



United States Department of the Interior



BUREAU OF LAND MANAGEMENT
Southern Nevada District Office
Las Vegas Field Office
4701 N. Torrey Pines Drive
Las Vegas, Nevada 89130
<http://www.blm.gov/nv/st/en.html>

In Reply Refer To:
N-93306, N-93321, N-93337
2800 (NVS1000)

FED-EX TRACKING NUMBER

Skip Canfield
Nevada Division of State Lands
Department of Conservation and Natural Resources
901 South Stewart Street, Suite 5003
Carson City, Nevada 89701

Dear Mr. Canfield:

Thank you for your comments from the Nevada State Clearinghouse on the Environmental Assessments (EAs) prepared for the Dry Lake Solar Energy Zone projects. This letter responds to all substantive comments made in your letters, which are attached for reference.

Lighting

Lighting for the projects would generally adhere to the guidance provided in the comment. For example, all lighting would be designed to provide the minimum illumination needed to achieve safety and security objectives, and be directed downward and shielded to focus illumination on the desired areas. In addition, the applicants would prepare a Bureau of Land Management (BLM)-approved Lighting Management Plan.

Materials

All materials installed on federal lands are subject to Visual Resource Management analysis. The facilities will conform to the BLM color pallet.

Required Permits

All projects on federal lands are required to comply with federal, state, and local permit requirements potentially including, but not limited to, those identified in your letter.

Water for Construction Workers

Well water for construction will not provide potable water. Drinking water for construction workers will be brought on site by truck.

Sincerely,



Vanessa L. Hice
Assistant Field Manager
Division of Lands

Enclosures



Christ, Nancy <nchrist@blm.gov>

State Agency Comments E2015-082 EA - Dry Lake SEZ - Playa Solar Project

1 message

Skip Canfield <scanfield@lands.nv.gov>

Fri, Jan 9, 2015 at 9:14 AM

To: "nchrist@blm.gov" <nchrist@blm.gov>, "ghelseth@blm.gov" <ghelseth@blm.gov>

Cc: Skip Canfield <scanfield@lands.nv.gov>

The Nevada State Clearinghouse received the attached comments and the comments below regarding this EA;

<http://clearinghouse.nv.gov/public/Notice/2015/E2015-082.pdf>

Skip Canfield

Nevada State Clearinghouse**State Land Use Planning Agency***Nevada Division of State Lands**Department of Conservation and Natural Resources**901 South Stewart Street, Suite 5003**Carson City, NV 89701**775-684-2723**<http://clearinghouse.nv.gov>**www.lands.nv.gov*

As part of the EA - , EA - Dry Lake SEZ - Playa Solar Project, please consider the cumulative visual impacts from development activities **(temporary and permanent)**.

Utilize appropriate lighting:

- Utilize consistent lighting mitigation measures that follow "Dark Sky" lighting practices.

- Effective lighting should have screens that do not allow the bulb to shine up or out. All proposed lighting shall be located to avoid light pollution onto any adjacent lands as viewed from a distance. All lighting fixtures shall be hooded and shielded, face downward, located within soffits and directed on to the pertinent site only, and away from adjacent parcels or areas.

- A lighting plan should be submitted indicating the types of lighting and fixtures, the locations of fixtures, lumens of lighting, and the areas illuminated by the lighting plan.
- Any required FAA lighting should be consolidated and minimized wherever possible.

Utilize building materials, colors and site placement that are compatible with the natural environment:

- Utilize consistent mitigation measures that address logical placement of improvements and use of appropriate screening and structure colors. Existing utility corridors, roads and areas of disturbed land should be utilized wherever possible. Proliferation of new roads should be avoided.
- For example, the use of compatible paint colors on structures reduces the visual impacts of the built environment. Using screening, careful site placement, and cognitive use of earth-tone colors/materials that match the environment improve the user experience for others who might have different values than what is fostered by built environment activities.
- Federal agencies should require these mitigation measures as conditions of approval for all permanent and temporary applications.

Thank you.

Skip Canfield, State Land Use Planning Agency

2 attachments

 E2015-082 NDEP (EA - Dry Lake SEZ - Playa Solar Project).pdf
52K

 E2015-082 NDEP 2 (EA - Dry Lake SEZ - Playa Solar Project).pdf
65K

Comment Letter 1

DATE: December 17, 2014
TO: State Clearinghouse, Department of Administration
FROM: Nevada Division of Environmental Protection, Bureau of Water Pollution Control
SUBJECT: State Clearinghouse Comments for E2015-082 (EA - Dry Lake SEZ - Playa Solar Project)

The Nevada Division of Environmental Protection (NDEP), Bureau of Water Pollution Control (BWPC) has received the aforementioned State Clearinghouse item and offers the following comments:

The project may be subject to BWPC permitting. Permits are required for discharges to surface waters and groundwater's of the State (Nevada Administrative Code NAC 445A.228). BWPC permits include, but are not limited to, the following:

- Stormwater Industrial General Permit
- De Minimis Discharge General Permit
- Pesticide General Permit
- Drainage Well General Permit
- Temporary Permit for Discharges to Groundwater's of the State
- Working in Waters Permit
- Wastewater Discharge Permits
- Underground Injection Control Permits
- Onsite Sewage Disposal System Permits
- Holding Tank Permits

Please note that discharge permits must be issued from this Division before construction of any treatment works (Nevada Revised Statute 445A.585).

For more information on BWPC Permitting, please visit our website at:
<http://ndep.nv.gov/bwpc/index.htm>

Additionally, the applicant is responsible for all other permits that may be required, which may include, but not be limited to:

- | | |
|-----------------------------------|---|
| • Dam Safety Permits | - Division of Water Resources |
| • Well Permits | - Division of Water Resources |
| • 401 Water Quality Certification | - NDEP |
| • 404 Permits | - U.S. Army Corps of Engineers |
| • Air Permits | - NDEP |
| • Health Permits | - Local Health or State Health Division |
| • Local Permits | - Local Government |

1-1

1-2

Comment Letter 6

E2015-082 (EA - Dry Lake SEZ - Playa Solar Project)

AGENCY COMMENTS: The Nevada Division of Environmental Protection (NDEP), Bureau of Safe Drinking Water (BSDW), understands that the proposed project will employ an average of 700 to 800 construction workers during the projected 18 month construction phase of the facility and will employ 5 full time employees during the operation of the facility. The BSDW further understands a new 250 gpm well will be drilled and above ground water storage tanks will be constructed to provide water for construction and operational purposes. Please be aware that if the proposed well provides drinking water to 25 or more construction workers for at least 60 days out of a year, the facility is required to become a permitted public drinking water system. Plans and specifications for the drinking water system will need to be submitted to the NDEP, BSDW for review and approval prior to construction of any drinking water system infrastructure. Questions or comments should be directed to Jim Balderson at 775-687-9517, or jbalderson@ndep.nv.gov.

6-1

6-2

Signature: Jim Balderson P.E.



Date: 01/08/2015

Jim Balderson P.E., Engineering Supervisor
Bureau of Safe Drinking Water
901 S. Stewart Street, Ste 4001
Carson City, NV 89701
775-687-9517
jbalderson@ndep.nv.gov



Christ, Nancy <nchrist@blm.gov>

State Agency Comments E2015-083 EA - Dry Lake SEZ - Dry Lake Solar Energy Center

1 message

Skip Canfield <scanfield@lands.nv.gov> Fri, Jan 9, 2015 at 9:17 AM
To: "nchrist@blm.gov" <nchrist@blm.gov>, "ghelseth@blm.gov" <ghelseth@blm.gov>
Cc: Skip Canfield <scanfield@lands.nv.gov>

The Nevada State Clearinghouse received the attached comments and the comments below regarding this EA;
<http://clearinghouse.nv.gov/public/Notice/2015/E2015-083.pdf>

Skip Canfield

Nevada State Clearinghouse
State Land Use Planning Agency

Nevada Division of State Lands
Department of Conservation and Natural Resources
901 South Stewart Street, Suite 5003
Carson City, NV 89701
775-684-2723
<http://clearinghouse.nv.gov>
www.lands.nv.gov

As part of the EA - Dry Lake SEZ - Dry Lake Solar Energy Center, please consider the cumulative visual impacts from development activities **(temporary and permanent)**

Utilize appropriate lighting:

- Utilize consistent lighting mitigation measures that follow "Dark Sky" lighting practices.

- Effective lighting should have screens that do not allow the bulb to shine up or out. All proposed lighting shall be located to avoid light pollution onto any adjacent lands as viewed from a distance. All lighting fixtures shall be hooded and shielded, face downward, located within soffits and directed on to the

2/3/2015

DEPARTMENT OF THE INTERIOR Mail - State Agency Comments E2015-083 EA - Dry Lake SEZ - Dry Lake Solar Energy Center

pertinent site only, and away from adjacent parcels or areas.

- A lighting plan should be submitted indicating the types of lighting and fixtures, the locations of fixtures, lumens of lighting, and the areas illuminated by the lighting plan.

- Any required FAA lighting should be consolidated and minimized wherever possible.

Utilize building materials, colors and site placement that are compatible with the natural environment:

- Utilize consistent mitigation measures that address logical placement of improvements and use of appropriate screening and structure colors. Existing utility corridors, roads and areas of disturbed land should be utilized wherever possible. Proliferation of new roads should be avoided.

- For example, the use of compatible paint colors on structures reduces the visual impacts of the built environment. Using screening, careful site placement, and cognitive use of earth-tone colors/materials that match the environment improve the user experience for others who might have different values than what is fostered by built environment activities.

- Federal agencies should require these mitigation measures as conditions of approval for all permanent and temporary applications.

Thank you.

Skip Canfield, State Land Use Planning Agency

 E2015-083 NDEP (EA - Dry Lake SEZ - Dry Lake Solar Energy Center).pdf
52K

DATE: December 17, 2014
TO: State Clearinghouse, Department of Administration
FROM: Nevada Division of Environmental Protection, Bureau of Water Pollution Control
SUBJECT: State Clearinghouse Comments for E2015-083 (EA - Dry Lake SEZ - Dry Lake Solar Energy Center)

The Nevada Division of Environmental Protection (NDEP), Bureau of Water Pollution Control (BWPC) has received the aforementioned State Clearinghouse item and offers the following comments:

The project may be subject to BWPC permitting. Permits are required for discharges to surface waters and groundwater's of the State (Nevada Administrative Code NAC 445A.228). BWPC permits include, but are not limited to, the following:

- Stormwater Industrial General Permit
- De Minimis Discharge General Permit
- Pesticide General Permit
- Drainage Well General Permit
- Temporary Permit for Discharges to Groundwater's of the State
- Working in Waters Permit
- Wastewater Discharge Permits
- Underground Injection Control Permits
- Onsite Sewage Disposal System Permits
- Holding Tank Permits

13-1

Please note that discharge permits must be issued from this Division before construction of any treatment works (Nevada Revised Statute 445A.585).

For more information on BWPC Permitting, please visit our website at:
<http://ndep.nv.gov/bwpc/index.htm>

Additionally, the applicant is responsible for all other permits that may be required, which may include, but not be limited to:

- | | |
|-----------------------------------|---|
| • Dam Safety Permits | - Division of Water Resources |
| • Well Permits | - Division of Water Resources |
| • 401 Water Quality Certification | - NDEP |
| • 404 Permits | - U.S. Army Corps of Engineers |
| • Air Permits | - NDEP |
| • Health Permits | - Local Health or State Health Division |
| • Local Permits | - Local Government |

13-2



Christ, Nancy <nchrist@blm.gov>

State Agency Comments E2015-083 ADDITIONAL Comments - EA - Dry Lake SEZ - Dry Lake Solar Energy Center

1 message

Skip Canfield <scanfield@lands.nv.gov> Mon, Jan 12, 2015 at 9:09 AM
To: "nchrist@blm.gov" <nchrist@blm.gov>, "ghelseth@blm.gov" <ghelseth@blm.gov>
Cc: Skip Canfield <scanfield@lands.nv.gov>

Nancy, received additional NDEP comments on this one after the fact.. -Skip

From: Skip Canfield
Sent: Friday, January 09, 2015 9:17 AM
To: 'nchrist@blm.gov'; 'ghelseth@blm.gov'
Cc: Skip Canfield
Subject: State Agency Comments E2015-083 EA - Dry Lake SEZ - Dry Lake Solar Energy Center

The Nevada State Clearinghouse received the attached comments and the comments below regarding this EA;
<http://clearinghouse.nv.gov/public/Notice/2015/E2015-083.pdf>

Skip Canfield

Nevada State Clearinghouse
State Land Use Planning Agency

Nevada Division of State Lands
Department of Conservation and Natural Resources
901 South Stewart Street, Suite 5003
Carson City, NV 89701
775-684-2723
<http://clearinghouse.nv.gov>
www.lands.nv.gov

As part of the EA - Dry Lake SEZ - Dry Lake Solar Energy Center, please consider the cumulative visual impacts from development activities **(temporary and permanent)**.

Utilize appropriate lighting:

- Utilize consistent lighting mitigation measures that follow "Dark Sky" lighting practices.

- Effective lighting should have screens that do not allow the bulb to shine up or out. All proposed lighting shall be located to avoid light pollution onto any adjacent lands as viewed from a distance. All lighting fixtures shall be hooded and shielded, face downward, located within soffits and directed on to the pertinent site only, and away from adjacent parcels or areas.

- A lighting plan should be submitted indicating the types of lighting and fixtures, the locations of fixtures, lumens of lighting, and the areas illuminated by the lighting plan.

- Any required FAA lighting should be consolidated and minimized wherever possible.

Utilize building materials, colors and site placement that are compatible with the natural environment:

- Utilize consistent mitigation measures that address logical placement of improvements and use of appropriate screening and structure colors. Existing utility corridors, roads and areas of disturbed land should be utilized wherever possible. Proliferation of new roads should be avoided.

- For example, the use of compatible paint colors on structures reduces the visual impacts of the built environment. Using screening, careful site placement, and cognitive use of earth-tone colors/materials that match the environment improve the user experience for others who might have different values than what is fostered by built environment activities.

- Federal agencies should require these mitigation measures as conditions of approval for all permanent and temporary applications.

Thank you.

Skip Canfield, State Land Use Planning Agency

 **E2015-083 NDEP2 (EA - Dry Lake SEZ - Dry Lake Solar Energy Center).pdf**
65K

E2015-083 (EA - Dry Lake SEZ - Dry Lake Solar Energy Center)

AGENCY COMMENTS: The Nevada Division of Environmental Protection (NDEP), Bureau of Safe Drinking Water (BSDW), understands that the proposed project will employ 400 workers during the anticipated 18 month construction phase and that a water storage tank /stand may be constructed for temporary water storage for dust control and other construction uses. Page 33 of the report states that "water would be brought in from off-site" and suggests it may be used for drinking. If the water is intended for human consumption, please contact Jim Balderson at 775-687-9517 or jbalderson@ndep.nv.gov prior to project start up. Please be aware that plans and specifications for the water storage tank and any other associated potable water system infrastructure will need to be submitted to and approved by the BSDW prior to construction.

14 - 1

14 - 2

Signature: Jim Balderson P.E.



Date: 01/09/2015

Jim Balderson P.E., Engineering Supervisor
Bureau of Safe Drinking Water
901 S. Stewart Street, Ste 4001
Carson City, NV 89701
775-687-9517
jbalderson@ndep.nv.gov



Christ, Nancy <nchrist@blm.gov>

State Agency Comments E2015-081 EA - Dry Lake SEZ - Harry Allen Solar Energy Center

1 message

Skip Canfield <scanfield@lands.nv.gov>

Fri, Jan 9, 2015 at 9:11 AM

To: "nchrist@blm.gov" <nchrist@blm.gov>, "ghelseth@blm.gov" <ghelseth@blm.gov>

Cc: Skip Canfield <scanfield@lands.nv.gov>

The Nevada State Clearinghouse received the attached comments and the comments below regarding this EA:

<http://clearinghouse.nv.gov/public/Notice/2015/E2015-081.pdf>

Skip Canfield

Nevada State Clearinghouse

State Land Use Planning Agency

Nevada Division of State Lands

Department of Conservation and Natural Resources

901 South Stewart Street, Suite 5003

Carson City, NV 89701

775-684-2723

<http://clearinghouse.nv.gov>

www.lands.nv.gov

As part of the EA - Dry Lake SEZ - Harry Allen Solar Energy Center, please consider the cumulative visual impacts from development activities **(temporary and permanent)**.

Utilize appropriate lighting:

- Utilize consistent lighting mitigation measures that follow "Dark Sky" lighting practices.

- Effective lighting should have screens that do not allow the bulb to shine up or out. All proposed lighting

2/3/2015

DEPARTMENT OF THE INTERIOR Mail - State Agency Comments E2015-081 EA - Dry Lake SEZ - Harry Allen Solar Energy Center

shall be located to avoid light pollution onto any adjacent lands as viewed from a distance. All lighting fixtures shall be hooded and shielded, face downward, located within soffits and directed on to the pertinent site only, and away from adjacent parcels or areas.

- A lighting plan should be submitted indicating the types of lighting and fixtures, the locations of fixtures, lumens of lighting, and the areas illuminated by the lighting plan.

- Any required FAA lighting should be consolidated and minimized wherever possible.

Utilize building materials, colors and site placement that are compatible with the natural environment:

- Utilize consistent mitigation measures that address logical placement of improvements and use of appropriate screening and structure colors. Existing utility corridors, roads and areas of disturbed land should be utilized wherever possible. Proliferation of new roads should be avoided.

- For example, the use of compatible paint colors on structures reduces the visual impacts of the built environment. Using screening, careful site placement, and cognitive use of earth-tone colors/materials that match the environment improve the user experience for others who might have different values than what is fostered by built environment activities.

- Federal agencies should require these mitigation measures as conditions of approval for all permanent and temporary applications.

Thank you.

Skip Canfield, State Land Use Planning Agency



E2015-081 NDEP (EA - Dry Lake SEZ - Harry Allen Solar Energy Center).pdf
52K

DATE: December 17, 2014
TO: State Clearinghouse, Department of Administration
FROM: Nevada Division of Environmental Protection, Bureau of Water Pollution Control
SUBJECT: State Clearinghouse Comments for E2015-081 (EA - Dry Lake SEZ - Harry Allen Solar Energy Center)

The Nevada Division of Environmental Protection (NDEP), Bureau of Water Pollution Control (BWPC) has received the aforementioned State Clearinghouse item and offers the following comments:

The project may be subject to BWPC permitting. Permits are required for discharges to surface waters and groundwater's of the State (Nevada Administrative Code NAC 445A.228). BWPC permits include, but are not limited to, the following:

- Stormwater Industrial General Permit
- De Minimis Discharge General Permit
- Pesticide General Permit
- Drainage Well General Permit
- Temporary Permit for Discharges to Groundwater's of the State
- Working in Waters Permit
- Wastewater Discharge Permits
- Underground Injection Control Permits
- Onsite Sewage Disposal System Permits
- Holding Tank Permits

16-1

Please note that discharge permits must be issued from this Division before construction of any treatment works (Nevada Revised Statute 445A.585).

For more information on BWPC Permitting, please visit our website at:
<http://ndep.nv.gov/bwpc/index.htm>.

Additionally, the applicant is responsible for all other permits that may be required, which may include, but not be limited to:

- | | |
|-----------------------------------|---|
| • Dam Safety Permits | - Division of Water Resources |
| • Well Permits | - Division of Water Resources |
| • 401 Water Quality Certification | - NDEP |
| • 404 Permits | - U.S. Army Corps of Engineers |
| • Air Permits | - NDEP |
| • Health Permits | - Local Health or State Health Division |
| • Local Permits | - Local Government |

16-2



United States Department of the Interior



BUREAU OF LAND MANAGEMENT
Southern Nevada District Office
Las Vegas Field Office
4701 N. Torrey Pines Drive
Las Vegas, Nevada 89130
<http://www.blm.gov/nv/st/en.html>

H
3/16/15
Let's
3/16/15

In Reply Refer To:
N-93306, N-93321, N-93337
2800 (NVS1000)

MAR 16 2015

FED-EX 773146569565

TRACKING NUMBER

D. Bradford Hardenbrook
Supervisory Habitat Biologist
Southern Region, Nevada Department of Wildlife
4747 Vegas Drive
Las Vegas, Nevada 89108

Dear Mr. Hardenbrook:

Thank you for your comments on the Environmental Assessments (EAs) prepared for the Dry Lake Solar Energy Zone projects. This letter responds to all substantive comments made in your letter, which is attached for reference.

The EAs were developed with raptor survey data provided by Nevada Department of Wildlife. The updated data mentioned in your comment response will be considered as part of the decision making process.

Sincerely,

Vanessa L. Hice
Assistant Field Manager
Division of Lands

Enclosures



Brian Sandoval
Governor

STATE OF NEVADA
DEPARTMENT OF WILDLIFE

1100 Valley Road
Reno, Nevada 89512
(775) 688-1500 • Fax (775) 688-1595

Comment Letter 2

TONY WASLEY
Director

PATRICK CATES
Deputy Director

JACK ROBB
Deputy Director

December 23, 2014

SAI#: E2015-081
E2015-082
E2015-083

Ms. Nancy Christ, Planning and Environmental Coordinator
BLM Southern Nevada District Office
4701 North Torrey Pines Drive
Las Vegas, NV 89130

Re: Environmental Assessments (EAs); Harry Allen Solar Energy Project, Playa Solar Project, and Dry Lake Solar Energy Center Project

Dear Ms. Christ:

The Nevada Department of Wildlife (NDOW) appreciates the opportunity to review the EAs. Through prior consultation we acknowledge and appreciate that our previous contributions have been incorporated into the present documentation. In addition to previous consultation, we note updated 2014 raptor surveys and related data are available.

2-1

We look to the success of the projects inclusive of implementing appropriate and reasonable actions for wildlife and wildlife-related values. For additional assistance, please contact Brad Hardenbrook, Supervisory Habitat Biologist, in the Las Vegas Office at (702) 486-5127 x3613 or bhrdnbrk@ndow.org. Thank you again for this input opportunity.

Sincerely,

D. Bradford Hardenbrook
Supervisory Habitat Biologist
Southern Region, Nevada Department of Wildlife
4747 Vegas Drive, Las Vegas, Nevada 89108
702.486.5127 x3600; 702.486.9857 FAX
bhrdnbrk@ndow.org

AJM: DBH

cc: Skip Canfield, Program Manager, Division of Lands
John Tull, Ph.D. Wildlife Staff Specialist, NDOW
NDOW, Files



United States Department of the Interior



BUREAU OF LAND MANAGEMENT
Southern Nevada District Office
Las Vegas Field Office
4701 N. Torrey Pines Drive
Las Vegas, Nevada 89130
<http://www.blm.gov/nv/st/en.html>

In Reply Refer To:
N-93306, N-93321, N-93337
2800 (NVS1000)

FED-EX

TRACKING NUMBER

Kevin Emmerich
Laura Cunningham
Basin and Range Watch
P.O. Box 70
Beatty, Nevada, 89003

Dear Mr. Emmerich and Ms. Cunningham:

Thank you for your comments on the Environmental Assessments (EAs) prepared for the Dry Lake Solar Energy Zone (SEZ) projects. This letter responds to all substantive comments made in your letter, which is attached for reference.

Streamlining NEPA

The Bureau of Land Management (BLM) is committed to the public process. As described in Section 4 of the EAs, extensive coordination, consultation, and public involvement specific to solar energy development in the SEZs have occurred throughout the Solar Programmatic Environmental Impact Statement (Solar PEIS) process, and throughout the Dry Lake SEZ process. As described in Section 1.1 of the subject EAs, the EAs are tiered to the Solar PEIS (BLM and DOE 2010; BLM and DOE 2012). Tiering allows for the preparation of an EA and Finding of No Significant Impact for a proposed action (also referred to as a “Finding of No *New* Significant Impact” (43 CFR 46.140(c)), so long as any significant effects of the individual action were analyzed in the Solar PEIS and any additional effects of the individual action not analyzed in the Solar PEIS are not significant.

Purpose and Need

The purpose and need statements of the subject EAs are consistent with BLM authorities and policies including Instruction Memorandum 2011-59, which reiterates and clarifies BLM National Environmental Policy Act (NEPA) policy regarding analyzing externally generated utility-scale renewable energy right-of-way applications.

Desert tortoise

A cumulative impacts analysis of the Northeastern Mohave Recovery Unit has been completed in the EAs. A single translocation plan for the Dry Lake SEZ projects is being developed with direction and input provided by the BLM, U.S. Fish and Wildlife Service (USFWS) and the Desert Tortoise Recovery Office (DTRO) through the Endangered Species Act Section 7 process. The plan will comply with all applicable guidance and policy, including Secretarial Order 3330. The translocation of desert tortoise will not result in exceeding density requirements as determined by the DTRO and will be consistent with the goals and objectives of the USFWS 2011 revised desert tortoise recovery plan. As described in Section 3.9.5.1.2 of the EA, and in compliance with USFWS guidelines, only tortoise determined to be healthy and asymptomatic will be translocated.

Avian kills and polarized glare

The discussion of impacts to migratory birds was not limited to southwestern willow flycatcher, Yuma clapper rail, and yellow-billed cuckoo. Impacts to Migratory Bird species, including those impacts related to the potential for solar projects to mimic a “lake effect,” are described in Section 3.8 of the EAs and in the Affected Resources Form attached to the Playa EA. In addition, required design features and mitigation measures are included in the EAs to address potential impacts to migratory birds including the preparation of project specific Bird and Bat Conservation Strategies (BBCSs) that will include monitoring and adaptive management components to assist in avoiding and minimizing impacts to migratory birds. The applicants are working closely with the BLM and the USFWS to finalize project specific BBCSs; including the development of acceptable monitoring protocols to be implemented. The BLM will make post construction project monitoring reports available upon request.

An EIS should be prepared for each project

A programmatic EIS has already been prepared, and only in the case of a new significant impact would project specific EISs be required. As described in Section 1.1 of the EAs, the EAs are tiered to the Solar PEIS (BLM and DOE 2010; BLM and DOE 2012). Tiering allows for the preparation of an EA and Finding of No Significant Impact for a proposed action (also referred to as a “Finding of No *New* Significant Impact” (43 CFR 46.140(c)), so long as any significant effects of the individual action were analyzed in the Solar PEIS and any additional effects of the individual action not analyzed in the Solar PEIS are not significant.

Air quality and dust

The potential for dust emissions to spread Coccidioidomycosis (valley fever) is described in Section 3.15.5.1 of the Playa EA. Errata sheets to add this information to the Harry Allen and Dry Lake EAs will be published with their respective Decision Records. The impacts of potential increased dust emissions would be minimized because each project would comply with the regulatory requirements of a dust control permit from the Clark County Department of Air

Quality and would operate under a Health and Safety Program as described in Section 2.2 of the EAs.

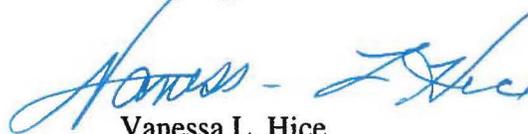
Project web page

A public project webpage will be prepared and maintained by the BLM or a third party during construction for each project in accordance with BLM guidelines for Environmental Compliance Management.

Visual resources

As described in Section 3.21 of the EAs, the projects have been found to conform to the BLM Visual Resource Management classes consistent with BLM visual resource contrast rating guidelines. In addition, all Key Observation Points were identified for the projects following BLM guidelines as described in Section 3.21 of the EAs. The impacts on areas surrounding the SEZ, including sensitive visual resource areas such as the Arrow Canyon Wilderness Area, are described in the Solar PEIS and have been incorporated by reference into the EAs.

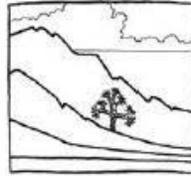
Sincerely,



Vanessa L. Hice
Assistant Field Manager
Division of Lands

Enclosures

Comment Letter 3



Basin and Range Watch

January 6th,

To: Nancy Christ

BLM Southern Nevada District Office
4701 North Torrey Pines Drive, Las Vegas, NV 89130

Email: nancy_christ@blm.gov

Subject: Comments on the Playa Solar Project (Dry Lake SEZ Parcels 2,3 and 4) NEPA# DOI-BLM-NV-S010-2014-0127-EA, Project # N-93306. Comments on the Dry Lake Solar Energy Center Project NEPA# DOI-BLM-NV-s010-2014-0126-EA , Project # N-93337 and the Harry Allen Solar Energy Center Project NEPA # DOI-BLM-NV-S010-2014-0125-EA Project # N – 93321.

Basin and Range Watch is a group of volunteers who live in the deserts of Nevada and California, working to stop the destruction of our desert homeland. Industrial renewable energy companies are seeking to develop millions of acres of unspoiled habitat in our region. Our goal is to identify the problems of energy sprawl and find solutions that will preserve our natural ecosystems and open spaces. We have visited the Dry Lake South Solar Energy Zone and adjacent wilderness areas. We are concerned about the direct and cumulative impacts that the project would have on the region.

3-1

Streamlining Away the Integrity of NEPA: The BLM has released 3 environmental Assessments for 3 solar projects on 6 parcels on over 3,000 acres in the Dry Lake Solar Energy Zone and appears to be gloating about the streamlined review in the press release. The process has been streamlined to the point where public participation has never been more difficult. You are reviewing a very large chunk of land for development with a very minimal time period. Ever worse, you held the public meeting just 2 days after the release of the EA's. Plus, BLM opened the 30 day comment period with the Christmas and New Year's holiday strategically situated right in the middle. This appears to be a streamlining strategy. To maintain the integrity of public participation for NEPA, BLM should extend the comment deadline for at least ten days to accommodate the potential people missed over the holidays.

3-2

The expedited, streamlined review of these three projects is due to the programmatic review provided in the *Final Programmatic Environmental Impact Statement for Solar Energy Development in Six Southwestern States (PEIS)*.

All of the three EA's state: *"This EA will assist the BLM in project planning and compliance with the National Environmental Policy Act (NEPA) and Federal Land Policy and Management Act of 1976*

Comment Letter 3

(FLPMA). The EA is tiered to the July 2012 Final Solar PEIS. Tiering allows for the preparation of an EA and Finding of No Significant Impact (FONSI) for the Proposed Action (also referred to as a "Finding of No New Significant Impact," 43 Code of Federal Regulations [CFR] 46.140(c)), so long as any significant effects of the individual action were analyzed in the Solar PEIS and any additional effects of the individual action not analyzed in the Solar PEIS are not significant."

