

**Solar Regional Mitigation Planning – Dry Lake Solar Energy Zone Pilot Project
Kickoff Workshop
August 29–30, 2012**

Workshop Summary Report

1 Background

The need for regional mitigation planning to address unavoidable impacts of solar energy development was identified in the *Programmatic Environmental Impact Statement for Solar Energy Development in Six Southwestern States* (Solar PEIS), which was published by the U.S. Department of the Interior (DOI) Bureau of Land Management (BLM) and U.S. Department of Energy (DOE) in July 2012. The Solar PEIS identified 17 solar energy zones (SEZs) in the six-state study area, which are areas that are well suited to solar energy development where the BLM will prioritize and facilitate utility-scale solar development. The Solar PEIS also identified an extensive inventory of design features (i.e., required mitigation measures) that would be applied for any right-of-way (ROW) grants for solar facilities on BLM-administered lands, and proposed a new Solar Energy Program that would establish ROW authorization policies and allow permitting of future solar energy development projects on public lands to proceed in a more efficient, standardized, and environmentally responsible manner.

The BLM’s proposed Solar Energy Program implements a “mitigation hierarchy” — avoid, minimize, and then mitigate (or offset) impacts (see Appendix A, Section A.2.5 of the Solar PEIS). This hierarchy requires that avoidance and minimization strategies be implemented first to eliminate or reduce potential adverse impacts from solar energy development. When there are impacts that cannot be fully avoided or minimized, appropriate measures to offset or mitigate the adverse impacts must be implemented. In the Solar Energy Program, the BLM has implemented avoidance strategies through the identification of SEZs as priority areas for development; in general, the SEZs were selected to avoid as many potential impacts as possible. The BLM has implemented minimization strategies through the adoption of both programmatic and SEZ-specific design features. In anticipation that development may nonetheless result in significant unavoidable impacts, the BLM is working to develop Regional Mitigation Plans for each SEZ.

The BLM, through the course of responding to individual ROW applications that have been received to date for solar facilities, has learned that the identification of appropriate mitigation for unavoidable impacts is a difficult process. Under current procedures, the BLM identifies for the applicants those unavoidable impacts associated with the proposed project that require mitigation. Applicants then draft their proposals for mitigation of those impacts, subject to BLM approval. This process can be lengthy and result in several rounds of negotiation.

Because the SEZs are areas where the BLM is committed to facilitating solar development, the Solar PEIS recognized that identification of unavoidable adverse impacts (to the extent possible prior to specific project proposals) and corresponding appropriate mitigation requirements would provide some certainty and time-saving opportunities for developers

submitting ROW applications within SEZs. It was recognized that the mitigation requirements should consider the status of the resource of concern within the region based on existing data, trends, and other factors affecting that resource (if available). Taking these factors into consideration, the BLM has identified the following goals for developing SEZ-specific Solar Regional Mitigation Plans (SRMPs):

- Develop a consistent, regional approach to mitigating impacts associated with development in an SEZ, thereby establishing incentives for development in the SEZ;
- Reduce uncertainty about mitigation requirements (eliminate the current guessing game) and streamline the process for mitigating unavoidable adverse impacts;
- Establish science-based or other objective criteria for determining which unavoidable impacts will be mitigated and identify effective mitigation actions;
- Establish on-site avoidance and minimization requirements that support build-out plans for the SEZ;
- Obtain concurrence from the various regulatory agencies regarding the need for mitigation and the appropriate off-site mitigation strategy;
- Potentially reduce the costs, complexity, and timeline associated with off-site mitigation activities and obtaining project approvals;
- Establish a simple mitigation fee structure, and create an opportunity to pool funds collected from multiple developers and apply the pooled funds to mitigation projects that will produce the most significant results for the dollar;
- Support the BLM's implementation of adaptive management approach to solar energy development;
- Provide relevant information for determining mitigation requirements for projects on variance lands; and
- Achieve a greater degree of stakeholder collaboration throughout the mitigation planning process.

The BLM has not previously produced a regional mitigation plan, and thus it has begun the Dry Lake SEZ SRMP Pilot Project, which is focused on the Dry Lake SEZ located about 15 mi (24 km) northeast of Las Vegas in Nevada. An acceptable process for the identification of unavoidable adverse impacts and appropriate offset or mitigation of those impacts must necessarily include stakeholder input, and the BLM plans to work extensively with stakeholders throughout the process of developing the Dry Lake SRMP. This outreach was initiated through a kickoff workshop held August 29–30, 2012, at the Tuscany Suites in Las Vegas. Approximately 70 participants attended the workshop, including representatives from other federal, state, and local government agencies; nongovernmental organizations (NGOs) concerned with issues such

as environmental or recreational impacts; representatives from the solar development industry, mining industry, and utilities; one tribal representative; and individual members of the public. This report summarizes the content of that workshop and the input received from stakeholders.

