

APPENDIX G

RESPONSE TO COMMENTS ON THE RDEP DRAFT EIS

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APPENDIX G
RESPONSE TO COMMENTS ON THE RDEP DRAFT ENVIRONMENTAL IMPACT STATEMENT

G.1 INTRODUCTION

After publishing the RDEP Draft EIS, the BLM had a 90-day public comment period to receive comments on it. The BLM received written comments by mail, email, and submitted at the public meetings, as well as oral comments transcribed at public meetings. Comments covered a wide spectrum of thoughts, opinions, ideas, and concerns. BLM recognizes that commenters invested considerable time and effort to submit comments on the Draft EIS, and developed a comment analysis methodology to ensure that all comments were considered as directed by NEPA regulations.

The BLM has identified and formally responded to all substantive public comments. A systematic process for responding to comments was developed to ensure all substantive comments were tracked and considered. Upon receipt, each comment letter was assigned an identification number and logged into an excel-based database that allowed the BLM to organize, categorize, and respond to comments. Substantive comments from each letter were coded to appropriate categories based on content of the comment, retaining the link to the commenter. The categories generally follow the sections presented in the Draft EIS, though some relate to the planning process or editorial concerns.

Comments similar to each other were grouped under a topic heading; BLM drafted a statement summarizing the issue(s) contained in the comments. The responses were crafted to respond to the comments and if a change to the EIS was warranted.

Although each comment letter was diligently considered, the comment analysis process involved determining whether a comment was substantive or non-substantive in nature. In performing this analysis, BLM relied on the CEQ's regulations to determine what constituted a substantive comment.

A substantive comment does one or more of the following:

- Questions, with a reasonable basis, the accuracy of the information and/or analysis in the EIS;
- Questions, with a reasonable basis, the adequacy of the information and/or analysis in the EIS;
- Presents reasonable alternatives other than those presented in the Draft EIS that meet the purpose and need of the proposed action and addresses significant issues;
- Questions, with a reasonable basis, the merits of an alternative or alternatives;
- Causes changes in or revisions to the proposed action; and
- Questions, with a reasonable basis, the adequacy of the planning process itself.

Additionally, BLM's NEPA handbook identifies the following types of substantive comments:

- Comments on the Adequacy of the Analysis: Comments that express a professional disagreement with the conclusions of the analysis or assert that the analysis is inadequate are substantive in nature but may or may not lead to changes in the Proposed RMP/Final EIS. Interpretations of analyses should be based on professional expertise. Where there is disagreement within a professional discipline, a careful review of the various interpretations is warranted. In some cases, public comments may necessitate a reevaluation of analytical conclusions. If, after reevaluation, the manager responsible for preparing the EIS (authorized officer [AO]) does not think that a change is warranted, the response should provide the rationale for that conclusion.
- Comments That Identify New Impacts, Alternatives, or Mitigation Measures: Public comments on a draft EIS that identify impacts, alternatives, or mitigation measures that were not addressed in the draft are substantive. This type of comment requires the AO to determine whether it warrants further consideration. If it does, the AO must determine whether the new impacts, new alternatives, or new mitigation measures should be analyzed in the Final EIS, a supplement to the Draft EIS, or a completely revised and recirculated Draft EIS.
- Disagreements with Significance Determinations: Comments that directly or indirectly question, with a reasonable basis, determinations regarding the significance or severity of impacts are substantive. A reevaluation of these determinations may be

warranted and may lead to changes in the Final EIS. If, after reevaluation, the AO does not think that a change is warranted, the response should provide the rationale for that conclusion.

Comments that failed to meet the above description were considered non-substantive. Many comments received throughout the process expressed personal opinions or preferences, had little relevance to the adequacy or accuracy of the Draft EIS, or represented commentary regarding resource management and/or impacts without any real connection to the document being reviewed. These comments did not provide specific information to assist the planning team in making changes to the alternatives or impact analysis in the Draft EIS, and are not addressed further in this document. Examples of some of these types of comments include the following:

- The best of the alternatives is Alternative D (or A, B, or C);
- BLM has yet to show land stewardship at or above the level currently demonstrated by the private sector;
- RDEP does not reflect balanced land management;
- More land should be protected as wilderness;
- I want the EIS to reflect the following for this area: no grazing, no logging, no drilling, no mining, and no OHVs;
- More areas should be made available for multiple uses (drilling, OHVs, ROWs, etc.) without severe restrictions.

Opinions, feelings, and preferences for one element or one alternative over another, and comments of a personal and/or philosophical nature were all read, analyzed, and considered, but because such comments are not substantive in nature, BLM did not include them in the report nor respond to them. It is also important to note that while all comments were reviewed and considered, comments were not counted as "votes." The NEPA public comment period is neither considered an election nor does it result in a representative sampling of the population. Therefore, public comments are not appropriate to be used as a democratic decision-making tool or as a scientific sampling mechanism.

Comments citing editorial changes to the document were reviewed and incorporated. The Final EIS has been extensively technically edited and revised to fix typos, missing references, definitions, and acronyms, and other clarifications as needed.

Copies of all comment documents received on the Draft EIS, as well as transcripts of comments delivered orally during the public meetings, are available by request on CD from the BLM's Arizona State Office and on-line via the RDEP project Web site. The submission numbers for the comment documents are printed on the right margin of the first page of the comment

document for comments received by mail, email, at meetings, or delivered orally during the public meetings.

G.1.1 Campaign letters

The Wilderness Society held a standardized letter campaign for the RDEP effort through which their constituents were able to submit the standard letter or a modified version of the letter indicating support for The Wilderness Society's position on RDEP. Individuals who submitted the modified standard letter generally added new comments or information to the letter or edited it to reflect their main issue. Modified letters with unique comments were given their own letter number and coded appropriately. All commenters who used The Wilderness Society's campaign letter are listed in the **Campaign Letter Commenter List** following the comment responses.

G.1.2 How the Appendix is Organized

The appendix is divided up into three main sections. The first section, **Introduction**, provides an overview of the comment response process. The second section, **Issue Topics, Responses, and Comments**, is organized by the primary topic and then by specific issue subtopics that relate to an aspect of NEPA, the BLM planning process, or specific resources and resource uses. For example, all comments that relate to aspects of the Alternatives fall under the heading "1.2.2 Alternatives". This includes subsections such as Design Features and Best Management Practices, the Elimination Criteria, and any of the six alternatives. Comments and responses for baseline information (such as the information found in Chapter 3, Affected Environment) and impact analysis are found under the respective resource topic. For example, you can find the comments related to the affected environment and impact analysis on cultural resources under the "1.2.3 Cultural Resources" heading. Each topic or subtopic contains a summary statement, the BLM's response to the summary statement, and excerpts from individual comment letters. Excepts are reprinted directly from the submitted comment and have not been edited for spelling, grammar, or punctuation.

The third section, **Commenter Lists**, provides the names of individuals who submitted comment letters (whether unique or a version of The Wilderness Society's campaign letter) on the Draft EIS. Comment submissions are indexed and listed alphabetically by the commenter's last name.

G.2 ISSUE TOPICS, RESPONSES, AND COMMENTS

G.2.1 Air Resources

Impact Analysis

Summary:

The commenter suggests that the RDEP could temporarily increase ambient particulate matter (dust) levels.

Response:

The RDEP identifies lands across Arizona that are most suitable for the development of renewable energy. The proposed land use allocations are at the planning-level scale and would not authorize any specific projects or imply such approval. Any proposal for a wind or solar energy project will still require site specific permitting, additional environmental analysis, and NEPA compliance. The environmental consequences presented in this EIS document the types and general magnitude of impacts that could be anticipated from typical solar and wind energy developments.

Short-term increases in particulate matter during construction are discussed in the Draft EIS in Section 4.2.1, Air Quality and Air-Quality-related Values, Impacts Common to All Alternatives. The BLM recognizes that fugitive dust from construction could exceed the NAAQS for particulate matter at project site boundaries (Draft EIS pg. 4-11). As discussed in the Draft EIS, fugitive dust impacts from site-specific renewable energy development on BLM-administered lands would be addressed through the right-of-way application process by requiring a Dust Abatement Plan and implementing design measures and best management practices, such as those in Appendix B of the EIS. In addition, site-specific NEPA analysis for actions on BLM-administered lands would assess the specific level of effect of that action. Site-specific actions would also be subject to local air quality permitting requirements, including reviewing potential impacts and proposed dust control measures.

Comments:

Submission No: RDEP-Drft-0059
Commenter: Diane L. Arnst, Arizona Department of Environmental Quality, Air Quality Division
Comment: REDUCE DISTURBANCE of PARTICULATE MATTER during CONSTRUCTION
This action, plan or activity may temporarily increase ambient particulate matter (dust) levels. Particulate matter 10 microns in size and smaller can penetrate the lungs of human beings and animals and is subject to a National Ambient Air Quality Standard (NAAQS) to protect public health and welfare. Particulate matter 2.5 microns in size and smaller is difficult for lungs to expel and has been linked to increases in death rates; heart attacks by disturbing heart rhythms and increasing plaque and clotting; respiratory infections; asthma attacks and cardiopulmonary obstructive disease (COPD) aggravation. It is also subject to a NAAQS.

Methodology

Summary:

The commenter suggests that the air quality analysis was overly general. The analysis should include emission factors and methodologies to quantify peak daily and/or peak yearly impacts from RDEP alternatives and should compare the impacts with local, regional, state of Arizona, and/or federal air emissions thresholds.

Response:

The RDEP identifies lands across Arizona that are most suitable for the development of renewable energy. This proposed land use allocation is at the planning-level scale and would not authorize any

specific projects or imply such approval. Any proposal for a wind or solar energy project will still require site specific permitting, additional environmental analysis, and NEPA compliance. The environmental consequences presented in this EIS document the types and general magnitude of impacts that could be anticipated from typical solar and wind energy developments.

While the reasonably foreseeable development scenario provides a magnitude of development in megawatts, and the alternatives recommend where such development could occur in general, the timing, location, and technology of such development would depend on specific development proposals. Any proposal for a solar or wind development will require due diligence, including National Environmental Policy Act (NEPA) compliance; this analysis could include a quantitative accounting of potential emissions and an analysis of a project's adherence to the general conformity rule and Prevention of Significant Deterioration increments, as applicable. Proposed site-specific development actions would also be subject to local air quality permitting requirements. The ROW application process would require implementation of a Dust Abatement Plan and other design measures and best management practices, such as those contained in Appendix B of the EIS. Additional measures could also be required, as determined during both the BLM application process and the local permitting process.

Comments:

Submission No: RDEP-Drft-0042

Commenter: Kirk Brus, Army Corps of Engineers

Comment: 2. Chapter 4.2.1 Air Quality and Air Quality-related Values. The Draft EIS does not contain or discuss quantitative air quality emissions calculations/analyses from the RDEP proposed project alternative construction and/or operation. The Draft EIS should contain sufficient quantitative technical data to permit a full assessment of all potentially significant air quality environmental impact(s). To quantify potentially significant air quality impacts, construction impacts, in particular should include the emission factors and methodologies that are used to establish peak daily (and/or peak yearly) impacts from the RDEP proposed project alternative (s). The evaluation of potentially air quality impacts from the RDEP proposed project alternative should at a minimum include emissions from all on-road mobile sources and offroad mobile sources for construction and transportation equipment on both construction and operation for the RDEP proposed project alternative(s). Making qualitative statements in Chapter 4.2.1 such as: "PV solar facilities would result in negligible emissions of criteria air pollutants from operation of the solar generating equipment itself. Operation of a PV solar facility would result in minor emissions from personal and maintenance vehicles, limited delivery trucks, and limited equipment exhaust, as well as fugitive dust emissions from windborne dust and dust generated by vehicles on unpaved surfaces," and/or "Wind energy facilities would have negligible emissions associated with operation of the wind turbines themselves. Operational emissions would include minor levels of criteria pollutants from scheduled changes of lubricating and cooling fluids and greases, limited vehicle use for maintenance activities, and limited equipment exhaust from routine brush clearing," is not based on quantitative technical data to allow for an adequate and full assessment of all potentially significant air quality environmental impacts, and may not support the existing statements in Chapter 4.2.1 that the RDEP proposed project alternative would have negligible or minor emissions associated with the RDEP proposed project alternative as currently stated, with or without the incorporating Best Management Practices (BMPs) cited in Appendix B on the RDEP proposed project alternative. Also, NEPA requires disclosure, and not providing and/or not discussing quantitative air quality calculations analysis for the RDEP proposed project alternative(s) may not meet the NEPA requirement on disclosure.

Submission No: RDEP-Drft-0042
Commenter: Kirk Brus, Army Corps of Engineers
Comment: Without a quantitative air quality calculations analyses of the RDEP proposed project alternative(s) including doing a comparison with local, regional, state (of Arizona) and/or Federal (National) air emissions thresholds, the RDEP proposed project alternative(s) could require a Conformity Determination per the Federal Clean Air Act (CAA). A reference, from the US Environmental Protection Agency, for air quality emissions calculations analyses is Emissions Factors & AP 42, Compilation of Air Pollutant Emission Factors, and can be found at the following weblink: http://www.epa.gov/ttnchie1/ap42/

Mitigation measures

Summary:

The commenter provides additional mitigation measures to be considered for design features and BMPs.

Response:

Measures similar to those suggested by the commenter to control dust during site preparation and construction were included in the table of BMPs that could be required for solar and wind development (see Table B-4 of Appendix B of the Draft EIS) and are designated as Measures 1 through 17; in the Final EIS, they are consolidated as design features and can be found in Appendix B. To expand on site restoration requirements, Measure 13 has been revised as follows: "Topsoil from all excavations and construction activities shall be salvages and reapplied during reclamation or, where feasible, used for interim reclamation by being reapplied to construction areas not needed for facility operation as soon as activities in that area have ceased. Unused topsoil and other erosion-susceptible material shall be removed from the site via covered trucks."

Comments:

Submission No: RDEP-Drft-0059
Commenter: Diane L. Arnst, Arizona Department of Environmental Quality, Air Quality Division
Comment: The following measures are recommended to reduce disturbance of particulate matter, including emissions caused by strong winds as well as machinery and trucks tracking soil off the construction site:
I. Site Preparation and Construction
A. Minimize land disturbance;
B. Suppress dust on traveled paths which are not paved through wetting, use of watering trucks, chemical dust suppressants, or other reasonable precautions to prevent dust entering ambient air;
C. Cover trucks when hauling soil;
D. Minimize soil track-out by washing or cleaning truck wheels before leaving construction site;
E. Stabilize the surface of soil piles; and
F. Create windbreaks.
II. Site Restoration
A. Revegetate any disturbed land not used;
B. Remove unused material; and
C. Remove soil piles via covered trucks.

G.2.2 Alternatives

Design Features and Best Management Practices

Summary:

The commenters provide new BMPs and design features that the BLM should consider, including those for transportation, lands with wilderness characteristics, and wildlife. Additionally, the commenters provided critiques and suggested changes to BMPs 4, 27, 31, 100, 131-132, 136, 142-143, and 145.

Response:
The RDEP identifies lands across Arizona that are most suitable for the development of renewable energy. This proposed land use allocation is at the planning-level scale and would not authorize any specific projects or imply such approval. Any proposal for a wind or solar energy project will still require site specific permitting, additional environmental analysis, and NEPA compliance. The environmental consequences presented in this EIS document the types and general magnitude of impacts that could be anticipated from typical solar and wind energy developments.

Site specific mitigation measures would be applied to respond to the unique impacts and setting for a particular project.

All of the design features and BMPs listed in Appendix B were intended to avoid, minimize, or mitigate potential resource conflicts, such as impacts on critical wildlife habitat or impacts from siting a project near sensitive viewsheds. The design features and BMPs were reviewed in light of the revised design features of the Solar Energy Final Programmatic EIS and the Wind PEIS ROD. The BLM determined that most of the RDEP's suggested mitigation measures duplicated national program guidance; in order to reduce the duplication, RDEP's design features and BMPs have been modified to conform to the BLM's national solar energy and wind energy programs. Appendix B, Design Features and Best Management Practices, has been modified to incorporate by reference the national solar energy program design features, as described in the Solar Final Programmatic EIS. Only those design features and BMPs that are unique to Arizona and REDA lands are specifically noted in the revised Appendix B.

Many of the comments requested additional BMPs or changes to BMPs that would require more specific coordination and compliance with county planning requirements or involvement (Draft EIS BMP Nos. 4, 27, 31, 100, 131, 132, 136, 142, 143, and 145). The BLM national renewable energy programs have proposed programmatic design features which include many opportunities for local government involvement and consultation, such as:

- Make early contact with local officials, regulators, and inspectors to explore all applicable regulations and address concerns unique to solar power generation projects.
- Emphasize early identification of, and communication and coordination with, stakeholders, including federal, state, and local agencies, special interest groups, Native American tribes and organizations, elected officials, and concerned citizens.
- Consult with local agencies about potential impacts of development in or close to state or local special use areas, such as parks.
- Avoid lands identified as incompatible by local governments for renewable energy development.
- Compare preliminary site grading, drainage, erosion, and sediment control plans with applicable local jurisdiction requirements.
- Consult federal, state, and local "waterwise" guidelines, as applicable, for project development in the arid Southwest.
- Site facilities to maximize local, regional, and statewide economic benefits and coordinate with local and state entities, such as state and county commissions and planning departments.
- Site projects to minimize adverse effects on area housing markets and local infrastructure (e.g., schools and other public services) and to ensure adequate housing vacancy rates and local infrastructure support for workers and their families (Solar Final PEIS, Volume 7, pg. 48).

Additionally, commenters requested provisions for the appropriate disposal of the by-products of water treatment processes and additional measures to ensure that projects are sited so that public motorized access is kept open when existing roads are impacted by a project. There are several design features that address these concerns in Appendix B.

Comments:

Submission No: RDEP-Drft-0001
Commenter: Michael J. Lacey, Arizona Department of Water Resources
Comment: Table B-4, Best Management Practices, Page B-71. CSPs and, to a more limited degree, PV facilities require higher water quality than is likely to be found in the natural environment. As such, water treatment works are likely to be required. Provisions for the appropriate disposal of the by-products of the treatment processes should be added as a BMP.

Submission No: RDEP-Drft-0024
Commenter: Steve Saway
Comment: a. Table 1, Design Features. Recommend Table 1 include additional measures to ensure that projects are sited so that public motorized access is kept open when existing roads are impacted by the project. (The need for this is exemplified by the proposed Gillespie Solar Energy Zone that, if approved, would potentially block public motorized access along Agua Caliente Road and adjoining routes that lead to the Woolsey Peak and Signal Peak Wilderness areas.) For example, on page B-29, under the "Transportation" category, a measure could be added as follows: "A public access plan will be developed to identify alternate motorized routes if a project cannot be sited to avoid impacting existing motorized routes. Project siting will honor all access routes established by the current resource or travel management plan or else provide for suitable alternate routes. "(Appropriate language should also be added to Table 2, Required Plans.) Also, on page B-6, under the category that is titled "Designated Areas with Wilderness Characteristics", the measures are actually applicable to a broader context. Recommend this category be defined as "Unique, Important, or Sensitive Areas". Item 18 under this category could be revised to read as follows: "Renewable energy facilities shall be located and designed to minimize impacts on the viewshed of specially designated visually sensitive areas, including units of the National Landscape Conservation System, Backcountry Byways, designated areas with wilderness characteristics, or areas managed by other federal, state, and local agencies."

Submission No: RDEP-Drft-0010
Commenter: John Shepard, Arizona Solar Working Group
Comment: Wildlife Connectivity: The Mohave REDA is traversed by the large Detrital Wash which may provide connectivity for key wildlife species including pronghorn antelope. RDEP's design features and best management practices should ensure continued access for wildlife through the site to limit habitat fragmentation.

Submission No: RDEP-Drft-0043
Commenter: Karl Taylor, Mohave County Public Works
Comment: BMP No. 4- The recommend measure is too broad and does not include specification of an assessment method for planning purposes. Further, it does not account for various factors affecting wind generated dust emissions, such as nonerodible elements, crust formation, frequency of mechanical disturbance, wind gusts, and wind accessibility.

Submission No: RDEP-Drft-0043
Commenter: Karl Taylor, Mohave County Public Works
Comment: BMP No. 27- New roads constructed on public rights-of-way shall satisfy local government adopted engineering standards for road design, drainage design, construction, and operation. If part or all of BLM road design standards provide more stringent requirements, then BLM standards should govern provided local government concurrence to assure no undue impact on future maintenance and

operational requirements to a local government jurisdiction which potentially may assume future maintenance of proposed new roads.

Submission No: RDEP-Drft-0043
Commenter: Karl Taylor, Mohave County Public Works
Comment: BMP No. 31 - Recommend adding use of nonhazardous and noncorrosive agents in road pavement structure construction.

Submission No: RDEP-Drft-0043
Commenter: Karl Taylor, Mohave County Public Works
Comment: BMP No. 100 -The reference to Traffic Management Plan is too broad in nature and should be expressed under local government planning and operations requirements. Planning requirements may include completion of a Traffic Impact Analysis to identify and properly plan road infrastructure necessary to provide construction and post-construction access to the developed site as well as provide information and data on traffic load (volume and vehicle class/weight) for evaluation of impacts and mitigation requirements on existing local government unpaved and paved roads serving the development. Operations requirements involve obtaining all required State and local government right-of-way use and oversize/overweight vehicle permits pertinent to site construction work and routine operations.

Submission No: RDEP-Drft-0043
Commenter: Karl Taylor, Mohave County Public Works
Comment: BMP No. 131 - Construction grading on property under local government jurisdiction shall adhere to that jurisdiction's permitting requirements and subject to pertinent adopted standards.

Submission No: RDEP-Drft-0043
Commenter: Karl Taylor, Mohave County Public Works
Comment: BMP No. 132- New roads constructed on public rights-of-way shall satisfy local government adopted engineering standards for road design, drainage design, construction, and operation. If part or all of BLM road design standards provide more stringent requirements, then BLM standards should govern provided local government concurrence to assure no undue impact on future maintenance and operational requirements to a local government jurisdiction which potentially may assume future maintenance of proposed new roads

Submission No: RDEP-Drft-0043
Commenter: Karl Taylor, Mohave County Public Works
Comment: BMP No. 136- This measure may be interpreted as a variance to road design standards mandated under other BMP measures on existing road reconstruction and new road construction. Recommend clarifying to remove any unintended interpretation.

Submission No: RDEP-Drft-0043
Commenter: Karl Taylor, Mohave County Public Works
Comment: BMP No. 142 - An access road siting and management plan shall in addition address local government planning requirements. Planning requirements may include completion of a Traffic Impact Analysis to identify and properly plan road infrastructure necessary to provide construction and post-construction access to the developed site as well as provide information and data on traffic load (volume and vehicle class/weight) for evaluation of impacts and mitigation requirements on existing local government unpaved and paved roads serving the development.

Submission No: RDEP-Drft-0043
Commenter: Karl Taylor, Mohave County Public Works
Comment: BMP No. 143 - The reference to Traffic Management Plan is too broad in nature and should be expressed under local government planning and operations requirements. Planning requirements may include completion of a Traffic Impact Analysis to identify and properly plan road infrastructure necessary to provide construction and post-construction access to the developed site as well as

provide information and data on traffic load (volume and vehicle class/weight) for evaluation of impacts and mitigation requirements on existing local government unpaved and paved roads serving the development. Operations requirements involve obtaining all required State and local government right-of-way use and oversize/overweight vehicle permits pertinent to site construction work and routine operations.

Submission No: RDEP-Drft-0043
Commenter: Karl Taylor, Mohave County Public Works
Comment: BMP No. 145- The use of "only if in safe and environmentally sound locations" when referring to a shall (requirement) of existing road use invokes subjectivity on what represents a safe and environmentally sound location without specification of engineering-based standards and/or jurisdiction standards or rules.

Submission No: RDEP-Drft-0058
Commenter: Buster Johnson, Mohave County Board of Supervisors
Comment: BMP No.4 - The recommend measure is too broad and does not include specification of an assessment method for planning purposes. Further, it does not account for various factors affecting wind generated dust emissions, such as nonerodible elements, crust formation, frequency of mechanical disturbance, wind gusts, and wind accessibility.

Submission No: RDEP-Drft-0058
Commenter: Buster Johnson, Mohave County Board of Supervisors
Comment: BMP No. 27 - New roads constructed on public rights-of-way shall satisfy local government adopted engineering standards for road design, drainage design, construction, and operation. If part or all of BLM road design standards provide more stringent requirements, then BLM standards should govern provided local government concurrence to assure no undue impact on future maintenance and operational requirements to a local government jurisdiction which potentially may assume future maintenance of proposed new roads.

Submission No: RDEP-Drft-0058
Commenter: Mohave County Board of Supervisors
Comment: BMP No. 31 - Recommend adding use of nonhazardous and noncorrosive agents in road pavement structure construction.

Submission No: RDEP-Drft-0058
Commenter: Buster Johnson, Mohave County Board of Supervisors
Comment: BMP No. 100 - The reference to Traffic Management Plan is too broad in nature and should be expressed under local government planning and operations requirements. Planning requirements may include completion of a Traffic Impact Analysis to identify and properly plan road infrastructure necessary to provide construction and post-construction access to the developed site as well as provide information and data on traffic load (volume and vehicle class/weight) for evaluation of impacts and mitigation requirements on existing local government unpaved and paved roads serving the development. Operations requirements involve obtaining all required State and local government right-of-way use and oversize/overweight vehicle permits pertinent to site construction work and routine operations.

Submission No: RDEP-Drft-0058
Commenter: Buster Johnson, Mohave County Board of Supervisors
Comment: BMP No. 131 - Construction grading on property under local government jurisdiction shall adhere to that jurisdiction's permitting requirements and subject to pertinent adopted standards.

Submission No: RDEP-Drft-0058
Commenter: Buster Johnson, Mohave County Board of Supervisors
Comment: BMP No. 132 - New roads constructed on public rights-of-way shall satisfy local government adopted engineering standards for road design, drainage design, construction, and operation. If part or all of BLM road design standards provide more stringent requirements, then BLM standards should govern provided local government concurrence to assure no undue impact on future maintenance and

operational requirements to a local government jurisdiction which potentially may assume future maintenance of proposed new roads.

Submission No: RDEP-Drft-0058
Commenter: Buster Johnson, Mohave County Board of Supervisors
Comment: BMP No. 136 - This measure may be interpreted as a variance to road design standards mandated under other BMP measures on existing road reconstruction and new road construction. Recommend clarifying to remove any unintended interpretation.

Submission No: RDEP-Drft-0058
Commenter: Buster Johnson, Mohave County Board of Supervisors
Comment: BMP No. 142 - An access road siting and management plan shall in addition address local government planning requirements. Planning requirements may include completion of a Traffic Impact Analysis to identify and properly plan road infrastructure necessary to provide construction and post-construction access to the developed site as well as provide information and data on traffic load (volume and vehicle class/weight) for evaluation of impacts and mitigation requirements on existing local government unpaved and paved roads serving the development.

Submission No: RDEP-Drft-0058
Commenter: Buster Johnson, Mohave County Board of Supervisors
Comment: "BMP No. 143 - The reference to Traffic Management Plan is too broad in nature and should be expressed under local government planning and operations requirements. Planning requirements may include completion of a Traffic Impact Analysis to identify and properly plan road infrastructure necessary to provide construction and post-construction access to the developed site as well as provide information and data on traffic load (volume and vehicle class/weight) for evaluation of impacts and mitigation requirements on existing local government unpaved and paved roads serving the development. Operations requirements involve obtaining all required
State and local government right-of-way use and oversize/overweight vehicle permits pertinent to site construction work and routine operations."

Submission No: RDEP-Drft-0058
Commenter: Buster Johnson, Mohave County Board of Supervisors
Comment: BMP No. 145 - The use of "only if in safe and environmentally sound locations" when referring to a shall (requirement) of existing road use invokes subjectivity on what represents a safe and environmentally sound location without specification of engineering-based standards and/or jurisdiction standards or rules.

Development Incentives

Summary:

The commenters suggested additional developer incentives for the BLM to consider as part of the RDEP. These include applying the incentives from the Solar Program IMs to projects of any size (not just developments that are greater than 20 megawatts), policies for processing priority project applications (such as those sited in REDAs versus non-REDAs), 30-year terms on renewable energy ROWs, lower rental fees, and a comprehensive mitigation program.

Response:

RDEP will follow the national solar and wind program policy and guidance, which would include the requirements presented in the Solar Program IMs. The national solar program is developing incentives through a formal rulemaking process that is scheduled to be completed in 2013. In addition to the national program guidance, RDEP is considering some additional incentives for development in the REDAs as presented in the Draft EIS, including streamlined ROW processing for utility-scale solar by

providing analysis that meets much of the national solar program's variance process, giving renewable energy development first priority over other land uses within REDAs while honoring valid existing rights, giving renewable energy development applications within the REDAs the first priority processing over applications located outside of the REDAs, and giving electricity transmission projects and needs related to renewable energy development applications within the REDAs priority location and processing over these applications outside of the REDAs (Draft EIS, pg. 2-13). Lands outside REDAs would not receive priority processing, but application on lands with minimal sensitive resources would likely require less environmental review and mitigations making the processing process simpler.

The BLM's current rental policy is interim and will continue to be evaluated to ensure the government is getting the best value for public lands and that the rates are favorable to promote economic growth. Under most circumstances ROW grant holders can request to renew an expiring 30 year grant. The BLM may grant that renewal if they are in good standing and if they can demonstrate that there is a public and market need for that use of public land. Most power purchase agreements are 20 years, therefore a 30 ROW grant allows for that 20 year power purchase agreement, construction, decommissioning, and reclamation.

Comments:

Submission No: RDEP-Drft-0010
Commenter: John Shepard, Arizona Solar Working Group
Comment: What has not been addressed in the DEIS are the financial and technical capability of the applicant as a factor for variance applications. We offer some recommendations in our "Incentives" section that should help meet these requirements.

Submission No: RDEP-Drft-0006
Commenter: Alex Daue, The Wilderness Society
Comment: Recommendations: We encourage Arizona BLM to make clear its expectation of a more efficient permitting process for applications in REDAs. In addition, we suggest that variance applications in REDAs that have been screened for economic and technical viability (consistent with BLM Instruction Memoranda IM 2011-060) be processed before variance applications outside of REDAs. Finally, establishing a comprehensive mitigation program for developers to take part in would benefit both developers and Arizona BLM. The goals of such a program should be to simplify and improve the mitigation process for future projects.

Submission No: RDEP-Drft-0025
Commenter: Christopher Lish
Comment: Second, the BLM should develop additional incentives for developers to put projects in low-conflict sites identified in the plan. By making it more economical and efficient to build there, it will reduce the likelihood of projects being built in other areas with sensitive wildlands and wildlife habitat.

Submission No: RDEP-Drft-0005
Commenter: Katherine Gensler, Solar Energy Industries Association
Comment: Many of these proposals mimic the current policies for utility-scale (greater than 20 MW) solar projects, as spelled out in several 2011 Instructional Memoranda. These economic incentives should accrue to any project in a REDA, regardless of its size.

Submission No: RDEP-Drft-0010
Commenter: John Shepard, Arizona Solar Working Group
Comment: We encourage Arizona BLM to make clear its expectation of a more efficient permitting process for applications in REDAs. In addition, we suggest that projects in REDAs that have been screened for economic and technical viability (consistent with BLM Instruction Memoranda IM 2011-060) automatically qualify for the "Priority

Projects" list or other priority processing scheme that BLM institutes, and are otherwise processed before non- REDA applications

Submission No: RDEP-Drft-0010
Commenter: John Shepard, Arizona Solar Working Group
Comment: To make the REDAs more attractive to developers, we propose these economic incentives. Many of these proposals mimic the current policies for utility-scale (greater than 20 MW) solar projects, as spelled out in several 2011 IMs. These economic incentives should accrue to any project in a REDA, regardless of its size.

Submission No: RDEP-Drft-0010
Commenter: John Shepard, Arizona Solar Working Group
Comment: Recommendations: A long-term lease is of great importance to solar developers, as the ROW term needs to match the duration of the power purchase agreement signed with the utility customer plus the project's construction time. Therefore, we request a minimum ROW term of 30 years, with the opportunity to renew. In addition, we suggest that ROW grants have a flexible duration, such that the applicant could choose an initial ROW grant of more than 30 years, if so desired

Submission No: RDEP-Drft-0010
Commenter: John Shepard, Arizona Solar Working Group
Comment: In addition, lower rental fees will make development in REDAs a more attractive proposition. While ASWG was unable to agree upon specific recommendations for reduced rental rates, we do agree that applications in REDAs should receive some kind of reduced rental rate, so long as the rate still provides fair market value for the use of public lands.

Submission No: RDEP-Drft-0005
Commenter: Katherine Gensler, Solar Energy Industries Association
Comment: Finally, establishing a comprehensive mitigation program for developers to take part in would benefit both developers and Arizona BLM. The goal of such a program should be to reduce costs to the developer while better meeting the mitigation needs of Arizona BLM. Up-front information about what mitigation is necessary and a list that outlines options a developer may take to satisfy the mitigation requirements would create a smoother process for all involved.

Submission No: RDEP-Drft-0010
Commenter: John Shepard, Arizona Solar Working Group
Comment: Finally, establishing a comprehensive mitigation program for developers to take part in would benefit both developers and Arizona BLM. The goals of such a program should be to reduce costs and simplify and improve the mitigation process for future projects. Developers should know in advance what mitigation measures may be and have a list of options to comply.

Submission No: RDEP-Drft-0065
Commenter: The Wilderness Society
Comment: Second, the BLM should develop additional incentives for developers to put projects in low-conflict sites identified in the plan. By making it more economical and efficient to build there, it will reduce the likelihood of projects being built in other areas with sensitive wildlands and wildlife habitat.

Submission No: RDEP-Drft-0003
Commenter: Amanda Ormond, Interwest Energy Alliance
Comment: Recommendation 6 – Developer-Obtained Information
Project developers are responsible for performing or having performed myriad assessments of lands they are proposing to develop. From these evaluations developers may have additional or more up-to-date information than the Department. Interwest believes that if a developer can show the Department that the area proposed for development has the same characteristics as REDA lands the Department should have a process to allow that proposed project land to be designated as "REDA lands" for

the purpose of the developer receiving incentives (see recommendation 3 for more information on incentives).
Interwest recommends that the Department allow developers to receive incentives for siting on non-REDA lands if the developer can demonstrate that the proposed project parcel has the same characteristics as REDA lands.

Disposal

Summary:

Mohave County would like the BLM to make the commitment that land swaps would not result in a net loss of private lands in the county.

Response:

BLM would review any proposal for sale or exchange of lands marked for disposal in a current RMP on a case-by-case basis. However, should a willing partner propose the sale or exchange of lands, all applicable policy and guidance on disposal of BLM lands would be followed including coordinating and consulting with Arizona state agencies and local government and agencies. This requirement for consultation is also reiterated as a management action considered as part of the alternatives in RDEP (see Land Tenure Management Actions in the Draft EIS, pg. 2-13).

Any land tenure adjustments for BLM-administered lands, whether as part of a REDA or outside a REDA, would solely be for lands that have been previously identified for disposal in current RMPs. The process would be conducted on a case-by-case basis RDEP is not considering new disposal decisions..

Comments:

Submission No: RDEP-Drft-0058
Commenter: Buster Johnson, Mohave County Board of Supervisors
Comment: The County is also very concerned about the potential loss of additional private lands available for development. Specifically, Mohave County would like a commitment from the BLM, as a part of this program, to the effect that no BLM land swaps or sales result in a net loss of private, usable land within Mohave County.

Elimination Criteria

Summary:

The BLM needs to better explain how it applied the wildlife-related screens, including Arizona's Game and Fish Department's Species and Habitat Conservation Guide (Species and Habitat Conservation Guide), as well as how other screens were developed, selected and applied, or rejected.

Response:

The RDEP REDA GIS methodology has been included as in the online GIS metadata (see RDEP project Web site). The metadata details what was used to create the REDA screens, the queries or boundaries placed on the REDA screen data, information on the decision process. In some instances, such as data layers or information supplied by cooperating agencies (e.g., the AGFD Species Habitat Conservation Guide), the screens' methodologies are briefly summarized and noted as incorporated by reference. Full information on these data would be available from the source agency or organization.

Comments:

Submission No: RDEP-Drft-0010

Commenter: John Shepard, Arizona Solar Working Group

Comment: Without the needed information, we are left with a very general understanding of the way in which BLM applied the wildlife-related screens, including AGFD's Species and Habitat Conservation Guide (Species and Habitat Conservation Guide). The narrative provided for the application of the AGFD's Species and Habitat Conservation Guide is very general (DEIS, pages 4-42 and 4-46), and does not provide sufficient detail as to how other screens, such as those related to big game were developed, selected (or rejected) and applied.

Additional Buffer

Summary

The BLM should include a one-kilometer buffer to the wildlife linkages screening model.

Response

Beier wildlife linkages were used as a REDA screen in the Draft EIS. The BLM reviewed using a 1 km buffer around these wildlife linkages as a REDA screen. The analysis concluded that using Beier wildlife linkages 1 km buffer may or may not suitable as wildlife corridors depending on site conditions. The identification of a REDA is at the planning-level scale and would not authorize any specific projects or imply such approval. Any proposal for a wind or solar energy project will still require site specific permitting, additional environmental analysis, and NEPA compliance. Project specific analysis would include an accounting of any potential wildlife corridors/linkages.

Comments:

Submission No: RDEP-Drft-0071

Commenter: Jamie Rappaport Clark, Defenders of Wildlife

Comment: Recommendation: Documented wildlife linkages and areas important for habitat connectivity should be excluded from REDAs, even as their more formal scientific documentation is pending, so as to preserve their integrity and functionality. Both solar and wind development have a high potential to cause habitat loss, fragmentation and disturbance that could render these important linkages ineffective. This is of particular concern for intervening lands that may not rank high in terms of biological diversity, but play an important role in terms of facilitating crucial dispersal and migration events for wildlife. Defenders supports the BLM's use of the AGFD / NAU Beier Lab subset of priority modeled wildlife linkages as a screen. In addition, we recommend including a 1 km buffer screen surrounding these linkages in order to protect their functionality (i.e. reducing edge effects associated with development and human activities). We recommend that upon RDEP screens being revisited in the future, the most current modeled wildlife linkages for completed county-level assessments should be obtained by from the AGFD and utilized as screens, as were the AGFD / NAU Bier Lab subset of priority wildlife linkages.

Citizen's Proposed Wilderness

Summary:

The BLM should eliminate Citizen Proposed Wilderness lands from consideration as REDA.

Response:

The screening criteria for REDAs rely on formally designated special designations to be consistent with BLM guidance and handbooks on wilderness. Wilderness Areas and Wilderness Study Areas have been eliminated from REDAs, and most of the CPW areas are already screened out due to other resources

being present. An analysis of citizen proposed wilderness has been added to the Final EIS in Chapter 4, Environmental Consequences. Should citizen-proposed wilderness areas be designated as Wilderness Areas in the future, then they will be eliminated from any renewable energy development as noted in national solar and wind energy policy.

Comments:

Submission Nos: RDEP-Drft-0031 and No: RDEP-Drft-0033

Commenters: Kathy Lopez and Jeanie Watkins

Comment: Citizen's Proposed Wilderness (CPW) lands throughout Arizona should be screened out and removed from REDA lands. In the current EIS, the preferred alternative has only 500 acres of conflict, but the BLM can do a better job.

The proposed Agua Caliente Solar Energy Zone (SEZ) west of Gila Bend fails to avoid two Citizen Proposed Wilderness Areas. The proposed SEZ should be modified to avoid these areas and be exposed to the same environmental and cultural resource screens that other areas are.

Submission No: RDEP-Drft-0006

Commenter: Alex Daue, The Wilderness Society

Comment: Citizen's Proposed Wilderness Areas – These should be added as screens. These citizen-inventoried areas contain wilderness characteristics, are otherwise undisturbed, and lack evidence of substantive human development. As such, they are not low-conflict areas. GIS data for these areas is included in the enclosed CD, Attachment 1.

Submission No: RDEP-Drft-0071

Commenter: Jamie Rappaport Clark, Defenders of Wildlife

Comment: we advocate for all CWP units to be screened out 100%, to avoid the inclusion of, and future conflict with, any lands that have been documented to contain wilderness characteristics and values.

Cultural Resources

Summary:

The commenters suggest adding NRHP-listed sites, NRHP-eligible sites, and Native American sensitive sites and traditional cultural properties to the listing of screening criteria in Table 2-1, Areas with Known Sensitive Resources.

Response:

Due to the statewide scale of RDEP and the extensive presence of cultural resources throughout the state, it is impractical for Class III surveys to be conducted to identify all NRHP-eligible sites. Additionally, a complete review of the AZSITE database would not provide a full inventory of archaeological sites as less than 10 percent of the area in Arizona has been surveyed to current standards. As noted above, the REDAs identified in the alternatives are being considered for *potential* development. This proposed land use allocation is at the planning-level scale and would not authorize any specific projects or imply such approval. Any proposal for a wind or solar energy project will still require site specific permitting, additional environmental analysis, tribal consultations, and cultural resource program compliance, including following the National Historic Preservation Act (NHPA), associated regulations, and all BLM manuals. This would include conducting cultural resources inventories (e.g., Class III surveys) of the development proposal and a full analysis of the impacts on any resources found in the area of potential effect. In accordance with federal laws, regulations, and BLM policy, tribes will be invited to participate in pre-application meetings during the initial phase of project siting, which will facilitate early identification of traditional resources that could be affected by a proposed project. This process would improve efforts to identify and avoid impacts to TCPs and sacred

sites and could lead to changes in the location or boundaries of a project. See the Cultural Resources section below for additional information on affected environment and impact analysis requirements as part of RDEP and future NEPA analysis.

At this stage of screening for potential REDAs, the BLM did not use a single, statewide, cultural resources data layer as one of the screening criterion. However, the RDEP did use data from those areas that are well documented by the BLM (e.g., Sears Point) and that are known to contain highly unique or significant sites at risk, intact cultural landscape values, or significant cultural resources, due to high densities of archaeological sites (see the revised Table 2-1 in the Final EIS). Areas screened out from REDA specific due to sensitive cultural resources are as follows:

- House Rock Valley
- Poston Butte
- Petrified Forest Expansion Area
- Gila River Terraces
- Clanton Hills

Many of the most significant cultural resources on BLM-administered lands, including National Register-listed sites and districts (such as Sears Point, Painted Rocks, and Perry Mesa) are within National Monuments, National Conservation Areas, and Areas of Critical Environmental Concern that were eliminated from REDA consideration. Other locations and landscapes that were eliminated from consideration for various reasons, such as lands with wilderness characteristics, also are known to contain important cultural resources.

The EIS analysis reviewed current National Register listings to determine the presence or proximity of listed properties in relation to the REDAs and SEZs considered for the "Maximum REDA" alternative (Alternative 1). Approximately 90 of the total of 1,384 listed properties and districts in Arizona (about seven percent) are within or near the REDAs and SEZs. Most of these 90 properties are outside of proposed renewable energy areas but could potentially be affected by visual impacts. There are 19 National Register-listed properties on BLM-administered lands, all of which are managed for long-term preservation and protection. Some of these properties (such as Sears Point) could be affected by visual, auditory, or atmospheric impacts to their settings. The effects would need to be determined on a project-specific basis with efforts to avoid or mitigate any adverse effects.

The RDEP also includes the suite of design feature requirements that would be required as part of the design for renewable energy projects (see Appendix B in the Final EIS). Additionally, the BLM is committed to working with tribes and the Arizona State Historic Preservation Office on specific projects to avoid impacts on significant cultural resources.

Comments:

Submission No: RDEP-Drft-0020

Commenter: Rebecca A. Loudbear, Colorado River Indian Tribes

Comment: The screen, however, includes virtually no consideration of cultural resources. ES-b to 11. The list does not include sites or districts listed on the National Register of Historic Places, nor does it include other previously identified cultural resource sites. Other than the Gila River Terraces, which are a proposed cultural resources ACEC, the list includes no traditional cultural properties or other areas sacred to tribes. As the DEIS recognizes, the identified REDA therefore "could include lands where there are tribal interests and heritage

resources that are not currently identified." DEIS 4-71; see also DEIS 4-72 ("Impacts are discussed generically, because the presence, absence, or location of tribal interests and heritage resources and their relation to potential renewable energy development are not fully known and would be identified through project-specific consultations."); DEIS App. 4-3 ("Potential effects on cultural resources in adjacent areas, or tribal concerns such as visual impacts or access issues relating to places of traditional importance, could raise issues that would need to be addressed through the Section 106 of the NHPA consultation process).

Submission No: RDEP-Drft-0020
Commenter: Rebecca A. Loudbear, Colorado River Indian Tribes
Comment: "In addition, deferral of cultural resource identification is inappropriate because the purpose of the RDEP is to provide guidance on "where development should occur." DEIS 1-3 (emphasis added). The RDEP sets the ball in motion for fast-paced, streamlined develop of solar and wind resources on BLM-administered land. DEIS ES-2. Even assuming future surveys and tribal consultation are completed when project-specific development is proposed, it will be exceedingly difficult to change course at that future juncture, given the significant investment of time and resources by both BLM and the developer. The DEIS acknowledges as much, stating that due to the small size of BLM's preferred alternative "if heritage resources were discovered within the REDA, it would be more difficult to move or microsite any proposed development." DEIS 2-57. By identifying cultural resources before significant bureaucratic and financial momentum builds for a particular project, the RDEP could avoid repeatedly re-creating the problems that have arisen at Genesis.

Submission No: RDEP-Drft-0020
Commenter: Rebecca A. Loudbear, Colorado River Indian Tribes
Comment: Without directly explaining this omission, the DEIS hints at various excuses for failing to exclude areas of potential cultural resource significance. First, the DEIS suggests that because little is currently known about cultural resources across the state of Arizona, and because this DEIS has a "programmatic focus" (DEIS ES-7), it is appropriate to defer analysis of cultural resources to a later time. The argument is wrong on both the facts and the applicable law. The DEIS acknowledges that data on previously recorded sites already exists in the Arizona Archaeological Site and Survey Database and in National Register of Historic Places. DEIS 3- 13.There is no reason that this information cannot be included in the screen; indeed, it is necessary to include it to ensure that the REDAs actually represent areas of low resource sensitivity. In addition, the DEIS claims that consultation with affected tribes began early, in order to "thoroughly consider[] cultural resources in [all] environmental analysis. DEIS ES-5, see also DEIS 1-22. The RDEP should not be approved and the EIS should not be certified until consultation has progressed sufficiently to identify all resources of significance to tribes, so that they can be eliminated from the final REDAs. See DEIS 3-11 (BLM acknowledges that it "is obligated under the [NHPA], FLPMA, NEPA, and agency policy to protect cultural resource values and to consider and mitigate the potential impact of proposed activities and land use plans."). If desired by the affected tribes, a complete ethnography should be completed of the region to aid in this identification.

Deletion

Summary:

Commenters suggest that the following REDA screening criteria be eliminated: VRM Class III, Airports, Areas of Known Mineral Deposits, incorporated cities, and floodplains.

Response:
The BLM reviewed the commenters list of elimination criteria suggested for deletion and made the following findings and conclusions:

- VRM Class III areas: While it may be possible to site renewable energy developments within VRM Class III areas, this management objective class is known to have constraints that could make siting difficult. Considering that RDEPs stated purpose is to allow the permitting of future renewable energy development projects to proceed in a more efficient and standardized manner and occur in areas with the fewest known constraints, keeping VRM Class III as a screening criteria meets the purpose for RDEP. VRM Class III areas would still be available for application. Airports: Based on public comments noting that airports could be very good sites for renewable energy development and subsequent review by BLM, airports were deleted from Table 2-1.
- Areas of known mineral deposits: Arizona has a large potential for development of various mineral deposits. Harvesting many minerals requires significant land disturbance. To avoid conflicts between mining and renewable energy, areas with the highest potential of subsurface minerals were used as a screen. As reflected in RDEP, BLM supports the reuse of disturbed lands and proposes management measures that would facilitate renewable energy development at mining sites. Unless REDAs are petitioned for withdrawal as a future action, lands with mineral resources would be managed under applicable minerals laws and regulations.
- Floodplains: BLM acknowledges that some floodplains could be disturbed and therefore be suitable for renewable energy development. However, many floodplains are still undisturbed and have resource constraints such as possible sever erosion and other resource concerns. Based on these constraints, BLM decided to keep floodplains as an elimination criterion in Table 2-1. However, it's important to note that development could still be permitted on the lands outside of REDA.
- Slope: As slope increases there is a higher potential for resource conflicts, including erosion, gullying, habitat loss, alteration of nutrient cycling, and changes to local hydrological conditions. BLM expects that REDAs will be areas of low resource conflicts; therefore, slope serves as a valid screening tool.