↑
3-2
cont'd

The PEIS was a very incomplete document. We analyzed the 5 Solar Energy Zones in the state of Nevada and the two in California. Many of the issues that were raised by Stakeholders in the Dry Lake Mitigation workshops were simply resolved with adaptive management solutions which are not really solutions. Adaptive management is simply a way to streamline approval and has been over used by the Interior Department for energy projects in the past 5 years. While the ES's rely on Tiering as a form of incorporation by reference that refers to previous EAs or EISs, the PEIS would be the reference you are referring to and as we will point out, missed important factors regarding the environmental analysis of the Dry Lake Solar Energy Zone. Because the PEIS relies too much on Adaptive Management, we would like to request that each of these solar projects be reviewed by with an Environmental Impact Statement.

↑
3-3
↑
3-4

Purpose and Need: The Purpose and Need Statement justifies approval based on the President's Climate Action Plan and recent competitive lease auctions for parcels on the solar zone. The statement refers to regional mitigation workshops. But the statement makes a poor case for on-site mitigation to compensate for loss of resources. Off site mitigation would potentially enhance resources off site, but would do little to compensate for the damage caused by large scale industrial development. Retiring grazing allotments, building desert tortoise fences, hiring more law enforcement for resource protection and enhancing interpretive exhibits are all discussed mitigation strategies, but would do little to help the specific site targeted for development.

↑
3-5
↑
3-6

The Purpose and Need Statement fails to fully emphasize BLM's commitment to the National Environmental Policy Act. The mitigation requirements fall short of complying with the Endangered Species Act, the National Environmental Policy Act and Migratory Bird Treaty Act.

↑
3-7
↑
3-8

Due to incomplete data in the PEIS, the Purpose and Need Statements should be rewritten to accommodate a full range of conservation alternatives for the site. These should include distributed generation, brownfields and conservation alternatives.

↑
3-9

Desert Tortoise:

The Solar Energy Zone has a moderate to high density of desert tortoises and has been acknowledged by the EA's as being important for the connectivity of populations:

"The potential for both genetic and demographic connectivity occurs throughout the Dry Lake Valley, particularly within the Coyote Springs Critical Habitat Unit to the northwest of the Project area (BLM 2014b). A connectivity area is located on the northwestern boundary of the SEZ. The corridor is designated as desert tortoise Critical Habitat within the Coyote Springs Desert Wildlife Management Area (DWMA) (Clark County 2007), and is approximately 1.5 miles to 3 miles wide within the area of indirect effects, and averaging 6 miles across its full length."

↑
3-10
↓

Comment Letter 3

The USFWS has also preliminarily estimated that the Dry Lake SEZ may support up to 213 desert tortoises (BLM and DOE 2010).

In particular, the site of the Harry Allen Solar Energy Center has a high quality habitat for the desert tortoise as pictured below:



We would like to see a cumulative analysis created focusing on the impacts that large solar projects have had on the desert tortoise. So far we have seen over 150 removed from the Ivanpah Solar Project, 157 from the Moapa Solar Project and most recently 152 from the Silver State South Project. In spite of the transmission lines on the Dry Lake Solar Zone, the site supports a population of similar size.

Already, tortoises on the first two sites have experienced translocation mortality from hyperthermia and predation.

The below numbers from the California Department of Fish and Game indicate 50 percent mortality from translocation of desert tortoise.

- Tortoises handled for blood testing will have 5% mortality rate from handling.
- Tortoises translocated will have a 50% mortality rate.
- Resident Tortoises on the recipient site will also have a 50% mortality rate due to competition from translocated tortoises.

The Fish and Wildlife Service has stated that they do not support translocation as a proven mitigation strategy for big development projects.

We are also concerned that desert tortoise translocation could lead to the proliferation of Upper respiratory Tract disease in tortoise populations in Coyote Springs Valley.

The Dry Lake mitigation workshops concluded "Niche modeling, completed by the National Park Service for the Lake Mead National Recreation Area, suggests, under future climate change, high-quality desert tortoise habitat will remain in the Gold Butte ACEC while most of the adjacent desert tortoise habitat in the national recreation area will decline and disappear."

At the 2013 Desert Tortoise Symposium in Ontario, California, Dr. Barry Sinervo, an evolutionary biologist from UC Santa Cruz, presented research that suggested that the very development of solar projects in arid regions facing a warming future will cumulatively add to the "local" heat index. Sinervo states: "We find that solar farms accelerate predicted extinctions by 50 years. Therefore,

↑
3-10
cont'd

3-11

3-12
↓

Comment Letter 3

populations of Gopherus adjacent to solar farms may go extinct even before benefits of solar farms are realized (e.g., by 2080). In addition, the siting of solar projects in the Ivanpah Valley or near California City threatens the only habitat predicted to sustain population demography in 2080, effectively eliminating climate refuges for G. agassizii."

And:

"We emphasize that while prospects look bleak for Gopherus it can be rescued from climate-forced extinction with aggressive limits on CO2 input into the atmosphere. However, current and proposed solar projects will only hasten extinctions and likely eliminate the last remaining refuges for Gopherus from climate warming." <http://www.deserttortoise.org/symposium/2014Abstracts.pdf>

If the areas surrounding Gold Butte are indeed this vulnerable to climate change including the lands located on the solar zone, this is a bad time to be removing habitat identified valuable for desert tortoise connectivity.

At this point, desert tortoise populations have taken a large hit from utility scale solar projects in the Northeast Recovery Unit for the species. We believe streamlining environmental review for projects that will remove habitat for the species is a step backwards. An EIS should be prepared for each project to further evaluate the impacts to the species.

Avian Kills/Polarized Glare:

Large solar projects are creating a polarized glare or lake effect and are causing birds and insects to be deceived and collide with solar panels or simply dehydrate. The avian impacts are not fully understood, but everyone seems to agree that this problem was underestimated during the initial boom to fast track big solar on both public and private lands in the Southwestern US. The polarized "lake effect" is now well known from the Genesis, Desert Sunlight and Ivanpah Projects, all in California. Bird species that have collided (or dehydrated) with solar panels and heliostats include the Endangered Yuma clapper rail, peregrine falcon, American kestrel and a host of water birds. As far as we know, very few focused surveys are occurring in the state of Nevada. The Crescent Dunes power tower will have these surveys take place after the project goes on line this winter, but that is all we know about. For three California Solar Projects, we have been informed that over 160 species of birds have been recorded killed with thousands of individual mortalities.

The Environmental Assessments briefly raise the issue of polarized glare when talking about threatened and endangered birds. The only three species mentioned are the southwestern willow flycatcher, the Yuma clapper rail, and the yellow-billed cuckoo which are all special status or Endangered Species. The EA's claim that the "project area is not within a path that would connect any aquatic features", but overlook the fact that Lake mead National Recreation Area is about 30-40 miles to the south and the Pahrnagat National Wildlife Refuge is about 60-70 miles to the north. While the lake effect would not mimic riparian habitat, both the Southwest willow flycatcher and yellow billed cuckoo could be present at Pahrnagat National Wildlife Refuge and could pass over the solar projects. There are many water birds that could pass over the project using it as a path between Lake Mead and Pahrnagat which potentially could collide with solar panels. The effect may also increase risk of collision with transmission lines and electrocution. An EIS should be written for each document and the bird lists of both Pahrnagat National Wildlife Refuge and Lake Mead National Recreation Area should be included. The



3-12
cont'd



3-13



3-14

3-15

Comment Letter 3

below is a list of water birds from Pahranaagat National Wildlife Refuge, many of which could potentially hit the solar panels on these three projects.

LOONS	Sp	S	F	W
___ Common Loon		o	-	o o
GREBES	Sp	S	F	W
___ Pied-billed Grebe*		c	o	c c
___ Horned Grebe		r	-	r -
___ Eared Grebe		c	u	c c
___ Western Grebe*		c	u	c c
PELICANS & CORMORANTS	Sp	S	F	W
___ American White Pelican		u	r	u o
___ Double-crested Cormorant*		c	c	c u
BITTERNS, HERONS & EGRETS	Sp	S	F	W
___ American Bittern*		u	o	u o
___ Great Blue Heron*		c	c	c c
___ Great Egret		o	o	u -
___ Snowy Egret		u	u	c o
___ Cattle Egret		-	-	r r
___ Green Heron		r	-	r -
___ Black-crowned Night-Heron*			u	u u o
IBIS	Sp	S	F	W
___ White-faced Ibis		o	u	u -
WATERFOWL	Sp	S	F	W
___ Tundra Swan		u	-	u c
___ Greater White-fronted Goose			r	- r r
___ Snow Goose		r	-	o u
___ Ross' Goose		r	-	- -
___ Canada Goose*		c	c	c c
___ Green-winged Teal*		c	o	u c
___ Mallard*	u	u	c	c
___ Northern Pintail*		u	u	c c
___ Blue-winged Teal		o	-	o o
___ Cinnamon Teal*		c	o	c u
___ Northern Shoveler*		c	o	u u
___ Gadwall*	c	u	c	u

3-15
cont'd

Comment Letter 3

- ___ American Wigeon
- ___ Canvasback
- ___ Redhead*
- ___ Ring-necked Duck
- ___ Greater Scaup
- ___ Lesser Scaup
- ___ Common Goldeneye
- ___ Bufflehead
- ___ Hooded Merganser
- ___ Common Merganser
- ___ Red-breasted Merganser

u o c c
 c r c c
 c u c u
 u r u r
 r - r -
 o - o o
 o o - o o
 u - u o
 r - r o
 u - o c
 o - o o

___ Ruddy Duck*

<http://www.npwrc.usgs.gov/resource/birds/chekbird/r1/pahran.htm>

↑
3-15
cont'd

Executive Order 13186 (Responsibilities of Federal Agencies to Protect Migratory Birds, signed in January 2001) requires the BLM to evaluate the effects of federal actions on migratory birds. The lack of information regarding polarized glare bird collisions with solar panels in both the PEIS and the three Environmental Assessments show that BLM failed to adequately evaluate the effects of these proposed Federal actions on migratory birds. This puts the BLM in violation of the Migratory Bird Treaty Act. The cumulative impacts of polarized glare collision combined with electrocution and habitat loss increase threats to avian fauna. An EIS should be prepared for each project so these impacts can be better evaluated.

↑
3-16

At this point, those California projects are among the few that are reporting findings of dead birds at their sites. And although we have nothing in writing to confirm this, we have now been told by a few biologists working on these projects that they are discouraged by the developers from reporting incidental finds.

↑
3-17

In 2008, there was a very strong localized rain storm that filled up Silver Lake, located in the Silurian Valley, California for about 2 months. We do have a photo of the temporary lake below. We also saw white pelicans on the lake but do not have a photo of the birds.



↑
3-18
↓

Comment Letter 3

^Silver Lake just north of Baker, California and adjacent to the project site after strong rains in 2008.



^Lake effect from the Copper Mountain Solar facility south of Boulder City, Nevada.

If a real, ephemeral lake can attract white pelicans to the Silurian Valley, than there should be concern that an artificial lake would attract birds to new "lakes" between Lake Mead and the Pahrnagat National Wildlife Refuge.

Recently, the US Fish and Wildlife Service released a report called "*Avian Mortality at Solar Energy Facilities in Southern California: A Preliminary Analysis*" Rebecca A. Kagan, Tabitha C. Viner, Pepper W. Trail, and Edgard O. Espinoza National Fish and Wildlife Forensics Laboratory

The report has enough information to tell us that incidental reporting of bird mortality from solar projects does not really give the complete numbers.

The report finds that "*Trauma was the leading cause of death documented for remains at the Desert Sunlight (First Solar project) and Genesis sites.*"

The report also states "*These solar facilities appear to represent "equal-opportunity" hazards for the bird species that encounter them. The remains of 71 species were identified, representing a broad range of ecological types. In body size, these ranged from hummingbirds to pelicans; in ecological type from strictly aerial feeders (swallows) to strictly aquatic feeders (grebes) to ground feeders (roadrunners) to raptors (hawks and owls). The species identified were equally divided among resident and non-resident species, and nocturnal as well as diurnal species were represented.*"

The two main identified cause of mortality from photovoltaic projects are trauma and predation. The report details the mortality at the 4,500 acre Desert Sunlight photovoltaic site which was built by First Solar;

"Sixty-one birds from 33 separate species were represented from Desert Sunlight. Due to desiccation and scavenging, a definitive cause of death could not be established for 22 of the 61 birds. Blunt force impact trauma was determined to have been the cause of death for 19 Desert Sunlight birds including two Western Grebes (Aechmophorus occidentalis) and one each of 16 other species. Impact (blunt force) trauma is diagnosed by the presence of fractures and internal and/or external contusions. In particular, bruising around the legs, wings and chest are consistent with crash-landings while fractures of the head and/or neck are consistent with high-velocity, frontal impact (such as may result from impacting a mirror).

3-18
cont'd

3-19

Comment Letter 3

Predation was the immediate cause of death for 15 birds. Lesions supporting the finding of predation included decapitation or missing parts of the body with associated hemorrhage (9/15), and lacerations of the skin and pectoral muscles. Eight of the predated birds from Desert Sunlight were grebes, which are unable to easily take off from land. This suggests a link between predation and stranding and/or impact resulting from confusion of the solar panels with water.

Challenges to data collection included rapid degradation of carcass quality hindering cause of death and species determination; large facilities which are difficult to efficiently search for carcasses; vegetation and panels obscuring ground visibility; carcass loss due to scavenging; and inconsistent documentation of carcass history. Searcher efficiency has been shown to have varying influences on carcass recovery with anywhere from 30% to 90% detection of small birds achieved in studies done at wind plants (Erickson et al., 2005). Scavengers may also remove substantial numbers of carcasses. In studies done on agricultural fields, up to 90% of small bird carcasses were lost within 24 hours (Balcomb, 1986; Wobeser and Wobeser, 1992). OLE staff observed apparently resident ravens at the Ivanpah power tower. Ravens are efficient scavengers, and could remove large numbers of small bird carcasses from the tower vicinity.

(Erickson, W. P., G. D. Johnson, and D. P. Young, Jr., 2005, A summary and comparison of bird mortality from anthropogenic causes with an emphasis on collisions: U S Forest Service General Technical Report PSW, v. 191, p. 1029-1042; Balcomb, R., 1986, Songbird carcasses disappear rapidly from agricultural fields: Auk, v. 103, p. 817-820; Wobeser, G., and A. G. Wobeser, 1992, Carcass disappearance and estimation of mortality in a simulated die-off of small birds: Journal of Wildlife Diseases, v. 28, p. 548-554.) "

The report concludes:

"Given these variables it is difficult to know the true scope of avian mortality at these facilities. The numbers of dead birds are likely underrepresented, perhaps vastly so. Observational and statistical studies to account for carcass loss may help us to gain a better sense of how many birds are being killed."

And the photovoltaic projects have insect impacts: "Light and noise pollution associated with electrical power plants can be problematic for wildlife. Polarized light pollution from PV panels can attract aquatic insects and other species that mistake the panels for bodies of water, potentially leading to population decline or even local extinction of some organisms (Horvath et al. 2010). Nighttime lighting for security or other reasons may negatively impact a variety of Mojave Desert species, many of which have developed nocturnal behavior to escape the daytime heat of the desert. (Mojave Desert Ecoregional Assessment September 2010, The Nature Conservancy of California 201 Mission Street, 4th Floor San Francisco, CA 94105) p. 50"

The only real organized surveys for avian mortality are taking place at the Ivanpah Solar Project with only a 20 percent coverage. They have now discovered 3 kit fox dens in the project site as well as active raven nests. It is likely that scavengers are removing birds before they can be counted. The rest of the finds are simply incidental which may indicate that mortality numbers are far greater than being reported.



3-19
cont'd

3-20

Comment Letter 3

The approved Blythe Solar Power Project would be a 4,000 acre PV facility near the Colorado River near Blythe, California also built by First Solar.

At a hearing for the California Energy Commission, there were interveners. LABORERS' INTERNATIONAL UNION OF NORTH AMERICA had biologist Shawn Smallwood estimate a number of birds that would be killed for one of the interveners to the project. He estimated that over 2,100 birds would be killed per year by the 4,000 acre Blythe Solar Power Project. The estimate can be viewed here:

http://docketpublic.energy.ca.gov/PublicDocuments/09-AFC-06C/TN201152_20131108T155000_Testimony_of_K_Shawn_Smallwood_PhD.pdf

We would like to suggest that the agencies require avian monitoring on these projects and mitigation. Single axis units can be potentially designed to be turned upside down which could be helpful in the migration times.

The US Fish and Wildlife Avian Mortality Report makes the following recommendations for these big projects:

- For at least two years (and in addition to planned monitoring protocol), conduct daily surveys for birds (at all three facilities)
- Use dogs for monitoring surveys to detect dead and injured birds that have hidden themselves in the brush, both inside and outside the perimeter of the facility
- To decrease removal of carcasses, implement appropriate raven deterrent actions
- Retrofit visual cues to existing panels at all three facilities and incorporate into new panel design. These cues should include UV-reflective or solid, contrasting bands spaced no further than 28 cm from each other.

Air Quality/Dust:

Dust control in hot, arid climates is very problematic. The removal of well established vegetation, biological soil crusts and centuries old desert pavement creates opportunities for dust to be airborne every time the wind blows. Not only does fugitive dust create problems for visual and biological resources, it creates issues for public health as well.

We are seeing this problem with several of the recently approved, prioritized large energy projects. The Department of Interior has been so effective in streamlining the environmental review of these projects that they have created a perfect storm of compromised air quality.

The EA's fail to fully address the potential of fugitive dust emissions to spread Coccidioidomycosis (Valley Fever) to nearby communities. The Dry Lake Zone is located about 10miles from the city of Las Vegas, Nevada.

There have been 368 cases of Valley Fever confirmed in Clark County, Nevada from 1992 to 2003:
<http://www.lasvegassun.com/news/2003/aug/11/valley-fever-hidden-threat-in-wind/>

Epidemiologists investigated an outbreak of valley fever that had sickened 28 workers at two large solar-

3-21

3-22

3-23

3-24

Comment Letter 3

power construction sites in San Luis Obispo County: <http://articles.latimes.com/2013/may/01/local/la-me-ln-valley-fever-solar-sites-20130501>
One of these projects was called Topaz, built by First Solar.

3-24
cont'd

We would like to request the following mitigation measures for air quality on the Silver State South Project:

1. Stop all construction when wind speeds reach ten miles per hour or more.
2. Limit construction hours by half when temperatures climb above 100 degrees.
3. Hold developer accountable for their air quality violations. Give them steep fines until they can get their act together. The Right of Way/Lease Grant issued for this project states: *"Failure of the holder to comply with any diligent development provision of this instrument may cause the Authorized Officer to suspend or terminate the authorization in accordance with 43 CFR 2807.17 -2807.19, and use the posted Performance and Reclamation bond to cover the costs for removal of any equipment and/or facilities. The Authorized Officer will provide the holder a written Notice of Failure to Ensure Diligent Development prior to the suspension or termination of the authorization. The holder will be provided an opportunity to correct any noncompliance in accordance with 43 CFR 2807.18 or submit a written request to the Authorized Officer for an extension of the time lines in the approved Plan of Development."*
4. Provide a web page where the general public can monitor disciplinary actions taken by BLM to insure that developers are in compliance with conditions of mitigation. This web site should have a place for the public to report violations.

3-25

Visual Resources:

Lands on the project site are designated VRM Class IV which is the lowest possible classification. The BLM however, has failed to evaluate all of the potential visual impacts. For example, there are no KOP simulations from the Arrow Canyon Range which is in the ACEC less than a mile north of the project.



^ Dry Lake Valley seen from the Arrow Canyon Range. Solar projects would be highly visible from here.

3-26

Large solar projects can remove up to 5 square miles of habitat. Due to the large project size, lands of all VRM classifications will be cumulatively impacted. The project will be visible from lands that are miles outside of the ROW.

3-27

Comment Letter 3

The size of the project is large and will have the potential to impact different VRM zones of different classes. The project site should be evaluated for impacts on area with all visual classes.

↑ 3-27
|
| cont'd

Adaptive Management Failures:

The following is a list of just some of the problems and failures that have arisen from streamlined, fast-tracked energy projects under the management of the Interior Department on BLM land in the last 5 years. These are only just a few examples.

1. Ivanpah Solar Project, California: About 6 times as many desert tortoises were removed from the site than both the BLM and the developer predicted.
2. Genesis Solar Project, California: Due to streamlined permitting, inadequate archeological surveys were conducted for this project and an entire archeological village was destroyed by the developers along the Ford Dry Lake.
3. Ocotillo Express Wind Project. In May, 2013, one of the turbines threw a blade on a public access road. Flaws were discovered in the design of the turbines and the entire project was curtailed for months while repairs could be made.
4. Desert Sunlight Project, California: In fall of 2014, the owner of the project asked to extract an additional 50 acre feet of water from the local aquifer which has been determined to be fossil water.
5. Ivanpah Solar Project: Owner NRG is burning over twice the natural gas they originally said they would due to the fact that the project is only running on a small part of predicted capacity.
6. Desert Sunlight, Ivanpah, Genesis (and several more) are documenting over 160 species of birds that have been killed at the projects with thousands of individuals.

3-28

Conclusion:

We would like to comment on more of the missed details of these three EA's but BLM simply did not provide us with enough time to do so. Lack of known mitigation and use of the Adaptive Management concept is a frivolous way for the BLM to conduct business on public lands. Streamlining review of very large projects like this will set future precedents and will be used for many other public land uses besides renewable energy. By chipping away at NEPA, BLM is taking the public ownership out of public lands and simply serving the well funded developers. Again, we would like to request that the BLM review these three very large solar projects with full Environmental Impact Statements.

3-29

3-30

3-31

Thank you,

Kevin Emmerich
Laura Cunningham
Basin and Range Watch
P.O. Box 70
Beatty, Nevada 89003

January 22nd, 2015

To: Nancy Christ, Greg Helseth

BLM Southern Nevada District Office 4701 North Torrey Pines Drive, Las Vegas, NV 89130

Email: nancy_christ@blm.gov, ghelseth@blm.gov

Subject: Additional comments based on new information unavailable at the time for the comment period for the Playa Solar Project (Dry Lake SEZ Parcels 2,3 and 4) NEPA# DOI-BLM-NV-S010-2014-0127-EA, Project # N-93306. Comments on the Dry Lake Solar Energy Center Project NEPA# DOI-BLM-NV-S010-2014-0126-EA , Project # N-93337 and the Harry Allen Solar Energy Center Project NEPA # DOI-BLM-NV-S010-2014-0125-EA Project # N – 93321.

Basin and Range Watch submitted comments on the above listed Environmental Assessments for the three solar projects in the Dry Lake Solar Energy Zone. We have acquired some information from the US Fish and Wildlife Service that was recently obtained through a Freedom of Information Act Request concerning the geographic distribution of the Federally Endangered Yuma clapper rail, (*Rallus longirostris yumanensis*). We believe was missed by the EA's and would like the BLM to consider this in these follow up comments.

All three EA's state "The southwestern willow flycatcher, the Yuma clapper rail, and the yellow-billed cuckoo are riparian birds that require surface water, and no riparian habitat occurs in or near the project area. The project area is not within a path that would connect any aquatic features and the closest documented records for these species are 20 and 25 miles away (32 and 40 km away), respectively (personal communication, Susan Cooper, USFWS Las Vegas, and Melanie Cota, BLM Southern Nevada District, September 29, 2014)."

Dead Yuma clapper rails have been found at two California solar projects and a likely cause would be that the birds were deceived by the polarized lake effect, collided with the solar panels and died from blunt trauma.

As we pointed out in our first comments, the three EA's for the Dry Lake Solar Projects have failed to recognize a potential flyway between Lake Mead/Muddy River and the Pahrangat National Wildlife Refuge, 70 miles to the north. The shiny polarized effect of the panels of the Dry Lake Solar Energy Projects could easily produce this lake effect and potentially injure or kill a YCR.

We have attached a report and a map from the Fish and Wildlife Service that document Yuma clapper rail presence at Pahrangat National Wildlife Refuge. Since these documents were not available before the comment deadline ended for the Dry Lake Solar EA's, we believe you should add this information to our comments.

Thank you for your consideration,

Kevin Emmerich

Laura Cunningham

Basin and Range Watch

P.O. Box 70

To date, we know of the following clapper rail records documenting long-distance dispersal (most or all presumably *yumanensis*, but see Lake Tamarisk below), all at: L/SPECIES/Birds/Yuma Clapper Rail. Total – at least 12 sites/records (± listed chronologically):

Harper Dry Lake, CA—4-7 June 1977 (*American Birds* 31: 1189; Henderson, Phil. 1977. *A survey of rail composition in six desert localities, southeast California, June 1977*. U.S.D.I., Bureau of Land Management, Calif. Desert Plan Program, Riverside, Calif. Report Purchase Order CA-060-PH7-1767)

East Cronese Lake, CA—17 May 1978 (*American Birds* 33: 218)

Tucson, AZ—27 September 1990, downtown, individual found wandering a paved street in Tucson, captured, died and repositied at U of AZ museum [*American Birds* 45(1): 136]; Jul 19, 2013 email from Mark Stevenson to Gjon Hazard].

Lake Tamarisk, Desert Center, CA—May 1992 [*American Birds* 46(3): 480 and 501]; G. McCaskie thought the bird was *levipes* based on cinnamon plumage

Quitobaquito Spring, AZ—14-18 June 1996 (*Field Notes* 50(5): 978; Laura Dickson, two NPS Field Observation Forms)

Ash Meadows NWR, NV—first found in 1999, and then breeding since at least 2007 [Garnett et al. 2004. *Great Basin Birds* (7): 6-15; R. Fridell 2010. *American Birds* 63(3): 478; NWR report]

Willcox, AZ—Twin Lakes Golf Course pond, May 18, 2002 [per Mark Stevenson email dated 18 May 2002, correction to erroneous date publ. in: *North American Birds* 56(3): 338]

Roosevelt Lake, AZ—2002 [Service 2003. Biological and Conference Opinion for Issuance of a Section 10(a)(1)(B) Permit to Salt River Project for Operation of Roosevelt Lake. USFWS Arizona Ecological Services Office, Phoenix, Arizona.]

Desert Sunlight Solar Project, Desert Center, CA—May 8, 2013 (incidental take report by Ironwood Consulting, Inc., dated [redacted])

Pahrnagat NWR, NV—1 June 2013 [June 27, 2013 email from Theresa Hyde to Joe Kahl (USBR) describes sound recordings; <http://ebird.org/ebird/view/checklist?subID=S14354850>]

Greater Phoenix, AZ—various localities along the Gila and Salt Rivers, dates; July 23, 2013 email from Lesley Fitzpatrick to Gjon Hazard. Birds appear to be nesting after previous dispersal and colonization event(s).

Picacho Reservoir, AZ— See Monson and Philips 1981; Rosenberg and Stevenson 2002; Wise-Gervais 2005. This site is now dry and, thus, no longer supports rails.



United States Department of the Interior



BUREAU OF LAND MANAGEMENT
Southern Nevada District Office
Las Vegas Field Office
4701 N. Torrey Pines Drive
Las Vegas, Nevada 89130
<http://www.blm.gov/nv/st/en.html>

In Reply Refer To:
N-93306
2800 (NVS1000)

FED-EXTRACKING NUMBER

Edward L. LaRue, Jr., M.S.
Desert Tortoise Council, Ecosystems Advisory Committee, Chairperson
4654 East Avenue S #257B
Palmdale, CA 93552

Dear Mr. LaRue:

Thank you for your comments on the Environmental Assessment (EA) prepared for the Playa Solar Project proposed on Parcels 2, 3, and 4 of the Dry Lake Solar Energy Zone (SEZ). This letter responds to all substantive comments made in your letter, which is attached for reference.

Response to Comment 1: The Bureau of Land Management (BLM) is responding to your comments in this letter and does not intend to republish or reissue a new EA. This approach is consistent with Section 6.9.2 of BLM NEPA Handbook H-1790-1 (2008), which states (with italics added): "If a substantive and timely comment does not lead to changes in the EA or decision, you may reply directly to the commenter, and we recommend that you document the reply in *either* the EA *or* the decision record." The decision record for this project will include a copy of your letter as well as this reply.

Response to Comment 2: The BLM is coordinating with the U.S. Geological Survey Nevada Water Science Center as part of a future study to understand the effects of dust palliatives in stormwater runoff on the health of desert tortoise. If dust palliatives are used on the project site, then the applicant would contribute funds to that study. Study results will be publicly available upon completion.

Response to Comment 3: Management plans, including the desert tortoise translocation plan, are stipulations of the right-of-way grant. A single desert tortoise translocation plan is being prepared for the three projects proposed within the Dry Lake SEZ with direction and input provided by the BLM, U.S. Fish and Wildlife Service (USFWS), and the Desert Tortoise Recovery Office (DTRO) through the Endangered Species Act Section 7 process. Once finalized, the plan will be provided upon request. Section 3.9 of the EA summarizes desert tortoise survey work that already has occurred on the project site (EA, p. 3.9-1 et seq.) and analyzes potential impacts of translocation (EA, p. 3.9-6 et seq.). Survey of the approximately

10,000 acre translocation area was divided among the three applicants in the Dry Lake SEZ; the data will be combined and reflected in the Desert Tortoise Translocation Plan for the SEZ. Desert tortoise translocation monitoring requirements will be provided in the plan now under development.

The BLM understands your concerns with the translocation of desert tortoise and the desire for durable protections to ensure desert tortoise are not subject to additional translocations. Any future land use applications would consider the previous translocation of desert tortoise and require a biological opinion (BO). Additional utility-scale solar development within the translocation areas is already limited by the Las Vegas Resource Management Plan (RMP) as amended by the Record of Decision for the Solar PEIS, which designates the translocation area as either closed to solar development or subject to the variance process.

Response to Comments 4 and 8: Direct effects “are caused by the action and occur at the same time and place” (40 CFR 1508.8(a)). Indirect effects “are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable.” (40 CFR 1508.8(b)). As explained in Section 6.8.2 of BLM NEPA Handbook H-1790-1 (2008), “The value in requiring analysis of both direct and indirect effects is to make certain that no effects are overlooked. Because it can be difficult to distinguish between direct and indirect effects, you do not have to differentiate between the terms.... Effects are weighted the same; you do not consider an indirect effect less important than a direct effect in the analysis.” The EA analyzes and describes the project’s potential direct and indirect effects on desert tortoise in Section 3.9 (EA, p. 3.9-1 et seq.), desert tortoise habitat in Section 3.10 (see, e.g., p. 3.10-7), and the Coyote Springs Area of Critical Environmental Concern (ACEC) (which is designated as Critical Habitat for desert tortoise and is being managed by the BLM for the recovery of the species) in Section 3.4 (p. 3.4-1 et seq.). Because direct and indirect effects are weighted the same, disagreement about the characterization of a potential effect as direct or indirect does not affect the adequacy of the EA.