2 Objectives and Structure of the Kickoff Workshop

As described by Shannon Stewart (the BLM project manager for the Solar PEIS) in the workshop introductory remarks, the two objectives of the pilot project are to adopt a regional mitigation plan for the Dry Lake SEZ with the intent of making development in the SEZ easier than it would be without the mitigation plan, and to apply the lessons learned to mitigation planning for other SEZs. Stakeholder involvement will be important in meeting these objectives; the process is intended to be transparent and to consider the concerns of all interested parties, while decreasing uncertainty and saving time for solar developers. The kickoff workshop was the start of this process; the agenda for the workshop is included as Attachment 1 of this summary report. The BLM plans to hold additional workshops and to provide opportunities for public input and public comment on the draft regional mitigation plan as it is being developed.

In the kickoff workshop, the Session 1 initial presentation outlined the current practices for mitigation planning within the ROW grant process. Then NGO groups and industry representatives presented their views on regional mitigation planning: what the new process should accomplish and how it should be carried out. Presentations included discussions of regional mitigation planning in the context of archaeological, ecological, and hydrological resources, as well as tribal concerns.

Session 2 of the workshop consisted of presentations by BLM staff on the regional mitigation planning framework presented in the Final Solar PEIS (given by Joe Vieira, Dry Lake SRMP Pilot Project Manager), and on the solar long-term monitoring plan and how it will be utilized within regional mitigation planning (given by Gordon Toevs, BLM Washington Office). This section of the workshop ended with a group discussion on the new approach, possible improvements, and ways in which stakeholders could be involved.

Session 3 of the workshop on Day 2 began with an overview of the affected environment and potential impacts of development in the Dry Lake SEZ, based on Solar PEIS information and analyses (Argonne staff). Then Mike Dwyer of BLM's Ely, Nevada, District Office presented more detailed information about the framework and action plan for regional mitigation planning. The rest of the day consisted of break-out discussions where questions on the framework and action plan were discussed in smaller groups, followed by presentations summarizing the group discussions led by group members.

3 Summary of Workshop Presentations

The presentations given at the workshop are available for viewing or downloading on the Dry Lake Mitigation Project Web page at: (http://www.blm.gov/nv/st/en/fo/lvfo/blm_programs/energy/dry_lake_solar_energy.html). The following sections provide a brief summary of the presentations provided in the three sessions of the workshop.

3.1 Session 1: Why undertake a new approach to mitigation?

3.1.1 BLM's current process for planning and managing mitigation for renewable energy ROWs (Greg Helseth): The current BLM process does follow the mitigation hierarchy (avoid, minimize, and mitigate). During the pre-application meetings for a project, the unavoidable impacts are identified, and the applicant is required to propose mitigation for those impacts to the BLM. Compliance monitoring is accomplished through a third-party compliance contractor that is hired by the BLM and provides weekly reports about any incidents that occur during construction.

3.1.2 Views of conservation community on new process for mitigation planning (Laura Crane and Dr. John Hiatt): Ms. Crane presented information on what landscape-scale planning is and how it can incorporate mitigation. The view of The Nature Conservancy (TNC) is that development should happen in zones, so the organization agrees that the SRMP should be an incentive for developers to apply for land in zones. The best possible outcome would be that mitigation would result in a net positive impact on a resource on a regional basis. Laura emphasized that the opinion of TNC is that mitigation should be for the life of the impact (not the life of the project). The location of mitigation does not necessarily need to be close to the location of impacts (that is, mitigation requirements should be at the regional scale), except for water-related impacts, which generally need to be mitigated within the same basin in which the impacts occur.

Dr. Hiatt's presentation focused on the biodiversity of the Mojave Desert and that the ecosystem is currently quite intact, making questionable the value of setting aside mitigation lands that would later be developed anyway. Dr. Hiatt discussed that mitigation should include active restoration of land that had already been degraded.

3.1.3 Views of industry on new process for mitigation planning (Andrew Wang and Clay Jenson): Solar Reserve and Bright Source are both in the process of constructing solar facilities on BLM-administered lands either in Arizona, California, or Nevada, and thus have experience with the current process used to identify acceptable mitigation measures for unavoidable adverse impacts. Mr. Wang cited an example of an unusual proposed mitigation for impacts to the Mojave fringe-toed lizard from development of the Quartzite Project in Arizona: funding further research on the lizard (e.g., occupancy, density, home range) in order to allow better identification of important habitat to protect. Mr. Jenson stated that the Bright Source view is that regional mitigation planning would be an improvement over the current process where it falls to industry to find and propose mitigation lands, because it is the Agencies that have the

best knowledge of species' locations and habitats and would identify regional, multi-species' needs for the developers.