Comments:
Submission No: RDEP-Drft-0003
Commenter: Amanda Ormond, Interwest Energy Alliance
Comment: "Recommendation 7 - Changes to Screening Process
There are several layers that were incorporated in the process that we believe are unnecessary or inappropriate to identify low-conflict lands.
• Remove BLM Visual Resource Management Classes 3. These areas are currently available for mineral and wind energy development and should be allowed for renewable energy development under the RDEP process.
• Remove Airports (.25 mile buffer) as a screen. Airports can provide an ideal location for development of solar resources. The U.S. Air Force and airports (Prescott Airport and Denver International Airports) are examples.
• Remove Areas of Known Mineral Deposits – Land use for mining and renewable energy generation are not automatically incompatible and should be allowed where appropriate. "

Submission No: RDEP-Drft-0010
Commenter: John Shepard, Arizona Solar Working Group
Comment: FEMA 100-year Floodplains – In the state of Arizona, a number of human-made structures have been developed to collect and channel floodwaters away from vulnerable infrastructure and

facilities. In many instances, these installations create floodplains that may be perfect for the development of some renewable energy facilities. Therefore, ASWG recommends that floodplains be removed as a screen, recognizing the likelihood that many of these areas may be good candidates for solar development. In other circumstances, however, there are natural floodplains that retain critical ecological value that should not be developed. Such areas may include ephemeral washes, xeroriparian areas, seasonally dry rivers, wetlands, agricultural ponds, and a variety of other mapped floodplains that retain valuable resources that preserve the viability of wildlife in the arid Arizona climate. Thus, we encourage the BLM to take special care when evaluating project-specific sites within and around 100-year floodplains to ensure that impacts to critical resources are limited.

Submission No: RDEP-Drft-0006
Commenter: Alex Daue, The Wilderness Society
Comment: Airports (.25 mile buffer) – These should be removed as a screen. As demonstrated at various airports and military airfields and bases, solar generation can be compatible in or near airports or flight facilities. A recent report by the US Department of Agriculture evaluating the potential for alternative energy production at airports notes that "with careful planning, locating alternative energy projects at airports could help mitigate many of the challenges currently facing policy makers, developers, and conservationists" (DeVault et al. 2012).
Incorporated Cities – These should be removed as a screen. Cities and towns in Arizona are considering establishing Renewable Energy Incentive Districts and other zoning designations that encourage solar at various scales within their jurisdictions. This screen is not consistent with such efforts.
Areas of Known Mineral Deposits – These should be removed as a screen. Mining and solar or wind generation are not inherently incompatible activities and, in certain instances, could be co-located.

Submission No: RDEP-Drft-0010
Commenter: John Shepard, Arizona Solar Working Group
Comment: Areas of Known Mineral Deposits – These should be removed as a screen. Mining and solar or wind generation are not inherently incompatible activities and, in certain instances, could be co-located.

Submission No: RDEP-Drft-0010
Commenter: John Shepard, Arizona Solar Working Group
Comment: Airports (0.25 mile buffer) – These should be removed as a screen. As demonstrated at various airports and military airfields and bases, solar generation can be compatible in or near airports or flight facilities. A recent report by the US Department of Agriculture evaluating the potential for alternative energy production at airports notes that "with careful planning, locating alternative energy projects at airports could help mitigate many of the challenges currently facing policy makers, developers, and conservationists" (DeVault et al. 2012).

Submission No: RDEP-Drft-0010
Commenter: John Shepard, Arizona Solar Working Group
Comment: Incorporated Cities – These should be removed as a screen. Cities and towns in Arizona are considering establishing Renewable Energy Incentive Districts and other zoning designations that encourage solar at various scales within their jurisdictions. This screen is not consistent with such efforts.

Geographic Information System Data

Summary:

The commenter suggests adding The Nature Conservancy's ecoregional conservation assessment datasets to the Areas with Known Sensitive Resources.

Response:
The BLM used its national and Arizona datasets for sensitive species habitat, and AGFD data sets for sensitive species locations and Species Habitat Conservation Guide as REDA-eliminated criteria. The Nature Conservancy ecoregional assessments were reviewed, and BLM found that they also incorporated AGFD data for ESA listed species and BLM sensitive species, and overlapped with much of the RDEP datasets. The BLM will continue to evaluate data sets for site specific analysis if future developments are proposed within REDAs.

Comments:
Submission No: RDEP-Drft-0009
Commenter: Rob Marshall, MFS, The Nature Conservancy
Comment: "Areas of regional significance identified in ecoregional assessments often include species listed under the ESA or important terrestrial and aquatic wildlife habitat needed to ensure wildlife populations remain viable and do not warrant protection under the ESA. While some areas identified in ecoregional assessments do not have special designations or special status species, their regional importance in maintaining non T&E species, healthy watersheds and the continued provisioning of ecosystem services qualifies these areas as having recognized values and high sensitivity to impacts from habitat conversion.
Table 1a lists the acres of overlap between BLM's preferred alternative and grasslands with the highest ecological integrity in Arizona. Table 1b identifies the specific areas where BLM's preferred alternative overlaps with areas of regional conservation importance and the percentage overlap, which gives an indication of the magnitude of impact if development were to proceed in these areas.
Table 1a. Acres overlap between native, intact grasslands in Arizona and the RDEP preferred alternative on BLM and non-BLM lands. Grasslands listed by TNC ecoregion in which they occur. Grasslands are native dominated grasslands (Class A = native grasslands with less that 10% shrub cover; Class B = native grasslands with 10-35% shrub cover) or sacaton grasslands (Class C) from TNC grasslands assessment (2004).

Submission No: RDEP-Drft-0009
Commenter: Rob Marshall, MFS, The Nature Conservancy
Comment: 1) Add regional conservation datasets to the analysis used to identify Areas with Known Sensitive Resources. BLM has made significant progress in identifying REDAs lands with low resource sensitivity. Two important regional conservation assessments that identify sensitive biological resources were omitted from the analyses: The Nature Conservancy's ecoregional conservation assessments for the state and the statewide grassland assessment. Overlaying the proposed REDAs with these datasets reveals several additional areas with biological values of regional importance that meet the criteria for "Areas with Known Sensitive Resources". These areas should also be excluded from REDA consideration. These assessments were derived using the best available science to identify lands and waters of regional conservation significance. Extensive data from state, federal and other regional datasets along with expert knowledge was captured in a scientifically repeatable process from multiple stakeholders across government and non-governmental agencies, tribal interests and the private sector. These datasets have been used widely as environmental screens and are publically available for download (http://azconservation.org/).

Black Mesa
Summary:
The BLM should consider additional data to screen for REDAs in the Black Mesa area.

Response:
BLM initiated consultation with affected tribes early in the RDEP development process. As a matter of practice, the BLM coordinates with all tribal governments, associated native communities, native organizations, and tribal individuals whose interests might be directly and substantially affected by activities on public lands. As tribes are sovereign nations, the BLM only considered requests for consultation and inclusion of tribal lands through federally recognized tribal governments and agencies. During consultation, tribes identified their interests and concerns in regard to developing renewable energy projects on tribal lands, adjacent lands, and traditional territories, and highlighted a desire to better understand the nature, benefits, costs, and environmental impacts of various technologies. However, the tribes did not become formal cooperating agencies, did not express an interest for BLM to include tribal lands as part of the planning and analysis area, and, apart from one exception no tribe submitted nominated sites from tribal lands for consideration as part of RDEP. As a result, tribal lands were not included in the RDEP planning area or the analysis area. The Final EIS has been updated to include this explanation.

The BLM is committed to ongoing consultation with tribes after RDEP; the BLM would be able to provide information and analysis to help inform tribal governments and agencies, and serve as a resource for the tribal members, policy makers, and energy planners that are considering renewable energy projects on their lands. This could include providing the screening criteria (the resources noted in Table 2-1) used to define REDAs to tribes to use if they would like to do a similar screening process on their lands.

Comments:
Submission No: RDEP-Drft-0060
Commenter: Beth Rivers, Indigenous Support Coalition of Oregon
Comment: Please use data from the report written by Southwest Research and Information Center for your analysis: http://coaldiver.org/documents/black-mesa-solar-potential-report-2010 Black Mesa has the slope, the radiance, the acreage, the roads, access and proximity to transmission facilities with right-of-ways already established; it already has had resource clearances and resources removed, and wells are available for the water needed without any danger of depleting the aquifer or contaminating streams by solar operations. (See pages 2, 4-9) http://empowerblackmesa.org/docs/JJClacs/BMESA_Maps_%20FINAL.pdf

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Non-BLM Lands

Summary
The BLM should apply the screening criteria to all non-BLM-administered lands (private and state), not just BLM-administered lands.

Response
The BLM defined the RDEP planning and analysis areas as all lands within Arizona, except for Department of Defense and tribal lands. The REDA screening criteria, including big game layers provided by the AGFD, were applied across the entire planning area in order to provide analysis that would help inform state, tribal, and local governments and agencies and serve as a resource for the general public, policy makers, and energy planners that are considering renewable energy projects. The Final EIS has been revised to clarify what lands were considered in the planning and analysis areas and the rationale for doing so; see Section 1.6, Scope of the Analysis.

Comments:

Submission No: RDEP-Drft-0052

Commenter: Ginger Ritter, Arizona Game and Fish Department

Comment: The Department analyzed the affect these changes would have on the REDAs, both the maximum REDA and the Collaborative REDA (Appendix 1). While conducting this analysis, it appeared that the big game layers were only used on BLM administered lands. For consistency and to truly focus renewable energy development on lands with low resource sensitivity and few environmental conflicts, the big game layer exclusions should be applied to all lands regardless of ownership.

National Park System Units

Summary:

The commenter suggests additional lands that should be screened out from REDA consideration due to sensitive viewsheds near NPS units.

Response:

The BLM appreciates the importance of the setting, character, and resources of National Park System lands. How these lands could be impacted by renewable energy development is very dependent upon the proposed technology and site characteristics (e.g., topography, vegetation, wind direction, viewshed, wildlife corridors, and habitat). Therefore at the planning level it is difficult to conduct such site-specific analysis. To avoid conflicts with National Park System lands, the following management action has been added to the Final EIS in Chapter 2, Alternatives. It applies to all action alternatives and is consistent with direction in the Solar PEIS (BLM and DOE 2012).

Where a wind or solar energy development ROW application is submitted in a REDA that is in an areas identified by the National Park Service as having a high potential for conflict with the resources of a unit of the National Park Service or special areas administered by the National Park Service, additional documentation will be required. This documentation may include information to verify any or all of the following potential resource conditions resulting from the proposed project:

- Increased loading of fine particulates (criteria pollutants: PM 2.5 and PM10 [particulate matter with a diameter of 2.5 μm or less and 10 μm or less, respectively]) and reduced visibility in Class I and sensitive Class II areas;
- Atmospheric, auditory, or visual alterations to the settings of sites, structures, or trails that are managed for their historical, cultural heritage, or interpretive values;
- Enhanced public access that could increase the threat of damage or vandalism to cultural resources administered by the NPS;
- Altered frequency and magnitude of floods, and water quantity and quality;
- Reduced habitat quality and integrity and wildlife movement and/or migration corridors; increased isolation and mortality of key species;
- Fragmentation of natural landscapes;
- Diminished wilderness, scenic viewsheds, and night sky values on landscapes within and beyond boundaries of areas administered by the NPS; and
- Diminished cultural landscape qualities within and beyond boundaries administered by the NPS.

In response to NPS comments on the Solar Programmatic EIS, BLM-administered lands near Wupatki National Monument and Fort Bowie National Historic Site were eliminated from consideration as REDAs.

Comments:

Submission No: RDEP-Drft-0066
Commenter: John Wessels, National Park Service
Comment: "Another area of concern is that several alternatives, including the preferred alternative, identify state and private lands south and west of Pipe Spring NM as suitable for development of renewable energy projects. Because these tracts are in the immediate viewshed of Pipe Spring NM, such developments would be inconsistent with the historic scene and may potentially result in adverse effects to this historic viewshed. Specifically, these private and state lands are south and west of the Kaibab Paiute Reservation and include lands within the Kanab Creek Watershed and the Crest of Cedar Ridge. We request that the following lands be deleted from the non-BLM Administered lands identified for ""collaborative-based REDA.""
Township 39N, range 4W, all non-BLM sections
Township 39N, range 5W, all non-BLM sections
Township 39N, range 5W, all non-BLM sections
Township 40N, range 5W, Section 7, and Sections 16-36
Township 40N, range 6W, Sections 8-36
The location of solar infrastructure should be sensitive to the viewshed of Pipe Spring NM, and mitigation measures should be applied to minimize the visual intrusion from solar infrastructure."

Submission No: RDEP-Drft-0066
Commenter: John Wessels, National Park Service
Comment: In addition to our request under item 2) above [RDEP-EIS lands proposed for development that are in proximity to NPS units should be excluded from consideration until decisions on land exclusions and resource protection criteria are finalized in the Solar PEIS], NPS also requests all solar energy program lands identified by the NPS as areas having high potential for conflict with NPS-administered resources and located outside the RDEP-EIS preferred alternative be considered for exclusion from utility-scale solar development. Because the RDEP-EIS tiers off of the Solar PEIS, we believe that the Final RDEP-EIS should not be prepared prior to the Record of Decision on the Solar PEIS. This chronology would allow for greater specificity of potential impacts, avoidance and mitigation considerations, and a more informed decision-making process.

Submission No: RDEP-Drft-0010
Commenter: John Shepard, Arizona Solar Working Group
Comment: Proximity to Road to Lake Mead National Recreation Area: The National Park Service has expressed concerns about the proximity of this site to Temple Bar Road and the entrance to the recreation area.

Parcel Size

Summary:

The BLM should set a minimum parcel size and generation capacity as a requirement for REDAs; any parcel that would not meet the size/generation capacity requirement should be eliminated from consideration.

Response:

Based on commenter input, the BLM reviewed the areas with small REDA parcels and determined that it made sense to revise the screening criteria to eliminate parcels that are eight acres or less. However, in the case when the small parcel is immediately adjacent to a larger REDA, then it was encompassed into the larger REDA.

Comments:

Submission No: RDEP-Drft-0071
Commenter: Jamie Rappaport Clark, Defenders of Wildlife
Comment: Even though RDEP, unlike the Solar PEIS, is meant to examine renewable energy generation at all scales (not just utility-scale), we recommend that RDEP establish a minimum REDA parcel size, tied to a minimum generation capacity, for planning and analysis purposes. A minimum parcel size would reduce habitat fragmentation as a result of small developable REDAs (and all their attendant road, transmission, and other infrastructure) scattered across the landscape, reduce the difficulties in planning for and siting transmission, and would provide additional coherence in planning. In studies with the National Renewable Energy Laboratory (NREL) BLM has not used a minimum parcel size for solar PV generation planning, but has incorporated minimum sizes for wind (50 acres for grid connected sites) and solar CSP generation (40 acres). 3 By not using a minimum parcel size in the DEIS, the screening processes for alternatives 1 and 6 produced enormous numbers of REDAs, most of which are extremely small—26,082 in alternative 1, and 17,468 in alternative 6. The distribution of REDAs by size is such that while the vast majority of REDAs in both alternatives are very small, the vast majority of acreage is contributed by several hundred large parcels in both cases.

Submission No: RDEP-Drft-0071
Commenter: Jamie Rappaport Clark, Defenders of Wildlife
Comment: REDAs that are not large enough to support a minimum amount of renewable energy generation should be removed from consideration. According to the EPA4, it is generally not economical to develop an installation of less than 1 MW of solar energy on disturbed or degraded lands. Using the BLM's estimate of 8 acres/MW for solar development, unconnected REDAs smaller than 8 acres should therefore be excluded from final consideration. Approximately 67% of the REDAs are smaller than 8 acres, but removing them from alternatives 1 and 6 would result in a reduction of only 1.4% of total REDA acreage in both alternatives.

Submission No: RDEP-Drft-0071
Commenter: Jamie Rappaport Clark, Defenders of Wildlife
Comment: Recommendation: Following all other screening steps, any REDAs smaller than 8 acres (i.e. not capable of accommodating at least 1 MW of installed solar capacity) should be dropped if not immediately adjacent to another REDA such that the sum of the two REDAs is 8 acres or greater.

Slope

Summary:

Slope should be eliminated as a screening criterion as it is a rough rule of thumb that should not be used as the sole determining factor for determining the suitability of a parcel for solar development.

Response:

The purpose of RDEP is to identify those areas most suitable for renewable energy development, which included eliminating resources that are well documented and known to create conflicts when siting renewable energy projects. As slope increases there is a higher potential for resource conflicts, including erosion, gullying, habitat loss, alteration of nutrient cycling, increasing issues with species' habitat, and changes to local hydrological conditions. The purpose of REDAs is to minimize resource conflicts; therefore, slope serves as a valid screening tool.

Comments:

Submission No: RDEP-Drft-0010

Commenter: John Shepard, Arizona Solar Working Group

Comment: Slope – Slope is a technical criterion or constraint. It should be listed separately from other screening criteria. The 5% slope criterion is a rough rule of thumb for identifying ideal lands for solar development, but it should not be used as the sole determining factor as to the suitability of a parcel of land for solar development. With this in mind, we agree that there should be some flexibility to develop on lands with greater than 5% slope in limited circumstances and on an individual project basis. For example if a proposed project is located up to 33% outside of a REDA on lands with greater than 5% slope but that otherwise meet RDEP's screening criteria, then this project should be treated as a REDA project. Implementation of this proposal should be consistent with the recommendations outlined in the January 27, 2012, "Joint Comments on the Supplemental Draft PEIS for Solar Development" submitted by the 21 parties that comprised the California Desert Renewable Energy Working Group.

Species Habitat Conservation Guide Tiers

Summary:

The BLM should skew REDAs more toward Tiers 1 and 2 rather than Tier 3.

Response:

The BLM has incorporated the recommendation of our cooperating agency, AGFD, to use Species Habitat Conservation Guide tiers 4, 5, and 6 as REDA screens. Tiers 1, 2, and 3 are not used as REDA screens.

Comments:

Submission No: RDEP-Drft-0071

Commenter: Jamie Rappaport Clark, Defenders of Wildlife

Comment: Recommendation: BLM should work to ensure that the distribution of REDAs into Species and Habitat Conservation Guide tiers is skewed proportionally more towards Tiers 1 & 2 than Tier 3.

Sonoran Desert Heritage Conservation Proposal

Summary:

The BLM should include the Sonoran Desert Heritage Conservation Proposal as a screening criterion for REDAs.

Response:

The REDA screen recognizes officially designed special management areas, As the Sonoran Desert Heritage area is currently under consideration by Congress and has not yet been designated as a special management area, it was not included as an REDA screen. Should the Sonoran Desert Heritage area be designated by Congress as a special management area in the future, then it will be excluded from any renewable energy development as noted in national solar and wind energy policy.

Comments:

Submission No: RDEP-Drft-0065
Commenter: The Wilderness Society
Comment: First, the BLM should remove the few proposed sites that currently conflict with the Sonoran Desert Heritage conservation proposal.

Submission No: RDEP-Drft-0006
Commenter: Alex Daue, The Wilderness Society
Comment: Sonoran Desert Heritage conservation plan: These areas should be added as a screen. The Sonoran Desert Heritage conservation plan in western Maricopa County has been proceeding through a public process for several years. The project aims to gain federal designations of wilderness and National Conservation Area on over 600,000 acres of BLM lands. Currently, the REDA in the RDEP conflicts with up to 12,300 acres of land that is included in this proposal. Solar development is inappropriate in these areas, and we ask that the BLM add these lands as a screen. Figure 1 shows the boundaries of the proposal in a black line with areas in conflict in red. GIS data for this area is included in the enclosed CD, Attachment 1.

Submission No: RDEP-Drft-0025
Commenter: Christopher Lish
Comment: First, the BLM should remove the few proposed sites that currently conflict with the Sonoran Desert Heritage conservation proposal.

Submission No: RDEP-Drft-0031
Commenter: Kathy Lopez
Comment: Lands within the Sonoran Desert Heritage Proposal, which encompasses critical wildlands in western Maricopa County, should be removed from potential renewable energy development areas.

Submission No: RDEP-Drft-0036
Commenter: Tom Taylor
Comment: 2. pls consider the Sonoran desert heritage proposal and keeping it wildlife landscape.

Submission No: RDEP-Drft-0033
Commenter: Jeanie Watkins
Comment: Lands within the Sonoran Desert Heritage Proposal, which encompasses critical wildlands in western Maricopa County, should be removed from potential renewable energy development areas.

Specific Species of Concern

Summary:

The BLM should change the REDA model screens to individual species of concern so that high quality habitats are not missed.

Response:

The BLM used the AGFD Heritage Database Management System ESA listed species as well as individual sensitive species data as available from BLM, cooperating agencies, and public sources.

The AGFD State Habitat Conservation Guide (Species and Habitat Conservation Guide) does not predict species diversity; it is a statewide model of conservation potential and sensitive species are accounted for in the Species and Habitat Conservation Guide model. The Species and Habitat Conservation Guide has six tiers of conservation potential, with areas categorized as tier 6 having the highest conservation potential and areas of tier 1 having the lowest conservation potential. The AGFD used five indicators of wildlife conservation to make the Species and Habitat Conservation Guide model:

1. The importance of the landscape in maintaining biodiversity, represented by the species of greatest conservation need;

2. The economic importance of the landscape to the AGFD and the community, represented by the species of economic and recreational importance;
3. The economic importance of the water bodies and aquatic systems to the AGFD and the community, represented by sport fish;
4. Large areas of relatively intact habitats, represented by unfragmented areas; and,
5. The importance of riparian habitat to wildlife, represented by riparian habitat

As noted in the Final EIS, any proposal for a solar or wind development will require due diligence, such as compliance with NEPA, wildlife laws, regulations, and guidance. This could include conducting biological surveys of the development proposal and a full analysis of the impacts on any resources found in the area of potential effect Species and Habitat Conservation Guide before permitting.

The BLM and the AGFD agree that the AGFD predicted species raster datasets (AGFD 2012b) as unsuitable for REDA screens.

Comments:

Submission No: RDEP-Drft-0010
Commenter: John Shepard, Arizona Solar Working Group
Comment: The AGFD's Species and Habitat Conservation Guide model and BLM's Special Status Species layer are both composite datasets that comprise data from many species of conservation concern. While we support the use of these screens, their synthetic nature does not provide the public the ability to understand the potential impacts of the various alternatives upon specific species of conservation concern. In addition, it is our understanding that the Species and Habitat Conservation Guide predicts species diversity only. Thus, we are concerned that using only the top three tiers (with moderate to high diversity only) as a screen may overlook some important moderate to high quality habitats for individual species of conservation concern that should be screened out.

Submission No: RDEP-Drft-0006
Commenter: Alex Daue, The Wilderness Society
Comment: The AGFD's Species and Habitat Conservation Guide model and BLM's Special Status Species layer are both composite datasets that comprise data from many species of conservation concern. While we support the use of these screens, their synthetic nature does not provide the public the ability to understand the potential impacts of the various alternatives upon specific species of conservation concern. In addition, it is our understanding that the Species and Habitat Conservation Guide predicts species diversity only. Thus, we are concerned that using only the top three tiers (with moderate to high diversity only) as a screen

Submission No: RDEP-Drft-0010
Commenter: John Shepard, Arizona Solar Working Group
Comment: The BLM should incorporate AGFD spatial data for pronghorn in its analysis to identify key moderate to high quality habitat networks and migratory corridors for pronghorn. These areas should be screened out from consideration as REDAs, so as to avoid contributing to habitat loss, fragmentation, population isolation and associated population declines. In addition to utilizing AGFD data, the BLM should consider evaluating the class A and class A & D grasslands from The Nature Conservancy's grassland inventory as possible screens for REDAs, in order to avoid directing development to important habitats for pronghorn and other grassland obligates.

Wildlife

Summary:

The BLM should consult with the USFWS and AGFD for the best available information for additional wildlife screens, including pronghorn and habitats for the Sonoran desert tortoise, the shovel-nosed snake, the western burrowing owl, the banded Gila monster, and the Springerville pocket mouse.

Response:

As noted above, the BLM used the AGFD Heritage Database Management System for ESA listed species, individual sensitive species data as available from BLM, cooperating agency, and public sources, and the AGFD's Species and Habitat Conservation Guide model as wildlife screens in determining REDAs. The BLM and the AGFD agree that the AGFD predicted species raster datasets (AGFD 2012b) as unsuitable for REDA screens because it has not been validated using the heritage database system.

The BLM used data on special status species as areas eliminated from consideration. A majority of the big game density data recommended by AGFD for inclusion as REDA was incorporated as screens. Other big game species habitats with conflicts to REDAs will be evaluated on a site-specific basis.

The BLM will manage desert tortoise habitats in accordance with Instruction Memorandum No. AZ-2012-31. RDEP has eliminated from considerations desert tortoise categories 1, 2, and 3 and included the most recent data on desert tortoise conservation areas from the Solar Final EIS. Prior to any authorization, analysis for impacts to desert tortoise habitats on a site-specific basis will be required.

Pronghorn habitats occur in areas that are also suitable for renewable energy development, including an existing wind farm. The site-specific impacts analysis should include impacts to pronghorn habitats based on renewable technologies.

As noted in the Final EIS, any proposal for a solar or wind development will require due diligence, such as National Environmental Policy Act (NEPA) and wildlife policy compliance, including conducting a biological surveys of the development proposal and a full analysis of the impacts on any resources found in the area of potential effect before permitting.

Comments:

Submission No: RDEP-Drft-0052

Commenter: Ginger Ritter, Arizona Game and Fish Department

Comment: The Department was not consulted on how these layers should be applied. We recommend including the following:

a) Bighorn sheep- exclude all

* Bighorn are declining statewide due to drought, habitat fragmentation, and loss of habitat. It is crucial to protect/preserve all remaining suitable habitat that exists.

b) Black bear- exclude all.

* Excluding all does not affect BLM lands and does not remove a significant portion of the non BLM lands from the REDAs.

c) Elk (Summer)- no change

d) Elk (Winter)- also exclude very high

* Does not appear to have been excluded.

e) Javelina- also exclude low

* Excluding low removes an insignificant amount of BLM lands from the REDAs.

f) Mountain lion - no change) Mule deer (Summer)- also exclude medium

* Excluding medium removes an insignificant amount of BLM lands from the REDAs and would be

consistent with the exclusions places on their winter ranges.
g) Mule deer (Summer)- also exclude medium
* Excluding medium removes an insignificant amount of BLM lands from the REDAs and would be consistent with the exclusions places on their winter ranges.
h) Mule deer (Winter)- no change
i) Pronghorn (Summer)- exclude all but very sparse
* Pronghorn are declining statewide due to due to drought, habitat fragmentation, and loss of habitat. It is crucial to protect/preserve much of the remaining suitable habitat that exists.
j) Pronghorn (Winter)- exclude all
* See above
k) Turkey (Summer)- no change
1) Turkey (Winter)- no change
m) White-tailed deer- also exclude low
* Excluding low does not affect BLM lands and does not remove a significant portion of the non BLM lands from the REDAs.

Submission No: RDEP-Drft-0015
Commenter: Matt Clark, Defenders of Wildlife, Phoenix Meeting Transcript
Comment: In particular, I think there's concern with regard to intact native grasslands, which often occur, not surprisingly in flat sunny areas, and so wanting to make sure that we're prioritizing utility and subutility-scale development is not in our most intact, high-quality grasslands, and also related to that, to species that depend upon intact high-quality grasslands or grassland obligate species, including wide-ranging species like pronghorn. So I'm hoping that BLM and cooperating agencies can work to potentially address that through, you know, the possibility of screening out any crucial areas for species like pronghorn or important areas for landscape connectivity for those species.

Submission No: RDEP-Drft-0071
Commenter: Jamie Rappaport Clark, Defenders of Wildlife
Comment: The RDEP DEIS recognizes the ongoing threats and challenges to stabilizing and increasing American pronghorn numbers in Arizona: "Today, due to loss of habitat from housing development, fragmentation by highways, and other land use changes, populations have declined and are maintained by relocation programs." (DEIS p 3-40). Pronghorn are one of the AGFD's Species of Economic and Recreational Importance. Yet, the DEIS fails to quantify or qualify the potential impacts of the various alternatives upon this species of ecological, economic, and recreational importance. The DEIS also does not utilize American pronghorn habitat as a screen in its "important big game habitats", which we believe should be rectified. Because pronghorn habitats in Arizona are diverse across the state and have a patchy-distribution in many cases, due to intervening, and in some cases encroaching, woodlands or other physical and visual barriers – remaining connections between habitat patches of this animal (that is naturally averse to visual obstructions), may be narrow or already compromised in some way (e.g. by substandard fencing, encroaching vegetation, roads and other human developments), and thus may be easily severed or disrupted by large-scale renewable energy development projects. For these reasons, we encourage BLM to revisit utilizing American pronghorn as a screen at this statewide, programmatic level, in order to plan appropriately for the conservation and recovery of this iconic, wide-ranging grassland obligate species.

Submission No: RDEP-Drft-0006
Commenter: Alex Daue, The Wilderness Society
Comment: The BLM should incorporate AGFD spatial data for pronghorn in its analysis to identify key moderate to high quality habitat networks and migratory corridors for pronghorn. These areas should be screened out from consideration as REDAs, so as to avoid contributing to habitat loss, fragmentation, population isolation and associated population declines. In addition to utilizing AGFD data, the BLM should consider evaluating the class A and class A & D grasslands from The Nature Conservancy's grassland inventory as possible screens for REDAs, in order to avoid directing development to important habitats for pronghorn and other grassland obligates.

Submission No: RDEP-Drft-0006
Commenter: Alex Daue, The Wilderness Society
Comment: Special Status Species, Including T&E Species Locations – While we commend the BLM for attempting to screen out special status species habitat from further consideration as REDAs, it is clear from our preliminary review of spatial data obtained on 05/02/12 from AGFD that there is significant overlap between proposed REDAs of the various DEIS alternatives and AGFD predicted distributions for the Sonoran desert tortoise and other special status species. We recommend BLM revisit AGFD predicted distributions for all special status species, consult with the AGFD and USFWS, and identify all moderate to high quality habitats for special status species that should be screened, so as to avoid inclusion of lands in REDAs containing such conflicts.

Submission No: RDEP-Drft-0071
Commenter: Jamie Rappaport Clark, Defenders of Wildlife
Comment: We recognize that the BLM has attempted to screen out conflicts with this sensitive and declining species by utilizing its own spatial dataset of Sonoran desert tortoise management units as a screen. While we support the application of this screen, we also believe there are likely additional important Sonoran desert tortoise habitats, in particular those in flatter terrain in intervening valleys that, while more sparsely populated, are nonetheless key to maintaining intact habitat and areas that are free of human-created barriers, so as to maintain a functionally connected metapopulation. As described in the species account, core, higher density populations of this species tend to be "island like" and associated with steeper terrain and aspects. This description is consistent with the configuration of BLM's Sonoran desert management units that were used as an RDEP screen. The AGFD predicted distribution, however, predicts more of the flatter terrain that "may be important for longterm population viability". This flatter terrain is coincident with some of the lands also identified as having ideal solar resources and low slope. We are concerned with the large amount of acreage of AGFD predicted distribution that lies outside of the BLM's management units and screen.
Recommendation: In order for the RDEP program to avoid directing development into important Sonoran desert tortoise linkages and potentially contributing to the decline of this species, we recommend the BLM consult with the USFWS and AGFD to interpret the best available information, which should inform the Final RDEP DEIS REDA preferred alternative extent and configuration, such that all important low density, habitat connectivity and dispersal habitats for this species are identified and screened out of the final preferred alternative.

Submission No: RDEP-Drft-0071
Commenter: Jamie Rappaport Clark, Defenders of Wildlife
Comment: Analysis: According to analyses we performed with BLM and AGFD spatial data, RDEP DEIS Alternative 1 overlaps Tucson shovel-nosed snake predicted distribution by a total of approximately 81,432 acres (300 acres on BLM administered lands and 81,132 acres on non-BLM lands). According to the same data, RDEP DEIS Alternative 6 overlaps Tucson shovel-nosed snake predicted distribution by a total of approximately 80,210 acres (421 acres on BLM administered lands and 79,789 acres (See Appendix B).
Recommendation: We encourage the BLM to screen out all important habitats for the Tucson shovel-nosed snake. Habitat for this declining species is key to maintain intact and free of humancreated barriers, so as to maintain a healthy metapopulation. The flat terrain associated with suitable Tucson shovel-nosed snake habitat is coincident with some of the lands also identified as having ideal solar resources and low slope. In order for the RDEP program to avoid directing development into important Tucson shovel-nosed snake habitat and potentially contributing to the decline of this species, we recommend the BLM consult with the USFWS and AGFD to interpret the best available information, which should inform the Final RDEP DEIS REDA preferred alternative extent and configuration, such that all important habitat and areas of important

habitat connectivity for this species are identified and screened out of the final preferred alternative. "

Submission No: RDEP-Drft-0071
Commenter: Jamie Rappaport Clark, Defenders of Wildlife
Comment: Analysis: According to analyses we performed with BLM and AGFD spatial data, RDEP DEIS Alternative 1 overlaps Western burrowing owl predicted distribution by a total of approximately 336,108 (18,166 acres on BLM administered lands and 317,942 acres on non-BLM lands). According to the same data, RDEP DEIS Alternative 6 overlaps Western burrowing owl predicted distribution by a total of approximately 236,435 acres (13,937 acres on BLM administered lands and 222,498 acres (See Appendix B).
Recommendation: We encourage the BLM to screen out all important habitats for the Western burrowing owl, as well as habitats for associated burrowing mammals. The flat terrain associated with suitable Western burrowing owl habitat is coincident with some of the lands also identified as having ideal solar resources and low slope. In order for the RDEP program to avoid directing development into important Western burrowing owl habitat and potentially contributing to the decline of this species, we recommend the BLM consult with the USFWS and AGFD to interpret the best available information, which should inform the Final RDEP DEIS REDA preferred alternative extent and configuration, such that all important habitat and areas for this species are identified and screened out of the final preferred alternative.

Submission No: RDEP-Drft-0071
Commenter: Jamie Rappaport Clark, Defenders of Wildlife
Comment: "Analysis: According to analyses we performed with BLM and AGFD spatial data, RDEP DEIS Alternative 1 overlaps the broader Gila monster predicted distribution by a total of approximately 1,091,236 acres (226,052 acres on BLM administered lands and 865184 acres on non-BLM lands). According to the same data, RDEP DEIS Alternative 6 also overlaps Gila monster predicted distribution by a total of approximately 1,092,236 acres (226,052 acres on BLM administered lands and 865,184 acres (See Appendix B).
Recommendation: We encourage the BLM to screen out all important habitats for the Banded Gila monster. We recognize that the analysis conducted above is for the species as a whole, and only a portion of this analysis applies to the Banded Gila monster. However, the spatial data layer provided does not break out the Banded Gila monster from the predicted distribution at the species level. In order for the RDEP program to avoid directing development into important Banded Gila monster habitat and potentially contributing to the decline of this species, we recommend the BLM consult with the USFWS and AGFD to interpret the best available information, which should inform the Final RDEP DEIS REDA preferred alternative extent and configuration, such that all important habitat and areas of important habitat connectivity for this species are identified and screened out of
the final preferred alternative. "

Submission No: RDEP-Drft-0071
Commenter: Jamie Rappaport Clark, Defenders of Wildlife
Comment: According to analyses we performed with BLM and AGFD spatial data, RDEP DEIS Alternative 1 overlaps the predicted distribution of the Springerville pocket mouse by a total of approximately 88,063 acres (4,711 acres on BLM administered lands and 83,352 acres on non-BLM lands). According to the same data, RDEP DEIS Alternative 6 also overlaps Springerville pocket mouse predicted distribution by a total of approximately 60,688 acres (1,140 on BLM administered lands and 59,248 acres on non-BLM lands) (See Appendix B). Recommendation: We encourage the BLM to screen out all important habitats for the Springerville pocket mouse. In order for the RDEP program to avoid directing development into important Springerville pocket mouse habitat and potentially contributing to the decline of this species, we recommend the BLM consult with the USFWS and AGFD to interpret the best available information, which should inform the

Final RDEP DEIS REDA preferred alternative extent and configuration, such that all important habitat and areas of important habitat connectivity for this species are identified and screened out of the final preferred alternative.

Submission No: RDEP-Drft-0071
Commenter: Jamie Rappaport Clark, Defenders of Wildlife
Comment: Through our analysis of the proposed nominated sites, REDAs and Agua Caliente Solar Energy Zone, it has become apparent that significant portions of these lands may not qualify as lands of "low resource sensitivity" because of potentially significant conflicts with habitats for special status species and species of economic and recreational importance. Therefore, while we cannot support any of the alternatives as currently proposed, we hope to be able to support a modified alternative that does adequately screen out these habitats from these areas. In order to achieve this, we recommend the BLM consult closely with the AGFD, the US Fish and Wildlife Service, and wildlife experts from the academic and non-profit sectors, so as to ensure the areas identified do meet the BLM's definition of "low resource sensitivity.

Submission No: RDEP-Drft-0010
Commenter: John Shepard, Arizona Solar Working Group
Comment: Special Status Species, Including Threatened and Endangered Species Locations – While we commend the BLM for attempting to screen out special status species habitat from further consideration as REDAs, it is clear from our preliminary review of spatial data obtained on 05/02/12 from AGFD that there is significant overlap between proposed REDAs of the various DEIS alternatives and AGFD predicted distributions for the Sonoran desert tortoise and other special status species. We recommend BLM revisit AGFD predicted distributions for all special status species, consult with the AGFD and USFWS, and identify all moderate to high quality habitats for special status species that should be screened, so as to avoid inclusion of lands in REDAs containing such conflicts.

Submission No: RDEP-Drft-0010
Commenter: John Shepard, Arizona Solar Working Group
Comment: The BLM should incorporate AGFD spatial data for pronghorn in its analysis to identify key moderate to high quality habitat networks and migratory corridors for pronghorn. These areas should be screened out from consideration as REDAs, so as to avoid contributing to habitat loss, fragmentation, population isolation and associated population declines. In addition to utilizing AGFD data, the BLM should consider evaluating the class A and class A & D grasslands from The Nature Conservancy's grassland inventory as possible screens for REDAs, in order to avoid directing development to important habitats for pronghorn and other grassland obligates.

Submission No: RDEP-Drft-0071
Commenter: Jamie Rappaport Clark, Defenders of Wildlife
Comment: Overall, we strongly recommend that the BLM consult closely with the Arizona Game and Fish Department and the USFWS to identify all special status species and big game habitats, as well as areas important for habitat connectivity of same, that should be screened out in the creation of a new, truly low-conflict alternative for the Final EIS. Our primary goal is to strengthen what we believe is a very promising approach to the development of renewable resources.

Submission No: RDEP-Drft-0071
Commenter: Jamie Rappaport Clark, Defenders of Wildlife
Comment: (1) as detailed in our joint letter with the Arizona Solar Working Group, the Species and Habitat Conservation Guide model mainly identifies areas of high species diversity, but some important special status species (e.g. Sonoran desert tortoise) may exist in habitats of relatively low diversity and thus additional careful screening is necessary to screen out their habitats

Submission No: RDEP-Drft-0071

Commenter: Jamie Rappaport Clark, Defenders of Wildlife
Comment: While we agree that the RDEP screening process holds the potential to identify a subset of low resource sensitivity lands, Defenders' preliminary analyses of the overlay between proposed REDAs in Alternatives 1 and 6 and spatial data from the AGFD's Statewide Wildlife Action Plan and HabiMap have illuminated significant potential conflicts with special status species, as well as species of economic and recreational importance. Therefore, we do not believe any of the currently proposed DEIS alternatives are consistent with RDEP's intent and we therefore unable to support any of the proposed alternatives. BLM should include a modified preferred alternative in the Final DEIS that has adequately screened out these important wildlife habitats.

Yuma Proving Ground

Summary:

The BLM should include a 10-mile buffer along the YPG boundary and US-95 through the YPG as additional elimination criteria.

Response:

In review of comments, the BLM eliminated the small REDA inholdings within the YPG boundary, but did not apply a 10-mile buffer along the southeast/east YPG boundary.

The RDEP identifies lands across Arizona that are most suitable for the development of renewable energy. This proposed land use allocation is at the planning-level scale and would not authorize any specific projects or imply such approval. Any proposal for a wind or solar energy project will still require site specific permitting, additional environmental analysis, and NEPA compliance. Different renewable energy technologies have different impacts; therefore, during this process, the BLM would coordinate with the DOD to avoid any impacts to the military mission.

Comments:

Submission No: RDEP-Drft-0030
Commenter: Matthew D Williamson CIV, US Army Garrison Yuma
Comment: YPG Eastern Boundary Comments: Request a 10-Mile buffer along southeast/east YPG boundary, as solar panels within this area would interfere with ongoing testing.

Submission No: RDEP-Drft-0030
Commenter: Matthew D Williamson CIV, US Army Garrison Yuma
Comment: US-95 Corridor Within YPG Comments: Non-concur, solar panels in this area would interfere with ongoing testing.

Land Tenure

Summary:

The description of the Land Tenure Alternative is confusing, and the BLM should clarify its purpose and policies.

Response:

The goals, objectives, and management actions Land Tenure Alternative are described in Section 2.3.2, Elements Common to All Action Alternatives (pg. 2-12 to 2-13 in the Draft EIS), and were developed to respond to key planning issue #6, Land Tenure Adjustments: Can the BLM exchange or sell disposal parcels in order to benefit local economies and create development incentives? (See Section 1.10, Key Planning Issues, pg. 1-21 of the Draft EIS.) The Land Tenure goal was put forward to address both of

these points by allowing the BLM to pursue disposal of its available land in the REDA and the acquisition of non-federal lands in areas of high conservation priority (pg. 2-12, Draft EIS). The description in the Final EIS has been improved to provide this clarity on the purpose of the alternative and why it is under consideration.

Comments:

Submission No: RDEP-Drft-0006
Commenter: Alex Daue, The Wilderness Society
Comment: We recommend that the EIS explicitly recognize the challenges with exchanges and seek to utilize them on a limited basis as they will add to the complexity and possible controversy of a proposed renewable energy development.

Submission No: RDEP-Drft-0056
Commenter: Katherine Rose and Audrey Werth
Comment: It should be noted that certain areas of the EIS statement were vague and used unclear wording. In the proposed land tenure REDA the rhetoric was especially convoluted. Also enough reasoning was not provided as to why land owners would benefit from trading "conservation" land with "disposed of" lands. A clarification of this section of the impact statement would allow for a better understanding of all of the alternatives.

Load Centers

Summary:

The lands where the CAP load center overlaps with other sensitive lands, such as wilderness areas and National Wildlife refuges, should be removed from consideration as REDAs.

Response:

The BLM reviewed the GIS data and REDA screens to determine if there were conflicts between load centers and sensitive resource areas. The review found that in areas where the load center criteria overlaps with a wilderness or wildlife refuge, those areas are still eliminated from consideration from REDA and are not included in Alternative 1, Maximum REDA.

Comments:

Submission No: RDEP-Drft-0010
Commenter: John Shepard, Arizona Solar Working Group
Comment: The 5-mile screen in Alternative 3 is appropriate if the RDEP's focus is placed on previously disturbed lands and pumping stations along CAP for any potential renewable energy project. Examples of potentially sensitive areas to avoid include lands south of the Bill Williams River National Wildlife Refuge where the canal emerges from under the Bill Williams Mountains, the East Cactus Plain Wilderness Area located near Bouse, and some sections near the Harquahala Mountains

Submission No: RDEP-Drft-0006
Commenter: Alex Daue, The Wilderness Society
Comment: The 5-mile screen in Alternative 3 is appropriate if the RDEP's focus is placed on previously disturbed lands and pumping stations along CAP for any potential renewable energy project. Examples of potentially sensitive areas to avoid include lands south of the Bill Williams River National Wildlife Refuge where the canal emerges from under the Bill Williams Mountains, the East Cactus Plain Wilderness Area located near Bouse, and some sections near the Harquahala Mountains.

New Alternative

Summary:

The commenter suggests a new alternative that would consider only lands marked for disposal that are also no longer suitable wildlife habitat and that have no cultural resources.

Response:

The BLM reviewed the merits of this suggestion and determined that it would leave REDA lands too small and fragmented and would not meet the purpose and need of the RDEP. The Final EIS was updated to explain that this alternative was considered but eliminated from detailed analysis (see Section 2.5, Alternatives Considered but Eliminated from Detailed Analysis).

Comments:

Submission No: RDEP-Drft-0056

Commenter: Katherine Rose and Audrey Werth

Comment: We propose a seventh alternative in which the land used would only be disposed lands that are no longer acceptable for wildlife habitat and do not have any cultural significance. There would be no problem with developing in these areas.

Policy

Summary:

The RDEP should have specific guidelines for NEPA analysis that would be required within REDAs.

Response:

As described in the Final EIS Section 1.5.3, Requirements for Further Environmental Analysis, any proposal submitted to BLM for a solar or wind development will require due diligence, including National Environmental Policy Act (NEPA) compliance; environmental reviews for projects submitted after the RDEP Record of Decision is signed would be tiered to the RDEP EIS and would follow all current CEQ and BLM NEPA requirements, policies, and guidance. Additionally, the BLM retains the discretion to deny solar and wind ROW applications based on site-specific issues and concerns, even in those areas available or open for application in the existing land use plan.

Comments:

Submission No: RDEP-Drft-0010

Commenter: John Shepard, Arizona Solar Working Group

Comment: The Final EIS should provide guidance on issues to be developed in NEPA analysis for specific solar applications within a REDA, whether in an EA or EIS, including:

Specifying that robust public involvement is required, including requiring a comment period, even if using an EA, and emphasizing the benefits of early and ongoing public involvement, such as through providing preliminary alternatives for public comment;

Requiring cumulative impact analysis to address ongoing projects and stressors in the project area that cannot be accomplished through tiering; and

Clarifying BLM's authority to deny applications. We support the BLM reiterating that the agency "retains the discretion to deny solar and wind ROW applications based on site-specific issues and concerns, even in those areas available or open for application in the existing land use plan" (DEIS, p. ES-7). We would also recommend that the BLM clarify that its discretion can be applied to deny applications without conducting in-depth environmental analysis.

Required Plans – Transportation

Summary:

The BLM should add that the proponent shall address local government planning requirements as part of the transportation-related required plans.

Response:

The RDEP identifies lands across Arizona that are most suitable for the development of renewable energy. The proposed land use allocations are at the planning-level scale and would not authorize any specific projects or imply such approval. Any proposal for a wind or solar energy project will still require site specific permitting, additional environmental analysis, and NEPA compliance. Local coordination would occur as part of the site-specific permitting, including an analysis of impacts on transportation systems. The Final EIS includes a variety of design features that provide opportunities for local government involvement and consultation, such as:

- Make early contact with local officials, regulators, and inspectors to explore all applicable regulations and address concerns unique to solar power generation projects.
- Emphasize early identification of, and communication and coordination with local agencies, elected officials, and concerned citizens.
- Consult with local agencies about potential impacts of development in or close to state or local special use areas, such as parks.
- Avoid lands identified as incompatible by local governments for renewable energy development.
- Site facilities to maximize local, regional, and statewide economic benefits and coordinate with local and state entities, such as state and county commissions and planning departments.
- Site projects to minimize adverse effects on area housing markets and local infrastructure (e.g., schools and other public services) and to ensure adequate housing vacancy rates and local infrastructure support for workers and their families (Solar Final PEIS, Volume 7, pg. 48).

Comments:

Submission No: RDEP-Drft-0043

Commenter: Karl Taylor, Mohave County Public Works

Comment: Table B-2: An access road siting and management plan shall in addition address local government planning requirements. Planning requirements may include completion of a Traffic Impact Analysis to identify and properly plan road infrastructure necessary to provide construction and post-construction access to the developed site as well as provide information and data on traffic load (volume and vehicle class/weight) for evaluation of impacts and mitigation requirements on existing local government unpaved and paved roads serving the development.

Submission No: RDEP-Drft-0043

Commenter: Karl Taylor, Mohave County Public Works

Comment: Table B-2: Traffic Management Plan - The reference to Traffic Management Plan is too broad in nature and should be expressed under local government planning and operations requirements. Planning requirements may include completion of a Traffic Impact Analysis to identify and properly plan road infrastructure necessary to provide construction and post-construction access to the developed site as well as provide information and data on traffic load (volume and vehicle class/weight) for evaluation of impacts and mitigation requirements on existing local government unpaved and paved roads serving the development. Operations requirements involve obtaining all required State and local government right-of-way use and oversize/overweight vehicle permits

pertinent to site construction work and routine operations.

Submission No: RDEP-Drft-0058

Commenter: Buster Johnson, Mohave County Board of Supervisors

Comment: Table B-2: Access Road Siting and Management Plan - An access road siting and management plan shall in addition address local government planning requirements. Planning requirements may include completion of a Traffic Impact Analysis to identify and properly plan road infrastructure necessary to provide construction and post-construction access to the developed site as well as provide information and data on traffic load (volume and vehicle class/weight) for evaluation of impacts and mitigation requirements on existing local government unpaved and paved roads serving the development.