Response to Comment 5: The Coyote Springs ACEC is 1,500 acres of the larger (10,000 acre) translocation site. The Dry Lake SEZ Desert Tortoise Translocation Plan will identify necessary fencing to secure the translocation area. All desert tortoise within the potential area of translocation whether within or outside of the ACEC have received health assessments. Additional health assessments will be conducted prior to translocation as necessary consistent with a USFWS-approved Desert Tortoise Translocation Plan for the Dry Lake SEZ. It will assess and consider population densities, existing threats, and evidence of disease for all areas proposed for translocation.

Response to Comment 6: The potential impact to Critical Habitat within the Coyote Springs ACEC related to desert tortoise translocation was described in the Playa Solar EA (see p.3.9-6 et seq.). The BLM also is consulting on this impact under Endangered Species Act (ESA) Section 7 for the project. While this impact may not have been contemplated fully under the Solar PEIS, it does not represent a new significant impact as shown by the analysis in the EA. A single desert tortoise translocation plan is being prepared for the three projects proposed within the Dry Lake SEZ with direction and input provided by the BLM, USFWS, and the Desert Tortoise Recovery Office. The plan will assess and consider population densities, existing threats, and evidence of disease for all areas proposed for translocation.

Response to Comment 7: The BLM would like to correct the Table 3.9-1 on page 3.9-2 of the Playa Solar EA. The column titled “Total” is reflective of all project areas and translocation areas surveyed. For the purposes of the EA only the “Project Area” column is relevant. Survey results for the translocation area will be combined and reflected in the Dry Lake SEZ Desert Tortoise Translocation Plan. The acreage differences noted in the comment reflect the fact that the survey of the project area for desert tortoise included a buffer around the 1,700 acre development footprint as required by the BLM and USFWS.

Response to Comment 8: See response to Comment 4.

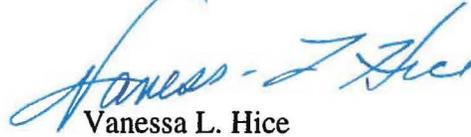
Response to Comment 9: Presence/absence surveys for desert tortoise have been conducted on the project site and the proposed translocation recipient sites according to USFWS accepted protocol. An experienced, permitted biologist conducted a health assessment of each tortoise that was located during the presence/absence surveys in accordance with guidelines in USFWS’s 2013 Health Assessment Procedures for the Mojave Desert Tortoise (*Gopherus agassizii*): A Handbook Pertinent to Translocation. Assessments on the project site and the translocation recipient sites included a visual inspection of the animal’s condition, body size and weight measurements, and collection of a blood sample and oral swab for disease analysis. The results of the health assessment will be included in the Dry Lake SEZ Desert Tortoise Translocation Plan.

Response to Comment 10: The BLM recognizes your concerns with additional specificity and clarity regarding the final mitigation strategy that will be utilized to offset unavoidable impacts from development in the SEZ. It is BLM’s intent to collect the \$1,836 per acre fee identified in the Regional Mitigation Strategy for the Dry Lake Solar Energy Zone and to document that commitment in the Decision Records (DRs). The fee will be collected prior to BLM issuing a notice to proceed. The BLM intends to hold a workshop within 90 days of signing the DR(s) to gain your input on how to implement the mitigation strategy. Any necessary NEPA analysis on mitigation measures will be completed as soon as practicable and we look forward to your input during that NEPA process as well. As disclosed in the EAs, BLM’s selection of any compensatory mitigation measures will be consistent with the procedures described by IM 2013-142 (June 13, 2013) and draft Manual Section 1794, “Regional Mitigation,” which includes guidance for management of funds collected as part of the restoration, acquisition, or preservation portion of the total mitigation fee by an independent third party (Section 1.5 of the EAs).

Response to Comment 11: See response to Comment 3 regarding the release of the translocation plan prior to being finalized. The Dry Lake SEZ Desert Tortoise Translocation Plan will follow all applicable guidance and standards and will be approved by the USFWS.

Regarding your request to be considered an Affected Party: The Desert Tortoise Council is on the BLM mailing list and will continue to receive notice of all projects in the Southern Nevada District that could result in impacts to desert tortoise.

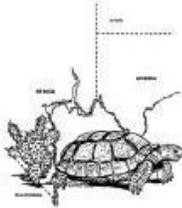
Sincerely,



Vanessa L. Hice
Assistant Field Manager
Division of Lands

Enclosure

Comment Letter 4



DESERT TORTOISE COUNCIL

4654 East Avenue S #257B

Palmdale, California 93552

www.deserttortoise.org

ed.larue@verizon.net

7 January 2015

Via email only to: nancy_christ@blm.gov

Ms. Nancy Christ, Bureau of Land Management

RE: Playa Solar Project (Dry Lake SEZ Parcels 2, 3, & 4) Environmental Assessment (NEPA#: DOI-BLM-NV-S010-2014-0127-EA; Case file #: N-93306)

The Desert Tortoise Council (Council) is a private, non-profit organization comprised of hundreds of professionals and laypersons who share a common concern for wild desert tortoises and a commitment to advancing the public's understanding of this species. Established in 1975 to promote conservation of tortoises in the deserts of the southwestern United States and Mexico, the Council regularly provides information to individuals, organizations and regulatory agencies on matters potentially affecting the desert tortoise within its historical range.

We appreciate the opportunity to comment on this Environmental Assessment (EA) for the Playa Solar Project (Dry Lake SEZ Parcels 2, 3, & 4), File Number: N-93306, by Playa Solar, LLC (First Solar). In the following comments, we have excerpted pertinent portions of the EA, which are shown in *italics*, and followed by our comments.

1. Page 1-1, Section 1.1: In our experience, the Bureau of Land Management (BLM) typically releases a *draft* EA first and a *final* EA later that incorporates comments and makes necessary modifications. Should we consider this EA to be draft or final? Will there be a subsequent (final) EA that incorporates changes that result from these and other comments submitted to the BLM? 4-1

2. Page 2-18, Section 2.2.13.9: With regards to the following statement, "*If palliatives are used, the Applicant would contribute funds to a BLM study to understand the effects of dust palliatives on the health of desert tortoises.*" is this BLM study already underway or would these funds be used to initiate that study? In either case, the Council would appreciate receiving a copy of the study when it becomes available. 4-2

3. Page 2-28, Table 2-7: We see in this table that a translocation plan is supposed to be prepared for the BLM. Has this plan already been written? In the absence of the plan, we feel that the Council cannot adequately assess the proposed displacement of tortoises, particularly as it would impact critical habitat in the Coyote Springs ACEC. What is the estimated population of tortoises inside the translocation area and how may they be affected? How does the proponent plan to determine (monitor) the success or failure of translocation within tortoise critical habitat? Will those portions of the translocation area outside the ACEC be subject to development that may affect the translocated tortoises? We are unable to answer any of these questions with the information included in the EA and in the absence of the translocation plan. 4-3

Comment Letter 4

4. Page 3.4-2, Section 3.4.5.1: We disagree with the following statement: *“the Proposed Action would not cause direct effects to specially designated areas including ACECs,”* as placing tortoises into this critical habitat area will directly impact the recipient population. We note that the companion EAs for the Harry Allen Solar Energy Center and Dry Lake Solar Energy Center both identify impacts to recipient populations of tortoises, particularly within the Coyote Springs ACEC, as being direct, so it is not clear why this EA fails to do so. 4-4

5. Page 3.4-2, Section 3.4.5.1: In the last paragraph on this page, you indicate that *“Approximately 1,500 acres of the proposed desert tortoise translocation area identified by the BLM and the USFWS occurs partially within the southern end of the Coyote Springs ACEC.”* How much of the proposed translocation area is outside the ACEC? Did BLM consider that displaced tortoises may occupy more than a two-square-mile area and, unless the translocation area is fenced, not be contained within the intended 1,500-acre area? Is deposition of displaced tortoises into the Coyote Springs ACEC consistent with goals and objectives of the USFWS 2011 revised desert tortoise recovery plan? Was translocation of tortoises into ACECs envisioned and analyzed in the Final Solar PEIS? Has the population to be affected within this ACEC been studied to determine population densities, existing threats, evidence of disease, etc.? 4-5

6. Page 3.4-3, Section 3.4.5.1: With regards to the following statement *“Because no new significant impacts related to specially designated areas would occur as a result of the Proposed Action, no mitigation measures are recommended,”* are we to assume that the EA does not consider the introduction of tortoises into critical habitat within the Coyote Springs ACEC to be a significant impact? We note that the Solar PEIS did not envision displaced tortoises to be translocated into critical habitat, so that it is the burden of the EA to assess impacts associated with this action. Where are those impacts fully analyzed in the EA? For example, how many tortoises occur on the 1,500-acre translocation area and how much of that is critical habitat? Aren't the measures identified in the translocation plan considered mitigation? 4-6

7. Page 3.9-2, Table 3.9-1: We note in Table 3.9-1 that the Project area is identified as 2,150 acres although elsewhere it is identified as 1,700 acres with 1,550 acres of impact (Pages 2-32 and 2-33). Further, you indicate that an estimated 44 adult tortoises would be affected within the Project area. Is this the 1,700-acre area, the 2,150-acre survey area, or some other acreage? It is not clear as currently presented. 4-7

8. Page 3.9-6, Section 3.9.5.1: We disagree with the following statement: *“Direct effects are limited to the boundaries of the Project area;”* as direct effects would occur within both the Project Area and Translocation Area. However, we acknowledge that the author of the EA incorrectly considers the translocation of tortoises to be an *indirect effect*, and that those impacts are addressed in the next paragraph. 4-8

9. Page 3.9-6, Section 3.9.5.1: The discussion given in the last full paragraph on this page seems a bit one-sided, as it considers only the transmission of disease from translocated tortoises to the host population. Have any disease studies been conducted on the host population to see if the translocated tortoises may be exposed to pathogens harbored by the resident tortoises? 4-9

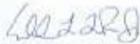
Comment Letter 4

10. Page 3.9-12, Section 3.9.5.1: With regards to the following statement, "*The BLM will decide as part of the decision record for this Project if fees will be collected, and if so, the amount of those fees.*" the Council feels that, not only should these fees be required, they should be applied to the Coyote Springs ACEC, which is most likely to be affected by the proposed action. We note earlier on the same page that these fees "would also be required," so perhaps the above wording should be modified in the Final EA? 4-10

11. Page 3.9-13, Section 3.9.5.1: With regards to the following sentence, "*However, the incorporation of BMPs and adherence to measures described in the Desert Tortoise Translocation Plan such impacts would be minimized to the extent possible.*" where is the list of BMPs that are to be implemented? In the absence of an actual translocation plan, we are unable to determine if these BMPs will function or to suggest new measures to enhance them. 4-11

We thank you for the opportunity to review this EA and trust that you will address the comments given above. We also ask that the Desert Tortoise Council be considered an Affected Party for this and other environmental documents affecting tortoises by BLM projects in Nevada. Finally, neither the Biological Assessment nor the Translocation Plan for the proposed action was made available as an attachment or appendix to this EA. Given how much the EA refers to the translocation plan, we find that our ability to effectively analyze the approach is undermined, and we ask that these documents be provided when they become available. 4-12
4-13

Regards,



Edward L., LaRue, Jr., M.S.
Desert Tortoise Council, Ecosystems Advisory Committee, Chairperson



United States Department of the Interior



BUREAU OF LAND MANAGEMENT
Southern Nevada District Office
Las Vegas Field Office
4701 N. Torrey Pines Drive
Las Vegas, Nevada 89130
<http://www.blm.gov/nv/st/en.html>

In Reply Refer To:
N-93306, N-93321, N-93337
2800 (NVS0056)

FED-EX

TRACKING NUMBER

Erin Lieberman
Joy Paige
Defenders of Wildlife
1130 17th Street, NW
Washington, DC 20036-4604

Dear Ms. Lieberman and Paige:

Thank you for your comments on the Environmental Assessments (EAs) prepared for the Dry Lake Solar Energy Zone (SEZ) projects. This letter responds to all substantive comments made in your letter, which is attached for reference. A separate response is being provided to joint comments received from Defenders of Wildlife, the Wilderness Society, and The Nature Conservancy.

In response to your request for *draft* environmental and mitigation plans: The BLM recognizes your preference for public review of these plans. However, these are required as a stipulation of the right-of-way (ROW) grant, won't be completed until after a ROW is issued. All final plans can be provided by the BLM upon request.

In response to your comments on standard and consistent format and adherence to the Solar PEIS design features: The BLM recognizes that there are variations in the precise format and language of the EAs for the different projects. The EAs, however, comply with NEPA. The BLM intends to include errata to the EAs in the Decision Record (DR) to clarify and/or correct disparities between the EAs as needed. Specifically, we will clarify that the area impacted by this development effort totals approximately 11,263 acres (3,083 acres in the three Dry Lake SEZ project sites and 8,180 acres surveyed within the recipient site, where desert tortoises from the project sites will be translocated to and monitored post-translocation); that cactus and yucca surveys were completed for all proposed projects; and the BLM relied on the contents of the Affected Resources Form for all the projects. We note your suggestions for all project-specific reviews going forward and intend to share these suggestions with BLM Washington Office.

In response to your comments on the *draft* Translocation Plan and protecting translocation areas: The BLM recognizes your concerns with the translocation of desert tortoise and the desire for

durable protections to ensure desert tortoise are not subject to additional translocations. The EAs acknowledge in Section 3.9 that translocation may cause injury or death of desert tortoises, and that disease transmission is also an associated risk. A single translocation plan for the three projects proposed within the Dry Lake SEZ is being developed with direction and input provided by the BLM, U.S. Fish and Wildlife Service (USFWS), and the Desert Tortoise Recovery Office (DTRO) through the Endangered Species Act Section 7 process. The translocation plan will comply with all applicable guidance and policy, including Secretarial Order 3330. Translocation of desert tortoise into the ACEC will not exceed density requirements as determined by the DTRO. The BLM is considering long-term monitoring in coordination with the local USFWS office and the DTRO. Any agreed-upon monitoring studies would be required in the Biological Opinion and incorporated in the ROW grant. The Final Translocation Plan, Biological Opinion and monitoring reports will be available upon request to the BLM.

In response to your comments on protecting translocation areas: Any future land use applications would consider the previous translocation of desert tortoise and require a biological opinion. Additional utility-scale solar development within the translocation areas is already limited by the Las Vegas Resource Management Plan (RMP) as amended by the Record of Decision for the Solar PEIS, which designates the translocation area as either closed to solar development or subject to the variance process. In addition, Alternative 2 of the draft RMP revision considers designating the translocation area as closed to utility-scale solar projects. We urge you to submit your comments related to the RMP revision during the RMP revision public comment period, which ends March 9, 2015.

In response to your comments on the Regional Mitigation Strategy (SRMS) and the adequacy of the EAs: The BLM recognizes your concerns with additional specificity and clarity regarding the final mitigation strategy that will be utilized to offset unavoidable impacts from development in the SEZ. It is BLM's intent to collect the \$1,836 per acre fee identified in the Regional Mitigation Strategy for the Dry Lake Solar Energy Zone and to document that commitment in the DR(s). The fee will be collected prior to BLM issuing a notice to proceed. The BLM intends to hold a workshop within 90 days of signing the DR(s) to gain your input on how to implement the mitigation strategy. Any necessary NEPA analysis on mitigation measures will be completed as soon as practicable and we look forward to your input during that NEPA process as well. As disclosed in the EAs, BLM's selection of any compensatory mitigation measures will be consistent with the procedures described by IM 2013-142 (June 13, 2013) and draft Manual Section 1794, "Regional Mitigation," which includes guidance for management of funds collected as part of the restoration, acquisition, or preservation portion of the total mitigation fee by an independent third party (Section 1.5 of the EAs).

As described in the EAs, because the EAs are tiered to the programmatic EIS, the findings that are being sought are a Finding of No *New* Significant Impact ((43 CFR 46.140(c)). If the Proposed Action would result in significant effects not considered in the Solar PEIS, then those impacts either would need to be mitigated below significance or an EIS would need to be prepared before the BLM could authorize the Proposed Action (BLM NEPA Handbook H-1790-1, Section 5.2.2. No new significant impacts were disclosed during completion of the environmental analysis; therefore, an environmental impact statement is not required (BLM NEPA Handbook H-1790-1, Section 5.2.2).

The impacts related to the potential for a solar project to mimic a “lake effect” are described in Section 3.8 of the EAs. In addition, required design features and mitigation measures are included in each of the EAs to address potential impacts to migratory birds, including the preparation of project specific Bird and Bat Conservation Strategies (BBCSs) that will include monitoring and adaptive management components. The applicants are working closely with the BLM and the USFWS to finalize project specific BBCSs; including the development of acceptable monitoring protocols to be implemented. The BLM will make post construction project monitoring reports available upon request.

Regarding your comments on potential groundwater impacts: As described in Section 1.1 of the subject EAs, the EAs are tiered to the Solar PEIS (BLM and DOE 2010; BLM and DOE 2012). Tiering allows for the preparation of an EA and Finding of No Significant Impact (FONSI) for a proposed action (also referred to as a “Finding of No *New* Significant Impact” (43 CFR 46.140(c)), so long as any significant effects of the individual action were analyzed in the Solar PEIS and any additional effects of the individual action not analyzed in the Solar PEIS are not significant. As described in your comment letter, the Draft Solar PEIS and Final Solar PEIS, as well as the Solar Programmatic Biological Assessment and Biological Opinion, all contemplate that groundwater withdrawal associated with projects in the SEZ could impact groundwater dependent springs and associated aquatic communities including listed and sensitive resources. As discussed in detail below, the BLM’s conclusion that impacts associated with groundwater withdrawal would not result in a new significant impact beyond the analysis and expectations in the Solar PEIS that resulted in the BLM identifying the lands as a priority area for solar energy development remains valid, subject to further clarification in response to this and related public comments.

Playa Solar EA: The Playa Solar EA fully disclosed the amount of water needed for the construction and operation and maintenance of the proposed 200 MW solar facility as well as the potential sources for that water (see Section 2.2.6.1, p. 2-9). As discussed, the project would require a total of up to 1,350 acre-feet of water over an approximately 18-month period for construction-related activities. The Project’s water consumption during operations would be up to 5 acre-feet per year (afy), which reflects a further revision by the Applicant to reduce operational water use from 15 afy, as was noted in the EA. The water would be obtained from the Garnet Valley groundwater basin and potentially, if water is transported to the site, other basins that have hydrologic connectivity to the Muddy River ecosystem, including the Black Mountain Basin. The Applicant proposes to meet all supply requirements through existing water rights obtained from municipal and private holders of those rights.

The Playa Solar EA analyzed the potential impacts from this proposed amount and location of groundwater withdrawal and concluded that the project would not withdraw groundwater to the extent that adverse effects would be expected to occur beyond those identified in the Solar PEIS (see Section 3.22.5.1, p. 3.22-3; and Section 3.9.5.1, p. 3.9-5). As discussed in detail in the EA, this analysis tiered to Sections 5.9 (BLM and DOE 2010, p. 5-37 et seq.) and 11.3.9.2 (BLM and DOE 2010, p. 11.3-57) of the Draft Solar PEIS and Sections 5.9 (BLM and DOE 2012, p. 57 et seq.) and 11.3.9.2 (BLM and DOE 2012, p. 11.3-18) of the Final Solar PEIS and to Appendix M of the Draft Solar PEIS, which provides details of the aquifer characteristics of the Garnet Valley

hydrologic basin and presents results of numeric groundwater flow model analysis conducted to examine the influence of potential groundwater withdrawal to support utility-scale solar energy development at the Dry Lake SEZ. In addition, the analysis relied on two additional existing studies for conclusions regarding impacts to listed and sensitive groundwater dependent species such as the Moapa dace: USFWS's Intra-Service Programmatic Biological Opinion on Moapa Dace (USFWS 2006); and the Mifflin and Associates (Mifflin) Hydrogeologic and Groundwater Modeling Analysis for the Moapa Paiute Energy Center Study (Mifflin 2001).

In response to comments received on the Playa Solar EA and as part of the Endangered Species Act (ESA) Section 7 consultation process for the Playa Solar Project, the BLM has evaluated more recent hydrologic studies in formulating its conclusions namely: Tetra Tech Inc., 2012a. Development of a Numerical Groundwater Flow Model of Selected Basins within the Colorado Regional Groundwater Flow System, Southeastern Nevada: Consultants' Report to the National Park Service (NPS), U.S. Fish and Wildlife Service (FWS), and BLM September 2012; and Tetra Tech Inc., 2012b. Predictions of the Effects of Groundwater Pumping in the Colorado Regional Groundwater Flow System, Southeastern Nevada: Consultants' Report to the NPS, USFWS, and BLM September 2012. The BLM believes that these studies represent sufficient hydrologic modeling to analyze groundwater withdrawal impacts from the proposed projects within the Dry Lake SEZ and, therefore, additional hydrologic modeling for individual projects in the SEZ is not necessary in order to adequately assess impacts. These studies provide more certainty regarding the hydrologic connectivity between the hydrogeomorphic basins in the White River Groundwater Flow System. Based on these studies, the BLM has determined that the use of up to 1,325 acre feet of groundwater for the 18-month construction window and 5 afy for operations of the Playa Solar Project could contribute to ongoing adverse effects to groundwater dependent springs and associated aquatic communities including listed and sensitive resources such as the Moapa dace. These impacts, however, would be short-term, occurring over a limited 18-month project construction window, and would not result in long-term adverse impacts to the groundwater system or listed or sensitive resources.

As discussed in the Playa Solar EA, the Applicant will incorporate design features into the project development process to avoid and minimize impacts to water resources (see Section 2.2.17.1, p. 2-24). This includes minimizing to the maximum extent possible the use of water during project construction and operation and maintenance through measures such as the use of BLM approved dust palliatives for dust control (see 2.2.6.1, p. 2-9). The BLM has also initiated formal consultation with the USFWS for the Playa Solar Project to address potential impacts to Moapa dace in compliance with Section 7 of the ESA.

The Playa Solar Project will implement the following applicable measures from the Solar Programmatic Biological Opinion (USFWS 2012). In addition, as described further below, BLM has included an additional mitigation measure to further reduce potential impacts to Moapa dace which builds on BLM's already successful program along the Muddy River to further assist in the recovery of the Moapa dace.

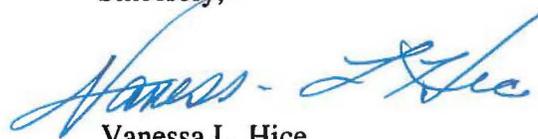
- The Project is located in a BLM identified priority area for solar energy development (i.e., SEZ) and has been sited and designed to avoid impacts on important, sensitive, or unique resources, including aquatic habitat and habitats supporting listed species.
- As detailed in recent hydrologic modeling (Tetra Tech Inc. 2012a, b), the Project would not completely avoid surface water or groundwater withdrawals that have the potential to affect sensitive habitats (e.g., aquatic, wetland, and riparian habitats). The proposed groundwater withdrawal associated with the Project would be short-term, however, occurring over the 18-month Project construction window; no long-term adverse impacts are anticipated.
- As necessary, the Applicant would develop a Groundwater Monitoring and Reporting Plan (referred to in the Solar Programmatic Biological Opinion as a Water Resources Mitigation and Monitoring Plan) to be reviewed and approved by the BLM. The Groundwater Monitoring and Reporting Plan would document pre-construction baseline groundwater conditions, guide groundwater monitoring and reporting, and document project-related groundwater use to ensure that the Applicant stays within the volume analyzed pursuant to BLM's NEPA and ESA processes.
- The Project would not result in a point of groundwater withdrawal being moved closer to locations supporting the groundwater-dependent species and (or) increased pumping in the regional carbonate aquifer in areas with a significant potential to affect habitat for those species (albeit the total consumptive groundwater use may remain the same).
- The BLM will require the Applicant to implement conservation measures to offset the effects of groundwater withdrawal on groundwater-dependent species and their habitats. For the Playa Solar Project, the BLM will require the Applicant to fund the design and installation of crayfish barriers to protect Moapa dace from upstream migration of invasive species. These funds would further the BLM and its partner agencies' existing efforts to eradicate non-native species from the historic range of Moapa dace and thereby promote the continued recovery of this species.

Populations of Moapa dace have been declining since the species was federally listed in 1967. These fish populations were under threat from the upstream invasion of non-native fish, principally the blue tilapia (*Oreochromis aurea*). To combat the decline of these endangered and sensitive species, the BLM constructed three concrete fish barriers (Hidden Valley, Perkins, and the Narrows) on the Muddy River. Combined with the existing upstream barrier located within the Moapa Valley Wildlife Refuge and a water diversion on Tribal land, the purpose of the fish barriers was to prevent the continued spread of non-native fishes up the Muddy River, thereby decreasing the predation and competitive pressure imposed by introduced fishes on the Moapa dace and other sensitive fish species. The project also facilitated the treatment with rotenone and eradication of non-native fishes in 2011 and 2012. The number of Moapa dace increased from approximately 450 in 2008 to over 2000 in 2014. In total, the BLM has spent over \$850,000 on recovery efforts for this species in the Muddy River.

Impending threats to the Moapa dace include invasion by the Red-Swamp crayfish in the Muddy River. The BLM plans to retrofit the existing Perkins fish barriers to install a crayfish barrier to keep this invasive species from threatening Moapa dace populations. For mitigation of potential adverse effects to Moapa dace from the Proposed Action through groundwater use, the Applicant will fund the design and installation of this crayfish barrier to prevent upstream movement of this invasive species. If the crayfish breaches the fish barrier, there could be detrimental effects to Moapa dace populations and eradication of this invasive species would be very difficult as they can bury themselves deep in the bottom of the river.

Harry Allen and Dry Lake EAs: Section 2.2.6.2 of the Harry Allen EA and 2.2.6.1 of the Dry Lake EA describes the annual demand for water during operations for each project as approximately 350,000 gallons (1 acre-foot/year). As described in the Harry Allen and Dry Lake EAs, the construction contractor would be responsible for identifying and securing the rights to an existing permitted water source(s) for construction needs and brought in to each site. Water would not be obtained from the Garnet Valley Basin; or from any of the five over-appropriated nearby basins for the Harry Allen and Dry Lake projects.

Sincerely,



Vanessa L. Hice
Assistant Field Manager
Division of Lands

Enclosures



National Headquarters
 1130 17th Street, N.W. | Washington, D.C. 20036-4604 | tel 202.682.9400 | fax 202.682.1331
www.defenders.org

Comment Letter 5

January 8, 2015

Ms. Nancy Christ
 Mr. Greg Helseth
 BLM Southern Nevada District Office
 SNPLMA Division
 4701 North Torrey Pines Drive
 Las Vegas Nevada, 89130
 (702) 515-5120

RE: Environmental Assessments (“EAs”) of the three proposed Solar Energy Projects in the Dry Lake Solar Energy Zone (SEZ).

Dear Ms. Christ and Mr. Helseth:

On behalf of Defenders of Wildlife (Defenders), please accept and fully consider these comments regarding the Bureau of Land Management’s (the Bureau or BLM) Environmental Assessments (EAs) of the three proposed solar energy projects in the Dry Lake Solar Energy Zone (SEZ). Note this letter incorporates our comments for the EAs for all three projects proposed for parcels 1-6 of the Dry Lake SEZ (Environmental Assessments: DOI-BLM-NV-S010-2014-0125; 0126 & 0127). We would also like to incorporate by reference the joint comments submitted to BLM regarding these EAs by Defenders, the Wilderness Society and the Nature Conservancy.¹

5-1
5-2

We are also engaged in the Bureau’s efforts to revise the Las Vegas Resource Management Plan (RMP). We remind BLM that in revising this RMP, it is incumbent on the agency to ensure that mitigation and conservation commitments made in these EAs and associated Decision Records (DRs) are not undermined by any future revisions to the RMP.

5-3

I. Implementation of the BLM’s Western Solar Program

The release of these three EAs for the Dry Lake SEZ represents a pivotal moment for the implementation of BLM’s Solar Energy Program, established through the Solar Programmatic Environmental Impact Statement (“PEIS”). These three solar energy projects

5-4

¹ See Letter from Defenders of Wildlife, the Wilderness Society, and the Nature Conservancy to Ms. Christ and Mr. Helseth, BLM (Jan. 8, 2015) regarding Dry Lake Solar Energy Zone Project Environmental Assessments.

Comment Letter 5

are the first to move forward under the directed development paradigm established in the PEIS. By directing development to lands of lower conflict and providing financial and predictable incentives, the BLM can successfully manage lands for both energy and natural resources. The successful leasing of the Dry Lake SEZ demonstrates the promise of this approach.

These three EAs and the development of a regional mitigation strategy for the Dry Lake SEZ serve as an important pilot for future development in other SEZs and ultimately, the successful implementation of the Solar Energy Program. While we have described several concerns regarding the draft EAs in our comments below, it is our hope that the lessons learned through the Dry Lake SEZ can help shape future implementation of the Solar Energy Program and specifically, environmental review and regional mitigation for other SEZs.

a. Draft environmental and mitigation plans

As described further below, more specificity is required regarding the various environmental management plans and the regional mitigation strategy that will be adhered to for the project. In accordance with the Solar PEIS, the project proponents are required to incorporate design features into project development to avoid and minimize impacts to the surrounding environment. These measures are implemented in part through the development of site-specific management and operation plans. In the EAs, BLM asserts that “[i]n accordance with the design features and other requirements, the Applicant will be required to prepare the following management plans, which would be submitted to the BLM for approval:

1. Bird and Bat Conservation Strategy
2. Decommissioning and Site Reclamation Plan
3. Desert Tortoise Translocation Plan
4. Dust Abatement Plan
5. Spill Prevention and Emergency Response Plan
6. Health and Safety Program
7. Groundwater Monitoring and Reporting Plan
8. Fire Management Plan
9. Lighting Management Plan
10. Integrated Weed Management Plan
11. Raven Management Plan
12. Site Rehabilitation and Restoration Plan
13. Stormwater Pollution Prevention Plan
14. Site Drainage Plan
15. Traffic Management Plan
16. Surface Water Quality Management Plan
17. Worker Education and Awareness Plan (WEAP).”

