to disrupt the ecosystems, cultural resources, and water supply for desert communities in the watershed irreversibly. Construction activities, habitat fragmentation, and the depletion of groundwater resources could spell extinction for the flora and fauna that have thrived in this extreme desert environment for millennia. A single solar project can require 1,000 acre-feet or more of water for construction - that's enough water to sustain 2,000 households for a year. With groundwater overpumping being the chief threat to the Amargosa River, the basin simply cannot sustain a rush of solar projects.

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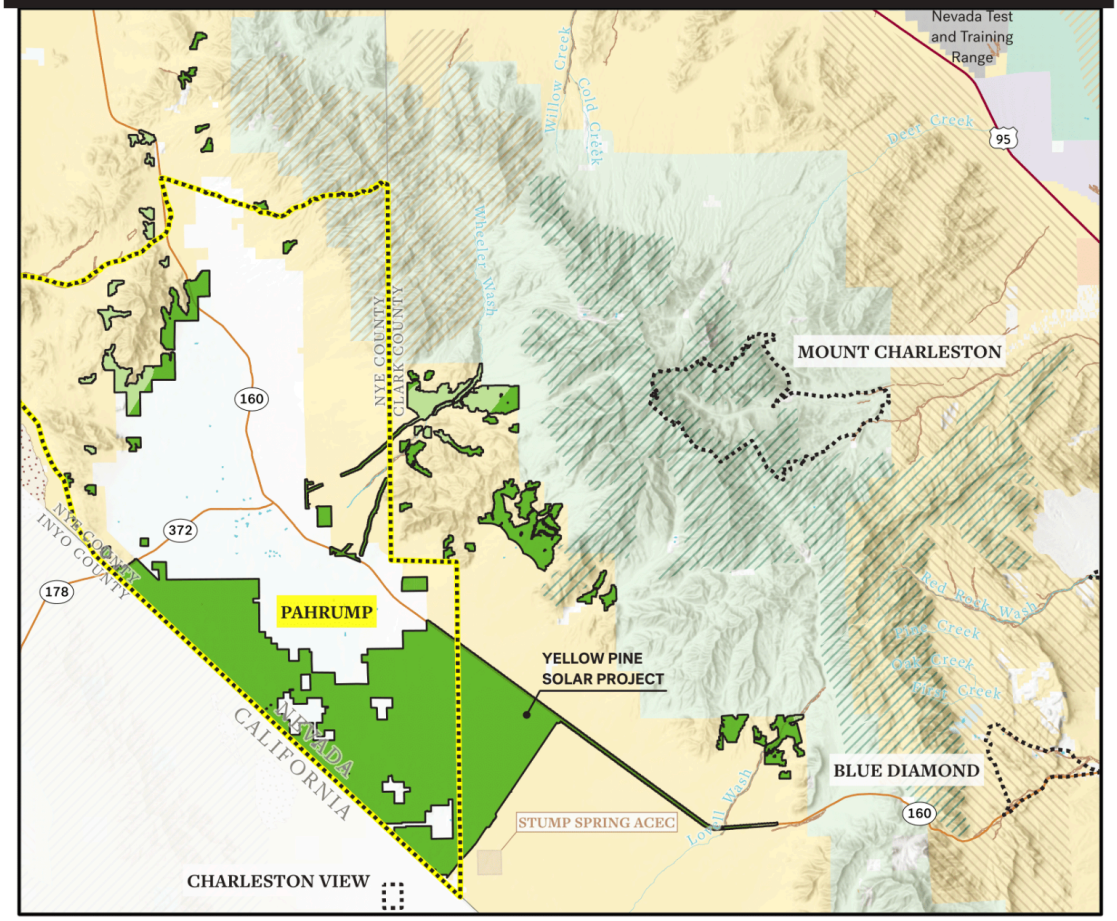
PAHRUMP VALLEY



Western Solar Plan Proposed Solar Allocations

Final Solar PEIS Proposed Plan Areas
- Available for Solar Development
- Available but Avoidance

- Census Designated Place (CDP)
- Pahrump

- BLM ACEC
- Federal Wilderness Area
- BLM Conservation Area
- BLM Wilderness Study Area

- Wash
- Playa
- Lake, Pond, or Reservoir

Scale: 1:365,000
0 5 mi

Production Date: September 2024. **Coord. System:** NAD 1983 UTM Zone 11N. **Data sources:** USGS, BLM, US Census Bureau, Esri, NASA, NGA, USGS.

Note: Data in this map were acquired from various sources, and may exhibit varying degrees of accuracy. The information contained in these data is dynamic and may change over time. Data is not of survey quality and is in no way intended for engineering or legal purposes.

The Amargosa Conservancy works toward a sustainable future for the Amargosa River and Basin through science, stewardship, and advocacy.

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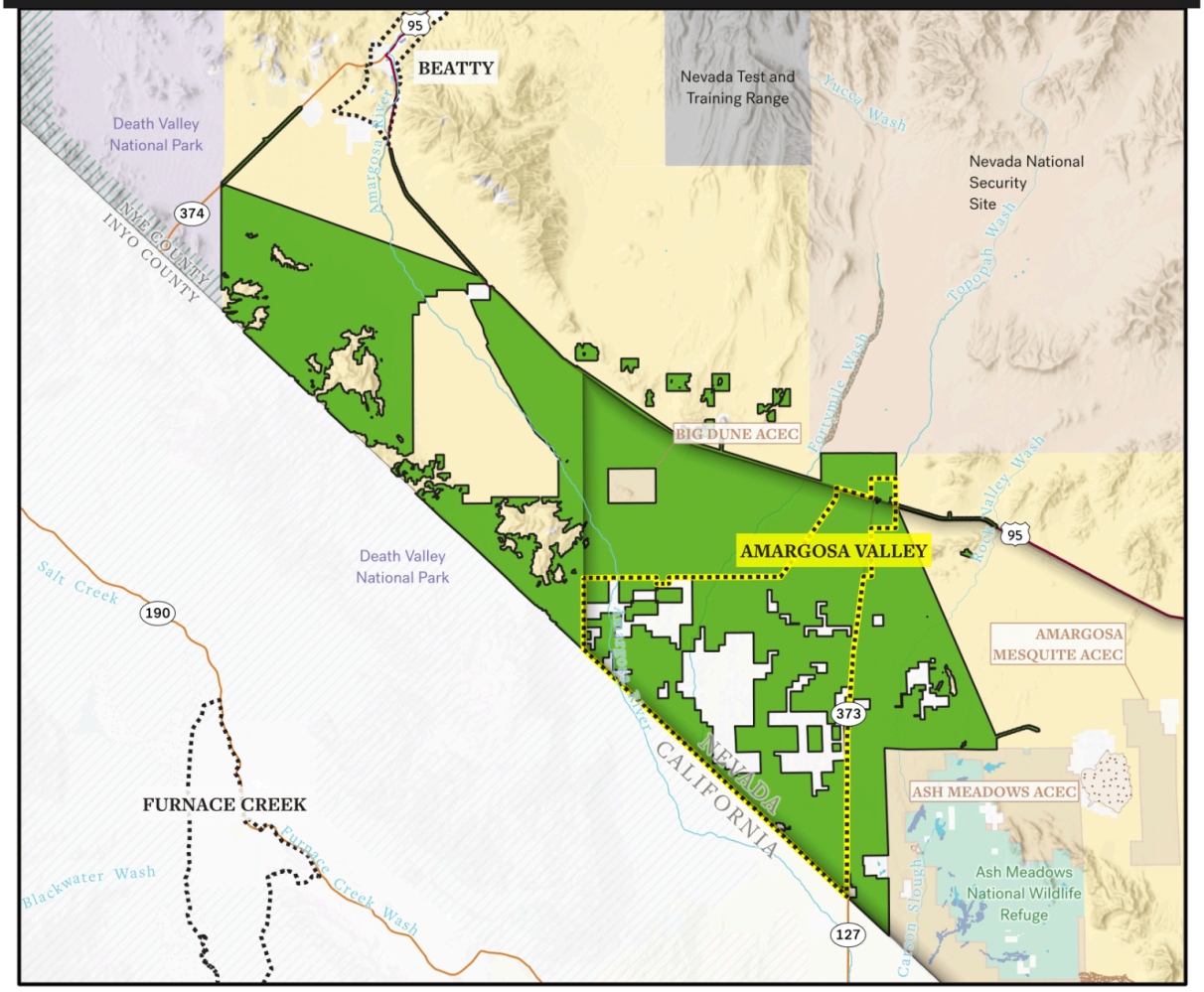
AMARGOSA DESERT



Western Solar Plan Proposed Solar Allocations

Final Solar PEIS Proposed Plan Areas
- Available for Solar Development
- Proposed Amargosa Valley Mineral Withdrawal
- Census Designated Place (CDP)
- Amargosa Valley
- BLM ACEC
- Federal Wilderness Area
- Wash
- Playa
- Lake, Pond, or Reservoir
- Swamp or Marsh

Scale: 1:378,000
0 6 mi

Production Date: September 2024. **Coord. System:** NAD 1983 UTM Zone 11N. **Data sources:** USGS, BLM, US Census Bureau, Esri, NASA, NGA, USGS.

Note: Data in this map were acquired from various sources, and may exhibit varying degrees of accuracy. The information contained in these data is dynamic and may change over time. Data is not of survey quality and is in no way intended for engineering or legal purposes.

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SUMMARY OF REQUESTS

Amargosa Conservancy urges the BLM to consider the following requests deriving from the content of our protest:

1. Improve the Western Solar Plan through exclusion of most or all culturally and ecologically sensitive public lands in the Amargosa River watershed.
2. Restrict future utility-scale solar energy development to areas such as the Amargosa Valley Solar Energy Zone that have been formally supported by local municipalities in previous planning efforts.
3. Prioritize private lands already in use for agriculture for solar energy development which would benefit rural communities, reduce groundwater stresses, and protect wildlife.
4. Consider the cumulative impacts on groundwater resources and the potential harm to disadvantaged communities and tribal lands.

PROTEST

1. <u>Protesting Party: Contact Information and Interests:</u>

This Protest is filed by:

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Amargosa Conservancy is a 501(c)3 non-profit organization with over 1,900 members and supporters based in Shoshone, California and has been the leading voice for the conservation of the Amargosa River watershed for two decades. The Amargosa Conservancy is dedicated to standing up for the wilds, waters, and communities of the scenic Amargosa River watershed and Eastern Mojave. The Conservancy engages in advocacy, education, science, on-the-ground conservation, and land preservation in order to promote the long-term sustainable health of the Amargosa River watershed.

The Amargosa River watershed is one of the most hydrologically and biologically unique places in North America. Centered on the Amargosa River and several tributaries, it is home to dozens of species that live nowhere else on Earth. The springs in Nevada and California that create the river in Oasis Valley, Ash Meadows, Shoshone and Tecopa, and into Death Valley National Park are the product of a vast carbonate aquifer flow system which underlies dozens of valleys in the southwestern Great Basin. These springs sustain human communities which rely on the water for survival and economic growth. The watershed also sustains delicate biological communities that otherwise would not exist in the hottest, driest place on the continent.

The Amargosa River watershed spans two states, Nevada and California; and four counties, Nye, Clark, Inyo, and San Bernardino; and has a variety of land management and protective designations. Public lands within the basin are managed by the Bureau of Land Management (BLM), the National Park Service, the US Fish and Wildlife Service, the U.S. Forest Service, the Department of Defense, and the Department of Energy. The Basin contains numerous protected areas including Ash Meadows National Wildlife Refuge, home to the densest concentration of endemic species in North America; eight BLM Wilderness Areas, eight Areas of Critical Environmental Concern, and one Wilderness Study Area; Death Valley National Park, the largest national park in the lower 48 states; the Spring Mountains National Conservation Area; numerous private nature preserves managed by The Nature Conservancy; significant portions of the Old Spanish National Historic Trail; and 33.7 miles of the Amargosa Wild and Scenic River (AWSR). The federal reserve water rights for the AWSR, Death Valley National Park, and the eight Wilderness areas were established by statute.

The Amargosa River watershed is host to 15 species of groundwater-dependent plants and animals protected as threatened or endangered under the Endangered Species Act (ESA). These include four fishes, one invertebrate, seven plants, one mammal, and two migratory birds. The groundwater which gives rise to the Amargosa River also is essential to the continued existence of these species. As many as 60 additional groundwater dependent endemic species have been identified within the Basin.