Submission # RDEP-Drft-0043

Commenter: Karl Taylor, Mohave County Public Works

Comment: Table B-2: Traffic Management Plan - The reference to Traffic Management Plan is too broad in nature and should be expressed under local government planning and operations requirements. Planning requirements may include completion of a Traffic Impact Analysis to identify and properly plan road infrastructure necessary to provide construction and post-construction access to the developed site as well as provide information and data on traffic load (volume and vehicle class/weight) for evaluation of impacts and mitigation requirements on existing local government unpaved and paved roads serving the development. Operations requirements involve obtaining all required State and local government right-of-way use and oversize/overweight vehicle permits pertinent to site construction work and routine operations.

Required Plans – Water Resources

Summary:

The BLM should include a provision for the proponent to prepare the Water Resource Plan in consultation with ADWR.

Response:

The water policy of the BLM is that the states have the primary authority and responsibility for the allocation and management of water resources within their own boundaries, except as otherwise specified by Congress. The BLM will cooperate with state governments, including the Arizona Department of Water Resources, under the umbrella of state law to protect all water uses identified for public land management purposes and will conform to applicable state water laws and administrative claims procedures in managing and administering all BLM programs and projects, except as otherwise specifically mandated by Congress.

Appendix B, Design Features, Required Plans, and Best Management Practices details a number of actions and plans a proponent must take including the following:

- ***Required plans:*** Water Resources Monitoring & Mitigation Plan, detailed hydrologic study, and comprehensive groundwater basin analysis
- Make early contact with local officials, regulators, and inspectors to explore all applicable regulations and address concerns unique to solar power generation projects.
- Emphasize early identification of, and communication and coordination with stakeholders, including state and local agencies (including ADWR), elected officials, and concerned citizens.
- Consult with local agencies about potential impacts of development in or close to state or local special use areas, such as parks.

- Avoid lands identified as incompatible by local governments for renewable energy development.
- Compare preliminary site grading, drainage, erosion, and sediment control plans with applicable local jurisdiction requirements.
- Consult state and local "waterwise" guidelines, as applicable, for project development in the arid Southwest.

Comments:

Submission No: RDEP-Drft-0001
Commenter: Michael J. Lacey, Arizona Division of Water Resources
Comment: Water Resource Monitoring & Mitigation Plan, Table B-2, Page B-46. ADWR recommends that such plans are required to be prepared in consultation with the Department and local water providers and water users.

Submission No: RDEP-Drft-0001
Commenter: Michael J. Lacey, Arizona Division of Water Resources
Comment: Table B-3, Required Studies, Pages B-49 and B-50. ADWR suggests segregating the flood control and water supply elements.

Submission No: RDEP-Drft-0001
Commenter: Michael J. Lacey, Arizona Division of Water Resources
Comment: Additionally, we recommend tailoring the required groundwater studies to the proposed use. A prospective wet-cooled CSP facility utilizing several thousand acre-feet of groundwater per year should be required to conduct a far more robust investigation and impact evaluation than a PV facility using 20 acre-feet for panel cleaning and domestic use. ADWR recommends modification of the bullet at the top of Page B-50 to "…other water users and water right claimants…"

Transmission – Change Screening Criteria

Summary:

The BLM should modify the Alternative 2 Transmission Line and Utility Corridor screening criteria to include lower voltage restrictions, remove the length of transmission criterion, and should include a capacity criterion or criteria.

Response:

It is important to recognize that the REDAs are identified for *potential* development based on an analysis of environmental constraints. Any proposal for an actual project would require due diligence on the part of the project proponent, including determination of line capacity and length of transmission required for the type of development and its location. Effects resulting from a specific project, its location, and design elements would be analyzed and disclosed during the NEPA compliance process.

The identification of a REDA near transmission does not imply capacity. Conversely, by not using capacity as a screen, REDAs are not eliminated where capacity might be an issue today, but alleviated in the future.

The areas within five-miles of transmission line or utility corridor used for Alternative 2 were developed based on conversations with industry and utility companies. While the economically viable length of any gen-tie is dependent on the specifics of a project, five miles was a number that consistently came up as being financially reasonable while minimizing resource conflicts. Larger BLM REDAs contiguous with areas within five miles of existing or planned transmission lines were also included. Additionally, the Load Alternative (Alternative 3) captures many of the lower voltage lines of concern.

As discussed in Draft EIS Section 2.5, Alternatives Considered but Eliminated from Detailed Analysis, the BLM considered a 20-mile zone around 230kV transmission lines. As mapped, this area captures most lower voltage lines and serves as an example of what would happen if lower voltage was included in the screen. Using a 20-mile zone, the results indicated that there would be no substantial difference in REDA acreage between a 20-mile transmission buffer and the Maximum REDA under Alternative 1.

Comments:

Submission No: RDEP-Drft-0003

Commenter: Amanda Ormond, Interwest Energy Alliance

Comment: Recommendation 1 – Transmission Voltage Restriction

In section 2.3.4 - Alternative 2 - BLM screens for lands that are within 5 miles of existing and planned transmission lines and further stipulated that the lines must be 230 kilovolt or higher. As RDEP is focused on supporting development of many technologies at various scales it is inappropriate to apply a screen of high voltage transmission as renewable energy projects can and commonly do connect to transmission lines of much lower voltage.

As a general rule the higher the voltage of the interconnection the greater the cost of interconnection. If BLM maintains this voltage screen it will dissuade and make more expensive, smaller projects on BLM lands. Interwest recommends that no screen for voltage level be applied in any alternative.

Submission No: RDEP-Drft-0003

Commenter: Amanda Ormond, Interwest Energy Alliance

Comment: Recommendation 2 – Proximity to Transmission

In Alternatives 2 and 6 lands that are greater than five miles from existing and planned transmission are screened out (for the purpose of REDA designation). Wind and some solar projects may require longer than a five mile gen-tie line to connect to transmission to move power to market. BLM has not given a specific reason that five miles was chosen; this length seems arbitrary. Arizona's two existing wind projects have gen-tie lines of longer than five miles, demonstrating the need for review of this criteria.

Interwest recognizes that the Department is trying to add a reasonable filter to encourage the siting of projects near existing infrastructure, and that an underlying goal is protection of ecosystems and important habitat areas. However, the fact that there is a transmission line in the area of project development is not as important as if there is capacity (space) on the transmission line to carry the energy produced by the project. Interwest does not know of a way to use capacity on a transmission line as a screening criterion; as capacity values constantly change and are not publicly known. We believe that transmission proximity does not provide a reasonable proxy for habitat protection, and that the cost of transmission will naturally limit the geography of projects as projects that are near transmission as more economical.

Interwest recommends that the BLM not apply a screen of any length for transmission whether to an existing or planned transmission line or to BLM-designated utility corridors. Further, we believe BLM should explore alternate screening methodologies that would minimize habitat fragmentation."

Submission No: RDEP-Drft-0005

Commenter: Katherine Gensler, Solar Energy Industries Association

Comment: However, RDEP does not address the primary challenges to solar development in Arizona. In order for a solar power plant to be commercially viable and financeable, a developer must locate a site with plentiful solar resource, access to transmission and secure a long-term power purchase agreement from a utility. Arizona's solar resources are the envy of the Southwest. Like much of the West, though, transmission capacity available to transmit electricity from a new power plant is at a premium. As discussed below, BLM's analysis fails to properly

account for the transmission necessary to supply solar power both in-state and out-of-state.

Submission No: RDEP-Drft-0005
Commenter: Katherine Gensler, Solar Energy Industries Association
Comment: First, BLM incorrectly assumes that the existence of a transmission line is indicative of enough available transmission capacity to effectively transport power from the generating location to a load center. One can only know how much capacity is available after conducting a power flow model and contingency analysis. These analyses are complex and resource-intensive and are best undertaken by the responsible transmission planning entities. In addition, the "queue" for use of any available transmission may be crowded with requests for service for other projects, thus providing little or no assurance that any transmission capacity will be available for an additional project.

Submission No: RDEP-Drft-0005
Commenter: Katherine Gensler, Solar Energy Industries Association
Comment: Second, minimizing the distance between generation and the nearest transmission line does not assure the least environmental impact. The transmission grid is a vast, integrated network. Adding power to one spot on the transmission grid will cause impacts elsewhere on the system. It is not uncommon for a developer to learn that interconnecting to a particular substation ten miles away will cause fewer grid impacts – and fewer environmental impacts – than interconnecting to a substation only four miles away.
Again, this information can only be known as a result of the system impact study. If BLM insists upon an arbitrary standard of less than five miles to transmission, the result will be suboptimal development of both solar generation resources and transmission infrastructure. "

Submission No: RDEP-Drft-0005
Commenter: Katherine Gensler, Solar Energy Industries Association
Comment: Finally, while limiting the analysis to transmission lines 230 kV and above may be acceptable when contemplating utility-scale solar development. However, RDEP seeks to attract projects of less than 20 MW, as well, which could interconnect to transmission or distribution facilities at a much lower voltage level.

Submission No: RDEP-Drft-0005
Commenter: Katherine Gensler, Solar Energy Industries Association
Comment: The Arizona Solar Working Group is proposing further conversation about transmission and SEIA looks forward to those recommendations. At a minimum, in the Final EIS BLM should eliminate the 230 kV threshold and the requirement that a REDA be no more than five miles from an existing transmission line.

Submission No: RDEP-Drft-0010
Commenter: John Shepard, Arizona Solar Working Group
Comment: Recommendation: Given this insight regarding solar project viability at multiple voltage classes, ASWG recommends that the Preferred Alternative be modified such that the voltage class restriction of 230 kV or higher be removed.

Submission No: RDEP-Drft-0010
Commenter: John Shepard, Arizona Solar Working Group
Comment: Because power lines at voltages below 230 kV are much more ubiquitous throughout Arizona, proposed solar projects can be located nearer to lower voltage distribution and sub-transmission systems. The energy output of projects in the range of 10-100 MW can be accommodated on power lines at voltages much lower than 230 kV. In Arizona, typical voltages for different classes of power delivery are:

- Distribution level: 12.47 kV, 20.8 kV
- Sub-transmission level: 34.5 kV, 46 kV, and 69 kV
- High Voltage Transmission: 115 kV, 138 kV, 230 kV

- Extra High Voltage Transmission: 345 kV and 500 kV

The amount of interconnection capacity and typical lengths of power lines in each class increases with voltage, as shown in the table below. Power lines in the 46 kV voltage class in particular are often located in rural/remote areas of Arizona, which tend to coincide with many proposed REDAs, both on BLM and non-BLM-administered lands, making them ideal for renewable energy delivery to rural load centers. Similarly, 115 kV sub-transmission lines, which are capable of carrying the output of up to a 100-150 MW power plant tend to be located in both rural and surrounding metropolitan areas, making them ideal for delivery to both rural and urban load centers.

Voltage Interconnection Capacity Radial Distance

- 12 kV – 20.8 kV 1 - 10 MW 1 – 3 miles
- 34.5 kV – 46 kV 10 – 50 MW 3 – 10 miles
- 69 kV 50 – 100 MW 5 – 20 miles
- 115 kV / 138 kV 100 – 250 MW 20 – 40 miles
- 230 kV 250 – 500 MW 20 – 60 miles
- 345 kV / 500 kV 500 – 1,200 MW 50 – 100+ miles

The reason for variation, or ranges, of interconnection capacity in the above table, relates to variability in the design configurations of the power lines considered here. In essence, not all power lines of a given voltage class are "created equal." The interconnection capacity considered in this table contemplates a typical amount of power that may be added to an existing line. However, factors such as the "youth" or age and saturation of a line, the design ampacity (capacity for power flow), the configuration of a line that may comprise multiple (bundled) conductors, and other factors affecting the power flow capacity of any given line will vary.

Water – Screening Criteria

Summary:

The BLM should consider different screening criteria, such as availability of renewable water supplies and access to water delivery infrastructure.

Response:

The overall purpose the RDEP is to identify those areas best suited for renewable energy development. In order to find the best suited areas, BLM consulted with ADWR to find a way to use additional protection measures that would highlight areas that may have sensitive water use issues. The Water Protection Zones purpose was not to exclude or eliminate areas from REDA, but to require additional design features that developers would need to consider when siting, designing, constructing, and operating renewable energy projects. The Zones are arranged hierarchically, with WPZs 2 and 3 adding increasingly strict design features in addition to those defined in Appendix B, Design Features, such as annual consumption of a renewable energy development would not exceed 55 acre-feet per year (WPZ 3 design feature). Water Protection Zone 1 offers a minimum set of water quantity protection (only the design features noted in Appendix B, Design Features) and are based on the relative abundance of groundwater. Because some groundwater basins have very little published groundwater data, a determination could not be made as to its current condition. Those groundwater basins where the condition could not be determined were placed into WPZ 1 to ensure that they would have at least the minimum protection, pending receipt of additional data.

Should a project be proposed, effects on water quantity and quality will be evaluated on all proposed facilities on BLM-administered lands regardless of the Water Protection Zone, and BLM would require the project to meet all required and applicable mitigation measures, design features, and BMPs.

Comments:

Submission No: RDEP-Drft-0001

Commenter: Michael J. Lacey, Arizona Division of Water Resources

Comment: "The zones appear to have been established without regard to availability of renewable water supplies and access to water delivery infrastructure.

BLM reaches the conclusion that all lands within AMAs may not serve as appropriate locations for utility-scale solar facilities. While the AMAs were created in response to concerns about water level declines, significant progress has been made since the passage of the Groundwater Management Act (GMA) in 1980. By example, portions of the Phoenix AMA are blessed with sustainable, adequate, and redundant water supplies and, as such, may be suitable for utility-scale solar facilities, including concentrating solar power (CSP) facilities. Such facilities would need to secure water rights or withdrawal authorities from ADWR and would be subject to conservation requirements established by the Department within its Management Plans. Alternatively, facilities developed outside of an AMA will conduct their business largely absent of any oversight by ADWR. They will have no State-mandated water conservation requirements, nor will they have to meter or report their water use.

Zone 1 as presented on Figure 2-9 appears to be the "catch all" category, determined as those lands that do not fall into Zones 2 or 3. As mapped, Zone 1 contains lands with limited or extremely challenging access to groundwater (the Central Highlands and Colorado Plateau, by example) and areas that are subject to the Colorado River Accounting Surface, requiring an allocation of Colorado River water for legal use.

While such groupings are attractive when assembling ambitious and comprehensive reports such as this Draft EIS, ADWR does not believe that these WPZs are especially useful for prospective developers of utility-scale solar facilities as presented. 2 Water withdrawn from wells located within the Colorado River Accounting Surface is administered by the US Bureau of Reclamation. The drilling of such wells is conducted under the purview of ADWR."

Water – Zone classification

Summary

The BLM needs to modify the water alternative screening criteria to include a criterion that would limit solar development technology within the REDAs based on the technology's water consumption rates and the water classification system used in the water alternative, and it would integrate Arizona's Water Development Commission study for identifying groundwater basins.

Response

The RDEP's development of Water Protection Zones and applicable design features provide the mechanism for addressing water issues specific to a particular solar project's design elements. Recognizing that renewable energy technologies are rapidly changing, in the water resource section the BLM chose to focus on water use and availability rather than on a specific technology. As an example and in most cases, a PV facility could be located anywhere, based on available water resources and assuming all other conditions were met. A CSP facility could also be located anywhere, but it could have the greatest chance of becoming operational in WPZ 2 or WPZ 1 dependent upon the proposed cooling technology and whether the water is obtained from new or existing infrastructure.

While data used in development of the Water Protection Zones reflects current conditions as provided in the Water Development Commission study, the criteria (and associated design features) would apply to any basin from which conditions changes. In other words, it is possible for a basin that's currently in WPZ 3 to be moved into WPZ 2 or WPZ 1 should conditions change within that basin.

Comments:

Submission No: RDEP-Drft-0058
Commenter: Buster Johnson, Mohave County Board of Supervisors
Comment: Why are certain water basins identified as needing "high" protection, versus "low" protection? How was this derived? Hualapai Basin, within Mohave County, is shown as a basin of apparent special concern, termed "high protection". There are other basins in the County listed as being of intermediate "protection".

Submission No: RDEP-Drft-0009
Commenter: Rob Marshall, MFS, The Nature Conservancy
Comment: 2) Integrate results of Arizona's Water Development Resources Commission study in the identification of water protection categories for Arizona's groundwater basins
The Conservancy commends BLM's designation of water basins with sensitive surface watersheds and known water supply issues with the highest level of water protection in the RDEP. BLM did not take into account the findings of a recent comprehensive report completed by Water Resource Development Commission that analyzed Arizona's water needs for the next 100 years and identified areas of the state that will require additional water supplies to meet future projected water demands (WRDC 2011). Analysis of those data indicate that several additional basins warrant classification as water protection zone 3, including:
(1) basins where projected future water demands will exceed supply within the next 25 and 50 years in those basins (Table 2a); and
(2) basins where surface water resources (perennial rivers and streams) are dependent upon and sensitive to changes in groundwater levels (Table 2b)."

Submission No: RDEP-Drft-0008
Commenter: Paul Melcher, Department of Development Services
Comment: In relation to the solar technology utilized, staff recommends that it be limited to photovoltaic (PV) or concentrated photovoltaic (CPV) applications for two reasons. First, there is a minimal amount of water needed for PV /CPV development, whereas concentrated solar projects (CSP) can be very water-intensive. Recognizing that molten salt or another liquid could be used for collection or transfer, water is still need to create the steam to tum the turbines as part of the conversion of heat to electricity. Moreover, there is a recognition by Arizona and Yuma County residents as captured in the repo11 from the 99111 Arizona Town Hall (November 2011) that the state must develop sustainable renewable energy resources that are less water intensive. From the Yuma County work group commenting on the town hall results, the participants expressed a common sentiment that decried the use of Arizona water and land assets to generate electricity for California. Further deference to PV /CPV projects is also supported by the EIS recognition that the Agua Caliente SEZ would fall into Water Protection Zone 2 (WPZ 2) under Table 2-6 of Alterative 4. WPZ 2 language contains specific groundwater protections based on natural recharge and a project design feature that limits water use to dry-cooling technology.

Submission No: RDEP-Drft-0001
Commenter: Michael J. Lacey, Arizona Division of Water Resources
Comment: The report did not sufficiently contrast the considerable differences in water use between CSP and Photovoltaic (PV) facilities. Based on ADWR's experience in siting solar facilities, water use between these competing technologies can be vastly different, with CSP consuming upwards of 100 times more water than comparably sized PV facilities.
The Department recommends that separate presentations be made delineating lands suitable for CSP and those suitable for PV, based on water as a siting constraint.

Climate Change – Impact Analysis

Summary:

The BLM needs to consider climate change impacts in RDEP's impact analysis.

Response:

The Draft EIS provided a discussion of the climate change environmental consequences of the No Action and action alternatives (Draft EIS, Section 4.2.2, Greenhouse Gas Emissions and Climate Change, pgs. 4-16 to 4-18). Programmatic-level analyses on plan-level actions, such as RDEP, are typically broad and qualitative, rather than being quantitative or focused on site-specific actions (BLM Land Use Planning Handbook H-1601-1, Chapter II, A-B at 11-13 and Chapter IV, B at 29).

Comments:

Submission No: RDEP-Drft-0006
Commenter: Alex Daue, The Wilderness Society
Comment: The BLM should address the issues associated with climate change and implications for water resources, wildlife and their habitats in the context of the solar energy development.

Submission No: RDEP-Drft-0010
Commenter: John Shepard, Arizona Solar Working Group
Comment: The BLM should address the issues associated with climate change and implications for water resources, wildlife and their habitats in the context of the solar energy development.

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Submission No: RDEP-Drft-0071
Commenter: Jamie Rappaport Clark, Defenders of Wildlife
Comment: The BLM should address the issues associated with climate change and implications for water resources, wildlife and their habitats in the context of the solar energy development.

G.2.3 Cultural Resources

Design Features and Best Management Practices

Summary:

The BLM should consider additional design features and BMPs that address cultural resources and tribal concerns, including supporting avoidance as the preferred mitigation measure and the one to be used in virtually all circumstances if cultural resources could be impacted.

Response:

Due to the statewide scale of RDEP and the extensive presence of cultural resources throughout the state, it is impractical for Class III surveys or individual ethnographic reports to be conducted. As noted above, the REDAs identified in alternatives are being considered for *potential* development; "RDEP will identify those areas most suitable for renewable energy development within the variance areas identified by the Solar PEIS" (Draft EIS, pg. ES-3). The BLM is not directing development to one area or another and neither will the Record of Decision result in the granting of a permit for a renewable energy development to start construction. Any proposal for a solar or wind development will require due diligence, including National Environmental Policy Act (NEPA) and cultural resource program policy compliance, such as conducting a Class III inventory of the development proposal and a full analysis of the impacts on any resources in the area of potential effect.

Regarding future applications, government-to-government and project-specific consultations with tribal staff will provide opportunities for tribes to identify traditional cultural properties or use areas, culturally important plant and animal species, continued access, or other concerns. However, there may be times when the specifics of the project and/or location will require new or additional ethnographic research to adequately consider the effects of the development. Should new ethnographic research, studies, or interviews be determined as necessary, the BLM cultural staff, in consultation with tribal officials, will develop an appropriate study scope to complete the affects analysis.

The RDEP has revised its design features, BMPs, and required plans and studies to be consistent with the design features in the Solar Final PEIS. Inclusion of relevant design features as part of a projects application to BLM is a required element of the RDEP, including avoidance as the preferred mitigation option. Other design features, such as required monitoring, would be included depending on the specific design and location of the proposal and would be decided on in consultation with the affected tribes and the State Historic Preservation Office. Additionally, the BLM retains the discretion to deny solar and wind ROW applications based on site-specific issues and concerns, even in those areas available or open for application in the existing land use plan.

The lead agency will prepare a Monitoring and Discovery Plan for each project, regardless of the presence or absence of documented cultural resources, to address any anticipated or unanticipated discoveries during construction and operations. This plan will include a Plan of Action to address any discoveries of human remains or materials protected under the Native American Graves Protection and Repatriation Act (NAGPRA). Such plans will be prepared and implemented in consultation with tribes. In the event of a discovery, tribes will be notified promptly in accordance with procedures defined in 36 CFR 800.13, *Post-review discoveries* or as specified in the regulations implementing NAGPRA. Tribes will be consulted in evaluating the discovery and determining appropriate treatment. If the BLM determines that avoidance is not feasible, after consulting with tribes, it will provide the tribes with its rationale for arriving at this decision.

Comments:

Submission No: RDEP-Drft-0018

Commenter: John Bathke, Historic Preservation Officer for the Quechan Indian Tribe, Yuma Meeting Transcript

Comment: Obviously, there's the studies that are done, but we would specifically like to see an ethnography, trails studies, and regional synthesis studies done before each project. This has become problematic with Genesis, it's becoming problematic with Ocotillo, and I think it would alleviate a lot of headaches if we did that pre-application.

Submission No: RDEP-Drft-0020

Commenter: Rebecca A. Loudbear, Colorado River Indian Tribes

Comment: Cultural Resource Design Feature 17: "Unexpected discovery of cultural resources" must be better defined. CRIT recommends that work shall be halted for all resources—even so-called "isolates" until evaluation can proceed. Potentially affected tribes shall be notified within 24 hours of all discoveries.

Submission No: RDEP-Drft-0020

Commenter: Rebecca A. Loudbear, Colorado River Indian Tribes

Comment: Cultural Resource Design Feature 13: The text should be revised to make clear that avoidance of known cultural resources is always the preferred resolution option. In addition, a plan for previously unknown cultural resources shall be prepared for all projects. In addition to the measures suggested, the plan should also include consultation with potentially affected Tribes and notification of such tribes, within 24 hours, in the event of an

unexpected discovery. Finally, the unexpected discovery plan should require avoidance of the new site if avoidance is feasible. The agency shall support a determination of infeasibility with substantial evidence.

Submission No: RDEP-Drft-0020
Commenter: Rebecca A. Loudbear, Colorado River Indian Tribes
Comment: Cultural Resource Design Feature 14: A 100 percent archaeological surface survey is not a "treatment plan," but a prerequisite to informed decision-making. If it appears, based on a Class II inventory, that there is any possibility of cultural resources on the project site, a Class III survey must be completed prior to project approval.

Submission No: RDEP-Drft-0020
Commenter: Rebecca A. Loudbear, Colorado River Indian Tribes
Comment: Cultural Resource Design Feature 15: BLM shall engage all potentially affected Tribes to determine if a tribal monitor is recommended for the Project. In all cases where a tribal monitor is recommended, BLM shall prepare a monitoring plan.

Submission No: RDEP-Drft-0020
Commenter: Rebecca A. Loudbear, Colorado River Indian Tribes
Comment: Native American Concerns BMP 88: Where there is a reasonable expectation of encountering unidentified cultural resources during construction, monitoring, by both cultural resource specialists and tribal monitors, must be required.

Submission No: RDEP-Drft-0020
Commenter: Rebecca A. Loudbear, Colorado River Indian Tribes
Comment: According to the spiritual beliefs of many of CRIT's members, the disturbance and removal of cultural resources from the locations where such resources were left by their ancestors—even if completed in the name of "data recovery" or preservation—is taboo. This concern is heightened if the removal is completed by non-members acting without regard to the spiritual practices. As such, the best, and in CRIT's opinion, the only, mitigation measure for significant impacts to cultural resources affiliated with the Tribes is avoidance.
While the DEIS states a preference for avoidance (e.g., DEIS 4-21), the DEIS must be revised to more fully support avoidance as the preferred mitigation measure, and the one to be employed in virtually all circumstances where cultural resources are potentially impacted. In particular, the DEIS currently states that "[f]or subsurface sites discovered accidentally during earthmoving activities, the requirements for data collection would salvage important scientific data for future use." DEIS 4-24. This language must be revised to ensure that avoidance of newly discovered resources is considered first and foremost."

Submission No: RDEP-Drft-0020
Commenter: Rebecca A. Loudbear, Colorado River Indian Tribes
Comment: Native American Concerns BMP 89: Any determination that avoidance of visual intrusion is not "possible" must be made in consultation with potentially affected tribes and supported by substantial evidence.

Submission No: RDEP-Drft-0020
Commenter: Rebecca A. Loudbear, Colorado River Indian Tribes
Comment: Native American Concerns Design Feature 116: Any determination that avoidance is "not possible" must be made in consultation with potentially affected tribes and supported by substantial evidence.

Submission No: RDEP-Drft-0020
Commenter: Rebecca A. Loudbear, Colorado River Indian Tribes
Comment: Native American Concerns Design Feature 116 + 117: Please clarify the process for determining which plants and wildlife species are "culturally important" These species should be identified prior to submission of any project tiered off of this EIS. Any determination that avoidance is "not possible" must be made in consultation with

potentially affected tribes and supported by substantial evidence.

Submission No: RDEP-Drft-0020
Commenter: Rebecca A. Loudbear, Colorado River Indian Tribes
Comment: Native American Concerns Design Feature 120: Any determination that avoidance is "not possible" must be made in consultation with potentially affected tribes and supported by substantial evidence. CRIT does not believe that any of the proposed "possible mitigations" adequately mitigate for the disturbance of such cultural resources.

Submission No: RDEP-Drft-0020
Commenter: Rebecca A. Loudbear, Colorado River Indian Tribes
Comment: Historic Properties Treatment Plan: The HPTP must be developed in consultation with potentially affect tribes. Adequate time must be given for consultation on these documents. The Plan must specify that any determination that avoidance is "not possible" must be made in consultation with potentially affected tribes and supported by substantial evidence. Tribal monitors must be present when the project has any potential to affect cultural resources significant to tribes and tribes must be notified within 24 hours of any unexpected discovery. A 100 percent archaeological surface survey is not a "treatment plan," but a prerequisite to informed decision-making, If it appears, based on a Class II inventory, that there is any possibility of cultural resources on the project site, a Class III survey must be completed prior to project approval.

Submission No: RDEP-Drft-0020
Commenter: Rebecca A. Loudbear, Colorado River Indian Tribes
Comment: Cultural Resource Design Feature 10: A Class II inventory shall be required for all project areas where no previous survey has been completed, or where a previous survey has indicated the potential presence of cultural resource materials.

Formerly Used Defense Sites

Summary:

The document should discuss formerly used defense sites in the cultural resources section if the areas were associated with World War II-era historic sites.

Response:

As noted in comments, the affected environment discussion in chapter 3 omitted any discussion of the historic sites, such as historic military sites like Camp Horn and Camp Hyder, two significant World War II-era divisional training camps. Section 3.4.1, Cultural Resources, has been revised in the Final EIS to account for these historic military sites and any associated ordnance.

Comments:

Submission No: RDEP-Drft-0058
Commenter: Buster Johnson, Mohave County Board of Supervisors
Comment: Page 182, the discussion regarding the Northern Patayan Cultural Region seems to generally omit references to the sizable World War II-era, Formerly Used Defense Sites (FUDS) within Mohave County, still under study by the Army Corp of Engineers and Arizona Department of Environmental Quality. It is difficult to envision how a site that may have been compromised by military debris would have "cultural" value, however IF that can be said of Formerly Used Defense Sites, the document may want to reference the presence of known FUDS in Mohave County, as it seems to similarly identify former military uses in other parts of the state, namely in the Agua Caliente SEZ.

Baseline Information and Impact Analysis

Summary:

The EIS analysis for cultural resources is based on incomplete and insufficient information; therefore, it must be revised.

Response:

As noted in the Draft EIS, the RDEP EIS is a programmatic approach to planning on BLM-administered lands in Arizona; the descriptions of the affected environment and the analysis in environmental consequences is of sufficient detail to support the programmatic nature of the EIS. Impacts associated with renewable energy were generally described in Section 4.2.3, Cultural Resources. Once an application is under consideration, site-specific descriptions of the area's resources would be included in the NEPA analysis, and particular elements of a project's design would provide the context for specific impacts.

It is also important to recognize that the REDAs are identified for potential development. Any proposal for an actual project would require due diligence, including NHPA and NEPA compliance. At this project level of the process, the proposed application boundaries of the projects would be reviewed against the data layers to determine if there are additional issues that could not be recognized at the larger landscape scale. Of particular note are protected species and cultural resources that require mandated consultations.

For future applications that could be proposed (whether inside or outside the REDAs), pre-application meetings are required under the Solar Energy Development Program and would be helpful for a project developed on lands not yet surveyed for cultural resources. The BLM and other stakeholders, including tribes, could provide some sense of the potential for significant resources in the area during the pre-application process. A records check is required before any Class II or Class III surveys in order to familiarize the researcher with the area and to help define the survey strategy. Consultation with tribes and local historians and other basic research strategies would provide valuable information and context for any project inventories. A Class II sampling survey would provide additional information if there were still sufficient gaps in what might be present in the prospective project area. After all of the due diligence, if the land continues to have potential for development, the Class III survey would be required for the remaining lands as part of the application process.

Comments:

Submission No: RDEP-Drft-0004

Commenter: Thane D. Sommerville, Attorney for the Quechan Tribe

Comment: Here, the analysis of cultural resource impacts is based on incomplete and insufficient identification efforts. The DEIS notes that surveys would be necessary for any projects in the Lower Gila Cultural Region in order to identify cultural resources within the project area. Cultural Resources, 3-15. As noted above, BLM has not conducted any surveys in the Agua Caliente SEZ, and many nearby artifacts have not yet been evaluated. Id. at 3-20 - 3-22. As of 2003, less than seven percent of BLM-administered land in Arizona had been surveyed for cultural resources. Id. at 3-12. Based upon predictive modeling, thousands of new cultural resources could be present within the six Renewable Energy Development Areas (REDA) alternatives. Id.

Submission No: RDEP-Drft-0004

Commenter: Thane D. Sommerville, Attorney for the Quechan Tribe

Comment: In addition to the direct destruction of cultural resources that could result from renewable energy projects, the Tribe is concerned about indirect visual impacts. The DEIS states that developments would be visible from important mountains and highlands, including Sears Point ACEC and Eagle Mountains, Signal Mountain, and Woolsey Peak Wilderness Areas. Cumulative Impacts, 5-51. The cultural and ceremonial use of the landscape will be impaired when thousands of solar pedestals are visible from these areas. The cumulative analysis of the visual impacts is insufficient, as no glint/glare study was conducted, and the DEIS failed to enumerate the environmental effects of related projects, and the interaction of the projects.

Submission No: RDEP-Drft-0004
Commenter: Thane D. Sommerville, Attorney for the Quechan Tribe
Comment: The DEIS states that project proposals would be evaluated based on the NHPA § 106 requirements (Environmental Consequences (Cultural Resources), 4-18 - 4-19), but it is impossible for the BLM to determine the impact of the RDEP on cultural resources absent an initial finding of what cultural resources exist within any REDA, BLM-administered land, or the SEZ. The DEIS also puts forth that mitigation measures could decrease adverse impacts to cultural resources (Id. at 4-21). Mitigation measures cannot be however, until the cultural resources are identified and evaluated. In addition, impacts to sensitive cultural resources generally cannot be reduced through mitigation.
The inadequate identification efforts make it impossible for the decision-makers and interested public to reasonably evaluate the cultural significance of the area and the full extent of the impacts that the RDEP will cause to the cultural landscape. Marsh v. Oregon Natural Resources Council, 490 U.S. 360 (1989) (noting a primary purpose of NEPA is to foster both informed decision making and informed public participation). This also violates the obligation to make a good faith effort to identify cultural resources of concern to interested Indian tribes. See 36 C.F.R. § 800.4(b) (requiring agency to make reasonable and good faith effort to identify historic properties affected by undertaking). BLM must identify and evaluate the cultural resources present in lands affected by the RDEP in order to comply with NEPA and the NHPA.

Submission No: RDEP-Drft-0004
Commenter: Thane D. Sommerville, Attorney for the Quechan Tribe
Comment: The DEIS contains no actual analysis of the impact to cultural resources resulting from the proposed development of renewable energy projects throughout Arizona. Notably, the DEIS states that the RDEP would not impact cultural resources, and would only have indirect effects. Cumulative Impacts, 5-12. The DEIS, however, also states that cultural resources could be completely destroyed by the clearing, grading, and excavation of a RDEP project area alone. Environmental Consequences (Cultural Resources), 4-20. This analysis is inconsistent. The OEIS goes on to briefly discuss indirect impacts to cultural resources based on each of the REDA alternatives and the SEZ, yet the analysis consists of nothing more than statements that cultural resource loss could occur, though mitigation measures could reduce such impact. Id. at 5-12 - 5-15. This cursory analysis fails to satisfy NEPA requirements. City of Carmel- By- The-Sea v. United States Department of Transportation, 123 F.3d 1142 (1997).

Submission No: RDEP-Drft-0004
Commenter: Thane D. Sommerville, Attorney for the Quechan Tribe
Comment: This deferral also mars the DEIS's analysis of alternatives. In comparing alternatives, the EIR makes the generic assumption that each square mile of the identified REDA would contain just over 10 archaeological sites. DEIS 4-18 to 28. This assumption is applied without regard to the likelihood of encountering sites, even though DEIS acknowledges that certain types of lands are significantly more likely to contain cultural resources. DEIS 4-19 to 20 ("[C]ultural resource density increases in proximity to water. Any construction projects undertaken within the proposed REDAs that occur near major or seasonal

drainages, springs, or playa zones would increase the potential for impacts on prehistoric or historic cultural resources."); 4-22 ("[T]he areas of potential cultural significance, whether prehistoric or historic, would mostly likely be near dry lake beds, in dune areas, or along washes."); see also DEIS 3-12 ("the numbers, density, and distribution of the resources vary widely over geographic areas"). As such, the only reported difference between the various alternatives is based on total acreage of disturbed land. This generic analysis precludes informed decision-making. The EIR should be revised to take into account the characteristic of the lands included in each alternative, to determine whether certain alternative would result in a greater likelihood of cultural resource sites per acre. (continued below)

Submission No: RDEP-Drft-0020
Commenter: Rebecca A. Loudbear, Colorado River Indian Tribes
Comment: Second, the DEIS appears to omit specific information on cultural resources based on an assumption that areas with other sensitive resources overlap with areas of sensitive cultural resources. The DEIS makes clear that complete cultural resource information was not included in the initial screen. Table ES-2, which lists the areas screened out from the REDAs, does not include any specific cultural resource datasets. Elsewhere, the DEIS confirms that NRHP-listed properties are included in the REDAs (DEIS 4-23), no Class I review of cultural resources was completed (DEIS 3-13), that existing archaeological surveys are woefully incomplete (DEIS 4-23), and that the "presence, absence, or location of tribal interests and heritage resources . . . are not fully known." DEIS 4-72.
However, the DEIS then assumes that areas of "high [cultural resource] site density [] are not part of the REDA." DEIS 3-12; see also DEIS 2-50 ("It is unlikely that many known NRHP-eligible sites would be affected by development within the REDA."); 5-28 ("[TIhe REDAs would reduce the cumulative impacts on traditional territories by focusing development on areas of relatively low resources sensitivity. . . and in disturbed zones or areas near existing infrastructure."). As discussed above, the DEIS must be revised to identify areas of significant cultural resources and eliminate them from the REDA. At the very least, however, the DEIS should clarify exactly how significant cultural resources will be avoided, given that they are not specifically screened from the REDA. The DEIS must also support any assumptions based on correlation to other sensitive resource areas. If such correlations cannot be adequately supported, the DEIS must be revised to more accurately present the state of knowledge regarding the presence of absence of cultural resources within the REDA.

G.2.4 Cumulative Analysis

Analysis Area

Summary:
The cumulative analysis boundary should be extended to include California, Utah, Colorado, and New Mexico.

Response:
The RDEP identifies lands across Arizona that are most suitable for the development of renewable energy. The proposed land use allocations are at the planning-level scale and would not authorize any specific projects or imply such approval. Any proposal for a wind or solar energy project will still require site specific permitting, additional environmental analysis, and NEPA compliance. It would be speculative at this time to assume particular cumulative effects from any post-RDEP BLM Arizona or non-Arizona projects. If and when future BLM AZ projects are proposed and BLM has more data about the likely cumulative effects of those projects, including the likely geographic scope of those cumulative effects, the BLM will consider those effects through future site-specific NEPA. The environmental consequences presented in this EIS document the types and general magnitude of impacts that could be

anticipated from typical solar and wind energy developments. Applications for site-specific projects near state boundaries will assess the cumulative impacts of those actions and others within the appropriate distance to adequately asses the cumulative effects.

Comments:

Submission No: RDEP-Drft-0047
Commenter: Kenneth L. Sizemore, Five County Association of Governments
Comment: The analysis stops at state boundaries, and does not adequately consider impacts to adjacent communities in Utah. No scoping sessions were held north of the Grand Canyon. The analysis should be refined to include impacts to St. George and Kanab, UT.

Submission No: RDEP-Drft-0020
Commenter: Rebecca A. Loudbear, Colorado River Indian Tribes
Comment: Here, the DEIS artificially constrains the cumulative impact analysis by focusing solely on renewable energy projects in Arizona. DEIS 5-12.This geographic limitation ignores the fact that directly across the border in California, BLM is proposing a slew of renewable energy projects on federal land, including at over a dozen within a 50 mile radius of the CRIT reservation. That another division of BLM is preparing these projects is not a sufficient excuse for ignoring their clear cumulative impacts.

Analysis Scope

Summary:

The scope of cumulative analysis should include past activities, including transmission lines.

Response:

The scope of the cumulative analysis is generally described in Section 5.1.2, Past, Present, and Reasonably Foreseeable Future Actions. The section notes that "Effects of past actions and activities are manifested in the current condition of the resources, as described in the affected environment"; the existing ROW infrastructure is discussed in Section 3.8.1, Lands and Realty RDEP Affected Environment. It is also important to recognize that the REDAs are identified for potential development. Any proposal for an actual project would require due diligence, including NEPA compliance. It would be speculative at this time to assume particular cumulative effects from any post-RDEP BLM Arizona or non-Arizona projects. If and when future BLM AZ projects are proposed and BLM has more data about the likely cumulative effects of those projects, including the likely geographic scope of those cumulative effects, the BLM will consider those effects through future site-specific NEPA. At the site specific level, the proposed application design and requirements would be reviewed against the existing infrastructure to determine whether an upgrade is needed depends on the scale of the proposed development, and what impacts may result from the new project requirements.

Comments:

Submission No: RDEP-Drft-0022
Commenter: Elizabeth Webb
Comment: Recognition that some older transmission lines were sited before there was a more rigorous environmental review and as such some areas with existing infrastructure may not be appropriate for further energy expansion. Cumulative impacts can be a significant concern.

G.2.5 Wildlife – Naming Convention

Summary:

The BLM should correct the name of the Arizona desert tortoise.

Response:

The BLM will recognize the taxonomic change of the Sonoran desert tortoise population when accepted by the U.S. Fish and Wildlife Service.

Comments:

Submission No: RDEP-Drft-0007

Commenter: Greta Anderson, Western Watersheds Project

Comment: The DEIS should correct the taxonomic nomenclature for desert tortoise. The Sonoran desert tortoise is now Gopherus morafkai (Murphy et al., 2011). It is reported incorrectly throughout the document.

Submission No: RDEP- Drft-0011

Commenter: Desert Tortoise Council

Comment: We suggest the Arizona tortoise be named separately from the Mojave tortoise as Gopherus morafkai, Morafka's desert tortoise or the Sonoran desert tortoise (Murphy et al. 2011).Murphy RW, Berry KH, Edwards T, Leviton AE, Lathrop A, Riedle JD (2011) The dazed and confused identity of Agassiz's land tortoise, Gopherus agassizii (Testudines, Testudinidae) with the description of a new species, and its consequences for conservation. ZooKeys 113: 39–71.

G.2.6 Geographic Information System

Data Availability

Summary:

The BLM should make all the RDEP datasets available to the public. If information is too sensitive to release to the public, then the BLM needs to explain why the dataset is not available.

Response:

The BLM has and will continue to make GIS datasets available. The RDEP uses some datasets that contain sensitive data, such as known location of sensitive species and cultural sites, or are administered and owned by other agencies, such as AGFD. For the Final EIS the BLM will post a full listing of datasets and explain why any sets are not available and contact information on where to obtain datasets not controlled by the BLM.

Comments:

Submission No: RDEP-Drft-0071

Commenter: Jamie Rappaport Clark, Defenders of Wildlife

Comment: Lastly, the BLM needs to provide a mechanism by which the public can freely access publicly available data used in the DEIS, while still respecting data sensitivities. And, given significant errors that we found in the spatial datasets provided by the BLM, we recommend that the BLM should make available a complete, fully accurate dataset.

Submission No: RDEP-Drft-0010

Commenter: John Shepard, Arizona Solar Working Group

Comment: For non-sensitive data, all GIS data layers used as screens in RDEP should be accessible for download directly from the BLM's RDEP Web page,

or from that of the cooperating agency, and should be available as Google Earth (.kml or .kmz) files in addition to standard GIS formats. These data should include detailed metadata and attributes.2 Metadata for mapped wildlife habitats, predictive habitat models and composite outputs that have been used as screens should include reference to the methodologies employed for mapping and model development, and include a description of how they were applied as a screen in RDEP. Statistics and maps elucidating how wildlife-related screens characterize the proposed REDAs, nominated sites and Agua Caliente Solar Energy Zone should be made available.

Submission No: RDEP-Drft-0006
Commenter: Alex Daue, The Wilderness Society
Comment: Although BLM made available some of the data layers used on the DEIS website, that information did not include the data layers provided by the AGFD.
Without the needed information, we are left with a very general understanding of the way in which BLM applied the wildlife-related screens, including AGFD's Species and Habitat Conservation Guide (SHCG). The narrative provided for the application of the AGFD's SHCG is very general (DEIS, pages 4-42 and 4-46), and does not provide sufficient detail as to how other screens, such as those related to big game were developed, selected (or rejected) and applied.

Submission No: RDEP-Drft-0006
Commenter: Alex Daue, The Wilderness Society
Comment: For non-sensitive data, all GIS data layers used as screens in RDEP should be accessible for download directly from the BLM's RDEP Web page, or from that of the cooperating agency, and should be available as Google Earth (.kml or .kmz) files in addition to standard GIS formats. These data should include detailed metadata and attributes.4 Metadata for mapped wildlife habitats, predictive habitat models and composite outputs that have been used as screens should include reference to the methodologies employed for mapping and model development, and include a description of how they were applied as a screen in RDEP. Statistics and maps elucidating how wildlife-related screens characterize the proposed REDAs, nominated sites and Agua Caliente Solar Energy Zone should be made available.

Submission No: RDEP-Drft-0006
Commenter: Alex Daue, The Wilderness Society
Comment: For sensitive data, the BLM should explain why this information is unavailable and provide a means for the public to request either the data layers or specific data analyses.

Submission No: RDEP-Drft-0010
Commenter: John Shepard, Arizona Solar Working Group
Comment: For sensitive data, the BLM should explain why this information is unavailable and provide a means for the public to request either the data layers or specific data analyses.

Submission No: RDEP-Drft-0071
Commenter: Jamie Rappaport Clark, Defenders of Wildlife
Comment: Recommendation: The BLM needs to provide a mechanism by which the public can freely access publicly available data used in the DEIS, while still respecting data sensitivities.

Submission No: RDEP-Drft-0071
Commenter: Jamie Rappaport Clark, Defenders of Wildlife
Comment: Not only have these data errors prevented us from conducting accurate analyses, we are concerned that inaccuracies or offsets in these layers may result in a failure to detect areas of high resource value within proposed REDAs, areas that were intended to be screened out. Statistics generated based upon these same layers may also be inaccurate. We measured an approximately 209 meter offset in the original dataset provided, and an 80 meter offset in the modified version provided to us on 05/15/12. The occurrence of these errors raise a concern that there may be other errors in the datasets we have not yet been able to detect. The BLM has an obligation to provide accurate data

to the public and to correct the administrative record.
Recommendation: BLM should make available to the public a complete, fully accurate dataset.

Submission No: RDEP-Drft-0003
Commenter: Amanda Ormond, Interwest Energy Alliance
Comment: Recommendation 8 – Transparency of Data Layers.
The BLM has incorporated several data layers that come from state agencies, yet those data are not readily accessible for review and/or deemed confidential. Therefore, it is impossible for Interwest to comment on the appropriateness of inclusion of some layers. Further, including these data and not have them be accessible for review is in essence deferring decisions on federal land management to state agencies.
Interwest recommends that BLM work with state agencies to make available data layers that are used in the RDEP process. For layers that are deemed sensitive the Department should identify a process to work with those seeking information to provide the information while maintaining confidentiality.

Data Corrections

Summary:
The BLM needs to correct the GIS datasets.

Response:
The datasets have been corrected for the Final EIS.

Comments:
Submission No: RDEP-Drft-0071
Commenter: Jamie Rappaport Clark, Defenders of Wildlife
Comment: 1) We encountered significant data errors that hampered our ability to provide timely, accurate, and helpful comments regarding wildlife impacts to the BLM, and which raise concerns regarding the ultimate accuracy of the heavily geospatial RDEP process.
2) The original public data were not internally consistent. For example: the RDEP_REDA_alt1_max_BLM.shp and the RDEP_REDA_alt1_max_nonBLM.shp shapefiles overlap one another, which they should not given that they are based on land ownership; and
3) The original data in question were defined as NAD_1983_UTM_Zone_12N. However, they do not line up correctly with the AZDFG data as they should. It appears that this is because the data were potentially defined with the incorrect datum. Re-defining the data only partially fixes this registration issue and therefore this potential solution does not fix the alignment problem.
4) The land ownership positioning issue was rectified in the modified dataset. However, there is still a positioning issue for polygons related to the Species and Habitat Conservation Guide (SHCG) which places SHCG related polygons outside of the low SHCG categories from which they were likely derived, into higher ones that they are obviously not intended to be in. Also only the BLM half of each alternative dataset was provided. The non-BLM parcels have not been corrected.

Independent Verification

Summary:
The RDEP datasets should be independently verified to assess their accuracy.

Response:
The Final EIS GIS data were created by the BLM Arizona State Office, in conjunction with the BLM's contractor EMPSi. The Draft EIS GIS data were posted on the RDEP website, which provides an opportunity for independent verification. The Final EIS GIS's metadata includes descriptions of the methodology used to develop the REDA alternatives, and is available online at the RDEP Web site.

Comments:
Submission No: RDEP-Drft-0071
Commenter: Jamie Rappaport Clark, Defenders of Wildlife
Comment: Given the inaccuracies discovered in the BLM's dataset for the DEIS, we are concerned that these same data might have been used by the BLM in their own analyses and development of the REDAs and the Agua Caliente SEZ. The accuracy of the data used in this process needs to be verified.

G.2.7 Impact Analysis

Climate Change Assumptions

Summary:
BLM's assumption that energy produced would be the same across all alternatives is incorrect and needs to be modified.

Response:
As noted in Section 4.1.3 Analytical Assumptions, several assumptions were made to facilitate the analysis of the projected impacts. These assumptions set guidelines and provide reasonably foreseeable projected levels of development that would occur within the RDEP planning area and timeframe. These assumptions should not be interpreted as constraining or redefining the management objectives and actions proposed for each alternative, as described in Chapter 2, Alternatives. The commenter is correct in noting that acreage differences between alternatives can result in variation of intensity and context of effects across alternatives. However, the action alternatives are not much more restrictive of one as compared to the others; notwithstanding the acreage differences, the alternatives that would identify fewer REDA lands would not actually be much more restrictive for renewable energy development than alternatives with more REDA lands. The stated assumption did not adequately represent the basis for the climate change analysis. It has been modified in Section 4.2.2 in the Final EIS to better explain that anticipated development for renewable energy, as expressed in the RFDS, is the starting point for the analysis.