↑
5-4
cont'd

↓
5-5

Comment Letter 5

However, BLM fails to provide any of these draft plans in the EAs for review or identify whether any additional stakeholder review and comment will occur prior to BLM's approval of such plans. Given the importance of these plans for reducing the overall environmental impact of the proposed projects and BLM's "Finding of No Significant Impact" ("FONSI"), **BLM must provide an opportunity for stakeholder review and comment of these plans prior to the issuance of the final DR.**

5-5
cont'd

b. Standard and consistent format

Furthermore, we ask BLM to develop a standard format for project-level NEPA documents that is consistent with the format and structure of the Solar PEIS. The draft EAs do not follow the structure of the Solar PEIS and there are significant differences between the format of the EA prepared for the Playa Solar Project in contrast to the other two EAs. A standard format that follows the structure of the PEIS will not only improve the process for developers when preparing their respective NEPA analysis, it will also facilitate a more efficient, meaningful review for stakeholders when attempting to review such documents during comment periods.

5-6

In addition to format, we also noticed several unexplained substantive differences between the Playa Solar Project in contrast to the other two EAs. A few examples of such inconsistencies are identified include:

- There is an inconsistent description of the type of compensatory mitigation activities that will be utilized to offset unavoidable impacts for specific affected resources. The EA for the Playa Solar Project provides a level of specificity with respect to compensatory mitigation actions that is not provided in the other two EAs. For example, only the Playa Solar Project EA identifies the following specific compensatory mitigation actions:
 - Migratory birds: "Specific mitigation funds would be set aside to locate and pull hollow mine markers in the district to help offset potential impacts to migratory birds."²
 - General vegetation: "Offsite mitigation funds would be used to raise the frequency of resource monitoring and law enforcement patrols in existing desert tortoise ACECs with a goal of preventing new damage to vegetation and the ecosystem services it provides and identifying and correcting problems early while they are still relatively small."³

5-7

² U.S. Dep't of the Interior Bureau of Land Management, *Environmental Assessment (DOI-BLM-NV-S010-2014-0127-EA) for the Playa Solar Project (Dry Lake Solar Energy Zone Parcels 2, 3, & 4)* 3.8-6 (December 2014).

³ *Id.* at 3.10-7

Comment Letter 5

- Special status species: “Using part of this [mitigation] fee, the BLM would provide seed collection and long term conservation of the species through the Center for Plant Conservation, National Collection of Endangered Plants.”⁴
- Soil resources: “[O]ffsite mitigation funds would be provided to develop BMPs and techniques for restoring cryptobiotic crusts.”⁵
- The EA for the Playa Solar Project indicates that the potential translocation area surveyed is approximately 10,000 acres while the other two EAs describe the potential desert tortoise translocation area as 14,700 acres.⁶
- It appears that BLM requested that First Solar conduct a cactus and yucca survey for the proposed Playa Solar Project; while only a density estimate was completed for the other two projects.⁷
- Only the EA for the Playa Solar Project included a summary table of resource areas considered in the Solar PEIS and specifically evaluated in the EA. (See Affected Resources Form in Appendix C.)⁸

5-7
cont'd

These numerous inconsistencies lead to confusion and frustrate the credibility and value of the tiered process established by the solar PEIS. Generally, all of the projects within a SEZ should be subject to the same expectations and requirements pursuant to the PEIS. **As such, we recommend that BLM identify the additional type of surveys and analysis that will be required for the site-specific EAs at the beginning of the NEPA process and develop a unified strategy to ensure consistent EA development, review and approval for all EAs within a SEZ.** BLM should also provide information to support any substantive disparities between EAs or project requirements within a SEZ.

c. Adherence to Solar PEIS design features

The Solar PEIS established a set of design features, which are mitigation requirements to avoid or reduce adverse impacts. Adherence to these design features is an important component of the

5-8

⁴ *Id.* at 310-8.

⁵ *Id.* at 3.14-3.

⁶ See *Id.* at 3.9-1 & U.S. Dep't of the Interior Bureau of Land Management, *Environmental Assessment (DOI-BLM-NV-SO10-2014-0125-EA) for the Harry Allen Solar Energy Center Project* 61 (December 2014).

⁷ See U.S. Dep't of the Interior Bureau of Land Management, *Environmental Assessment (DOI-BLM-NV-SO10-2014-0127-EA) for the Playa Solar Project (Dry Lake Solar Energy Zone Parcels 2, 3, & 4)* 3.11-1 (December 2014) & S. Dep't of the Interior Bureau of Land Management, *Environmental Assessment (DOI-BLM-NV-SO10-2014-0125-EA) for the Harry Allen Solar Energy Center Project* 27 (December 2014).

⁸ U.S. Dep't of the Interior Bureau of Land Management, *Environmental Assessment (DOI-BLM-NV-SO10-2014-0127-EA) for the Playa Solar Project (Dry Lake Solar Energy Zone Parcels 2, 3, & 4)* C-3 –C-19 (December 2014).

Comment Letter 5

implementation of BLM's Solar Energy Program. Accordingly, we appreciate the summary table of programmatic design features incorporated in the EAs (*See* table 2-7 of the Playa Solar Project and Table 4 in the Dry Lake Solar Project and the Harry Allen Solar Energy project respectively), and believe this type of table should be incorporated in NEPA analyses for all project-specific reviews going forward.

↑
5-8
cont'd

In addition, we found the information summary in the Affected Resources Form in Appendix C of the EA for the Playa Solar Project to be incredibly valuable. We are puzzled why a similar table was not included in the other two EAs. This table provides an excellent overview of the resource evaluations performed by BLM and the developers and allows stakeholders an opportunity to assess consistency of the tiered analysis with the Solar PEIS. **We urge BLM to make this a standard requirement for all project-level NEPA analyses under the solar PEIS.**

↑
5-9

II. Desert Tortoise

a. Draft translocation plan

The EAs assert that an FWS-approved Desert Tortoise Translocation Plan (Translocation Plan) must be completed and approved by BLM prior to issuance of the Notice to Proceed. While we support this requirement, the EAs fail to include the draft Translocation Plan for public review and are significantly lacking in detail regarding what the final translocation plan will entail. Instead, the released EAs only provide an anticipated number of tortoises to be translocated, a general description of a very large area surveyed for potential translocation, and a commitment to adhere to FWS' Desert Tortoise Translocation Plan Development Guidance. No additional detail is provided regarding estimated populations of tortoises within the translocation area and specifics regarding how such resident populations could be impacted by translocated tortoises.

↑
5-10

Without more detail, we are unable to evaluate potential impacts or provide meaningful recommendations to improve the effectiveness and success of the final Translocation Plan. This is particularly concerning with respect to potential impacts to critical habitat in the Coyote Springs Area of Critical Environmental Concern (ACEC). **To ensure meaningful stakeholder comment, we ask BLM to make the draft Translocation Plan available for public review and comment along with FWS' draft Biological Opinions prior to finalization.**

↑

In addition, we urge BLM to better acknowledge the significant uncertainties associated with desert tortoise translocation. BLM asserts that "[d]espite some risk of mortality or decreased fitness, translocation is widely accepted as a useful strategy for the conservation of the desert tortoise (Field et al. 2007)."⁹ This statement is misleading and fails to acknowledge the

↑
5-11
↓

⁹ Dep't of the Interior Bureau of Land Management, *Environmental Assessment (DOI-BLM-NV-S010-2014-0125-EA) for the Harry Allen Solar Energy Center Project 62* (December 2014).

Comment Letter 5

management prescriptions and rule sets, are subject to amendment and revision before conservation objectives have been achieved.¹²

5-12
cont'd

Accordingly durable protections need to be considered for lands identified for offsite mitigation and translocation.

c. Consistency with Las Vegas Resource Management Plan

We also compared the potential translocation areas against the draft Las Vegas RMP that is currently out for public comment. Under BLM’s preferred alternative 3, the northwest corner of the potential translocation area is designated as variance lands meaning they could be subject to renewable energy development in the future (see tan shaded area in figure 1 enclosed). We also mapped potential utility corridors in the draft Las Vegas RMP (see figure 2 enclosed). Note that several proposed utility corridors are within the potential translocation area, which if constructed upon, could frustrate the effectiveness of the translocation plan. BLM’s preferred alternative in the RMP also includes a proposed new SEZ adjacent to the Dry Lake SEZ (see yellow shaded area in enclosed figure 1). Development of this new SEZ would undoubtedly result in additional tortoise translocations and result in additional stress on resident and translocated populations.

5-13

In addition to the draft RMP, we also evaluated proposed renewable energy projects in the vicinity of the SEZ. Currently, there is at least one grandfathered solar energy project (i.e., First Solar Desert Springs) within the proposed translocation area (see enclosed figure 3). Accordingly, BLM must consider this project and other pending applications when identifying the final translocation area.

5-14

Given these potential threats, the final area chosen for translocation must be accompanied by durable land-use protections both within and outside the Coyote Springs ACEC. This recommendation is consistent with the Solar PEIS, which identifies “Desert Tortoise translocation sites identified in applicable land use plans, project-level mitigation plans or Biological Opinions” as exclusion areas for solar development.¹³ Durable protections are

5-15

¹² The importance of addressing enduring management and designations is highlighted in the following:

- Interim Policy, Draft-Regional Mitigation Manual Section-1794: BLM identified the need for mitigation to be durable and defined durability as “effective for as long as the land-use authorization affects the resources and values.” Identifying the duration as longer than the permit is particularly important in landscapes such as the desert Southwest, where restoration will likely take hundreds of years.
- Secretarial Order No. 3330: Identified “ensuring the durability of mitigation measures over time” as one of five of the elements of successful mitigation on the public lands.
- Mitigation Report: The Report noted “BLM is exploring new approaches to ensure durable mitigation including easements, cooperative agreements, conservation rights of way, and withdrawals for ensuring effective and durable mitigation actions.” The Report also listed durability as one of ten “Guiding Principles for Landscape-Scale Mitigation,” and its application necessary to “...realize the promise of landscape-scale mitigation.” Id. at 2, pp. 9-12.

¹³ U.S. Dep’t of the Interior Bureau of Land Management, *Final Programmatic Environmental Impact Statement on Wind Energy Development on BLM-Administered Lands in the Western United States*, ES 8 (Volume 1) (June 2005).

Comment Letter 5

imperative to ensure that these tortoises will not be subject to additional translocations and improve the likelihood of translocation success.

↑5-15
|
cont'd

d. Long-term study of translocation effectiveness

Furthermore, the developers should be required to support a long-term study evaluating the long-term effectiveness of the translocated tortoises. FWS' translocation plan development guidance indicates that "previous translocation studies have generally occurred over durations of less than five years, various risks have not been fully evaluated and long-term success has not yet been demonstrated."¹⁴ Accordingly, the developers should work with BLM, FWS, and other agencies, as appropriate, to design a long-term study (greater than 5 years) to provide additional information regarding the long-term effectiveness of the desert tortoise translocation. This information will be valuable to determine the true success of these efforts and guide additional research on this subject.

5-16

III. Regional Mitigation Strategy

One key element of the Western Solar Program was the commitment by the BLM to develop Regional Mitigation Plans to ensure effective and strategic off-site mitigation for unavoidable impacts of utility-scale solar development. To date, the only completed solar regional mitigation strategy (SRMS) is for the Dry Lake SEZ. Led by a BLM team including a national renewable energy project manager and local Nevada planning and resource specialists, the pilot involved stakeholders from local government, the solar industry, the environmental community, sportsmen and Native American tribes. The goal was to develop a consistent, regional approach to mitigating impacts and a strategy for how and where the unavoidable impacts of utility-scale solar development can be most efficiently and effectively mitigated off-site. Important elements of this approach include: identification of unavoidable impacts that warrant mitigation; creation of mitigation objectives; selection of sites and mitigation actions; setting a mitigation fee; establishing a fiduciary structure to hold and distribute funds; and setting a process for monitoring and adaptive management. Unfortunately, despite the existence of the Dry Lake SRMS, a tool in which BLM and stakeholders invested heavily, the Dry Lake SRMS is not incorporated into the draft EAs and the EA's contain ambiguous language about future offsite mitigation actions.

5-17

As such, additional specificity and clarity is required regarding the substance and process for the final regional mitigation strategy that will be utilized to offset unavoidable impacts from development in the Dry Lake SEZ. As they are written, the three EAs provide little or no specificity about compensatory offsite mitigation actions, or even if mitigation will be required at

¹⁴ U.S Fish and Wildlife Service, Translocation of Mojave Desert Tortoises from Project Sites: Plan Development Guidance 1 (November 2011).

Comment Letter 5

all. For example, the following language is repeated in all the mitigation sections for the three EAs:

To compensate for unavoidable impacts, a per-acre fee was recommended for acres disturbed by this Project. BLM will decide as part of the decision record for this Project *if* fees will be collected, and if so, *the amount* of those fees. Off-site mitigation *may* include restoration of native vegetation and site protection activities proposed as part of the SRMS and would benefit wildlife because they would also protect and restore habitat and reverse effects of habitat fragmentation. Off-site mitigation actions funded to offset those impacts *may require* additional NEPA analysis by the BLM prior to implementation.¹⁵

BLM's use of words such as "if" and "may" leaves stakeholders with little clarity regarding what the final regional mitigation strategy will be, whether these actions will be sufficient to fully offset unavoidable impacts and whether the fee developers are required to pay is sufficient to accomplish the intended actions. Without this information, BLM and stakeholders are unable to evaluate environmental impacts from the proposed development.

BLM is also unclear regarding what resources it will require compensatory mitigation for. **BLM should clarify that all residual unavoidable impacts identified in the SRMS will be fully mitigated in the final regional mitigation strategy.** Without a thorough description of the residual unavoidable impacts and the mitigation measures that will be adopted, we have significant concerns about the adequacy of the EAs. We generally strongly support the tiered approach outlined in the Solar Energy Plan, since it fulfills the intent of the Solar PEIS and provides additional predictability to developers for projects in low-conflict SEZs, but our significant concerns about the absence of mitigation measures applicable to the Dry Lake SEZ impacts raise doubts about the approach adopted here.

NEPA requires that BLM discuss mitigation measures in an Environmental Impact Statement (EIS). 40 C.F.R. §§ 1502.14, 1502.16. Also, under NEPA, BLM's Finding of No Significant Impact (FONSI) is lawful only if "BLM has made a convincing case that no significant impact will result there from or that any such impact will be reduced to insignificance by the adoption of appropriate mitigation measures." Defenders of Wildlife, 152 IBLA 1, 6 (2000) (citations omitted). In general, in order to show that mitigation will reduce environmental impacts to an insignificant level, BLM must

¹⁵ Dep't of the Interior Bureau of Land Management, *Environmental Assessment (DOI-BLM-NV-S010-2014-0125-EA) for the Harry Allen Solar Energy Center Project 55-56* (December 2014).

↑
5-17
cont'd

5-18

5-19

5-20
↓

Comment Letter 5

discuss the mitigation measures “in sufficient detail to ensure that environmental consequences have been fairly evaluated.” *Communities, Inc. v. Busey*, 956 F.2d 619, 626 (6th Cir. 1992). Simply identifying mitigation measures, without analyzing the effectiveness of the measures, violates NEPA. Agencies must “analyze the mitigation measures in detail [and] explain how effective the measures would be A mere listing of mitigation measures is insufficient to qualify as the reasoned discussion required by NEPA.” *Nw. Indian Cemetery Protective Ass’n v. Peterson*, 764 F.2d 581, 588 (9th Cir. 1985), *rev’d on other grounds*, 485 U.S. 439 (1988). NEPA also directs that the “possibility of mitigation” should not be relied upon as a means to avoid further environmental analysis. Council on Environmental Quality, *Forty Most Asked Questions Concerning CEQ’s National Environmental Policy Act Regulations*, available at <http://ceq.hss.doe.gov/nepa/regs/40/40p3.htm>; *Davis v. Mineta*, 302 F.3d at 1125.

5-20
cont’d

The EAs are also unclear as to what the final regional mitigation fee will be to develop in the Dry Lake SEZ. The EAs ambiguously assert that “BLM will decide as part of the decision record for this Project *if* fees will be collected, and if so, *the amount* of those fees.”¹⁶ BLM should clearly state that BLM will require developers to pay the per-acre mitigation fee identified in the SRMS, corrected to incorporate the 30-year multiplication step required for the durability per-acre fee, prior to issuing a Notice to Proceed for ground disturbance. We previously identified a calculation error in the final Technical Note 444 for the SRMS. The Technical Note included a durability per-acre fee, but failed to multiply that fee by 30 years. This 30-year multiplication step was described in the Technical Note but not included in the actual calculation, leading to almost a \$600/acre shortfall in the final mitigation fee, which should by this calculation be 31% higher at \$2,416/acre.

5-21

Furthermore, the EAs fail to identify who will collect funds, oversee, and administer the regional mitigation actions and how such fees will be collected and accounted for. The Solar PEIS indicates that “[t]he BLM will identify and establish a structure to hold and apply for mitigation investments made for solar energy development in the SEZs” and that a third party will be engaged to “hold, manage, and allocate mitigation investments per the established regional objectives in the regional mitigation plan.”¹⁷ Despite this commitment in the Solar PEIS, BLM has yet to designate this third party or more fully describe the process that will be utilized to fulfill the long-term implementation of the final regional mitigation strategy for the three projects in the Dry Lake SEZ. **BLM must clarify that the mitigation fees will be placed into a secure fund as described in the Dry Lake SRMS that can only be used to implement**

5-22

¹⁶ *See Id.*

¹⁷ U.S. Dep’t of the Interior Bureau of Land Management, *Final Programmatic Environmental Impact Statement on Wind Energy Development on BLM-Administered Lands in the Western United States*, A 117 (June 2005).

Comment Letter 5

mitigation actions to offset impacts from development in Dry Lake SEZ and a description of the mechanisms that will be used for accounting and distribution of the funds.

↑ 5-22
↓ cont'd

In sum, the BLM needs to provide additional specificity and clarity regarding the final mitigation strategy that will be utilized to offset unavoidable impacts. We ask BLM to modify the draft EAs and FONSI to address these concerns, and to ensure that the Decision Records (DRs) also include specific commitments to appropriate mitigation. Specifically, the final EAs, FONSI, and DR must include the following:

- Clarification that all residual unavoidable impacts identified in the SRMS will be mitigated.
- A commitment by BLM to collect from the developers the per-acre mitigation fees identified in the SRMS, corrected to incorporate the 30-year multiplication step required for the durability per-acre fee, prior to issuing a Notice to Proceed for ground disturbance.
- A commitment that mitigation fees will be placed into a secure fund as described in the Dry Lake SRMS and the Solar PEIS that can only be used to implement mitigation actions to offset impacts from development in Dry Lake SEZ and a description of the mechanisms that will be used for accounting and distribution of the funds.
- Identification of potential mitigation sites and measures that will be analyzed and implemented according to the prescriptions above. Potential mitigation sites and measures should include those identified in the Dry Lake SRMS.
- A commitment to analyze and implement specific mitigation measures that would address development impacts within a specified timeframe.
- A commitment to initiate any NEPA analysis necessary for implementation of the final regional mitigation strategy within six months of signing the DR for the Dry Lake SEZ solar development EA, and complete this NEPA analysis within one year of signing the DR for development.

5-23

IV. Impacts to migratory birds & bats

Given recent reports of avian and bat fatalities at utility-scale solar facilities we strongly support BLM's statement that the applicants will be required to complete a Bird and Bat Conservation Strategy (BBCS) that includes a robust systematic monitoring and adaptive management plan to assist in avoiding and minimizing impacts to migratory birds by the Project. As BLM is aware, in April, the National Fish and Wildlife Forensics Laboratory issued a preliminary forensic

5-24

5-25

Comment Letter 5

analysis on birds collected from these facilities (referred herein as the “Forensic Lab Report”).¹⁸ While significant uncertainty remains regarding the causes of these mortalities, the Forensic Lab Report concluded that solar photovoltaic plants may pose a specific hazard for water birds who may mistake the reflective panels for a large body of water.

5-25
cont'd

As acknowledged by the Forensic Lab Report, there is a significant need for more robust scientific information regarding avian impacts from solar facilities. The reported mortalities from solar facilities likely underestimate the true scope of impacts due to the nature of discovery (often incidentally) and the high rate of carcass loss from scavenging and degradation around these facilities. Several federal agencies are currently working to improve systematic monitoring methodologies for avian impacts at solar facilities. FWS and U.S. Geological Survey (“USGS”) are currently working together to research effective monitoring technologies for solar facilities. We are also aware of similar collaborative efforts by Argonne National Laboratory and the National Renewable Energy Laboratory as part of the SunShot Initiative to evaluate current information about avian risk and assess next steps. **BLM and developers should work closely with these agencies to ensure that monitoring protocols incorporate the best available science and most up-to-date methodologies.**

5-26

Monitoring protocols should also be designed carefully such that monitoring results can help improve our understanding of avian risk and biology and inform adaptive management decisions. To this end, these monitoring protocols should adhere to standard science-based protocols and information-sharing guidelines such that project-level data can be pooled by multiple facilities to inform current and future research efforts. **We also ask that developers make a commitment in the BBCS to make this monitoring data publicly available as soon as acquired through an electronic database or similar vehicle to facilitate transparency and collaboration.**

5-27

V. Groundwater impacts

The BLM’s conclusion that groundwater pumping will not have effects on listed and sensitive resources is not substantiated, and the required compensatory mitigation and monitoring measures for water resources are either absent or inadequate. This is particularly important in the Mojave, given that it contains so many key groundwater dependent ecosystems.

5-28

A summary of analyzed environmental impacts from water consumption for each Project is provided below in Table 1.

¹⁸ *Avian Mortality at Solar Energy Facilities in Southern California: A Preliminary Analysis*, Rebecca A. Kagan, Tabitha C. Viner, Pepper W. Trail, and Edgard O. Espinoza National Fish and Wildlife Forensics Laboratory (April 7, 2014).

Comment Letter 5

Table 1 –Impacts to water resources identified in EAs

Project EA	Estimated water need for project construction	Additional water needs during project operation	BLM Identified Impacts from Proposed Action	Rationale
Harry Allen Solar Energy Project (Dry Lake Parcel 1)	430 acre feet	Not mentioned	“The Proposed Action does not include a groundwater well, and there would be no impacts to hydrologic conditions from water drawdown associated with the project”	“Water would be brought in from off-site and there would be no additional drawdown of groundwater supplies in the hydrographic basin.”
Playa Solar Project (Dry Lake SEZ Parcels 2,3 &4)	1,350 acre feet + a well with ~403 acre foot per year capacity to remain for project operations	~15afy	“The BLM has concluded that the limited water needs for the Proposed Action... would not withdraw groundwater to the extent that adverse effects would occur to aquatic biota”	Not mentioned
Dry Lake Solar Energy Center Project (Dry Lake SEZ Parcels 5&6)	430 acre-feet	Not mentioned	“The Proposed Action does not include a groundwater well, and there would be no impacts to hydrologic conditions from water drawdown associated with the Project.”	“Water would be brought from off-site and there would be no additional drawdown of groundwater supplies in the hydrographic basin”

5-28
cont'd

The Draft Solar PEIS, to which these EAs are tiered, articulated a particular concern over groundwater withdrawals for solar energy development in the Dry Lake SEZ (Draft Solar PEIS 11.3.11.4.2 Impacts; italics added for emphasis):

5-29

Comment Letter 5

Thus, groundwater withdrawals for solar energy needs could affect surface water levels and aquatic habitat in the Colorado River. In addition, groundwater withdrawals could alter the size and chemical and physical conditions of groundwater-dependent springs (including those on the north shore of Lake Meade and within Desert NWR and Moapa NWR) in the vicinity of the SEZ, and adversely affect associated aquatic communities. Historically, groundwater withdrawals have resulted in the loss or reduction of native species in desert springs. Consequently, the effect of groundwater withdrawals for solar energy development on pool and spring aquatic communities is of particular concern. Additional details regarding the volume of water required and the types of organisms present in potentially affected water bodies would be required in order to further evaluate the potential for impacts from water withdrawals.

5-29
cont'd

The Draft Solar PEIS also mentions these concerns in its scoping comments on the proposed Dry Lake SEZ (Draft Solar PEIS 11.3-128).

In scoping comments on the proposed Dry Lake SEZ (Stout 2009), the USFWS expressed concern that groundwater withdrawals from the Garnet Valley groundwater basin associated with solar energy development on the SEZ may reduce the regional groundwater supply that supports spring-fed aquatic habitats in the SEZ region, including habitats in the Pahrangat and Moapa Valleys. This includes species that occur in aquatic and riparian habitat associated with the following springs: Moapa Warm Springs (including Big Muddy Spring) and Corn Creek Spring (Figure 11.3.12.1-1). Although these areas are outside of the affected area as defined above, they are included in the evaluation because of the possible effect of groundwater withdrawals.

These EAs fail to adequately address groundwater impacts for the following reasons:

- 1.) Apart from the construction phase, there is no estimate provided of water needs over the useful life of the projects. This estimate needs to be included in the EAs as part of the assessment on the overall impact on water resources for each project.
- 2.) Without providing any hydrologic modeling, data, studies or additional analysis to support the claim, the BLM's conclusion that the Playa Solar Project "would not withdraw groundwater to the extent that adverse effects would occur to aquatic biota" is arbitrary and unsubstantiated. The BLM needs to first establish what the standard is from which to evaluate when adverse effects were occurring (See attached 2012 TNC comment letter on Clark, Lincoln, and White Pine Counties Groundwater Development Project Final Environmental Impact Statement). Published data from the Nevada Department of Water Resources for the Garnet

5-30

5-31

Comment Letter 5

Valley Basin, where the Dry Lake SEZ is located, indicate a perennial yield for the basin of 400 AFY (See Appendix A). Ignoring all other uses, the constructed well for the project alone is capable of over-drafting the basin. In addition, the total permitted use for the basin is 3366 AFY, while the perennial yield is 400 AFY, meaning Garnet Valley is already over-allocated by a factor of 8.4. While the granting of water rights applications does not fall into BLM's purview, the agency must consider the potential cumulative impacts occurring from excessive groundwater withdrawal. While actual pumping estimates are often poor or unavailable, it is reasonable to expect that a currently over-allocated, but not over-drafted, may become over-drafted within the reasonably foreseeable future.

5-31
cont'd

- 3.) The EAs for the Harry Allen Solar Energy Project and the Dry Lake Solar Energy Center Project do not provide any analysis of potential environmental impacts for estimated groundwater withdrawals. The rationale provided is "[w]ater would be brought from off-site and there would be no additional drawdown of groundwater supplies in the hydrographic basin." It is not stated, however, where the water will come from. Appendix 1 indicates that the overwhelming majority of groundwater basins comprising the Southern Nevada BLM district are over-allocated. In order to properly make a determination of no significant impact for these projects, the BLM needs to analyze as part of this NEPA process where the water will come from for these projects and what the effects will be on the hydrographic basin, so that appropriate mitigation measures can be developed, if warranted.

5-32

- 4.) The EA for the Playa Project states that the Applicant would prepare a Groundwater Monitoring and Reporting Plan to be reviewed and approved by the BLM if groundwater is used. It does not however provide any guidance on what elements such a plan must contain (e.g., monitoring requirements, trigger levels, standard for determining adverse environmental impact).

5-33

Based on these findings, Defenders strongly urges the BLM to consider the recommendations made by TNC regarding groundwater mitigation in their 2013 comment letter on the Draft Solar Regional Mitigation Strategy for the Dry lake Solar Energy Zone and Draft Technical Note: Procedural Guidance and Framework for Developing Solar Regional Mitigation Strategies." As they still apply, they are listed below.

5-34

- 1) Require developers to "conduct a hydrologic study (or studies) that demonstrate a clear understanding of the local surface water and groundwater hydrology" (SPEIS/ROD page 69.) Any hydrologic study or studies should use all available data and accepted models that specifically define groundwater basins and surface water and groundwater interactions, sustainable yields, and long-term efforts of all existing and probable withdrawals, including likely effects related to climate change.

Comment Letter 5

- 2) Require developers to “avoid, minimize and mitigate impacts on groundwater and surface water resources in accordance with laws and policies” (SPEIS/ROD page 71.) Purchase of actively used senior water rights in multiples of solar project use is the most effective means to mitigate for groundwater impacts where water rights are significantly over-allocated.
- 3) Employ “an adaptive management strategy and modifications, as necessary” (SPEIS/ROD page 73.) The SPEIS/ROD specifies that during operations, the developer shall monitor “water quantity and quality in areas adjacent to or downstream from development areas through the life of the project to ensure that water flows and water quality are protected” (page 73.) We believe that it is critical for BLM to impose groundwater monitoring with triggering provisions that specify automatically imposed remedies for reductions in groundwater use in the event that monitoring or modeling shows that adverse effects are likely to occur, or are occurring.

↑
5-34
cont'd

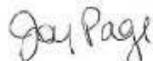
VI. Conclusion

Thank you for your thorough consideration of these important comments. Please contact us if we can provide more information.