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From its beginnings in the Oasis Valley north of Beatty to its ultimate evaporation on the salt flats of Badwater Basin in Death Valley National Park, the Amargosa's water provides the vital resource which sustains life throughout the watershed. It is a complex hydrological system, which has only been thoroughly studied and documented in the past twenty years or so. It has become apparent over the past several decades of monitoring that the watershed is very sensitive to groundwater pumping or hydrological diversion activities. Decreasing or increasing the amount of water flowing through the system at one point in the system will inevitably entail changes at another point. Increasing development pressures over the last 50 years throughout the basin have contributed to the alteration and diminution of downgradient flows. Additionally, intensified drought, flooding, and evapotranspiration associated with climate change continues to impact groundwater flows in myriad ways.

The Amargosa River watershed is broadly defined as the topographic watershed and ground watershed of the Amargosa River, including Nevada groundwater basins 228, 227B, 229, 227A, 226, 225, 230, 162 (including portions in California), and likely additional basins further to the north and east; and the topographic watershed of the Amargosa River in California, including Chicago Valley, California Valley, Silurian Valley, Shadow Valley, the Amargosa River Valley, and Death Valley itself.

The springs, seeps, and flows in areas including Ash Meadows National Wildlife Refuge and Death Valley National Park are dependent on groundwater flows extending from Beatty, NV through the Amargosa Desert. Groundwater management in this area has been significantly structured around the preservation of water levels in the Devils Hole, a disjunct enclave of Death Valley National Park within Ash Meadows NWR. Though water levels in the Devils Hole have stabilized as a result of management actions intended to protect the Devils Hole pupfish (*Cyprinodon diabolis*), reports of decline in domestic wells in Amargosa Valley signal ongoing imbalance of use and recharge in this region.

A substantial portion of the water in the Amargosa groundwater flow system also comes from the Pahrump Valley aquifer, which in turn receives recharge principally from the Spring Mountains as well as from groundwater flows from several contributory basins in Southern Nevada. This water flows through carbonate bedrock and alluvial fill aquifers beneath the Nopah Range and emerges at key springs such as Twelvemile Spring, Resting Spring, Tecopa Hot Springs, Chappo Spring, and Shoshone Spring, as well as in the flow of the Amargosa Wild & Scenic River. Surface flows of these and other springs have already experienced a precipitous decline as a result of aquifer overdraft, almost certainly the result of historical over-pumping in the Pahrump Valley.

Hydrological conditions and historical trends indicate that any increase in groundwater withdrawals within the Amargosa Desert or the Pahrump Valley aquifer could have continued

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detrimental effects on groundwater flows and dependent resources within the Amargosa River system itself.

2. ISSUES BEING PROTESTED

I. Failure to Comply with FLPMA's planning standards

ISSUE BEING PROTESTED: The FEIS fails to comply with FLPMA's planning standards regarding having a baseline inventory of resources, complying with existing RMP requirements, and evaluating ACECs.

PARTS OF THE PLAN BEING PROTESTED: ALL OF THE BELOW

FLPMA requires that:

> "[T]he public lands be managed in a manner that will protect the quality of the scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archeological values; that, where appropriate, will preserve and protect certain public lands in their natural condition; that will provide food and habitat for fish and wildlife and domestic animals; and that will provide for outdoor recreation and human occupancy and use." 43 U.S.C. § 1701(a)(8).

For all public lands, Congress mandated that the BLM "shall, by regulation or otherwise, take any action necessary to prevent unnecessary or undue degradation of the lands." 43 U.S.C § 1732(b).

BLM must manage the public lands for multiple use and sustained yield (43 U.S.C. § 1701(a)(7)), in the context of the broad public interest:

> "The term "multiple use" means the management of the public lands and their various resource values so that they are utilized in the combination that will best meet the present and future needs of the American people; making the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to changing needs and conditions; the use of some land for less than all of the resources; a combination of balanced and diverse resources uses that takes into account the long-term needs of future generations for renewable and nonrenewable resources, including, but not limited to, recreation, range, timber, minerals, watershed, wildlife and fish, and natural scenic, scientific and historical values; and harmonious and coordinated management of the various

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resources *without permanent impairment of the productivity of the land and the quality of the environment with consideration being given to the relative values of the resources and not necessarily to the combination of uses that will give the greatest economic return or the greatest unit output*." 43 U.S.C. § 1702(c) (emphasis added).

The FEIS shows that BLM failed to adequately consider the impacts of the proposed plan amendments and reasonable alternatives in the context of FLPMA. The BLM is required to ensure that the proposed plan amendments will be consistent with objectives of each of the RMPs as a whole, not simply overlay a new decision onto existing management plans that are tied to the resources of each specific management area. For example, the Las Vegas RMP, which guides management of the Pahrump Field Office of BLM, contains numerous requirements which are inconsistent with the proposed RMPA here:

- WT-3 requires BLM to "Ensure availability of adequate water to meet management objectives including the recovery and/or re-establishment of Special Status Species," (RMP/ROD at 13) and FW-3-g, requires BLM to "Protect important resting/nesting habitat, such as riparian areas and mesquite/acacia woodlands. Do not allow projects that may adversely impact the water table supporting these plant communities." (RMP/ROD at 23). Similarly, FW-3-a requires BLM to "Manage mesquite and acacia woodlands for their value as wildlife habitat in the following areas: Amargosa Valley … Pahrump Valley," (RMP/ROD at 23). The proposed RMPA provides no such requirements, and indeed may in fact allow projects that adversely affect the water table supporting such plant communities. And numerous areas containing mesquite woodlands are allocated as available for solar in the RMPA in both Amargosa Valley and Pahrump Valley.
- AC-1 requires BLM to "Manage a sufficient quality and quantity of desert tortoise habitat, which in combination with tortoise habitat on other federal, state, and private land, will meet recovery plan criteria. Maintain functional corridors of habitat between ACECs to increase the chance of long-term persistence of desert tortoise populations within the recovery unit." (RMP/ROD at 14). Similarly, SS-3 states, "Manage desert tortoise habitat to achieve the recovery criteria defined in the Tortoise Recovery Plan and ultimately to achieve delisting of the desert tortoise…"(RMP/ROD at 25). Based on the discussion below regarding desert tortoises, it is likely that the RMPA violates this provision.
- SS-2-b Requires BLM to, "Manage public lands adjacent to the Ash Meadows Area of critical environmental concern… to complement spring and aquatic habitat for special status species, including projects that may affect ground water levels or spring flows." The RMPA violates this provision as well by allocating

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lands immediately adjacent to Ash Meadows ACEC for a water-intensive industrial development.

Unfortunately, the PEIS fails to show that BLM has considered such potential conflicts in its preparation of the proposed RMPAs as required by FLPMA. Because BLM managers must comply with management plans (*ONRCF v. Brong,* 492 F.3d 1120, 1025 (9th Cir. 2007)), this will create unanticipated conflicts and confusion — and also result in undermining the purpose of the Western Solar Plan to support good siting for solar projects.

FLPMA mandates that BLM "shall prepare and maintain on a continuing basis an inventory of all public lands and their resources and other values." 43 U.S.C. § 1711(a). This inventory must undergird the land use planning process, 43 U.S.C. § 1701(a)(2); *see also Ctr. for Biological Diversity v. BLM*, 422 F. Supp. 2d 1115, 1166-68 (N.D. Cal. 2006), and be kept current to account for resource changes. 43 U.S.C. § 1711(a). BLM must arrange for "resource, environmental, social, economic and institutional data and information to be collected." 43 C.F.R. § 1610.4-3. BLM may not approve management plan amendments based on outdated, inadequate, or inaccurate inventories. 43 U.S.C. § 1712(c)(4); *Or. Natural Desert Ass'n v. Rasmussen,* 451 F. Supp. 2d 1202, 1212-13 (D. Or. 2006).

FLPMA requires that in developing and revising land use plans utilizing the inventory information, the BLM consider many factors:

"**Criteria for development and revision**

In the development and revision of land use plans, the Secretary shall—
(1) use and observe the principles of multiple use and sustained yield set forth in this and other applicable law;
(2) use a systematic interdisciplinary approach to achieve integrated consideration of physical, biological, economic, and other sciences;
(3) give priority to the designation and protection of areas of critical environmental concern;
(4) rely, to the extent it is available, on the inventory of the public lands, their resources, and other values;
(5) consider present and potential uses of the public lands;
(6) *consider the relative scarcity of the values involved and the availability of alternative means* (including recycling) *and sites for realization of those values;*
(7) *weigh long-term benefits to the public against short-term benefits*;
(8) provide for compliance with applicable pollution control laws, including State and Federal air, water, noise, or other pollution standards or implementation plans; and
(9) to the extent consistent with the laws governing the administration of the public lands, *coordinate the land use inventory, planning, and management*

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activities of or for such lands with the land use planning and management programs of other Federal departments and agencies and of the States and local governments within which the lands are located…" 43 U.S.C. § 1712(c) (emphasis added)

Thus, in amending any land use plan, BLM must use an interdisciplinary approach based on science, prioritize protection of ACECs (and other lands prioritized for conservation such as National Wildlife Refuges), consider alternatives taking into account the relative scarcity of the resources affected, and coordinate with other Federal land management in the area. BLM must also inventory resources and utilize those resource inventories in the planning process.

Here, many of the RMPs are old and do not have current inventories of water resources, species and habitats within the planning areas and BLM appears to have ignored inventory information it did have for some resources such as lands with wilderness characteristics (LWC) and cultural resources. By failing to utilize relevant inventory information, BLM is violating FLPMA's inventory provision. *See Center for Biological Diversity v. Bureau of Land Management,* 422 F.Supp.2d 1115, 1166-67 (N.D. Cal. 2006) (discussing need for BLM to take into account known resources in making management decisions); *ONDA v. Rasmussen*, 451 F.Supp. 2d 1202, 1212-13 (D. Or. 2006) (finding that BLM did not take a hard look under NEPA by relying on outdated inventories and such reliance was inconsistent with BLM's statutory obligations to engage in a continuing inventory under FLPMA).

BLM also failed to evaluate or designate any ACECs in the RMPA, despite having received numerous nominations for them across the 11 state planning area.

BLM also failed to adequately coordinate the RMPA with other Federal departments and agencies as required. In particular, while Appendix H is intended as a coordinating plan with other agencies, it fails to include any measures to coordinate with the U.S. Fish and Wildlife Service. Ash Meadows National Wildlife Refuge has the potential to be significantly impacted by the RMPA, and yet there are no protective measures in place for Ash Meadows, no special mitigations for possible impacts to the Refuge, nor even a disclosure that the Refuge will be affected by the RMPA. This is particularly true due to the groundwater consumption that will necessarily follow the land use allocations for solar in the Amargosa River watershed.

II. Failure to Comply with FLPMA's UUD standard

ISSUE BEING PROTESTED: The FEIS fails to analyze a range of alternatives pertaining to critical issue areas, and fails to adequately describe why it rejected the Western Alliance Smart from the Start Alternative from further consideration.

PARTS OF THE PLAN BEING PROTESTED: ALL OF THE BELOW

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The proposed RMPA fails to comply with FLPMA's mandates for preventing unnecessary and undue degradation of public lands. This failure permeates each of the issue areas discussed herein in this protest, and all of the below protested points are part of an overall protest based on this failure.

"[T]he Secretary shall, by regulation or otherwise, take any action necessary to prevent unnecessary or undue degradation of the lands." 43 U.S.C. § 1732(b) ("UUD"). This substantive duty to prevent unnecessary and undue (UUD) lies at "the heart of FLPMA," Mineral Policy Center v. Norton, 292 F. Supp. 2d 30, 42 (D.D.C. 2003), and extends to all actions undertaken on BLM-managed public lands.

In May of 2024 BLM issued a new definition of UUD as part of its Conservation and Landscape Health Final Rule, 89 Fed. Reg. 40308 (May 9, 2024)—the first time the agency expressly defined UUD outside of the mining context:

> "(aa) "Unnecessary or undue degradation" means harm to resources or values that is not necessary to accomplish a use's stated goals or is excessive or disproportionate to the proposed action or an existing disturbance. Unnecessary or undue degradation includes two distinct elements: "Unnecessary degradation" means harm to land resources or values that is not needed to accomplish a use's stated goals. For example, approving a proposed access road causing damage to critical habitat for a plant listed as endangered under the Endangered Species Act that could be located without any such impacts and still provide the needed access may result in unnecessary degradation. "Undue degradation" means harm to land resources or values that is excessive or disproportionate to the proposed action or an existing disturbance. For example, approving a proposed access road causing damage to the only remaining critical habitat for a plant listed as endangered under the Endangered Species Act, even if there is not another location for the road, may result in undue degradation. The statutory obligation to prevent "unnecessary or undue degradation" applies when either unnecessary degradation or undue degradation, and not necessarily both, is implicated."
> 43 C.F.R. § 6101.4 (emphasis added).