3.1.4 Other multiple-use perspectives — archeological resources and tribal concerns, and recreational user concerns (Stephen Fosberg and Steve Belinda): Regarding SRMP for archeological resources, Mr. Fosberg recommends starting with the June 2012 Prehistoric Context report for southern Nevada but broaden the approach to cover historic sites as well, and focus the research design on the types of properties most likely to be found in the SEZs. With such a regional mitigation strategy in place, the process could be sped up for developers and the need for additional consultation on archeological resource mitigation could be avoided, because mitigation would have been previously agreed upon during review of the regional strategy. In discussing tribal concerns regarding mitigation, Mr. Fosberg notes that their concerns cover a broad range of resources (e.g., water, wildlife, jobs, air quality). Because tribes have expressed dissatisfaction with the consultation process to date, a new emphasis on consultation is needed, possibly including funds to support travel of tribal members when needed.

Mr. Belinda stated that he was expressing personal concerns regarding loss of recreation with solar development in SEZs, not necessarily the opinions of the Theodore Roosevelt Conservation Partnership. One concern was that if hunters had to travel farther to an open hunting location, they might not make the trip and therefore would just lose the recreation of hunting. Mr. Belinda also noted that impacts to game species (e.g., quail, deer elk) are not addressed to the same degree as impacts to special-status species (e.g., threatened species as listed by various agencies). He felt this was an inequitable practice. Mr. Belinda also noted that regional mitigation planning should have structure and rigor and should last beyond the life of the project. He stated that sportsmen could contribute by mapping key hunting areas.

3.2 Session 2: What does the new approach to mitigation entail?

3.2.1 Proposed solar regional mitigation planning framework (SRMP framework) (Joe Vieira and Shannon Stewart): Mr. Vieira outlined the objectives of the SRMP framework as described in Appendix A, Section A.2.5 of the Solar PEIS, including to achieve a systemic, transparent, equitable, and cost-efficient mitigation approach; to respond to public comments requesting a new approach; and to expand thinking beyond consideration of individual projects. He explained the use of the mitigation hierarchy of avoidance, minimization, and then mitigation (or the offsetting of impacts). The desired outcome of the process is to achieve impact mitigation and to increase clarity and certainty for mitigation requirements and costs for SEZs. Mr. Vieira also explained that while projects proposed in variance areas would not directly benefit from the regional mitigation planning for SEZs, the objectives and priorities of those mitigation plans might guide mitigation planning for individual projects in variance areas. The goals of the SRMP include achieving integration and consistency among jurisdictional requirements, establishing repeatable mitigation strategies, evaluating land acquisitions, allowing restoration of degraded lands, and ensuring adequate funding over time to achieve mitigation outcomes. Monitoring and adaptive management will be used to verify that mitigation strategies are adequate to address impacts over time. The required elements of the SRMP are, with stakeholder input, to establish

the following: (1) a baseline upon which to assess unavoidable impacts; (2) a methodology for identifying and quantifying unavoidable impacts; (3) a methodology for determining mitigation obligations or costs for individual projects; (4) a structure to hold and apply mitigation investments; (5) regional objectives regarding where and how mitigation investments will be made; and (6) a monitoring and adaptive management plan to evaluate mitigation.

3.2.2 Solar Long-Term Monitoring Plan (LTMP) (Gordon Toevs and Jason Taylor): The Solar Program will use BLM's Assessment, Inventory, and Monitoring (AIM) methodology for monitoring at the SEZs as described in Appendix A, Section A.2.4 of the Solar PEIS, which is based on framing the issue, establishing conceptual models, measuring core indicators, and obtaining a sound sample design. It is an iterative process. The sample design must be statistically valid, and a control site must be used. Low-density data (extensive sampling) are already available across all BLM-managed lands to inform regional questions; high-density data (intensive sampling) will be collected to inform SEZ-specific questions. Use of remote sensing data can increase the precision of the data collected for priority areas, aid with refining sample designs, and reduce monitoring costs. The LTMP approach for mitigation monitoring will use a repeatable, documented process to provide quantitative information to inform decisions, aid in cumulative impact analyses, and ultimately determine the effectiveness of the mitigations employed.