Sincerely,



Erin Lieberman
Western Policy Advisor, Renewable Energy and Wildlife
Defenders of Wildlife
elieberman@defenders.org



Joy Page
Policy Advisor, Renewable Energy and Wildlife
Defenders of Wildlife
jpage@defenders.org

CC: Ray Brady

Enclosures

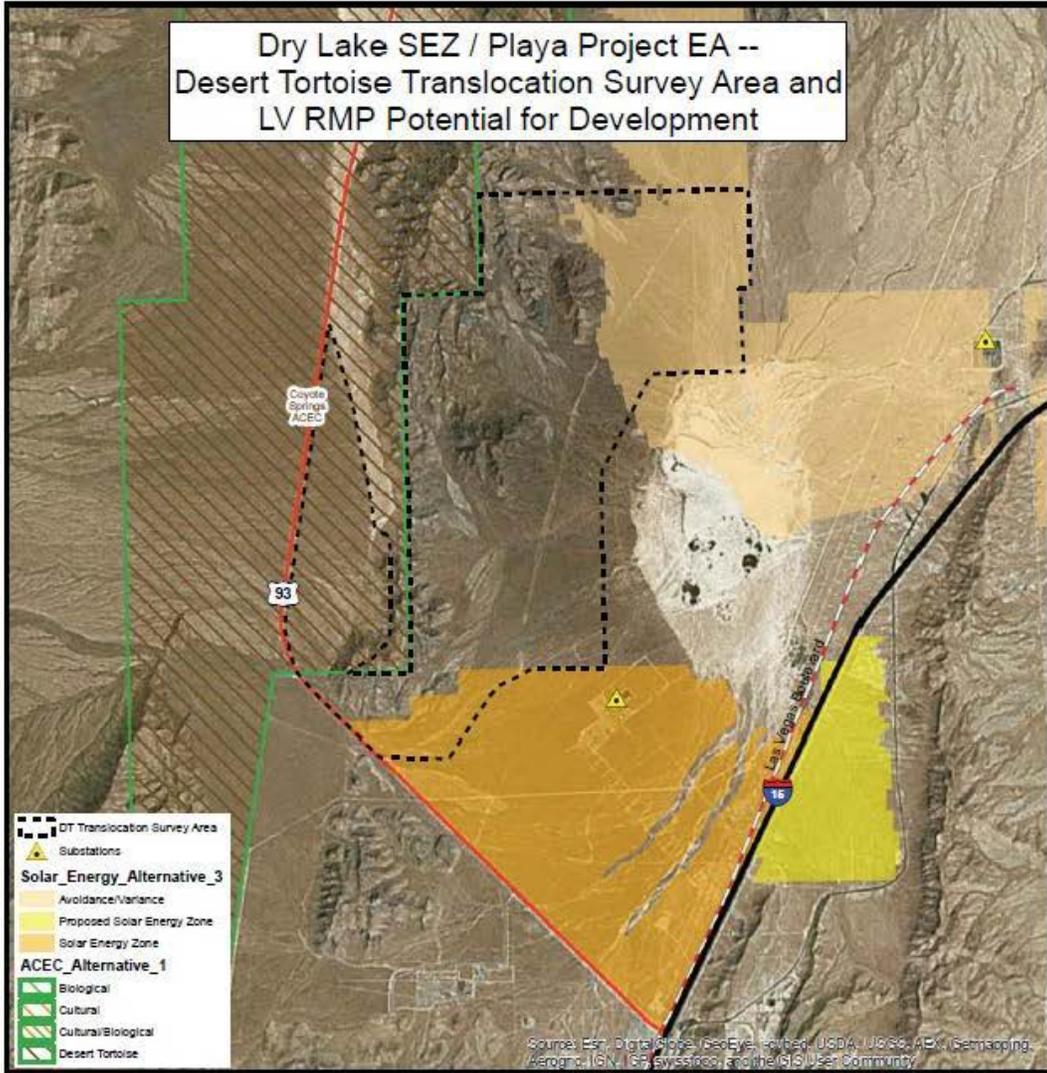


Figure 1

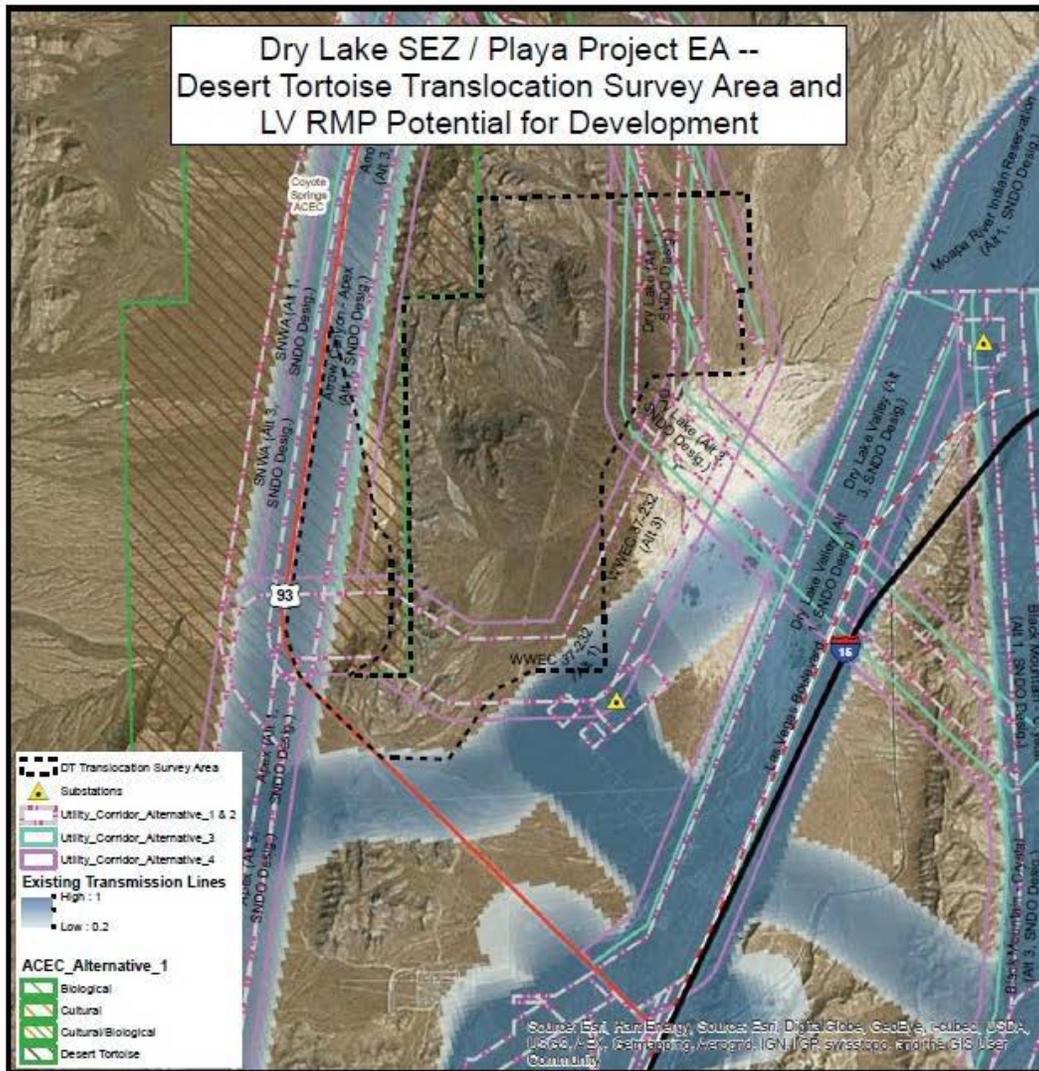
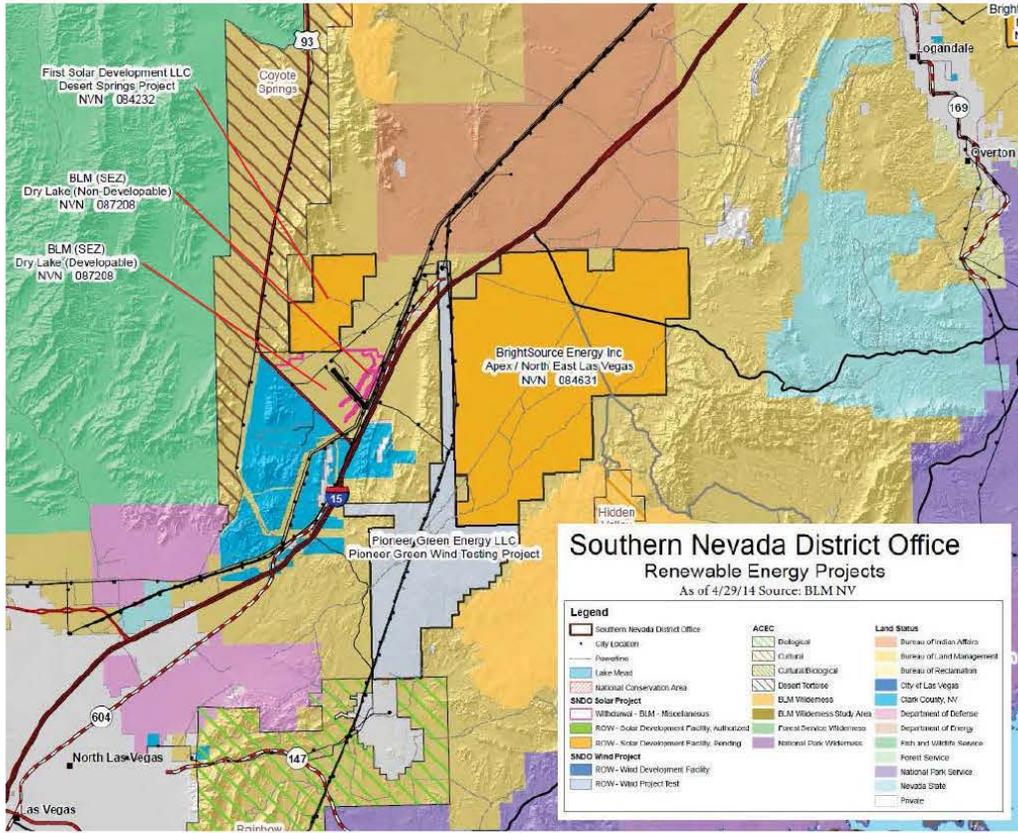


Figure 2

Figure 3





United States Department of the Interior



BUREAU OF LAND MANAGEMENT
Southern Nevada District Office
Las Vegas Field Office
4701 N. Torrey Pines Drive
Las Vegas, Nevada 89130
<http://www.blm.gov/nv/st/en.html>

In Reply Refer To:
N-93306, N-93321, N-93337
2800 (NVS1000)

FED-EX

TRACKING NUMBER

John Zablocki
Mojave Desert Program Director
The Nature Conservancy
915 E. Bonneville Avenue
Las Vegas, NV 89101

Dear Mr. Zablocki:

Thank you for your comments on the Environmental Assessments (EAs) prepared for the Dry Lake Solar Energy Zone (SEZ) projects. This letter responds to all substantive comments made in your letter, which is attached for reference. A separate response is being provided to joint comments received from Defenders of Wildlife, the Wilderness Society, and The Nature Conservancy.

Analysis of Groundwater-related Effects

As described in Section 1.1 of the subject EAs, the EAs are tiered to the Solar Programmatic Environmental Impact Statement (Solar PEIS) (BLM and DOE 2010; BLM and DOE 2012). Tiering allows for the preparation of an EA and Finding of No Significant Impact (FONSI) for a proposed action (also referred to as a "Finding of No *New* Significant Impact" (43 CFR 46.140(c)), so long as any significant effects of the individual action were analyzed in the Solar PEIS and any additional effects of the individual action not analyzed in the Solar PEIS are not significant. As described in your comment letter, the Draft Solar PEIS and Final Solar PEIS, as well as the Solar Programmatic Biological Assessment and Biological Opinion, all contemplate that groundwater withdrawal associated with projects in the SEZ could impact groundwater dependent springs and associated aquatic communities including listed and sensitive resources. As discussed in detail below, the BLM's conclusion that impacts associated with groundwater withdrawal would not result in a new significant impact beyond the analysis and expectations in the Solar PEIS that resulted in the BLM identifying the lands as a priority area for solar energy development remains valid, subject to further clarification in response to this and related public comments.

Playa Solar EA

The Playa Solar EA fully disclosed the amount of water needed for the construction and operation and maintenance of the proposed 200 MW solar facility as well as the potential sources for that water (see Section 2.2.6.1, p. 2-9). As discussed, the project would require a total of up to 1,350 acre-feet of water over an approximately 18-month period for construction-related activities. The Project's water consumption during operations would be up to 5 acre-feet per year (afy), which reflects a further revision by the Applicant to reduce operational water use from 15 afy, as was noted in the EA. The water would be obtained from the Garnet Valley groundwater basin and potentially, if water is transported to the site, other basins that have hydrologic connectivity to the Muddy River ecosystem, including the Black Mountain Basin. The Applicant proposes to meet all supply requirements through existing water rights obtained from municipal and private holders of those rights.

The Playa Solar EA analyzed the potential impacts from this proposed amount and location of groundwater withdrawal and concluded that the project would not withdraw groundwater to the extent that adverse effects would be expected to occur beyond those identified in the Solar PEIS (see Section 3.22.5.1, p. 3.22-3; and Section 3.9.5.1, p. 3.9-5). As discussed in detail in the EA, this analysis tiered to Sections 5.9 (BLM and DOE 2010, p. 5-37 et seq.) and 11.3.9.2 (BLM and DOE 2010, p. 11.3-57) of the Draft Solar PEIS and Sections 5.9 (BLM and DOE 2012, p. 57 et seq.) and 11.3.9.2 (BLM and DOE 2012, p. 11.3-18) of the Final Solar PEIS and to Appendix M of the Draft Solar PEIS, which provides details of the aquifer characteristics of the Garnet Valley hydrologic basin and presents results of numeric groundwater flow model analysis conducted to examine the influence of potential groundwater withdrawal to support utility-scale solar energy development at the Dry Lake SEZ. In addition, the analysis relied on two additional existing studies for conclusions regarding impacts to listed and sensitive groundwater dependent species such as the Moapa dace: USFWS's Intra-Service Programmatic Biological Opinion on Moapa Dace (USFWS 2006); and the Mifflin and Associates (Mifflin) Hydrogeologic and Groundwater Modeling Analysis for the Moapa Paiute Energy Center Study (Mifflin 2001).

In response to comments received on the Playa Solar EA and as part of the Endangered Species Act (ESA) Section 7 consultation process for the Playa Solar Project, the BLM has evaluated more recent hydrologic studies in formulating its conclusions namely: Tetra Tech Inc., 2012a. Development of a Numerical Groundwater Flow Model of Selected Basins within the Colorado Regional Groundwater Flow System, Southeastern Nevada: Consultants' Report to the National Park Service (NPS), U.S. Fish and Wildlife Service (FWS), and BLM September 2012; and Tetra Tech Inc., 2012b. Predictions of the Effects of Groundwater Pumping in the Colorado Regional Groundwater Flow System, Southeastern Nevada: Consultants' Report to the NPS, FWS, and BLM September 2012. The BLM believes that these studies represent sufficient hydrologic modeling to analyze groundwater withdrawal impacts from the proposed projects within the Dry Lake SEZ and, therefore, additional hydrologic modeling for individual projects in the SEZ is not necessary in order to adequately assess impacts. These studies provide more certainty regarding the hydrologic connectivity between the hydrogeomorphic basins in the White River Groundwater Flow System. Based on these studies, the BLM has determined that

the use of up to 1,325 acre feet of groundwater for the 18-month construction window and 5 afy for operations of the Playa Solar Project could contribute to ongoing adverse effects to groundwater dependent springs and associated aquatic communities including listed and sensitive resources such as the Moapa dace. These impacts, however, would be short-term, occurring over a limited 18-month project construction window, and would not result in long-term adverse impacts to the groundwater system or listed or sensitive resources.

As discussed in the Playa Solar EA, the Applicant will incorporate design features into the project development process to avoid and minimize impacts to water resources (see Section 2.2.17.1, p. 2-24). This includes minimizing to the maximum extent possible the use of water during project construction and operation and maintenance through measures such as the use of BLM approved dust palliatives for dust control (see 2.2.6.1, p. 2-9). The BLM has also initiated formal consultation with the USFWS for the Playa Solar Project to address potential impacts to Moapa dace in compliance with Section 7 of the ESA.

The Playa Solar Project will implement the following applicable measures from the Solar Programmatic Biological Opinion (FWS 2012). In addition, as described further below, BLM has included an additional mitigation measure to further reduce potential impacts to Moapa dace which builds on BLM's already successful program along the Muddy River to further assist in the recovery of the Moapa dace.

- The Project is located in a BLM identified priority area for solar energy development (i.e., SEZ) and has been sited and designed to avoid impacts on important, sensitive, or unique resources, including aquatic habitat and habitats supporting listed species.
- As detailed in recent hydrologic modeling (Tetra Tech Inc. 2012a, b), the Project would not completely avoid surface water or groundwater withdrawals that have the potential to affect sensitive habitats (e.g., aquatic, wetland, and riparian habitats). The proposed groundwater withdrawal associated with the Project would be short-term, however, occurring over the 18-month Project construction window; no long-term adverse impacts are anticipated.
- As necessary, the Applicant would develop a Groundwater Monitoring and Reporting Plan (referred to in the Solar Programmatic Biological Opinion as a Water Resources Mitigation and Monitoring Plan) to be reviewed and approved by the BLM. The Groundwater Monitoring and Reporting Plan would document pre-construction baseline groundwater conditions, guide groundwater monitoring and reporting, and document project-related groundwater use to ensure that the Applicant stays within the volume analyzed pursuant to BLM's NEPA and ESA processes.
- The Project would not result in a point of groundwater withdrawal being moved closer to locations supporting the groundwater-dependent species and (or) increased pumping in the regional carbonate aquifer in areas with a significant potential to affect habitat for those species (albeit the total consumptive groundwater use may remain the same).
- The BLM will require the Applicant to implement conservation measures to offset the effects of groundwater withdrawal on groundwater-dependent species and their habitats.

For the Playa Solar Project, the BLM will require the Applicant to fund the design and installation of crayfish barriers to protect Moapa dace from upstream migration of invasive species. These funds would further the BLM and its partner agencies' existing efforts to eradicate non-native species from the historic range of Moapa dace and thereby promote the continued recovery of this species.

Populations of Moapa dace have been declining since the species was federally listed in 1967. These fish populations were under threat from the upstream invasion of non-native fish, principally the blue tilapia (*Oreochromis aurea*). To combat the decline of these endangered and sensitive species, the BLM constructed three concrete fish barriers (Hidden Valley, Perkins, and the Narrows) on the Muddy River. Combined with the existing upstream barrier located within the Moapa Valley Wildlife Refuge and a water diversion on Tribal land, the purpose of the fish barriers was to prevent the continued spread of non-native fishes up the Muddy River, thereby decreasing the predation and competitive pressure imposed by introduced fishes on the Moapa dace and other sensitive fish species. The project also facilitated the treatment with rotenone and eradication of non-native fishes in 2011 and 2012. The number of Moapa dace increased from approximately 450 in 2008 to over 2000 in 2014. In total, the BLM has spent over \$850,000 on recovery efforts for this species in the Muddy River.

Impending threats to the Moapa dace include invasion by the Red-Swamp crayfish in the Muddy River. The BLM plans to retrofit the existing Perkins fish barriers to install a crayfish barrier to keep this invasive species from threatening Moapa dace populations. For mitigation of potential adverse effects to Moapa dace from the Proposed Action through groundwater use, the Applicant will fund the design and installation of this crayfish barrier to prevent upstream movement of this invasive species. If the crayfish breaches the fish barrier, there could be detrimental effects to Moapa dace populations and eradication of this invasive species would be very difficult as they can bury themselves deep in the bottom of the river.

Harry Allen EA

As described in the Harry Allen EA, the construction contractor would be responsible for identifying and securing the rights to an existing permitted water source(s) for construction needs and brought in to each site. Water would not be obtained from the Garnet Valley Basin; or from any of the five over-appropriated nearby basins for the Harry Allen project. As described in Section 3.22 of the EA there would be no impacts as a result of groundwater withdrawal

Section 2.2.6.2 of the Harry Allen EA describes the annual demand for water during operations for each project as approximately 350,000 gallons (1 acre-foot/year).

Dry Lake Solar Energy Center EA

As described in the Dry Lake EA, the construction contractor would be responsible for identifying and securing the rights to an existing permitted water source(s) for construction needs and brought in to each site. Water would not be obtained from the Garnet Valley Basin; or from

any of the five over-appropriated nearby basins for the Dry Lake project. As described in Section 3.22 of the EA there would be no impacts as a result of groundwater withdrawal

Section 2.2.6.1 of the Dry Lake EA describes the annual demand for water during operations for each project as approximately 350,000 gallons (1 acre-foot/year).

Regional Mitigation Strategy

The BLM recognizes your concerns with additional specificity and clarity regarding the final mitigation strategy that will be utilized to offset unavoidable impacts from development in the SEZ. It is BLM's intent to collect the \$1,836 per acre fee identified in the Regional Mitigation Strategy for the Dry Lake Solar Energy Zone and to document that commitment in the Decision Records (DRs). The fee will be collected prior to BLM issuing a notice to proceed. The BLM intends to hold a workshop within 90 days of signing the DR(s) to gain your input on how to implement the mitigation strategy. Any necessary NEPA analysis on mitigation measures will be completed as soon as practicable and we look forward to your input during that NEPA process as well. As disclosed in the EAs, BLM's selection of any compensatory mitigation measures will be consistent with the procedures described by IM 2013-142 (June 13, 2013) and draft Manual Section 1794, "Regional Mitigation," which includes guidance for management of funds collected as part of the restoration, acquisition, or preservation portion of the total mitigation fee by an independent third party (Section 1.5 of the EAs).

Additional Materials Provided

Receipt of the information provided as appendices to your comments is noted. Such information includes TNC's October 2012 comments on the Clark, Lincoln, and White Pine Counties Groundwater Development Project Final EIS; a map and other groundwater information; and TNC's and others' March and May 2013 comments on the regional mitigation strategy and mitigation actions for the Dry Lake SEZ. All of the information provided in the appendices predates the EA, which was published in December 2014. In accordance with Section 6.9.2.1 of NEPA Handbook H-1790-1 (2008), which provides guidance on substantive comments, none of the materials does one or more of the following: question, with reasonable basis, the accuracy of information in the EA; question, with reasonable basis, the adequacy of, methodology for, or assumptions used for the environmental analysis; present new information relevant to the analysis; present reasonable alternatives other than those analyzed in the EA; or cause changes or revisions in one or more of the alternatives. Therefore, consistent with Section 6.9.2 of BLM NEPA Handbook H-1790-1 (2008), no more detailed response to this information is required.

Sincerely,



Vanessa L. Hice
Assistant Field Manager
Division of Lands

Enclosures

Comment Letter 7



THE NATURE CONSERVANCY
Southern Nevada Office
915 E. Bonneville Avenue
Las Vegas, NV 89101
Tel 702-737-8744
Fax 702-737-5787

January 8, 2015
Ms. Nancy Christ
Mr. Greg Helseth
BLM Southern Nevada District Office
4701 North Torrey Pines Drive
Las Vegas Nevada, 89130
(702) 515-5120

Subject: Dry Lake Solar Energy Zone Project Environmental Assessments

- Playa Solar Project (Dry Lake SEZ Parcels 2, 3 & 4; DOI-BLM-NV-S010-2014-0127-EA)
- Dry Lake Solar Energy Center Project (Dry Lake SEZ Parcels 5 and 6; DOI-BLM-NV-S010-2014-0126-EA)
- Harry Allen Solar Energy Center Project (Dry Lake SEZ Parcel 1; DOI-BLM-NV-S010-2014-0125-EA)

Dear Ms. Christ and Mr. Helseth:

The Nature Conservancy thanks the Bureau of Land Management (BLM) for the opportunity to provide comments regarding the three Environmental Assessments (EAs) and Findings of No Significant Impact (FONISs) for the Dry Lake Solar Energy Zone projects.

The Nature Conservancy (TNC) is an international conservation organization dedicated to the preservation of lands and waters upon which all life depends. We have been active in the Mojave Desert since the 1970s and have been active participants in the development of the Solar Programmatic Environmental Impact Statement (Solar PEIS) and the Desert Renewable Energy Conservation Plan (DRECP) among other policy forums related to siting renewable energy on public lands in the Mojave Desert. We were active participants in the Dry Lake Solar Energy Zone (SEZ) pilot regional mitigation strategy planning project, and are working to contribute to the revision of the BLM's Las Vegas Resource Management Plan.

Our organization supports the President's Climate Action Plan, including the goal of an additional 10,000 MW of renewable energy on public lands. However, this goal must not be met through the avoidable and irreplaceable loss of wildlife, critically important habitats, wildlife corridors, and ecosystem function.

In order to meet these challenges, TNC has been especially focused on assisting BLM in reaching its goal of achieving conservation on a landscape scale, most recently in the context of desert renewable energy siting. A vital component of this goal is the effective implementation of the mitigation hierarchy.

TNC is a well know, respected and credible leader in the development and use of landscape-scale conservation science for mitigation planning. TNC's *Mojave Desert Ecoregional Assessment* (2010) provides a rigorous, scientifically sound basis for discriminating between high and low ecological resource conflict lands, helping to point out where development may have fewer impacts, where it

7-1
↓

Comment Letter 7

should be avoided, and where compensatory mitigation resources might best be employed to enhance or maintain conservation values across a region¹.

The BLM's Solar Energy Program represents an important vehicle for implementing this approach. The BLM's "Interim Policy, Draft – Regional Mitigation," Secretarial Order 3330, and the Dry Lake Solar Regional Mitigation Strategy (SRMS) provide important, recent, and explicit affirmation that the BLM will seek to fully assess all environmental impacts, and employ the mitigation hierarchy of avoid, minimize and offset to address these impacts. This includes compensatory, regional mitigation to offset any remaining adverse impacts after avoidance and minimization requirements have been fulfilled, in ways that maximize conservation benefits on a landscape scale.

The benefits of landscape scale planning and regional mitigation extend beyond conservation considerations. The proactive planning approach adopted by the Solar PEIS can increase the certainty of timing of permitting, costs, and mitigation requirements for developers. However, the extent to which these benefits are realized depends on the BLM's ability to effectively implement the Solar PEIS and its regional mitigation policies.

The Dry Lake SEZ represents the first opportunity to demonstrate the effectiveness of the BLM's Solar Energy Program, a precedent setting effort for both energy development and for conservation. TNC applauds BLM's selection of the Dry Lake site as a SEZ. BLM's planning for Dry Lake focused development in an area of relatively low resource value, eliminated lands with higher value ecological value from the SEZ, and required minimization best management practices (BMPs). BLM built on this effort through the development of the pilot SRMS for the Dry Lake SEZ.

However, the success of the Dry Lake SEZ in fulfilling the intent of the Solar PEIS remains to be determined. *The critical factors upon which that success depends include:*

- 1) A robust assessment within the EA of project environmental impacts and the appropriate compensatory off-site mitigation requirements needed to address any unavoidable impacts;**
- 2) The incorporation into the EA's via this National Environmental Policy Act (NEPA) process of a transparent, clear, and effective mitigation strategy that addresses the mitigation requirements;**
- 3) The successful implementation of the mitigation strategy on the ground.**

While the third factor remains to be seen, its success will in large part depend on the degree to which the factors 1 & 2 are properly addressed. TNC has significant specific concerns with both the first and second factors as they are presented in these EAs – these concerns are addressed in a public comment letter on the EA's being submitted jointly with The Wilderness Society and Defenders of Wildlife. That letter details our concerns about the vagueness of the mitigation elements and requirements in the draft EA's and FONSI's, and provides recommendations for how compensatory mitigation measures should be incorporated and addressed.

¹ For example, the ROD for Solar PEIS explicitly recognizes TNC's eco-regional assessments as a source of landscape-scale information for the BLM to "...identify, and to exclude from SEZs, areas of high ecological value or importance." (Page 173, ROD for Solar PEIS)

7-1
cont'd

7-2

Comment Letter 7

This letter is intended to supplement those comments – building on the concern of adequacy and appropriateness of compensatory off-site mitigation measures in the EA's, specifically focused on the impacts of groundwater use.

7-3

Even if all the mitigation issues raised in our joint letter with TWS and DOW were fully addressed, the EA's and FONSI's (and by extension, the Dry Lake SRMS) would not adequately address the need to mitigate for impacts to groundwater resources from solar development at the Dry Lake SEZ.

The BLM's conclusion in the EAs that groundwater pumping will not have adverse effects on listed and sensitive resources is not substantiated, and the required compensatory mitigation and monitoring measures for water resources are either absent or insufficient. We believe that the absence of analysis of impacts to water resources in the EAs does not fulfill the requirements to reach a Finding of No Significant Impact under NEPA.

Groundwater dependent ecosystems in the Mojave are rare and sensitive, and may be significantly adversely impacted by even very small decreases in water level caused by pumping, even at some distance from the resources. The Dry Lake SEZ is located in an arid region, overlying an over-allocated groundwater basin that is linked to sensitive aquatic and water dependent surface resources. Very little is known about the hydrogeology of the basin. BLM's impact assessment is based on a one dimensional model of the basin with very little data, and is in conflict with BLM's own claims regarding the potential long-term impacts of groundwater withdrawal in the basin, as well as the concerns raised by the Fish and Wildlife Service regarding potential impacts to sensitive species during development of the Solar PEIS. As a result, the finding in the EA/FONSIs that no compensatory mitigation is needed to offset the effects of groundwater pumping for the Playa Solar Project is not supportable. For the two projects that apparently will rely on imported water, the EA/FONSIs do not state where this water will come from, nor do they commit the projects to obtain imported water from specific sources.

7-4

The Draft and Final versions of the Solar PEIS, to which these EAs are tiered, articulated particular concerns over groundwater withdrawals for solar energy development in the Dry Lake SEZ. The Draft Solar PEIS contained this:

Thus, groundwater withdrawals for solar energy needs could affect surface water levels and aquatic habitat in the Colorado River. In addition, groundwater withdrawals could alter the size and chemical and physical conditions of groundwater dependent springs (including those on the north shore of Lake Mead and within Desert NWR and Moapa NWR) in the vicinity of the SEZ, and adversely affect associated aquatic communities. Historically, groundwater withdrawals have resulted in the loss or reduction of native species in desert springs. *Consequently, the effect of groundwater withdrawals for solar energy development on pool and spring aquatic communities is of particular concern. Additional details regarding the volume of water required and the types of organisms present in potentially affected water bodies would be required in order to further evaluate the potential for impacts from water withdrawals.* (Draft Solar PEIS Section 11.3.11.4.2; italics added for emphasis)

7-5

The Final version of the Solar PEIS, referring to groundwater in the Dry Lake SEZ, contained the following:

"Increases in groundwater extraction from the basin could impair other uses and affect ecological habitats."(BLM 2012 Final Solar PEIS 11.3-28)

Comment Letter 7

"The additional information and analyses of water resources presented in this update agree with the information provided in the Draft Solar PEIS, which indicates that the proposed Dry Lake SEZ is located in a desert valley with predominately intermittent/ephemeral surface water features and groundwater in a basin aquifer overlaying a regional-scale carbonate rock aquifer system. Historical groundwater use in the region has led to groundwater declines of approximately 20ft (6m) from the 1950s to the 1980s. The NDWR set the perennial yield for the Garnet Valley to 400 ac-ft/yr (4.2 million m³/yr) committed for beneficial uses. An additional 44,500 ac-ft/yr (55 million m³/yr) of water right applications are held in abeyance, and no new water right applications are being accepted. These baseline conditions suggest that water resources are scarce in the vicinity of the Dry Lake SEZ, and that the primary potential for impacts resulting from solar energy development comes from surface disturbances and groundwater use." (BLM 2012 Final Solar PEIS 11.3-29)

A subsequent Argonne National Laboratory study² of groundwater conditions in Garnet Valley reported the following additional relevant findings (italics added for emphasis):

The State Engineer issued rulings for each of the six basins in January 2014. In ruling 6256, the State Engineer concluded that there is no additional groundwater available for appropriation in Garnet Valley. Additionally, the State Engineer concluded that approval of the pending applications within Garnet Valley would prove detrimental to the public interest based on impacts to the Muddy River Springs Area and denied all of the pending applications. (Page 10).