In order to properly comply with FLPMA and BLM's duties to protect public lands and resources, the new definition of UUD at 43 C.F.R. § 6101.4 should apply to the Western Solar Plan. BLM must revise its review and potential approval of the proposed RMPAs accordingly.

BLM's Proposed Plan fails to prevent UUD because it authorizes harm to land and wildlife that is not necessary to meet BLM's goals. BLM's analysis in both the Draft and Final PEISs showed that it was possible to accommodate the Reasonably Foreseeable Development Scenario over 12 times over, while still excluding solar development from the occupied habitat of ESA listed species and other sensitive areas. See, e.g., Final PEIS at 2-27 to 2-28. Yet the Proposed RMPAs would leave much of this habitat available for development, excluding only

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certain areas based on undisclosed and arbitrary criteria. Id. at 6-13 (the Final PEIS does not describe how BLM and FWS delineated the "additional specific areas" or species protected under the Proposed Plan).

The harm to ESA-listed species, for instance the desert tortoise or those at Ash Meadows National Wildlife Refuge, under the Proposed Plan would constitute UUD because it is not necessary to meet BLM's solar development goals or the purpose and need for the action. Indeed, making the occupied habitat of ESA-listed species and other sensitive areas available for development is contrary to BLM's stated purpose and need because it would increase resource conflicts and create uncertainty for developers.

III. Range of Alternatives

ISSUE BEING PROTESTED: The FEIS fails to analyze a range of alternatives pertaining to critical issue areas, and fails to adequately describe why it rejected the Western Alliance Smart from the Start Alternative from further consideration.

PARTS OF THE PLAN BEING PROTESTED: 2, 2.1, 2.3, 2.3.6, 6

The Final Environmental Impact Statement (FEIS) fails to provide a reasonable range of alternatives for analysis (FEIS Section 2.1), and improperly excludes reasonable alternatives from detailed consideration (FEIS Section 2.3). The problems with the range of alternatives were highlighted in numerous parties' comment letters (i.e. CBD 2024, p. 12-36; TNC 2024, p. 4-15; Humboldt County 2024, p. 2, 11, 12; NAS 2024, p. 26-27). The range of alternatives presented is insufficient and does not meet the requirements of the National Environmental Policy Act (NEPA).

Notably, the RMPA adopted numerous decisions that were not sufficiently analyzed in the FEIS, including new programmatic features that should have been analyzed. These include the slope requirement, exclusion criteria, grandfathering projects, design features, and the addition of the avoidance category. In all cases, BLM has violated NEPA by failing to analyze a range of alternatives pertaining to these critical issue areas.

Most notably, a coalition of rural counties submitted the Western Alliance Smart from the Start Alternative (Beaver County 2024, p. 2; Churchill County 2024, p. 4; Duchesne County 2024, p. 1; Eureka County 2024, p. 3; Humboldt County 2024, p. 1; NACO 2024, p. 5; Nye County 2024, p. 6; White Pine County 2024, p. 4). This document outlined a set of priorities for permitting solar projects on public lands which would limit harm to communities and the environment while prioritizing solar development on millions of acres of disturbed lands. In particular, it advocates for allowing development only on disturbed, low conflict lands within 10 miles of transmission. This would mean in particular lands with >40% invasive annuals (i.e. cheatgrass); lands that are in neither "core" nor "growth" sagebrush habitats; are set back by at

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least a mile buffer from farms and homes; and are identified through consultation with state and local government.

The FEIS did not evaluate the Western Alliance Smart from the Start Alternative, nor did it incorporate substantially similar principles to the Western Alliance Smart from the Start Alternative into the proposed RMPA. The FEIS states that "many elements" from this alternative exist within BLM's current policy and procedures, and that other elements are included in Alternatives 4 and 5 (FEIS at 2-37). While this may be partially true, not all elements of the Western Alliance Smart from the Start Alternative were evaluated in the FEIS, and not all elements were addressed in Section 2.3.6 of the FEIS, where BLM describes its rationale for rejecting the alternative from consideration.

In particular, BLM failed to examine an alternative in the FEIS that would include a buffer around communities, despite being requested by 53 commenters during scoping (FEIS at 7-2) and numerous commenters on the DEIS (Humboldt County, 2024; Citizens to Protect Smith Valley, 2024 p. 4; Labadie, 2024 p. 2; Basin & Range Watch, 2024, p. 13). BLM also failed to explain why it was eliminating such an alternative from consideration. As described below, the RMPA will entail significant and unmitigable impacts to communities and property owners. BLM's failure to examine an alternative which would provide true mitigation for these issues is a major failure of the FEIS to adhere to FLPMA and NEPA.

IV. Impacts to Rural Communities, Socioeconomics, & Environmental Justice

PART OF THE PLAN PROTESTED: 4.5, 4.15

The FEIS fails to adequately consider or mitigate the impacts of large-scale solar development on rural communities located near lands opened to solar development. Rural communities often face unique challenges, including limited access to services and infrastructure, and the development of industrial-scale solar projects can exacerbate these challenges. Issues like increased traffic, noise, heat island effect, and the visual impacts of large solar installations were not adequately addressed in the plan.

The FEIS fails to follow BLM's established guidelines on analyzing and mitigating environmental justice impacts during the NEPA process. The 2022 BLM document titled "Addressing Environmental Justice in NEPA Documents" presents the obligations BLM must follow when addressing equity issues for energy development. Environmental justice is defined in this document as follows:

"Environmental justice (EJ) is the fair treatment and meaningful involvement of all potentially affected people—regardless of race, color, national origin, or income—when we in the federal government develop, implement, and enforce environmental laws, regulations, and policies[...] Fair treatment means that no group should bear a disproportionate share of the

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adverse consequences that could result from federal environmental programs or policies. Populations of particular concern are minority, low-income, and tribal communities." (Bureau of Land Management, 2022 p. 3-4) (Catlin, 2024 p. 13-14).

The FEIS fails to adequately define and identify impacted environmental justice communities. In particular, while it makes generalized statements about the racial, demographic, and socioeconomic makeup of the 11 Western states, the impacts of the RMPA will be felt differently across those states, and across communities within those states. Rural counties in particular will bear much of the burden of the development enabled by the RMPA, and the socioeconomic situation for these communities is different than in urban parts of the West.

The FEIS' provided methodologies used for evaluation of Environmental Justice in section F.5 appear arbitrary and data coarse. The FEIS describes application of the 50% Threshold Analysis, meaning that if the percentage of block group population (whose income is equal to or below 200% of the federal poverty level) is equal to or more than 50% of the total block group population, it qualifies as a potential low-income population of concern. The FEIS does not provide sufficient justification of the adoption of the 50% Threshold Analysis as an appropriate methodology to adequately address, mitigate, or avoid impacts to low-income populations affected by this planning process. Many rural communities within the planning area such as Amargosa Valley, NV have statistically significant low-income populations consisting of over 30% of total population, according to census data.[1] Through arbitrary adoption of the 50% Threshold Analysis methodology, the FEIS fails to clarify why low income communities wherein nearly 1 in 3 residents are considered to be in a poverty state do not rise to the level of significant concern in siting renewable energy projects in the West.

During public comment on the FEIS, numerous organizations expressed concerns about the impacts of the RMPA on communities and environmental justice, and the need for analysis of and mitigation of these impacts (Smallwood 2024, p. 2; NDA 2024, p. 6-7), including the need for Community Benefits Agreements (CBAs) (TWS *et al.* 2024, p. 45-50). Comments submitted by the State of Nevada Department of Agriculture identified unsubstantiated assumptions surrounding economic benefit to rural communities in the DEIS. Additionally, these comments reveal a lack of sufficient economic growth vs. loss analyses in the FEIS regarding municipal and county expenses incurred from overuse of roads, increased demand on local law enforcement, and increased demand on fire and emergency personnel in rural areas (NDA 2024, p. 6).

EPA noted in their comment letter, "an inequitable distribution of benefits and burdens associated with clean energy projects across the region that contribute to disproportionate

[1] https://data.census.gov/profile/Amargosa_Valley_CDP,_Nevada?g=160XX00US3201000#income-and-poverty

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impacts on communities with EJ concerns. Proximity to multiple energy projects, including clustering solar farms and other clean energy projects can cause cumulative impacts," (EPA 2024, p. 1). EPA cites concerns they have with the DEIS's analysis of impacts to environmental justice, cumulative impacts, health impacts, fugitive dust, water consumption. Their concerns appear to have been unaddressed by BLM.

Based on the land allotments depicted by the FEIS, the communities of the Amargosa River watershed will face a disproportionate burden of the consequences of this planning process. The Amargosa River watershed is home to some 40,000 people in the communities of Beatty, Amargosa Valley, Crystal, and Pahrump in Nevada; and Charleston View, Death Valley Junction, Shoshone, Tecopa, and Furnace Creek in California. Per 2020 census data, 93.4% of Amargosa Basin residents live in Pahrump, Nevada. All of the people in the watershed are reliant on the same surface and/or groundwater that comprise the Amargosa River for their survival. These communities tend to be socio-economically disadvantaged, with poverty rates 15-30% above the national average, and median household incomes 30-55% less than the national average.

Outside of Pahrump, services are highly limited. Residents in Beatty must travel 75 miles to the nearest grocery store or hospital; that distance is 55 miles for residents of the Amargosa Farms area of Amargosa Valley. Between low income thresholds, limited access to services, limited access to political power, and limited ability to respond to new external pressures such as solar energy development, these communities clearly qualify as environmental justice communities.

Tourism based around the Amargosa River and the protected places in the Amargosa Basin is a main economic driver for the communities here. Agriculture is also a significant component of the economy in Amargosa Valley. And Pahrump derives significant economic benefit acting as a bedroom community for Las Vegas. In all cases, sustained supplies of groundwater, and sustained flow at the surface water features that groundwater creates, are essential to the continued economic productivity and livelihoods of people in the Amargosa Basin.

The FEIS generally discloses and analyzes potential impacts to communities and environmental justice. Communities may experience a wide variety of negative impacts from nearby solar development, including:

- Air quality: "unmitigated fugitive dust could occur over the life of a PV project," "Unmitigated airborne particulate drift from soil disturbance or herbicide application (or existing herbicide presence in soil) could create a disproportionate health risk for nearby minority and low-income communities," (FEIS at 5-73).
- Noise: "Site preparation, construction, operation, and decommissioning… will produce low-, mid-, and high-frequency noise that could range from 95 dBA near

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the construction site to 40 dBA at the distance of 1.2 mi from the site," "Human hearing loss can begin to occur at 70 dB (CDC 2022) and the WHO (2010) recommends <30 dB for high-quality sleep. Studies indicate that noise pollution adversely impacts child learning, well-being, and development," (FEIS at 5-75).

- Large numbers of construction workers: "higher levels of population in-migration may produce social change such as strain on or breakdown of traditional rural community structures and socio-cultural disruption," (FEIS at 5-77).
- Impacts to property values: "Property values might decline in some locations as a result of the deterioration in aesthetic quality, real or perceived health impacts, congestion, or social disruption," (FEIS at 5-137). Many of these impacts are related to, "distance of housing from solar projects." "Rapid increases in population and the associated congestion in the absence of adequate infrastructure investment and appropriate local community planning might have adverse impacts on property values."
- Environmental values: "Solar energy development may affect environmental amenities, including environmental quality, stable rural community values, or cultural values," (FEIS at 5-138).
- Tourism: "perceived deterioration in the natural environment and in amenities in particular locations may have an important impact on the ability of communities in adjacent areas to foster sustainable economic growth," (FEIS at 5-138).
- Rural way of life: "Communities hosting these developments may experience a different quality of life, with a transition away from a more traditional lifestyle involving ranching and agriculture (taking place in small, isolated, close-knit homogenous communities with a strong orientation toward personal and family relationships) toward a more urban lifestyle, with increasing cultural and ethnic diversity and increasing dependence on formal social relationships within the community," (FEIS at 5-139).