3.3 Session 3: Develop an action plan for preparing a regional mitigation plan for the Dry Lake SEZ

3.3.1 Overview of the Dry Lake SEZ Affected Environment and Summary of Impacts (Heidi Hartmann and Ben O'Connor): The Dry Lake SEZ is about 15 mi (24 km) northeast of Las Vegas; it has an area of 5,717 potentially developable acres, which corresponds to development potential for a solar facility of up to 915 megawatts (MW). There is interest in development in this area: although the three pending solar applications within or adjacent to the SEZ that were identified in the PEIS are to be closed soon, a 350-MW facility has recently been approved near the SEZ, and a large pending application is across from the SEZ on the other side of I-15. There are several transmission corridors with existing power lines overlapping the SEZ. The Solar PEIS identified the potential for the following types of impacts on resources: access to public lands restricted in and near the SEZ; visual impacts to specially designated areas within 25 mi (40 km) of the SEZ (likely to be minor); possible impacts on recreational uses such as by off-highway vehicles (OHVs) or for hunting (data insufficient); impacts on military operations at Nellis Air Force Base and Nellis Testing and Training Range; existing mining claims that could impact solar development; groundwater use made more difficult because the basin is over-appropriated; the loss of sensitive vegetation habitats; adverse impacts to 73 special-status species that could occur in the area of the SEZ if they are present; particulates that would be a concern for air quality; the presence of cultural resources (e.g., the Old Spanish Trail) that could be impacted by development; potential impacts on resources of concern to Native Americans, including potential impacts to plants and animal species of cultural importance and locations of cultural concern, as identified in an ethnographic survey; the fact that the number of construction and permanent jobs created from development would vary depending on the technology used; possible transportation impacts resulting from increased traffic; and cumulative impacts that are

likely because there are many other currently operating or planned industrial facilities in and near the SEZ.

3.3.2 Framework and Action Plan for Developing the SRMP for the Dry Lake SEZ

(Mike Dwyer): The proposed framework (content) of the Dry Lake SRMP is derived from two frameworks in the Solar PEIS: Framework for Developing Region Mitigation Plans (Appendix A.2.5) and Framework for Developing a Monitoring and Adaptive Management Plan for SEZs (Appendix A.2.4). The elements of developing an SRMP and LTMP were presented (same as listed under 3.2.1 and 3.2.2, respectively). Mr. Dwyer presented the outline of the SRMP, including identification of: unavoidable impacts; impacts that should be mitigated; mitigation objectives; actions (mitigations) to offset the selected impacts; funding for the mitigation actions; and long-term monitoring needs to evaluate the effectiveness of the mitigation. Mr. Dwyer explained the importance of mitigation from a *regional* perspective, at which level the question to be answered is: which impacts represent significant threats to the resilience and/or sustainability of ecological, social, and cultural systems in the region? Systems dynamics (plotting the impacts over time) would be a useful tool in identifying significant impacts and causal relationships. The action plan for producing the Dry Lake SRMP includes stakeholder involvement and review of interim products. A preliminary schedule for subsequent workshops was presented, including workshops in October, December, and January.

4 Summary of Participant Feedback

4.1 General Feedback

Input from workshop participants was received during the various question-and-answer periods after presentations, during the group discussions, and via e-mail after the workshop. During the group discussions, the participants were asked to consider the following questions:

1. Has the BLM omitted any important elements in its regional mitigation planning framework?
2. How can the regional mitigation planning framework be improved?
3. Are key steps missing from the Framework/Action Plan? (See Figure 1 of the Framework/Action Plan document.)
4. Are there any important stakeholders that are not represented at this workshop?
5. What do you need in order to participate effectively as a stakeholder?
6. How do you see your organization being involved or participating in the Dry Lake SEZ Regional Mitigation Plan pilot?
7. Are there existing and relevant data, studies, or models that should be used in developing the Dry Lake SEZ Regional Mitigation Plan?

The bullet points below represent the feedback received from the workshop participants during the group discussion session, and also during other discussion periods. In many cases, similar comments were received from several groups..