It should be noted that although the Garnet Valley may have the ability to supply the water necessary for the Dry Lake SEZ's water use over a 20-year window, *water use even at current levels is not sustainable over the longer term, because it far exceeds basin yield.* Even if pumping were to cease, the replenishment of groundwater removed from storage would be expected to occur at a slow rate (Burbey 1997) (Page 20).

Hydrogeologic information that is obtained as individual solar projects are developed should be used to refine, modify, and update the models and analyses used for this study. (Page 20).

These EAs/FONSI's inadequately address groundwater impacts for the following reasons:

- 1) Without providing any hydrologic modeling, data, studies or additional analysis to support the claim, the BLM's conclusion that the Playa Solar Project "would not withdraw groundwater to the extent that adverse effects would occur to aquatic biota" is arbitrary and unsubstantiated. The BLM needs to first establish the standard used to evaluate when adverse effects are occurring (See **Appendix A**, TNC comment letter on Clark, Lincoln, and White Pine Counties Groundwater Development Project Final Environmental Impact Statement). Published data from the Nevada Department of Water Resources for the Garnet Valley Basin, underlying the Dry Lake SEZ, indicate a perennial yield for the basin of 400 AFY (See **Appendix B**). Ignoring all other uses,

² Final Report. Groundwater Modeling to Assess Water Resource Impacts at the Dry Lake Solar Energy Zone. Argonne National Laboratory. May 2014

Comment Letter 7

the constructed well for the project alone has the capacity to over-draft the basin. In addition, the total permitted use for the basin is 3,366 AFY, while the perennial yield is 400 AFY, meaning Garnet Valley is already over-allocated by a factor of 8.4. While the Nevada State Engineer issues water rights, BLM must consider the potential impacts—including cumulative impacts—occurring from groundwater withdrawals when it makes land use decisions, limiting and properly mitigating for uses that might have adverse effects on sensitive groundwater dependent resources. Where, as here, actual pumping estimates are poor or unavailable, it is reasonable to expect that a currently over-allocated basin may actually be over-drafted or become over-drafted within the reasonably foreseeable future.

↑
7-6
cont'd

- 2) The EA's for the Harry Allen Solar Energy Project and the Dry Lake Solar Energy Center Project do not provide any analysis of potential environmental impacts for estimated groundwater withdrawals. The rationale provided is "Water would be brought from off-site and there would be no additional drawdown of groundwater supplies in the hydrographic basin." However, where the water will come from is not revealed. **Appendix C** demonstrates that the overwhelming majority of groundwater basins comprising the Southern Nevada BLM district are over-allocated. In order to properly make a determination of no significant impact for these projects, the BLM needs to analyze as part of this NEPA process where the water will come from for these projects and what the effects will be on the hydrographic basin from which the water will come, so that, if warranted, appropriate avoidance and mitigation measures can be developed.

7-7

- 3) The EA for the Playa Project states that the Applicant would prepare a Groundwater Monitoring and Reporting Plan to be reviewed and approved by the BLM if groundwater is used. It does not however provide any guidance on what elements such a plan must contain (e.g., monitoring requirements, trigger levels, standard for determining adverse environmental impact). The elements such a plan should contain, as well as a timeline for the plan's development, need to be made explicit.

7-8

- 4) Apart from the construction phase, there is no estimate provided of water needs over the useful life of the Harry Allen and Dry Lake Solar Energy Center projects. This estimate needs to be included in the EAs as part of the assessment on the overall impact on water resources for each project

7-9

- 5) The BLM needs to follow the recommendation of the Argonne report that "**Hydrogeologic information that is obtained as individual solar projects are developed should be used to refine, modify, and update the models and analyses used for this study. (Page 20).**" Such information represents project specific impacts that were not analyzed in the Solar PEIS and are therefore necessary to be included in these EAs before a FONSI can be reached.

7-10

Based on these findings, TNC strongly urges the BLM to consider the recommendations we made regarding groundwater mitigation in our 2013 comment letter on the Draft Solar Regional Mitigation Strategy for the Dry lake Solar Energy Zone and Draft Technical Note: Procedural Guidance and Framework for Developing Solar Regional Mitigation Strategies (see **Appendix D**). As they still apply, they are listed below.

7-11
↓

Recommendations:

Comment Letter 7

- 1) Require developers to “conduct a hydrologic study (or studies) that demonstrate a clear understanding of the local surface water and groundwater hydrology.” (SPEIS/ROD page 69) Any hydrologic study or studies should use all available data and accepted models that specifically define groundwater basins and surface water and groundwater interactions, sustainable yields, and long-term effects of all existing and probable withdrawals, including likely effects related to climate change.
- 2) Require developers to “avoid, minimize and mitigate impacts on groundwater and surface water resources in accordance with laws and policies.” (SPEIS/ROD page 71) Purchase of actively used senior water rights in multiples of project consumption greater than or equal to the ratio of over allocation in the source basin is the most effective means to mitigate against cumulative groundwater impacts where water rights are significantly over-allocated.
- 3) Employ “an adaptive management strategy and modifications, as necessary.” (SPEIS/ROD page 73) The SPEIS/ROD specifies that during operations, the developer shall monitor “water quantity and quality in areas adjacent to or downstream from development areas through the life of the project to ensure that water flows and water quality are protected.” (SPEIS/ROD page 73) We believe that it is critical for BLM to impose groundwater monitoring with triggering provisions that specify automatically imposed remedies for reductions in groundwater use in the event that monitoring or modeling shows that adverse effects are likely to occur, or are occurring.

7-11
cont'd

Additional comments

The role of the SRMS in the NEPA process:

In addition to the joint public comments mentioned previously, TNC respectfully submits further comments on inclusion of mitigation elements in the EA’s and FONSI’s via the NEPA process.

The BLM’s approach for approving the Dry Lake SEZ projects is fundamentally sound—tiering down to issue EAs and FONSI’s after reviewing site-specific issues and setting mitigation requirements based on that review. However, effective implementation requires that the result of this abbreviated process include specific, transparently adopted and durable mitigation requirements as well as a description how the deployment of the mitigation resources will address unavoidable impacts over time. At this time, the EA/FONSI’s do not meet these important benchmarks, as a result sacrificing certainty for both development and conservation outcomes.

The question of how a non-NEPA SRMS should be properly integrated into project EAs tiered to a PEIS is important. The Council on Environmental Quality’s Memorandum on Effective Use of Programmatic NEPA Reviews states that:

Some of the cases that address “improper tiering” involve situations where an agency attempts to tier a NEPA review to a non-NEPA document and that is not appropriate³.

³ Executive Office of the President, Council on Environmental Quality, December 18, 2014. Memorandum for Head of Federal Departments and Agencies. Subject: Effective Use of Programmatic NEPA Reviews.

Comment Letter 7

Given that the Dry Lake SRMS was not put through the NEPA process, BLM may have concern that using the mitigation findings of the SRMS in these EAs could be pre-decisional. However, we do not think that this concern is justified. Incorporating the relevant elements of the SRMS into these EAs does not constitute 'tiering' of the EAs to a non-NEPA document. In the case of Dry Lake SRMS, the scientific analysis, justification for required mitigation of unavoidable impacts and findings of the SRMS should be included in the EA, and constitute the information from which a NEPA decision should be made and a valid mitigated FONSI can be reached. In other words, at some point the relevant mitigation findings in the SRMS needs to be evaluated under NEPA, and these EAs are an appropriate place to do so for the Dry Lake solar projects. We understand that unexpected circumstances may require the BLM to reevaluate mitigation sites/actions, and that implementation of the mitigation actions may require additional NEPA analysis in the future. Nevertheless, at the very least, the BLM's explicit acknowledgement of a developer's requirements to mitigate for specific unavoidable impacts needs to be included in the EAs before a mitigated FONSI can be reached. The SRMS should be treated as the rationale upon which these mitigation requirements are being presented in the NEPA document. Direct reference to the SRMS in the EAs, or inclusion of the analyses in the EAs, does not imply that EAs are being 'tiered' to a non-NEPA document, and is therefore not pre-decisional.

7-12
cont'd

Additional concerns with adequacy and appropriateness of compensatory off-site mitigation measures as identified in SRMS

We believe that even if the SRMS been incorporated in the manner proposed in this and our joint comment letter, significant concerns would remain regarding the sufficiency of the Final Dry Lake SRMS to meet appropriate NEPA standards for mitigation decisions.

We have provided the BLM with recommendations on how to these concerns in previous comments to the BLM, although not through a NEPA process, and therefore not a part of the official record. As we believe strongly that these recommendations are still applicable, and should be considered for this and future SEZ regional mitigation strategies, we are appending them here so that they form part of the public record. We highlight several key aspects of these concerns below, and provide appropriate reference, where applicable, to the appendices that provide a more detailed and complete examination of these issues:

7-13

The Final Dry Lake SRMS did not contain adequate provision for performance standards by which to evaluate effectiveness of mitigation actions to fulfill NEPA requirements.

The CEQ's guidelines state that:

Agencies should clearly identify commitments to mitigation measures designed to achieve environmentally preferable outcomes in their decision documents. They should also identify mitigation commitments necessary to reduce impacts, where appropriate, to a level necessary for a mitigated FONSI. *In both cases, mitigation commitments should be carefully specified in terms of measurable performance standards or expected results, so as to establish clear*

Comment Letter 7

*performance expectations.*⁴ (italics added for emphasis)

In order to conform to CEQs guidelines, the BLM needs to present its proposed goals and objectives, as well as provide clear, measurable performance objectives with which to evaluate the effectiveness of mitigation in meeting those goals. (**Appendices D, E**).

7-13
cont'd

The Final Dry Lake SRMS did not contain adequate provision for ensuring the durability and additionally of mitigation investments

The area chosen for regional mitigation actions in the Final Dry Lake SRMS was Gold Butte. TNC previously expressed concerns that the area chosen did not provide sufficiently durable protection for conservation investments, and that it was not clear if the proposed actions would provide sufficient additionally. Our reasoning behind these concerns, as well as recommendations for how to properly address them are provided in TNC's individual and joint comment letters on the "Draft Solar Regional Mitigation Strategy for the Dry Lake Solar Energy Zone," and "Draft Technical Note: Procedural Guidance and Framework for Developing Solar Regional Mitigation Strategies" (**Appendices D, E**). TNC also provided recommended methods for how to address these factors when considering mitigation site selection (**Appendices F, G**)

7-14

General recommendations for further SRMS development to meet NEPA requirements:

TNC believes strongly in the need for a clear, consistent, and robust scientific methodology for development of any regional mitigation strategy. We also believe that in order to meet the challenges of providing for mitigation that is durable, additional, transparent, and effective, it is important to revisit our past approaches in light of lessons learned. As an active participant in the development of the Dry Lake SRMS, we are committed to working with the BLM to ensure that the Dry Lake pilot is maximally effective, and we intend these comments to help realize that goal.

7-15

Conclusion

The Dry Lake SEZ is the first site in the Southwest to have the potential to successfully demonstrate the agency's approach to competitive leasing of renewables coupled with pre-determined regional mitigation. As such, it will set an important national precedent for future BLM energy and mitigation efforts.

The BLM did an outstanding job in its use of landscape-scale planning to select the Dry Lake SEZ. The agency also led a very open and participatory stakeholder driven process to develop the Dry Lake Solar Regional Mitigation Strategy. TNC applauds these efforts; however, we believe the concerns with the EAs outlined in this letter need to be addressed in order to ensure that the Dry Lake process sets a proper precedent for the implementation of the Solar Energy Program and BLM and DOI's broader transition to effective regional mitigation planning.

7-16

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

⁴ Executive Office of the President Council On Environmental Quality. Jan 2011. Page 8. Memorandum for Heads of Federal Departments and Agencies. Subject: Appropriate Use of Mitigation and Monitoring and Clarifying the Appropriate Use of Mitigated Findings of No Significant Impact.

Comment Letter 7

Sincerely,

John Zablocki
Mojave Desert Program Director
The Nature Conservancy

Appendix A: TNC Comment Letter to BLM re: Clark, Lincoln, and White Pine Counties Groundwater Development Project Final Environmental Impact Statement. (October, 2012)

Appendix B: Comparison of Perennial Yield and Total Committed Permit Allocations (Acre-Feet/Year) Southern Nevada

Appendix C: Map of relative over-allocation of groundwater basins in Southern Nevada

Appendix D: TNC Comment Letter to BLM re: "Draft Solar Regional Mitigation Strategy for the Dry Lake Solar Energy Zone," and "Draft Technical Note: Procedural Guidance and Framework for Developing Solar Regional Mitigation Strategies" (May, 2013)

Appendix E : Joint TNC, DOW, and TWS comment letter re: Outstanding concerns with the Dry Lake Solar Energy Regional Mitigation Plan. (March, 2013)

Appendix F: TNC Report on Dry Lake SEZ Candidate Compensatory Mitigation Sites and Actions for Unavoidable Impacts. (March, 2013)

Appendix G: TNC Comments to BLM re: Possible Mitigation of Impacts from Solar Energy Development in the Dry Lake SEZ within Existing Areas of Critical Environmental Concern: (March, 2013)

Comment Letter 7

Appendix A: TNC Comment Letter to BLM re: Clark, Lincoln, and White Pine Counties Groundwater Development Project Final Environmental Impact Statement. (October, 2012)

Comment Letter 7



THE NATURE CONSERVANCY

Northern Nevada Office
One East First Street, #1007
Reno, NV 89501

Southern Nevada Office
1771 East Flamingo Road, Ste. 104A
Las Vegas, NV 89119

Tel 775-322-4990
Fax 775-322-5132

Tel 702-737-8744
Fax 702-737-5787

October 1, 2012

Amy Lueders
State Director
Bureau of Land Management
1340 Financial Blvd.
Reno, Nevada 89502

Subject: Clark, Lincoln, and White Pine Counties Groundwater Development Project Final Environmental Impact Statement

The Nature Conservancy has reviewed the Final Environmental Impact Statement (EIS) for the Clark, Lincoln, and White Pine Counties Groundwater Development Project (Project). We commend BLM for addressing a number of issues in the Draft EIS. In particular, we support the exclusion of Snake Valley from the pumping area and the addition of a comprehensive program for monitoring, management and mitigation (COM Plan). Moreover, the EIS has well documented the significant aquatic, vegetation and wildlife resources that could be adversely affected by the Project, by type and by location. These biological resources include perennial springs, streams, ponds, lakes, wetlands and meadows, riparian vegetation, and the associated aquatic, amphibian, and terrestrial species associated with these groundwater-dependent ecosystems. Dozens of these species have some special status for conservation.

However, under the Preferred Alternative in the EIS (Alternative F), as well as all other Alternatives other than No Action, the projected stress to these groundwater-dependent ecosystems and associated species caused by the long-term groundwater withdrawals would propagate over hundreds of miles and hundreds of years. Because of the severe potential impacts, we are requesting and recommending that you defer making a Record of Decision until certain key matters are resolved and made part of the public record if you select any Alternative other than the No Action Alternative.

Introduction

The mission of The Nature Conservancy (the Conservancy) is to conserve the lands and waters on which all life depends. To achieve this mission, the Conservancy engages constructively with public agencies, private landowners, local communities and others. The Conservancy's approach is non-confrontational and solution-oriented.

Comment Letter 7

The Conservancy has identified 23 priority landscapes that collectively capture virtually all of Nevada's ecological systems and over 50 percent of its imperiled species. The significant biological resources at two of these "Last Great Places" in Nevada would be adversely impacted by the Project's proposed long-term, large-scale groundwater withdrawals. These landscapes include Spring Valley-Snake Range (in particular Spring Valley itself) and White River Valley (in particular Cave Valley). The Conservancy has been engaged in varied conservation action at these areas over many years. For example, the Conservancy recently completed a "Landscape Conservation Forecasting" report of conditions and proposed management actions for Great Basin National Park (Spring Valley-Snake Range), under a cooperative agreement with the National Park Service. A map of the Conservancy's Priority Landscapes in Nevada is enclosed.

These landscapes contain significant occurrences of aquatic, riparian, and wetland ecosystems, and dozens of associated species that are globally imperiled. The Conservancy's conservation objective is to ensure the long-term viability of the water-dependent ecological systems and imperiled species by maintaining sufficient groundwater and spring flows at these areas. Spring Valley and the other priority landscapes also support a diversity of wildlife species – fish, waterfowl, upland birds and mammals – that are dependent upon the water resources. These species and places are important to Nevadans who use and love the outdoors.

The Issues

There are three issues which the Conservancy wishes to highlight, which are of sufficient importance to merit a postponement of the Record of Decision until they are satisfactorily addressed and made part of the public record. These issues are:

- The lack of a standard for determining "unreasonable adverse impacts" to the groundwater-dependent ecosystems and significant biological resources
- The failure to identify and incorporate ecological modeling as the only reasonable tool to forecast potential adverse impacts to these resources before they actually occur, which may be years in the future.
- The failure to provide for meaningful public engagement in the process of developing the COM Plan.

These issues may seem somewhat technical in nature, but their importance is elevated by the severe potential stress to biological resources under the Preferred Alternative. For example, under the Preferred Alternative, major declines in groundwater levels (greater than 10, 20, 50 and *even 100 feet*) occur within large portions of Spring Valley and Cave Valley within 75 years after build-out of the Project. Moreover, although the EIS often compares the Preferred Alternative F with the previous Alternative E (in that each excludes Snake Valley pumping), Alternative F provides for substantially more groundwater withdrawal than Alternative E. Alternative F provides for pumping up to 114,129 afy, which is 45% greater than the pumping amount under Alternative E (up to 78,755 afy). Indeed, for reasons that are not fully clear, Alternative F provides for more groundwater pumping than has currently been permitted by the Nevada State Engineer in the basins in which production would occur. The effect of

Comment Letter 7

Alternative F is more pumping in an even smaller area, *thereby increasing the groundwater drawdown in Spring Valley and Cave Lake Valley* as compared to Alternative E (see maps in Chapter 3, 3.3-174 and 3.3-182).

Given this dramatic potential future impact on significant biological resources, we wish to stress the importance of resolving the three issues in advance of (or as part of) the Record of Decision, if the decision is anything other than the No Action alternative. Our specific suggestions are as follows:

Standard for Determining Adverse Environmental Impact

Among the COM Plan's stated objectives -- which the Conservancy strongly supports -- is "to avoid, minimize, or mitigate adverse environmental impacts to groundwater-dependent ecosystems and biological communities." The COM Plan outline speaks to various monitoring needs to inform subsequent NEPA analysis (e.g., defining ecological water requirements for groundwater-dependent ecosystems), and also mentions that "triggers or environmental indicators and adaptive management thresholds" will be developed. These are certainly important factors. However, the EIS is silent on one of the most critical factors relating to monitoring, management and mitigation. *No standard has yet been established for what actually constitutes an adverse environmental impact.*

By way of background, the Conservancy helped facilitate the development of the Monitoring Plans under the Stipulation Agreements, using its Conservation Action Planning methodology as a framework. The Monitoring Plans identified the groundwater-influenced ecosystems and their associated special status biota, as well as the Key Ecological Attributes and Indicators for assessing the condition of each system. Key Ecological Attributes represent the critical factors that will capture the ecosystem's or species' likelihood to persist for a century or longer, including elements such as ecological processes, composition, structure and size. Indicators are what is measured for each key attribute. The attributes and indicators serve as a foundation for determining potential adverse impacts. However, they do not in themselves provide a standard for determining adverse impacts.

A standard is different than a particular threshold for defining impacts to a particular biological resource. A standard can be applied across all resources. The Conservancy commonly uses a standard that the Key Ecological Attributes for an ecological system or species should fall within an *acceptable range of variation for the system to be considered viable, recognizing that some management actions may still be required to maintain the system.* If such a standard were deployed, then any predicted movement of an indicator or a suite of indicators *outside* of the acceptable range of variation might be considered an "unreasonable adverse environmental impact" -- whatever the cause, be it groundwater withdrawal or some other management practices affecting the ecosystem. This standard is well-documented in peer-reviewed literature (see "Are We Conserving What We Say We Are? Measuring Ecological Integrity within Protected Areas" by Parrish et al, *Bioscience*, September 2003 / Vol. 53 No. 9). This standard and methodology has been applied by the Conservancy and others in hundreds of instances,

Comment Letter 7

including assessing the health of aquatic resources. For example, the State of Utah's Great Salt Lake Advisory Council recently used this standard and approach for defining and assessing the health of ecological systems and focal species in and adjoining the Great Salt Lake.

As such, a clear standard for what constitutes an adverse ecological impact should be part of the public record if any action is taken other than the No Action Alternative. The Conservancy had made such a recommendation in its comments on the Draft EIS, but we can find no response to this recommendation in the Final EIS.

Ecological Modeling to Forecast Future Impacts

Although we have not conducted a technical evaluation of the regional groundwater model used in the EIS, we applaud BLM's use of regional groundwater modeling. We also applaud BLM's initial efforts to link the results of the groundwater flow modeling to predicting potential impacts to groundwater-dependent biological resources, such as springs, streams, wetlands, meadows and their associated special status species. The predicted impacts cited in the EIS include spring flow reduction, stream flow reduction, lowered groundwater levels, and reduced evapotranspiration.

However, the potential biological impacts can only be inferred by the current coarse-scale groundwater modeling, and need to be better assessed with more fully developed ecological models, as well as with more finely tuned local scale groundwater flow models. BLM acknowledges in the EIS that the latter (local groundwater models) will be developed. BLM also indicates that "flow-habitat relationships would be studied in selected springs and streams," but makes no broader reference to developing and using ecological models to forecast potential adverse impacts to the biota. Springsnails, for example, are highly sensitive to water levels, flows and temperature. The potential impact from groundwater pumping on local springsnail populations, as well as other sensitive aquatic species, could be assessed with finer resolution ecological models that were linked to the results of the more finely tuned local scale groundwater models.

The Conservancy and federal agency partners (including BLM) now routinely use ecological models to forecast future conditions and the potential effects of alternative management strategies for terrestrial and riparian ecosystems at a landscape-level. We strongly encourage the adoption and use of ecological modeling as an adaptive management tool. Ecological models – with parameters linked to the predicted groundwater levels, spring and stream flows, and vegetation evapotranspiration from the groundwater model – could allow the forecasting of adverse impacts well before they might occur, as well as testing a variety of mitigation management strategies in advance of any actual impacts. The Spring Valley Stipulated Agreement provides for the potential development and use of ecological models. Indeed, we can think of no other approach that could reasonably be used to forecast future biological impacts.

Comment Letter 7

As such, a commitment to develop and use ecological modeling in subsequent NEPA analyses should be part of the public record if any action is taken other than the No Action Alternative. The Conservancy had made such a recommendation in its comments on the Draft EIS, but we can find no response to this recommendation in the Final EIS.

Meaningful Public Engagement in the COM Plan

In the Final EIS, BLM has assumed the leadership role for providing assurance of monitoring, management and mitigation of potential adverse impacts. BLM's enforcement authority includes the ability to require reduction or cessation of groundwater withdrawals. The COM Plan is the mechanism for accomplishing this.

We applaud this clarity of authority to enforce monitoring, management and mitigation, which was missing in the Draft EIS. But in doing so BLM has assumed an enormous role, one for which it has little past experience. BLM states that it will seek "interagency input" in the development and implementation of the COM plans, and as it makes future decisions. However, the public has been virtually removed from any subsequent future role in this critical element. BLM provides only for "public disclosure" – that is, "the public would be kept informed of the development and implementation of the COM Plan." (Chapter 3, 3.20-25). Interestingly, this statement in the EIS document is counter to a statement in the Standard Responses, Appendix H, which said:

Section 3.20 contains a public involvement process that would provide recommendations to inform BLM's decision-making process during the deliberations on whether SNWA's groundwater development has likely caused or contributed to adverse effects, and ultimately whether and what adaptive management measures to employ.

Because the EIS has shown the potential for severe environmental impacts, and established the COM Plan process as the key mechanism to monitor, manage and mitigate these impacts, a commitment to a public involvement process that would provide recommendations to inform BLM's future decision-making process should be part of the public record if any action is taken other than the No Action Alternative.

Conclusion and Recommendation

Given the types, levels and extent of environmental impacts predicted under the Preferred Alternative in the EIS, the Conservancy recommends that three key matters be resolved in the public record in advance of (or as part of) any Record of Decision, if the decision is anything other than the No Action Alternative.

- A clear standard be established for what constitutes an "unreasonable environmental impact."

Comment Letter 7

- A requirement that ecological models be developed to better forecast the impacts of reduced groundwater levels and flows to the Key Ecological Attributes of the groundwater-dependent ecosystems that have been developed in the Spring Valley and Delamar, Dry Lake and Cave Valleys Monitoring Plans.
- An assurance of meaningful public engagement in the COM Plan to provide for monitoring, management and mitigation of potential adverse environmental impacts.

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

Sincerely,



Mathew Tuma
Nevada State Director

Enclosures:

- Map of The Nature Conservancy's Priority Nevada Landscapes
- Bioscience article: "Are We Conserving What We Say We Are? Measuring Ecological Integrity within Protected Areas"

Cc: Board of Trustees, The Nature Conservancy in Nevada
Dave Livermore, Utah State Director, The Nature Conservancy

Comment Letter 7

Appendix B: Comparison of Perennial Yield and Total Committed Permit Allocations (Acre-Feet/Year)
Southern Nevada

Comment Letter 7

**COMPARISON OF PERENNIAL YIELD AND TOTAL COMMITTED PERMIT ALLOCATIONS (ACRE-FEET/YEAR)
SOUTHERN NEVADA**

Basin No.	Basin Name	Entire Basin In BLM Area	Basin Borders California	Perennial Yield (1)	Total Committed Permits (2)	Ratio of Total Permits To Perennial Yield	Total Pumping (4)	Restrictions?
161	Indian Springs Valley	No	No	500	1391	2.782	721	
162	Pahrump Valley	No	Yes	20000	60488	3.0244	14355	
163	Mesquite (Sandy) Valley	No	Yes	1500	449	0.299333333	603	Water levels declining/pumping in CA
164a	Ivanpah Valley (north)	No	Yes	700	3025	4.321428571	NR (5)	
164b	Ivanpah Valley (south)	No	Yes	250	781	3.124	NR (5)	
165	Jean Lake Valley	Yes	No	50	290	5.8	NR (5)	
166	Hidden Valley	Yes	No	0	67	--	NR (5)	Presented as >10:1
167	Eldorado Valley	Yes	No	500	2256	4.512	NR (5)	
211	Three Lakes Valley	No	No	4500	4500	1	354	
212	Las Vegas Valley	No	No	25000	87140	3.4856	74098	
213	Colorado River Valley	No	Yes	200	4557	22.785	NR (5)	
214	Piute Valley	No	Yes	300	5037	16.79	NR (5)	
215	Black Mountains Area	Yes	No	1300	5798	4.46	NR (5)	Yes - Ruling 1169
216	Garnet Valley	No	No	400	3366	8.415	NR (5)	Yes - Ruling 1169
217	Hidden Valley	No	No	200	2275	11.375	NR (5)	Yes - Ruling 1169
218	California Wash	Yes	No	2200 (3)	3068	1.394545455	NR (5)	
219	Muddy River Springs Area	No	No	100-36000	14527	--	NR (5)	Yes - Ruling 1169
220	Lower Moapa Valley	No	No	50	5776	115.52	NR (5)	Yes - Ruling 1169
223	Gold Butte Area	Yes	No	500	1	0.002	NR (5)	
224	Greasewood Area	No	No	300	4	0.013333333	NR (5)	
225	Mercury Valley	No	No	24000	27654			Basins 225-230 inclusive
227a	Fortymile Canyon/Jackass Flat	No	No					
229	Crater Flat	No	No					
230	Amargosa Desert	No	Yes					Devil's Hole Restrictions

(1) - Perennial Yield Based on Nevada Department of Water Resources

(2) - Total committed permit allocations includes all active rights - does not include current applications.

(3) - System yield estimated at 7,000 AFY

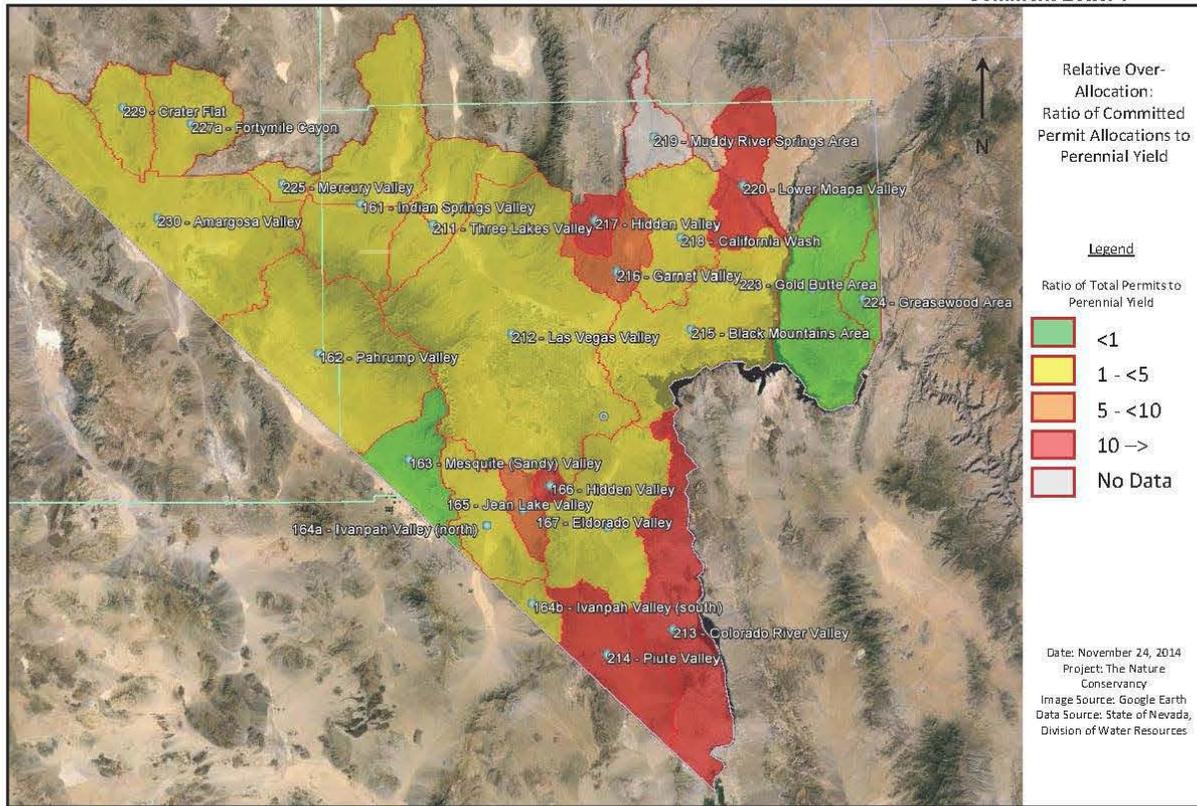
(4) - Total pumping as reported by Nevada Department of Water Resources exclusive of domestic pumping

(5) - NR = not reported

Comment Letter 7

Appendix C: Map of relative over-allocation of groundwater basins in Southern Nevada

Comment Letter 7



ANDY ZDON & ASSOCIATES, INC.