Moreover, the influx of construction workers and equipment can strain local resources, impacting housing, public services, and overall community character. These changes can degrade the quality of life for rural residents, who are often left out of decision-making processes (Labadie, 2024, p. 7).

The BLM's failure to consider these socio-economic impacts in the FEIS constitutes a major gap in the analysis and threatens the well-being of these communities.

These impacts are made more acute when solar development occurs directly on the fenceline of property owners in environmental justice and rural communities. Across the Amargosa River watershed, property owners are facing the prospect of BLM-managed public lands directly on their property lines being allocated for solar development. This includes the entirety of the private property comprising the town of Amargosa Valley, smaller parcels in and

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around private property in the town of Beatty, and all of the landowners along the south border of the town of Pahrump. Likely thousands of property owners are directly affected by this, and thousands more whose properties are not directly abutting lands made available for solar but who will nonetheless be impacted due to proximity.

Numerous organizations, municipalities, and agencies expressed the need for BLM to analyze and provide alternatives that could have mitigated or eliminated potential impacts to rural communities through instituting exclusionary buffer zones or setback distances. Commenters proposed setback radii surrounding rural communities ranging from 1 to 30 miles to prevent the potential for these communities to bear a disproportionate burden of impacts from this programmatic process (Humboldt County, 2024; Citizens to Protect Smith Valley, 2024 p. 4; Labadie, 2024 p. 2; Basin & Range Watch, 2024, p. 13). The FEIS failed to address these concerns and provide acceptable alternatives for public review.

While the FEIS discloses that there will be significant impacts on environmental justice and rural communities, it fails to adequately mitigate those impacts, or to address what impacts may be impossible to mitigate.

Appendix B of the DEIS outlined 16 mandatory resource-specific design features related to environmental justice concerns. The FEIS omits several of these mandatory design features, presenting a reduced list of seven mandatory elements, with five additional non-mandatory project guidelines related to environmental justice concerns.

The following notable mandatory design features presented in the DEIS were omitted or significantly altered in the FEIS:

- “EJ-G-2 The BLM and project developers shall provide information on the likely impact of a utility-scale solar project on air quality, water quality, and land resources, and the relevant design features for these resources that would be required under the ROD for this Solar Programmatic EIS.”

This mandatory design feature was omitted from the FEIS, removing any requirement for BLM project developers to disclose information on likely environmental justice impacts to affected communities.

- “EJ-G-9 The BLM and project developers shall avoid siting solar projects in areas where impacts on environmental justice concerns, or impacts on human health and welfare generally, are reasonably foreseeable. Such impacts include but are not limited to air quality, drinking water supplies, subsistence resources, and public services.”

This mandatory design feature was altered in the FEIS to read as follows:

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> "EJ-5 The BLM and project developers shall use all available resources and strategies to minimize disproportionate and adverse impacts on communities with environmental justice concerns or impacts on human health and welfare generally. Such impacts include but are not limited to air quality, drinking water supplies, water supplies for agricultural and livestock use, local use of subsistence resources, and public services."

This alteration meaningfully removes the requirement to avoid siting of solar projects in areas where environmental justice impacts are reasonably foreseeable, despite responsible siting being the most effective means through which undue and unnecessary degradation of environmental justice values on public lands could be avoided. The FEIS also fails to establish the requirement for baseline studies related to air quality, drinking water supplies, public services, etc., making measurement of minimization or mitigation of impacts difficult or impossible.

- "EJ-D-2 The project owner/operators and the BLM shall consider the needs and desires of low-income, minority, and Tribal populations in determining the specific conditions to which the land will be reclaimed."

This requirement was adjusted to be a project guideline in the FEIS, thereby removing any requirement for project owner/operators or BLM to outline and execute reclamation approaches that mitigate or compensate for environmental justice concerns held by affected communities.

- "EJ-G-10 The BLM and project developers shall immediately address any identified impacts on environmental justice concerns, or an impact on human health or safety generally, in coordination with the local governments."

This requirement was removed from the FEIS, removing any responsibility for BLM or project developers to address environmental justice impacts emergent during construction, operation, or reclamation, placing the burden to do so solely on local governments and emergency services.

- "EJ-G-11 The BLM and project developers shall prioritize local minority, low income, and Tribal populations for project-related employment opportunities, wherever feasible; and establish vocational training programs for local schools and the local low-income and minority workforce to promote development of skills for, equitable apprenticeship, and high-quality employment opportunities within the solar energy industry (local projects, if possible). The BLM and project developers shall consider options to include labor standards, workforce agreements, and local hiring provisions for clean energy projects."

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This requirement was shifted to a project guideline in the FEIS, removing any obligation on behalf of the project developer to provide workforce training or employment opportunities for environmental justice communities.

The FEIS does introduce two novel mandatory requirements related to environmental justice, but fails to address mitigation of the impacts addressed:

- “EJ-6 The BLM and project developers shall engage with communities with environmental justice concerns periodically during project construction, operation, and decommissioning regarding overall processes and outcomes to learn what worked well and what could be done differently to promote equitable EJ-related processes and outcomes. Schedule ongoing reporting and coordination meetings with county government officials to identify and resolve emergent issues.”

While this requirement is likely intended to provide BLM and developers with valuable feedback to improve future project development, it fails to adequately outline mitigation or prevention measures for current projects inclusive of input from affected Tribal and local municipalities beyond the county government.

- “EJ-2 The BLM and project developer shall develop, early in the planning process, an outreach plan for communities with environmental justice concerns regarding valley fever, where applicable.”

This requirement merely requires outreach regarding concerns with valley fever, acknowledging valley fever as a potential environmental justice impact but presenting no requirements for actual mitigation or prevention of these impacts.

The FEIS and DEIS notably include only a singular mandatory resource-specific design feature requirement related to socioeconomic concerns, indicating a major gap in analysis. The following singular requirement is stated in the FEIS as follows:

- “S-1 If the BLM determines that the project is likely to have a substantial negative impact on the economic or social conditions of local communities, the project developer shall work with state, local, and Tribal agencies and governments to develop a community monitoring program to identify and evaluate socioeconomic impacts of the proposed solar energy development. Monitoring programs shall collect data reflecting the economic, fiscal, demographic, and social impacts of development at the state, local, and Tribal levels. Parameters to be evaluated shall include impacts on local labor and housing markets, local consumer product prices and availability, local public services (police, fire, and public health), and educational services. Programs shall also monitor indicators of social disruption (for example, crime, alcoholism, drug use, and mental

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health) and the effectiveness of community welfare programs in addressing these problems. Project developers shall periodically provide updates to the BLM regarding the monitoring results."

This requirement explicitly recognizes the potential for substantial negative impact on economic and social conditions of local communities from solar energy projects on adjacent public lands. This FEIS requirement of establishing community monitoring programs not only fails to address or require any meaningful mitigation or prevention measures, but places the burden of monitoring these impacts directly on the communities suffering potential economic and social losses with no explicit compensatory requirements to offset this burden.

Given the potential scale of development on public lands in and around township boundaries and directly adjacent to homes and businesses in the Amargosa River watershed, the FEIS evidently places a disproportionate burden on these environmental justice communities and must be rectified.

V. Water Use and Impacts to Over-Pumped and Over-Appropriated Hydrographic Basins

ISSUE BEING PROTESTED: The FEIS does not contain sufficient analysis of the impacts of the RMPA on groundwater resources; does not offer an alternative which would restrict development within overdrafted groundwater basins; and does not offer sufficiently protective design features.

PART OF THE PLAN BEING PROTESTED: 4.20, B.2.20, B.3.20

The FEIS failed to adequately assess the impacts of solar development on groundwater resources, particularly in hydrographic basins that are already over-pumped or over-appropriated. Many of the regions open to solar development are in arid environments where groundwater resources are critically stressed, such as within the Amargosa River watershed. The additional water demands for solar projects—whether for construction, dust suppression, or operational cooling—will exacerbate existing groundwater depletion.

The Amargosa Conservancy commented during the scoping phase that BLM should exclude projects in overdrafted groundwater basins unless the extraction is offset by an equal or greater reduction in groundwater pumping elsewhere in the basin (Amargosa Conservancy *et al.* 2023, p. 10). The Amargosa Conservancy and others also commented during the Draft EIS phase that BLM has failed to properly analyze impacts to overdrafted groundwater basins from

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solar development (Amargosa Conservancy 2024, pp. 4-5; Center for Biological Diversity 2024, pp. 23 & 44; Basin and Range Watch, *et al.*, pp. 28-30 & 54).

While the FEIS provides some broad-scale analysis of groundwater demand and withdrawals across the American West, it fails to examine basins that are critically overdrawn and how further groundwater withdrawals may exacerbate such impacts. If the FEIS and RMPA will be the final word on siting, then there must be analysis of a variety of groundwater basin scenarios, including those that are overdrawn.

The FEIS lacks any meaningful mitigation strategies to address these impacts. Public comments repeatedly urged the BLM to consider water-supply-based exclusions, especially in areas where water tables are already in significant decline, yet the BLM has failed to adequately respond. Instead, BLM primarily relies on inadequate mitigation measures which will not address the root causes of groundwater overdraft. For instance, the FEIS says that impacts to groundwater "can be avoided by using alternate water sources (e.g., trucking in water) and reducing water consumption requirements" (FEIS at 5-38). But this ignores the obvious question - where is the water being trucked in from? In the desert, functionally all available water resources are groundwater - that water will be withdrawn from somewhere. Since a typical utility-scale solar facility will consume, as an average, 1,000 acre-feet of water during construction, the fossil fuel implications of trucking in such a vast amount of water are substantial. In addition, the source basin may also be overdrafted.

BLM failed to identify how such issues would be mitigated, instead relegating responsibility to address this issue to state water regulation as sufficiently protective of groundwater resources (FEIS at 5-181). BLM also says that design features from Appendix B will be sufficiently protective of groundwater resources (FEIS Appendix B at B-32-35). However, these design features are mostly just further studies. Those design features that purport to be protective of groundwater resources are vague and unenforceable (for instance, feature WR-3w: "Project developers shall utilize appropriate water sources with respect to management practices for maintaining aquatic, riparian, and other water-dependent resources."). The design features for Legal Availability of Water contain no mandates at all for how a project will be permitted - they just require further studies. Studies do not protect groundwater resources.

The FEIS does not contain sufficient analysis of the impacts of the RMPA on groundwater resources; does not offer an alternative which would restrict development within overdrafted groundwater basins; and does not offer sufficiently protective design features. Without robust protections for these vulnerable water resources, the plan risks causing long-term, irreversible damage to groundwater systems and associated dependent ecosystems such as Ash Meadows NWR, Death Valley National Park, the Amargosa WSR, numerous designated Wilderness Areas, National Conservation Lands, Areas of Critical Environmental Concern, and other biological and cultural resources.

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VI. Alteration of Surface Water Flow

ISSUE BEING PROTESTED: The FEIS failed to adequately disclose or analyze the impacts of the proposed action on surface water flow and erosion, and the design features do not adequately mitigate these impacts.

PART OF THE PLAN BEING PROTESTED: 4.20, 4.62, B.2.20, B.3.20

Construction of utility-scale solar projects is known to alter surface water flow (Nair et. al, 2022). This is due to a variety of factors, including land grading, vegetation removal and/or mowing, road construction, fences and berms, flood channel diversions to protect the project, and changes to aquifer infiltration. These effects may be magnified by development on steeper slopes (described and cited in CBD 2024, pp. 14-15). These issues were raised during scoping (Amargosa Conservancy *et al.* 2023, p. 8; DTC 2023, p. 16), and by parties during the DEIS comment period (CBD 2024, pp. 14-15; Basin and Range Watch *et al.* 2024, pp. 15-23; The Nature Conservancy 2024, p. 16).

The FEIS does provide a generalized description of the impacts of utility-scale solar projects on surface water flow and erosion. For instance, the FEIS states that during site preparation, “hydrologic alterations from increased impervious areas and regrading could potentially change surface drainage patterns and infiltration locations,” (FEIS at 5-182) and that even after decommissioning, “hydrologic alterations could still be in place, including regraded areas that affect surface runoff patterns, any redirected surface drainages, and filled excavations that alter groundwater pathways,” (FEIS at 5-183). However, the FEIS asserts that such impacts can be “controlled following federal, state, and local requirements that protect downstream surface water features from changes in intensity and timing of runoff, water quality of runoff, and potential contamination of groundwater sources,” (FEIS at 5-182). The FEIS does not disclose or analyze what exactly those requirements may be.