Workshop Participant Feedback

- There is general support for what BLM is doing in terms of establishing a regional mitigation plan, although there is a need to define goals, objectives, and outcomes (deliverables) more clearly.
- General consensus was heard on the appropriateness of the mitigation hierarchy: avoid, minimize, and then apply offsetting or compensatory mitigation.
- Several participants stated that BLM should consider clarifying that the intent of the project is to establish requirements for offset mitigation or compensatory mitigation, given that the mitigation hierarchy includes other actions, such as avoiding and minimizing actions.
- BLM needs to define what types of actions or activities qualify as being offset what types warrant compensatory mitigation.
- BLM needs to establish and define clear and consistent terminology.
- Mitigation actions need to be effective, durable, and sustainable; there is a need to monitor the entire plan and its implementation into the future.
- BLM needs to establish methodologies for (1) identifying/quantifying unavoidable impacts, (2) assessing the value of resources, and (3) establishing priorities for mitigation.
- BLM should develop a schematic and timeframe defining how development in an SEZ will occur that includes addressing (1) tiered National Environmental Policy Act of 1969 (NEPA) analyses, (2) establishment of further site-specific design features to avoid or minimize impacts, (3) the competitive bidding process, and (4) the development and implementation of an SRMP for mitigation of those impacts that warrant mitigation.
- The focus on mitigation of unavoidable impacts is not consistent with NEPA or BLM's NEPA implementation regulations. BLM is not required to mitigate unavoidable impacts, and the SRMP should include an explanation of the statutory/regulatory authority under which BLM is proposing to mitigate unavoidable impacts. If such an authority does not exist, BLM should explain why it is proposing extra-regulatory requirements. Extra-regulatory requirements should not be imposed on development within the SEZs. BLM needs to establish a solid baseline for the SEZ and region, using the best currently available data.
- BLM needs to identify for stakeholders what it thinks are the unavoidable significant impacts that may occur in order to establish sideboards on the discussions with stakeholders (i.e., reduce the potential for stakeholders to prepare mitigation recommendations to address impacts that actually are not likely to occur because of existing avoidance and minimization requirements).
- More discussion is needed to define the unavoidable impacts for the Dry Lake SEZ: although BLM seemed to imply that that was achieved in the workshop, not all agree on that point. BLM should clarify how impacts that still can be avoided or minimized within the SEZs will be addressed.

- BLM should clearly define whether its goals are to mitigate impacts to the original habitat of the Dry Lake SEZ area or to its current and already degraded habitat.
- BLM should clearly define the geographic boundary of the region considered in the scope of regional mitigation plans for each resource of concern.
- Stakeholders want to review and comment on baseline data in order to ensure that there is agreement on the baseline conditions.
- BLM needs to integrate with other agencies to ensure compliance with state laws, local ordinances, and zoning requirements, as well as to facilitate buy-in regarding the process, decisions, and requirements and to share relevant data.
- The efforts should promote consistency between Field Offices and SEZs, although it is recognized that specific mitigation requirements will vary by SEZ. BLM should explain how the SRMP approach can be flexibly applied in moving from one SEZ to another.
- BLM needs to establish working groups that can do the technical work in between workshops; BLM should provide materials prior to workshops for discussion.
- A challenge related to regional mitigation for the Dry Lake SEZ will be to find appropriate, available parcels of land within the region that are suitable to support offset mitigation actions and to provide long-term protection of those lands.
- BLM needs to clarify what will be required for projects proposed on variance lands.
- System dynamics should be used as a modeling tool provided that care is taken to ensure there is a strong “feedback loop” that can be monitored and evaluated in order to support adaptive management strategies and provided that external influences do not obscure actual relationships between development and impacts.
- SRMPs should not create a disincentive for developing in the SEZs; instead, these plans need to continue to establish incentives by way of reducing uncertainty about mitigation requirements and establishing consensus among federal and state agencies about what actions will be required.
- Industry would like some flexibility in how mitigation goals are achieved and would like to ensure follow-through on investments in data collection and analysis.
- Concerns were expressed with respect to how to fund mitigation actions.
- It was stated that the transmission capacity at the site requires more thorough evaluation than was provided in the Solar PEIS. If there is no reasonable expectation of available capacity, there is no reason to develop the SEZ.
- Should BLM cover the costs of the survey work needed to better determine the unavoidable impacts? Similarly, should BLM prepare SEZ-specific (or project-specific) NEPA reviews and necessary consultations (Sec. 7, Sec. 106, and CWA Sec. 404) needed to give developers more certainty regarding the potential hurdles associated with developing in the SEZ? One question is whether this is a legitimate use of taxpayer money. Potentially, BLM could cover these costs upfront and then recover the expenses through charges to developers as part of the competitive process. To provide any degree of certainty, BLM probably would need to impose some limitations on the type of

development that could occur on certain parcels (e.g., technology restrictions). In addition, to recoup its expenses, BLM would need some certainty that developers would likely respond to a competitive bid process.

- Important stakeholders or contributors were not represented at the workshop, including groups with specific expertise (e.g., U.S. Geological Survey, DOE), the Nevada State Engineer's Office (water issues), recreational groups (especially recreational shooters who use the dry lake for target practice), permitted land users (e.g., mine claim holders and grazing permittees), the solar industry, and utilities.
- Regarding comments that Clark County should be represented, does this mean involving the Clark County Department of Air Quality and/or the Clark County Regional Flood Control District?