Comment Letter 7

Appendix D: TNC Comment Letter to BLM re: "Draft Solar Regional Mitigation Strategy for the Dry Lake Solar Energy Zone," and "Draft Technical Note: Procedural Guidance and Framework for Developing Solar Regional Mitigation Strategies" (May, 2013)

Comment Letter 7



May 15, 2013

Joe Vieira, Renewable Energy Project Manager
U.S. Bureau of Land Management
Transmitted via email: joseph.vieira@blm.gov

**Re: "Draft Solar Regional Mitigation Strategy for the Dry Lake Solar Energy Zone,"
and "Draft Technical Note: Procedural Guidance and Framework for
Developing Solar Regional Mitigation Strategies"**

The Nature Conservancy submitted a letter jointly with The Wilderness Society and Defenders of Wildlife on May 13, 2013 (Joint Letter) regarding the BLM's "Draft Solar Regional Mitigation Strategy for the Dry Lake Solar Energy Zone," (Draft Dry Lake Strategy) and "Draft Technical Note: Procedural Guidance and Framework for Developing Solar Regional Mitigation Strategies" (Draft Technical Note) both dated April 29, 2013. This letter supplements the Joint Letter with additional points of concern to The Nature Conservancy, and incorporates by reference all points of the Joint Letter.

The Joint Letter recognized that the Dry Lake Strategy has largely met certain key Solar PEIS objectives for regional mitigation, in particular with respect to identifying unavoidable impacts and mitigation options in a regional ecosystem context; a meaningful stakeholder process; and a logical progression of steps for identifying a mitigation site that is appropriate for offsetting impacts at the Dry Lake SEZ.

Our Joint Letter also raised concerns with respect to key BLM regional mitigation objectives, including those with respect to the durability and additionality of proposed conservation measures; insufficient specificity and measurability of conservation objectives; insufficient specificity of conservation actions; and the absence of details with respect to appropriate fiduciary mechanisms.

This supplementary letter addresses the following:

- example ecological goals, objectives and measures for mitigation actions;
- recommendations for more specific conservation actions;
- concerns about the methodologies for: determining unavoidable impacts that warrant mitigation; identifying and prioritizing mitigation sites; setting mitigation fees; and the planning framework for regional mitigation; and

Comment Letter 7

- recommendations related to evaluation, monitoring and mitigation of groundwater impacts.

I. Examples of Ecological Goals, Objectives and Measures for Mitigation Actions:

As stated in our Joint Letter, TNC is concerned that the proposed objectives and conservation actions of the Draft Dry Lake Strategy are insufficiently specific to ensure they meet BLM's stated goal of being "adequate to the impacts over time." The objectives are not measurable, and the 80% discounting of the base mitigation fee is not accompanied by a clear statement of what activities will be funded as a result of this discounting. Also needed is an analysis to suggest that the proposed funded actions will achieve the mitigation objectives.

In order to achieve the appropriate level of specificity it is necessary to thoroughly identify the conservation values of the Gold Butte mitigation site, the threats to those values, and evaluate which actions will most cost-effectively mitigate those threats (i.e., return on investment analysis). Such an analysis is typically conducted as a Conservation Management Planning exercise. TNC recommends that BLM undertake such an exercise in the coming months before offering the Dry Lake SEZ for development.

A. Conservation Values and Threats – Setting the Context for Goals, Objectives and Actions.

In lieu of the more comprehensive Conservation Management Planning effort that we suggest BLM undertake, TNC offers the following assessment of resource values and threats to those values of the Gold Butte ACEC. What follows is a restatement of material TNC previously submitted to BLM March 11, 2013 ("Possible Mitigation of Impacts from Solar Energy Development in the Dry Lake SEZ within Existing Areas of Critical Environmental Concern: Comments from The Nature Conservancy"). It is on the basis of this type of information, along with BLM's assessment of unavoidable impacts from development of the Dry Lake SEZ, that appropriate mitigation actions can be developed.

Positive Characteristics:

- The whole of this peninsula is a combination of Sonoran, Mojavean and Colorado Plateau ecological systems, and as such is extraordinarily biologically diverse.
- Desert tortoises are present in medium densities (at least prior to recent extensive fires).
- Gila monsters are abundant here relative to their usual rarity elsewhere.
- Endemic springsnails are present in the Pakoon Basin portion of this ACEC (AZ side).
- The area contains rich cultural heritage from previous Native American inhabitants as well as from Spanish occupation period and frontier cultural sites.
- Gold Butte is surrounded by the Colorado River to the south and the Virgin River to the north and west, making this a very distinct and protectable peninsular ACEC.

Negative Characteristics:

- There is a growing problem of red brome and schismus grass infestation as a legacy of the livestock grazing of previous decades that will likely result in catastrophic wildfires, severely compromising the Mojave succulent and scrub communities. The risk of permanent type conversion is high.

Comment Letter 7

- Dense red brome infestation throughout the lowland creosote scrub and Joshua Tree woodlands – increases major wildfire risks.
- Over 500 miles of BLM-recognized routes, many redundant, some occurring within and on culturally and ecologically sensitive sites.
- Free-ranging cattle illegally graze throughout the peninsula without agency enforcement action.
- OHV use is widespread and generally not limited due to lack of law enforcement presence, especially on weekends and holidays.
- Most springs have been altered for livestock use but could be restored with effort.
- Current configuration of the ACEC is based primarily on current desert tortoise habitat and leaves out connectivity with the extraordinary Virgin Mountain area which has unique assemblages of montane reptiles and plants due to its height and location relative to adjacent ecoregions.

In light of these threats, and in particular due primarily to the abundance and tenacity of the red brome infestation as well as the difficulties federal land managers have had enforcing livestock grazing and OHV policies, the long term prognosis for Desert Tortoise is poor to fair.

B. Example Goals, Objectives and Measures.

Key to the success of regional mitigation will be the clear definition of specific, measurable objectives for mitigation investments that address threats at the place where regional mitigation funds are invested. Along those lines, we are providing examples of ecological goals, objectives and measures for mitigation actions that are at a level of detail to guide investments and actions and are focused on actions that would be additional to BLM's current commitments. The actions that we focus on for developing regional goals, objectives and measures are also actions that increase the durability of other conservation investments.

Goal: Reduce Fragmentation: Reducing the fragmentation (roughly equivalent to restoring intactness) of the site would improve habitat quality and reduce threats to desert tortoise and other terrestrial plant and animal species in the Gold Butte ACEC/candidate mitigation site.

One of the best and most direct ways to reduce fragmentation at the Gold Butte ACEC will be to close excessive roads and off-road vehicle trails. Road closure would also directly reduce the threat of death and injury to desert tortoise and other animals due to collision or being run over by vehicles. It would also reduce the likelihood and rate of invasion by harmful non-native species such as red brome and Schismus grass. Because these species carry fire far more readily than any of the native species, road closures could also reduce the threat of fire in the candidate mitigation site.

Objective: Close 50-75% of roads outside the Backcountry Byway:

Allied objectives for restoring habitat to the roadways and/or across the entire candidate site should also be established because ultimately the purpose of closing the roads is to improve native species habitat and to maintain or increase populations of target (covered) native species, such as the desert tortoise. Some examples:

Comment Letter 7

Objective: Increase cover of perennial native vegetation to closed roads and trails to a value of 25% or more within 5 years.

Objective: Increase perennial native vegetation cover across the entire site by 10% above current values within three years.

Objective: Increase the desert tortoise population at the site by 20% within ten years.

Achievement of and progress towards these goals and objectives should be measured regularly and corrective action taken if progress is not sufficient. Two major types of measures, activity and outcome measures, should be used.

Activity measures determine whether or not prescribed actions have been taken. An activity measure for road closures would simply be a measure of the road segments (or road miles) closed within the candidate site within a given period of time. A standard for deeming what is an effectively closed road should be determined ahead of time. For example, a road may be defined as closed if an absolute threshold of zero passages per year by wheeled vehicles were detected. Alternatively, a lower threshold of, for example, 0.5 passages per month (6/year) might be deemed acceptable. This could be measured directly by placing road counters (special cables laid across the road and connected to a counter by the roadside). Or it might be measured by an assessment of damage to plants along specific road segments (this measure would also evidence whether adequate progress was being made in habitat recovery), disturbance of chalk layers deposited along closed road beds, or some other indicator sensitive to the passage of vehicles. Road closure is a *means* to the *end* of reducing fragmentation, and of increasing habitat, the cover of native perennial vegetation and the populations of target (covered) species.

Outcome measures assess whether those ends have been accomplished or are being approached. Appropriate outcome measures in this example would include before and after measures of fragmentation or intactness, measures of native perennial vegetation cover and measures of populations sizes of target species. A variety of fragmentation indices are available, some using largest intact block or mean size of blocks, others using maximum distance to nearest road or trail or mean distance to nearest road or trail, and so on. Such measures are usually conducted in GIS and/or may require before-and-after aerial imagery.

Native perennial cover may be assessed using GIS and before-and-after aerial imagery, or it may be measured in the field using point counts, visual cover estimates or other methods. It may also be useful to measure cover of annual herbaceous species in plots on closed roadbeds and compare this with measures from plots located within undisturbed blocks.

Comparisons of cover measures between plots from old roadbeds versus plots from undisturbed areas must be made with data collected in the same year and preferably on the same day(s). Annual and even shorter-term rainfall can have a huge effect on plant cover, and particularly on annual herbaceous species cover, with values far higher in wet years than in dry years no matter whether the plots were previous damaged or not.

In some cases with small study sites and/or particularly easy to find and count species populations can be censused and values before and after treatments directly compared. More often not all individuals can be found or counted within a reasonable time or with

Comment Letter 7

available labor and funds. In these cases, populations can be sampled and the population size estimated with relative accuracy. It would be appropriate to estimate desert tortoise population size in the candidate mitigation site before treatment and at regular intervals afterwards and the results compared to determine whether the population is increasing or whether it has reached the goal. Abundances of plants may also be determined by other measures such as cover values (for a particular species or group of species), frequency or biomass.

Provided that BLM selects the (existing or expanded) Gold Butte ACEC/candidate mitigation site, we recommend that at least the following before-and-after measures and comparisons be carried out:

- Miles of roads and trails closed;
- Reduction of fragmentation using a standard fragmentation index
- Vehicle passages per year on closed roads and trails as measured by road counters;
- Cover of perennial native vegetation on old (closed) roadbeds and trails before and after closure (also compare with cover in undisturbed areas to determine whether these values are even approached and how long this can be expected to take);
- The desert tortoise population size before and 5 and 10 years after road closures on the site.

II. Conservation Actions needed at Gold Butte

TNC believes effectiveness, and return on investment analyses are critical insofar as there will be limited funds available for mitigation actions and it is critical that their expenditure achieve as much conservation as possible. TNC also stresses our recommendation that BLM provide a clear and transparent accounting of which actions have already been committed to (e.g., through the Clark County MSCHP) and which actions will be taken, in addition to existing commitments, for mitigation of impacts at Dry Lake SEZ. BLM should limit expenditure of mitigation funds to actions that are additional to prior commitments. In light of the preceding discussion of the Gold Butte ACEC conservation values, threats, goals, objectives and measures, TNC recommends the following more specific conservation actions, listed in priority order of likelihood of conservation effectiveness.

- 1) Removal of trespass cattle (Note: this is a previous commitment that should be done prior to mitigation investment and not use Dry Lake mitigation funds).
- 2) Closure of 50-75% of existing roads and trails outside of the Back Country By-way
- 3) Control of OHV activities to "designated routes only" – dedicated law enforcement personnel on weekends and holidays.
- 4) Restoration of key springs throughout the peninsula on both BLM and NPS lands.
- 5) Weed management plan for prevention of future landscape-scale fires.
- 6) Weed treatments at scale – probably involving widespread spraying of ecologically appropriate chemical herbicide and/or use of biocide such as the Black Fingers of Death fungus.
- 7) Experimental treatment of select burned areas for expedited restoration/recovery of natural Mojave plant community.
- 8) Mojave Desert environmental education program integrated into Bunkerville and Mesquite schools as well as available for adult public through continuing education

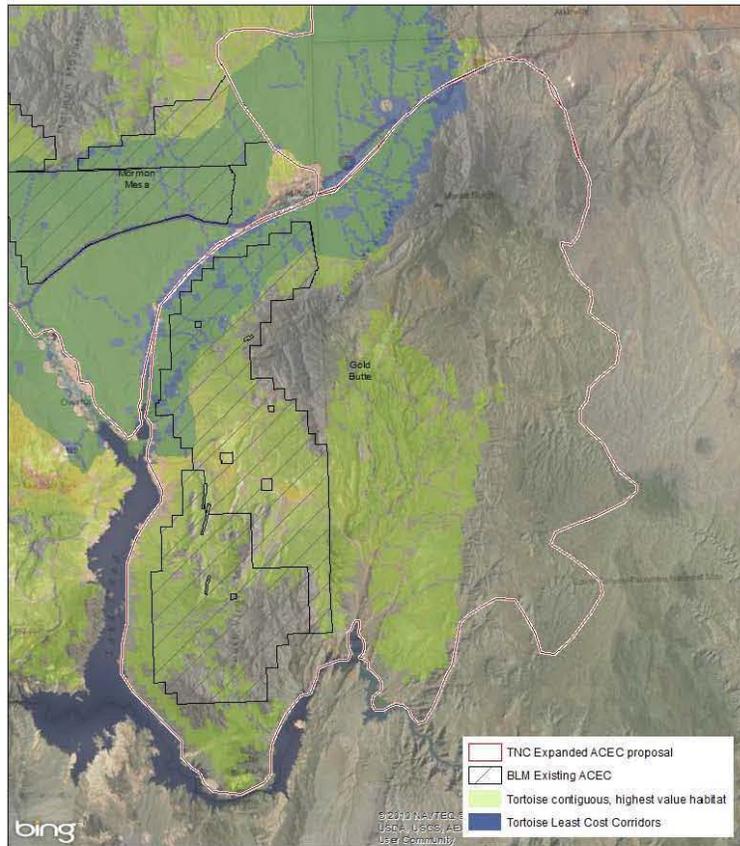
Comment Letter 7

- 9) Determine if fencing of the Gold Butte Back Country By-way road with installation of tortoise appropriate culverts is appropriate given current traffic levels and evidence of significant tortoise or other species mortality.
- 10) Modification of Gold Butte ACEC boundaries to incorporate the Virgin Mountain area. This area is key to the long-term viability of the species that the Dry Lake SEZ mitigation plan intends to protect because it offers a combination of topographical diversity and connectivity to adjacent ecoregions. As such, this area is important to protect because its location and geographic features will allow plants and animals to adapt and move in response to climate change. The following figure illustrates TNC recommendations for the new boundaries.



Dry Lake Solar Energy Zone

The Nature Conservancy Candidate Mitigation Sites - Expanded ACECs
Tortoise Corridors



Comment Letter 7

III. Methodologies

TNC suggests that several methods used in the Draft Dry Lake Strategy and Draft Technical Note need to be improved upon, as follows:

A. Method for determining which unavoidable impacts require mitigation.

As a preliminary concern, the criteria for determining which unavoidable impacts require compensatory mitigation, and which do not, is unclear. The central criteria for making this critical determination should be spelled out and justified.

B. Method for Identifying and Prioritizing Regional Mitigation Sites

TNC accepts that the Gold Butte ACEC is an appropriate site for mitigation as long as durability and additionality issues are addressed. However, we are concerned with several aspects of the methodology for choosing the site. First, In the Draft Regional Mitigation Strategy for the Dry Lake SEZ and the Draft Technical Note, BLM states that one of the criteria used for selecting a location for regional mitigation was that “the sites have partial or complete conservation status.” We disagree that this should be a criterion for selecting regional mitigation sites.

As TNC has suggested, BLM should favorably consider expending mitigation resources on redefined, expanded and new protected areas. BLM should inventory and evaluate existing ACECs—adding to these or establishing new areas as appropriate, particularly where landscape level ecological goals could be achieved. Limiting the selection of mitigation sites to existing conservation areas closes off from consideration many areas that may well provide better conservation values.

Ideally, if mitigation dollars are going to be invested in public lands, a place that meets the regional mitigation goals and objectives and that does not currently have a conservation designation should be identified. The mitigation investment, along with measures to provide meaningful and lasting conservation designations and removal of incompatible uses (e.g., designation through a land use plan amendment accompanied by an MOU), would then constitute mitigation that is both durable and additive to existing agency commitments.

We commend BLM for the method proposed to identify, evaluate and prioritize candidate mitigation sites in the February 27th workshop.¹ TNC and Defenders of Wildlife suggested similar selection methodologies. Both the Regional Mitigation Plan for Dry Lake SEZ and the Technical Note would benefit from a clear description of this method. Currently, the method is documented in the Technical Note as only three steps:

- 1) Identify a full range of mitigation options
- 2) Assess Alternative mitigation sites and actions
- 3) Review and Analyze Mitigation Sites in GIS

¹ Pages 45-52 of this document:
http://www.blm.gov/pgdata/etc/medialib/blm/nv/field_offices/las_vegas_field_office/energy/dry_1ake_sez/workshop_4_feb_27.Par.4524.File.dat/Feb.2013%20Workshop%20Presentations.pdf

Comment Letter 7

We found the order of these steps confusing, since the analysis to identify potential mitigation sites should occur using the best available information, including GIS. TNC specifically recommends that BLM clarify that:

- 1) Identification of the full range of mitigation options should happen concurrently with identification of the candidate mitigation sites. Each location will likely require different actions to meet the regional mitigation goals and objectives.
- 2) Identification of candidate mitigation sites should use the best available information, including input from the BLM Field Office, input from stakeholders and a GIS analysis using regional data (e.g. related to fragmentation, species distribution, migration corridors, invasive species, etc.)
- 3) The analysis to identify and evaluate candidate mitigation sites, including the GIS analysis, should be shared with stakeholders.
- 4) The process that was proposed at the February 27th workshop is the approach used by the Dry Lake SEZ team in identifying potential mitigation sites and prioritizing among them. The specifics of that approach should be explained in more detail.

C. Mitigation Fee

TNC supports the proposed level of the mitigation fee that would result in \$7.1 million in mitigation funds under the scenario that the Dry Lake SEZ is fully developed. If spent on the most cost-effective actions, this level of funding could result in meaningful conservation (as long as incompatible uses are also withdrawn or removed and the actions are additive to existing BLM commitments). TNC also agrees with the concept of adjusting the mitigation fee based on landscape context and resource value.

However, the method for evaluating landscape condition, evaluating resource value and discounting the mitigation fee is problematic and should be revised before it is applied to future SEZ regional mitigation planning efforts or any other project mitigation calculation.

Regarding landscape context, the proposed method for characterizing the landscape context as less altered than the ecoregion, similar to the ecoregion or more altered than the ecoregion assumes without justification a normal distribution of data. Accordingly, BLM should evaluate how the data are distributed and should share this evaluation with the stakeholders. If the data are not distributed normally, BLM's proposed method for characterizing the landscape context is inappropriate and should not be applied. In addition, if the data are distributed normally, we recommend that the data be split equally into thirds rather than using a 0.5% standard deviation.

Regarding resource value, the proposed approach for determining resource value uses vague and duplicative criteria and does not provide a logical explanation of how the proposed criteria would add up to a true resource valuation. For example, it appears that the category "Value in the RMP" contains duplicative characteristics with the category "Legal/Policy Status."

Further, the criteria for ranking the "Value in the RMP" and the "Legal/Policy Status" categories appear to be inappropriate given the requirements for identification of SEZs in

Comment Letter 7

the Solar PEIS. For example, to score a “3” or a “2” in the “Value in the RMP” and “Legal/Policy Status” categories, the SEZ would need to be located in an area that is precluded under the Solar PEIS. The Draft Dry Lake Strategy and the Draft Technical Note provide the following as some examples of what may cause a SEZ to rank as a “3” or “2” in resource value under “Value in the RMP” and “Legal/Policy Status”: within exclusion areas, within an ACEC, within a Wilderness Area. Per the Record of Decision for the Solar PEIS, SEZs are not permitted in these locations. As such, these criteria are inappropriate for determining the resource value of the SEZ.

Of note, based on our understanding of the Resource Value chart, the maximum score possible for a SEZ appears to be an 8, which is categorized as a “high” resource value, making it impossible to rank as a “critical” resource value and therefore currently impossible to have a 1:1 mitigation ratio. This is also inappropriate.

Once the landscape context and resource value methods are fixed, the ratios should also be adjusted. Any area that contains a critical resource in a high value landscape should be avoided. In addition, we believe that areas with high or critical resource values, and areas that have a landscape context that is less altered than the ecoregion, should have at least a 1:1 mitigation ratio.

D. Planning framework for regional mitigation

In our Joint Letter, we noted that the Dry Lake Strategy has not been developed through a NEPA process, and therefore cannot in and of itself modify land uses. In the future, we strongly recommend that regional mitigation planning be done concurrently with these processes so that BLM can make formal changes to land use designations and commit to management actions, removal of incompatible uses, and use restrictions.

IV. Recommendations Related to Evaluation, Monitoring and Mitigation for Groundwater Impacts

For the Dry Lake pilot, BLM has concluded that unavoidable groundwater impacts may occur, but those impacts are unlikely because “BLM will review all applications to validate net neutral water use (i.e., ground-water purchased from holders of currently used existing senior water rights).” The agency has concluded that no offsite mitigation is necessary as part of the regional mitigation planning process (Attachment D, Summary Table, at p. 68).

Our understanding is that water rights in the basin associated with the Dry Lake SEZ are severely over allocated, and there is no realistic hope that over-allocation will be brought into balance with the basin’s perennial yield. As such, we are concerned about the decision to not plan for the mitigation of groundwater use as part of the Draft Dry Lake Strategy. Our preference would have been for the agency to propose the adoption of groundwater best management practices, restrictions on development, and monitoring and trigger requirements in the regional mitigation planning process (similar to restrictions that were clarified during this process due to land-based development restrictions from utility lines).

Since these factors are not addressed in this plan, we strongly recommend the following, in accordance with the Record of Decision for the Solar PEIS (SPEIS/ROD), when offering specific parcels within the Dry Lake SEZ for competitive bid:

Comment Letter 7

- 1) Require developers to “conduct hydrologic study (or studies) that demonstrate a clear understanding of the local surface water and groundwater hydrology” (SPEIS/ROD page 69.) Any hydrologic study or studies should use all available data and accepted models that specifically define groundwater basins and surface water and groundwater interactions, sustainable yields, and long-term efforts of all existing and probable withdrawals, including likely effects related to climate change.
- 2) Require developers to “avoid, minimize and mitigate impacts on groundwater and surface water resources in accordance with laws and policies” (SPEIS/ROD page 71.) Purchase of actively used senior water rights in multiples of solar project use is the most effective means to mitigate for groundwater impacts where water rights are significantly over-allocated.
- 3) Employ “an adaptive management strategy and modifications, as necessary” (SPEIS/ROD page 73.) The SPEIS/ROD specifies that during operations, the developer shall monitor “water quantity and quality in areas adjacent to or downstream from development areas through the life of the project to ensure that water flows and water quality are protected” (page 73.) We believe that it is critical for BLM to impose groundwater monitoring with triggering provisions that specify automatically imposed remedies for reductions in groundwater use in the event that monitoring or modeling shows that adverse effects are likely to occur, or are occurring.

Groundwater impacts are likely to pose significant problems in other areas, such as the Amargosa Valley Nevada SEZ, and in many, if not most, variance sites. For future regional mitigation efforts, we recommend that for basins where cumulative existing pumping exceeds or is likely to exceed perennial yield, the agency should require the developer to secure a reliable and legally available water supply to meet project needs that does not exacerbate the groundwater problem and does not negate the benefits of greenhouse gas reductions that solar energy can provide (e.g., by trucking in water).

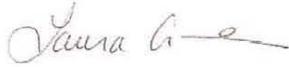
In other areas, where groundwater usage approaches reasonable limits, BLM should restrict water use through development technologies or mitigation requirements. In most desert basins an effective mitigation program for solar will require a combination of best management practices and compensation. Predictive modeling and a well-designed monitoring plan to detect in advance likely adverse effects on groundwater resources should be coupled to a trigger mechanism that automatically requires reductions in project groundwater pumping in the event that adverse effects are occurring or predicted to occur.²

² BLM recently issued several comment letters to the California Energy Commission in connection with the proposed Bright Source Hidden Hills Solar Generation System proceeding, (now suspended.) The letters were signed by the California and Nevada state directors and proposed adoption of the majority of these principles in order to provide long term protection for groundwater dependent ecological resources, including the Wild and Scenic Amargosa River. We believe that these letters establish sound precedent for groundwater protection as BLM moves forward with the establishment of mitigation principles for all solar approvals.

Comment Letter 7

Thank you for the opportunity to comment. Please feel free to contact either of us if you have questions or would like to discuss our recommendations.

Sincerely,



Laura Crane
Director, California Renewable Energy Initiative
The Nature Conservancy, California Chapter



Michael Cameron
Associate State Director
The Nature Conservancy, Nevada Chapter

Cc: Ray Brady, BLM
Mike Dwyer, BLM NV
Karen Smith, ANL
Gordon Toevs, BLM WO
Heidi Hartmann, ANL
Shannon Stewart, Environmental Science Associates

Comment Letter 7

Appendix E : Joint TNC, DOW, and TWS comment letter re: Outstanding concerns with the Dry Lake Solar Energy Regional Mitigation Plan. (March, 2013)

Comment Letter 7

March 28, 2013

Joe Vieira, Renewable Energy Project Manager
Bureau of Land Management
joseph_vieira@blm.gov

RE: Outstanding concerns with the Dry Lake Solar Energy Zone Regional Mitigation Plan

Dear Joe:

On behalf of the undersigned, we are writing to express our continued support of the Dry Lake Solar Energy Zone Regional Mitigation Plan process and efforts made to date. We believe that this process can result in a plan that outlines an efficient and effective approach to mitigation. This is a goal that we continue to work with the Bureau of Land Management (BLM) and other stakeholders to achieve. The success of this effort, however, will be determined by the extent to which the plan is based on science, clear and appropriate methodologies, and a commitment to accurately assessing and valuing the real and unavoidable impacts of solar energy development. This is necessary not only for the effort at Dry Lake, but also because BLM has stated its intent to produce through this pilot project a model for future regional mitigation plans.

We are strongly in favor of choosing mitigation areas and actions at a landscape scale in order to guide mitigation investments in the most important places for conservation. Our overarching concerns are that:

1. The conservation objectives for resources of interest (e.g., those resources that will require compensatory offsite mitigation) are not clear and therefore we are unable to evaluate the effectiveness of mitigation activities and associated costs, leaving us no basis to know if the mitigation actions will achieve the conservation objectives.
2. Mitigation investments are being proposed on public lands without a clear approach for ensuring that these investments will be durable.
3. Draft methodologies (e.g., for establishing a mitigation fee, ranking candidate mitigation sites) are so convoluted that it is not possible to judge the effectiveness of applying these approaches across the landscape.

In addition, BLM has explained many aspects of its approach with examples, but has not presented proposals for moving forward. To illustrate:

- Example goals and objectives have been presented, but BLM's proposal for the draft or final goals and objectives have not yet been shared.
- Mitigation fee examples have been presented, without a clear proposal.

Comment Letter 7

- A number of potential mitigation sites have been identified, but BLM has not yet evaluated these particular sites using their proposed methodologies.

To address our overarching concerns, we recommend that:

1. BLM present its proposed goals and objectives for the Dry Lake SEZ Regional Mitigation Plan.
2. BLM include withdrawal of incompatible uses, as well as other tools (e.g., designations) as a component to any mitigation investment on public lands. Furthermore, BLM needs to present its proposed approach for ensuring durability of mitigation investment on any public lands.
3. BLM demonstrate that the method for establishing an offsite fee is consistent with mitigation, monitoring, and adaptive management programs successfully implemented by other Department of the Interior agencies and outlined in the BLM's Assessment, Inventory, and Monitoring (AIM) Strategy. Any method utilized must sufficiently evaluate actual impacts and provide an adequate and durable conservation-based mitigation response. We also strongly recommend that BLM solicit peer review from USGS on its proposed methodologies (e.g., selection of landscape condition and resource values to establish the fee, methodology for assessing landscape condition, methodologies).
4. BLM complete the analysis of candidate mitigation investment sites, clearly stating BLM's proposals and not simply illustrating with examples.

In addition, we are concerned with BLM's proposal of "replacing one developed acre with an equivalent intact acre of the same ecological character." There are three primary issues with this "one for one" approach: (1) ecological character is an undefined and ambiguous term that provides no certainty that impacted resources will be offset with the same resources; (2) the needs of impacted resources (including species, habitats, and other important resources) may not be adequately mitigated; and (3) the cumulative impacts cannot be adequately met in a quid pro quo approach to mitigation. The inherent variation in habitat, and relaxing this requirement to allow dissimilar habitats to be exchanged, could easily lead to ineffective and poorly targeted mitigation that does not meet the simple goal of offsetting development activities while leaving wildlife and their habitats in as good or better condition than they currently are on public lands. Therefore, when mitigation investments are made on public lands, the one-to-one ratio is not likely to be adequate to mitigate for developed acres.