Comments:
Submission No: RDEP-Drft-0058
Commenter: Buster Johnson, Mohave County Board of Supervisors
Comment: Page 369, Section 4.2.2, states that one assumption made in the impact analysis is that "The overall amount of energy provided by renewable sources would be the same under each alternative." Since some of the alternatives are much more restrictive (by area) than others, it is hard to see how that assumption can be made. Stated another way, it is difficult to see how those assumptions could be accurate. Some alternatives would limit the amount of usable areas substantially, relative to other alternatives. Surely the acreage available under each alternative has to play an important role in calculating how much electrical generation is possible under each scenario.

Mitigation Measures

Summary:

The BLM needs to include mitigation measures with all elements of CEQ Regulation 1508.20.

Response:

The RDEP identifies lands across Arizona that are most suitable for the development of renewable energy. This proposed land use allocation is at the planning-level scale and would not authorize any specific projects or imply such approval. Any proposal for a wind or solar energy project will still require site specific permitting, additional environmental analysis, and NEPA compliance. The environmental consequences presented in this EIS document the types and general magnitude of impacts that could be anticipated from typical solar and wind energy developments.

Site specific mitigation measures would be applied to respond to the unique impacts and setting for a particular project.

All of the design features and BMPs listed in Appendix B were intended to avoid, minimize, or mitigate potential resource conflicts, such as impacts on critical wildlife habitat or impacts from siting a project near sensitive viewsheds. The design features and BMPs were reviewed in light of the revised design features of the Solar Energy Final Programmatic EIS and the Wind PEIS ROD. The BLM determined that most of the RDEP's suggested mitigation measures duplicated national program guidance; in order to reduce the duplication, RDEP's mitigation measures have been modified to conform to the BLM's national solar energy and wind energy programs. Appendix B, Design Features and Best Management Practices, has been modified to incorporate by reference the national solar energy program design features, as described in the Solar Final Programmatic EIS, and the wind energy program BMPs, as described in the Wind PEIS ROD. Only those design features and BMPs that are unique to Arizona and REDA lands are specifically noted in the revised Appendix B. Each project specific application will be subject to analysis and may have other site specific design features or mitigation.

Comments:

Submission No: RDEP-Drft-0007

Commenter: Greta Anderson, Western Watersheds Project

Comment: The scale of the degradation and loss of the public lands that could result from the RDEP process is unprecedented, which makes consideration of appropriate mitigation measures difficult. All of the mitigation measures outlined in §1508.20 are applicable to various aspects of solar energy development.

Submission No: RDEP-Drft-0006

Commenter: Alex Daue, The Wilderness Society

Comment: Mitigation: Although it appears that REDA lands are relatively unencumbered by significant environmental conflicts, mitigation measures should be considered to address impacts to natural resources and public values.

Submission No: RDEP-Drft-0010

Commenter: John Shepard, Arizona Solar Working Group

Comment: Mitigation: Although it appears that REDA lands are relatively unencumbered by significant environmental conflicts, mitigation measures should be considered to address impacts to natural resources and public values.

Regional Mitigation Plan

Summary:

The BLM should consider a regional mitigation plan requirement as part of the design features.

Response:

The RDEP identifies lands across Arizona that are most suitable for the development of renewable energy. The proposed land use allocations are at the planning-level scale and would not authorize any specific projects or imply such approval. Any proposal for a wind or solar energy project will still require site specific permitting, additional environmental analysis, and NEPA compliance. Mitigation requirements will be applied on a project specific level.

Regional Mitigation Planning is currently being piloted by the national Solar Program and is discussed in detail in the Solar Final PEIS (see Section A.2.5 of Appendix A of the Final Solar PEIS). Should a Regional Mitigation Plan become an effective tool then they BLM Arizona will determine how best to apply it to SEZs and REDAs.

Comments:

Submission No: RDEP-Drft-0009

Commenter: Rob Marshall, MFS, The Nature Conservancy

Comment: An example of a regional mitigation plan to offset unavoidable impacts would encompasses a robust compensatory program with the following six elements:

1. An ecological baseline upon which unavoidable impacts are assessed.

What is the current ecological status of the landscapes to be developed? What is the habitat quality and level of intactness, where do the species occur and what is their population status and viability? What species are rare, sensitive, endemic, threatened, endangered? What are the aquatic, surface water and groundwater resources and what is their status? Where are the wildlife migratory corridors, where is connectivity of habitats critical in the face of climate change? What ecological trends are underway and how do we expect them to impact species and habitats? The information and data to inform these and other questions form the ecological baseline from which to assess the impacts, both site specific and cumulative, from renewable energy development.

2. A mechanism to assess & quantify unavoidable impacts over the life of the impacts.

There is a growing body of work to develop methodologies to assess impacts from development. BLM has participated in the development of several, and a wide array created by BLM, other federal and state agencies, academia, consultants, etc., have been used to assess impacts on BLM-administered lands. Whatever methodology is selected, it should be transparent and based on best available scientific techniques. It should capture impacts beyond those to federal and state ESA-listed species, BLM Species of Concern and Sensitive Species, and habitats protected under the Clean Water Act. It should also capture cumulative impacts, and the temporal nature of impacts, i.e. over the life of the impact (likely in perpetuity).

3. A methodology to translate the impacts into dollars, i.e. mitigation investments – including sufficient funding to manage and monitor the mitigation investments.

Similar to (2.) above, extensive work has gone into and continues to develop methodologies to translate ecological impacts into dollars or mitigation investments and actions. Again, transparency and consistency in the use of the methodology is important. Importantly, the costs of assessing the impacts, and the monitoring and managing the mitigation investments over the life of the impacts needs to be included in the cost of mitigation, and thus the amount of mitigation investment that the project proponent is responsible for. However, the costs of mitigation cannot be so high, or

unreasonable, that development cannot occur – a key facet is to avoid impacts to areas that are "unmitigatable," i.e. ecological resources that cannot be replaced or are extremely rare, or where the impacts are so extensive as to drive the costs of mitigation to a level beyond a reasonable level, such as has been largely accomplished, with several omissions noted in these comments, by BLM's RDEP process.

4. A structure to hold and apply mitigation investments.

Given BLM cannot hold mitigation funds, a structure such as a 3rd party arrangement with fiduciary responsibility (and demonstrated fiduciary experience) should be implemented to hold, manage and allocate mitigation investments. Structures should be regionally/landscape or state based to ensure mitigation investments are responding to impacts on the specific landscape being impacted. Structures should also include representation by agencies such as BLM, State Fish and Game agencies, and U.S. Fish and Wildlife Service. Involvement by key stakeholders in an advisory and oversight role, i.e. counties, conservation community, industry, sportsmen/recreation, etc., would also be important to the long-term success of a mitigation program.

5. A prioritization, e.g. conservation plan, as to where and how mitigation investments should be made.

Where and how should mitigation investments be used to ensure the highest return on investment? What "tools" should be used to implement mitigation, i.e. land acquisition, withdrawing BLM-administered lands from other uses, changing land designations or uses, restoration, mitigation banks, etc. How are conservation priorities established, especially relative to potential impacts?

At a minimum, we recommend BLM develop a regional conservation plan, such as at an ecoregional scale as described above. Plans should be driven by the best data as the basis for establishing conservation priorities. Conservation plans should seek to prioritize actions to address conservation priorities that achieve the best conservation return on investment.

6. Monitoring to ensure mitigation investments are adequate relative to impacts over the life of the impacts.

Monitoring and adaptive management are key to a successful mitigation program. We recommend the establishment of an adaptive management program (i.e. specifically implement AIM across the region) with long term monitoring and assured funding from project proponents for the life of the project.

Submission No: RDEP-Drft-0009

Commenter: Rob Marshall, MFS, The Nature Conservancy

Comment: By regional scale we mean a scale such as ecoregions, for example, which share similar plant communities and species and, thus, make like for like habitat compensation more straightforward and increase the likelihood that sufficient wildlife habitat remains intact. This approach can benefit from currently-available regional landscape-scale ecological assessments, such as BLM's rapid ecoregional assessments, state wildlife action plan data such as the Arizona Game and Fish Departments Habimap Arizona, or TNC's ecoregional and other regional-scale conservation assessments.

To ensure unavoidable impacts are fully offset, the Conservancy recommends that BLM establish an off-site mitigation program that, in addition to the potential for acquisition of private lands, allows mitigation on BLM-administered lands where impacts cannot be addressed through acquisition and long-term management of private lands; allows "mitigation banking" on BLM-administered lands where conservation designation and/or management can achieve mitigation needs/outcomes relative to specific impacts to habitats and associated species; ensures adequate funding over time to achieve mitigation outcomes; creates third party-managed endowments of mitigation funds to manage and direct mitigation investments and activities; and ensures monitoring and adaptive management to ensure mitigation is adequate relative to impacts over time. Below we outline additional specifics on the elements of a regional mitigation plan. (continued below)

Submission No: RDEP-Drft-0009
Commenter: Rob Marshall, MFS, The Nature Conservancy
Comment: 3) Implement Mitigation Hierarchy at Regional Scale to Achieve Lasting, Tangible Results
We commend BLM for the considerable attention to on-site best management practices that would avoid or minimize adverse environmental impacts. Less attention has been focused in the RDEP DEIS, however, on how BLM will resolve unavoidable impacts to natural resource values. As emphasized in The Nature Conservancy's comments on BLM's Solar Draft Programmatic EIS for Six Southwestern States, current utility scale solar technologies permanently eliminate habitat and displace species, as well as eliminate most other uses of BLM-administered lands. As a result, on-site mitigation to offset habitat loss/fragmentation and other impacts is largely impossible, leaving off-site mitigation the primary (if not the only) option. While we recognize that the purpose of RDEP is to proactively guide infrastructure away from sensitive natural resources, we believe it is important for BLM to develop and implement a clear and comprehensive plan for unavoidable impacts to sensitive or regionally important natural resources.
We recommend that BLM create a mitigation framework at a regional scale to ensure mitigation efforts yield lasting, tangible results, including an offset program that compensates for loss of high ecological value habitat with like habitat off-site. One rationale for a regional framework is the leverage that can be gained by combining offsets for unavoidable impacts from RDEP projects with those from other infrastructure projects such as SEZs. The potential to combine mitigation needs under one regional plan will make mitigation efforts less costly and more effective than a project by project approach that typically results in a patchwork of small mitigation sites that are of insufficient scale and connectivity to be ecologically viable or to fully offset impacts over time.

G.2.8 Soils – Affected Environment

Summary:
The BLM should consider the commenter's suggested new NRCS soil data sources.

Response:
All available NRCS soil survey data were considered in the development of the DEIS, as discussed in detail in Section 3.17.1, Soil Resources, under affected environment and in Section 4.2.17, Soil Resources, under the impacts analysis. Due to the scale of the project, only soil orders for the entire planning area were discussed rather than individual soil series. As the analysis for the SEZ was more site specific, the analysis included discussion of the individual soil series. Impacts by soil order for the planning areas and by soil series for the SEZ are included in Section 4.2.17 (see Tables 4.6-4.13). Specific NRCS references used are provided in Chapter 8, References. The BLM recognizes that at this scale of planning there will be incomplete or unavailable information, such as a lack of ground-truthing of the NRCS data used or unavailability of soil field inventories (see Section 4.1.4, Incomplete or Unavailable Information). Should a developer propose a project within a REDA, then either the ground-truthing or soil field inventory may be conducted as needed as a component of site-specific NEPA analysis before project approval and development.

Comments:

Submission No: RDEP-Drft-0042
Commenter: Kirk Brus, Army Corps of Engineers
Comment: Chapter 4.14 Incomplete or Unavailable Information, specifically the discussion: "Some of the major types of data that are incomplete or unavailable include the following: "Field inventory of soils and water conditions" A reference on soils (inventory), from the NRCS, is located at the following weblink: http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx

G.2.9 Implementation – Existing Applications

Summary:

The BLM needs to clarify how existing applications would be processed once REDAs are allocated.

Response:

The process for processing applications would follow the BLM's National Solar Program guidance, as described in the Solar Program Record of Decision. The BLM defines 'pending' applications as any applications (regardless of place in line) filed within proposed variance and/or exclusion areas before the publication of the Supplement to the Draft Solar PEIS (October 28, 2011), and any applications filed within proposed SEZs before June 30, 2009 (see Section 1.3.3.2 of this Final Solar PEIS). Pending applications will continue to be processed in accordance with due diligence and siting requirements under the BLM's existing policies and regulations and will not be subject to any new program elements adopted through the ROD for this Solar PEIS. The BLM will process second-in-line and subsequent applications as pending applications if they otherwise meet the criteria for pending and the corresponding first-in-line application is closed (denied or withdrawn) (Solar Final PEIS, volume 7, Section 3.11.2 Pending Applications).

Comments:

Submission No: RDEP-Drft-0010
Commenter: John Shepard, Arizona Solar Working Group
Comment: Previous Applications: The proposed BP Wind Energy project covers a significant amount of the Mohave REDA, raising questions about how proposed REDAs align with existing applications.

Submission No: RDEP-Drft-0003
Commenter: Amanda Ormond, Interwest Energy Alliance
Comment: Recommendation 4 – Existing Projects on Proposed REDA Lands
Interwest members are actively developing projects in Arizona. It is unclear how, or if existing projects may be affected by the designation of a Renewable Energy Development Area (REDA) through the RDEP process.
Interwest recommends that the Department take care to ensure that currently proposed or pending projects on BLM lands are not negatively affected by the RDEP project.

Submission No: RDEP-Drft-0005
Commenter: Katherine Gensler, Solar Energy Industries Association
Comment: We encourage Arizona BLM to make clear its expectation of a faster permitting process. In addition, we suggest that REDA applications automatically qualify for the "Priority Projects" list or other priority processing scheme that BLM institutes

Submission No: RDEP-Drft-0062
Commenter: Kathleen M. Goforth, Environmental Protection Agency, Environmental Review Office
Comment: We also recommend that the BLM provide additional information, in the FEIS, on the procedures for evaluating renewable energy applications submitted to the BLM. The DEIS

describes the protocol for processing applications for new projects, including new projects proposed outside of a renewable energy development area (REDA) or SEZ; but it is unclear how existing project applications are to be handled (e.g., whether they will be given a lower priority than projects proposed in a REDA or SEZ), and whether they will be subject to the design features and BMPs included in the RDEP.

G.2.10 Lands and Realty – Impact Analysis

Summary:

The BLM needs to clarify why military air training routes would be a hindrance to renewable energy development.

Response:

Placing renewable energy plants and transmission facilities in or near military training routes (MTRs) could create safety issues for military aircraft pilots. However, the presence of MTRs does not preclude renewable energy development. Where MTRs are present, additional coordination with the Federal Aviation Administration (FAA) and Department of Defense (DoD) would be required before a specific project begins.

Supplemental information has been added to Section 3.8.1, Land Use and Realty, of the FEIS to further define MTRs and discuss the applicability of the DoD's AP/1B publication to renewable energy facilities. Minimum AGL data for all MTRs in Arizona is also available in a 2003 map published by the Arizona State Land Department and could help inform the ROW authorization and facility siting processes for future renewable energy development.

Comments:

Submission No: RDEP-Drft-0058

Commenter: Buster Johnson, Mohave County Board of Supervisors

Comment: Figure 3-14, Page 226, shows Military Training Routes (air flights). The EIS appears to indicate that the presence of such routes generally would preclude the placement of renewable energy proposals within those areas. Those paths crisscross over large portions of Mohave County. Why would the presence of renewable energy facilities in these areas create a concern?

G.2.11 Livestock Grazing – Impact Analysis

Summary:

The BLM needs to discuss the impacts on wildlife from allowing solar development in the closed allotment within the Agua Caliente SEZ.

Response:

The RDEP FEIS addresses the impacts from the proposed land use plan amendment decisions on the various resources occurring within the SEZ. The proposed RMP amendment decisions are to identify the Agua Caliente SEZ, establish goals, objectives, management actions, and design features for application within the SEZ, identify any specific SEZ design features, change the VRM class from III to IV, and to remove the Wildlife Habitat Management Area allocation and the SRMA designation from within the SEZ boundary (see Section 1.5.2, Decisions on the SEZ). The FEIS presents the range of impacts (direct, indirect, and cumulative) from all these actions on the various resources that occur within the proposed Agua Caliente SEZ including wildlife, livestock grazing, and vegetation. For impacts on

livestock grazing, see Section 4.2.9 for direct and indirect impacts and Section 5.3.8 for cumulative impacts; for impacts on wildlife see Sections 4.2.6 and 5.3.6; for special status species, see Sections 4.2.19 and 5.3.15; and for vegetation, see Sections 4.2.21 and 5.3.17.

As noted in Section 4.2.9, Livestock Grazing, the grazing allotment which overlaps with the Agua Caliente SEZ (the Palomas Allotment) has not had any grazing in the last five years, at a minimum, and has no AUMs, as stated in the Yuma FO FEIS (see Table 4-18). As a result, management decisions in the 2010 ROD to "close" this allotment are likely to have had negligible benefit to wildlife because no practical change in use occurred due to lack of activity under both previous and current management. As such, the development of the Agua Caliente SEZ is not likely to represent a significant cumulative impact on the habitat specifically related to livestock grazing management. However, the BLM recognizes that cumulative impacts could occur on wildlife habitat and would include loss of wildlife habitat; these cumulative impacts of development of the SEZ on wildlife are discussed in Section 5.3.6, Fish and Wildlife.

Comments:

Submission No: RDEP-Drft-0007
Commenter: Greta Anderson, Western Watersheds Project
Comment: The removal of livestock grazing [from the SEZ ephemeral grazing allotment] was pitched as something of a habitat offset for the lands that are still in use under the current ROD, i.e. the closure of some portions of the field office mitigated the ongoing livestock grazing in the northern part of the planning area. However, if solar development occurs on the "closed" allotments, the benefit to wildlife is reduced. The new Agua Caliente SEZ is a cumulative impact in the habitat that should be considered in context of livestock grazing in the field office.

G.2.12 Noise – Impact Analysis

Summary:

The BLM needs to consider noise impacts from renewable energy development.

Response:

Impacts related to noise from renewable energy development are discussed in Section 4.2.12, Noise (pg. 4-75 to 4-82 of the Draft EIS).

Comments:

Submission No: RDEP-Drft-0067
Commenter: Dr. Annita Harlan
Comment: I especially encourage you to consider the impact that generator sound/noise will have on the environment and its inhabitants.

G.2.13 Nominated Sites

Summary:

The BLM should explain how nominated sites factor in to REDAs, and nominated sites should be screened with the same elimination criteria as those used to determine REDAs.

Response:

In the Draft EIS, all nominated sites where carried forward and identified as REDAs based on the assumption that prior uses would have removed or reduced any sensitive resource values. During the public review of the Draft EIS, commenters noted that some of the nominated sites did not appear

disturbed or may still support sensitive resources. To address this issue, the nominated sites have been screened in the Final EIS using the following process:

1. Nominated sites were evaluated using readily-available satellite photographs and site history to determine if they were notably disturbed. Any nominated sites that were determined to be disturbed were brought forward as a REDA.
2. The remaining sites were evaluated using the REDA screening criteria noted above. If they met the REDA requirements, then they were included as a REDA.
3. Sites that had partial disturbance or contained areas with no known sensitive resources, were delineated. The portions of the sites that were disturbed or met REDA screening requirements, were included as REDA.
4. All undisturbed sites containing sensitive resources were not included as REDA.

Additionally, the Butler Valley and Empire Farms sites (both on State lands), and the Fredonia OHV Area, Sonoita Landfill, and the Snowflake Mine sites (BLM-administered lands) were withdrawn from consideration by request of the State of Arizona, the BLM Arizona Strip Field Office, and the BLM Arizona State Office after review of the Draft EIS. These sites are not included as a REDA or in the analysis.

Comments:

Submission No: RDEP-Drft-0071
Commenter: Jamie Rappaport Clark, Defenders of Wildlife
Comments: Also, we recommend Species and Habitat Conservation Guide lands of Tiers 4, 5, and 6 and all special status species habitats should be excised from nominated sites. Or, if nominated sites contain a significant amount of Tier 4, 5 and 6 lands and/or special status species habitat, that they be dropped altogether to ensure this subset of lands are consistent with RDEP's original intent. The BLM should work to ensure that the distribution of REDAs into Species and Habitat Conservation Guide tiers is skewed proportionally more towards Tiers 1 & 2 than Tier 3.

Submission No: RDEP-Drft-0071
Commenter: Jamie Rappaport Clark, Defenders of Wildlife
Comment: We have learned from discussions with BLM that the 64 nominated sites are considered REDAs, even though they were subject to a different screening process. The Final EIS should include a more complete description of how the nominated sites relate structurally to the rest of the REDAs, including whether nominated site acreage counts towards the summed total REDA acreage.

Submission No: RDEP-Drft-0058
Commenter: Buster Johnson, Mohave County Board of Supervisors
Comment: The current listing of 64 sites (recommended for renewable energy placement due to the fact that they are areas of known damage or existing disturbance to the land) seems an inadequate identification of likely areas of renewable-energy approval. It also raises the question, "are any other lands seriously going to be considered by the BLM for approval of renewable energy placement, other than the 64 sites nominated in this EIS"?

Submission No: RDEP-Drft-0071
Commenter: Jamie Rappaport Clark, Defenders of Wildlife
Comment: Recommendation: We urge the BLM to apply the REDA screens to nominated sites—those nominated sites that would not have passed the full REDA screening should not be included as REDAs under RDEP.

Agricultural Lands

Summary:

The BLM should include a discussion on the potential for acquiring water rights and water resource benefits that could accrue by developing solar facilities on irrigated lands.

Response:

Acquisition of water rights is out of scope for the RDEP as water rights are governed by the State of Arizona. Arizona has five Active Management Areas, located in regions with a heavy reliance on mined groundwater. Active Management Areas are subject to regulation, in accordance with the Arizona Groundwater Code; management goals for the Active Management Area could restrict water-intensive uses, such as solar energy generation requiring water for cooling or condensation. Section 3.3.2 of the nominated sites report (Appendix C in the Final EIS) discusses CSP plant development considerations, including water use.

The BLM would conduct subsequent NEPA analyses for site-specific project and implementation level actions for proposed renewable energy development (Section 1.5.3). These activity plan-level analyses would tier to the REDA analysis and would expand the environmental analysis when more specific information is known. These subsequent NEPA analyses would tier to the land use planning analysis and would evaluate project impacts at the site-specific level (see 40 CFR, Sections 1502.20 and 1508.28). In addition, as required by NEPA, the public would be offered the opportunity to participate in the NEPA process for these specific implementation actions.

Comments:

Submission No: RDEP-Drft-0001
Commenter: Michael J. Lacey, Arizona Division of Water Resources
Comment: Appendix C, Section 2.7, Agricultural Lands. ADWR recommends including a discussion on the potential for acquiring water rights and water resource benefits that may accrue by the development of solar facilities on actively irrigated lands. By example, CSP facilities are being developed and proposed on irrigated lands in the Gila Bend Basin, resulting in significant reductions in potential water use.

Cultural Resources

Summary:

The BLM needs to screen the nominated sites for cultural resources and sensitive tribal resources.

Response:

As noted in the Draft EIS, the RDEP EIS is a programmatic approach to planning allocations across Arizona BLM-administered lands and that the nominated sites are identified for potential development. Any proposal for an actual project would require due diligence, including NEPA compliance. At the project development level, the proposed application boundaries of the projects would be reviewed against the data layers to determine if there are additional issues that could not be recognized at the larger landscape scale.

For future applications that could be proposed (whether inside or outside nominated sites), pre-application meetings are required under the Renewable Energy Development Program and would be helpful for a project developed on lands not yet surveyed for cultural resources. The BLM and other

stakeholders, including tribes, could provide some sense of the potential for significant resources in the area during the pre-application process. A records check is required before any Class II or Class III surveys in order to familiarize the researcher with the area and to help define the survey strategy. Consultation with tribes and local historians and other basic research strategies would provide valuable information and context for any project inventories. A Class II sampling survey would provide additional information if there were still sufficient gaps in what might be present in the prospective project area. After all of the due diligence, if the land continues to have potential for development, the Class III survey would be required for the remaining lands as part of the application process.

Comments:

Submission No: RDEP-Drft-0020

Commenter: Rebecca A. Loudbear, Colorado River Indian Tribes

Comment: The RDEP also identifies previously disturbed sites as REDAs, regardless of potential sensitive resources. The appendix identifies specific disturbed sites, and lists potential resource constraints, including the presence of sensitive species or habitats. However, the listings contained in the appendix make no mention of cultural resources or other tribal constraints. This omission is particularly problematic with respect to sites 14 and 43, which are directly adjacent to the Colorado River Indian Reservation. The listing for site 43, which is over 22,000 acres, states that "there may be fewer environmental constraints associated with this site, which could result in a reduced likelihood for increased permitting and construction costs and public opposition." App. C. CRIT strongly objects to this characterization. The site was previously used for agriculture, which as the DEIS acknowledges, indicates that it "could contain cultural resources or intact archaeological deposits." DEIS 4-3. Moreover, solar development of the site would create significant visual resource impacts from the Reservation, an impact that is glaringly omitted. Similar issues exist with respect to sites 6, 9, 14, 26 and 36. The DEIS must be revised such that the listings properly identify both known and potential constraints posed by cultural resource and tribal concerns.

Submission No: RDEP-Drft-0004

Commenter: Thane D. Sommerville, Attorney for the Quechan Tribe

Comment: The preferred alternative also allows renewable energy projects to be placed on lands that have merely been subject to anthropogenic activity, and such lands could contain significant cultural resources under the surface disturbances. The Bureau of Land Management (BLM) should limit renewable energy projects to lands that have been subject to only the most intensive and permanent disturbances, such as landfills, mines, or gravel pits.

Submission No: RDEP-Drft-0004

Commenter: Thane D. Sommerville, Attorney for the Quechan Tribe

Comment: B. BLM Should Limit Qualified Lands to Only Specific Categories of Significantly and Permanently Disturbed Areas.

According to the DEIS, the RDEP seeks to promote sustainable renewable energy development through reusing disturbed land. Land Reuse, 2-14 - 2-16. The Tribe generally supports locating renewable energy projects on disturbed land, but is concerned that the RDEP could lead to development of such projects on lands that have merely been subject to anthropogenic activity, such as agriculture, OHV -use, or other minor disturbances. While agriculture or OHV -use constitutes a disturbance, those activities may not harm cultural resources buried just below the surface of the land. In fact, cultural resources have been located intact and preserved on lands or areas historically used for agriculture. Southwestern agricultural practices result in relatively shallow soil disruption, which makes it possible for resources to be fully preserved on agricultural lands.

Renewable energy project development, however, could completely destroy significant resources of

cultural value to the Tribe. BLM should define disturbed land to include only lands subjected to past resource-intensive or industrial land uses, such as landfills, mines, or hazardous waste disposal sites. Without a more limited definition of disturbed lands, cultural resources important to the Tribe could be lost forever.

New Site

Summary:

The BLM should consider the Black Mesa mine as an additional newly nominated site.

Response:

While the Draft EIS notes that BLM will consider additional nominated sites proposed through the RDEP planning process, neither the Hopi nor the Navajo tribes have proposed Black Mesa's inclusion as a nominated site during consultations. Additionally, the RDEP Draft EIS notes that whatever decisions are made in the Record of Decision, they will apply only to BLM-administered lands. The information included in the EIS, such as the methodologies for determining renewable energy development areas, is available for use by the tribes if they wish to utilize it for their own planning process.

Comments:

Submission No: RDEP-Drft-0060

Commenter: Beth Rivers, Indigenous Support Coalition of Oregon

Comment: Please consider my nomination of the reclaimed lots of the Black Mesa Mining Complex leasehold as a Renewable Energy Development Area or a Solar Energy Zone. I propose that Arizona BLM analyze these reclaimed strip mined lots of the Black Mesa mine and the Kayenta mine using the same criteria as sites nominated during your scoping period and include them in mapping your blueprint for agencies and renewable energy developers.

National Park System Units

Summary:

The commenters suggest that some nominated sites should be dropped from consideration due to resource conflicts and that nominated sites in the viewshed of NPS units have technological restrictions.

Response:

As noted above in the response to general Nominated Sites, the BLM has rescreened the nominated sites to avoid resource conflicts. As part of this process Detrital Wash has been significantly reduced in size. Additionally, the Fredonia OHV Area and Snowflake Mine site have been withdrawn from consideration by request of the BLM Arizona Strip Field Office.

The BLM appreciates the importance of the setting, character, and resources of National Park System lands. How these lands could be impacted by renewable energy development is very dependent upon the proposed technology and site characteristics (e.g., topography, vegetation, wind direction, viewshed, wildlife corridors, and habitat). Therefore at the planning level it is difficult to conduct such site-specific analysis. To avoid conflicts with National Park System lands, the following management action has been added to the Final EIS in Chapter 2, Alternatives. It applies to all REDAs in the action alternatives and is consistent with direction in the Solar PEIS (BLM and DOE 2012).

Where a wind or solar energy development ROW application is submitted in a REDA that is in an areas identified by the National Park Service as having a high potential for conflict with the resources of a unit of the National Park Service or special areas administered by the National Park Service, additional documentation will be required. This documentation may include information to verify any or all of the following potential resource conditions resulting from the proposed project:

- Increased loading of fine particulates (criteria pollutants: PM 2.5 and PM10 [particulate matter with a diameter of 2.5 μm or less and 10 μm or less, respectively]) and reduced visibility in Class I and sensitive Class II areas;
- Vulnerability of sensitive cultural sites and landscapes, loss of historical interpretative value due to destruction or vandalism;
- Altered frequency and magnitude of floods, and water quantity and quality;
- Reduced habitat quality and integrity and wildlife movement and/or migration corridors; increased isolation and mortality of key species;
- Fragmentation of natural landscapes;
- Diminished wilderness, scenic viewsheds, and night sky values on landscapes within and beyond boundaries of areas administered by the NPS; and
- Diminished cultural landscape qualities within and beyond boundaries administered by the NPS.

Comments:

Submission No: RDEP-Drft-0066
Commenter: John Wessels, National Park Service
Comment: Pipe Spring National Monument (NM)
Our primary concern at Pipe Spring NM is protecting the viewsheds which contribute directly to the feeling of remoteness for the location. This isolation on the Arizona Strip is often mentioned in the historic accounts of the area, and is a prominent interpretive theme that we present to visitors. The primary viewsheds of concern are to the southeast, south and southwest where the expanse of the Arizona Strip is clearly visible for a distance of up to 40 miles, and is substantially undeveloped.
The nominated sites in the RDEP-EIS: 1) #23 (Fredonia Landfill) and 2) #24 (Fredonia OHV Area), are within this primary viewshed, and can be seen from a well-used visitor trail in Pipe Spring NM. However, the view in this direction is already somewhat obscured by other developments in the foreground including structures in the town of Fredonia. For this reason, we may be able to support some of the most common and low profile types of solar energy developments (e.g., photovoltaic panels) in these two tracts. One exception would be the installation of a mirror array and solar tower, which, would be prominently visible throughout the day. We suggest that BLM exclude this particular type of solar development on these lands.

Submission No: RDEP-Drft-0066
Commenter: John Wessels, National Park Service
Comment: Lake Mead National Recreation Area (NRA)
The Detrital Wash (within Site 17) area is described in the RDEP-EIS as a 17,695-acre area having the majority of the ground surface slopes at less than 5% grade, within close proximity to roads and transmission lines and with minimal environmental constraints. We believe that the site also contains outstanding natural and scenic resources that are not adequately described in this document.
Lake Mead NRA includes lands within the northwestern portion of Mohave County, Arizona abutting lands included in Site 17. Lands within Lake Mead NRA and adjacent Bureau of Reclamation and BLM lands can be characterized as being relatively remote and undeveloped, in broken terrain with peaks and ridges surrounded by gently sloping bajadas. The remoteness and character of the lands are further supported by the proposed and designated wilderness along much of the northern boundary of the Site 17 lands.

Ranking Method

Summary:

The BLM needs to revise and improve the ranking method for nominated sites to make it more useful and user friendly.

Response:

Based on comments on the Draft EIS, the ranking process that was used to evaluate the nominated sites for solar and wind energy development in Appendix C of the Draft EIS was removed from the Nominated Sites Report in the Final EIS. Appendix C was revised in the Final EIS to provide background information only for the nominated sites, including solar and wind energy potential, environmental characteristics, and potential remediation or restoration requirements. The nominated sites are not ranked in the Final EIS.

Comments:

Submission No: RDEP-Drft-0007

Commenter: Greta Anderson, Western Watersheds Project

Comment: The discussion of ranking criteria is only marginally useful because for any site, it isn't clear which resources were considered. For example, the "Sensitive Resources and Land Management" rankings (DEIS at 4-3) says each site was screened for 12 criteria. However, the results (table 4-1) do not identify specifically which criteria were met or unmet, leaving it to the reader and the decision-maker to guess at which resources led to which scores. Some of the scores are inexplicable, with more degraded areas receiving lower scores that less degraded areas. (This scoring system is very counter-intuitive for self-evident reasons.) Because the scores aren't explained in the DEIS, it is impossible to know why certain locations scored so low and others so high. More detail should be included in future iterations.

Submission No: RDEP-Drft-0058

Commenter: Buster Johnson, Mohave County Board of Supervisors

Comment: Apparently the BLM intends to factor in all of these considerations, assigning weight to each variable in the equation, based on the perceived value of a given site, in order to come to a decision over applications that it receives. That process appears to be mostly subjective, with few quantifiable variables. Such processes do not instill public confidence in their government.

Submission No: RDEP-Drft-0058

Commenter: Buster Johnson, Mohave County Board of Supervisors

Comment: The draft EIS does include numerous exhibits that offer alternative options for the location of renewable energy projects. It then focuses on 64 damaged properties, areas of known "disturbance", which are given high priority for placement of these proposals. Further, the draft goes on to describe the many reasons why large areas are either off-limits to development, or are sensitive and/or protected to some degree (implying, if not stating, that those designations make approvals less likely in those areas). Taken together, the document seems to present something of a mixed message, in which neither an applicant nor jurisdictions such as Mohave County would be definitively able to decipher whether or not a given site is likely to receive a decision of "yes" or "no" from the BLM, for the siting of a solar field, a wind farm, or similar renewable energy facility.

Re-evaluating sites

Summary:

The BLM needs to reevaluate nominated sites and to eliminate those with sensitive resources, transmission issues, or previous use constraints.

Response:

In the Draft EIS, all nominated sites where carried forward and identified as REDAs based on the assumption that prior uses would have removed or reduced any sensitive resource values. During the public review of the Draft EIS, commenters noted that some of the nominated sites did not appear disturbed or may still support sensitive resources. To address this issue, the nominated sites have been screened in the Final EIS using the following process:

1. Nominated sites were evaluated using readily-available satellite photographs and site history to determine if they were notably disturbed. Any nominated sites that were determined to be disturbed were brought forward as a REDA.
2. The remaining sites were evaluated using the REDA screening criteria noted above. If they met the REDA requirements, then they were included as a REDA.
3. Sites that had partial disturbance or contained areas with no known sensitive resources, were delineated. The portions of the sites that were disturbed or met REDA screening requirements, were included as REDA.
4. All undisturbed sites containing sensitive resources were not included as REDA.

Additionally, the Butler Valley and Empire Farms sites (both on State lands), and the Fredonia OHV Area, Sonoita Landfill, and the Snowflake Mine sites (BLM-administered lands) were withdrawn from consideration by request of the State of Arizona, the BLM Arizona Strip Field Office, and the BLM Arizona State Office after review of the Draft EIS. These sites are not included as a REDA or in the analysis.

Comments:

Submission No: RDEP-Drft-0046

Commenter: David Grieshop

Comment: Siting. The Tombstone landfill (a brownfield site) is a good reuse opportunity for the land. (I lead a brownfield conversion of an abandoned tobacco processing plant into a city farmer's market and small condo development in NC in late 1990s.) The downside is the transmission connection distance to existing high voltage cut in when using a brownfield site. Power cut-in to existing high voltage capacity is always an issue; especially gaining right of ways.

Submission No: RDEP-Drft-0005

Commenter: Katherine Gensler, Solar Energy Industries Association

Comment: Other previous uses, though, pose more of a challenge. Brownfields, abandoned mines and any site requiring remediation prior to development require significantly more time, expertise and financial resources on the developer's part. Resolution of liability issues alone could take years and significant attorney fees. There is scant evidence to show that today's solar developers have the necessary resources or inclination to undertake such a development. Indeed, EPA's RE-Powering America program, which aims to redevelop contaminated or brownfield sites with renewable energy, only highlights solar success stories on former landfills, not on any brownfields.

Submission No: RDEP-Drft-0064
Commenter: Jerry Stabley, Pinal County Planning and Development
Comment: #7 Brady Central CAP
This site is shown in our [Pinal County] Comprehensive Plan as part of a planned Regional Park. This planned park is focused on preserving the Picacho Mountains, and extends from this site south to Interstate 10. My understanding of this site, and site #45, was that they were to act as retention basins for surface water flowing towards the CAP. If these sites do have that purpose, how do the basins work with the solar facilities?

Submission No: RDEP-Drft-0064
Commenter: Jerry Stabley, Pinal County Planning and Development
Comment: #8 Brady Wash Pipeline
The [Pinal County] Comprehensive Plan shows an open space wildlife corridor in Section 17 of this site. From the aerial photographs, it appears that Section 22 of this site may have some difficult terrain issues.

Submission No: RDEP-Drft-0064
Commenter: Jerry Stabley, Pinal County Planning and Development
Comment: #19 Empire Farms
This site is immediately adjacent to developed residential areas in San Tan Valley, which is the largest community in Pinal County. This site, in combination with other adjacent State Lands, has been mentioned as a location for a town center for the community. There are other State Land parcels in this vicinity which could accommodate solar energy development and do not have the near term potential for urban development that Empire Farms has.

Submission No: RDEP-Drft-0061
Commenter: Alexander B. Smith, Bureau of Reclamation, Environmental Resource Management Division
Comment: Figure 1-3 and Section 7 of the DEIS identify 5 Nominated Sites (sites 2, 27, 31, 45, and 60) located within the right-of-way of the Central Arizona Project (CAP). The CAP is owned by Reclamation and operated by the Central Arizona Water Conservation District pursuant to an Operating Agreement between the two parties. Exhibit B-1 to that Operating Agreement sets forth the policy for management of areas along the upslope embankment of the CAP canal, which are collectively referred to as "mitigation lands." Those mitigation lands constitute a significant portion of the CAP sites identified in the DEIS. Mitigation lands (also referred to as "green-up" areas) were set aside to compensate for the destruction of wildlife habitat and disruption of cross drainage that resulted from construction of the CAP. According to the Reclamation policy, mitigation lands can be used for low-impact purposes provided those purposes do not cause wildlife disturbances or habitat alteration. Lands within the mitigation areas may be considered for other project resource management purposes only if appropriate mitigation measures are implemented. Full replacement or enhancement of existing habitat values would be required by Reclamation for loss of habitat within these areas. It is assumed that all mitigation costs would be the responsibility of the project proponent.

Submission No: RDEP-Drft-0066
Commenter: John Wessels, National Park Service
Comment: The site [#17] is within the Mojave Desert which comprises only a small portion of the acreage within the State of Arizona. The Detrital Wash is the prominent feature of the area and is a large ephemeral wash that extends approximately 25 miles in a general north-south direction and ends at the shoreline of Lake Mead. Washes are extremely important features in the Mojave Desert because they provide vertical structure and cover not present in areas outside of washes. The Mojave Desert is characterized by low shrub lands with Creosote bush (Larrea tridentata) and Burrobush (Ambrosia dumosa) as dominant perennial plants. Each of these plants is less than 4feet in height so there is not much structure to the general Mojave Desert landscape. With the low profile of the vegetation, the natural geologic features dominate the landscape.

The area surrounding Detrital Wash is typical Mojave Desert with low density shrubs but the bajadas show little impact of man and have a high degree of integrity. There are two parallel power lines and a meandering gravel road but otherwise there is little evidence of man and man's activities in this area. The area is in remarkable condition and that condition should be maintained. The majority of the Federal land ownership in this general area is checker boarded and difficult to manage. The area in and around Detrital Wash, which is in consolidated Federal ownership, could be managed as an alternative to the rapidly developing lands of the greater area.

Submission No: RDEP-Drft-0066
Commenter: John Wessels, National Park Service
Comment: As a cooperating agency in the preparation of the Draft Environmental Impact Statement for the Mohave Wind Energy Project proposed to be located in this general area, we continue to have concern with BLM's low quality characterization of the local viewshed. We contend the area is valuable for its visual resources and solar development will compromise this valued resource. We also disagree with BLM's conclusion that these lands have been subject to previous disturbance.

Submission No: RDEP-Drft-0007
Commenter: Greta Anderson, Western Watersheds Project
The Hartman Wash Mine (site #29) in Maricopa County is a tributary of the Hassayampa River. The aerial image that accompanies the nominated site summary differs greatly from aerial images that can be found online. This wash is a major migratory corridor and should be withdrawn from future consideration. Category: Nominated sites Sub-category Re-evaluating sites

Submission No: RDEP-Drft-0007
Commenter: Greta Anderson, Western Watersheds Project
Comment: The Bouse Hills CAP site (site #6) is within or adjacent to the Plomosa Special Recreation Management Zone (RMZ-3, Bouse Plain), which is to be managed for allowing visitors to appreciate the natural setting and for minimal development. Lake Havasu ROD ARMP 2007 at 94. Invasive species, including Sahara mustard (Brassica tournefortii), are an issue in this area. Impacts to the Little Harquahala Herd Area should also be considered and mitigation.

Submission No: RDEP-Drft-0007
Commenter: Greta Anderson, Western Watersheds Project
Comment: The Brady Wash Pipeline site (Site #8) is inappropriate for future consideration because of the special status species' habitats that occur there. We agree with the scoring that gives this a low potential based on sensitive resources and land management concerns. DEIS at 4-5. It is not clear why this site is referred to as a "pipeline," and the site description contains insufficient detail if this area has already been impacted by utility development.

Submission No: RDEP-Drft-0007
Commenter: Greta Anderson, Western Watersheds Project
Comment: It is unclear why the Chevron Vacant Land site (site #12) was included as a REDA. It has important environmental resources including desert tortoise habitat and big game habitat. The RDEP states that this has been identified for disposal, but the plan in which those decisions were made is very old. It is far from a graded road, and upgrading the site for industrial energy use would require a much larger footprint of impacts than the site itself. It is surrounded by undeveloped land and should be withdrawn as a REDA. Its weighted score is low (DEIS at 4-5) and it should not be considered further.

Submission No: RDEP-Drft-0064
Commenter: Jerry Stabley, Pinal County Planning and Development
Comment: #12 Chevron Vacant Land
This location on the coalesced alluvial fans from Black Mountain could lead to some drainage issues and will probably make this site highly visible from Hwy 79. During the development of our [Pinal County] Comprehensive Plan, many people in the

County expressed as strong interest in protecting views from the highway. A very large solar field could cause strong public concerns.

Submission No: RDEP-Drft-0007
Commenter: Greta Anderson, Western Watersheds Project
Comment: A 2007 Rapid Watershed Assessment of the Detrital Wash Watershed (Available online: nemo.srnr.arizona.edu) identifies resource concerns including erosion, excessive runoff, water quality issues, plant condition, and rangeland site stability as issues in the watershed. There is true riparian vegetation in the watershed that could be affected if the Detrital Wash REDA (site #18) is developed.
There are nine federally listed species in the Detrital Wash Watershed, and while the DEIS acknowledges that 35 percent of the REDA site is special status species habitat, it does not identify the species or discuss impacts to species in the region. The DEIS does not describe whether any of the species of concern are found within the REDA. With such a high ecological significance, the REDA should be withdrawn. The RWA identifies development in the Detrital Wash as a resource concern; certainly expanded suburban development should be analyzed as a cumulative impact of any energy development. The relatively high weighted score of the REDA within the RDEP is unfortunate and we suspect that comes from an insufficiently hard look at the sensitive resources and land management concerns in the proposal ranking. DEIS at 4-5.

Submission No: RDEP-Drft-0007
Commenter: Greta Anderson, Western Watersheds Project
Comment: The Ryland REDA (site #47) is inappropriate for further consideration because of its potential to support wetlands. Nearly ¼ of the site has the potential for wetland habitat, and the remaining area of the site should be saved as a buffer on this important habitat. It has a high conservation potential and that should eliminate it from the RDEP. It is also unclear how the RDEP's "Ryland" site overlaps with the Ryland Landfill site that has been selected as a test site for a federal project to assess the feasibility of putting solar sites on landfills. See http://bit.ly/AcUMR6/.

Submission No: RDEP-Drft-0002
Commenter: Maria Baier, Arizona State Land Department
Comment: The ASLD also requests that you delete the Butler Valley and Empire Farms nominated sites from the Final EIS due to higher value uses than renewable energy for these sites.

G.2.14 Off-Highway Vehicles Impact Analysis

Summary:

The BLM needs to improve the cumulative impact analysis in the OHV section to account for pushing recreationists into other areas if an OHV disturbed location is converted to a REDA.

Response:

The Fredonia OHV Area has been withdrawn from consideration at the request of the BLM Arizona Strip Field Office.

Comments:

Submission No: RDEP-Drft-0007
Commenter: Greta Anderson, Western Watersheds Project
Comments: We don't object to energy development in areas that have already been significantly degraded by off-highway vehicle use and which meet other criteria for responsible energy development. However, we are concerned by the Fredonia OHV Area REDA (site #24) because of the potential for energy development at this site to displace ORV impacts to new locations in the Arizona Strip. Because the Arizona Strip BLM doesn't monitor or enforce ORV restrictions, we fear that restricting use on an existing play area would have cumulative

impacts for the surrounding landscape that the BLM isn't addressing in the DEIS. Illegal road construction takes a single initial pass through desert lands and then other riders simply follow the two-track. BLM has not sufficiently analyzed the displacement of these impacts from the REDA to other fragile areas within the field office. The RDEP's stated intention is to limit new disturbance; by placing known recreational sites off-limits, BLM is ensuring new disturbance will occur.

G.2.15 Other Plans

Summary:

The BLM needs to better explain state and local jurisdiction responsibilities resulting from the RDEP.

Response:

Decisions made in the RDEP Record of Decision will apply only to BLM-administered lands. The analysis was conducted statewide regardless of land status to facilitate statewide planning and identify areas for possible partnering between the BLM and other federal or state agencies and private land owners. There is no requirement for local jurisdictions to implement the decisions of RDEP.

Comments:

Submission No: RDEP-Drft-0058

Commenter: Buster Johnson, Mohave County Board of Supervisors

Comment: Generally, statements are made throughout the document that contend that certain protections must be, or should be in place, to safeguard various aspects of a quality-of-living nature, for taxpayers and residents closest to proposed renewable energy proposals. To what extent are these assertions, made by the BLM (who only has direct jurisdiction over BLM properties) incumbent on local jurisdictions to implement? Is the County expected to enforce provisions of this document?

G.2.16 Consistency with other BLM Planning Efforts

Summary:

The RDEP decisions need to be revised to be consistent with the Lower Sonoran RMP.

Response:

The RDEP was conceived as a statewide initiative that would identify renewable energy development areas and would update most of the RMPs in Arizona. The Draft EIS explains that several RMPs, including the Lower Sonoran RMP, would be amended with the decisions made as part of the RDEP (see Section 1.5.1, Decisions on the REDA). As the commenter notes, the Lower Sonoran RMP/EIS process was at the Draft EIS stage when the RDEP's Draft EIS was released for public comment. The Lower Sonoran Draft RMP/EIS was refined and modified to become the Proposed RMP/Final EIS, and the Record of Decision was signed on September 14, 2012. Based on the new decisions in the Lower Sonoran ROD, BLM updated the GIS datasets and eliminated from consideration the new SRMA, ACEC, and VRM III areas, resulting in an acreage changes under each alternative (see **Chapter 2**, Alternatives, for the acreage amounts). Once the RDEP ROD is signed, however, its decisions will amend the Lower Sonoran ROD as noted in **Section 1.5.1**, Decisions on Renewable Energy Management and the REDAs.

Comments:

Submission No: RDEP-Drft-0024

Commenter: Steve Saway

Comment: However, I am concerned that the RDEP's definition of lands with low resource sensitivity is problematic. It appears from the RDEP

Draft EIS maps that these lands include portions of the Lower Sonoran Field Office that were designated in the Draft Lower Sonoran Resource Management Plan (RMP) as "High and Moderate Sensitivity Areas" under the category of "Utility Scale Renewable Energy Development Avoidance Areas" (see Map 2-7e in the Lower Sonoran Draft RMP). Recommend the RDEP Draft EIS be revised as needed to be consistent with the Draft Lower Sonoran RMP.

G.2.17 Planning

Agency Coordination

Summary:

The BLM needs to coordinate more with Pima County.

Response:

The BLM worked closely with cooperating agencies and county governments including meetings with Pima County, in developing the Draft PEIS. with counties and local agencies throughout the remainder of the RDEP analysis process.