4.2 Feedback on Impact Issues of Potential Concern for the Dry Lake SEZ

The bullet points below represent resources at the SEZ for which participants expressed concern over potential adverse impacts during the workshop or through the evaluation forms:

- Conservation of ecological resources;
- Cultural resources;
- Tribal concerns;
- Visual resource management, including night sky impacts;
- Conflict(s) with military space and operations;
- Recreational use and access to surrounding public lands;
- Loss of open space and fragmentation of large tracts of public land;
- Sporting and big game management;
- Groundwater depletion and impacts to ephemeral drainages and playa ecosystems;
- Water, soil, and vegetation impacts;
- Air quality impacts;
- Loss of tax revenues if private lands are used as mitigation lands;
- Local infrastructure (roads, traffic) and services (emergency response) (Nye County);
- Loss of multiple-uses for BLM lands (Lincoln County); and
- Cumulative impacts.

5 Summary of Input Received through the Evaluation Forms

A copy of the evaluation forms used for the workshop is included here as Attachment 2.

5.1 Presentation Ratings

The participants' ratings for individual presentations were quite varied, reflecting the particular interests of a diverse audience. For example, a few people felt the overview presentation on the Dry Lake SEZ was not useful; however, a number of people rated it as very useful. Similar patterns were seen for other presentations. Some general observations are provided below:

- The presentation on Current Planning/Management of Mitigation was too cursory to be useful, although the commenter noted that the subsequent discussion brought out more important information.
- The presentation by Andrew Wang (Solar Reserve) did not address the topic of mitigation very well; and both industry presentations seemed to some commenters like plugs for the solar industry, the company, and/or their technology.
- The presentations on the first day could have been shortened, combined, or eliminated in order to focus the workshop discussion more specifically on the Dry Lake SEZ.
- More time should be allocated to group discussions, particularly to breakout discussions. The breakout discussions could have been better focused by assigning a couple of different questions to each group to ensure that all topics were covered. (As a counterpoint, at least one reviewer felt that the group discussions were not well focused, and he/she would prefer to provide written comments.)

5.2 Additional Specific Feedback

The information provided in answers to the individual questions on the evaluation form is as follows:

- E-mail is the preferred project communication mechanism.
- A current project Web site is also important. Others mentioned list serves, discussion boards, online parking lots, online feedback mechanisms, a data clearinghouse, and an interactive spatial data viewer.
- Workshop materials should be provided in advance of workshops, along with a clear description of what will be discussed at each workshop.
- Consider using webinars to share information.
- Consider holding sessions in the evenings.

- Workshops should be held at inexpensive venues near the airport; second-hand smoke was a concern for at least one participant.
- Hosting the workshops at a government facility might make travel authorization easier to obtain.
- Some participants, including presenters, strayed off topic too much.
- BLM should use additional organizations to share information about the project. Specifically, it was recommended that BLM should use the Solar Energy Industries Association and the Large-Scale Solar Association.

5.3 Specific Offers of Potential Contribution to the Project

Several organization and individuals offered to contribute to the Dry Lake SEZ SRMP project, as noted below:

- John Tull and The Wilderness Society would like to be directly engaged to provide their expertise on energy development on public lands (John Tull has a science background; regional knowledge; and relationships with people in academia, agencies, and NGOs that may be useful in the pilot) (J. Tull).
- Clark County can share its expertise administering a large-scale, multiple species mitigation program, including an adaptive management framework (Clark County).
- Danny Rakestraw, who works for a local environmental engineering and consulting firm, offered to provide insights into the local natural resources and the needs of a number of species. (His offer indicated that he might be contracted as a consultant or could support this as a concerned citizen.)

5.4 Suggestions Regarding Existing and Relevant Data, Studies, or Models

The following suggestions for sources to consult in gathering baseline data for the project were received:

- From Nye County: BLM representatives and local stakeholders said there were at least three ROW requests near the site, in addition to the environmental impact statements associated with the transmission ROWs passing through or near the site. All NEPA documents associated with these ROWs should be pulled from BLM files to provide the basis of a regional mitigation approach.
- From Lincoln County:
 - Clark County Multi-Species Habitat Conservation Plan.
 - BLM Las Vegas District Resource Management Plan.
 - Clark County Master Plan.
 - Any existing allotment management plans for the area.