A huge number of the areas allocated for solar development across the Intermountain West, and particularly in the Great Basin, are in groundwater basins which no longer qualify for the Army Corps of Engineers’ jurisdiction for Waters of the U.S. This is because they do not contain traditionally navigable waters or waters with a continuous surface connection to traditionally navigable waters (88 Fed. Reg. 61964, p. 16). As a result, Clean Water Act protections do not apply and there are functionally no federal protections imposing requirements to avoid alterations to surface water flow. State regulations vary widely, and again in areas without perennial water flow, in general there are few requirements which will result in avoided alterations to surface water flow. As for local requirements, the RMPA applies to such a huge swath of the country that it’s impossible to make generalizations about local regulation of surface water flow alterations. Some jurisdictions may have rigorous regulation of such - many jurisdictions likely have no regulation of such. As a result, in many cases functionally the only

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protections for surface water flow will come from the design features in Appendix B.2.20 (FEIS at B-32).

Unfortunately, these design features are mostly vague and so subjective that they could be flouted with little recourse for the agency. For instance, measure WR-1ro does not specify how adverse impacts to surface water runoff patterns would be avoided - it simply states that developers “shall develop measures,” to avoid such impacts (FEIS at B-32). Measure WR-2ro is similarly vague, saying developers, “shall restore surface water flows to pre-disturbance conditions,” (FEIS at B-33) even though such instruction seems to directly contradict the above referenced disclosure that there could be permanent alterations to surface hydrology post-decommissioning (FEIS at 5-183).

Some of the design features may actually be counterproductive as well. Measure WR-5ro states, “Project developers shall demonstrate the project will not increase the potential for offsite flooding and include provisions for stormwater and sediment retention on the project site,” (FEIS at B-33). First, “shall demonstrate,” is vague and unenforceable, and does not reveal the criteria under which BLM will evaluate whether or not a project increases the potential for off-site flooding. Second, the idea that the way to mitigate this issue is with stormwater retention structures is also problematic. Flooding is a natural part of desert ecosystems Boudreau, 2024). Floods not only spread soil nutrients and provide a reliable disturbance regime, they also can be a vector for exchange of genetic material, promoting diversity and connectivity across landscapes. Finally, floods provide the main mechanism for groundwater recharge in closed hydrographic basins - in many cases in the more arid parts of the West, the only appreciable groundwater recharge occurs during flood events (Charles, 2024). By diverting stormwater, the solar projects are denying the desert an essential abiotic factor which shapes geology, hydrology, life and biodiversity. This is functionally an unmitigable impact, and speaks to the absolute necessity of appropriate siting decisions above all else given the unmitigable nature of some issues.

VII. Slope

ISSUE BEING PROTESTED: The FEIS failed to include an alternative which maintains the 5% slope restriction, and failed to analyze the impacts of changing the slope restriction from 5% to 10%.

PART OF THE PLAN BEING PROTESTED: 2.1.1

An obvious omission from the range of alternatives is that of slope requirements. In the 2012 Western Solar Plan, solar development was limited to areas with slope less than 5%. This helps minimize the impacts of erosion and large-scale land grading, and will promote quicker reclamation after decommissioning. In the FEIS, one alternative does away with any slope

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requirement altogether, while the other four alternatives have a 10% slope requirement. The FEIS failed to include an alternative which maintains the 5% slope restriction.

The RMPA increases the maximum slope allowable for solar energy siting from 5% to 10%, a major shift from the 2012 WSP, which opens up a much larger area - millions of additional acres across the West - for development. However, the impacts of this change were not analyzed in the FEIS. During scoping, numerous commenting parties including the Amargosa Conservancy urged BLM to include an alternative that would maintain the 5% slope requirement (Amargosa Conservancy, *et al.* 2023, p. 8). Not only did BLM fail to include an alternative maintaining the 5% slope requirement in the FEIS, BLM also failed to even analyze the impacts of changing this slope requirement. Some Draft EIS comment letters urged such an analysis (e.g. CBD 2024, pp. 3 & 14-15), but BLM failed to include it. The change is given a cursory mention with no analysis in several places in the FEIS (e.g. FEIS at 5-50, at 5-70, etc.). The only alternatives comparison is made between Alternative 1 (no slope requirement) and Alternatives 2-5 (10% slope requirement) and is presented in cursory fashion (FEIS at 2-41). Thus the FEIS failed to respond to scoping and DEIS comments by failing to include an alternative which maintains the 5% slope restriction and failing to analyze the impacts of changing the slope restriction from 5% to 10%.

This issue has a tangible effect on the Amargosa River watershed. In particular, portions of the alluvial fans coming off of Mount Charleston into Pahrump Valley in Wheeler Wash and Carpenter Canyon have been allocated as Available for solar in the FEIS which have a slope of greater than 5% but less than 10%. As described in CBD 2024, pp. 14-15, there can be considerable environmental impacts from developing on steeper slopes, including increased erosion, increased area being graded within project sites, and could cause changes to hydrology and groundwater infiltration. These steeper areas also tend to be areas where big game and other organisms come up or down off the mountains during seasonal movements.

VIII. Visual Impacts to Protected and Sensitive Areas

ISSUE BEING PROTESTED: The FEIS fails to adequately consider impacts deriving from visual resource value degradation of a suite of designated protected landscapes, landmarks, and trails with exceptional scenic, cultural, and historic significance.

PARTS OF THE PLAN BEING PROTESTED: 5.19, B.2.19, B.3.19

The FEIS does not adequately address the visual impacts of solar development on several protected and sensitive areas renowned for their scenic and cultural significance within or directly adjacent to the Amargosa River watershed.

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The FEIS is also inconsistent in its application of its own exclusion criteria on this issue. Table 6-2. Resource-Based Exclusion Criteria in the Proposed Plan specifies exclusion of "...lands classified as visual resource management (VRM) Class I or II throughout the 11-state planning area…" The BLM Visual Resource Inventory Nevada depicts significant portions of the Amargosa Valley and Pahrump Valley regions as receiving Class I and Class II status; yet these areas were not excluded from the FEIS. These areas should be excluded from potential solar development in order for the BLM to rectify this inconsistent application of exclusion criteria.

The FEIS at 5.19.1 and Appendix F.19.2 states that Sensitive Visual Resource Areas (SVRAs) would be generally excluded from solar development. SVRAs are described to potentially include "units of the National Park System, monuments, trails, scenic highways, WSRs, wildlife refuges, and other designated scenic, historic, and cultural resource areas." (5.19.1) The FEIS further states that SVRAs "...close to the lands available for application could be subject to visual impacts from the development, if, and only if, the solar energy development was actually visible from within these areas, and visually prominent enough to cause a non-negligible impact." (F.19.2)

In acknowledging that SVRAs could be subject to visual impacts, the BLM acknowledges that the FEIS opens the potential for violation of management mandates and undermining of resource preservation or conservation objectives and goals of other managing agencies, including the U.S. Fish & Wildlife Service, National Park Service, and others. The FEIS fails to adequately analyze potential impacts to SVRAs and define negligible vs. non-negligible impacts to lands whose visual values are under protective status.

The following localities satisfy the definition of SVRAs and/or have been assessed Class I or Class II VRM status wherein impacts to visual resources from proximal solar energy development projects were not sufficiently analyzed and could rise to the level of non-negligible:

- Death Valley National Park: As a unit of the National Park System, Death Valley qualifies as a Sensitive Visual Resource Area. Large-scale solar development near or directly on the boundary of Death Valley will disrupt the park's iconic viewsheds, which are critical to regional tourism and wilderness character. According to the FEIS, nearly 40 semi-contiguous miles of the park's eastern border could be developable for solar energy projects. The park's vast, uninterrupted desert landscapes are highly vulnerable to industrial-scale installations that would significantly alter and degrade their appearance. This land area was brought to the BLM's attention for exclusion due to impacts to visual resources during scoping in comments submitted by Basin & Range Watch (p. 137)
- Ash Meadows National Wildlife Refuge: As a wildlife refuge, Ash Meadows NWR qualifies as a Sensitive Visual Resource Area. Ash Meadows is a wetland oasis adjacent to the eastern boundary of Death Valley National Park. In addition to sustaining a suite of endangered, threatened, and endemic plant and wildlife species, the refuge attracts

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visitors due to its stark visual contrasts to Death Valley and the surrounding landscape typical of the Mojave Desert. Solar projects near the refuge could degrade the visual experience of visitors and compromise historic and cultural viewsheds. Additionally, the BLM Southern Nevada District Office assigned the Ash Meadows National Wildlife Refuge Offset land area a "High" sensitivity rating in its Visual Resource Inventory dated March, 2011 (BLM 2011, p. 49).

- Old Spanish National Historic Trail: As a National Historic Trail, the Old Spanish Trail qualifies as a Sensitive Visual Resource Area. The Old Spanish NHT is uniquely co-administered by the Bureau of Land Management and National Park Service. A significant section of this trail that connected Sante Fe, NM to Los Angeles, CA transverses the Amargosa River watershed. The section of the trail routed through Nevada's Pahrump Valley has already suffered significant degradation to its visual resources from solar projects developed on variance lands. The FEIS illustrates the potential for a significant portion of the trail in the Pahrump Valley to be further impaired visually by contiguous or nearly contiguous solar energy projects.
- Nopah Range Wilderness: As a designated wilderness area, the Nopah Range Wilderness qualifies as a Sensitive Visual Resource Area. Solar development near the Nopah Range Wilderness, which constitutes much of the south western boundary of the Pahrump Valley, would significantly alter the visual character of this pristine area. The Nopah Range Wilderness is valued for its rugged desert mountain peaks and solitude. Industrial solar facilities would compromise the wilderness experience for recreationists seeking natural beauty and isolation. The FEIS did not assess the visual resource management status of or impacts to the Nopah Range Wilderness.

The FEIS does not provide sufficient analysis of these visual impacts, nor does it propose adequate mitigation measures to protect the viewsheds and cultural values of these important areas. BLM's failure to address these issues is a critical omission that must be rectified.

IX. Grandfathering Projects

ISSUE BEING PROTESTED: The grandfathering of projects has the potential to undermine the entire RMPA, and BLM failed to disclose and analyze which projects will be grandfathered, and the impacts of such an action.

PART OF THE PLAN BEING PROTESTED: 6.5

The criteria for grandfathering certain projects were not disclosed or analyzed in the FEIS. The FEIS instead makes decisions about the applicability of the RMPA on pending solar applications based on, "the degree to which BLM has progressed its review of the application," (FEIS at 6-40). Several public comments on the DEIS urged BLM to permit all pending applications according to the new RMPA (CBD 2024, pp. 45-46; TWS *et al.*, p. 61-62). BLM not

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only ignored these recommendations but failed to even analyze the impacts of grandfathering a large number of projects. BLM purports to be protective of the environment by granting "partial exempt" status to what's likely a large number of projects, requiring them to adhere to design features while exempting their siting from the land allocations of the RMPA (FEIS at 6-41). Design features are not sufficient to mitigate the impacts of solar siting in inappropriate areas.

The public still does not have access to a list of grandfathered projects, which prevents us from evaluating the impacts of these exemptions. Furthermore, across the entire planning the application of grandfathering criteria from the FEIS will exempt what's likely to be hundreds of thousands of acres from the siting requirements of the RMPA, undermining the plan's overall effectiveness. Some projects which likely qualify as partially exempt, meaning are in exclusion areas, defeating the purpose of those land allocations.

This has a significant effect on the Amargosa River watershed. There are at least 25 pending solar applications within the watershed, in particular in the Amargosa Desert (hydrographic basin 230) and in Pahrump Valley (hydrographic basin 162). A great number of these projects have initiated permitting with BLM. Again we have not been provided a list of grandfathered projects so we do not know for sure. But, in some cases these projects are sited in areas excluded from development, in particular north of Ash Meadows and some areas near Pahrump. Since we are unable to determine which projects are grandfathered, we are unable to evaluate the environmental impacts of such. BLM has denied the public sufficient information to understand the implications of the FEIS and RMPA, and has failed to adequately disclose and analyze the impacts of the grandfathering regime proposed in the RMPA.