Comments:

Submission No: RDEP-Drft-0022

Commenter: Elizabeth Webb

Comment: A. Would prefer to see more tangible participation from Pima County in further analysis before the FEIS is released; particularly in regard to the Sonoran Desert Conservation Plan. IE; working papers, PC renewable energy policy, and specific comments regarding the "nominated sites" from Pima County. B. Concern about county level involvement is not limited to Pima County. C. Would prefer to see more active solicitation of input from specific, local non-governmental organizations dedicated to community and environmental protection prior to issuance of FEIS. Pima County has a list of registered neighborhood associations available on its GIS mapguide but this comment is not limited to just Pima County

Evaluation Process

Summary:

The BLM needs to ensure a process for updating and evaluating data used in the analysis.

Response:

BLM planning policy requires evaluation of planning decisions every five years (see BLM Land Use Planning Handbook, H-1601-1, pg. 33). As RDEP's Record of Decision is expected to provide new planning decisions for several Arizona BLM land use plans, these decisions would be reviewed as part of this required plan evaluation process. The decisions would be evaluated to determine:

- If decisions remain relevant to current issues
- If decisions are effective in achieving (or making progress toward achieving) desired outcomes
- If any decisions need to be revised
- If any decisions need to be dropped from further consideration
- If any areas require new decisions.

In making the determination, the BLM would consider whether mitigation measures included with the RDEP decisions are satisfactory, whether there are significant changes in the related plans of other

entities, and whether there is new data of significance that should be considered. The REDA screening tool is dynamic to respond to changing resource conditions and data.

Comments:

Submission No: RDEP-Drft-0033
Commenter: Jeanie Watkins
Comment: REDA lands should be evaluated every five years utilizing the best available data and new screening criteria as it becomes available.

Submission No: RDEP-Drft-0006
Commenter: Alex Daue, The Wilderness Society
Comment: Screening Process: The screening process should be updated and implemented on a regular basis, utilizing the best available science and most recent data (such as WECC's Environmental Data Task Force). Many of the screens are based on data that is constantly being updated and refined. RDEP should update its screening process and evaluations of REDAs every five years, at a minimum

Submission No: RDEP-Drft-0010
Commenter: John Shepard, Arizona Solar Working Group
Comment: Screening Process: The screening process should be updated and implemented on a regular basis, utilizing the best available science and most recent data (such as data from WECC's Environmental Data Task Force and Arizona Game and Fish Department's Statewide Wildlife Action Plan and Wildlife Linkage modeling data). Many of the screens are based on data that is constantly being updated and refined. RDEP should update its screening process and evaluations of REDAs every five years, at a minimum.

Submission No: RDEP-Drft-0003
Commenter: Amanda Ormond, Interwest Energy Alliance
Comment: Recommendation 5 – Process for Updating Data
BLM has used an extensive number of data sets to identify REDA lands. Some of these data are constantly being revised. BLM needs to implement a process that will allow the RDEP/REDA to be reviewed and updated to incorporate current data so the project does not stagnant or rely on out-of-date data.
Interwest recommends that BLM establish a schedule for reviewing and updating the information and dedicate the resources to accomplish the update. We recommend an updating of information a minimum of every five years.

Submission No: RDEP-Drft-0010
Commenter: John Shepard, Arizona Solar Working Group
Comment: Recommendation: Consistent with the timeline proposed in the Supplement for the Solar PEIS for the consideration of new SEZs, ASWG recommends that the RDEP process in Arizona, and other states should it serve as the model, should be updated by the BLM at a minimum every five years. We agree, as outlined in the Supplement, that outside petitioners may submit requests to update the RDEP process at an earlier time based on key criteria that should be outlined in the Final EIS.

Submission No: RDEP-Drft-0071
Commenter: Jamie Rappaport Clark, Defenders of Wildlife
Comment: We also reiterate the importance of regularly revisiting and updating the RDEP analyses in terms of their impacts on wildlife and resources. We believe that a five year review period would be reasonable and effective.
Recommendation: BLM should review the RDEP analyses every five years, incorporating new data into all of the screens and potentially adding new REDAs or nominated sites and removing any that can no longer be considered "low resource sensitivity".

Submission No: RDEP-Drft-0031
Commenter: Kathy Lopez
Comment: REDA lands should be reevaluated every five years utilizing the best available data and new screening criteria as it becomes available.

Public meetings

Summary:

The BLM failed to adequately announce the public meetings and should plan meetings in the communities most likely to be impacted by the decisions.

Response:

The BLM has made extensive opportunities for involvement and comment available to the public throughout the NEPA process for the RDEP EIS. A project website for the public was made available at the beginning of the project to make relevant project information available. The agencies conducted initial scoping from January 13, 2010, through March 11, 2010, during which time members of the public could comment on the scope and objectives of the RDEP through the project e-mail address, by mail, or in person at public meetings. In addition to the Notice of Intent, the BLM notified the public of the RDEP and the associated scoping period through media outlets, postcards, e-mails, and the RDEP website. Public meetings were held at 10 locations between February 8, 2010, and February 25, 2010. The scoping meetings gave the public an opportunity to learn and ask questions about the RDEP, to submit their site proposals, and to share issues and concerns with the BLM. The BLM chose an open-house meeting format to encourage broader participation, to allow attendees to learn about the RDEP at their own pace, and to enable attendees to ask BLM representatives questions in an informal one-on-one setting. In addition, the BLM provided a 25-minute presentation at each meeting about the RDEP and the public's role in the scoping process. The BLM has also provided presentations at conferences and to groups upon request.

After publication of the RDEP Draft EIS, there was a 90-day comment period; five public meetings were held in Yuma, Phoenix, Kingman, Flagstaff, and Tucson. Press releases where distributed to local media outlets, including radio, television stations, and newspapers. Over 3,000 project newsletters were mailed out to people that had expressed interest in the project, and notices were provided to stakeholder groups and all cooperating agencies. The project website hosted all meeting information along with the Draft EIS document and contact information.

Comments:

Submission No: RDEP-Drft-0022
Commenter: Elizabeth Webb
Comment: G. Public meetings may be more effective if held in the communities that would be more likely to be impacted by the RDEP. (impacted both positively and negatively). Most smaller communities have schools or fire stations with meeting rooms at possibly lower costs than a commercial hotel.

Submission No: RDEP-Drft-0057
Commenter: Robert Zittle
Comment: First and foremost the BLM failed to properly and adequately announce this meeting to the general public. The BLM could have advertised this meeting through the local TV, Radio Stations and newspapers. The local TV and Radio stations provide free public service announcements. Had this meeting been properly advertised and had it been scheduled just three weeks earlier when many of our local winter visitors were still in the area, the BLM could have filled the entire room with concerned citizens. The BLM knew in advance that they did not properly advertise the event because they only set out less than 50 chairs for the public meeting, expecting a very small population of people to attend.

Submission No: RDEP-drft-0057
Commenter: Robert Zittle

Comment: Posting the Notice on the BLM website, should not be an authorized means of notifying the public because many people do not even have access to computers and most of those who do have access to computers do not normally wake up in the morning saying gee I'd better check the BLM website for notices. The BLM failed to properly notify the public about this meeting.

G.2.18 Multiple Uses

Summary:

The BLM needs to clarify if there could be multiple concurrent uses within REDAs or if REDAs are for the exclusive use of renewable energy developments.

Responses:

All REDAs would remain available for multiple uses. However, once an application is accepted for consideration, the BLM will prioritize renewable energy development in REDAs. Other uses could still occur as appropriate for the activities and public health and safety.

Comments:

Submission No: RDEP-Drft-0058

Commenter: Buster Johnson, Mohave County Board of Supervisors

Comment: Generally, does a BLM approval of a renewable energy project, whether it be a series of wind turbines, or a field of solar arrays, preclude, limit or otherwise alter the existing rights of the public to use that same property (simultaneously) for purposes such as hiking, camping, hunting, cattle or sheep grazing, etc.? Is the developed property allowed to be fenced in a way that would keep out the public, and effectively precluding those uses? The public would likely be concerned about trading their open spaces and recreational uses for power production. One asset would apparently be exchanged for another. Preclusion of public uses on lands consumed by renewable energy projects seems to be an issue of genuine concern. Is there any intention to address this issue, to allow more uses simultaneously? Perhaps fencing of facility perimeters can be prohibited as a term of approval for BLM leases for these types of projects.

G.2.19 Purpose-Need

Include Tribal Lands

Summary:

The RDEP should include consideration of tribal lands in the scope of the analysis.

Response:

BLM initiated consultation with affected tribes early in the RDEP development process. As a matter of practice, the BLM coordinates with all tribal governments, associated native communities, native organizations, and tribal individuals whose interests might be directly and substantially affected by activities on public lands. As tribes are sovereign nations, the BLM only considered requests for consultation and inclusion of tribal lands through federally recognized tribal governments and agencies. During consultation, tribes identified their interests and concerns in regard to developing renewable energy projects on tribal lands, adjacent lands, and traditional territories, and highlighted a desire to better understand the nature, benefits, costs, and environmental impacts of various technologies. However, the tribes did not become formal cooperating agencies, did not express an interest for BLM to include tribal lands as part of the planning and analysis area, and, apart from one exception, no tribe submitted nominated sites for consideration as part of RDEP. As a result, tribal lands were not included in the RDEP planning area or the analysis area.

The BLM is committed to ongoing consultation with tribes after RDEP; the BLM would be able to provide information and analysis to help inform tribal governments and agencies, and serve as a resource for the tribal members, policy makers, and energy planners that are considering renewable energy projects on their lands. This could include providing the screening criteria (the resources noted in Table 2-1) used to define REDAs to tribes to use if they would like to do a similar screening process on their lands.

Comments:

Submission No: RDEP-Drft-0020
Commenter: Rebecca A. Loudbear, Colorado River Indian Tribes
Comment: Further, Arizona tribes may well be interested in siting projects on Tribal lands. Excluding tribal lands from consideration under the RDEP places additional pressure on developers and BLM to squeeze every available acre for project siting. This pressure may be alleviated, and thus, significant cultural, historic, and sacred sites spared the plow, if tribal lands comprise a share of the available land pool.
The DEIS Executive Summary states that one goal of BLM's mission is to "[b]e effective stewards of heritage resources by engaging [in] government-to-government consultation with tribal governments and thoroughly considering cultural resources in environmental analysis." DEIS ES-5.CRIT believes that part of that analysis should include an assessment of how tribal lands might factor into the total-land-requirement equation, provided that tribes are interested in and consulted on such an assessment.

Submission No: RDEP-Drft-0060
Commenter: Beth Rivers, Indigenous Support Coalition of Oregon
Comment: My recommendation follows input from Dine'h who have long sought solar development at Black Mesa following the Interior's installation of coal facilities leading to heavy reliance on carbon-based fuels in the region.

Submission No: RDEP-Drft-0060
Commenter: Beth Rivers, Indigenous Support Coalition of Oregon
Comment: Arizona's BLM DEIS states that the EIS will provide "tribal governments…with a better understanding of the environmental and economic issues associated with developing renewable energy in Arizona" (ES-7 to ES-8) and repeats the usefulness to "tribes" throughout, yet no Indian lands are included for BLM "blueprint" analysis (Table ES-2).

Submission No: RDEP-Drft-0060
Commenter: Beth Rivers, Indigenous Support Coalition of Oregon
Comment: The DEIS Executive Summary states "goals of the Energy Strategy include…to develop renewable energy strategies for all of Arizona" (ES-5) and yet every state map in the RDEP DEIS shows a neglected region in the northeast corner where both the Hopi and Navajo reservations are, where the Black Mesa Complex connects to the Navajo Generating Station and a power transmission grid delivers coal combustion electricity to Nevada, California and Arizona. Roughly one quarter of each Arizona map is shown as blank!

Submission No: RDEP-Drft-0060
Commenter: Beth Rivers, Indigenous Support Coalition of Oregon
Comment: And so, any review of public lands for analysis of renewable energy suitability needs to include a review of Indian lands that are "previously disturbed" such as reclaimed mine lots, especially when the review is done by DOI agencies. Additionally, the exclusion of Indian lands as a category from lands that Arizona BLM analyzes is unfair and goes against both the spirit and the letter of your regulations, codes, guides and strategic plans used by the BLM and DOI in developing proposals and Environmental Impact Statements.

Submission No: RDEP-Drft-0060
Commenter: Beth Rivers, Indigenous Support Coalition of Oregon
Comment: Reclaimed lots in the Black Mesa Complex and the "abandoned" Black Mesa Mine, which was closed due to environmental concerns and lack of a coal customer (after the Mohave Generating Station closed), should be seriously considered for RDEP analysis and solar development funded by DOI. "A key component of the RDEP is emphasizing the reuse of previously disturbed or developed lands that, after remediation or site preparation, may be suitable for renewable energy development" states the BLM DEIS Disturbed Lands and Nominated Parcels section (ES-6). Now that CO2 and other greenhouse gas emissions are coming under regulation federally and internationally, a conversion desired by the tribal peoples away from coal dependency and toward solar is due on the reclaimed leasehold.

Private Lands

Summary:

The BLM needs to clarify why private lands are included in RDEP.

Response:

The RDEP planning area includes all lands regardless of jurisdiction; however, the BLM would make decisions only on lands that fall under its jurisdiction (EIS page 3-1). While decisions made from the EIS would apply only to BLM-administered lands, the analysis was conducted statewide regardless of land status to facilitate statewide planning and to identify areas for possible partnering with the BLM and other federal or state agencies, and private landowners (EIS page 2-3).

Comments:

Submission No: RDEP-Drft-0058
Commenter: Buster Johnson, Mohave County Board of Supervisors
Comment: The EIS clearly makes a distinction between lands under BLM authority, and those that are not. Numerous exhibits identify sites, within BLM authority that are likely candidates for placement of renewable energy facilities. Other exhibits counter this by identifying all the many reasons that some of those likely areas are not really likely after all. It is understandable that the BLM would have this much authority over lands it administers. But the EIS also appears to do the same with private lands, although in a more subtle way. What is the intent in this regard?

Submission No: RDEP-Drft-0058
Commenter: Buster Johnson, Mohave County Board of Supervisors
Comment: Mohave County administers a General Plan county wide, and it has zoning and permitting authority over county unincorporated areas, so it has considerable interest in where renewable energy proposals are to be located. Projects proposed in the county, even on private land, appear to be evaluated by the BLM (through inter-agency courtesy reviews) on the same basis as if the sites were BLM-administered. Given the "checkerboard" nature of the distribution of private and public lands in Mohave County, the BLM's approach to decision making on public lands will substantially affect how it reviews private-land proposals. Accordingly, the BLM program should not be viewed as being limited to BLM lands only.

Site-Specific Analysis

Summary:

The BLM needs to be more specific in how site-specific analysis will be conducted.

Response:
Applications for proposed solar and wind energy development projects are processed as ROWs under Title V of FLPMA and Title 43, Part 2800, of the Code of Federal Regulations. The processing of solar and wind energy development ROW applications must comply with the BLM's planning, environmental, and ROW regulatory requirements. When the BLM considers a proposal submitted by others, the BLM decision maker must determine if it would conform with the applicable land use plan (43 CFR, 1610.5-3, 516 BM 11.5) and what level or type of environmental documentation is required.

The BLM will conduct subsequent NEPA analyses for site-specific project and implementation level actions for proposed renewable energy development (Section 1.5.3). These subsequent NEPA analyses would follow all CEQ and BLM NEPA policy and guidance (see 40 CFR, Sections 1502.20 and 1508.28, and the BLM NEPA Handbook, H-1710-1), tier to the RDEP analysis, and would evaluate project impacts based on the unique design elements and location of the proposal. The public would be offered the opportunity to participate in the NEPA process for these specific implementation actions as required by NEPA.

Comments:
Submission No: RDEP-Drft-0006
Commenter: Alex Daue, The Wilderness Society
Comment: We recommend the following specific changes and provisions regarding further NEPA analysis for project applications. The Final EIS should provide guidance on issues to be developed in NEPA analysis for specific solar applications within a REDA, whether in an EA or EIS, including: Identifying specific elements of analysis – simply stating (as the DEIS does) that "This EIS will not eliminate the need for site-specific environmental review for future individual renewable energy development proposals;…" (DEIS, p. 1-13) is not sufficient guidance. The Final EIS should require that analysis of individual applications will address, at a minimum, features and resources of the actual location, technology, a reasonable range of alternatives, plan of development, cumulative impacts for affected landscape, and mitigation measures, and provide opportunities for public comment through scoping, preliminary alternatives, and draft NEPA document; Specifying that robust public involvement is required, including requiring a comment period, even if using an EA, and emphasizing the benefits of early and ongoing public involvement, such as through providing preliminary alternatives for public comment; Requiring cumulative impact analysis to address ongoing projects and stressors in the project area that cannot be accomplished through tiering; and Clarifying BLM's authority to deny applications. We strongly support the BLM reiterating that the agency "retains the discretion to deny solar and wind ROW applications based on site-specific issues and concerns, even in those areas available or open for application in the existing land use plan" (DEIS, p. ES-7). We would also recommend that the BLM clarify that its discretion can be applied to deny applications without conducting in-depth environmental analysis.

Submission No: RDEP-Drft-0010
Commenter: John Shepard, Arizona Solar Working Group
Comment: The Final EIS should provide guidance on issues to be developed in NEPA analysis for specific solar applications within a REDA, whether in an EA or EIS, including:
Identifying specific elements of analysis – simply stating (as the DEIS does) that "This EIS will not eliminate the need for site-specific environmental review for future individual renewable energy development proposals…" (DEIS, p. 1-13) is not sufficient guidance. The Final EIS should require that analysis of individual applications will address, at a minimum, features and resources of the actual location, technology, a reasonable range of alternatives, plan of development, cumulative impacts for affected landscape, and mitigation measures, and

provide opportunities for public comment through scoping, preliminary alternatives, and draft NEPA document;

G.2.20 National Park Service Areas in Variance Lands in the Solar Final PEIS

Summary:

The commenter requests that the RDEP run the REDA alternatives again in order to include the new National Park Service areas defined in the Solar Final PEIS.

Response:

The BLM appreciates the importance of the setting, character, and resources of National Park System lands. How these lands could be impacted by renewable energy development is very dependent upon the proposed technology and site characteristics (e.g., topography, vegetation, wind direction, viewshed, wildlife corridors, and habitat). Therefore at the planning level it is difficult to conduct such site-specific analysis. To avoid conflicts with National Park System lands, the following management action has been added to the Final EIS in Chapter 2, Alternatives. It applies to all action alternatives and is consistent with direction in the Solar PEIS (BLM and DOE 2012).

Where a wind or solar energy development ROW application is submitted in a REDA that is in an areas identified by the National Park Service as having a high potential for conflict with the resources of a unit of the National Park Service or special areas administered by the National Park Service, additional documentation will be required. This documentation may include information to verify any or all of the following potential resource conditions resulting from the proposed project:

- Increased loading of fine particulates (criteria pollutants: PM 2.5 and PM10 [particulate matter with a diameter of 2.5 μm or less and 10 μm or less, respectively]) and reduced visibility in Class I and sensitive Class II areas;
- Vulnerability of sensitive cultural sites and landscapes, loss of historical interpretative value due to destruction or vandalism;
- Altered frequency and magnitude of floods, and water quantity and quality;
- Reduced habitat quality and integrity and wildlife movement and/or migration corridors; increased isolation and mortality of key species;
- Fragmentation of natural landscapes;
- Diminished wilderness, scenic viewsheds, and night sky values on landscapes within and beyond boundaries of areas administered by the NPS; and
- Diminished cultural landscape qualities within and beyond boundaries administered by the NPS.

Comments:

Submission No: RDEP-Drft-0066

Commenter: John Wessels, National Park Service

Comment: Although we realize that BLM used different screening processes to select lands for potential renewable energy development in Arizona, NPS asks for the following in the RDEP-EIS: 1) Reassess the footprint of the potential development lands based upon as yet undefined or finalized land exclusion decisions from the Solar PEIS, 2) RDEP-EIS lands proposed for development that are in proximity to NPS units should be excluded from consideration until decisions on land exclusions and resource protection criteria are finalized in the Solar PEIS, and 3) clarify within the RDEP-EIS whether the decision resulting from this plan will further refine the footprint of solar energy program lands in Arizona as described in the Final Solar PEIS.

G.2.21 Variance Process

Summary:

The BLM needs to clarify how the RDEP relates to the variance process, as described in the Solar PEIS Supplement.

Response:

The proposed variance areas and associated variance process described in the Solar Final PEIS would apply only to utility-scale solar development. Under RDEP, REDAs may fulfill many elements of the national solar program's variance process. For a solar energy project that is not utility scale, including distributed generation, it would follow the RDEP requirements (such as application of design features) and any existing management prescriptions in BLM land use plans. Both utility-scale and smaller scale renewable energy projects that require a ROW from the BLM would be subject to individual site-specific NEPA analyses.

Utility-scale solar development project applications could be submitted in variance areas not identified as REDAs; however, the BLM would consider these ROW applications for utility-scale solar energy development on a case-by-case basis based on environmental considerations, in coordination with appropriate federal, state, and local agencies, and tribes, and public outreach. Demonstrating to the BLM and other coordinating parties that a proposal in a variance area would avoid, minimize, or mitigate, as necessary, sensitive resources would be the responsibility of the applicant. Based on a thorough evaluation of the information provided by an applicant, and the input of federal, state, and local government agencies, tribes, and the public, the BLM would determine whether it is appropriate to continue to process or to deny a ROW application submitted through the variance process.

Comments:

Submission No: RDEP-Drft-0006
Commenter: Alex Daue, The Wilderness Society
Comment: Finally, the Supplement to the Solar PEIS notes that all variance applications that are determined to be appropriate for continued processing will be submitted by the State Director to the BLM Washington Office for the Director's concurrence (Supplement, p. 2-40). We question whether this would be necessary for applications in REDAs.

Submission No: RDEP-Drft-0010
Commenter: John Shepard, Arizona Solar Working Group
Comment: Finally, the Supplement to the Solar PEIS notes that all variance applications that are determined to be appropriate for continued processing will be submitted by the State Director to the BLM Washington Office for the Director's concurrence (Supplement, p. 2-40). We question whether this would be necessary for applications in REDAs.

G.2.22 Reasonably Foreseeable Development Scenario

Calculations

Summary:

The BLM needs to revise the RFDS to reflect more accurate calculations.

Response:

Calculations for the RFDS were developed by identifying lands using screening criteria developed in the ARRTIS project (Southwest Area Transmission Planning Group 2009), the 2007 Arizona Wind Energy

Assessment (Arizona Wind Working Group 2007), and the Solar Energy Development Programmatic EIS (BLM 2010). Based on the calculations from the GIS screening process, the acreage was then divided by an industry-standard factor of generation capacity per acre, resulting in an estimate of solar electricity generation capacity for both the entire state and BLM-administered lands in the state. Estimates in the RFDS represent the potential if land were fully developed; the BLM recognizes that development could occur at a lower level due to other constraints. The RFDS is intended to support the analysis in the EIS and would not be used directly in decision making.

Comments:

Submission No: RDEP-Drft-0006
Commenter: Alex Daue, The Wilderness Society
Comment: Acres of BLM Lands Needed to Support 1 MW Solar Development: The calculations in Appendix A implicitly assume that 100% of the BLM lands that are potentially developable and have solar potential could be developed at the assumed rate of eight acres to one megawatt. However, it is unrealistic to assume that all of the BLM acres identified as priority areas for solar would actually be suitable for development, and that projects would be sited so closely together as to make use of every acre of land. It would be more appropriate to assume that the amount of BLM land needed to develop one megawatt of solar include a buffer of 20% that does not actually host projects, but represent areas between projects or are lands that are otherwise inappropriate for development. So for example, of every 10 acres of BLM lands designated as preferred for solar development, only eight of those acres would be developed at the assumed acres per megawatt rate.

Submission No: RDEP-Drft-0010
Commenter: John Shepard, Arizona Solar Working Group
Comment: Acres of BLM Lands Needed to Support 1 MW Solar Development: The calculations in Appendix A implicitly assume that 100% of the BLM lands that are potentially developable and have solar potential could be developed at the assumed rate of eight acres to one megawatt. However, it is unrealistic to assume that all of the BLM acres identified as priority areas for solar would actually be suitable for development, and that projects would be sited so closely together as to make use of every acre of land. It would be more appropriate to assume that the amount of BLM land needed to develop one megawatt of solar include a buffer of 20% that does not actually host projects, but represent areas between projects or lands that are otherwise inappropriate for development. So for example, of every 10 acres of BLM lands designated as preferred for solar development, only eight of those acres would be developed at the assumed acres per megawatt rate.

Decision Making

Summary:

The BLM needs to clarify how the RFDS calculations relate to REDAs and to the BLM's decision making.

Response:

As stated in Section 2.6, Summary of the Reasonably Foreseeable Development Scenario, the RFDS is neither a planning decision nor the No Action Alternative in the EIS; rather, it serves as a technical supporting analytical document intended to be used as a reference. The RFDS would not specifically be used in BLM decision making. The purpose of the RFDS was to determine the anticipated level of development and acres required to satisfy these development needs in order that the appropriate area and scale of development could be analyzed in the EIS. The RFD provides an upper bound for the analysis and is typically designed to represent the maximum development scenario; as such, the RFDS serves as a supporting tool in the NEPA process rather than a stand-alone document that would dictate

BLM policy or decisions. The BLM recognizes that the RFDS estimate represents current conditions only and is likely to become outdated as renewable portfolio standards, energy demand, and other factors change the level of renewable energy required in the state. The RFDS will not be updated in light of newly available information, although this information could be used in the decision making process for site-specific projects. Information has been added to the document in Chapter 2, Alternatives, to clarify the role of the RFDS in the planning process.

Comments:

Submission No: RDEP-Drft-0006
Commenter: Alex Daue, The Wilderness Society
Comment: In addition to revising the above-noted assumptions, the DEIS should clarify how the Reasonably Foreseeable Development Scenario (RFDS) will be used by BLM decisionmakers in the context of solar projects proposed on BLM lands. On pages 2 and 3 of Appendix A, the DEIS notes that the RFDS is intended to provide policy makers, decision makers, the public, and developers with information on the overall solar potential in the state and on BLM lands, and on areas most suitable for development. However, it is not clear how RFDS-calculated results are intended to impact an eventual decision on the DEIS' Preferred Alternative, or how otherwise the results are intended to be used in the context of RDEP or other BLM decisions.

Submission No: RDEP-Drft-0010
Commenter: John Shepard, Arizona Solar Working Group
Comment: Recommendation: In addition to revising the above-noted assumptions, the DEIS should clarify how the Reasonably Foreseeable Development Scenario (RFDS) will be used by BLM decisionmakers in the context of solar projects proposed on BLM lands. On pages 2-3 of Appendix A, the DEIS notes that the RFDS is intended to provide policy makers, decision makers, the public, and developers with information on the overall solar potential in the state and on BLM lands, and on areas most suitable for development. However, it is not clear how RFDS-calculated results are intended to impact an eventual decision on the DEIS' Preferred Alternative, or how otherwise the results are intended to be used in the context of RDEP or other BLM decisions.

Submission No: RDEP-Drft-0003
Commenter: Amanda Ormond, Interwest Energy Alliance
Comment: Recommendation 9 – Reasonably Foreseeable Development Scenario (RFDS)
BLM has a section on RFDS. It is understood that the BLM developed the scenario to help guide identifying an adequate amount of land for renewable development. However, any estimate will be incorrect and may become out-of-date quickly. Arizona's utilities are projecting a return to growth in energy demand to 3 or 4 percent per year which could drastically change in-state demand for renewable energy. Further, California's policy on out-of-state renewables will also change the amount of land adequate to meet demand. If the BLM is going to keep the RFDS it should explain how that number will impact departmental decision-making.

New Data

Summary:

The BLM should consider additional information for the RFDS and update it accordingly.

Response:

The RFDS was developed as a planning tool for the development and analysis of alternatives in the EIS and represents estimates based on data available at a point in time. The BLM recognizes that factors that influence renewable energy demand are likely to change over time, as new projects are developed, for example. Because the RFDS is not intended to be a dynamic document, it will not be updated in light of

newly available information, although this information could be used in the decision making process for site-specific projects.

Comments:

Submission No: RDEP-Drft-0006

Commenter: Alex Daue, The Wilderness Society

Comment: The assumption regarding in-state renewables demand, however, is too low. We note that the DEIS leaves out several factors that are likely to boost demand significantly beyond what is required under the 15% RES, including: The Salt River Project, a utility that serves approximately 40% of the state's electric load, is likely to purchase significant renewables. Although SRP is not currently obligated under the RES, its board of directors has committed to purchasing about 8% of its retail sales from renewable energy by 2020, per its Sustainable Portfolio Principles adopted in 2011. The US Army has set a goal of ensuring that 25 percent of the Army's electricity comes from renewable sources by 2025. Public entities such as cities, towns, counties, school districts, community colleges, and universities are large potential purchasers of renewable energy, which will increase in-state demand. For example, the city of Phoenix has a renewable energy goal for the city to use 15% renewable energy by 2025. ASU's goal is to install 20 MW of solar by 2014.

Submission No: RDEP-Drft-0010

Commenter: John Shepard, Arizona Solar Working Group

Comment: Estimated AZ Renewable Energy Output: The DEIS proposes that due to a combination of the state's 15% Renewable Energy Standard (RES) and demand from states such as California, which will want to purchase generation from Arizona's abundance of solar resources, it should be assumed that twice the amount of renewables generation needed to meet the in-state RES is generated in Arizona in the foreseeable future. We consider it a reasonable assumption that within the next 20 years, Arizona will generate about 16,000 GWh of renewable power that will be exported to California and other states. The assumption regarding in-state renewables demand, however, is too low. We note that the DEIS leaves out several factors that are likely to boost demand significantly beyond what is required under the 15% RES, including:

The Salt River Project, a utility that serves approximately 40% of the state's electric load, is likely to purchase significant renewables. Although SRP is not currently obligated under the RES, its board of directors has committed to purchasing about 8% of its retail sales from renewable energy by 2020, per its Sustainable Portfolio Principles adopted in 2011.

The US Army has set a goal of ensuring that 25% of the Army's electricity comes from renewable sources by 2025.4 4 See http://www.army.mil/article/75960/Army_to_invest__7_billion_in_renewable_energy_projects/

Public entities such as cities, towns, counties, school districts, community colleges, and universities are large potential purchasers of renewable energy, which will increase in-state demand. For example, the city of Phoenix has a renewable energy goal for the city to use 15% renewable energy by 2025. ASU's goal is to install 20 MW of solar by 2014.

Revising the RFDS

Summary:

The BLM should explain how the RFDS would be revised and updated for future use.

Response:

The RFD was developed as a planning tool for alternative development and analysis in the EIS and represents estimates based on data available at a point in time. The BLM recognizes that it is likely to become outdated as renewable portfolio standards, energy demand, and other factors change the level

of renewable energy required in the state. During plan reviews, the RFDS could be reviewed and updated as appropriate.

Comments:

Submission No: RDEP-Drft-0006
Commenter: Alex Daue, The Wilderness Society
Comment: The DEIS should delineate a process for adjusting the RFDS going forward. In addition to likely changes in demand for renewable energy, as renewable technologies develop and change and as we do more mapping of lands and resources, various aspects of the scenario are likely to need adjustment (i.e., the amount of land used by solar technology type, capacity factors, and assessments of which lands are high-resource-sensitivity). The DEIS should lay out a process for BLM to reconsider and adjust the RFDS and its elements at regular intervals.

Submission No: RDEP-Drft-0010
Commenter: John Shepard, Arizona Solar Working Group
Comment: Recommendation: The DEIS should delineate a process for adjusting the RFDS going forward. In addition to likely changes in demand for renewable energy, as renewable technologies develop and change and as we do more mapping of lands and resources, various aspects of the scenario are likely to need adjustment (i.e., the amount of land used by solar technology type, capacity factors, and assessments of which lands are high-resource-sensitivity). The DEIS should lay out a process for BLM to reconsider and adjust the RFDS and its elements at regular intervals.

Submission No: RDEP-Drft-0003
Commenter: Amanda Ormond, Interwest Energy Alliance
Comment: The BLM should also plan to review and update the RFDS on a bi-annual basis if it is using the information for decision-making.

G.2.23 Solar Energy Zone

Applying Additional Screens

Summary:

The SEZ should be screened for other sensitive resources, including wildlife habitat.

Response:

The Final EIS proposes a revised proposed Agua Caliente SEZ (Alternative 6) in response to public comments to minimize impacts on resources and additional information provided by AZDGF. The revised proposed Agua Caliente SEZ's boundary is 500 meters away on either side of the three washes (which were identified using AGFD's Species and Habitat Conservation Guide data, category 4). This takes into account the AGFD's comments on the SEZ. The revised proposed Agua Caliente SEZ does not include the northern portion of the SEZ, allowing for potential tortoise migration between the Palomas Mountains and Baragan Mountain.

The AGFD and the BLM view the AGFD predicted species raster datasets (AGFD 2012b) as unsuitable for a SEZ screen. Once an application is under consideration, site-specific biological surveys of the area's resources would be included in the NEPA analysis.

Comments:

Submission No: RDEP-Drft-0071
Commenter: Jamie Rappaport Clark, Defenders of Wildlife
Comment: The proposed Agua Caliente SEZ was a late addition to the RDEP public process. As this proposed SEZ is subject to pending policies

associated with the BLM and DOE's Solar Programmatic Environmental Impacts Statement, it was not subjected to the same screens as REDAs. All of the alternative configurations of the SEZ contain some significant environmental conflicts. However, we believe that specific areas, such as the southwest portion of the proposed SEZ directly adjacent to the western boundary of the NRG solar development, could be appropriate for designation as a SEZ (see ASWG comments, Section 4, "Proposed Agua Caliente SEZ")

Submission No: RDEP-Drft-0071
Commenter: Jamie Rappaport Clark, Defenders of Wildlife
Comment: Sonoran desert tortoise – According to the analysis we conducted using BLM and AGFD data, we found that the majority of lands within all of the SEZ alternatives are within the AGFD predicted distribution of the Sonoran desert tortoise (See map in Appendix B, and Table 3 below). Gila monster – According to the analysis we conducted using BLM and AGFD data, we found that the majority of all of the SEZ alternatives fall within predicted distribution of the Gila Monster. Western burrowing owl - According to the analysis we conducted using BLM and AGFD data, we found that very little AGFD predicted habitat for the Western burrowing owl coincided with any of the SEZ alternatives (see map in Appendix B, and Table 5 below)
Submission No: RDEP-Drft-0071
Commenter: Jamie Rappaport Clark, Defenders of Wildlife
Comment: Defenders' preliminary analyses of the overlay between proposed Agua Caliente SEZ alternatives and spatial data from the AGFD's Statewide Wildlife Action Plan and HabiMap have illuminated significant potential conflicts with special status species, as well as species of economic and recreational importance. Therefore, we do not believe any of the currently proposed DEIS alternatives are consistent with RDEP's intent and we therefore unable to support any of the proposed alternatives. BLM should include a modified preferred alternative in the Final DEIS that has adequately screened out these important wildlife habitats.

Arizona Game and Fish Department Suggested Modifications to SEZ

Summary:

The BLM needs to incorporate the suggested modifications to the SEZ from the AGFD.

Response:

BLM considered the new information presented by the AGFD, along with other commenters, and has revised the boundary for the Agua Caliente SEZ in Alternative 6 of the Final EIS (now termed the revised proposed Agua Caliente SEZ). The additional layers considered included a 1km buffer around the major washes, additional cultural resources survey data, and elimination of lands that were identified as having wilderness characteristics. These additional criteria have moved the SEZ boundary to be 500 meters away on either side of the three washes; these lands are identified in AGFD's Species and Habitat Conservation Guide data as category 4.

Comments:

Submission No: RDEP-Drft-0052
Commenter: Ginger Ritter, Arizona Game and Fish Department
Comment: The Department is also concerned with the inclusion of the Aqua Caliente Solar Energy Zone (SEZ). The Department was notified during the development of the DEIS of this inclusion and we submitted comments to modify the SEZ. It does not appear our comments were incorporated. We strongly recommend incorporating our modifications to the SEZ (see attached, Appendix 2).

County Planning

Summary:

The BLM should consider additional information from Yuma County planning documents and initiatives.

Response:

Section 202(c)(9) of FLPMA requires, to the extent practical, that the BLM keep itself informed of other federal agency and state and local land use plans, that it ensure that consideration is given to those plans that are germane to the development of BLM land use plan decisions, and that it assist in resolving inconsistencies between federal and non-federal plans.

RDEP's planning decisions under consideration in the EIS have been reviewed for consistency with Yuma County plans; the BLM determined that the goals, objectives, management actions, and allocations do not conflict with county land use plans. The BLM is monitoring Yuma county's ongoing planning effort to identify solar energy incentive districts including one that includes some of the proposed Agua Caliente SEZ.

Additionally, BLM policies and design features require offices to coordinate with prospective applicants and local governments and agencies. The BLM would require prospective applicants to schedule and participate in two preliminary meetings with the BLM before filing a ROW application in a REDA or variance area; the aim of the second preliminary meeting is to initiate and ensure early coordination with federal (e.g., NPS and USFWS), state, and local government agencies and tribes. The proposed programmatic design features include many opportunities for local government involvement and consultation, as follows

- Make early contact with local officials, regulators, and inspectors to explore all applicable regulations and address concerns unique to solar power generation projects.
- Emphasize early identification of, and communication and coordination with, stakeholders, including federal, state, and local agencies, special interest groups, Native American tribes and organizations, elected officials, and concerned citizens.
- Consult with local agencies about potential impacts of development in or close to state or local special use areas, such as parks.
- Avoid lands identified as incompatible by local governments for renewable energy development.
- Compare preliminary site grading, drainage, erosion, and sediment control plans with applicable local jurisdiction requirements.
- Consult federal, state, and local "waterwise" guidelines, as applicable, for project development in the arid Southwest.
- Site facilities to maximize local, regional, and statewide economic benefits and coordinate with local and state entities, such as state and county commissions and planning departments.
- Site projects to minimize adverse effects on area housing markets and local infrastructure (e.g., schools and other public services) and to ensure adequate housing vacancy rates and local infrastructure support for workers and their families (Solar Final PEIS, Volume 7, pg. 48).

Comments:

Submission No: RDEP-Drft-0008

Commenter: Paul Melcher, Department of Development Services

Comment: Moreover, the comments in the preceding paragraphs reflect county staff intent to provide for only PV/CPV development as the Board

of Supervisors considers the creation of a Renewable Energy Incentive District (REID) that would include BLM administered lands in the proposed SEZ. A copy of the initial staff report and district maps is attached hereto. The SEZ would be located in Area 3 as described in the report/maps. The creation of the five proposed REIDs was done with three specific goals in mind:

1) Locate utility-scale renewable energy PV/CPV projects on lands that are not valley agricultural lands (those lands in the Yuma, Gila, Mohawk and Texas Hill Valleys/Areas);

2) Locate utility-scale renewable energy PV/CPV projects near suitable transmission lines and roadway infrastructure; and

3) Limit negative environmental, social, and economic impacts to surrounding lands from utility-scale renewable PV/CPV energy projects.

As one might expect, staff has interviewed numerous project stakeholders in order to determine how the REID development project can achieve these goals. To that end, staff has recommended that REID boundaries include: lands vacant and/or undeveloped with little or no resource value; lands previously disturbed or underutilized for agricultural production; lands near 12kV and higher transmission lines; and lands near arterial roadways. In addition, staff will be recommending development standards that preserve wildlife corridors and habitats and provide mandatory buffering and screening to existing and future uses, among others. It is anticipated that this project will be completed in late September 2012."

Submission No: RDEP-Drft-0008
Commenter: Paul Melcher, Department of Development Services
Comment: Second, PV/CPV project structures would not exceed the height restriction of 60 feet for structures for the Rural Area zoning district, which is the predominant zoning district for both Arizona State Trust and privately held land in the SEZ. If developers on private or Trust prope1lies desire structures exceeding 60 feet in height, then a variance from the Yuma County Zoning Ordinance is required. In contrast, power towers can range from 60 meters (197 feet) to 700 meters (2,297 feet) in height. In neighboring La Paz County, for example, the Quartzite Solar Energy tower (located on BLM administered lands) is 653 feet (199 meters) in height. Since Yuma County has no zoning jurisdiction over properties owned by the federal government and, as a result, no means of restricting structure height to monitor visual impacts in the SEZ, the possibility exists that a solar project developed on federal land could contain one or more power towers over 600 feet in height. While PV/CPV projects less than 60 feet in height would likely not be visible from the Juan Bautista de Anza National Historic Trail corridor, a tower 650 feet in height could certainly be seen from there and as far away as 25 miles as shown in Figure 4-4 of the draft RDEP EIS. In fact, such a tower would be the dominating physical feature in the SEZ and in the Hyder Valley region of Yuma County. In order to avoid such a possible visual impact, staff recommends limiting CSP tower heights to 60 feet, matching the maximum height allowed for structures per the Yuma County Zoning Ordinance.

Submission No: RDEP-Drft-0008
Commenter: Paul Melcher, Department of Development Services
Comment: Given that Yuma County is establishing specific development standards for utility scale solar PV/CPV projects as described in the REID proposal, staff welcomes the opportunity to work with BLM to create a set of development standards that meet county standards. If BLM is so willing, staff would also be interested in discussing an agreement whereby Yuma County and BLM review and approve projects in accordance with Yuma County zoning and building code requirements. If this is not possible, staff would request the opportunity to comment on proposed projects as a collaborating partner.

Cultural Resources

Summary:

The BLM needs to consider additional cultural resources information in analyzing the SEZ.

Response:

Additional Class II surveys were conducted in the Agua Caliente SEZ. Results of the surveys found and documented previously unknown cultural resources. This new information has been included in the Final EIS in the affected environment, Section 3.4 Cultural Resources, with new analysis in the environmental consequences, Section 4.2.3. Any proposal for a solar or wind development will require due diligence, including NHPA, NEPA and cultural resource program policy compliance, such as potentially conducting a Class III inventory of the development proposal and a full analysis of the impacts on any resources in the area of potential effect.

Comments:

Submission No: RDEP-Drft-0030

Commenter: Matthew D Williamson CIV, US Army Garrison Yuma

Comment: A good portion of the proposed area is part of the Arizona-California training area for Patton during the late 1930's and early 1940's. They may want to have any area they are serious about using cleared for use by the Corp of Engineers. We do have maps of the training area but the Corp would still need to clear the area for use.

Submission No: RDEP-Drft-0016

Commenter: Robert Mark, Rupestrian Cyber Services, Flagstaff Meeting Transcripts

Comment: Sears Point is quite close to the proposed solar site, and I just want to express some concerns. First of all, the visual impacts of the development. And, secondly, the Sears point study area is dense with not only petroglyph panels, but other cultural features, including rock alignments, geoglyphs, and prehistoric and historic trails. And I hope these will all be properly considered in making any decision as to what disturbances are appropriate in the proposed site.

Submission No: RDEP-Drft-0004

Commenter: Thane D. Sommerville, Attorney for the Quechan Tribe

Comment: While the [Quechan Indian] Tribe generally supports environmentally responsible solar and wind energy project planning, the Agua Caliente Solar Energy Zone (SEZ) falls on sensitive land that contains important cultural resources and the proposed threatened flat-tailed horned lizard habitat. The Tribe cannot support the preferred alternative in light of the Agua Caliente SEZ.

Submission No: RDEP-Drft-0004

Commenter: Thane D. Sommerville, Attorney for the Quechan Tribe

Comment: A. The Tribe Supports Responsible Renewable Energy Planning That Does Not Include the Agua Caliente SEZ.

The Agua Caliente SEZ is located on sensitive lands that may contain hundreds of important cultural resources and includes the flat-tailed homed lizard habitat. No cultural resources have been documented within the SEZ because no archeological surveys have been conducted on the land. DEIS, Cultural Resources, 3-20. The DEIS itself admits that Class III surveys would be necessary for any potential projects within the SEZ area (Cultural Resources, 3-22). However, surveys of the area should occur prior to any decision on designation of the area as an SEZ. The DEIS acknowledges that archaeological sites, historic structures, and traditional cultural properties could be completely destroyed by the clearing, grading, and excavation for projects. Environmental Consequences (Cultural Resources), 4-20. Construction of facilities and related infrastructure could also destroy such cultural resources. Id. Beyond direct impacts, altered topography and hydrologic patterns, soil removal, and soil erosion could harm or destroy significant cultural resources within a project area. Id.

""Cultural resources are nonrenewable and, once damaged or destroyed, are not recoverable."" Id. at 4-21.

Though the SEZ area has yet to be surveyed, 14 previously recorded sites exist within one mile of the SEZ. DEIS, Cultural Resources, 3-20. These previously recorded sites contain hearths, geoglyphs, trails, and rock rings. Id. The SEZ area likely contains similar artifacts, and may contain even more, as archeological field maps show three prehistoric trails within the area. See Id. The SEZ is located within the Tribe's traditional territory, and it likely contains many valuable cultural resources from Quechan ancestors. The Tribe would be devastated to lose such important pieces of its history.

Access

Summary:

The BLM needs to consider access to its lands if development is proposed within the SEZ.

Response:

In response to comments and concerns regarding access along the Palomas-Harquahala Road through the SEZ, a new management action has been added to Alternative 6 (Preferred Alternative) to state that access along the road must be maintained or rerouted if it were disrupted by any SEZ development.

Comments:

Submission No: RDEP-Drft-0010

Commenter: John Shepard, Arizona Solar Working Group

Comment: Parcel of approximately 2,000 acres west of the southern portion of the White Wing Ranch solar development (Figure 1): This parcel has seen severe impacts from users, making it suitable for large-scale development with few impacts on issues of environmental importance. The BLM should address public access to BLM lands north of this parcel if development is proposed here.

Submission No: RDEP-Drft-0057

Commenter: Robert Zittle

Comment: This will also restrict and/or deny access to the public lands behind the proposed project and nothing has been said about establishing a new alternate route to these lands. Federal law prohibits any act that denies access to public lands for the general populations. The BLM cannot deny access to these lands.

Modifying the SEZ Boundaries

Summary:

The BLM should consider modifying the SEZ boundaries to avoid sensitive resources and uses.

Response:

BLM considered the new information presented by the AGFD, along with other commenters, and has revised the boundary for the Agua Caliente SEZ (now termed the revised proposed Agua Caliente SEZ). The additional layers considered included a 1km buffer around the major washes that resulted in moving the SEZ boundary to 500 meters away on either side of the three washes (identified by AGFD's Species and Habitat Conservation Guide data as category 4), thereby preserving wildlife corridors in the washes. The revised proposed Agua Caliente SEZ also removes the northern portion of the largest SEZ footprint to maintain the area for potential tortoise migration between the Palomas Mountains and Baragan Mountain. The revised proposed SEZ also avoids most lands with wilderness characteristics not managed to protect those characteristics. An additional management action would provide access along or rerouting to accommodate access on the Palomas-Harquahala Rd. to ensure that is it not disrupted

by any SEZ development. This revised proposed Agua Caliente SEZ results in consolidating the area into an even smaller footprint.

In consultation with the AGFD, both agencies agree that the AGFD's predicted species raster datasets (AGFD 2012b) as unsuitable as a SEZ screen. Once an application is under consideration, site-specific biological surveys of the area's resources would be conducted and the findings included in the NEPA analysis.

Comments:

Submission No: RDEP-Drft-0010

Commenter: John Shepard, Arizona Solar Working Group

Comment: Parcel of approximately 8,000 acres on the east side of the proposed SEZ (Figure 2): This site has potential for large-scale development as it avoids two of the three major issues that exist on other areas of the proposed Agua Caliente SEZ including Citizen Proposed Wilderness (CPW) lands and major conflicts with the hunting community. While there are ecologically sensitive areas including xeroriparian zones within this parcel, it is of sufficient size and scale to both accommodate renewable energy development and likely mitigation factors including the following:

o Washes: The Desert washes including the large Baragan Wash should be preserved within a sizable corridor that can accommodate wildlife passage and protect existing ecological resources.

o Access: Legally created roads and trails within and around this parcel that are not damaging to natural and cultural resources should be accommodated either in their current locations or in appropriate places to ensure continued access to these and proximate lands.

o Wildlife: Wildlife connectivity in both the east-west and north-south directions should be preserved under any development scenario to limit the negative effects of fragmentation of the Palomas Plain Wildlife Habitat Area.

Submission No: RDEP-Drft-0006

Commenter: Alex Daue, The Wilderness Society

Comment: We offer the following alternative SEZ configurations involving two parcels:

Parcel of approximately 2,000 acres west of the southern portion of the White Wing Ranch solar development (Figure 1): This parcel has seen severe impacts from users, making it suitable for large-scale development with few impacts on issues of environmental importance. The BLM should address public access to BLM lands north of this parcel if development is proposed here.