- The draft plan under way at Nellis Air Force Base that will identify which areas they need for operations and training: which types of solar facilities would have unacceptable impacts and what locations they must have or could live without.
- From Clark County:
 - Ecosystem Indicators Project:
<http://www.clarkcountynv.gov/Depts/dcp/Documents/Library/dcp%20reports/2011/Geomorphology%20and%20Vegetation%20Mapping%20UNR%20578%20Jun%202011.pdf>.
 - Report of the Interagency Weed Sentry Project (2008–2009):
http://www.clarkcountynv.gov/Depts/dcp/Documents/Library/dcp%0reports/2010/20100115_Rept_fr_NPS_and_PLI_Weed_Sentry_Final_Project_Report.pdf.
 - The BLM Las Vegas office also has a recent set of habitat models for rare low-elevation plants that might be found in the Dry Lake SEZ area.
 - Nevada Natural Heritage Program can provide centralized species distribution data for the area: <http://heritage.nv.gov/gis/gis.htm>.
 - Great Basin Bird Observatory has recent monitoring and habitat modeling data, as well as the informative Bird Conservation Plan: http://gbbo.org/bird_conservation_plan.html.

6 Next Steps (Joe Vieira)

With the feedback received through this workshop, the BLM will continue work on the Dry Lake SEZ SRMP, revising the process as appropriate on the basis of participant feedback. BLM will carefully evaluate all of the suggestions received. A summary of this kickoff workshop will be provided, and information will be sent to participants and other interested parties on the next workshop dates, venue, and content as soon as these are established. The next workshop has been tentatively planned for the week of October 16 in Las Vegas; the planned content is impact evaluation, baseline data review, and discussion of mitigation obligations (establishing mitigation costs).

Attachment 1: Kickoff Workshop Agenda

Agenda

Regional Mitigation Planning – Dry Lake Solar Energy Zone Pilot Project

Phase I - Kickoff

August 29-30, 2012

Tuscany Suites and Casino, Las Vegas, NV

Project Objective: Develop an action plan for the preparation of the Regional Mitigation Plan for the Dry Lake Solar Energy Zone.

Wednesday, August 29, 2012

8:00 – 8:30 Welcome. Why is the BLM undertaking this initiative? Explain how this project is related to the Solar PEIS, discuss the uniqueness of Solar Energy Zones and the opportunities they present for mitigation planning.
(Presenter - Shannon Stewart/BLM)

8:30 – 9:00 Purpose of the meeting, agenda, logistics, introductions
(Presented by Argonne National Laboratory facilitators – Karen Smith, lead)

Session 1: Why undertake a new approach to mitigation?

9:00 – 9:30 How does BLM currently plan for and manage mitigation for renewable energy rights-of-way?
(Presenter - Greg Helseth/BLM)

9:30 – 9:45 Break

9:45 – 10:45 Redefining mitigation – conservation community view – panel discussion followed by facilitated group discussion
(Panel: Laura Crane/The Nature Conservancy, John Hiatt/Red Rock Audubon Society)

10:45 – 11:45 Redefining mitigation - solar industry view - panel discussion followed by facilitated group discussion
(Panel – Andrew Wang/Solar Reserve LLC, Clay Jensen/Bright Source Energy)

11:45 – 1:00 Lunch

1:00 – 2:00 Redefining mitigation - other multiple-use perspectives – panel discussion followed by facilitated group discussion
(Panel – Stephen Fosberg/BLM; Steve Belinda/Theodore Roosevelt Conservation Partnership)

Session 2: What does the new approach to mitigation entail?

- 2:00 – 2:30 Proposed Solar Regional Mitigation Planning Framework (RMPF):
Final Solar PEIS Appendix A.2.5 - presentation followed by
facilitated group discussion
(Presenters – Joe Vieira and Shannon Stewart/BLM)
- 2:30 – 2:45 Break
- 2:45 – 3:15 Solar Long-Term Monitoring Plan (LTMP): Final Solar PEIS
Appendix A.2.4) - presentation followed by facilitated group
discussion
(Presenters - Gordon Toevs and Jason Taylor/BLM)
- 3:15 – 4:30 Group discussion: Is the new approach on the right track? How
might it be improved upon? How can stakeholders contribute? Are
the outcomes appropriate and well-defined?
(Discussion facilitated by Argonne staff)
- 4:30 – 4:45 Summary of Day 1: overview of the goals and agenda for Day 2.
Conduct preliminary participant evaluation.
(Joe Vieira/BLM staff and Karen Smith/Argonne)