The grandfathering of projects has the potential to undermine the entire WSP RMPA, and BLM failed to disclose and analyze which projects will be grandfathered, and the impacts of such an action. This failure results in a lack of information for the public, leaving communities in a state of uncertainty and unsettlement as the fate of the landscapes they live in hangs in the balance.

X. Exclusion Zone Criteria

ISSUE BEING PROTESTED: The exclusion zone criteria are not sufficiently protective of public land resources in order to accomplish the purpose of the RMPA, and the FEIS failed to evaluate a range of alternative exclusion zones.

PART OF THE PLAN BEING PROTESTED: 6.2

The FEIS implements a number of exclusion zone criteria (FEIS at 6-7 to 6-14). The purpose of the RMPA is, "initial siting of utility-scale photovoltaic solar energy development proposals by identifying 'solar application areas,' which are areas of BLM-administered lands where proposals for solar energy development are anticipated to encounter fewer resource

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conflicts compared to areas identified as ‘exclusion areas’ where solar development is likely to encounter significant resource conflicts, making them unsuitable for solar development proposals,” (FEIS at 1-3). This is, in effect, pre-screening public lands for resource conflicts, presuming that siting projects in areas with low resource conflicts will minimize permitting times, litigation, and aggrieved constituencies. It is essential therefore, that the exclusion zones accurately reflect areas with high resource conflicts - otherwise lands will be pre-screened for siting solar which will still contain large resource conflicts and will thus fail to meet the purpose and need of the RMPA.

Unfortunately, the exclusion zone criteria laid out in the FEIS are not sufficiently protective of focal public land resources in order to accomplish the purpose of the RMPA, which is to reduce conflict over siting. The exclusion criteria are primarily based on pre-existing RMP provisions - most of these areas are *already* exempt from solar development by virtue of their very designation and/or their high slope. In order to accomplish the purpose of the RMPA, the exclusion criteria need to be significantly broader than existing land RMP land use allocations. Otherwise places left available for solar in the RMPA will still engender controversy, delay project deployment, and pose a threat to sensitive resources and communities.

One of the most significant omissions from a range of alternatives is the exclusion criteria. Instead of offering a range of exclusion criteria to be considered across different alternatives, the FEIS simply analyzes one set of exclusion criteria common to all alternatives (FEIS at 2-20). This denies the public the ability to compare possible alternatives and consider which would avoid or minimize adverse impacts. Several exclusion criteria which should have been considered across a range of alternatives are discussed below.

This issue was brought up in numerous public comments on the DEIS, with all commenters cited here suggesting additional exclusion criteria (CBD 2024, p. 3, 13, 17-30; TWS *et al.* 2024, p. 11-33; TNC 2024, p. 10-15; BRW *et al.* 2024, p. 11 & throughout). BLM not only failed to update the exclusion criteria to address the issues raised by commenters in the DEIS comment period, BLM also failed to disclose or analyze their reasons for why they chose to include certain exclusion criteria while eliminating various exclusion criteria suggested in comments on the DEIS from consideration.

1. *Desert Tortoise*

In the Draft EIS, BLM proposed excluding, “Known occupied habitat for ESA-listed species, based on current available information or surveys of project areas,” (DEIS at 2-21). In a footnote this was clarified to include the Mojave desert tortoise (DEIS at 2-24). The definition of “occupied” was left unclear. Certain design features were applied to areas with, “a suitability index equal to or greater than 0.5 (Nussear et al. 2009 or most recent as approved by permitting agencies) or habitat supporting 5 or more tortoises per square mile,” (DEIS at B-38). The existence of design features in these areas implies that projects would be permitted within

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tortoise habitat, just subject to various design features and mitigations. This seems counterintuitive since those areas would qualify as “occupied” and thus be excluded and not subject to design features. The DEIS left the reader wondering - is occupied tortoise habitat excluded or not?

Numerous commenters on the DEIS suggested excluding all occupied tortoise habitat from solar development, especially in habitat linkages, connectivity habitat, and movement corridors (FWS 2024, p. 14, 17; CBD 2024, p. 20-21, 29-32; TNC 2024, p. 12; TWS *et al.* 2024, p. 38-39, 49-52; DTC 2024, p. 4-5; NWF 2024, p. 26-27).

In the FEIS, BLM modified the endangered species exclusion criteria. The RMPA would now exclude “Known occupied habitat for ESA-listed species,” (FEIS at 2-21). A footnote specifies “this exclusion applies to all occupied habitat for ESA-listed species, including… Mojave desert tortoise,” (FEIS at 2-23). There are hints in the FEIS as to the true meaning of this. “BLM coordinated with the USFWS to identify **important habitat areas** for approximately 40 ESA-listed species to be excluded from solar energy development on BLM-administered lands,” (FEIS at 5-64, emphasis added). “The modified Exclusion #2 in the Proposed Plan includes specific mapped areas for 40 ESA-listed species identified in coordination with the USFWS,” (FEIS at M-14). “Exclusion #2 includes **habitat areas for Mojave desert tortoise**, including translocation and connectivity areas, rather than defining exclusion areas based on tortoise presence or tortoise density. In response to comments, the BLM decided not to incorporate the unmapped exclusion for known occupied habitat in the Proposed Plan,” (FEIS at M-40, emphasis added). The wording is peculiar because the actual exclusion criteria states that all occupied habitat for the Mojave desert tortoise should be excluded, but when pressed for detail, it turns out that it is only selected habitat areas.

The FEIS failed to disclose or analyze a rationale for how desert tortoise “habitat areas” for exclusion were chosen. No criteria for determining which tortoise habitat qualifies as “habitat areas” was provided. Decisions as to which “habitat areas” to include appear to be arbitrary and capricious and not supported by the best available science. And hundreds of thousands of acres of known occupied desert tortoise habitat was still included as available for solar, especially in Pahrump Valley and Amargosa Valley.

FWS provided incremental guidance to BLM for exclusion areas for desert tortoise. On May 25, 2023, FWS submitted a GIS shapefile to BLM (FWS 2023a) and accompanying justification (FWS 2023b) for their proposed desert tortoise exclusion areas. FWS proposed excluding functionally all BLM land in southern Nevada within the range of the Mojave desert tortoise, including all of Pahrump Valley, Amargosa Valley, and Sarcobatus Flat. All three of these areas are left available for solar in the FEIS.

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Figure 1: Desert tortoise exclusion areas proposed by FWS on May 25, 2023 (FWS 2023a).

On August 29, 2023, FWS submitted another GIS shapefile to BLM (FWS 2023c) and an accompanying justification (FWS 2023d). In it, FWS has significantly pared back their proposed exclusion zones. In the justification document, they state, “BLM requested the review and consideration of alternative exclusion areas,” (FWS 2023d, p. 2). The document states, “...some areas in Nevada (e.g., habitats adjacent to Interstate 15, U.S. Highway 95, surrounding habitats of Las Vegas) previously identified for exclusion were classified as ‘preferred’ locations for solar energy development,” (*Id.*). FWS then removed these preferred areas from their proposed exclusion zones. They also drew back the exclusion zones in other areas with no explanation.

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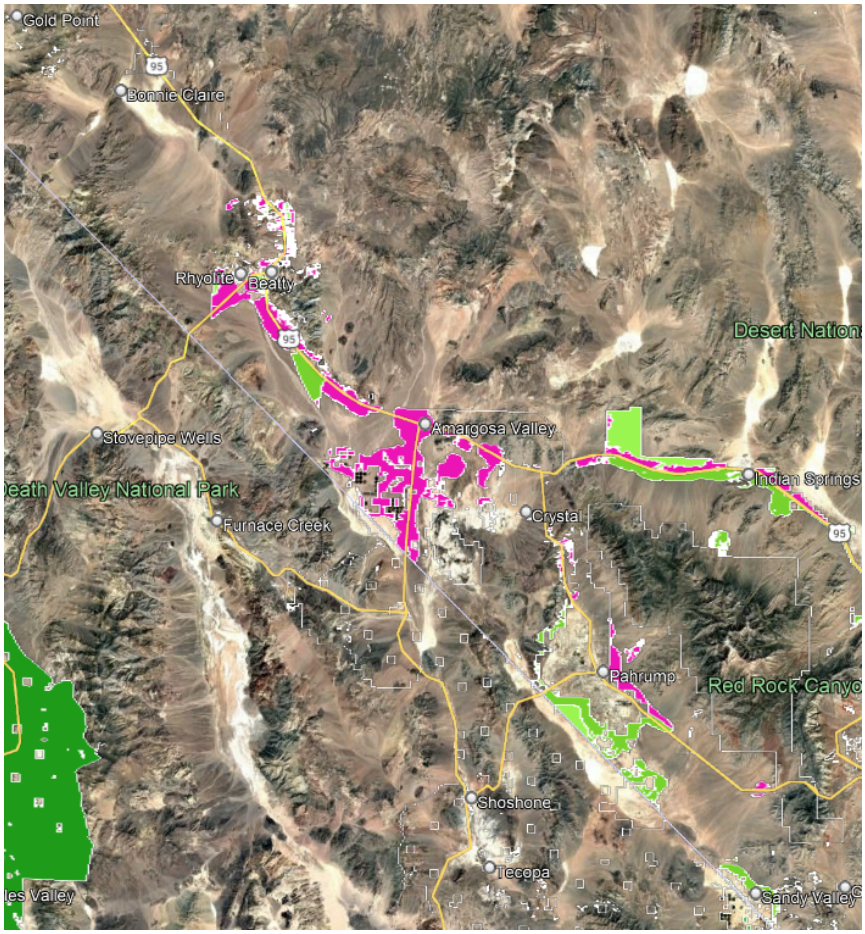

Figure 2: Desert tortoise exclusion areas proposed by FWS on August 29, 2023 (FWS 2023c). Pink areas are proposed exclusion while green areas are BLM-identified "preferred" locations for solar.

On November 29, 2023, FWS sent another GIS shapefile to BLM with proposed desert tortoise exclusion areas (FWS 2023e), as well as an accompanying justification document (FWS 2023f). By this point, FWS had whittled down what they were asking for to areas north of Highway 95 and east of Tecopa Road, thereby exempting not only BLM's "preferred" areas for solar energy but also the footprint of dozens of existing solar applications. This represents a drastic reduction in proposed exclusion from the map sent on May 25, 2023. The justification document makes no mention of "preferred" areas for solar or any other reason for so significantly changing the proposed exclusion areas (FWS 2023f). One is left to wonder what changed in the intervening six months and why the justification for these areas being left out of the exclusion zones was not included in the justification document.

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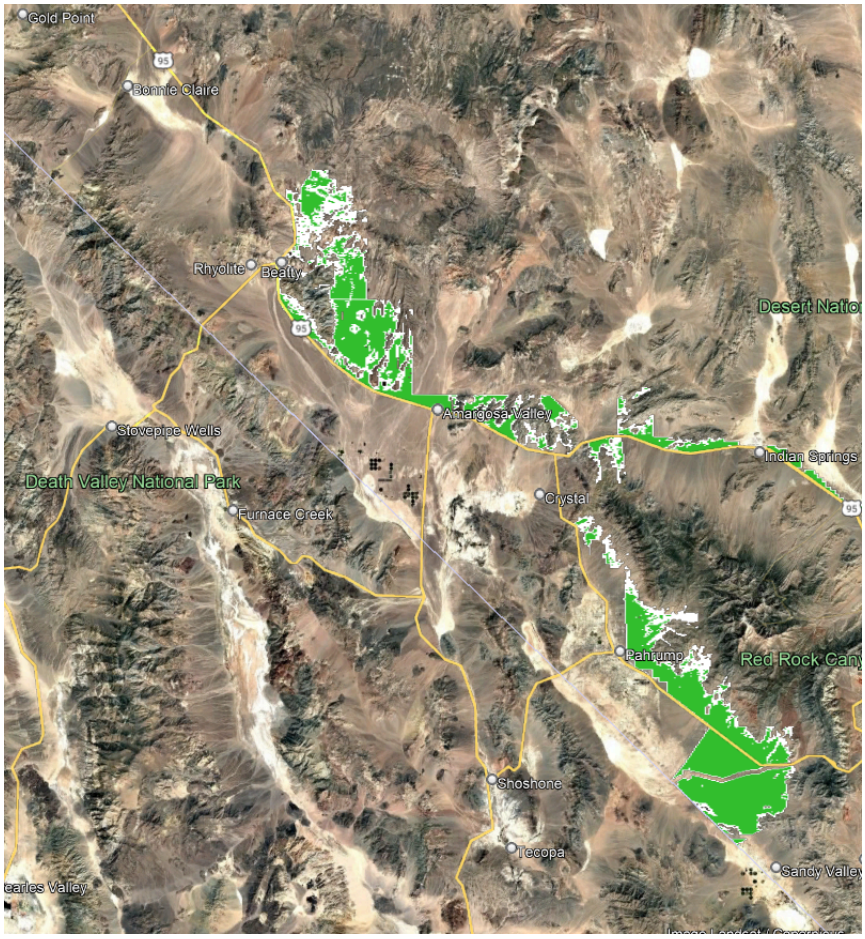

Figure 3: Desert tortoise exclusion areas proposed by FWS on November 29, 2023 (FWS 2023e).