Parcel of approximately 8,000 acres on the east side of the proposed SEZ (Figure 2): This site has potential for large-scale development as it avoids two of the three major issues that exist on other areas of the proposed Agua Caliente SEZ including Citizen Proposed Wilderness (CPW) lands and major conflicts with the hunting community. While there are ecologically sensitive areas including xeroriparian zones within this parcel, it is of sufficient size and scale to both accommodate renewable energy development and likely mitigation factors including the following:

o Washes: The Desert washes including the large Baragan Wash should be preserved within a 1 km corridor that can accommodate wildlife passage and protect existing ecological resources.

o Access: Legally created roads and trails within and around this parcel should be accommodated either in their current locations or in appropriate places to ensure continued access to these and proximate lands.

o Wildlife: Wildlife connectivity in both the east-west and north-south directions should be preserved under any development scenario to limit the negative effects of fragmentation of the Palomas Plain Wildlife Habitat Area.

Submission No: RDEP-Drft-0008

Commenter: Paul Melcher, Department of Development Services

Comment: As stated above, staff supports Alternative 3 with amendments to the site area as shown in Figure I below. These amendments provide a means to preserve wildlife corridors in wash areas and to preserve existing access to public lands. Specifically, Figure I represents a realignment of Alternative 3 boundaries through removal and addition of BLM administered lands within the Agua Caliente SEZ area. Recognizing that the intent of the SEZ is to utilize parcels of BLM land 2,500 acres or greater in size, staff proposes removing AREAS I and 2 while concurrently adding AREAS 3 and 4 to the Alternative 3 area boundary, resulting in a net increase in its size. Additionally, staff proposes adding AREA 5 to show the connection to transmission facilities with the understanding that actual generation projects would not be developed in it. If adding AREA 5 would create confusion as to the areas where actual projects could be developed, then staff proposes BLM represent on a map where it anticipates Alternative 3 solar projects will connect to transmission facilities.

In order to mitigate potential detrimental impacts to wildlife corridors and access to public lands, staff recommends eliminating AREAS I and 2 to prevent solar development in Hoodoo and Baragan Washes and on Palomas/Harquahala Road. Staff supports adding Area 4 to maintain a minimum project site size of 2,500 acres since its shape excludes Baragan Wash on its southern boundary, excludes Clanton Wash on its northeast boundary, and proposes no immediate impact on public land vehicular access. As a result, planning staff believes that the amendments as proposed in the preceding two paragraphs maintain the viability of solar development within Alternative 3 boundaries while preserving natural resources and public access to them.

Submission No: RDEP-Drft-0005

Commenter: Katherine Gensler, Solar Energy Industries Association

Comment: We support BLM's desire to establish a new Solar Energy Zone near Agua Caliente. As the Draft EIS indicates, the proximity of this site to existing infrastructure makes it a generally attractive location. However, we urge BLM not to adopt the boundaries established by Alternative 6, the Preferred Alternative. When considering a new SEZ, one of the most important features is to ensure that there are enough acres in a single parcel to support development of multiple utility-scale solar energy power plants. On the surface, 6,770 acres appears to be capable of supporting approximately 600 MW of solar development. However, those acres are spread across three distinct parcels of land, a configuration which does not ensure that the SEZ will be commercially attractive to developers. Instead, we encourage BLM to go back to the original boundaries in Alternative 1 and reassess the suitability of the entire area for designation as a SEZ.

Submission No: RDEP-Drft-0045

Commenter: Douglas Beach

Comment: To put more solar around near Whitewing Ranch Dateland, AZ on BLM land would damaging prime wildlife habit for many species of animals. More land striped of vegetation and fenced like Whitewing ranch is devastating to wildlife. Use the land south of Interstate 8 and north of the railroad tracks between Dateland and Gila Bend or from Tacna to Mohawk Pass for solar projects.

Recreation

Summary:

The BLM needs to consider additional baseline information and impact analysis for recreational uses in the SEZ.

Response:

The revised proposed Agua Caliente SEZ responds to public comments to minimize impacts on resources. The revised proposed Agua Caliente SEZ's boundary is 500 meters away on either side of the three washes, which were identified using AGFD's Species and Habitat Conservation Guide data, category 4. Avoiding the washes would preserve wildlife corridors, helping to preserve hunting

resources. The revised proposed Agua Caliente SEZ does not include the northern portion of the SEZ, allowing for potential tortoise migration between the Palomas Mountains and Baragan Mountain. Access disrupted by any SEZ development must be maintained or rerouted.

Comments:

Submission No: RDEP-Drft-0010

Commenter: John Shepard, Arizona Solar Working Group

Comment: Conflict with the Hunting Community: The greatest issue raised with regard to the Agua Caliente SEZ proposal by members of the public is the popularity and reliance on this area by hunters originating from the Yuma area. As documented by Arizona Game and Fish Department, there are a number of game species that have been documented in the proposed SEZ including dove, quail, mule deer, and mountain lion.

REDA Criteria

Summary:

The SEZ should be screened using the same criteria used to identify the REDAs.

Response:

In addition to identifying REDAs, the RDEP is serving as a step-down process to the Solar PEIS. The proposed Agua Caliente SEZ was identified based on a similar but different screening process from the REDAs in order to address specific needs of utility scale solar development. This process focused on the following criteria: available large contiguous parcels of BLM land (greater than 2,500 acres); proximity to transmission; limited known environmental or cultural constraints; proximity to roads and infrastructure; and preferably near existing development in order to consolidate impacts and minimize fragmentation. About 20,600 acres in the Agua Caliente area proved to best meet the overall criteria.

After identification of the proposed Agua Caliente SEZ, the BLM solicited the regional Arizona Game and Fish office, tribes (through ongoing consultation), and stakeholder groups for resource information specific to that location. These groups provided information indicating that portions of the SEZ provided recreational opportunities, hunting, access to other lands, cultural resources, and wildlife habitat and movement corridors. As a result of this input, a smaller SEZ footprint was also proposed for consideration in the Draft EIS.

Based on public comments on the Draft EIS, along with additional information from AGFD, the BLM has developed a revised SEZ boundary to address wildlife habitat and migration, lands with wilderness characteristics, cultural resources, and riparian areas. The revised boundary includes a 1 km buffer around the major washes to preserve wildlife corridors; removes the northern portion of the largest SEZ footprint to maintain the area for potential tortoise migration between the Palomas Mountains and Baragan Mountain; and avoids most "lands with wilderness characteristics not managed to protect those characteristics."

Comments:

Submission No: RDEP-Drft-0010

Commenter: John Shepard, Arizona Solar Working Group

Comment: Different environmental assessments conducted for RDEP REDA lands and the Agua Caliente SEZ. The RDEP process is an effort to identify disturbed or low-conflict lands or renewable energy development. Generally, REDA lands that have undergone RDEP screening process and identified in the DEIS fit this description. The proposed Agua Caliente SEZ did not go through this process and, as a result, does not—in its entirety—

fit this description. While SEZs are not required to go through the RDEP screening process, application of these screens to proposed SEZs could further reduce the potential for conflicts should these SEZs be approved. We note three areas of conflict identified through our study:

Submission No: RDEP-Drft-0010
Commenter: John Shepard, Arizona Solar Working Group
Comment: Disturbed lands: while the presence of disturbed lands is certainly an important and appropriate factor to consider in identifying new SEZs, there may be undisturbed areas with low environmental values that could be suitable for SEZ designation; these areas should also be considered for SEZ designation if they meet the other criteria.

Submission No: RDEP-Drft-0007
Commenter: Greta Anderson, Western Watersheds Project
Comment: The RMP states that the Palomas Plain Wildlife Habitat Area (WHA) is a potential reintroduction area for Sonoran pronghorn because it is large and relatively unfragmented. RMP at 2.53. The Agua Caliente SEZ overlaps the WHA and would indeed fragment and diminish the potential for reintroduction of this imperiled species. Moreover, the current ROD provides management direction to "concentrate developments such as utility facilities in areas already developed or disturbed in the Palomas Plain WHA." ROD-ARMP WF-052. It is not clear that the Agua Caliente SEZ would be located in an area already developed or disturbed; indeed, it overlaps substantially with a citizen proposed wilderness area. Furthermore, the RDEP identifies REDAs as withdrawing from consideration lands within special management designations, making the inclusion of the Agua Caliente SEZ that much more of a disjunction with the rest of the proposal.

Solar Energy Zone Selection Criteria

Summary:

The BLM should eliminate the Proximity to Existing Development criterion for selection of a SEZ and should use Previous Disturbance as the only criterion for selecting a SEZ.

Response:

The RDEP is to serve as a "step-down" to the Solar PEIS by considering whether to identify a SEZ for utility-scale solar. This requires a large contiguous parcel of BLM land (greater than 2,500 acres). None of the nominated disturbed sites meet these criteria. Proximity to development was just one of other criteria that the Arizona BLM used to help identify the Agua Caliente SEZ. As commenters noted, using proximity to existing development is likely to make an area a more desirable locality for future development, but more importantly it is viewed as a means to consolidate development in order to minimize impacts, such as habitat fragmentation.

Comments:

Submission No: RDEP-Drft-0010
Commenter: John Shepard, Arizona Solar Working Group
Comment: Proximity to existing solar development: while proximity to existing development is a good indicator of development interest, this should not be a requirement for new SEZs

Submission No: RDEP-Drft-0006
Commenter: Alex Daue, The Wilderness Society
Comment: While most of the SEZ identification criteria listed in the DEIS are appropriate (DEIS, p. 2-19), as the BLM reviews REDAs for potential additional SEZ designations, we recommend the following changes to the criteria:
Proximity to existing solar development: while proximity to existing development is a good indicator of development interest, this should not be

a requirement for new SEZs; and Disturbed lands: while the presence of disturbed lands is certainly an important and appropriate factor to consider in identifying new SEZs, there may be undisturbed areas with low environmental values that could be suitable for SEZ designation; these areas should also be considered for SEZ designation if they meet the other criteria.

Submission No: RDEP-Drft-0004
Commenter: Thane D. Sommerville, Attorney for the Quechan Tribe
Comment: The Tribe supports Alternative 5 because it concentrates renewable energy development on BLM-administered lands that prior planning processes have determined are appropriate for disposal. DEIS, Alternative 5: Land Tenure REDA, 2-33. Alternative 5 eliminates the Agua Caliente SEZ since the Yuma Resource Management Plan did not designate any lands within the SEZ footprint as suitable for disposal. Id. at 2-36. Utilizing previously identified disturbed land reduces the risk of loss to cultural resources, and still allows for needed renewable energy development. In the Final EIS, BLM should include an alternative that provides for solar and/or wind energy development on significantly and permanently disturbed lands, but that does not include the Agua Caliente SEZ.

Water – Affected Environment and Impact Analysis

Summary:

The BLM should consider additional water information in the analysis for the SEZ.

Response:

The BLM has reviewed the SEZ affected environment section on water resources and determined that the commenters were correct in noting that additional information should be included. The SEZ Water Resources affected environment description in Chapter 3, Section 3.23.2 has been revised in the Final EIS to include recognition of the limited hydrologic information available for the area and the results of historic agricultural use of the area on existing surface and groundwater resources. Additionally, the impact analysis discussion in Chapter 4, Section 4.2.23 has been revised to consider the effects of renewable energy development on ephemeral streams and the natural drainage patterns within the SEZ.

Based on public comments, the BLM has prepared a revised proposed Agua Caliente SEZ boundary which is 500 meters away on either side of the three washes. The Revised SEZ is identified as being in Water Protection Zone 2, which would have the additional design feature requiring industrial water use to be limited to dry cooling technologies.

The BLM will cooperate with state governments, including the Arizona Department of Environmental Quality, to protect and enhance public health and the environment by reducing the impact of pollutants discharged to surface and groundwater in accordance with the Safe Drinking Water Act, the Clean Water Act, and all applicable Aquifer Protection Permits

Comments:

Submission No: RDEP-Drft-0062
Commenter: Kathleen M. Goforth, Environmental Protection Agency, Environmental Review Office
Comment: We recommend that the BLM take particular care when siting projects within the proposed Agua Caliente Solar Energy Zone (SEZ). We acknowledge the time and effort expended to identify the SEZ, and commend the BLM for proposing a SEZ to complement those proposed in the Solar Programmatic Environmental Impact Statement. The topography of the SEZ, however, may present challenges for siting solar energy projects. The DEIS describes the proposed SEZ land surface as "scoured by a braided series of washes

and ephemeral streams," and including "at least six wide ephemeral washes on site and a network of minor braided streams that discharge into the ephemeral washes" (p. 3-173). The DEIS goes on to state that although National Wetland Inventory maps do not "identify mapped wetlands within the proposed SEZ analysis area," the area "likely has jurisdictional ephemeral waters of the U.S." Although cognizant of the BLM's commitment to avoid "surface waters, wetlands, streams, and floodplains" (a commitment demonstrated by reducing the size of the proposed SEZ, in part, to avoid braided channel floodplains), and supportive of the strong design features and best management practices in the DEIS to protect water resources, we feel there is potential for solar energy projects to affect ephemeral streams, and thereby the natural drainage patterns, within the proposed SEZ. We recommend that the BLM work with the Army Corps of Engineers to identify and avoid all jurisdictional ephemeral waters.

Submission No: RDEP-Drft-0001
Commenter: Michael J. Lacey, Arizona Division of Water Resources
Comment: Limited hydrogeologic information is available in the vicinity of the proposed Agua Caliente Solar Energy Zone (SEZ). Historic and current agricultural land uses have caused water level declines in the region. Similar aquifer responses would be anticipated from utility-scale CSP facilities. ADWR has made no analysis or regulatory determinations as to the sustainability of the groundwater system in this region at this time. Additionally, water quality in this region is generally poor. ADWR understands that CSPs require boiler-quality water for cooling and other uses. Inclusion of a discussion on the potential consequences of treatment by-product disposal may be warranted.

Wildlife Habitat Area

Summary:

The BLM needs to include analysis for impacts on the Palomas Plain WHA.

Response:

The revised proposed Agua Caliente SEZ has a smaller footprint and therefore fewer potential impacts on the Palomas Plain Wildlife Habitat Area. The impacts on the Palomas Plain Wildlife Habitat Area are discussed in the environmental consequences (Fish and Wildlife) section, DEIS pg. 4-44.

Comments:

Submission No: RDEP-Drft-0010
Commenter: John Shepard, Arizona Solar Working Group
Comment: Overlap with the Palomas Plain Wildlife Habitat Area (WHA): The Palomas Plain WHA is a critical area for the conservation of a variety of species and is considered to be the largest unfragmented section of Sonoran Desert habitat. Some species that rely on this area are endangered, threatened, or candidate species including the Sonoran Desert tortoise, the Sonoran Desert population of the bald eagle, cactus ferruginous pygmy-owl, and Sonoran Desert pronghorn, once released from their reintroduction site in the Kofa National Wildlife Refuge. Although the proposed SEZ overlaps only a small portion of this WHA, and there are no known instances of endangered, threatened, or candidate species in the area, impacts on this WHA should be a factor in the adoption and development of the SEZ.

Wilderness Characteristics

Summary:

The BLM needs to consider additional impact analysis for the lands with wilderness characteristics in the SEZ.

Response:
The three Agua Caliente SEZ footprints analyzed in the draft EIS are in compliance with the Yuma Field Office RMP wilderness direction and avoid all lands being actively managed for wilderness characteristics. Based on public comments, the BLM has developed a revised proposed Agua Caliente SEZ footprint (Alternative 6) which also avoids most lands with wilderness characteristics but are not being managed to protect those characteristics. These acres are adjacent to a recent new solar development, which has altered the overall characteristics in the region. Additionally, the analysis for lands with wilderness characteristics in the SEZ was reviewed and updated to reflect the revised SEZ footprint. See Section 4.2.25, Wilderness Characteristics in the Final EIS.

Comments:
Submission No: RDEP-Drft-0010
Commenter: John Shepard, Arizona Solar Working Group
Comments: Lands with Wilderness Characteristics (LWC) and Citizen Proposed Wilderness (CPW) Areas: When the Yuma Resource Management Plan (RMP) was being revised in 2005, Arizona Wilderness Coalition and other environmental groups provided the BLM with an inventory identifying lands with wilderness character, requesting that the agency manage the lands to protect those characteristics. The final RMP identified LWCs in the Palomas Mountains and Baragan Wash units. The BLM chose to manage a portion of the Palomas Mountains unit to maintain its wilderness characteristics, but the agency did not protect the remainder of the Palomas Mountains unit or any of the Baragan Wash unit. These BLM-recognized LWCs are also CPW units. While none of the Palomas Mountains LWC being managed to protect them overlap with the proposed SEZ, significant portions of both the Palomas Mountains and Baragan Wash LWCs not being managed to protect them are within some of the BLM proposed alternative configurations for the proposed SEZ. This could result in significant conflicts should solar development be proposed in these areas.

Wildlife
Summary:
The BLM needs to consider additional impact analysis and affected environment information for wildlife found in and around the SEZ.

Response:
As noted above, the BLM has revised the Agua Caliente SEZ footprint to further reduce the likelihood for impacts to known sensitive resources in the area. The new footprint excludes the northern portion of the maximum Agua Caliente SEZ area, resulting in protection of tortoise and their migration route between the Palomas Mountains and Baragan Mountain. Additionally, the Revised SEZ footprint removed the major east and west washes to allow for wildlife migration along these riparian corridors. The analysis in Chapter 4, Environmental Consequences has been revised to reflect these changes and any additional information on the wildlife found in the area.

Comments:
Submission No: RDEP-Drft-0007
Commenter: Greta Anderson, Western Watersheds Project
Comment: The DEIS dismisses potential impacts to Sonoran desert tortoise in the SEZ because "no special status species have been recorded within the proposed SEZ." DEIS at 4-121. But some of the

acreage within the proposed footprints for the Agua Caliente SEZ does contain desert tortoise habitat and the SEZ area provides linkage habitat between the Palomas Mountains and Baragan Mountains tortoise habitats and populations. As such, impacts to desert tortoise, desert tortoise habitat, loss of connectivity and increased fragmentation must be considered here and the DEIS's failure to do so renders it insufficient under NEPA.

Submission No: RDEP-Drft-0053
Commenter: Steven L. Spangle, US Fish and Wildlife Service
Comment: Page 3-145, Table 3-33- Desert tortoise- If there is classified tortoise (Gopherus morafkai) habitat on Barragan Mountain to the north of the proposed Agua Caliente SEZ and on the Palomas Mountains to the west of that area, tortoise may traverse the SEZ area during movement between those or other areas. Mobile wildlife species do not usually persist through time on isolated patches of habitat. Connectivity between patches can be important to long term survival and conservation.
Page 3-146, 3rd paragraph- Again, if there is classified tortoise habitat on Barragan Mountain to the north of the proposed Agua Caliente SEZ and on the Palomas Mountains to the west of that area, tortoise may traverse the SEZ area during movement between those or other areas. Mobile wildlife species do not usually persist through time on isolated patches of habitat. Connectivity between patches can be important to long term survival and conservation.

Submission No: RDEP-Drft-0004
Commenter: Thane D. Sommerville, Attorney for the Quechan Tribe
Comment: While the [Quechan Indian] Tribe generally supports environmentally responsible solar and wind energy project planning, the Agua Caliente Solar Energy Zone (SEZ) falls on sensitive land that contains important cultural resources and the proposed threatened flat-tailed horned lizard habitat. The Tribe cannot support the preferred alternative in light of the Agua Caliente SEZ.

Submission No: RDEP-Drft-0053
Commenter: Steven L. Spangle, US Fish and Wildlife Service
Comment: Page 4-124, 4th paragraph- Again, if there is classified tortoise habitat on Barragan Mountain to the north of the proposed Agua Caliente SEZ and on the Palomas Mountains to the west of that area, tortoise may traverse the SEZ area during movement between those or other areas. Mobile wildlife species do not usually persist through time on isolated patches of habitat. Connectivity between patches can be important to long term survival and conservation.

Submission No: RDEP-Drft-0071
Commenter: Jamie Rappaport Clark, Defenders of Wildlife
Comment: The proposed Agua Caliente SEZ is in close proximity to the captive breeding pen on the Kofa NWR. While the reintroduced pronghorn are currently constrained to the captive breeding pens, future releases from this and adjacent sites are anticipated once the captive population reaches a sufficient size threshold. At that time, Sonoran pronghorn will be free to move across the landscape, at which point they may encounter and be impacted by solar development projects and associated infrastructure and disturbance

Wildlife—Mitigation Measures

Summary:

The BLM needs to consider extensive avoidance and additional mitigation measures in the SEZ to avoid impacts on wildlife riparian habitat.

Response:

Based on comments, the BLM has revised the Agua Caliente SEZ footprint to remove the east and west washes, lands with wilderness characteristics, and areas with known cultural resources. This reduced

footprint removes the northern portion of the maximum Agua Caliente SEZ area, resulting in protection of tortoise and their migration route between the Palomas Mountains and Baragan Mountain. Additionally, by removing the major east and west washes, wildlife would be able to use the riparian corridors for movement through the area. Also, the SEZ does not include the northern portion of the maximum footprint allowing for potential tortoise migration between the Palomas Mountains and Baragan Mountain.

Any impacts that could result from a development proposal on the SEZ would be mitigated through siting decisions and the application of the required design features. For those impacts that are not fully avoided or minimized, the BLM would determine whether measures to offset or mitigate negative impacts would be appropriate and could recommend such measures following consultation with affected stakeholders.

The BLM proposes to establish regional mitigation plans for development in SEZs, including the revised proposed Agua Caliente SEZ. The framework outlined in the Final Solar PEIS incorporates many of the components suggested in the comments received, including allowing mitigation on both public and private lands, considering the full range of mitigation tools available (including changing land designations and restoration), ensuring adequate funding over time, acquiring third-party-managed mitigation funds, monitoring, and using adaptive management strategies to certify that mitigation is adequate relative to impacts over time. Such plans would establish priority mitigation activities and locations based on, and consistent with, existing conservation objectives, resource management plans, and other federal, state and local goals. See Section A.2.5 of the Final Solar PEIS for additional details.

Comments:

Submission No: RDEP-Drft-0071

Commenter: Jamie Rappaport Clark, Defenders of Wildlife

Comment: If the easternmost parcels in the proposed SEZ (Portions of Alternatives 1, 2, 4, 6) are to be included in an SEZ configuration, extensive grading may be necessary to facilitate development, as the terrain in this area undulates significantly and may be prone to sheet flow during major precipitation events. Thus, Defender's support for inclusion of this area as part of an SEZ will be contingent upon the BLM incorporating generous avoidance and mitigation for riparian corridors, as well as exclusion of special status species and game species habitats consistent with our recommendations above.

G.2.24 Socioeconomics - Impact Analysis

Summary:

A commenter questions whether there is an estimated percentage savings of time that the RDEP EIS will save the applicant over BLM doing nothing.

Response:

As stated in Section 1.5.3, Requirements for Further Environmental Analysis, site-specific environmental reviews for renewable energy development projects that begin after the ROD for this EIS is finalized would be tiered to this EIS; using the analysis provided in the EIS and design features developed in this plan, this information would reduce time and therefore costs to developers. While the development of REDAs aims to guide developers to areas that contain fewer barriers to development, these areas are not guaranteed to be free of issues. As stated in the DEIS "This EIS will not eliminate the need for site-specific environmental review for future individual renewable energy development proposals; the BLM

will make individual decisions on a case-by-case basis whether or not to authorize individual renewable energy development projects in conformance with the amended land use plan on the basis of this EIS" (DEIS pp 1-13). Having the EIS and amendments done, will save time and money for applicants.

Comments:

Submission No: RDEP-Drft-0058

Commenter: Buster Johnson, Mohave County Board of Supervisors

Comment: From the standpoint of an applicant, proposing a renewable energy project, is there an estimated percentage savings of time that this EIS will save the applicant, in obtaining a decision from the BLM, over a "no action" alternative?

G.2.25 Transmission – Impact Analysis

Summary:

The BLM needs to address transmission line capacity and direct and indirect transmission effects, including impacts from new power lines.

Response:

The purpose of RDEP is to identify lands with solar and wind potential and low resource sensitivity. As noted in the Draft EIS, the RDEP EIS is a programmatic approach to planning allocations across Arizona BLM-administered lands; the descriptions of the affected environment and the analysis in environmental consequences is of sufficient detail to support the programmatic nature of the EIS. Impacts associated with renewable energy including transmission lines were generally described in Chapter 4. Transmission line planning for energy development is generally based on business and financial decisions of the applicants; these decisions rely on multiple variable outside the control of the BLM, including site conditions, technology, project output, power purchase agreements and terms, line capacity, market demand, and financing, and would be speculative within the scope of RDEP.

As part of the planning process, Alternatives 2 and 6 (Preferred Alternative) identified REDAs that were close enough to existing transmission facilities as to make it more efficient and cost effective to bring the energy online and to deliver it to market while minimizing environmental impacts. Although the DEIS identified REDAs, renewable energy developments can be proposed outside of a REDA, including those locations that could be more economically viable, on a case-by-case basis using applicable national policy direction and guidance from existing land use plan decisions. However, proposed renewable energy development on sites not identified as REDAs would be subject to current land use plan requirements and guidance. Processing applications in these non-REDA locations would take more time to evaluate the site location, to conduct environmental and cultural reviews, to develop appropriate mitigation measures, to effectively collaborate with stakeholders, and, in some cases, to prepare a land use plan amendment (EIS, Section 1-3).

It is also important to recognize that the REDAs are identified for potential development. Any proposal for an actual project would require due diligence, including NEPA compliance. At the site specific level, the proposed project requirements, which could include new transmission lines and facilities, would be reviewed against the resources of the specific location to determine if there are additional issues that could not be recognized at the larger landscape scale. Once an application is under consideration, site-specific descriptions of the area's resources would be included in the NEPA analysis, and particular elements of a project's design would provide the context for specific impacts.

Comments:

Submission No: RDEP-Drft-0010
Commenter: John Shepard, Arizona Solar Working Group
Comment: Cost Reduction and Efficiency Gains: While the intended goal of reducing costs and enhancing efficiency is worthy, what the BLM proposes carries an unintended consequence that would actually increase costs for many prospective solar projects, both at smaller commercial scales and larger utility scales, by forcing them onto delivery systems at greater distances and higher voltages than necessary. Moreover, gen-tie length is only one of two very important factors affecting overall transmission development needs and costs. The interconnection of new generation to any existing power line typically requires physical upgrades to surrounding power infrastructure. Such "system upgrades" may consist of replacing and/or adding conductors (wires) to existing lines. In other cases, completely new lines must be built to accommodate the injection of additional power into existing networks.

Submission No: RDEP-Drft-0069
Commenter: Dr. John Nishio
Comment: Please also consider the cost of transmitting the produced energy via long transmission lines. There is a loss of energy during such transmission and the resources that go into such transmission lines are significant.

Submission No: RDEP-Drft-0057
Commenter: Robert Zittle
Comment: Third most of the power generated from this proposed project will not benefit the local population as it will be routed to areas outside the community.

Submission No: RDEP-Drft-0010
Commenter: John Shepard, Arizona Solar Working Group
Comment: System reinforcements that may be required by the introduction of new gen-ties may cause either requirements for upgrades to existing power lines or construction of new power lines;

Submission No: RDEP-Drft-0010
Commenter: John Shepard, Arizona Solar Working Group
Comment: New power lines, including gen-ties, through otherwise undeveloped areas cause much greater direct, indirect, and cumulative environmental impacts in currently un-fragmented areas than upgrades of existing power lines, because they include new roads, transmission poles or towers, right-of-way maintenance, and other activities and infrastructure that are associated with transmission lines;

Submission No: RDEP-Drft-0010
Commenter: John Shepard, Arizona Solar Working Group
Comment: The primary goal in considering limitation of the lengths of both new power lines and upgrades to existing power lines is the minimization of disruption to ecosystems and existing habitat areas. Specifically, introduction of new and upgraded power lines can potentially cause habitat fragmentation, thereby reducing wildlife connectivity between areas within particular wildlife species' domains;

Submission No: RDEP-Drft-0010
Commenter: John Shepard, Arizona Solar Working Group
Comment: Construction, operation, and maintenance of higher voltage power lines causes greater impacts than lower voltage power lines because the roads, transmission poles or towers and construction and maintenance activities required for higher voltage power lines are larger and more intensive.

G.2.26 Tribal Interests

Consultation

Summary:

The BLM needs to complete tribal consultation before the RDEP is finalized. The BLM also needs to involve tribal people, not just tribal governments, as directed by the MOU on Environmental Justice and EO 12898.

Response:

BLM initiated consultation with governments of 23 affected Indian tribes early in the RDEP development process; shared information and provided opportunities for review and comment on the development of EIS alternatives throughout the NEPA process; and participated in 16 meetings with 13 tribes, many of which involved BLM line managers and elected tribal leaders. The State Director also made presentations to tribal leaders at two meetings of the Inter Tribal Council of Arizona and discussed the RDEP at a meeting attended by representatives of seven tribes on May 23, 2012. The BLM welcomes additional discussions with tribes on planning for renewable energy development while avoiding or mitigating impacts on natural, cultural, and heritage resources. While the RDEP identifies lands that may be suitable for renewable energy development, any specific proposals for energy projects will be assessed on a case-by-case basis with early and frequent consultation with interested tribes. BLM would consult with tribes on REDA-specific issues or resources of concern, including those related to environmental justice. We would also encourage consultations to define priorities for studies that could synthesize or acquire information relating to the history of tribal land use and associated cultural and heritage values within certain areas that could be subject to energy development. Such efforts could support the development of regional mitigation strategies or identify previously unknown resource conflicts that would be incompatible with energy development.

The Section 106 consultation process and the NEPA public participation process are open to all tribal organizations and individuals, and BLM encourages their participation. In addition, in consulting with tribal governments, BLM requests their assistance in identifying elders, traditional religious practitioners, and other individuals who may offer relevant information or concerns.

Comments:

Submission No: RDEP-Drft-0004

Commenter: Thane D. Sommerville, Attorney for the Quechan Tribe

Comment: The NHPA requires ongoing consultation with interested Indian tribes throughout the identification and evaluation of cultural resources and the resolution of adverse effects. 36 C.F.R. § 800.3(f)(2); 800.4(a)(4); 800.5(c)(2)(iii); 800.6(a); 800.6(b)(2), etc. Additionally, multiple Executive Orders require ongoing consultation with Indian tribes where federally approved actions affect tribal interests. See Executive Order 12875, Tribal Governance (Oct. 26, 1993) (the federal government must consult with Indian tribal governments on matters that significantly or uniquely affect tribal governments); Executive Order 12898, Environmental Justice (Feb. 11, 1994) (federal government must consult with tribal leaders on steps to ensure environmental justice requirements); Executive Order No. 13007, Sacred Sites (May 24, 1996) (federal government is obligated to accommodate access to and ceremonial use of Indian sacred sites by Indian religious practitioners, avoid adversely impacting the physical integrity of sites, and facilitate the identification of sacred sites by tribes); Executive Order No. 13084, Consultation and Coordination with Indian Tribal Governments (May 14, 1998) (places burden on federal government to

obtain timely and meaningful input from tribes on matters that significantly or uniquely affect tribal communities); Executive Order 13175, Consultation with Indian Tribal Governments (Nov. 6,2000) (the federal government shall seek to establish regular and meaningful consultation with tribes in the development of federal policies affecting tribes).
BLM must complete consultation with the [Quechan Indian] Tribe in order for the RDEP to comply with federal law.

Submission No: RDEP-Drft-0041
Commenter: Mark T. Altaha, White Mountain Apache Tribe Historic Preservation Office
Comment: Please be advised such proposed RDEP projects may have the potential to have a negative impact to cultural heritage resources considered sensitive to Native American tribes. As part of the effort to identify cultural heritage resources a ethno-historic study and interviews with tribes may become necessary prior to implementing such proposed projects. Although such RDEP projects may not occur on lands deemed sensitive to the White Mountain Apache tribe, we recommend early consultation should areas adjacent to the Apache's four sacred mountains be subjected to such RDEP projects. These mountains would include the San Francisco Peaks, Mt. Baldy, Sierra Madres, and Mt. Graham in east central Arizona.

Submission No: RDEP-Drft-0060
Commenter: Beth Rivers, Indigenous Support Coalition of Oregon
Comment: In August of last year Federal agencies signed the Memorandum of Understanding on Environmental Justice and Executive Order 12898, and Secretary Salazar "reaffirm(ed) Interior's Commitment" to EJ in a DOI Press Release on March 29, 2012, providing a link to the DOI Environmental Justice Strategic Plan 2012-2017 which can be found at http://www.doi.gov/pmb/oepc/upload/Final-DOI-EJ-SP-March-27- 2012.pdf.
Among the updated EJ goals are to "ensure minority, low-income, and tribal populations are provided with the opportunity to engage in meaningful involvement in the Department's decision making processes" such as "conduct public meetings, listening sessions, and forums in a manner that is accessible to and inclusive of minority, low-income, and tribal populations" and "provide opportunities for the involvement of minority, low-income, and tribal populations as appropriate early and throughout program and planning activities and NEPA processes", and "establish working partnership with minority, low-income, and tribal populations". Note the language in DOI's 2012-2017 EJ SP repeats the term "tribal populations" rather than tribal government; thus, sending notice to the Navajo Nation or Hopi Tribe does not suffice as involving Indian peoples. (See page 13 on previous EJ Strategy; see pages 14, 16-17 for current EJ goals, measures.)

Submission No: RDEP-Drft-0060
Commenter: Beth Rivers, Indigenous Support Coalition of Oregon
Comment: In fact, there is no longer a Navajo Chapter House on the HPL. Also, the Hopi Tribe has legal jurisdiction, with no obligation or interest in passing along your notification to Dine'h on the HPL. Thus your office has not met the notification requirements of the Department of Interior's National Environmental Policy Act (NEPA) regulations at 43 CFR Part 46 encouraging public participation and community involvement, using the definition of proposed major the challenge to notify and include low-income and minorities, and to address "disproportionate and adverse" environmental impacts on them Federal actions as found in the Council on Environmental Quality's NEPA regulations at 40 CFR 1508.18, nor of Executive Order 12898, which further promotes the need for public participation, with the challenge to notify and include low-income and minorities, and to address "disproportionate and adverse" environmental impacts on them.

Submission No: RDEP-Drft-0004
Commenter: Thane D. Sommerville, Attorney for the Quechan Tribe

Comment: D. The Cultural Resource Evaluation Has Occurred Without Required Government-to-Government Consultation with the Tribe.
BLM has failed to engage in government-to-government consultation with the Tribe regarding impacts from the RDEP. Since no reports have been made to identify cultural resources within the affected lands, the Tribe's ability to comment on the impacts to cultural resources is severely impaired. These failures violate the NHPA and other federal laws.

Environmental Justice

Summary:

If the BLM is going to direct development to non-reservation lands, the impacts of this must be discussed in the environmental justice analysis.

Response:

As noted in the Draft EIS, the RDEP EIS is a programmatic approach to planning allocations across Arizona BLM-administered lands; the descriptions of the affected environment and the analysis in environmental consequences is of sufficient detail to support the programmatic nature of the EIS. As noted in the Draft EIS, "some tribal lands are located adjacent to REDAs, and impacts on these populations would be analyzed prior to site-specific development as appropriate" (Draft EIS pg. 4-34). General impacts from renewable energy actions on low-income and minority populations in the planning area are discussed on pages 4-34 to 4-36 of the Draft EIS. Once an application is under consideration, site-specific descriptions of the area's resources would be included in the NEPA analysis, and particular elements of a project's design would provide the context for specific impacts.

The REDAs are identified for potential development. Development would not be precluded outside of REDAs or on tribal lands. Furthermore, any proposal for an actual project within or outside of the REDA would require due diligence, including NEPA compliance. At this project level of the process, the proposed application boundaries of the projects would be reviewed against the data layers to determine if there are additional issues that could not be recognized at the larger landscape scale, such environmental justice considerations when siting projects.

For future applications that could be proposed (whether inside or outside the REDAs), pre-application meetings are required under the Solar and Wind Energy Programs and would be helpful for a project developed on lands near tribal populations. The BLM and other stakeholders, including tribes, could provide some sense of the potential for significant resources in the area during the pre-application process.

Comments:

Submission No: RDEP-Drft-0020
Commenter: Rebecca A. Loudbear, Colorado River Indian Tribes
Comment: Directing development only to off-reservation areas has the additional consequence of directing economic benefits away from tribes. The jobs, commercial activity, and revenue share that Tribes might otherwise enjoy as willing participants with BLM and developers is categorically denied under the RDEP's DEIS in its current form. This environmental justice consequence of the proposed plan is not even acknowledged in the DEIS, much less addressed. This proposal should be more fully explored through consultation with Arizona tribes.

G.2.27 Vegetation Resources

Summary:

The BLM needs to consider impacts to nominated sites that are vegetated versus fully disturbed and additional cumulative impacts resulting from previous disturbance in areas where vegetation resources have been removed or disturbed.

Response:

Additional analysis has been provided in the cumulative impacts vegetation section (Section 5.3.17) to include effects from other consumptive uses, such as livestock grazing, OHV use, and recreation. Additionally, for the Final EIS all nominated sites have been screened and only those sites that are disturbed or have no known sensitive resources are carried forward as a REDA. This eliminated many sites that have functional vegetative communities or other sensitive resources, including wildlife habitat and HMAs. Site-specific analysis would be conducted on all applications for renewable energy development and would address impacts to vegetation, wildlife, recreation and other applicable resources.

Comments:

Submission No: RDEP-Drft-0007

Commenter: Greta Anderson, Western Watersheds Project

Comment: Any habitats, however marginal, that are lost to solar energy development are being lost in addition to the acres of BLM lands adversely impacted by other consumptive uses such as livestock grazing and off-road vehicle use. Where the REDAs are proposed for previously-disturbed areas, the BLM must also consider the differences between a disturbed-but-vegetated site and an energy development in terms of carbon sequestration, wildlife use, recreation, access, connectivity, and fragmentation.

G.2.28 Water

Affected Environment

Summary:

The BLM should clarify ADWRs authority to regulate groundwater use in AMAs, INAs, and the rest of the state.

Response:

The BLM agrees that ADWR's authority role in water permitting should be clarified. The following text has been included in Section 4.2.23 of the Final EIS: "Groundwater use from groundwater-supply extraction wells located in AMAs would be subject to review and approval by the ADWR. For areas outside AMAs, including in INAs, BLM priority watershed, and sole source aquifers, the ADWR will ensure proposed wells are designed and constructed to prevent aquifer contamination."

Comments:

Submission No: RDEP-Drft-0001

Commenter: Michael J. Lacey, Arizona Division of Water Resources

Comment: 1. The document contains numerous references to ADWR's authorities to regulate groundwater use inside Active Management Areas (AMAs), Irrigation Non-Expansion Areas (INAs), and in the balance of the State. In general, our regulatory authority over groundwater use in the areas of the State outside of the AMAs is limited to ensuring that wells are drilled pursuant to permits issued by the Department and are constructed to minimum

standards to prevent aquifer contamination from surface spills and cross contamination between aquifer units. ADWR has no authority to conduct well impact analyses, or conduct any reviews as to legal access or the appropriateness of groundwater use pursuant to such well permits1,2. Footnotes: 1 ADWR regulates groundwater use within AMAs and has limited authority over the use of groundwater for industrial purposes (including power production) in the Harquahala INA. Upon a water adequacy election of local platting authorities, ADWR has additional authority over groundwater use for subdivision growth outside of AMAs. This language "Any proposed groundwater –supply extraction wells, including proposed wells in the AMAs, INAs, BLM priority watersheds, and sole source aquifers would be subject to review and approval by the ADWR." contained in the discussion of the potential environmental consequences of the alternatives is overly broad and, in the Department's opinion, implies a degree of protection against undesirable environmental consequences from the use of groundwater that may not exist in large portions of the State, notably in much of the areas that are the focus of BLM's report.

Design Features

Summary:

The BLM should consider only non-thermal PV solar panels as a design feature in the water alternative.

Response:

Guidance regarding solar thermal technology and water consumption was incorporated into the Final EIS. Specifically, Section 4.2.23 of the Final EIS now notes that the BLM would not permit utility scale solar thermal facilities unless it could be demonstrated that no significant impacts would occur on the applicable hydrologic system. Additionally, the additional Water Protection Zones described in the Water Alternative and incorporated into the Proposed Alternative are arranged hierarchically, with WPZs 2 and 3 adding increasingly strict design features in addition to those defined in Appendix B, Design Features, such as annual consumption of a renewable energy development would not exceed 55 acre-feet per year (WPZ 3 design feature).Appendix B, Design Features and Best Management Practices, in RDEP's Final EIS and Appendix A, Section A.2.2.10, in the Solar Final PEIS describe design features to avoid, mitigate, or minimize impacts on water resources from solar development.

The RDEP Draft EIS also addresses potential impacts on water resources resulting from solar energy development and proposes a set of design features common to all action alternatives. Appendix B, Design Features and Best Management Practices, Table B-1, Design Features, identifies 229 general measures to avoid or mitigate adverse impacts on all resource areas. Design feature numbers 59, 167-171, and 179 address water resources directly. In particular, design feature number 167 specifies that solar project developers "shall plan to implement water conservation measures…in order to reduce project water requirements…for example, using dry cooling…or selecting solar energy technologies that do not require cooling water." Design feature number 59 further advises that proponents of proposed solar facilities consider the capability of local surface or groundwater supplies to provide adequate water for operation and that water supply be considered early during project siting and design. Section 4.2.23, page 4-165, of the DEIS, notes that additional more detailed analysis and subsequent mitigation measures beyond those specified in Appendix B could be required during the ROW authorization and facility siting process.

Comments:

Submission No: RDEP-Drft-0046

Commenter: David Grieshop

Comment: Type of PV panels. I would encourage use of non-thermal solar panels generation given the two sites contain sufficient acreage to construction megawatt installations. Why? Non-thermal solar panels do not require water to produce steam. Water is an issue in the Sierra Vista sub watershed given the Congressional mandate for sustainable water yield; potential threat to Fort Huachuca; and future managed growth.

G.2.29 Wildlife

Design Features

Summary:

The BLM should eliminate the translocation of wildlife design feature as it would be detrimental to sensitive species.

Response:

Both the Solar Final EIS and RDEP Final EIS include the potential for translocating special status species. Any translocation would be planned and conducted in coordination with appropriate federal and state agencies and would include post-translocation monitoring. No change to the document has been made.

Comments:

Submission No: RDEP-Drft-0007

Commenter: Greta Anderson, Western Watersheds Project

Comment: BLM's design features for the RDEP include translocation of sensitive wildlife and plant species. DEIS at B-14. This fails to address the fact that many species do not survive or thrive or adapt to translocation. The BLM must limit the extent to which energy development displaces species and cannot merely plan to move the species.

Impact Analysis

Summary:

The DEIS does not analyze the anticipated impacts on wildlife species and provides only general qualitative estimates of impact that do not allow for quantitative or objective evaluation by the public. Improved and additional impact analysis is needed on bird and bat collisions with guywires in wind energy developments, tortoise, flat-tailed horned lizards, and migratory birds, including bird mortality from several causes.

Response:

It is also important to recognize that the REDAs are identified for potential development. Any proposal for an actual project would require due diligence, including NEPA compliance. At this project level of the process, the proposed application boundaries of the projects would be reviewed against the data layers to determine if there were additional issues that could not be recognized at the larger landscape scale. Of particular note are sensitive species and cultural resources that require mandated consultations.

Through the NEPA analysis, the BLM has complied with its Special Status Species policy and would not violate the Migratory Bird Treaty Act or Endangered Species Act. Due to the programmatic nature of the document, a species-by-species analysis was not conducted for sensitive or non-sensitive species within the REDAs. Impacts on many non-sensitive and most sensitive species would be reduced to the

greatest extent possible by avoiding numerous wildlife habitats (Table 2-1, e.g., AGFD Areas of Conservation Potential, special status species locations, wildlife corridors, USFWS critical habitat, BLM sensitive species habitat, desert tortoise habitat categories I, II, and III) and by implementing design features and BMPs (Appendix B). A more detailed species-specific analysis would be conducted during the NEPA analysis at the project level. Additional information on wind (meterological towers and guy wires) and solar (temperature changes) has been incorporated into the Chapter 4 analysis for fish and wildlife. According to these comments, changes were made in Section 4.2.6, Fish and Wildlife, under the Migratory Birds heading. On page 4-40 of the DEIS, the BLM addresses the impacts of roads on wildlife (including desert tortoise); this text will not be modified: "Although disturbance would generally be reduced compared to construction, human presence, traffic on access roads, fugitive dust, site lighting, operational noise from equipment, and erosion and sedimentation would continue to affect animals on and off the site, resulting in avoidance or reduction in use of an area larger than the project footprint." Any species that become listed under the Endangered Species Act in the future would be added to the REDA screening criteria and REDAs would be adjusted accordingly.

Comments:

Submission No: RDEP-Drft-0071
Commenter: Jamie Rappaport Clark, Defenders of Wildlife
Comment: Defenders seeks a clearer understanding of the potential impacts of RDEP alternatives on Arizona's wildlife communities from RDEP's "nominated sites", proposed Renewable Energy Development Areas (REDAs) and Agua Caliente Solar Energy Zone (SEZ). The DEIS does not provide any analysis of the anticipated impacts to specific wildlife species, and provides only general, qualitative estimates of impact that do not allow for quantitative or objective evaluation by the public. Furthermore, given the composite2 nature of the BLM's Special Status Species and Critical Habitat layers, as well as the AGFD's Species and Habitat Conservation Guide, we are unable to use these layers to understand how specific species might be impacted by the various alternatives.

Submission No: RDEP-Drft-0070
Commenter: Kay Sibary
Comment: Bat Conservation International has been working to identify ways wind energy can be operated to reduce the high number of wildlife killed by turbines. I hope you and the BLM plans will take these issues into account so that we don't aggravated an already serious environmental issue.

Submission No: RDEP-Drft-0053
Commenter: Steven L. Spangle, US Fish and Wildlife Service
Comment: Page 4-41, 2"d paragraph - Bird and bat collision with permanent meteorological towers, especially those supported by guy wires as opposed to free standing, is an issue at wind energy projects in addition to collisions with turbines and blade strikes.

Submission No: RDEP-Drft-0004
Commenter: Thane D. Sommerville, Attorney for the Quechan Tribe
Comment: The DEIS also fails to adequately address the cumulative impacts on the flat-tailed horned lizard (FTHL). There is no analysis of the environmental effects of other, related projects on the FTHL, nor any discussion of the interaction of related projects and future projects under the RDEP. Such a cursory analysis violates NEPA. Brong, 492 F.3d at 1133.

Submission No: RDEP-Drft-0004
Commenter: Thane D. Sommerville, Attorney for the Quechan Tribe
Comment: F. The RDEP Will Have Unacceptable Impacts on the Flat-Tailed Horned Lizard.
The DEIS acknowledges that the desert scrub habitat within and near the SEZ could provide habitat for the FTHL. Environmental Consequences (Special Status Species), 4-124. The Tribe deeply values the

FTHL, as it is part of the Tribe's creation story. The DEIS fails to specifically describe the risks to the FTHL, but notes that the greatest risk would be to animals with limited mobility, such as small reptiles. Environmental Consequences (Fish and Wildlife), 4-38. This adds to the Tribe's dissatisfaction with the Agua Caliente SEZ proposal.

The DEIS notes that the SEZ would result in removal and fragmentation of wildlife habitat in the southern part of the Palomas Plain WHA. The DEIS is inadequate in that it does not describe any mitigation features specific to the FTHL. Rather, it states that design features and best management practices would reduce habitat loss and fragmentation. Id. at 4-44. The section on design features and best practices, however, does not address the FTHL. Moreover, the Flat-tailed Horned Lizard Rangewide Management Strategy states that once FTHLs are relocated to another area, their mortality rate often increases due to the change in environment. Thus, while removal of lizards may avoid direct mortality resulting from construction and operation of the ROEP, it may lead to indirect mortality based on habitat change. Such a risk to an already dwindling population is unacceptable.

Submission No: RDEP-Drft-0007

Commenter: Greta Anderson, Western Watersheds Project

Comment: A number of the REDAs are within desert tortoise habitat and the impacts of additional infrastructure and road traffic in these areas should be assessed. Increased roads and road use may increase road kills of desert tortoises, increase spread of invasive weeds that modify desert tortoise habitat, result in increased road-kill facilitating localized population increases of predatory ravens and coyotes, and may result in increased poaching of desert tortoises (Grandmaison and Frary, 2012). The desert tortoise is a candidate species for listing under the Endangered Species Act. A 2011 settlement agreement requires the USFWS to reconsider the candidate status for the tortoise by 2015. The BLM cannot commit tortoise habitat to permanent destruction in advance of that deadline without weighty consideration of the impacts, and many of the REDAs will need to be reconsidered. Without this, the BLM's action here may propel the full listing of the species.

Submission No: RDEP-Drft-0007

Commenter: Greta Anderson, Western Watersheds Project

Comment: The DEIS and the BLM in general underestimates the impact of solar and wind energy development on birds protected under the migratory bird treaty act. The RDEP describes the impacts of Alternative I as "negligible" on migratory birds. DEIS at 4-43. This conclusion is based on the inclusion of certain design features that are identified in Appendix B. Unfortunately, those design features fail to account for the fact that birds and bats are highly mobile, don't stay strictly within riparian habitats or wetlands (#45), migratory corridors (#46), or "known" flight paths (#54). Solar developments should not be sited in close proximity to open water or agricultural fields to reduce their impact on birds (McCrary et al., 1986).