Thursday, August 30, 2012

- 8:00 – 8:30 Welcome: Summary of Day 1 comments, presentation of Day 2 goals and agenda
(Joe Vieira/BLM staff and Karen Smith/Argonne)
- Session 3: Develop an action plan for preparing a regional mitigation plan for the Dry Lake Solar Energy Zone.**
- 8:30 – 9:15 Overview of the Dry Lake SEZ: Affected environment/resource values, summary of impacts - presentation followed by facilitated group discussion
(Presenters –Heidi Hartmann and Ben O’Connor/Argonne)
- 9:15 – 9:45 Preliminary Framework and Action Plan: seven elements, how each element might be completed, who might be involved, preliminary list of ‘lessons-learned’ questions to be evaluated. Explain the group activity to follow.
(Presenter - Mike Dwyer, BLM)
- 9:45 – 10:00 Break
- 10:00 – 11:30 Break-out group discussions: feedback on the straw-man action plan (suggestions regarding the what, how, who; deliverables; ‘lessons-learned’ questions); how do you see your organization involved in the process?
- 11:30 – 12:30 Lunch
- 12:30 – 2:00 Break-out group presentations: representative from each group present, followed by questions/discussion; 15 minutes per group
(Discussion facilitated by Argonne staff)
- 2:00 – 2:30 Group Discussion: Consolidated list of recommend changes to the Framework
(Discussion facilitated by Argonne staff)
- 2:30 – 2:45 Break
- 2:45 – 4:15 Group Discussion: What impact issues should BLM address in the Dry Lake SEZ Regional Mitigation Plan.
(Discussion facilitated by Argonne staff)
- 4:15 – 5:00 Closing and Evaluation: Summary of workshop discussion, next steps. Conduct participant evaluation.
(Joe Vieira/BLM staff and Karen Smith/Argonne)

Attachment 2: Workshop Evaluation Form
Dry Lake SEZ Mitigation Planning Workshop – Phase I
August 29-30, 2012
Tuscany Suites and Casino, Las Vegas, NV
Workshop Evaluation Questionnaire

The BLM would like feedback regarding the usefulness of the topics discussed and the format of this workshop, so subsequent workshops can be organized to produce the most valuable information.

How helpful was each session in terms of informing you about the Regional Mitigation Planning Framework and pilot project: 1 – Not useful; 2 – Okay; 3 – Very useful; N/A – Didn't attend/missed

| Topic | Rating | | | N/A |
|---|--------|---|---|-----|
| | 1 | 2 | 3 | |
| Day 1: | | | | |
| Why a New Approach to Mitigation (S. Stewart – BLM) | | | | |
| Current Planning/Management of Mitigation (G. Helseth – BLM) | | | | |
| Redefining Mitigation – Conservation Community View (L. Crane – TNC; J. Hiatt - Red Rock Audubon Society) | | | | |
| Redefining Mitigation – Industry View (A. Wang – Solar Reserve; Clay Jensen, Bright Source Energy) | | | | |
| Redefining Mitigation – Other Perspectives (S. Fosberg – BLM; S. Belinda – Theodore Roosevelt Conservation Partnership) | | | | |
| Proposed Solar Regional Mitigation Planning Framework (J. Vieira and S. Stewart – BLM) | | | | |
| Solar Long-Term Monitoring Plan (G. Toevs and J. Taylor – BLM) | | | | |
| Group Discussion on New Approach | | | | |
| Day 2: | | | | |
| Overview of Dry Lake SEZ (H. Hartmann and B. O'Connor – Argonne) | | | | |
| Dry Lake SEZ Action Plan (M. Dwyer – BLM) | | | | |
| Break-Out Group Discussions on Action Plan | | | | |
| Break-Out Group Presentations on Action Plan | | | | |
| Group Discussion – Recommended Changes to Action Plan | | | | |
| Brainstorm Mitigations for Dry Lake SEZ Regional Mitigation Plan | | | | |

1. If you think a session was not useful, please provide additional input to explain the reason(s) for your evaluation.

2. Did the information presented at this workshop provide you with a good understanding of the process that BLM is undertaking with respect to mitigation planning? If not, on what aspects do you need more information?

3. Were there any topics that you felt were missing?

4. How did you hear about this workshop? Do you have a preference regarding how you want to receive additional information about this pilot project in the future?

5. How can BLM maximize the effectiveness of the stakeholder engagement process?

6. Please identify the potential impacts from solar development in the Dry Lake SEZ of greatest concern to you and/or your organization.

7. Please comment on the planned schedule and likelihood that you (or another representative from your organization) will participate in future workshops:

| Workshop | Ability to Participate/Comments |
|--|--|
| October: Review which impacts the BLM should mitigate; discuss how mitigation projects and/or actions will be funded | |
| December: Review mitigation objectives and what mitigation projects and/or actions should be undertaken | |
| January: Discuss how to determine if mitigation strategies, projects, and actions are achieving the desired outcomes | |

8. Other Comments