Finally, on May 10, 2024, FWS provided a final recommended exclusion area for the desert tortoise to BLM (FWS 2024a) and an accompanying justification document (FWS 2024b). This version included some recommended exclusions that were not in the November 2023 recommended exclusion areas, including areas north and west of Pahrump, and an area southwest of Beatty. There were also larger exclusion zones included near Indian Springs. However, the entirety of the area south of Highway 95 in the Amargosa Desert, and northwest of Tecopa Road in Pahrump Valley were omitted from the exclusion areas. The justification document does not provide specific detail on why these areas were omitted from the proposed exclusion areas.

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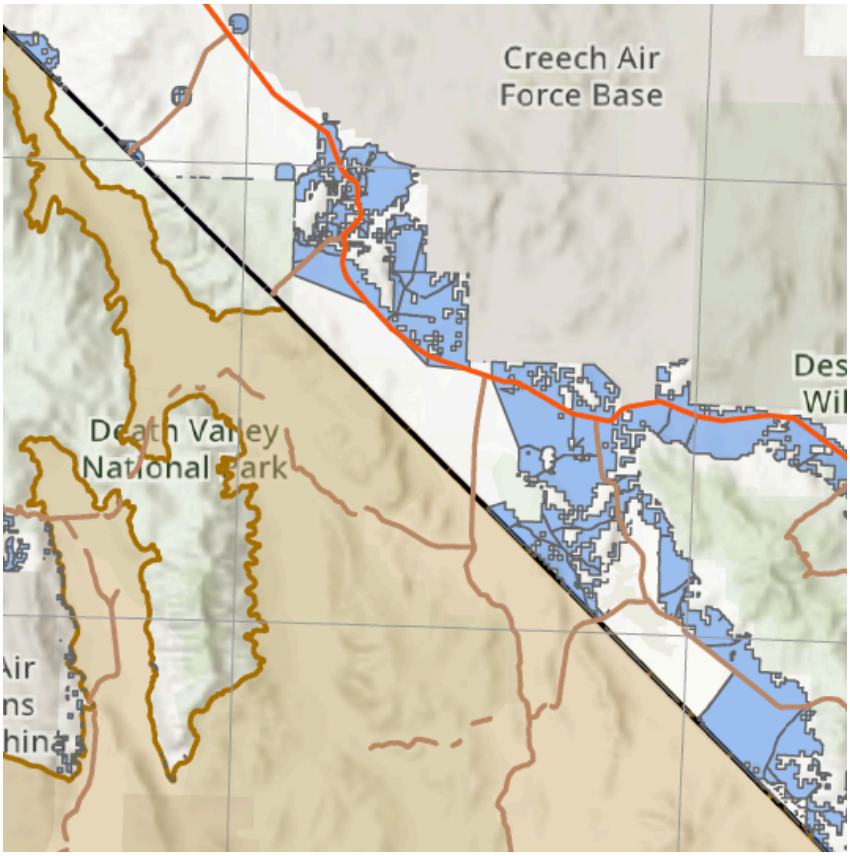

Figure 4: Desert tortoise exclusion areas proposed by FWS on May 10, 2024 (FWS 2024a).

The FEIS ended up adopting exclusion areas fairly closely aligned with the FWS recommendations from May of 2024. However, the rationale for why specific areas were chosen for exclusion and why other areas were omitted from exclusion was not provided in the FEIS. And the justification documents from FWS, which were not part of the FEIS or accompanying materials, do not document these rationales either.

It appears that the selection of which areas of occupied desert tortoise habitat to exclude from solar was arbitrary and not based on specific scientific recommendations. For instance, in Pahrump Valley, areas to the southeast of Tecopa Road were excluded from solar, but areas northwest of Tecopa Road, where there are numerous pending solar applications, were omitted from the exclusion zone. Since Tecopa Road is unfenced, lightly traveled, and not a significant barrier to tortoise movement, there is no appreciable difference between the status of the desert tortoise populations on either side of it. With no justification provided for omitting occupied tortoise habitat northwest of Tecopa Road from the exclusion zone, it appears to be an arbitrary decision primarily based on where existing pending solar applications are located. A similar dynamic is at play in the Amargosa Desert with regards to Highway 95 - FWS originally asked for this entire area to be excluded; in the end the FEIS allows solar on most lands south of

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Highway 95. The areas which were not excluded also closely align with the abundance of existing project applications. Given that tortoises can move freely across this corridor, it appears to be an arbitrary decision primarily based on where existing pending solar applications are located.

2. Bird Habitat Protection

The FEIS fails to adequately provide for the protection of bird habitats, most importantly in and adjacent to open water or other aquatic features. This was raised during the DEIS comment phase by numerous commenters (CBD 2024, p. 19-20; NCTWS 2024, p. 4; MTFWP 2024, p. 2; NMW 2024, p. 12; FWS 2024c, p. 19; Basin and Range Watch *et al.* 2024, p. 81-90). Each of these commenters urged BLM to adequately disclose and analyze the potential impacts of solar energy to birds, in particular regarding the "lake effect," wherein birds can perceive a photovoltaic solar project as a lake and collision with the panels may result in direct mortality.

The FEIS has only a cursory analysis of the potential for the lake effect (FEIS Appendix F at 5-116). The FEIS acknowledges that there may be fatality rates as high as 11.61 birds/MW/year, meaning California may be having annual mortality of 141,811 birds per year. If we assume the FEIS's RFDS of 700,000 acres is accurate, and we use the ~7.5 acres/MW figure from the RFDS, we can expect roughly 93,000 MW of deployment. Using this crude analysis, we arrive at over 1,000,000 birds per year being killed by the lake effect across the planning area at full build out.

Rather than providing a comprehensive analysis of this potential for lake effect collisions and other impacts on aquatic avian habitat, however, the FEIS simply points to mitigation measures in "Appendix A.4.1.11," (FEIS Appendix F at 5-117), which does not exist. There is a single, vague design feature regarding avian collisions in Appendix B: "ER-2w: Utilize techniques to reduce glare from panels to minimize bird and bat collisions where glare has been determined to have a substantial adverse effect on these species," (FEIS Appendix B at B-19). However, the design feature does not specify what the techniques are, how they would be implemented, or how they would be evaluated for efficacy. There is one recommended, non-mandatory project guideline: "ER-PG-45w: Tilt solar panels upward where feasible to minimize moon-glare and associated risk of bat/bird collisions from the panels," (FEIS Appendix B at B-43). However, this is discretionary, its efficacy has not been demonstrated, and it would not mitigate the impacts of bird collision during the day, which is when evidence has shown it is most abundant.

There are numerous areas across the planning area where this issue is most concerning. In general, these are areas where public lands made available for solar are directly proximal to lakes and other surface water features used by birds. Of most concern in the Amargosa River watershed is Ash Meadows National Wildlife Refuge. Renowned across the world for its avian diversity, Ash Meadows is a mixture of open water bodies and extensive

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marshlands. Birds coming into Ash Meadows are expecting land in waterer or aquatic habitat. The RMPA allocates lands for solar close to the borders of Ash Meadows, and it's possible that this could be a cause of avian mortality as birds collide with solar panels thinking they are landing on bodies of water at Ash Meadows. This could both harm wildlife and degrade the values of the Wildlife Refuge.

The FEIS has failed to adequately disclose and analyze the potential for impacts from solar development on avian species; failed to adequately mitigate for these impacts through design features and project guidelines; and failed to exclude sensitive areas where these impacts would be most acute.

3. Lands Adjacent to Existing Protected Areas

Many DEIS commenters suggested buffers around protected areas (Bowers 2024, p. 3; CPANP 2024, p. 4-6; Taylor 2024, p. 1; Basin and Range Watch 2024, p. 140; DTC 2024, p. 29; MBCA 2024, p. 3; NPCA 2024, p. 6). The FEIS fails to respond to these comments in Appendix M.2.5.21, "Specially Designated Areas and Lands with Wilderness Characteristics." This violates 43 U.S.C. § 1712(c)(9), the requirement for BLM to ensure coordination with the land use management activities of other agencies.

Throughout the planning area, the FEIS depicts making lands available for solar in direct proximity and adjacent to existing protected and/or withdrawn areas. The RMPA makes lands available for solar within 100 meters of 29 National Wildlife Refuges, 18 National Park Service units, and 78 Indian Reservations. Several Wild and Scenic Rivers are also impacted. In the Amargosa River watershed, this is most true for Death Valley National Park, where nearly 40 miles of its eastern boundary would have lands allocated for as available for solar directly abutting the Park boundary. This could provide significant impacts to the ecology and viewsheds of the Park.

However, instead of applying an exclusion criteria that would be fully protective of national parks and monuments, the FEIS proposes "areas that warrant additional review" at the time of application (FEIS Appendix H at H-1). In particular with National Park Service units, the FEIS establishes "Areas of Special Coordination." These are "resource resource areas within 25 mi (40 km) of national parks, national monuments, and other NPS-managed lands to be given particular attention to inform comprehensive discussion of potential impacts on NPS resources that could be associated with utility-scale solar energy development on BLM-administered lands," (FEIS Appendix H at H-8).

The measures described in Appendix H are not a protective buffer. They are merely a set of further analyses that must be conducted and consultations that must be made with the National Park Service or other relevant agencies. The Areas of Special Consideration

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description posits that any impacts to National Park Service units or other protected areas are mitigable (FEIS Appendix H at H-8).

Appendix H contains no information about special consideration for National Wildlife Refuges, as suggested by some commenters (TWS *et al.* 2024, p. 56; CPANP 2024, p. 9; DTC 2024, p. 29). National Wildlife Refuges are subject to disturbance from development on their boundaries. Ash Meadows National Wildlife Refuge has the potential to experience significant impacts from development very near to its borders. The FEIS did not respond to these comments or propose any protective mechanisms or areas of further analysis whatsoever for lands adjacent to National Wildlife Refuges.

4. Areas Eligible for or Proposed for Protection

The FEIS fails to disclose or analyze the impacts of the RMPA on areas proposed for protection. In particular, the RMPA allocates lands as available for solar within or directly adjacent to areas proposed for various sorts of federal protection. These include proposals for: Bahsahwahbee National Monument (Nevada); Owyhee Canyonlands National Monument (Oregon); Great Bend of the Gila National Monument (Arizona); Cabeza Prieta National Wildlife Refuge expansion in Ajo Valley (Arizona); and the Ash Meadows Mineral Withdrawal (Nevada). In each case, the allocation of these lands as available for solar threatens to undermine the very features for which protections are being sought.

In the Amargosa this is true for the proposed Ash Meadows Mineral Withdrawal. A proposal to withdraw approximately 276,000 acres of land from mineral entry has been undertaken by a diverse group of community stakeholders, with the support of most of Nevada's congressional delegation. Agencies have undertaken work in this direction. It would be counterproductive to protect the Amargosa Desert region with a mineral withdrawal only to turn around and cover the area in solar panels. The FEIS should have analyzed what impacts the RMPA would have on the proposed Ash Meadows Mineral Withdrawal.

5. Durability of Exclusion Areas

ISSUE BEING PROTESTED: The exclusion criteria and areas are not durable and can be amended by future project-specific RMP amendments.