The design features include avian impact monitoring but do not describe what happens when monitoring reveals high levels of impacts. The BLM must make a firm commitment to shut energy developments down when mortality cannot be mitigated or reaches a certain level of "take." The DEIS says that met towers will be periodically inspected but no firm protocol is established. DEIS at B-12. The DEIS does not address the high temperatures at solar sites and the impacts on avifauna that this intense heat generation can have.

Tiering from the Solar Programmatic Environmental Impact Statement

Summary:

The BLM should incorporate a more robust analysis of impacts on wildlife and the correct ecological scale, rather than using the Draft Solar PEIS analysis.

Response:
While the RDEP EIS relies on the Solar PEIS for general information on utility-scale solar developments, the analysis provided is resource and Arizona specific. As noted in the Solar EIS, the RDEP EIS is a programmatic approach to planning allocations across Arizona BLM-administered lands; the descriptions of the affected environment and the analysis in environmental consequences is of sufficient detail to support the programmatic nature of the EIS. Impacts associated with renewable energy were generally described in Section 4.2.6, Wildlife. Once an application is under consideration, site-specific descriptions of the area's resources would be included in the NEPA analysis, and particular elements of a project's design would provide the context for specific impacts.

It is also important to recognize that the REDAs are identified for potential development. Any proposal for an actual project would require due diligence, including NEPA compliance. At this project level of the process, the proposed application boundaries of the projects would be reviewed against the data layers to determine if there are additional issues that could not be recognized at the larger landscape scale. Of particular note are protected species that require mandated consultations.

For future applications that could be proposed (whether inside or outside the REDAs), pre-application meetings are required under the Solar and Wind Energy Programs and will help determine any sensitive wildlife resources that may be present within the project area. The BLM and other stakeholders, including AGFD and the USFWS, would provide some sense of the potential for significant resources in the area during the pre-application process.

Comments:
Submission No: RDEP-Drft-0071
Commenter: Jamie Rappaport Clark, Defenders of Wildlife
Comment: While we do support the approach of utilizing properly selected and applied wildlife screens, we do not believe utilizing Draft Solar PEIS wildlife impacts analysis by reference is sufficient for RDEP, which is intended to be a "step-down" analysis from the Draft Solar PEIS. The Draft Solar PEIS does not incorporate in-depth analysis of likely environmental consequences to specific resources from utility-scale solar energy development. This type of analysis does not constitute a "hard look" at the direct, indirect, and cumulative impacts to resources and uses of the public lands which could support permitting of projects. The BLM must incorporate a more robust analysis of impacts on wildlife at the correct ecological scale to ensure development is consistent with the intent of RDEP.

Submission No: RDEP-Drft-0071
Commenter: Jamie Rappaport Clark, Defenders of Wildlife
Comment: As noted in the DEIS, "Impacts on wildlife from utility-scale solar are described in the Draft Solar PEIS (Section 5.10, Table 5.10-2) and incorporated here by reference (BLM and DOE 2010)." (DEIS p 4-38). Unfortunately, the Draft Solar PEIS does not incorporate in-depth analysis of likely environmental consequences to specific resources from utility-scale solar energy development. As noted in Chapter 5 of the Draft Solar PEIS, the intent of the analyses presented is "to describe a broad possible range of impacts for individual solar facilities, associated transmission facilities, and other off-site infrastructure that might be required to support utility-scale solar energy development. DPEIS, p. 5-1 (emphasis added). This type of analysis does not constitute a "hard look" at the direct, indirect, and cumulative impacts to resources and uses of the public lands which could support permitting of projects. The BLM must incorporate a more robust analysis of impacts on wildlife at the correct ecological scale to ensure development is consistent with the intent of RDEP.

Mitigation Measures

Summary:

The BLM needs to explain what mitigation measures are in place to protect wildlife habitat and sensitive species and should also standardize monitoring protocols and landscape level conservation strategies as part of the mitigation measures. Some additional mitigation measures should include a measure that would require avoiding future USFWS wildlife corridors and measures that address habitat fragmentation and genetic flow between species populations.

Response:

Design features, required plans, and BMPs as presented in Appendix B would be implemented for solar and wind energy development. Monitoring protocols are established by BLM and state and federal agencies, and the Arizona Comprehensive Wildlife Conservation Strategy (AGFD 2006) would be implemented. The Final EIS REDA screening process has been updated to include additional information from the AGFD, including the Species and Habitat Conservation Guide data, teirs 4, 5 and 6. Tiers 1, 2 and 3 are used in updated analysis in Chapter 4. Any proposal for a wind or solar energy project will still require site specific permitting, additional environmental analysis, and NEPA compliance.

The environmental review of site-specific projects proposed in a REDA or SEZ could be facilitated by incorporating the analysis of this EIS, the Solar PEIS (BLM and DOE 2012a), and Wind PEIS (BLM 2005b). However, for site specific applications, the BLM will continue to look at new information and analyses including the Ecoregional Assessments and the LCC efforts as well as other information as they assess project proposals. Additionally, the regional mitigation planning that will follow as part of the commitments in the Solar PEIS may contribute additional mitigation measures and/or practices. Regional Mitigation Planning is currently being piloted by the national Solar Program and is discussed in detail in the Solar Final PEIS (see Section A.2.5 of Appendix A of the Final Solar PEIS). Should a Regional Mitigation Plan become an effective tool, then they BLM Arizona will determine how best to apply it to SEZs and REDAs.

Comments:

Submission No: RDEP-Drft-0032

Commenter: Joe Melton

Comment: 1. The area contains many dry river beds that originate in the KOFA Mountains, the Little Horns, the Eagle Tails, and other ranges and all drain into and through the proposed study areas to the Gila River. These are all vital travel routes for wildlife. The summer rains run water down these dry river beds greening up these routes for the necessary forage and travel route for our existing deer and sheep herds. These routes are extremely important for our wildlife to travel and find the ""green ups"" along these routes. What plans are included in the EIS to protect these vital areas from closure.

2. These areas also contain the most prolific breeding area in southern Arizona for our beautiful bobcat populations and a growing Mountain Lion population. The cats also travel these vital corridors and depend on the prey species that utilize these green up areas. What plans in the EIS are included to protect not only the corridors but the flood plane from the Gila River to the mouth of these dry river beds?

Submission No: RDEP-Drft-0006

Commenter: Alex Daue, The Wilderness Society

Comment: Additionally, to evaluate the cumulative impacts on species and other resources, and to compare impacts of different solar projects, locations and technologies, monitoring protocols

should be standardized within the appropriate biological scale for all projects, including transmission and related substations. Some protocols may need to be tailored (and thus different) for different ecosystems, watersheds or species. All monitoring data should be made publicly available in data sets with a common format (recommended by leading scientists who want to conduct studies) that may be easily downloaded and utilized by researchers and the public at large. This transparency will enable timely and robust evaluation of program impacts, efficacy of mitigation measures, and full engagement of the scientific community.

Submission No: RDEP-Drft-0052
Commenter: Ginger Ritter, Arizona Game and Fish Department
Comment: Lastly, the Department recommends including language that references the work the Department is doing to preserve wildlife connectivity. Specifically, it should state that as wildlife corridors are developed by the Department, these areas should be avoided to preserve connectivity. This is particularly important along I-8 where several acres of habitat have been identified as REDAs. If this area were to be developed without the consideration of wildlife movement corridors, the associated infrastructure would create movement barriers. These barriers would isolate wildlife and their habitat, increase the likelihood of species mortality, and restrict the ability of animals to move between important undeveloped regions of the state. Loss of this movement and permeability would result in the fragmentation of populations, prevent wildlife from accessing resources, finding mates, reduce gene flow, and prevent wildlife from re-colonizing areas where local extirpations may have occurred. Thus, the Department strongly encourages the inclusion of this language. It would meet the needs of the Department by ensuring that projects are sited in appropriate areas with low resource conflict and minimize impacts to wildlife and their habitats.

Submission No: RDEP-Drft-0010
Commenter: John Shepard, Arizona Solar Working Group
Comment: Additionally, to evaluate the cumulative impacts on species and other resources, and to compare impacts of different solar projects, locations and technologies, monitoring protocols should be standardized within the appropriate biological scale for all projects, including transmission and related substations. Some protocols may need to be tailored (and thus different) for different ecosystems, watersheds or species. All monitoring data should be made publicly available in data sets with a common format (recommended by leading scientists who want to conduct studies) that may be easily downloaded and utilized by researchers and the public at large. This transparency will enable timely and robust evaluation of program impacts, efficacy of mitigation measures, and full engagement of the scientific community.

Submission No: RDEP-Drft-0071
Commenter: Jamie Rappaport Clark, Defenders of Wildlife
Comment: Additionally, to evaluate the cumulative impacts on species and other resources, and to compare impacts of different solar projects, locations and technologies, monitoring protocols should be standardized within the appropriate biological scale for all projects, including transmission and related substations. Some protocols may need to be tailored (and thus different) for different ecosystems, watersheds or species. All monitoring data should be made publicly available in data sets with a common format (recommended by leading scientists who want to conduct studies) that may be easily downloaded and utilized by researchers and the public at large. This transparency will enable timely and robust evaluation of program impacts, efficacy of mitigation measures, and full engagement of the scientific community.

Submission No: RDEP-Drft-0010
Commenter: John Shepard, Arizona Solar Working Group
Comment: b. Establish baseline ecological data
The BLM and other federal and state agencies and non-profit organizations have conducted regional ecosystem and resource assessments that provide the foundation for evaluating baseline resource conditions, identifying stressors and their impacts, and establishing conservation strategies for protecting and restoring wildlife, habitat, and important natural resources. In particular, BLM recently detailed how it proposes to integrate the new Adaptive Inventory and Management (AIM) framework into the Solar Program, using it as a foundation upon which to add solar energy-specific elements. Using this baseline ecological information, landscape-level (e.g., ecoregional or watershed level) conservation strategies should be developed to achieve specific wildlife management objectives. It is important that BLM recognize that impacts on wildlife are not uniform.

Submission No: RDEP-Drft-0010
Commenter: John Shepard, Arizona Solar Working Group
Comment: c. Determine conservation/wildlife management impacts, objectives, and priorities
All mitigation should be directly related to broader regional conservation plans. To achieve this over the long term, the BLM should first consider existing State Wildlife Action Plans (SWAPS), current BLM wildlife management requirements and policies, existing RMPs, and other relevant regional or local conservation plans. In addition, the BLM should work collaboratively with appropriate Landscape Conservation Cooperatives to obtain the benefit of local and regional knowledge regarding resource conditions and current wildlife management goals and strategies, as well as incorporating strategies for climate adaptation into specific regional mitigation plans. The BLM and the FWS should work collaboratively to define a clear set of shared conservation priorities that guide decisions about where to develop and where to invest in conservation and/or restoration in the context of existing wildlife management strategies. Offset investments should be in priority conservation areas as determined by state wildlife action plans and decision support tools, regional conservation strategies, recovery plans, The Nature Conservancy ecoregional assessments, or other credible analysis or plans that identify areas of greatest ecological significance and opportunities for ecological restoration consistent with efforts to mitigate project impacts on specific species and habitats.

Submission No: RDEP-Drft-0006
Commenter: Alex Daue, The Wilderness Society
Comment: The BLM and other federal and state agencies and non-profit organizations have conducted regional ecosystem and resource assessments that provide the foundation for evaluating baseline resource conditions, identifying stressors and their impacts, and establishing conservation strategies for protecting and restoring wildlife, habitat, and important natural resources. In particular, BLM recently detailed how they propose to integrate the new Adaptive Inventory and Management (AIM) framework into the Solar Program, using it as a foundation upon which to add solar energy-specific elements. Using this baseline ecological information, landscape-level (e.g., ecoregional or watershed level) conservation strategies should be developed to achieve specific wildlife management objectives. It is important that BLM recognize that impacts on wildlife are not uniform.

Submission No: RDEP-Drft-0071
Commenter: Jamie Rappaport Clark, Defenders of Wildlife
Comment: b. Establish baseline ecological data
The BLM and other federal and state agencies and non-profit organizations have conducted regional ecosystem and resource assessments that provide the foundation for evaluating baseline resource conditions, identifying stressors and their impacts, and establishing conservation strategies for protecting and restoring wildlife, habitat, and important natural resources. In particular, BLM recently detailed how it proposes to integrate the

new Adaptive Inventory and Management (AIM) framework into the Solar Program, using it as a foundation upon which to add solar energy-specific elements. Using this baseline ecological information, landscape-level (e.g., ecoregional or watershed level) conservation strategies should be developed to achieve specific wildlife management objectives. It is important that BLM recognize that impacts on wildlife are not uniform.

Submission No: RDEP-Drft-0006
Commenter: Alex Daue, The Wilderness Society
Comment: All mitigation should be directly related to broader regional conservation plans. To achieve this over the long term, the BLM should first consider existing State Wildlife Action Plans (SWAPS), current BLM wildlife management requirements and policies, existing RMPs, and other relevant regional or local conservation plans. In addition, the BLM should work collaboratively with appropriate Landscape Conservation Cooperatives to obtain the benefit of local and regional knowledge regarding resource conditions and current wildlife management goals and strategies, as well as incorporating strategies for climate adaptation into specific regional mitigation plans. The BLM and the FWS should work collaboratively to define a clear set of shared conservation priorities that guide decisions about where to develop and where to invest in conservation and/or restoration in the context of existing wildlife management strategies. Offset investments should be in priority conservation areas as determined by state wildlife action plans and decision support tools, regional conservation strategies, recovery plans, Nature Conservancy ecoregional assessments, or other credible analysis or plans that identify areas of greatest ecological significance and opportunities for ecological restoration consistent with efforts to mitigate project impacts on specific species and habitats.

Submission No: RDEP-Drft-0071
Commenter: Jamie Rappaport Clark, Defenders of Wildlife
Comment: c. Determine conservation/wildlife management impacts, objectives, and priorities
All mitigation should be directly related to broader regional conservation plans. To achieve this over the long term, the BLM should first consider existing State Wildlife Action Plans (SWAPS), current BLM wildlife management requirements and policies, existing RMPs, and other relevant regional or local conservation plans. In addition, the BLM should work collaboratively with appropriate Landscape Conservation Cooperatives to obtain the benefit of local and regional knowledge regarding resource conditions and current wildlife management goals and strategies, as well as incorporating strategies for climate adaptation into specific regional mitigation plans. The BLM and the FWS should work collaboratively to define a clear set of shared conservation priorities that guide decisions about where to develop and where to invest in conservation and/or restoration in the context of existing wildlife management strategies. Offset investments should be in priority conservation areas as determined by state wildlife action plans and decision support tools, regional conservation strategies, recovery plans, The Nature Conservancy ecoregional assessments, or other credible analysis or plans that identify areas of greatest ecological significance and opportunities for ecological restoration consistent with efforts to mitigate project impacts on specific species and habitats.

Submission No: RDEP-Drft-0007
Commenter: Greta Anderson, Western Watersheds Project
Comment: The RDEP and the Agua Caliente SEZ create these barriers to genetic flow. Design features in Appendix B do nothing to address this and the only tortoise-specific design element pertains to capping pipes, etc. DEIS at B-14. We support the requirement to cap pipes and urge it to include all diameters, given the tiny size of juvenile tortoises. However, this does nothing to mitigate the impacts to tortoises that could occur from the species cross-country movement or to their burrows.

G.3 COMMENTER LISTS

G.3.1 Individual Submission Commenter List

Name	Affiliation	Submission Number
Mark T. Altaha	White Mountain Apache Tribe Historic Preservation Office	RDEP-Drft-0041
James Ammons		RDEP-Drft-0035
Greta Anderson	Western Watersheds Project	RDEP-Drft-0007
Sherry Appleby		RDEP-Drft-0034
Diane L. Arnst	Arizona Department of Environmental Quality, Air Quality Division	RDEP-Drft-0059
Maria Baier	Arizona State Land Department	RDEP-Drft-0002
John Bathke, Historic Preservation Officer for the Quechan Indian Tribe	Public Meeting Transcripts - Yuma, AZ	RDEP-Drft-0018
Douglas Beach		RDEP-Drft-0045
Stu Bengson	AZ BLM RAC member	RDEP-Drft-0038
Kirk Brus	Army Corps of Engineers	RDEP-Drft-0042
Bob Cassidy		RDEP-Drft-0026
Larry L. Clark	Clark Enterprises	RDEP-Drft-0072
Matt Clark, Defenders of Wildlife	Public Meeting Transcripts - Phoenix, AZ	RDEP-Drft-0015
Mike Daily		RDEP-Drft-0027
Alex Daue	The Wilderness Society	RDEP-Drft-0006
Katherine Gensler	Solar Energy Industries Association	RDEP-Drft-0005
Betty Ghedini		RDEP-Drft-0040
Betty Ghedini		RDEP-Drft-0044
Kathleen M. Goforth	Environmental Protection Agency, Environmental Review Office	RDEP-Drft-0062
Mark Hayduke Grenard		RDEP-Drft-0012
David Grieshop		RDEP-Drft-0046
Dr. Annita Harlan		RDEP-Drft-0067
Buster Johnson	Mohave County Board of Supervisors	RDEP-Drft-0058
Barbara Jordan		RDEP-Drft-0054
MGySgt Gary Kaitting, USMC (ret.)		RDEP-Drft-0063
Sarah King	Arizona Interfaith Power & Light	RDEP-Drft-0013
Michael J. Lacey	Arizona Department of Water Resources	RDEP-Drft-0001

Name	Affiliation	Submission Number
Christopher Lish		RDEP-Drft-0025
Kathy Lopez		RDEP-Drft-0031
Rebecca A. Loudbear	Colorado River Indian Tribes	RDEP-Drft-0020
Robert Mark, Rupestrian Cyber Services	Public Meeting Transcripts - Flagstaff, AZ	RDEP-Drft-0016
Rob Marshall, MFS	The Nature Conservancy	RDEP-Drft-0009
Andrea Martinez		RDEP-Drft-0021
Paul Melcher	Department of Development Services	RDEP-Drft-0008
Joe Melton		RDEP-Drft-0032
Dr. John Nishio		RDEP-Drft-0069
Amanda Ormond	Interwest Energy Alliance	RDEP-Drft-0003
Jean Public		RDEP-Drft-0050
Jamie Rappaport Clark	Defenders of Wildlife	RDEP-Drft-0071
George Reiners		RDEP-Drft-0048
Ginger Ritter	Arizona Game and Fish Department	RDEP-Drft-0052
Beth Rivers	Indigenous Support Coalition of Oregon	RDEP-Drft-0060
Katherine Rose and Audrey Werth		RDEP-Drft-0056
Joseph Paul Ruttle		RDEP-Drft-0028
Steve Saway		RDEP-Drft-0024
Jana Selk		RDEP-Drft-0014
John Shepard	Arizona Solar Working Group	RDEP-Drft-0010
Kay Sibary		RDEP-Drft-0070
Sidney Silliman, Ph.D.	Desert Tortoise Council	RDEP-Drft-0011
Bill Sims	4V Rod and Gun Club	RDEP-Drft-0055
Kenneth L. Sizemore	Five County Association of Governments	RDEP-Drft-0047
Alexander B. Smith	Bureau of Reclamation, Environmental Resource Management Division	RDEP-Drft-0061
Larry Snead		RDEP-Drft-0039
Thane D. Sommerville	Attorney for the Quechan Tribe	RDEP-Drft-0004
Steven L. Spangle	US Fish and Wildlife Service	RDEP-Drft-0053
Jerry Stabley	Pinal County Planning and Development	RDEP-Drft-0064
Linda Taunt	Arizona Department of Environmental Quality	RDEP-Drft-0037
Karl Taylor	Mohave County Public Works	RDEP-Drft-0043
Tom Taylor		RDEP-Drft-0036

Name	Affiliation	Submission Number
Jeanie Watkins		RDEP-Drft-0033
Elizabeth Webb		RDEP-Drft-0022
Elizabeth Webb		RDEP-Drft-0023
John Wessels	National Park Service	RDEP-Drft-0066
Matthew D Williamson CIV	US Army Garrison Yuma	RDEP-Drft-0030
Jean E. Wilson		RDEP-Drft-0029
Kathy Wittstock	Yavapai County Assessor's Office	RDEP-Drft-0049
Robert Zittle		RDEP-Drft-0057
	Public Meeting Transcripts - Kingman, AZ	RDEP-Drft-0017
	Public Meeting Transcripts - Tucson, AZ	RDEP-Drft-0019
	The Wilderness Society (campaign letter)	RDEP-Drft-0065

G.3.2 Campaign Letter Commenter List

Last Name	First Name
A	Aimee
Abbott	Mary
Able	Mary
Abramova	Inna
Abrams	Sally
Abrantes	Elizabeth
Adam	Margaret
Adams	Andrea
Adams	David
Adams	Eileen
Adams	JT
Adams	Spencer
Adams	Margaret
Adeina	Dalia
Adrian	Judith
Agostini	Luisa
Agovino	Christie
Aguilera	Marco
Aguirre	Gloria
Akey	David
Akin	Ray
Albertson	Pat
Alcock	John
Alderette	Gary
Alderson	George & Frances
Aldredge	Sharon
Aldrich	Verna
Alexander	Emily
Alexander	Kate
Alexander	Matthew
Alexander	Thomas
Alger	Jacqueline
Allan	David
Alldredge	Liza
Allen	Beth
Allen	Bruce
Allen	Dennis
Allen	Kelly
Allen	Ramona
Allen	Susan
Allen	Cat
Allison	Elaine
Almack	Charles

Last Name	First Name
Alonso	Shelley
Alpert	Dave
Altamirano	Andrew
Alter	Judith
Altman	Jason
Alzuro	Hernan
Amaral	Cynthia
Amato	Julie
Amato	Nicole
Ambrose	Karen
Ambroziak	Megan
Ames	Desiree
Ameson	Andrew
Amodeo	James
Amoroso	Isabella
Amsden	Liz
Andarmani	Kristine
Andersen	Janis
Anderson	Carol
Anderson	David
Anderson	Evette
Anderson	Henry
Anderson	Joan
Anderson	John H.
Anderson	Patricia & Donald
Anderson	Wayne
Anderssen	Saliane
Andrade	Paul
Andre	James
Andreani	Mary
Andreas	Leticia
Andrew	S.
Andrews	Frank G.
Andrews	Leslie
Andrews	Phyllis
Andreyo	Melissa
Angelesco	F
Anger	Robert
Anisman	Martin
Ansell	Martin
Anson	Gina
Anthony	Mary
Anthony	Nicholas

Last Name	First Name
Antone	Mike
Antonel	Stacy
Antonopoulos	Georgia
Apgar	Susan
Appelbaum	Philip
Arace	Marylucia
Arago	Marybeth
Aram	Susan
Archer	Tracey
Archuleta	Patricia
Arcure	Anthony
Arevalo	Ana
Armani	Debra
Armer	Brian
Armer	Joan & Paul
Armigo	Victoria
Armitage	Tami
Armstrong	Ellen
Armstrong	John
Arn	Anthony
Arnold	Alison
Aronson	Robert
Arquilla	Vance
Arteaga	Siria
Arthur IV	Richard
Arumugham	Vinu
Arutunian	Mary
Asbury	Luke
Ashton	Chris
Ashton	Joan
Atkins	Ed
Atos	Geraldine
Auerbach	Shirley
August	Boyer C.
Auman	Rick
Ausman	Emma
Austin	B.
Austin	Jana
Austring	Dee
Avellan	Jennifer
Avila	Elizabeth
Avila	Ron
Avila	Steve
Axt	Benjamin
Ayala	John

Last Name	First Name
Aycock	Christopher
Aylward	David
Babbini	Paul
Babcock	Clay
Babcock	Helen
Babcock	Karen
Babst	Christina
Bachelder	Matt
Bacina	Marla
Bacom	Tommy
Badawy	Nabila
Bader	Susanne
Baekey	Anita
Bahn	Sarah
Bailey	Elizabeth
Bailey	Mark
Bailey	Melinda
Bair	Marilyn
Baker	Beth
Baker	David
Baker	Kelsey
Baker	Pat
Baker	Paula
Balassi	Nancy
Baldwin	Valerie
Baldwin	Bruce
Baldwin	Lee
Balgemann	Elaine
Ballak	Jonathan
Ballen	Lee
Balog	Ranko
Baltin	Brian
Balzan	Darlene
Bandell	K.
Banever	Carol
Banever	Robert
Bankie	Brett
Banks	Michele
Banzhaf	Joyce
Barbato	Allice
Barbeau	Clayton
Barberini	Bernadette
Bardsley	Jacqueline
Barger	Denise
Barhoum	Christopher

Last Name	First Name
Barker	Eddie
Barkow	Carolyn
Barlow	Scott
Barlow	Stephanie
Barnard	Jeff
Barnes	David
Barnes	Leonie
Barnhart	S.
Barondes	Lynda
Barone	Sharon
Barranti	Chrys
Barrett	Dennis
Barrett	Jill
Barrett	Keiko
Barrett	Steven
Barrington	Tim
Barron	Art
Barry	Marion
Bartlett	Cindy
Bartlett	R.
Barton	Kimberly
Bartschi	Kiku
Basnar	Lee
Bass	Jennifer
Bassett	Susan
Bassett	Thomas
Bates	Abigail
Bates	Janis
Battaglia	Rosemary
Batten	Candace
Bauer	Ernst
Bauer	Isabel
Bauer	Terri
Baum	Rhona
Baumann	Linda & Paul
Bautista	Melvin
Baxter	Ben
Baxter	Joslyn
Beale	Marjorie
Beard	Pamela
Beattie	Evan
Bechtel	Paul
Bechtold	Carol
Beck	Amanda
Beck	Donald

Last Name	First Name
Beck	Jeffrey
Beckerman	Gary
Beckett	Lillian
Beckett	Suzannea
Beckham	Marie
Beckmann	Annie
Beckwith	Mark
Bednarz	Colleen
Beer	Julie
Bein	Ann
Belew	Lynette
Bell	Marianne
Bellenger	Jayme
Belli	Joseph
Benda	Hilarey
Benjamin	Corey
Bennett	Maris
Bennett	Patricia
Bennigson	Barbara
Bennion	Beth
Benson	Kathy
Benson	Richard
Bentley	Blake
Bentley	Stuart
Bentley	Stuart
Bentsen	Douglas
Berario	Myra
Berg	Hortari
Berg	Ricardo U.
Berg	Vicki L.
Berger	Karen
Berghen	Carol
Bergsma	Debi
Bergstrom	Barbra
Berkel	Cady
Berkel	Jon
Berkhimer	June
Berkshire	David
Berliner	Diane
Bermudez	Sara
Bernee	Ellen
Bernstein	Roslyn
Besancon	Maureen
Bescript	Linda
Bescript	Ruth

Last Name	First Name
Beserra	Jolino
Beshara	Suzanne
Best	Paul
Bettendorf	Lisa
Beverly	J.
Beyer	Dalia
Bhence	Blaze
Bickel	Jeffrey
Bien	Karen
Bigelow	John
Biggs	Warren
Bihler	Chris
Bilotti	Nicole
Binckley	Charles
Binnie	Robert
Binzen	Naomi
Bir	Sherianne
Bircher	K. Kay
Biron	Olivia
Bisbing	Robin
Bishop	Megan
Bishop	Russ
Bissell	Ahrash
Bivens	Dwain
Biwer	Yseult
Black	Celeste
Blackbum	Alice
Blackwell-Marchant	Pat
Blain	Richard
Blair	Jennifer
Blaisdell	Jill
Blakely	Terri
Blandino	Russell
Blanton	Rollin
Blattel	David
Bledsoe	Richard
Bleha	Patricia
Bleken	Anne-Lene
Bleyer	Jon
Bliden	Mich
Bliss	David
Block	Linda
Block	Trent
Blood	Michael

Last Name	First Name
Blueakasha	Rich
Blumberg	Zack
Blumenthal	Harry
Bobo	Orion
Bocchetti	Ralph
Bockian	Edith
Boehm	Marjorie
Boes	Sondra
Bogin	Ronald
Bogios	Constantine
Bohac	Stephen
Bohling	B
Bohn	Linnaea
Bohr	Ron
Boland	Vanessa
Bondoc	Jose Ricardo
Bonnet	Richard
Boone	Jim
Boone	Joseph
Booth	Erik
Borge	Donovan
Bork	Annette
Bosch	Alan
Boschert	Danielle
Bossard	Eudell
Bostock	Vic
Bott	David
Boudriot	Simone
Boughner	Donna
Boulet	Marie
Bourke	Jessie
Bourne	H
Bowers	Barbara
Boyden	Jon
Boyle	Henry
Braaten	Chrys
Brabham	Richard
Braden	Lori
Bradley	Peg
Brady	Anke
Brady	Kathleen
Braithwaite	Kimyn
Bramlage	Laurie
Branca	C.
Branch	Cheryl

Last Name	First Name
Brandon	Linda
Branstetter	Kevin
Brant	Karen
Bratt	Chris
Bratt	Mandy
Braude	Michael
Bray	Angeline
Brazil	Diane
Brazil	Michael
Breazeale	Joseph
Brechenridge	Bonnie
Brechtel	Felicia
Breda	Bo
Breitbard	Susan
Brenner-Ward	Isis
Bresciani	Marchelo
Brewer	Laurel
Briccetti	Eleanor
Bridschge	Mike
Briggs	Kathy
Brigmann	Ria
Brinsley	Chris
Brinton	Valerie
Britt	Cynthia
Britton	Joanne
Broad	Julia
Broadwell	Carolyn
Brock	Jason
Brodkin	Henry
Brooke	Louise
Brooke	Michael
Brooks	Deborah
Brophy	John
Brophy	Tim
Brosh	Linda
Broughton	Margaret
Brousseau	Jeanine
Brown	Damon
Brown	Jeannine
Brown	Jeff
Brown	Lloyd
Brown	Myrna
Brown	Patricia
Brown	Roderick
Brown	Shelly

Last Name	First Name
Brown	Vera
Brown	Elaine
Brown	Lolly
Brown-Ryther	Sherry
Brownwell	Deidre
Bruce	Dorothy
Bruce	Linda
Bruce	Linda
Bruce	Edie
Bruckman	Leonard
Bruhn	Roberta
Bruinen	Maria
Bruker	Dave
Brunell	Barbara
Brunett	Leslie
Bruni	Curzio
Brush	Kim
Bryant	Emily
Bryson	Sarie
Bubala	Louis
Buck	Margaret
Buckwald	Jan
Buhowsky	Joseph
Bui	Khoi
Bumgardner	Terri
Bunch	Van
Burch	Kelly
Burger	Bitsa
Burgess	Melinda
Burgett	Deborah
Burk	Joyce
Burns	Bruce
Burns	Kathryn
Burns	Lyn
Burow	Andy
Burr	James R
Burton	Etta
Bush	Celia
Bustamante	Maria
Bustos	Marty
Bustos	Ray
Butler	C
Byers	Andrea
Byers	Nancy
Cabezas	Maritza

Last Name	First Name
Cabezon	Beatriz
Cabot	Victor
Cadman	Susan
Cadosi Wilson	Annette
Caffejian	Rand
Cage	Ray
Calder	Malcolm
Calder	Tim
Caldwell	Alecto
Calhoun	Charles
Calhoun	Jerry
Cali	Lee
Caliguri	Sabina
Calkins	V.
Call	Connie
Calle	Alfy
Calleja	David
Callsen	Caryl
Calvisi	Ronald
Camacho	Armando
Cambra	Jennifer
Cameron	James
Cameron	Ruth
Cameron	Patrick
Camhi	Gail
Campbell	Dudley & Candace
Campell	Allan
Canfil	Lloyd
Cannara	A
Canning	Ernest
Cantwell	Diane
Caprio	Elen
Caps	Filip
Card-Derr	Geraldine
Cardenas	Dulce
Cardoza	Michael
Carl	Joan
Carlile	N. J.
Carlino	Thomas
Carlos	Rick
Carmona-Mancilla	Laura
Carnahan	Summer
Carney	Marilyn
Caro	Steve

Last Name	First Name
Carolan	Barbara
Carp	David
Carpenter	Gary
Carr	Donna
Carr	Gaile
Carr	John
Carr	Lleni
Carr	Seth
Carrington	Caroline
Carroll	Deborah
Carteno	Roberto
Carter	Sharie
Cartwright	Jennifer
Carvin	Mandy
Casale	Veronica
Case	Ruth
Cass	Mike
Castillo	Robert
Catron	Cheryl
Caughman	Erin
Cenci	Carol
Cencula	David
Chace	Lori
Chacon	Rochelle
Chadwick	Barbra
Chaiklin	Joseph
Chamberlain	Patricia
Chambers	Claire
Chan	Arthur
Chan	B.
Chang	Heather
Charlebois	Stacie
Charnes	Michael
Charney	Danielle
Chavez	Brandon
Chazen	Joyce
Check	Pamela
Cheeseman	Gail
Chen	Allan
Chen	Mich
Chenkin	Cari
Chere III	John
Chianis	Antonia & Andrew
Chidester	Kyle
Child	Katrina

Last Name	First Name
Childs	Pete
Childs	Eunice
Chinn	Karen
Chirpin	Robert
Chittenden	Claudia
Chittenden	David
Chittenden	David
Chiu	Albert
Chlubna	Joseph
Cho	Diana
Chou	Ana
Chow	Josi
Christian	Thomas
Christianson	Mathew
Christina	Linhardt
Christopher	Sandra
Christy	Heather
Chu	Richard
Chung	Gay
Church	Terry
Ciaramella	Susan
Ciardelli	Joanie
Cimarra	Conrad
Cipris	Zeljko
Cira	Kimberly Powell
Cisneros	Tara
Ciuffetelli	L
Clare-Gotch	Janet
Clarida	Christine
Clark	Anne
Clark	Donna
Clark	Irina
Clark	Thomas
Clark	Warren
Clarke	Michael
Clarke-Roberts	Rachel
Clayton	Diane
Clegg	Michael
Clegg	Michael
Clements Owens	Carly
Clemm	Britt
Clemson	G. Scott
Clever	Karoli
Clifford	Ruth
Clift	Julian
Clipka	Mike
Closson	Michael
Clough	Heather
Cloverdal Sumrall	Amber
Cobb	Dan
Cobb	Paul
Cobb	Dean
Coburn	Justin
Cochran	John
Cocking	Kurt
Cockshott	Shiela
Coel	Sara
Cohen	Benita
Cohen	Dan
Cohen	Eleanor
Cohen	Natalie
Cohen	Roy
Cohen	Tyler
Cohn	Barbara
Cole	Anne
Collard	Liz
Collins	Geoffrey
Collins	Gerry
Collins	Sandie
Colton	Lora
Colton	Steve
Columbia	James
Colvig	Lynne
Colwell	Elizabeth
Comell	Michelle
Commons	Judy
Commons	Sandy
Comstock	Michael
Conard	Judy
Confectioner	Vira
Congdon	Russell
Conklin	Kelly
Connick	Cherie
Connolly	Anna
Connor	Elizabeth
Conrad	Jamie
Conrad	Steve
Conradi	Harald
Conroy	Thomas
Contreras	Carlos

Last Name	First Name
Cook	Elizabeth
Cook	Judy
Cook	Michael
Cook	Carol
Coolidge	Anita
Cooper	Elsie
Cooper	Kathleen
Cooper	Ken
Cooper	Leslie
Cooper-Kelley	Penelope
Corcetti	Laura
Cordes	John
Corey	Norma
Corio	Joseph
Corman	Garry
Correlle	Missy
Corriere	Jim
Corrigan	Sean
Costa	Daniel
Costello	Edward
Cotton	Elizabeth
Couch	Charles
Coulter	Huxley
Councilman	Dave
Couvrette	Sharon
Covell	Sandi
Cox	Brent
Coyle	Gregory
Crabb	Jeanne
Craig	Ella
Crane	Donna
Crane	Marcella
Crane	Michael
Crane	Shannon
Crecelius	Cora
Creighton	Peter
Cripps	Phillip
Cronin	David
Crossley	Jean
Crow	Stephanie
Crow	Carolyn
Crown	Alvin
Crum	Cathy
Crusha	Connie
Cruz	Marian

Last Name	First Name
Cubeta	Diana
Cufaude	Tara
Cuff	Kermit
Cugini	Denise
Cullen	Kylie
Cuneo	Sherrell
Cunningham	Alan
Cunningham	Bob
Cunningham	Chris
Curedale	Patrice
Curia	Peter
Curtice	Sean
Curtis	Robert
Cuthbertson	Deirdra
D	Mia
Daei	Bobak
Dahl	Sadi
Dahlstrand	Lucia
Daly	Kevin
Dalzell	Melissa
D'Amico	Dominic
D'Amico	Donna
Dane	William
Daniel	Roger
Danielczyk	Matthew
Daniels	DW
Daniels	Lynda
Daniels	Patricia
Danielson	Sarah A.
Darland	Kathleen
Darling	Chris
Darling	Michael
Darovic	Elizabeth
Date	Sarah
Daugherty	Randall
Davenport	Helen
Davenport	Robert
Davenport	Susan
Davidson	Kathy
Davidson	Michael
Davies	Dorothy L.
Davies	Sue
Davis	Carla
Davis	Ellen
Davis	Frank

Last Name	First Name
Davis	J.
Davis	Patricia
Davis	Ryan
Davis	Vicki
Davis	Vicki
Davison	Jenine
Day	Beverly
De Baca	Sylvia
De Cecco	Jorge
De Costanzo	Danielle
De Dios	Alicia
De Domenico	Ellen
de la Maza	Helen
De Mirjian	Carolyn
DeAngelo	Vic
Dearing	Deb
DeBruton	Noel
DeCianne	Dominic
Decof	Bethany
Dee	D.
Dee	Diana
DeFelice	Paula
Degrigoli	Vito
Dehdashti	Sheedy
DeJong	Joan
Del Prato	Pierre
Delatte	M.
Delgadillo	Arthur
Delgado	Kathleen
Dellas	Merrill
Demirtas	Gail
Deniels	Barbara
Denison	James
Denning	Alison
Dennison	Carolyn
Denny	Wendy
Dentel	Ann
Denton	Jill
Denton	John T.
DePante	Greg
Derenne	Michaela
DeSantis	Richard
Desfor	Paul
Deshayes	Thierry
Desmond	Sheila
Devaney	Kathleen
Devaney	Sean
Devine	Timothy
Dexter	David
Di Sanza	Joseph
Diamond	Wendy
Diaz	Azucena
Diaz	Francisco
Diaz	Michael
Diederichs	Barbara
Dienstbier	Carol
Diermier	Jessica
Dietrich	Cathe
Dille	Samantha
DiMatteo	Richard
Dimitri	Katherine
Disimone	Christine
Dixon	Martha
Dobbins	Timothy
Dobrowitsky	Patrice
Dodge	Dana
Doeppers	James
Dolgin	Gary
Dollar	Ellen
Dollar	Lisa
Domb	Doreen
Domenico	James
Dominguez	Rodrigo
Dominique	Ryba
Donaldson	John R.
Donaldson	Karen
Donato	Donna
Donato	Karlene
Donnadieu	Elisa
Donovan	Charlotte
Donovan	Patrick M.
Dorer	Jeffrey
Dorfman	Nicole
Douglas	Dianne
Douglas	Dianne
Dow	Duncan
Dowe	Flurry
Dowell	Vivian
Dowling	Holly
Dows	Wena

Last Name	First Name
Doyle	Laurence
Doyle	Nikki
Dragavon	Linda
Drake	Susan
Dreste	Arlene
Dreyfuss	Meri
Dubansky	Joshua
Dubois	Courtney
DuCharme	Christy
Dudney	Betty
Duffy	Sharon
Dugaw	Anne
Duke	Carla
Duke	Shawn
Duncan	Erin
Duran	Dani
Duran	Virginia
Durben	Rachel
Duren	Sheri
Durkin	Samuel
Durling	Susan
Dwyer	David
Dwyer	Kathleen
Dykema	Cornelius
Eads	Claudia
Early	Gayle
Earnshaw	Joan
Eaton	Linda
Eaton	Michelle
Eck	JJ
Eckardt	Gerhard
Eckardt	Miriam
Eckardt	Miriam
Economou	Constantina
Eddings	Terri
Edeker	Jeff
Edelen	Byron
Eden	Jonathan
Edge	Dorcas
Edwards	Cathy
Edwards	Jane
Edwards	Jim
Edwards	Kay
Edwards	Mindy
Egle	Chris

Last Name	First Name
Ehresman	Casey
Eichinger	William
Eiseman	Deborah
Eisenberg	Howard
Eitelman	Andrea
Eke	Jocelyn
Eklund	Steve
Ekner	Maret
Elia	Rob
Elkins	Cheryl
Elkins	Lyle
Elkins	David K.
Ellingham	Lewis
Elliot	Alice
Elliott	Julie Heath
Ellis	Robert
Elpers	Mary
Ely	Dennis
Emanuel	Frances
Emerson	Chelsea
Engel	Christine
Engel	Dara
Engelsiepen	Jane
England	Bruce
Ennouri	Elena
Epperson	Leslie Ann
Eppley	Skip
Ercius-DiPaola	Ligia
Erhart	Marla
Erickson	Victoria
Ericson	Dana
Erikson	William
Ernst	Cathie
Escoto	Deborah
Escudero	Ana Cristina Lee
Escudier	Dylan
Esposito	Thomas & June
Espstein	Marc
Esselmann	Tanya
Essex	Michael
Essig	Matilda
Estes	Douglas
Estes	Matthew
Estrada	Laurie
Etheridge	Kelly

Last Name	First Name
Ethington	Ann
Evans	Dinda
Everett	Miranda
Everett	Rosemary
Ewasjet	April
Ewers	Janice
Eyck	Rick Ten
Fabiano	Donna
Face	Valerie
Factor	Donna
Fahlbusch	Nadine
Fahlgren	Vivian
Falzone	Dominick
Farkas	Elizabeth
Farkas	Nolan
Farone	Ted
Farrell	Fran
Favorite	David
Favre	Thierry
Fed	Up
Fein	MD
Feingold	Emily
Feldman	Grace
Feldman	Mark
Fellner	Robin
Felsinger	Art
Felstiner	John
Ferguson	John A.
Fernandez	Cynthia
Fernandez	T.
Ferrero	Mauro
Ferris	Chas
Ferris	Michael
Ferry	Stephen
Fershin	Charlene
Fichandler	Alice
Field	Christy
Field	Mitchell
Fiflis	Michael
Figge	Donald
Figueiredo	Eva
Filipic	Randy
Fillmore	Kurt
Fink	Christine
Fink	Penelope

Last Name	First Name
Fisch	Sara
Fischella	Bob
Fish	Jason
Fish	Margaret
Fisher	Hyland
Fishman	Ted
Fitzgeral	Stan
Fitzpatrick	Robert
Flanigan	Mickie
Flannery	Marcia
Fleming	Allison
Fleming	Eric
Fleming	Mary
Fletcher	Jude
Flint	Nancy
Flitcraft	John
Flores	Herminio
Flores-Garcia	JuanCristobal
Floyd	Jennifer
Fluor	Christine
Flynn	Pierce
Fogle	David
Foley	James
Foley	Mary
Foot	Susie
Ford	Barry
Ford	Lauren
Forno	Lysia
Foster	Colin
Foster	Thomas
Foster	Genette
Fotos	Tiffany
Fowler	Steve
Fox	Gene
Fox	Roger and Betty
Fraissl	Stephanie
Franchitto	Dana
Franklin	Constance
Franzen	Ellen
Frasieur	Forest
Frauman	Laurence
Fray	Tom
Frazier	Madelynn
Frederiksen	Chris
Fredkin	Donald

Last Name	First Name
Freeborn-Rubin	Bob
Freeborn-Rubin	Mona
Freedman	Paula
Freedman	Paula
Freeman	Gregory
Freeman	Kyri
Freeman	Lena
Freeman	Mark
French	Larry
French	Pamela
Frey	Michael
Frick	Dean
Friedman	Leanne
Friedman	Mitchell
Friedman	Sarah
Fritzinger	Dennis
Frost	Diane
Frost	Martin
Frounfelter	Earl
Frumento	John
Fuchslocher	Bryna
Fuentes	Gerardo
Fukuda-Schmid	Kristina
Fularczyk	Margaret
Fulsher	Sue
Fusco	Carol Anne
Fusilier	Gilda
Futterer	Joe
Gaffney	Malcolm
Gagliardo	Pamela
Gaither-Banchoff	Kelli
Galaif	Martha
Gallagher	Glenn
Gallegos	Geoffrey
Galliano	Marco
Gallinger	Rob
Gallup	Michael
Galutza	Mayra
Galvan	Roxanna
Gamble	Sandra
Gandhi	Dipal
Gandolfi	Stefanie
Ganter	Steve
Gantos	Angela
Gantt	Robert

Last Name	First Name
Gaponoff	Sharma Lynn
Garber	Sandra
Garcia	April
Garcia	Armando
Garcia	Erin
Garcia	Jeffrey
Garcia	Rio
Garcia	Ruben
Garcia	Susan
Garcia Cucharero	Marli
Garcilazo	Fabian
Gardner	David
Gardner	Len
Garevich	Sara
Garitty	Michael
Garrecht	Jamila
Garrett	Keith
Garrett	Megan
Garrett	Tudy
Gasperoni	John
Gatto	Gina
Gavilanes	Diego
Geare	Dave
Gebhard	Eric
Gee	Telegraph
Geiser	Becky
Gelczis	Lisa
Genasci	Elaine
Gendvil	Derek
George	Catherine
George	Marvin
Gerrard	Ron
Gerry	David
Getter	Camile
Gibb	Wayne
Gibbs	Brigitte
Giese-Zimmer	Astrid
Gigles	Peggy
Gilbert	Camille
Gilbert	Sandta
Gilbertson	David
Gilchriest	Anthony
Gilkyson	Tony
Gill	Susan
Gilland	James

Last Name	First Name
Gillaspy	Linda
Giller	Tim
Gillespie	Rhiannon
Gillette	Robyn
Gingrich	Nancy
Ginsburg	Stephen
Gionet-Hawker	Celeste
Giordani	Mark
Girard	Jocelyn
Gish	W.
Glasser	Mark
Glasser	Susan
Glidden	Dianna
Gloe	Janice
Glon	Herve
Gobby	Krista
Godfrey	Teresa
Godinez	Miguel
Godinez	Nestor
Godman	Elizabeth
Goetinck	Jean
Goff	Frances
Gold	Carol
Gold	Sandra
Goldberg	Rich
Goldberg	Susan
Goldfarb	Georgia
Golding	John
Goldman	Ron
Gondell	Robert
Gongaware	Denielle
Gonsman	James
Gonzales	Diane
Gonzalez	Yazmin
Goodale	Margaret
Gooding	Luna
Goodkind	Mary
Goodmacher	Greg
Goodman	Diana
Goosey	Doug
Goral	Edward
Gordon	Keith
Gordon	Lauretta
Gordon	Michael
Gordon	Mildred

Last Name	First Name
Gorman	Laurie
Gossett	Claudine
Gossett	Sharon
Gotkowska	Ela
Gottejman	Brian
Gottejman	Brian
Gottlieb	David
Gotvald	Mark
Gould	Rachel
Gowens	Edward L.
Graffell	Jess
Gragata	Yvonne
Graham	Barbara
Graham-Graham	Rosemary
Grainger	Elizabeth
Grames	Patricia
Grant	Willa
Grascon	Jordan
Graves	Caryn
Gray	Ellen
Gray	Jim
Gray	Laura
Greaves	Denise
Greco	Tony
Green	Bernard
Green	Dee
Green	Don
Green	Eileen
Green	Jo
Green	Rhonda
Greenberg	Brittany
Greene	Jeanine
Greene	Kathryn
Greene	Matt
Greene	Anne
Greener	Carol
Greenfeld	Frances
Greenstein	Jerry
Gregoire	John
Gregorian	Arthur
Gregory	Probyn
Gregory	Ramsey
Grenard	Mark Hayduke
Gretsch	Kevin
Griffith	Clayton

Last Name	First Name
Griffith	Nancy R.
Grimes	Dr. & Mrs. James
Grimwood	Jaime
Griswold	William
Gritsch	Maria
Grizzell	James
Grobman	Bruce
Grogan	Patricia
Grone	Lori
Gronet	Richard
Gross	Anne
Guardado	Jackie
Guidi	Adriana
Guiney	Emlyn
Guise	Elizabeth
Guisinger	Tim
Gulick	Elizabeth
Gullam	Paul
Guma	Karen
Gunn	Angela
Guse	Kevin
Gustafson	Rae Ann
Guthrie	Cathy
H.	H.
Hackamack	Gayle
Hackett	Susan
Hackett	Marcia
Hadjikhani	Beverly
Hafer	Sarah
Hagens	Donna
Haggard	Alan
Haggard	Judy
Hagiu	Ioana
Hague	George
Haig	Brenda
Haig	James
Haines	Patricia
Haines	Shauna
Haines	Michael
Hair	Zera
Hale	Angela
Hale	Elizabeth
Hale	Katie
Hales	Jay
Hall	Colleen
Hall	Kathleen
Hall	Natalie
Hall	Robert
Hall	Linnea Fronce & Thomas
Hall	Lynn
Hall	Stacy
Hallmark	Jena
Halsey	Jane
Hamel	Lyne
Hamilton	James
Hamilton	Sharon
Hammer	F.
Hammond	Stacy
Hand	Peter
Handley	Vance
Hanger	Susan
Hanks	Kim
Hansell	Jody
Hansen	Charlotte
Hansen	Claudia
Hansen	Janet
Hansen	Karen
Hanson	Kathy
Hanson	Kimberly
Hanson	Tim
Hanzich	Dorian
Hardack	Richard
Hardie	Daniel B.
Harding	Maggie
Hardwick	Barbara
Hardy	Richard
Hargleroad	Jewell
Harker	Jana
Harkins	Lynne
Harlan	Annita
Harman	Inge
Harms-Jones	Donald
Harnish	Diane
Harper	James
Harper	James
Harper	Rebecca
Harrell	Roger
Harrell	Margaret
Harrington	Michael

Last Name	First Name
Harrington-Bullock	Lynne
Harris	Brent
Harris	Shirley
Harris	Zoe
Harrison	Colleen
Harrison	Thomsa
Hart	Pete
Harte	Mary
Hartgraves	Paula
Hartman	Carol
Hartman	Nancy
Hartman	Randall
Harvey	Richard
Harvey	Marcia
Harwell	Andrew
Hasbach	Corinna
Hastings	Neil
Hastings	Susan
Hathaway	Susan
Hatton	R
Hauer	Ray
Hawkins	Amanda
Hawkins	Paula
Hawthorne	Christina
Hayes	Jennifer
Hayes	Marietta
Hayes	Randy
Hays-Gutzat	Pati
Head	Kris
Head	Susan
Healer	Genevieve
Hecht	Alicia
Heckman	Christopher
Heckman	Wayne
Hedges	Ken
Heinold	Christian
Heintz	Penny
Heinz	Robert
Heist	Roberta
Helm	Tom
Helmer	Kathleen
Hemingway-Proia	GeorgeAnn
Hench	James
Hennemuth	Gary
Hennessey	Debbie
Henriksen	James
Henry	John
Henson	Gloria
Henze	Martha
Heon	Christina
Herbert	Michael
Herman	Gene
Herman	Scott
Hermann	Larry
Hern	A.L.
Herold	Ana
Herrera	Laura
Herrington	Beverly
Hershey-Lear	Chandra
Hess	Edward
Hesselrode	Alice
Hester	J
Hewitt	Kimberly
Hicks	Leslie
Hicks	Robert
Hiestand	Nancy
Hild	David
Hildebrand	Karen
Hilker	Virginia
Hill	Frank
Hillegass	Melinda
Hilsman	Virginia
Hilts	Schuyler
Himes-Powers	Susan
Hines	Lanier
Hink	Lani
Hinkson	Jeremy
Hirsch	Deborah
Hirsch	Rifka
Hirt	Kathryn
Hochendoner	Bernard
Hockett	Mary
Hodges	Suzanne
Hoemig	G. Thomas
Hoeschler	Rebecca
Hoffman	Jeff
Hofmann	Susan
Hogan	Emily
Hogben	John

Last Name	First Name
Holley	J.
Hollier	David
Holloway	Allen
Holmen	Magnus
Holmes	Carla
Holmes	Michelle
Holmes	Virginia
Holstein	Jon
Holter	Norbert
Homan	Leslie
Hon	Will
Honeysett	Linda
Hong	Celeste
Hoople	E.
Hooson	Clare
Hopkins	Dotty
Horeftis	MaryHelen
Horn	Wesley
Horowitz	Diana
Horvath	Wanda
Horwitz	Martin
Hosea	David
House	Michael
Howard	Erin
Howard	Lynn
Howerton	Carolyn
Howsmon	Jason
Hoxie	Helen
Hredzak	Marty
Huang	Hans
Hubacek	Richard
Hubbell	Brad
Hudak	Lesley
Huddes	Shannon
Huddleston	Molly
Hudgins	Jerry
Hudgins	Richard
Hudson	Sharon
Huffman	Paula
Huggins	Roxana
Huggins	William
Humphrey	Jeff
Hungate	H Nona
Hunnicutt	Joan
Hunrichs	Paul

Last Name	First Name
Hunt	Nicole
Hunter	Elizabeth
Hunter	Shannon
Hupp	Carol
Hurd Glenn	Janine
Hurley	Kristin
Hurwitz	Jeffrey
Husoe	Erik
Hutchinson	Robert
Hutchison	Kristi
Hutton	Dee
Hydar	John & Roberta
Hydeman	Jinx
Hylton	Steve
Iaderosa	Andrea
Inigo	Carlos
Inyan	Barbara
Iosupovici	Miriam
Ip	Bonnie
Irving	David
Irving	Thomas
Irwin	Melanie
Irwin	Yvette
Isenhower	Eric
Isham	Wayne
Israelson	Linda
Iverson	Kent
Iverson	Steve
Jackson	Alicia
Jackson	Greg
Jackson	Jennifer
Jackson	Maria
Jackson	Monica
Jacob	Ronald
Jacobs	Tracy Ann
Jacobs	Tracy Annu
Jacoby	Ketzia
Jacoby	Peter
Jaime	Brenda
Jain	Paula
Jakusz	Heather
James	Romanyak
Jamieson	Peggy
Jannone	Dan
Janowitz-Price	Beverly

Last Name	First Name
Jarvis	Brad
Jarvis	Paul
Jasoni	Marilyn
Jaymes	Anjin
Jeckell	Joyce
Jeffers	Sandra
Jeffery	Karin
Jellison	Nancy
Jenkins	Jacqueline
Jensen	Donna
Jeska	Renee
Jessee	Rhonda
Jessler	Darynne
Jiobu	Laurie
Johansen	Elizabeth
Johanson II	David
Johhson	Carla
Johns	Juliet
Johnson	Audrey
Johnson	Beverly
Johnson	Carol
Johnson	Darrel
Johnson	Dwight
Johnson	Linda
Johnson	Linda
Johnson	Liz
Johnson	Marcia
Johnson	Marelyn
Johnson	Robert
Johnson	Stephen
Johnson	Teresa
Johnson	Terry Floyd
Johnson	Will
Johnson	Wayne
Johnstone	Penelope
Jolivette	Jane
Joly	Frederique
Jonaitis	Charles
Jones	April
Jones	Bradley
Jones	Brian
Jones	Carole
Jones	Hiroko
Jones	Jake
Jones	Johanna

Last Name	First Name
Jones	Julita
Jones	Sam
Jones-Bedel	Laura
Jordan	Lois
Joyce	Laurie
Jumonville	Julie
Kafer	Norma
Kafton	Pamela
Kahn	Georgia
Kallah	Zee
Kaluzhski	Alexandre
Kamath	Tara
Kampa	Jan
Kandus	Colleen
Kane	Irene
Kane	Linda
Kane	Mari
Kantor	Martin
Kapty	Patrick
Kardash	Rick
Karten	Nowell
Kast	Michael
Kastlie	Rod
Kastlie	Vickie
Kasuya	Tauny
Kathy	Compagno
Katz	Michele
Kauffman	George B.
Kaufman	Barry
Kaufman	Muffett
Kavantjas	Mia
Kawakami	Tedd
Kawecki	Lewis
Kay Foumberg	Robin
Kayan	Helmut
Kaye-Carr	Josh
Kean	Martha
Keans	Deb
Keeler	Robert
Keith	Joyce
Keith	Joyce
Kekule	Richard
Keller	Larry
Keller	Shelly
Kelly	Barbara

Last Name	First Name
Kelly	Florence
Kelly	Michael
Kelly	Nancy
Kelly	James Michael
Kelly	Alice
Kelly	Jennifer
Kelsberg	Jane
Kelsen	Kinsey
Kelsheimer	Elise
Kemenesi	Rick
Kendall	Benjamin
Kendrick	Thomas
Kenna	Aaron
Kennard	Clara
Kent	Schuyler
Kentor	Elen
Kenyon	Lucy
Kerr	Heather
Kestler	Carol
Ketcherside	Sharon
Ketterer	Marcia
Khalsa	Mha Atma S.
Khoury	Valentina
Kielarowski	Henry
Kielman	Laura
Kiley	Joan
Kimball	Barbara
Kimball	Toni
Kindig	Norman
King	Barbara
King	J.
King	Laurie
King	Jean
King	Susan
Kipers	Kevin
Kipp	Thomas
Kirby	Bettina
Kirby	Peter
Kirks	James
Kisner	Al
Kisselburg	Desiree
Kleber	Craig
Kleber	Keith
Kleber	Tracey
Klein	Chuck
Kleine	Walt
Kleinert	Maranda
Klengler	Ingolf
Klengler	Joan
Klipfel II	George F.
Klosterman	Pete
Klucsor	Carmen
Klug	Frank
Klusman	Eric
Knapper	Karl
Knickerbocker	Deanna
Knight	Diane
Knight	Franklin
Knight	Kendra
Knight	Sandra
Knobler	Karl
Knowland	Diana
Knox	Mayumi
Koessel	Karl
Kohler	John
Kohleriter	Bonnie
Kohnken	Pam
Koivisto	Ellen
Kolpin	Kimberly
Konar	Deborah
Koo	Rebecca
Kornhauser	Samuel
Korsen	Alan
Kothari	Sheila
Kourda	Terry
Kovacs	Natalie
Krajewski	Barbara
Kramer	Dee
Kramer	Joan
Kramer	Julie
Kramer	Kelly
Kraus	Gary
Krausz	Lisa
Kreager	Anita
Krell-Bates	Diane
Kritzer	Sherry
Kroeger	Becky
Kronenberger	Kathy Lou
Krosukup	Heidi
Krull	Marcia

Last Name	First Name
Krupinski	K.
Krywko	Kevin
Kuelper	Carol
Kugelman-Kropp	Claire
Kukovich	Kara
Kumar	Chetan
Kuntze	Richard
Kurcab	Kim
Kurez-Easom	Susan
Kuticka	Sheri
Kyle	Patrice
Kyriakos	Sharon
L Engel	Wayne
La Doux	Tasha
La Mont	Erika
LaBerge	Jason
Lacey	Carole
LaFauci	Lauren
Lafaver Gleason	Barbara
LaFrance	Roberta
Lagorio	Lori
Lahr	Kenneth
Lai	Janet
Lai	Molly
Lake	Carol
Lamb	John
Lambden	Corinne
Lambert	Alan
Lamont	Juliet
Lance	Jeanne
Landau	Beryl
Landin-Erdei	Mireya
Landon	Chanel
Landon	Dominique
Landsberg	Marisa
Lane	Jana
Lane	Lama
Lane	Priscilla
LaNew	Maryann
Lange	Chris
Langenfield	Debbie
Langlois	Elaine
Lanning	Kathryn
Lanzl	Catherine
Lao	Wendy

Last Name	First Name
Lapid	Gary
LaPointe	Drena
LaPointe	Larry
Larrain	Casey
Larsen	Areil
Larsen	Jane
Larson	Elaine
Larson	Janet
LaSchiava	Dona
Lashaway	Lisa
Latta	George
Lauer	Patricia
Laughon	Char
Lauren	Cynthia
Laurita	Lori
Laursen	Seth
Laustrup	Mark
Lautaro	Gabriel
Law	Terri
Lawnicki	Timothy
Lawrence	Edward P
Lawrence	Kathleen
Lawrence	Victor
Lawson	William
Lawton	Kathleen
Laxier	Scott
Le Fevre	Dale
Le Luong	Gervais
Le Sieur	Esther
Leach	Steven
Leaf	Jonathan
Leago	Emily
Leaming	Bob
Leather	Scott
Lebowitz	Sheri
Lebrato	Mary
Ledden	Dennis
Ledesma	David
Lee	Edward J.
Lee	Eileen
Lee	Eron
Lee	Kathy
Lee	Richard
Lee	Sabrina
Lee	Summer

Last Name	First Name
Lee	Brenda
Lee	Jeanine
Lee	Roberta
Leeder	Cynthia
Lefler	Scott
Legg	Ann & Derek
Lehr	Stephanie
Leigh	Gary
Leigh	Lynda
Lempart	Lukasz
Lenier	Doug
Lennox	Gerry
Leon	Peter
Leonard	Cami
Leonard	Nick
Leske	Jim
Lesko	Alberta
Leslie	Leslie
Letizia	Mark
Leto	Florence
Letson	Cheryl
Lev	Marjorie
Levin	Michael
Levin	Phyllis
Levine	Ellen
Levine	Sandy
Levitt	Judy
Levy	David
Lewis	Cheryl
Lewis	Deborah
Lewis	George
Lewis	Ildiko
Lewis	Jan
Lewis	Maxine
Lewis	Patrick
Lewis	Ryan
Lewis	Sherman
Liao	Yang
Lichtenberger	Mark
Lightcap	James
Lilly	Susan
Lim	Kristina
Lim	Olivia
Lima	Christopher
Lin	David

Last Name	First Name
Linam	Stephanie
Lindner	Matthew
Lindsay	Jason
Lindsay	Scott
Lipkind	Lawrence
Lipson	Beverly
Lis	Vera
Liss	Gary
Liss	Janet
Lissauer	Joan
Lista	Cassandra B.
Little	Godfrey
Little	Judith
Little	Robyn
Livesey-fassel	E.
Livesey-Fassel	Elaine
Livingston	Terri
Locicero	Jessica
Loe	Peggy
Logue	Darlene
Long	Kristina
Long	Jeffrey
Looby	Judith
Looney	Ernie
Lopez	Adolfo
Lopez	Ralph
Lord	Mike
Loree	Joe
Lorenson	Ray
Lorenz	Austen
Lorenzo	Gloria
Lorig	Bob
Lorraine	Hilary
Loseke	Rachel
Loucks	Cynthia
Loughlin	Richard
Louie	Vincent
Lourie	Ann
Loveday	George
Low	Loretta
Lowe	Rob
Lowrey	Austin
Lowry	Jamie
Lozano	Luis
Lubin	Dana

Last Name	First Name
Lubitz	Iris
Lubitz	Nicolas
Lubofsky	Toni
Lucchini	Paul
Luckman	Paul
Luetkemeier	Kristen
Luff	David
Luke	Richard
Lusk	JoAnne
Lustig	Karen
Luth	Sarah
Lynch	Kelli
Lynch	Lisa
Lynn	Heidi
Lynn	Rhonda
Lynne	Franceska
Maas	Larry
Mabrey	Edd
MacAdam	Iain
MacCollom	Alex
Macdonald	Barbara
MacDonald	Jennifer
MacIntyre	Michael
MacIntyre	Michael
Mackay	Donald
Mackay	Leslie
MacKrell	Chris
Macy	Rachel
Madarasz	Paul
Maddock	Laurra
Madison	Chelsea
Madison	Mary-Carol
Madore	Tyler
Madrigal	Teresa
Madruga	Philip
Maggy	Jamie
Mahaffey	Shana
Mahan	James
Mahl	Ekhard
Maisonneuve	Mark
Maker	Janet
Maldonado	Daniel
Maletsky	Susan
Mallett	Michael
Malley	Karen
Malmuth	Sonja
Maloney	Marcia
Maltzan	Jan
Mammon	Robert
Mande	Jace
Manley	Cynthia
Mann	Courtney
Mann	Harold
Manning	Alexis
Mannion	Maureen
Mannion	Cynthia
Marchese	John
Marcus	Martin
Marcus	Naomi
Mardesich	Daniel
Margay Burke	Bonnie
Marie	Christine
Mark	Marie
Markowski	Stephen
Marks	Joan
Markus	Mary
Marlatt	Randy
Marquez	Emilia
Marriner	Susannah
Martin	Brad
Martin	Chloe
Martin	Esther
Martin	Larissa
Martin	Susan
Martin	Timothy
Martin	William
Martinez	Jennifer
Martinez	John F.
Martinez	Keiko
Martinez	Michele
Martinez	Antonio
Martinez	Melissa
Martini	Richard
Martin-Neff	Gabrielle
Marzocchi	George
Maselbas	June
Massarotto	Francesca
Massey	Eileen
Massey	Irma
Massey	Jennifer

Last Name	First Name
Master	Ryan
Mastroianni	Anna
Masuda	Carol
Mathes	Barbara
Matheson	Meigs
Mathews	Arline
Mathys	Rita
Matlin	Thelma
Matlock	Dale
Matson	Gregg
Matsuoka	Janna
Mattes	Dale
Matthews	Charlotte
Matz	Tamara
Mauch	Rebecca
Maxson	Ronald
Maxwell	Lawrence
May	Geraldine
May	Michele
May	Marcie
Mayber	Marita
Maybury	John
Mayer	Joseph
Mayer	Marita
Mayer	Richard
Mayhew	Kimberly
Mayhew	Sarah
Mayo	Alberta
Mays	Teresa
Mazhnyy	Mark
Mazur	Alfred
Mc Vie	Christina
McAuliffe	Mary
McBride	Kathryn
McCalister	Janet
McCall Poetzl	Annie
McCamon	Liz
McCarten	Louis
McCarthy	Anne
McCleary	Elizabeth
McClosky	David
McCloud	Kalyn
McCombs	Robert
McCormick	Devin
Mccormick	Douglas

Last Name	First Name
McCormick	Douglas
Mccormick	Sue
McCorrry	Susan
McCoy	Michael
McCracken	Wendy
McCreless	Erin
McCrohan	Mary
McCulloch	Norma
McDaniel	Michael
McDermott	Sydney
McDonald	Claude
McDonald	Linda
McDonald	Pam
McDonough	Rebecca
McDowell	Tim
McDuffie	Holly
McEwen	Rebecca
McFarland	David
McGee	Maureen
McGonagle	Richard
McGregor	Cheryl
McHugh	Colin
McIntyre	Julian
McIntyre	Misty
McKay	Megan
McKee	Jerry
McKeighen	Daniel
McKenna	Caephren
McKenna	Dale
McKenna	Kendra
McKenzie	Ross
Mckenzie	Susan
McKinney	Rose
McLaughlin	Diane
McLaughlin	Michael
Mclaughlin	Susan
McLean	Kinsey
McMahan	Michael
McMahon	Anah
McMahon	Carol
McMahon	Sean
McMullen	Carole
McMullen	Gail
McMullen	Stacey
McMullen	Susan

Last Name	First Name
McNamara	Kevin
McNulty	Barbara
McQueen	Kelley
McRae Baley	Patricia
McVeigh	Patricia
McVein	Barbara J.
Meade	Pattie
Meager	Helen
Medeiros	Alexander
Medlock	Jenny
Medzihradsky	O.
Meehan	Don
Mehrotra	Rahul
Mejia	Marianna
Mello	Gilberto
Melvin	Catherine
Menard	Rose Marie
Mendenhall	Barbara
Menendez	Gabrielle
Meredith	Michael
Merkel	Alison
Merkel	Jane
Merritt	Jean
Merson	Keith
Messenger	William
Messineo	Michela
Metzinger	Karen
Meyer	Ichael
Meyer	Janice
Meyer	Twyla
Meyers	Cindy
Meyers	Eric
Meyers	Rosemary
Meza	Joel
Michelson	Golda
Milburn	Renee
Miles	Irene
Miliotis	David
Miller	Amelia
Miller	Christopher
Miller	Don
Miller	Harriet
Miller	Janet
Miller	Margretta
Miller	Nancy

Last Name	First Name
Miller	Norman
Miller	Patricia
Miller	Robert
Miller	Terry
Mills	Barry
Mimeau	Pat
Minault	Kent
Miner	Curt
Minic	Marija
Minnich	Ilene
Minor	David
Miranda	Michelle
Mitchell	Desiree
Mitchell	Ina
Mitchell	Jolina
Mitchell	Laureen
Mitchell	Mateus
Mitchell	Michelle
Mitsuda	Michael
Mittig	William
Miura	Siobhan
Miyasaka	Jeanne
Miyashiro	Marla
Mizuguchi	Naoko
Moeller	Lisa
Moeller	Michael
Moffett	Allison
Moise	Kim
Molgora	Bianca
Mombourquette	Kathy
Monahan	Moira
Mone	Carol
Monell	Mary
Monroe	Dean
Monroe	James
Mont-Eton	Jean
Moody	Moody
Moore	Hugh
Moore	Maria
Moore	Melissa
Moore	Deirdre
Moose	Mary Etta
Moose	Mary Etta
Mora	John
Moran	James

Last Name	First Name
Moran	Liana
Moran	Susan
Moran	V.
Morarre	Pam
Moreno	Albert
Morgan	Michael
Morgan	Sue
Morgenfruh	Rudolph
Morley	Norman
Morningsong	Cynkay
Morningsong	Cynkay
Morris	Cynthia
Morris	Everett
Morris	John
Morris	Ray
Morris	Steve
Morris	Alexis
Morris	Sharon
Morrison	Frances
Morrison	Marcella
Morrow	Lynn
Morrow	David
Mortensen	Richard
Mracek	Pavel
Mudge	Kathleen
Mugglestone	Lindsay
Mulcare	James
Muldaur	Maria
Mulder	Mark
Mulholland	Christine
Mulick	Jim
Mullane	Sharon
Mullen	Peter
Munce	William
Mundal	Sarah
Munoz	Jeanne
Murdosh	Sarah
Murphy	Ann-Marie
Murphy	Marcia Lee
Murphy	Betty
Mursch	Jeanne
Murti	Vasu
Mutascio	Robert
Myers	Derald
Myers	Nathan

Last Name	First Name
Nachlinger	Sylvia
Nadolski	Jessica
Nafziger	Nikki
Nagy	James
Nakata	James
Nantel	Vivianne
Nape	Clarice
Napolitan	Elaine
Nass	Thomas
Nast	C.
Natseway	Pat
Navarro	Greg
Navez	Ren
Neal	Warwick
Neal	Yvonne
Nealon	Sandra
Nelson	Marisa
Nelson	Miesen
Nelson	Nanci
Nelson	Scott
Nesbitt	Lynda
Ness-Lira	Carole
Neste	Lisa
Nesvadba	Fallon
Neuhauser	Alice
Newman	Michael
Newsham	Don
Newton	Roger
Ng	Carol
Nghiem	Nghi
Ngo	Ann
Nguyen	Binh
Nguyen	Vy
Nichols	Carmen
Nichols	Richard
Nicholson	Julie
Nickels	Jeanette
Nickum	John
Nicole	Anastasia
Nicoll	Michelle
Nielsen	Gregory
Nierman	GL
Nikolich-Zugich	Tijana
Nilles	Laila
Nillo	Christina

Last Name	First Name
Nishio	John
Nola	Robert
Nola	Michael
Nolan	Katherine
Noone	Molly
Noonkester	Dale
Noordyk	James
Nordahl	Richard
Notary	Kim
Notestine	James
Notkin	Debbie
Novak	Ken
Noyes	Daniel
Nunez	Carlos
Nunez	Rogelio
Nystrom	Barbra
Obando	Oscar
Obershaw	Lynda
Obyrne	Cynthia
Ochoa	Joan
Ochoa	Victor
O'Connell	Mary
O'Connor	MaryRose
Oda	John
Odelberg	Bruce
Odell	Norma
Oldham	Jan
Oliver	Kathryn
Oliver	Tom
Ollar	J. J.
Olsen	Donna
Olson	K.
Olson	Jinx
O'Malley	Polly
Omorenimwen Oboruemuh	Abraham
O'Neill	Cara
Oniell	Adrienne
Opera	Cleo
O'Rafferty	Eric
O'Reilly	Brian
Oriotis	Cassandra
Oriotis	Cassandra
Orlinski	Patricia
Oroz	Michelle

Last Name	First Name
Orozco	Steven
Orsary	Stephen
Osborne	Jessie
Oser	Wendy
Oshea	Maureen
Osterhoudt	David
Otero	Gloria
Otha Wolfenden	James
Overmann	Laura
Owen	Julie
Owens	Cindy
Paddock	Shelley
Padelford	Grace
Padgett	Lenay
Padmanabhan	Urmila
Palacio	D.
Palacio	Diane
Palermo	Michael
Palladine	Michelle
Palmer	Francis
Palmer	Kirstie
Palmer	Michelle
Palo	Margaret
Paltin	Sharon
Palumbo	E
Paniagua	Rosiris
Pann	Robert
Pantalone	Arlene
Papakonstandinou	Eleni
Pardini	Jennifer
Pardo	Daniela
Paris	Melina
Park	Jason
Park	Samuel
Parker	Anna
Parker	David
Parker	Elaine
Parker	Marie
Parks	Lisa
Parlette	Karen
Parreira	Stephanie
Parrish	Joan
Parrish	L
Parsons	Ron
Parzick	Anne

Last Name	First Name
Pasqua	John
Patterson	Ellen
Patterson	Kevin
Patti	Vincent
Patton	James
Patton	Lisa
Paul	Tanya
Paul-Almand	Nicole
Pavlidis	Gregory
Pedersen	Annette
Pekarcik	Diane
Pekin	Patrick
Pellicani	Andrea
Pelton	B.
Peluso	Josie
Pena	Suzanne
Pendrey	Deborah
Pennington	Heather
Pennington	Kenneth
Penunuri	Daniel
Perdios	Dan
Perisco	Yuka
Perkins	Anne
Perlman	Janet
Perrie	Martha
Perry	David
Perry	Lee
Perry	Leslie
Perry	Philip
Perryman	Jo-Ann
Persky	Jerry
Perszyk	Kim
Petel	Amanda
Peter	Williamson
Peters	Felicia
Peters	Freya
Peters	Susan
Peters	William
Peterson	Nancy
Peterson	Stanley
Petlock	Kyle
Petranto	Nancy
Pettey	Corinne
Pettis	Carolyn
Pettit	Sylvia

Last Name	First Name
Phelps	Tami
Phillips	Bob
Phillips	Kimberly
Phillips	Marilyn
Philllils	Jim
Phipps	Maria
Phung	Anne
Picciani	Laureen
Pichel	Vanna
Pielenz	Christine
Pielke	Janet
Pierce	Deborah
Pierna	Lisa
Pierre	Amy
Pierson	Dana
Pierson	Cassandra
Pineda	Jacqueline
Pinson	Ed
Piotrowski	Pauli
Pirch	Charlotte
Pitchford	Jayne
Pitchford	Victoria
Pitsker	Peter
Pitton	Helen
Platter-Rieger	Mary F.
Plaza	Minette
Plummer	Lewis
Plummer	Pam
Polansky	Debra
Polick	Melissa
Polish	Bret
Pollock	Jeri
Pomies	Jackie
Poncia	Beverly
Pope	Karen
Popp	David
Poppie	Frank
Porcellino	Ana
Porritt	Aponi
Porter	Dean
Porter	Kenneth
Portocny	Andrea
Posner	Susan
Potts	Catherine
Potts	Graeme

Last Name	First Name
Pousman	Robert
Povill	Jon
Powell	Regina
Powers	Gypsy
Powers	Laurel
Powers	Pam
Pratt	Lynne
Prax	Ken
Prchal	Steven
Preston	Astrid
Preston	Lynne
Prete	Michael
Price	Joan
Prince	Vicki
Prince	Winthrop
Priskich	Fiona
Pritchard	Jennifer
Prochazka	Penelope
Proctor	Stephanie
Proper	Kenneth
Prosser	Andy
Proteau	Mary
Provencher	Lauri
Pryputniewicz	Stephen
Puaoi	Richard
Public	Joe
Public	Joe
Purvis	Russ
Putz	Brad
Quadros	John
Quanstrom	Julie
Quellas	Matthew
Quigley	April
Quijano	Nikkelley
Quilici	Lauren
Quiroga	Estrella
R.	Cat
Rabb	Leslie
Rabbino	Michael
Rachmuth	Marc
Racine	Robert
Racobs	Richard
Radamaker	Theodore
Radford	Nancy
Rae	Judie

Last Name	First Name
Raible	Annette
Raider	Phil
Raim	Leila
Ralston	Jeannette
Ramon	Alberto
Ramos	Paul
Ramsden Scott	Sidney
Ramsey	Elizabeth
Randolph	Dee
Ranger	Michael
Rankin	Roxanne
Ranz	Lauren
Rarden	Ann
Rasor	Margaret
Rathbun	James
Ratliff	Peggy
Ratzlaff	Karen
Ray	Thomas
Reade	Anne
Reading	Jane
Reading	Roger
Reagan	Russell
Reback	Mark
Rebb	Karen
Redish	Maryellen
Reece	Monique
Reed	Rodger
Reel	Joseph
Reese	Gary
Reese	Drew
Rego	James
Reichert	Susan
Reid	Brian
Reid	Donna
Reifer	Jane
Reiley	Marcial
Reimer	Peter
Reinertson	TC
Reinhart	Kimberly
Reinhart	Robin
Reitmajer	Michelle
Renee	Nina
Rennacker	Ann
Renner	Randy
Reskof	Geraldine

Last Name	First Name
Reyes	Eric
Reynolds	Gloria
Reynolds	Judy
Rhein	Robert
Rhew	D
Rhoads	Gladys
Rhodes	Janet
Riber	Genevieve
Ribiat	Daniel
Riblett	Mary
Rice	David
Rice	Jay
Richardson	Joan
Richmond	Lonna
Richter	Donald
Ridder	Catherine
Rideout	James
Riedel	Randy
Riehart	Dale
Rietzel	Marilyn
Rigas	Dina
Riggs	Brent
Riggs	Kristin
Riggs	Vincent
Riley	Callie
Riley	John
Riley	Nancy
Rinaldi	Zorine
Rios	Jen
Rip	Nichole
Rippey	Kathleen
Risdon	Russ
Riskin	Ron
Risso	Alisa
Ritchie	Shann
Rivera	Joe
Rizvi	Akbar
Roach	Sally
Roark	John
Robbin	Barbara
Roberson	Patricia
Robert	Lance
Roberts	Gail
Roberts	Janet M.
Roberts	Julie

Last Name	First Name
Roberts	Les
Robertson	Chris
Robey	Eddy
Robey	Steve
Robins	Rick
Robinson	Helene
Robinson	Jacqueline
Robinson	Mick
Robinson	Naeda
Robinson	Tom
Robles	Sidney
Rocco	Priscilla
Roche	Maureen
Roch-Levecq	Anne-Catherine
Rodine	Jean
Rodine	Jean
Rodoff	Lennie
Rodrigues	Sharon
Rodriguez	Mary
Roe	Christina
Roe	R. Richard
Roebuck	Gregg
Roeder	Randolph
Rogalin	Suzanne
Rogat	Al
Rogers	Celeste
Rogers	David
Rogers	Margaret
Rogers	Susan L.
Rohrbaugh	Stacey
Rohrer	Laurel
Rojeski	Mary
Rollins	Sharon
Rollins	Sue
Romanowski	Scott
Romberger	Cynthia
Romero	Sydney
Romesburg	Denise
Rookhuyzen	Van
Rooney	Diane
Root	Charlene
Root	Jessie
Rosenblatt	Roxanne
Rosenblood	Jamie
Rosenblum	Stephen

Last Name	First Name
Rosenfeld	Samuel
Rosensimon	Barbara
Ross	Darlene
Ross	Erin
Ross	George
Ross	Kimberly
Rosser	Grif
Rossi	M.
Rossi	Ray
Rotcher	Michael
Roth	Diane
Roth	Doris
Roth	Jerome
Rothafel	Dort
Rowe	Susan
Rowoth	J.
Rubel	Scott
Rubicam	Shannon
Rubin	Michael
Rudin	K.
Ruiz	Danielle
Ruiz	Kathleen
Ruiz	Raul
Russell	Bob
Russell	Dianne
Russell	Linda
Russell	Patrick
Russell	Patrick
Rust	Tom
Ruster	Bert
Ruwe	Ben
Ryan	Jo Ellen
Ryan	Paul
Ryan	Therese
Rynkiewicz	Mary Lou
S	Svetha
Saar	Dolores
Saban	Don
Sabo	Betty
Sadler	Darla
Sagatelian	Nancy
Saint-Amour	Jeanne
Salama	Mo
Salamanca	Lena
Salas	Jan

Last Name	First Name
Salazar	Alicia
Salenger	Cathy
Salerno	Lou
Salerno	Marie
Salido	Robert
Sall	Gloria
Saltzman	Barry
Sams	James
Samuels	Pearl
San Miguel	Pamela
Sanchez	Cristina
Sanchez	Paul
Sanchez	Ralph
Sanchez	Sibyl
Sanderfer	Michael
Sanders	Gary
Sanders	M.
Sanders	Ralph
Sanderson	Reed
Sandoval	G
Sands	Adele
Sansone	VR
Santangelo	Phillip
Santangelo	Stephen
Santone	Deborah
Sarabia	Michael
Sardellitto	Peter
Sarris	Dorian
Sato	Nancy
Saue	Lucinda
Sauer	John
Saunders	Robert
Saunders	Stacy
Saussol	Bonnett
Savage	Alice
Savage	Patricia
Savich	Sophia
Savoia	Jo-Ann
Sawyer	Lynn
Sawyers	Carol
Scanlon	Shiva
Scarborough	Deborah
Scarpati	Rodolfo
Schachter	S.
Schaefer	Jim

Last Name	First Name
Schaeffer	Lorraine
Schaffer	Kim
Schairer	Karen
Schandall	Rami
Scharlack	Meyer
Schechtman	Barry
Schegloff	Myra
Schehl	Ed
Schellhous	Les
Schenck	Alan
Scherzer	Teresa
Schiffer	Marcia
Schiffman	Lauren
Schilling	Christy
Schimaneck	Michael
Schlecker	Rose
Schleimer	Sylvia
Schlesinger	Susie
Schlesinger	Susie
Schlinger	Henry
Schmid	Linda
Schmidt	Diana
Schmidt	Ann E.
Schminke	Molly
Schmitt	Walter
Schmitz	Heidi
Schneider	Sarah
Scholz	Ernest
Schorre	Dewey V.
Schott	Rosann
Schottlaender	Sherri
Schramm	Beatrix
Schriebman	Judy
Schuessler	Betty
Schuhrke	Nancy
Schulman	Leah
Schultz	Ashley
Schultz	Lesley
Schulze	Albert
Schuman	Richard
Schuster	J.
Schutt	Ashley
Schutte	Ron
Schutz	Ama
Schwab	Ann

Last Name	First Name
Schwartz	Alan
Schwartz	Don
Schwartz	Florence
Schwartz	Jake
Schwartz	Rich
Schwarz	Axel
Scott	Andrea
Scott	Harlan
Scott	Kari Lorraine
Scott	Lorna
Scott	Thomas
Scott	Nadine
Scotti	O. Bisogno
Scoville	Karen
Seaborg	Da ve
Seamon	John
Searles-Wilson	Wendy R.
Sears	Steve
Seaton	Chris
Sebastian	Joseph
Seekamp	Edward
Seekatz	Russ
Seeley	J
Seeley	Marsha
Seelig	Erica
Seeman	Carolyn
Segal	Mara
Seidenberg	Ariella
Seil	Fredrick
Seligman	William
Selken	Laura
Sellars	Stefanie
Sellers	Jennifer
Selover	Peg
Selten	Vic
Seltzer	Rob
Senegal	Aaron
Senour	Jon
Sepulveda	Christine
Serota	Michael
Severn	Percy
Seyfried	Mike
Shah	Omar
Sharee	Donna
Sharp	Kathy

Last Name	First Name
Shaw	Christine
Shaw	Marianne
Shaw	Susan
Sheets	Gabriel
Sheldon	Sher
Shepard	Dodie
Shepherd	Marilyn
Shepherd	Melanie
Shepherd	Melinda
Sheppard	William
Shere	Lindsey
Sheridan	Lenore
Sheridan	Marlene
Sherman	David
Sherman	Nina
Sherrill	T
Shiels	Laurie
Shilder	Mary
Shinder	David
Shipper	Sander
Shirley	Aida
Shively	John
Shook	Philip
Shook	Somer
Shoop	Karen
Shore	Brad
Shore	Garrett
Shores	Michael & Kathy
Shrader	Gregory
Shrum	Kenneth
Shubert	Lois
Shulda	Chris
Shulda	Vincent
Shuler	Heidi
Shulman	Joseph
Shuster	Marguerite
Sibary	Kay
Sickel	Kimberly
Sigel	Liz
Sigretto	Norma
Silan	Sheila
Silkey	Ulrike
Silva	Naomi
Silverio	Alexander
Silverman	Judy

Last Name	First Name
Simmons	Adrienne
Simmons	Ed
Simon	Brenda
Simon	Philip
Simonian	Thomas
Simons	Anita
Simpson	Eric
Simpson	Eric
Simpson	Kim
Sims	Amber
Sims	Donna
Sinacore	Paul
Singh	Bobby
Singh-Bowman	Nan
Singleton	Therese
Sipes	Loni
Siponen	Birgitta
Sircar	Subrata
Sirley	David
Siskron	Catherine
Sislin	Leno
Sitnick	Joan
Sittig	Tracey
Siwek	K
Skinner	Richard
Skwara	Alexandra
Slater-Giglioli	Julie
Slauson	Kevin
Slavik	Robert
Slawson	Dana
Sloneker	Sam
Smart	Wesley
Smith	Anne
Smith	Barbara
Smith	Barbara
Smith	Bret
Smith	Brittany
Smith	Cynthia
Smith	David A.
Smith	Deanna
Smith	Dennis
Smith	Grant
Smith	Indira
Smith	Julie
Smith	Kimberly

Last Name	First Name
Smith	Madeleine
Smith	Nancy
Smith	Nathan
Smith	Nicole
Smith	Randall
Smith	Richard
Smith	Scott
Smith	Lawrence
Smith	Shane
Smith-Clark	Stacey
Snyder	Sara
Snyder	Sara
Soens	Alison
Sogorka	Amber
Sohn	Marsha
Soligo	Piero
Somkin	Anthony
Sonnenblick	Rachel
Sonoquie	Monique
Soraghan	C.
Soria	Peter
Soria	Susan
Sosa	Gabriela
Soto	Lilvia
Soto	Monica
Sousa	Amanda
Souza	Michael
Spafford	Andy
Spanski	Linda
Sparks	Rick
Spence	Kathryn
Spencer	Aaron
Spencer	Jeremy
Spencer	Gayle
Sperry	Adam
Spinks	Dollie
Spivak	Howard
Spoon	Leslie
Sproat	Jan Lee
Srygley	Jane
St Clare	Simone
St. John	Lynne
Stampalia	Tom
Standard	Steven
Stanley	Norm
Stansberry	Cheryl
Stanton	Tom
Stark	Mary
Staton	Carrie
Steadmon	Jason
Steck	Sara
Steele	Brad
Steele	Cheryle
Steele	Karen
Steele	Karen
Steele	Karen
Steffen	Eric
Steffen	Wayne
Steffes	Wayne
Steiger	Bonnie
Steinhart	Peter
Steinitz	George
Stengle	Valarie
Stenoien	Marilynn
Stephan	Dorothea
Steponaitis	John
Stepp	Jenni
Stevens	Andrea
Stevenson	Douglas
Stewart	Catherine
Stewart	Eriksen
Stewart	John
Stewart	Julia
Stewart	Renell
Stewart	Robert
Stewart	Glenn
Stickle	John D.
Stidham	Jean
Stidham	Jean
Still	Holly
Stitt	Linda
Stock	Sandra
Stocker	Thomas
Stockstill	Rob
Stoecken	Diane
Stolzenberg	Rita
Stone	Jeffrey
Storace	Michelle
Stover	Sandra
Strange	Maleada

Last Name	First Name
Strassell	Mary
Stratton	Jewels
Strickland	Dylan
Strickland	Olga
Stroud	Briana
Stroup	Will
Strugatsky	Vladimir
Sturgeon	Catherine
Suarez	Dianna
Suarez	Juan
Suchecki	Carol
Sugarman	Kathy
Sullivan	Edward
Sullivan	Val
Sultar	Joanne
Sumiyoshi	Jennifer
Summar	Patrick
Summers	AJ
Summers	Kathryn
Summers	Steve
Suri	Dipa
Surratt	Ryan
Sutherland	Hugh
Sutton	John
Sutton	John
Sutton	Joseph
Suyehara	Erin
Suzuki	T.
Svendsen	Julie
Swanson	Anne
Swartz	Kathryn
Sweetland	Karen
Sweetling	William
Swift	Allen
Swift	Monica
Switalla	James
Swoiskin	Mark
Syed	Mushtaq
Sympson	Marisa
Szabo	Joseph
T.	Meggie
Tabachnick	Kenneth
Tabb	Linda
Tabor	Linda
Taerbaum	Jody

Last Name	First Name
Taft	Barry
Talamo	David
Talbot	Jacques
Talley	Charles P.
Tamburri	Nick
Tamoto	Jan
Tanimura	Pam
Tanz	Michael
Tapia	Rafael
Tarlow	Kathleen
Tarquino	Georgina
Tasher	Joanne
Tasker	David
Tasoff	Jack
Tassone	Louise
Tate	Leslie
Taylor	Deborah
Taylor	Emily
Taylor	Jeff
Taylor	Tim
Tedesco-Kerrick	Terry
Teevan	John
Tegland	Ormand
Tello	Lupita
Templeton	Sara
Tenenbaum	Debbie
Tenn	Cynthia
Tera	Rapp
Terriquez	Erika
Terry	Derrick
Terry	Justin
Terry	Michael
Terry	Terelle
Teunissen	Christina
Tews	Thomas
Thayer	Jeff
Thing	Susan
Thirouin	Kim
Thomas	Debbie
Thomas	J.
Thomas	James
Thomas	Jennifer
Thomas	Karen
Thomas	Toni
Thomas	Thais

Last Name	First Name
Thompson	Jackie
Thompson	Sandra
Thompson	Stacy
Thomsen	Don
Thorbjornsen	Brian
Thorpe	Naomi
Throndson	Jan
Thronton Sr.	Ernie
Thryft	Ann
Thurman	Andrea
Thurstjon	Julie
Tiarks	Daniel
Tice	Paula
Tichman	Nadya
Tidwell	Amber
Tilden	Margaret
Tilley	Justine
Tipper	Barbara
Tkach	Bill
Tkatch	Susan
Tomasello	Pela
Tomczyszyn	Michael
Ton	Tung
Toobert	Michael
Topping	Jeff
Torre-Bueno	Ava
Torres	Mayra
Torrisi	Sharon
Towers	Gloria
Towers	Patricia
Townsend	Carlos
Townsend	Chad
Toyohara	Karen
Tracey	Teri
Traer	Nancy
Trainer	Jon
Tran	Kim
Trapp	Gene R.
Travis	Annabelle
Treece	Michael
Trembly	Dennis
Trevillian	Linda
Tripp	Anthony
Tripp	Wendy
Tucker	Mark
Tucker	Veronica
Tull-Bell	Paul
Tung	Aiting
Tuomi	R.G.
Turek	Gabriella
Turner	Jake
Turner	Kelly
Turner	Scott
Turner	Dennis
Turner	Janet
Turney	Pat
Turrentine	Rogers
Tyler	Steve
Tyroler	S.
Uditsky	Myrna
Ulring	Karen
Ungar	Luci
Unruh	Cindy
Utzig Jr.	Albert
V	Jason
Va	Jackie
Vadopalas	Erika
Valdez	Patricia
Valdivia	Susan
Valencia	Richard
Valentine	Karen J.
Vallero	Daniel
Van Hook	Chris
Van Houten	Corinne
Van Kampen	Art
van Thiel	Mathias
Van Velson	Nathan
Van Zandt	Elizabeth
Vance	Eric
Vancompernolle	Geert
Vandeman	Mike
Vanderbush	Terry
Vanderleelie	Roy
Vandyke	Marlene
Vann	James
Vare	Sandi
Varvas	Jason
Vazquez	Evelyn
Vega	Elinor
Velasco	Steve

Last Name	First Name
Veliz	Lisa
Vella	Kent
Veloz	Amy
Veraldi	Anne
Verdugo	Debbie
Vesely	Sakura
Vesperman	Gary
Vetrie	Julia
Viken	Barbara
Villodas	Abigail
Vipond	Mathew
Visani	Simona
Visperas	Carlene
Visscher	William
Vlacich	Amy
Vollmer	Alex
von Alten	Bruce
von Kluge	Karen
Vosburg	Robin
Vossoughi	Siamak
VrMeer	Janice
Vu	Nguyen
Wagner	Dean
Wagner	Mark
Walcutt	Margaret
Wald	Johanna
Walkder	David
Walker	Angela
Walker	Aurea
Walker	Barbara
Walker	David
Walker	Jason Michael
Walker	Laura
Walker	Verla D.
Wallace	Amber
Wallace	Ken
Wallace	Margaret
Wallace	V.R.
Wallace	Victoria
Wallace	Victoria
Wallach	Aleta
Wallach	V.
Wallack	John
Wallaert	Karen
Waller	Jill
Waller	Paul
Walls	Karen
Walp	Susan
Walrafen	Barbara
Walton	John
Ward	Albert
Ward	Lyn
Warenycia	Dee
Waring	Dawn
Warner	Brett
Warner	Tim
Warr	Harvey
Warren	Craig
Warren	Ronald
Warwick	Scott
Watkins	Anita
Watkinson	Carolyn
Watson	Fran
Watson	Laurel
Watts	Nancy
Watwood	Alan
Waybur	Anne
Wdowinski	Gila
Weamert	Sarah
Webber	Patricia
Weber	Helen
Weber	Jamie
Wedel	Eric
Weid	Magan
Weigand	Edward
Weikel	Wendy
Weinberg	Ron
Weinberg	Henry
Weinberger	Mark
Weiner	Nona
Weiner	Peter
Weinstein	Lola
Weinstein	Melanie
Weiss	Abigail
Weiss	Jeremy
Weissbuch	Ellen
Weissburg	Robert
Weisser-Lee	Melinda
Weisz	Russell
Weitz	Scott

Last Name	First Name
Welch Lasken	Joanna
Welling	Jeanette
Wells	Barbara
Wells	Erin
Wellsted	B.
Wendell	John
Werner	Kirstyn
Werner	Shirley
Wesley	Susan
Whalen	Shirley
Wheeler	Mariko
Wheeler	Pearl
Whetstine	Linda
White	Dawn Marie
White	Evan
White	Jean
White	Kat
White	Michael
White	Mindi
White	Roberta
White	Vilma
Whitehouse	Judy
Whittenburg	Sherri
Whitton	Erika
Wickham	Jonas
Wieland	Chuck
Wightman	Richard
Wilbraham	Derek
Wilder	Jenny
Wilkin	Sue
Wilks	Terri
Will	Jennifer
Williams	Angie
Williams	Christina
Williams	Ian
Williams	Jayna
Williams	Kimberley
Williams	Michelle
Williams	Pat
Williams	Sara
Williams	Sara
Williams	Timothy
Williams	Wini
Williams	Catherine
Williams	Brigida
Williams-Gboizo	Maxine
Willis	Cheryl
Willis	Jennifer
Wills	Dorothy
Wilner Stack	Trudy
Wilson	Dave
Wilson	Dina
Wilson	James
Wilson	Ken
Wilson	Michael
Wilson	Patricia
Wilson	Pete
Wimp	Amy
Winchell	Peggy
Windrum	Ken
Winegrad	Bernard
Winget	Mike
Winholtz	Betty
Winkler	Carol
Winn	Debora
Winnick	Joie
Winston	Alan
Wise	Steven
Wishingrad	Barbara
Withers	Emily
Witsell	Peggy
Witte	Jennifer
Wittl	Wendy
Wobus	Elizabeth
Woersching	Marc
Wolf	Donald
Wolf	Kristina
Wolf	Rachel
Wolf	Anne
Wolfe	Bonny
Wolfe	Charles
Wolfe	Gerry
Wolff	Liza
Wolfram	Patricia
Wolfson	Toni
Wollaston	Timothy
Wollman	Issac
Wollman	Michael
Wong	Liana
Wood	Larry

Last Name	First Name
Wood	Lauren
Wood	Marilyn
Wood	Monica
Wood	Stephanie
Wood	Dianna
Woodard	Jud
Woods	Dana
Woods	Jan
Woods	Rory
Woods	Tansy
Woolery	Alex
Woolmingotn Meriville	Jacki
Work	Jo-Ann
Worley	David
Wornum	Claudia
Woudstra	Gerrit
Wright	Cory
Wright	Dale
Wright	Elizabeth
Wright	Georgina
Wright	Madeline
Wyse	Sheila
Xavier	Marjorie
Yamashita	Fujiko
Yanko	Delores
Yao	Judy
Yap	Alberto
Yean Lim	Yee
Yeboah	Katherine
Yerkey	David
Young	Jo
Young	Lowell
Youngerman	George
Youngerman	Lisa
Yusavage	Marianne
Zadaca	Joy
Zamora	Esther
Zamora	Rae
Zampieri	Janet
Zatkin	Dalia
Zeiger	Felicia
Zeller	Rudy
Zelmanovich	Silvana
Zelmanovich	Sivana
Zelner	Michael
Zelter	Daniel
Zelus	Marsha
Zemanek	Bill
Zenker	Elizabeth
Zerzan	Paula
Ziemer	Rosa
Zimmer	Arlene
Zimmerman	Helene
Zimmermann	John
Zunigae	E.
Zurfluh	Philip
	MC

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