PART OF THE PLAN BEING PROTESTED: 2.1.1

The durability of the exclusion criteria and areas was a concern raised in comments on the DEIS (CBD 2024, p. 36), which has gone unaddressed in the FEIS. The exclusion zones are only excluded as long as the proposed RMPA that is adopted through the WSP revision process

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is used without amendment. “Any utility-scale solar authorization that includes areas located within an exclusion area would require a land use plan revision or amendment prior to approval,” (FEIS at 2-2). This means that exclusion areas are not permanent, they are temporary. RMP amendments are a common feature of utility-scale solar permitting. For instance, the EISs for Rough Hat Clark County Solar, Gemini Solar, and the Esmeralda 7 Solar Projects all have been or are being permitted using RMP amendments. In order for the exclusion areas to be durable to provide the protections against UUD that the proposed RMPA purports to provide, there must be restrictions put on when and how subsequent project-specific RMP amendments will be allowed.

XI. Design Features

ISSUE BEING PROTESTED: The FEIS failed to disclose or analyze why the mandatory design features in the DEIS were significantly pared back and many were made optional.

PART OF THE PLAN BEING PROTESTED: 6.3, Appendix B

The FEIS included significant changes to the design features of the RMPA from the DEIS which the public was unable to provide comment on. The design features are the basic rules with which project developers must comply in order to build solar projects on public lands. They are the primary tools for mitigating the impacts of large-scale solar development on public land, and their application is essential to ensuring projects do not cause undue and unnecessary harm to public lands resources.

The Draft EIS contained 733 mandatory design features, which were to be “required” for all utility-scale solar development on public lands subject to the RMPA (DEIS Appendix B at B-1). Any deviation from these design features would require analysis in the site-specific NEPA document demonstrating that the design feature does not apply or is substantially covered by a comparable state or local design feature (DEIS Appendix B at B-2).

However the FEIS contains just 208 mandatory design features, a 72% reduction in the number of applicable mandatory design features. Instead, 170 design features were changed to “project guidelines,” which are not mandatory. The other 355 design features from the Draft EIS were left out altogether.

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	DEIS general	DEIS site	DEIS operations	DEIS decomission	DEIS Total	FEIS Mandatory	FEIS Guidance
acoustic	4	14	2	2	**76**	**1**	**6**
air	6	22	3	1	**32**	**4**	**19**
cultural	5	8	1	5	**19**	**3**	**0**
ER	54	133	42	61	**290**	**58**	**49**
EJ	12	1	1	2	**16**	**7**	**5**
geology	5	38	7	3	**53**	**5**	**25**
HMW	14	9	4	3	**30**	**13**	**8**
Health	8	6	1	1	**16**	**6**	**3**
Lands-Realty	9	3	0	0	**12**	**2**	**2**
Aviation	4	1	0	0	**5**	**1**	**1**
Minerals	3	3	0	0	**6**	**1**	**0**
Paleontology	8	3	0	1	**12**	**5**	**1**
Rangeland	9	2	1	1	**13**	**3**	**4**
Recreation	2	1	0	0	**3**	**2**	**0**
Socioeconomics	1	0	0	0	**1**	**1**	**0**
Special Designations	8	1	0	0	**9**	**3**	**0**
Transporation	3	4	0	0	**7**	**3**	**3**
Tribal	20	2	3	2	**27**	**7**	**1**
VR	14	53	4	9	**80**	**19**	**25**
Water	32	21	3	6	**62**	**27**	**14**
Wildland Fire	7	6	4	1	**18**	**6**	**4**
					787	**177**	**170**
						plus 31 plan wide	

Table XX: Comparison of design features between DEIS and FEIS. The DEIS had a total of 787 mandatory design features; the FEIS has a total of 177 mandatory design features, and an additional 170 optional design features.

The FEIS also waters down the applicability of even the mandatory design features. Mandatory design features "will be required only when relevant resource-specific issues exist at the proposed project location," (FEIS Appendix B at B-2). The FEIS would also allow these design features to be subsequently modified in site-specific NEPA similar to the DEIS. The sum of these two factors means it's not entirely clear which design features will apply to which projects, since it appears that will primarily be decided in site-specific NEPA, calling into question how mandatory these measures really are.

A large number of mandatory design features in the DEIS have become optional project guidelines in the FEIS. These optional guidelines, "provide additional methods and considerations that may support achievement of the required outcomes of the mandatory plan-wide and resource-specific design features. These guidelines may be applied in whole or in part at the discretion of the BLM authorized officer based on the project siting issues, local conditions, and advice from BLM resource staff." The criteria for when optional project

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guidelines would apply is not specifically spelled out. It's unclear when and if any of these guidelines would apply.

Design features are the main tool BLM has to mitigate the environmental impacts of solar development. "Design features and project guidelines are measures or procedures incorporated into the proposed plan or alternatives that could avoid, minimize, and/or compensate for adverse impacts from solar energy development," (FEIS at ES-14). While the siting of projects, and avoiding sensitive areas, is the main tool to mitigate impacts, there is an operating assumption in the RMPA that most impacts can be avoided and mitigated using design features. "The BLM's use of exclusion criteria to prohibit solar energy development in sensitive areas would mitigate potential environmental impacts from solar energy development by precluding impacts on those sensitive areas altogether. Programmatic design features required under all Action Alternatives would further mitigate impacts from proposed solar development," (FEIS at 2-2).

The dramatic change in number and applicability of design features from the DEIS to the FEIS constitutes a significant shift in the approach of the RMPA to mitigating impacts from solar development. The public should have had a chance to review these proposed changes and provide comment on them, bringing into question the adherence of this RMPA process to NEPA.

XII. Future Site-Specific Analysis

ISSUE BEING PROTESTED: The FEIS and RMPA do not specifically delineate what future site-specific or project-specific NEPA analysis will look like and what criteria will be used to evaluate whether or not to move forward with a project.

PART OF THE PLAN BEING PROTESTED: 1.1.5

The FEIS and RMPA are extremely vague as to what future site-specific or project-specific NEPA analysis will look like. After programmatic EISs, BLM tends to use Environmental Assessments (EAs) to evaluate projects which tier to a PEIS - this is true for geothermal in particular, but also for oil and gas wells.

The FEIS states, "...just because lands are available for solar applications [in the RMPA] does not mean that the BLM has decided these areas are suitable for solar energy development," (FEIS at 1-10). However later in the FEIS it states, "The Action Alternatives are intended to help the BLM, communities, and utility-scale solar developers by directing future development to the most suitable BLM-administered lands for such development," (FEIS at 5-3). BLM's public statements about the RMPA also indicate that BLM is deciding the available lands are suitable for development. The Western Solar Plan was described in a Department of Interior press release as, "directing development to areas that have fewer sensitive resources, less conflict with other uses of public lands, and close proximity to transmission lines, the BLM can

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permit clean energy more efficiently," (DOI 2024a). A different press release described the Western Solar Plan as, "driving development closer to transmission lines," while, "avoiding protected lands, sensitive cultural resources and important wildlife habitat," (BLM 2024a). If BLM is actively driving development to areas it's describing as having few impacts to resources, it clearly has decided that, in a general sense, lands being made available in the RMPA are suitable for solar development.

The FEIS is extremely vague about what future project-specific environmental review might entail. It is silent on whether projects would be subject to EISs or would be evaluated under the lower threshold of an Environmental Assessment. It does not make any mention of categorical exclusions, even though we know there are categorical exclusions allowing some amount of solar development on public lands without a full NEPA analysis (DOE 2024).

The RMPA should be explicit about what the parameters around future project-specific environmental review will be. First this needs to address the anticipated level of environmental review for future projects subject to the RMPA - will it be an EIS, an EA, a Categorical Exclusion?

More importantly however, the RMPA needs to be explicit about how BLM can reject inappropriate projects. The RMPA is clearly a zoning exercise that will prioritize and allow solar development on certain lands. However, the FEIS states, "The project review process may result in the modification, rejection, or denial of the application as determined appropriate by the BLM," (FEIS at 1-11). In that case, the RMPA should explicitly define what criteria will be used as to whether or not to reject a project application. The RMPA and FEIS default to invoking the design features to mitigate impacts, implying that all impacts are mitigable and siting determinations made based on the RMPA are somewhat immutable. As discussed elsewhere in this protest, some project impacts are unmitigable, and the only appropriate mitigation is to reject the project application. There needs to be a mechanism to say no to projects that have unmitigable impacts on communities and the environment.

XIII. Avoidance Land Allocation

ISSUE BEING PROTESTED: The avoidance land allocation was introduced into the FEIS and RMPA without the opportunity for public comment; and it provides no meaningful protection to the lands so designated.

PART OF THE PLAN BEING PROTESTED: 6.2

The FEIS and proposed RMPA introduce a new land allocation which did not appear in the DEIS. The purpose of the "avoidance" allocation is described as designating "...certain areas that are available for solar applications, but which have sensitive environmental resources that are particularly vulnerable to disturbance," (FEIS at 6-16). The FEIS gives two criteria for lands

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which qualify for avoidance designation: “All portions of big game migratory corridors that are not identified as “high-use” in state or federal wildlife agencies’ migration corridor databases;” and “areas designated as avoidance for solar development in existing BLM land use plans,” (FEIS at Table 6-3).

The avoidance designation does not eliminate lands from consideration for solar; rather it imposes some modest conditions on development on solar in these areas. These modest conditions are: 1.) conformance with existing RMP; 2.) stipulations to address local conditions; and 3.) consider feedback from local communities and project modifications to address those concerns (FEIS at 6-16). These measures are essentially the same measures required for every project under NEPA and do not provide any substantive protection or benefit for lands designated avoidance. It is not a meaningful designation.

This has effects in the Amargosa River watershed. Areas up Wheeler Wash east of Pahrump; on the west side of Pahrump in the Last Chance Range; and east of Beatty in the Bare Mountains are all designated as avoidance lands in the RMPA. The avoidance designation is not meaningful and provides no protection to these areas.

The introduction of the avoidance land allocation in the FEIS was never analyzed in the DEIS. There is no transparency about how and why BLM decided to introduce this new concept, how BLM decided which lands would qualify as avoidance. The public needs to be able to weigh in on this land allocation concept. The presence of this allocation strongly suggests that a Supplemental EIS may be necessary.

XIV. Cumulative Impacts

ISSUE BEING PROTESTED: The FEIS fails to sufficiently analyze cumulative impacts to environmental justice communities and socioeconomics.

PART OF THE PLAN BEING PROTESTED: 5.5.2, 5.15.2

There is the distinct possibility of severe cumulative impacts from the RMPA in the Amargosa River watershed. There are over 25 solar applications currently in Basin 230 and Basin 162, and several more north of Beatty. The RMPA designates 220,000 acres for solar development in the Amargosa River watershed, which would represent a fundamental transformation of the landscape: cumulative water withdrawals for this sort of development could be tens of thousands of acre-feet (tens of billions of gallons); private property and communities surrounded by industrial development; severe dust problems with so much destabilizing soils. It paints a very bleak picture of the future in this community.

Unfortunately the FEIS does not adequately examine this issue. Under the cumulative impacts analysis for environmental justice and socioeconomics, the FEIS touts the benefits of

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clean air and jobs, saying that the cumulative impacts of the RMPA would be beneficial for environmental justice and rural communities. The FEIS lacks analysis of how the above factors such as water, dust, and land disturbance, may fundamentally transform communities and ruin them for residents and the environment. The scale of transformation envisioned by the RMPA would cause significant cumulative impacts to the communities of the Amargosa River watershed, and these are not analyzed in the FEIS.

CONCLUSION

The FEIS for the Western Solar Plan is flawed in its analysis of alternatives, water use, air quality impacts, and the socio-economic effects on rural communities. The expansion of developable areas without sufficient analysis, the arbitrary exclusion criteria, and the failure to consider key environmental and social impacts are unacceptable. We urge the BLM to reconsider these issues and revise the WSP to comply with NEPA, the Clean Air Act, and other environmental and socio-economic protections.

Thank you for your attention and consideration.

Sincerely,

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AMARGOSA VALLEY TOWN BOARD

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September 26, 2024

The Amargosa Valley Town Board approved an Agenda Item at their Town Board Meeting on September 26, 2024.

To endorse the Protest of Final Utility – Scale Solar Energy Programmatic Environmental Impact Statement and Proposed Resource Management Plan Amendments (also known as the proposed updated Western Solar Plan).

As presented by the Amargosa Conservancy

Carolyn Allen	**Board Chair**	Carolyn Allen
Brenda Dymond	**Vice Chair**	Brenda Dymond
Mike Cottingim	**Town Clerk**	Mike Cottingim
Sara Rivers	**Member**	Sara Rivers
Pat Minshall	**Member**	Pat Minshall

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