Lastly, we want to address BLM's current proposal to use existing ACECs to satisfy new mitigation. Investment of solar mitigation funds in existing ACECs will be acceptable only if an ACEC can be shown to have the highest appropriate conservation values, the biological resources lost through development in the Dry Lake solar energy zone are represented in the ACECs where additional conservation actions would occur, and the expenditure of solar mitigation funds results in additional and measurable measures being taken at the ACEC above and beyond existing BLM commitments for managing that ACEC (e.g., measures that are required for BLM to manage the ACEC for the benefit of the critical environmental resources for which the ACEC was created). The additional measures must include withdrawal of incompatible uses, and other measures beyond withdrawal that have measurable and discrete conservation

Comment Letter 7

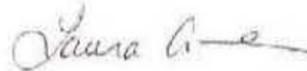
benefits that can be accounted for (i.e., there must be methods to ensure fiscal accountability with resulting management that clearly benefits conservation objectives).

Additional specific recommendations on these issues can be found in our comments submitted in response to the documents released on the Dry Lake Regional Mitigation Plan on March 18, 2013. Those responses are sent under separate cover. We look forward to discussing these issues further.

Sincerely,



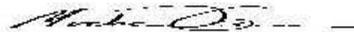
Erin Lieberman, Western Policy Advisor
Renewable Energy & Wildlife
Defenders of Wildlife
elieberman@defenders.org



Laura Crane, Director, California Renewable
Energy Initiative
The Nature Conservancy, California Chapter
lcrane@tnc.org



Alex Daue, Renewable Energy Associate
The Wilderness Society – BLM Action
Center
alex_daue@tws.org



Michael Cameron
Associate State Director, Nevada Chapter
The Nature Conservancy
mcameron@tnc.org

Cc: Ray Brady, BLM
Mike Dwyer, BLM NV
Karen Smith, ANL
Gordon Toevs, BLM WO
Heidi Hartmann, ANL
Shannon Stewart, Environmental Science Associates



United States Department of the Interior



BUREAU OF LAND MANAGEMENT
Southern Nevada District Office
Las Vegas Field Office
4701 N. Torrey Pines Drive
Las Vegas, Nevada 89130
<http://www.blm.gov/nv/st/en.html>

In Reply Refer To:

N-93306, N-93321, N-93337
2800 (NVS1000)

FED-EX TRACKING NUMBER

Laura Crane
The Nature Conservancy
915 E. Bonneville Ave.
Las Vegas, Nevada 89101

Erin Lieberman
Defenders of Wildlife
1130 17th Street, NW 1660
Carson City, Nevada 89701

Alex Daue
The Wilderness Society
Wynkoop St. Suite 850
Denver, Colorado 80202

Dear Ms. Crane, Ms. Lieberman and Mr. Daue:

Thank you for your joint comments on the Environmental Assessments (EAs) prepared for the Dry Lake Solar Energy Zone (SEZ) projects. This letter responds to all substantive comments made in your letter, which is attached for reference.

Modify the EAs to Address NEPA Concerns

The Bureau of Land Management (BLM) is responding to your comments in this letter and does not intend to republish or reissue a new EA. This approach is consistent with Section 6.9.2 of BLM NEPA Handbook H-1790-1 (2008), which states (with italics added): “*If a substantive and timely comment does not lead to changes in the EA or decision, you may reply directly to the commenter, and we recommend that you document the reply in either the EA or the decision record.*” The decision record for this project will include a copy of your letter as well as this reply.

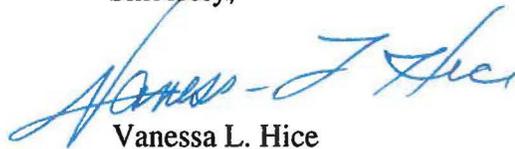
As described in Section 1.1 of the subject EAs, the EAs are tiered to the Solar Programmatic Environmental Impact Statement (Solar PEIS) (BLM and DOE 2010; BLM and DOE 2012). Tiering allows for the preparation of an EA and Finding of No Significant Impact (FONSI) for a proposed action (also referred to as a “Finding of No *New* Significant Impact” (43 CFR 46.140(c)), so long as any significant effects of the individual action were analyzed in the Solar PEIS and any additional effects of the individual action not analyzed in the Solar PEIS are not significant.

Regional Mitigation Strategy

The BLM recognizes your concerns with additional specificity and clarity regarding the final mitigation strategy that will be utilized to offset unavoidable impacts from development in the

SEZ. It is BLM's intent to collect the \$1,836 per acre fee identified in the Regional Mitigation Strategy for the Dry Lake Solar Energy Zone and to document that commitment in the Decision Records (DRs). The fee will be collected prior to BLM issuing a notice to proceed. The BLM intends to hold a workshop within 90 days of signing the DR(s) to gain your input on how to implement the mitigation strategy. Any necessary NEPA analysis on mitigation measures will be completed as soon as practicable and we look forward to your input during that NEPA process as well. As disclosed in the EAs, BLM's selection of any compensatory mitigation measures will be consistent with the procedures described by IM 2013-142 (June 13, 2013) and draft Manual Section 1794, "Regional Mitigation," which includes guidance for management of funds collected as part of the restoration, acquisition, or preservation portion of the total mitigation fee by an independent third party (Section 1.5 of the EAs).

Sincerely,

A handwritten signature in blue ink, appearing to read "Vanessa L. Hice", written over a faint, illegible background.

Vanessa L. Hice
Assistant Field Manager
Division of Lands

Enclosures

Comment Letter 8

January 8, 2015

Submitted electronically via BLM's ePlanning website and via email to nchrist@blm.gov and Gregory_Helseth@blm.gov

Ms. Nancy Christ
Mr. Greg Helseth
BLM Southern Nevada District Office
SNPLMA Division
4701 North Torrey Pines Drive
Las Vegas Nevada, 89130
(702) 515-5120

Subject: Dry Lake Solar Energy Zone Project Environmental Assessments

-Playa Solar Project (Dry Lake SEZ Parcels 2, 3 & 4; DOI-BLM-NV-S010-2014-0127-EA)
-Dry Lake Solar Energy Center Project (Dry Lake SEZ Parcels 5 and 6; DOI-BLM-NV-S010-2014-0126-EA)
-Harry Allen Solar Energy Center Project (Dry Lake SEZ Parcel 1; DOI-BLM-NV-S010-2014-0125-EA)

Dear Ms. Christ and Mr. Helseth,

The Nature Conservancy, The Wilderness Society and Defenders of Wildlife want to thank you for the opportunity to provide public comment on the Bureau of Land Management's (BLM) three Environmental Assessments (EA) for solar development on the Dry Lake Solar Energy Zone (SEZ) lease parcels. We are submitting these comments jointly to emphasize our shared desire to see responsible solar development on public lands move forward, while conserving important natural resources and values. Note we are also submitting separate, individual comment letters that highlight additional specific issues important to our respective organizations.

8-1

Most importantly, we are seeking the successful implementation of BLM's Solar Energy Program. BLM has made significant progress to-date. We support appropriate development of the Dry Lake SEZ, which provides an important opportunity for the BLM to demonstrate how directing development to lands of lower conflict and providing permitting efficiency and predictability incentives can allow the agency to successfully manage lands for both energy and natural resources. However, we share significant concerns with the current EAs, specifically the lack of inclusion of detail on compensatory mitigation elements, and the failure to adequately incorporate the Dry Lake Solar Regional Mitigation Strategy. Appropriate development of the Dry Lake SEZ depends on BLM addressing these issues.

8-2

Our organizations strongly support the focus that the BLM and the Department of the Interior (Interior) are giving to adopting the mitigation hierarchy, a focus underscored by the inclusion of regional mitigation within the Solar Programmatic Environmental Impact Statement (SPEIS), Secretary Jewell's first Secretarial Order and BLM's draft Regional Mitigation Policy and Manual.¹ We strongly support the

8-3

¹ The Secretary of the Interior's Order No. 3330 on "Improving Mitigation Policies and Practices of the Department of the Interior" outlines several key aspects of mitigation actions in an effective landscape scale planning approach: 1) the use of a landscape-scale approach to identify and facilitate investment in key conservation priorities in a region; 2) early integration of mitigation considerations in project planning and design; 3) ensuring

Comment Letter 8

intent and mandates of these initiatives, including the recognition of the importance of landscape-scale planning in applying the mitigation hierarchy to ensure conservation values are maintained while allowing responsible energy development to proceed, and that the mitigation hierarchy starts with avoidance first, then minimization, and finally investing in durable offsets to compensate for unavoidable impacts. BLM is making significant progress in these areas, and we support your continued efforts.

8-3
cont'd

Our comments spring from the intent and mandates of the Bureau's Solar Energy Program, which directs development to lands identified as suitable for utility-scale solar development, including those lands in the Dry Lake Solar Energy Zone (SEZ). As the BLM looks to carry out the President's Climate Action Plan goal of permitting an additional 10,000 MW of renewable energy on public lands, it is important this goal not be met through the avoidable and irreplaceable loss of wildlife, critically important habitats, wildlife corridors, wildlands and ecosystem function. By directing development to lands of lower conflict and providing permitting efficiency and predictability incentives, the BLM can successfully manage lands for both energy and natural resources as intended under the Program. The development of the Dry Lake SRMS coupled with the successful auction of parcels in the low-conflict Dry Lake SEZ provides the opportunity to demonstrate the promise of this approach.

8-4

A key element of the Solar Energy Program is the commitment by the BLM to develop Regional Mitigation Plans to ensure effective and strategic off-site mitigation for unavoidable impacts of utility-scale solar development. To date, the only completed solar regional mitigation strategy (SRMS) is for the Dry Lake SEZ. Led by a BLM team including a national renewable energy project manager and local Nevada planning and resource specialists, the pilot involved stakeholders from local government, the solar industry, the environmental community, sportsmen and Native American tribes. The goal was to develop a consistent, regional approach to mitigating impacts and a strategy for how and where the unavoidable impacts of utility-scale solar development can be most efficiently and effectively mitigated off-site. Important elements of this approach include: identification of unavoidable impacts that warrant mitigation; creation of mitigation objectives; selection of sites and mitigation actions; setting a mitigation fee; establishing a fiduciary structure to hold and distribute funds; and establishing appropriate monitoring and adaptive management.

8-5

Consistent with the SRMS, BLM committed prior to the Dry Lake SEZ auction to requiring developers to provide off-site mitigation funds for development in Dry Lake SEZ. The Federal Register notice seeking public interest in development in Dry Lake states: "[t]his notice also announces the release of the 'Solar Regional Mitigation Strategy for the Dry Lake Solar Energy Zone' that describes off-site mitigation costs that will be required for the development of future solar energy projects in the Dry Lake SEZ." (emphasis added). BLM's draft Regional Mitigation Manual also provides important guidance to the agency on incorporating mitigation into project decisions. For example, the manual states: "[t]he BLM may expressly condition its approval of the land-use authorization on an applicant's commitment to perform or cover the costs of mitigation, both onsite and outside the area of impact."

Unfortunately, despite agency guidance from the Solar Energy Program and the draft Regional Mitigation Manual, the mitigation actions and fees recommended in the Dry Lake SRMS are not

the durability of mitigation measures over time; 4) ensuring transparency and consistency in mitigation decisions; and 5) a focus on mitigation efforts that improve the resilience of our Nation's resources in the face of climate change.

Comment Letter 8

mitigation measures "in sufficient detail to ensure that environmental consequences have been fairly evaluated." *Communities, Inc. v. Busey*, 956 F.2d 619, 626 (6th Cir. 1992). Simply identifying mitigation measures, without analyzing the effectiveness of the measures, violates NEPA. Agencies must "analyze the mitigation measures in detail [and] explain how effective the measures would be . . . A mere listing of mitigation measures is insufficient to qualify as the reasoned discussion required by NEPA." *Nw. Indian Cemetery Protective Ass'n v. Peterson*, 764 F.2d 581, 588 (9th Cir. 1985), *rev'd on other grounds*, 485 U.S. 439 (1988). NEPA also directs that the "possibility of mitigation" should not be relied upon as a means to avoid further environmental analysis. Council on Environmental Quality, *Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations*, available at <http://ceq.hss.doe.gov/nepa/regs/40/40p3.htm>; *Davis v. Mineta*, 302 F.3d at 1125.

8-10
cont'd

We ask BLM to modify the draft EAs and FONSI to address these NEPA concerns, and to ensure that the Decision Records (DRs) also include specific commitments for appropriate mitigation. We strongly believe additional specificity and clarity is required regarding the substance and process for assessing, funding and implementing mitigation to offset unavoidable impacts from development in the Dry Lake SEZ.

Recommendations:

The BLM must provide additional specificity and clarity regarding the mitigation strategy that will be utilized to offset unavoidable impacts from solar development within the Dry Lake SEZ. Specifically, the final EAs, FONSI, and DRs must:

- Clearly state that all residual unavoidable impacts identified in the SRMS will be mitigated.
- Include a commitment by BLM to collect from the developers the per-acre mitigation fees identified in the SRMS prior to issuing a Notice to Proceed for ground disturbance. BLM should state clearly the formula used to calculate the per-acre fee.²
- Include a commitment that mitigation fees will be placed into a secure fund as described in the Dry Lake SRMS that can only be used to implement mitigation actions to offset impacts from development in Dry Lake SEZ and a description of the mechanisms that will be used for accounting and distribution of the funds.
- Identify potential mitigation measures and geographic parameters that will be analyzed and implemented according to the prescriptions above. Potential mitigation measures should include those identified in the Dry Lake SRMS.
- Include a commitment to analyze and implement specific mitigation measures that would address development impacts within a reasonable and specified timeframe.

8-11

We recommend BLM establish timeframes for implementing mitigation measures, i.e. that BLM will initiate and complete any NEPA analysis necessary for implementation of mitigation for Dry Lake SEZ solar development within a reasonable timeframe after signing the DRs for the Dry Lake SEZ solar development EAs, and BLM will begin implementation of the mitigation measures shortly thereafter (e.g. within six months of completion of NEPA). Given that the unavoidable impacts will occur immediately, it is critically important for mitigation to begin as soon as possible after ground

8-12

² Note that BLM made an error in calculating the fee in the Final SRMS: BLM did not multiply the \$20/acre durability and effectiveness fee x 30 years (the duration of the permit).

Comment Letter 8

disturbance to ensure mitigation goals can be met.

↑ 8-12
cont'd

We also recommend BLM provide for a public comment period on the changes to the EAs, FONSI and on the draft DRs prior to finalizing the DRs.

↑ 8-13

Conclusion:

BLM led an open and participatory, stakeholder driven process to develop the Dry Lake SRMS, which we robustly supported and participated in. The EAs however, lack the specificity and clarity regarding mitigation identified in the SRMS, and thus are inconsistent with the Solar Energy Program, BLM's draft Regional Mitigation Manual and NEPA. We strongly recommend BLM amend the three EAs and FONSI as outlined above, and ensure the DRs reflect the changes recommended.

We are committed to the success of appropriate solar development in the Dry Lake SEZ and implementation of appropriate mitigation for impacts, as well as implementation of the Solar Energy Program, Regional Mitigation Manual and Secretarial Order 3330 overall. Getting development and mitigation right for Dry Lake SEZ and the SRMS is crucial to all of these efforts.

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

Sincerely,

Laura Crane
Director, Renewable Energy Initiative
The Nature Conservancy
lcrane@TNC.ORG

Alex Daue
Assistant Director, Renewable Energy
The Wilderness Society
alex_daue@tws.org

Erin Lieberman
Western Policy Advisor, Renewable Energy & Wildlife
Defenders of Wildlife
elieberman@defenders.org

CC: Ray Brady (rbrady@blm.gov)

Comment Letter 8

Appendix A – additional examples of vague mitigation requirements from EAs

Example #1: Mitigation Measures for Threatened, Endangered and Candidate Wildlife Species for Playa Solar Project EA (Section 3.9-12)

“The SRMS identified the impact to wildlife from solar development within the SEZ that may warrant regional mitigation (BLM 2014a, Section 2.4.3.2). To compensate for unavoidable impacts, the SRMS recommended a per-acre fee that developers would pay for acres disturbed by development. The BLM will decide as part of the decision record for this Project *if* funds will be collected and, if so, the amount of those funds. Any compensatory mitigation measures will be consistent with the procedures described by IM 2013-142 (June 13, 2013) and draft Manual Section 1794, “Regional Mitigation,” which includes guidance for management of funds collected as part of the restoration, acquisition, or preservation portion of the total mitigation fee by an independent third party.” [emphasis added].

Example #2: Section Harry Allen Solar Energy Center EA, Sec 3.7.5.2.1. 3 Mitigation Measures for Sensitive Species

“Although application of the proposed design features would reduce impacts to sensitive wildlife, disturbance of 717 acres of habitat as a result of the Proposed Action would remain in the long term. During development of the Dry Lake SEZ SRMS, cumulative impacts to sensitive wildlife were identified as an unavoidable impact which cannot be mitigated on-site. Wildlife habitat is an ecosystem service provided by native vegetation. Impacts and mitigation for vegetation will also benefit general wildlife and sensitive wildlife. To compensate for unavoidable impacts, a per-acre fee was recommended for acres disturbed by this Project. The BLM will decide as part of the decision record for this Project *if* fees will be collected, and if so, the amount of those fees. Off-site mitigation may include restoration of native vegetation and site protection activities proposed as part of the SRMS and would benefit wildlife because they would also protect and restore habitat and reverse effects of habitat fragmentation. Off-site mitigation actions funded to offset those impacts may require additional NEPA analysis by the BLM prior to implementation.

Additionally, the measures from the Project-specific BO would be followed. These features are primarily designed to address impacts to federally listed species; however, many of them also benefit other sensitive wildlife species including burrowing owls (*Athene cunicularia*), Gila monster (*Heloderma suspectum*), and chuckwalla. Any remaining impacts to sensitive bird and bat species would be addressed through a Project-specific BBCS and Monitoring Plan that includes a robust systematic monitoring and adaptive management plan to assist in avoiding and minimizing impacts.”

Example # 3: Section Harry Allen Solar Energy Center EA, Sec 3.5.5.1.3 Mitigation Measures for Cultural Resources

“During development of the Dry Lake SEZ SRMS, cumulative impacts to cultural resources were identified as an unavoidable impact which cannot be mitigated on-site. To compensate for unavoidable impacts, a per-acre fee was recommended for acres disturbed by this Project. The BLM will decide as part of the decision record for this Project *if* fees will be collected, and if so, the amount of those fees. Off-site mitigation may include interpretation of NRHP-eligible sites as well as off-site protection of the Old Spanish Trail. Off-site mitigation actions funded to offset those impacts may require additional NEPA analysis by the BLM prior to implementation.”



United States Department of the Interior



BUREAU OF LAND MANAGEMENT
Southern Nevada District Office
Las Vegas Field Office
4701 N. Torrey Pines Drive
Las Vegas, Nevada 89130
<http://www.blm.gov/nv/st/en.html>

In Reply Refer To:
N-93306, N-93321, N-93337
2800 (NVS1000)

FED-EX TRACKING NUMBER

Kathleen Martyn Goforth, Manager
Environmental Review Section
United States Environmental Protection Agency Region IX
75 Hawthorne Street
San Francisco, California 94105-3901

Dear Ms. Goforth:

Thank you for your comments on the Environmental Assessments (EAs) prepared for the Dry Lake Solar Energy Zone (SEZ) projects. This letter responds to all substantive comments made in your letter, which is attached for reference.

Ephemeral Drainages

Non-development areas associated with ephemeral drainages (totaling 469 acres within the Dry Lake SEZ) are identified and shown in Figure 11.3.1.1-2 of the Final Solar Programmatic Environmental Impact Statement (Solar PEIS) (BLM and DOE 2012, p.11.3-1). As described in Section 11.3.9.2.1 of the Final Solar PEIS (BLM and DOE 2012, p.11.3-18), the designation of such non-development areas excludes the mapped 100-year floodplain from potential development. The 100-year floodplain area within the Dry Lake SEZ includes two major unnamed intermittent/ephemeral streams (or desert washes). The avoidance of such areas reduces the potential for adverse impacts relating to surface water hydrology and water quality associated with land disturbance activities (discussed in Section 3.22.5.1 of the Playa Solar Project EA, p. 3.22-3 et seq.) as compared to the impacts described and disclosed in Section 11.3.9 of the Draft Solar PEIS (BLM and DOE 2010, p. 11.3-53 et seq.). Consistent with the non-development areas identified and quantified in the Final Solar PEIS (BLM and DOE 2012), the two major unnamed intermittent/ephemeral streams (or desert washes) associated with the 100-year floodplain are outside the boundaries of Parcels 3 and 4 of the Playa Solar site (see Playa Solar EA Figures 2-1 and 2-2), avoiding an area of approximately 50.8 acres of identified ephemeral drainages within the mapped 100-year floodplain. Further, Figure 11.3.9.2-1 of the Final Solar PEIS (BLM and DOE 2012, p.11.3-26) identifies intermittent/ephemeral stream reach locations in addition to those described above associated with the 100-year floodplain and classifies the sensitivity of such reaches to disturbance. Potential impacts to such ephemeral

drainages from implementation of the Playa Solar Project are analyzed and discussed in Section 3.22.5.1 of the Playa Solar EA (p. 3.22-3 et seq.). The analysis presented in Section 3.22.5.1 was conducted in a manner that complies with the Clark County Regional Flood Control District's Hydrologic and Drainage Design Manual (CCRFCD 1999) and local entity requirements. As described in Section 2.2.11 of the Playa Solar EA (p. 2-12) and noted in your comment, final design of the project will continue to be refined as part of the final engineering process. Existing site hydrology will continue to be considered as part of that process.

As described in the analysis in Section 3.22.5.1.2 of the Dry Lake EA, the removal of the intermittent/ephemeral stream channels within the 100-year floodplain from Parcel 6 would reduce impacts to hydrologic conditions. Because those sensitive areas have been removed from development, there would be no additional impacts to ephemeral streams in the Dry Lake Project area.

Clearing and Grading

As noted in your letter, the EA for the Playa Solar Project explains that "existing vegetation removal and grading would be minimized to the extent reasonably practicable" (EA, p. 2-14) and that "[v]egetation would typically be maintained to a height of no more than approximately 12 inches as needed for site maintenance and fire-risk management" (EA, p. 2-13). In addition, the EA for the Harry Allen Solar Energy Center indicates that "the 715-acre solar facility would be cleared and grubbed of vegetation" (EA, p. 18). Decisions about clearing, grading, and related effects on dust management and drainage have been carefully considered, with the proposed project design minimizing vegetation disturbance and drainage disturbance impacts and prioritizing human health and safety considerations, including worker safety during the panel array installation and maintenance activities and public safety and natural habitat protection through the active management of wildland fire risks.

The BLM manages cactus and yucca as part of its forestry program (see Playa Solar EA Section 3.11, p. 3.11-1 et seq.; see Harry Allen and Dry Lakes EAs Section 3.12, p. 74). Cactus and yucca would be avoided in non-disturbance areas of the project site, and otherwise salvaged to the extent practical or compensated for by paying a fee in lieu of salvage.

Dust Palliatives

The BLM is coordinating with the U.S. Geological Survey Nevada Water Science Center as part of a future study to understand the effects of dust palliatives in stormwater runoff on the health of desert tortoise. If dust palliatives are used on the project site, then the applicant would contribute funds to that study. Study results will be publicly available upon completion.

Hazards and Hazardous Materials

As noted in the Playa Solar Project EA (p. 2-4), "The Applicant will use First Solar's proprietary thin-film CdTe solar PV modules." While CdTe itself is a hazardous substance in an isolated form, the CdTe in the PV panels is bound and sealed within the glass sheets and a laminate material. The EA clarifies this distinction between the isolated form and the finished product relative to what was disclosed in the Solar PEIS. As explained on EA page 3.15-4, "Section 5.20.2.3 of the Draft Solar PEIS identified cadmium telluride (CdTe) modules as a hazardous

material. This is not the case. Instead, such modules are an 'article' (i.e., a finished product) under the OSHA Hazardous Communication standard and the fact that they contain CdTe does not cause them to be categorized as a hazardous material." CdTe PV modules use a thin layer of CdTe (a few microns thick) to convert sunlight to electricity. A CdTe PV module (dimensions 1.2 m x 0.6 m) has less Cd content than a C-size flashlight NiCd battery (Fthenakis and Zweibel 2003). In addition to the module design which encapsulates the semiconductor material, environmental risks from CdTe PV are further minimized by CdTe's chemical properties (low vapor pressure, high boiling and melting points, low solubility) which limit its toxicity, mobility and bioavailability (Kaczmar 2011). Based on warranty return statistics, module breakage is rare, occurring in approximately 1 percent of modules over the 25-year warranty operating life (0.04 percent/yr). Over one-third of breakages occur during shipping and installation, resulting in removal. For the remainder, routine module inspections and power output monitoring are used to identify modules that are non-functioning potentially due to breakage. An article that examined the potential for CdTe leaching from commercial rooftop solar PV installations found the worst-case modeled environmental concentrations in soil, air, and groundwater in a California-based scenario, are one to five orders of magnitude below human health screening levels and below background levels (Sinha et al., 2012). Considerations necessary to ensure the safe handling, storage, transport, and recycling and/or disposal of the modules and related electrical components in a manner that is compliant with applicable law and protective of human health and the environment will be addressed in the Health and Safety Plan and Hazardous Materials Plan that will be required as stipulations of the right of way grant. Therefore, no stand-alone Broken PV Module Detection and Handling Plan is needed.

Sincerely,



Vanessa L. Hice
Assistant Field Manager
Division of Lands

Enclosures



Comment Letter 9

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street
San Francisco, CA 94105-3901

JAN 08 2015

Ms. Nancy Christ
Planning and Environmental Coordinator
Bureau of Land Management
Southern Nevada District Office - RECO
4701 North Torrey Pines Drive
Las Vegas, NV 89130

Subject: Environmental Assessments for the Harry Allen Solar Energy Center, Playa Solar Project, and Dry Lake Solar Energy Center, Clark County, Nevada

Dear Ms. Christ:

The U.S. Environmental Protection Agency has reviewed the Environmental Assessments for the three proposed projects located in the Dry Lake Solar Energy Zone: Harry Allen Solar Energy Center, Playa Solar Project, and Dry Lake Solar Energy Center. Our review and comments are provided pursuant to the National Environmental Policy Act and the Council on Environmental Quality Regulations (40 CFR Parts 1500-1508).

The Bureau of Land Management has prepared the subject EAs to address project-specific potential impacts associated with the development of six parcels of land totaling approximately 3,083 acres within the Dry Lake SEZ. The three EAs tier to the Draft, Supplemental, and Final Solar Programmatic Environmental Impact Statements developed by the BLM and the U.S. Department of Energy.

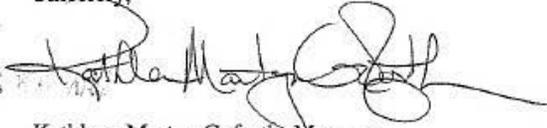
Based on input from other agencies and constituents, BLM has modified the boundaries of the Dry Lake SEZ several times since the SEZ was first established in order to avoid potential resource conflicts. We commend BLM on these efforts. The parcels on which the proposed projects would be sited present substantially reduced potential for adverse impacts to wildlife, military operations, floodplains, and wetlands, compared to other areas within the original SEZ boundary. To minimize the adverse impacts to these parcels, EPA recommends that BLM clarify the measures that will be taken to protect ephemeral drainages, consider additional measures to reduce the extent of clearing and grading, evaluate the use of dust palliatives, and require safe handling procedures for thin-film panels. Please see the enclosed detailed comments for EPA's specific recommendations.

We appreciate the opportunity to review the EAs and are available to discuss our comments. When the Decision Records for each project are released for public review, please send one hard copy and one CD-ROM to the address above (Mail Code: ENF-4-2). If you have any questions, please contact me at 415-972-3521, or contact Ann McPherson or Anne Ardillo, the lead reviewers for this project. Ann McPherson can be reached at 415-972-3545 or mcpherson.ann@epa.gov and Anne Ardillo can be reached at 415-947-4257 or ardillo.anne@epa.gov.

Printed on Recycled Paper

Comment Letter 9

Sincerely,

A handwritten signature in black ink, appearing to read "Kathleen Martyn Goforth". The signature is fluid and cursive, with a large loop at the end.

Kathleen Martyn Goforth, Manager
Environmental Review Section

Enclosures: EPA's Detailed Comments

Comment Letter 9

U.S. EPA DETAILED COMMENTS ON THE DRAFT ENVIRONMENTAL ASSESSMENTS FOR THE PROPOSED HARRY ALLEN SOLAR ENERGY CENTER, PLAYA SOLAR PROJECT, AND DRY LAKE SOLAR ENERGY CENTER, CLARK COUNTY, NEVADA, JANUARY 8, 2015

Ephemeral Drainages

According to the Playa Solar Project EA, all major existing drainages on the Project site would be avoided (pgs. 2-12). Table 2-7 provides a list of programmatic design features, as well as descriptions of how and where they are addressed. According to Table 2-7, the Applicant will avoid all drainages and surface water features (pg. 2-27). The proposed 1,700-acre site includes more than 90 acres of ephemeral drainages that have formed as a result of intermittent, large storm events. The size of the drainages ranges from 3 to 40 feet in width (except one 200-foot drainage) and 2 to 4 feet in depth. It is unclear which on-site drainages will be avoided in conjunction with implementation of the programmatic design feature discussed above, or whether this refers only to the identification of floodplain and wetland areas that were previously identified as non-development areas. 9-1

Recommendations:

Identify and quantify, if any, those major drainages that would be avoided on each project site.

Identify and quantify, if any, the drainages previously designated as non-development areas. 9-2

Maximize the avoidance of on-site drainages through design modifications to the photovoltaic array layout. 9-3

Within the Dry Lake Solar Project EA, Tables 5 & 6 document the evaluation of each resource/concern and rationale for inclusion or dismissal from detailed analysis in the EA. Under Hydrologic Conditions, Table 6 indicates that there are non-developable areas that may result in impacts to ephemeral stream channels, but concludes that further analysis is not needed. The EA does not provide any additional information on this topic. 9-4

Recommendation:

Clarify which non-developable areas may result in impacts to ephemeral streams.

Clearing and Grading

According to the Playa Solar EA, conventional farming equipment will be used to prepare the surface of the solar field for post and panel installation. The disk and roll technique will be utilized wherever possible, with limited use of scrapers to perform micro-grading. In areas where the terrain is not suitable, conventional cut and fill grading will be used to prepare the area. The Playa Solar site would be allowed to re-vegetate following construction and would typically be maintained to approximately 12 inches in height. Existing vegetation removal and grading would be minimized to the extent reasonably practicable.

Comment Letter 9

The Harry Allen Solar Energy Center EA indicates that the 715-acre solar facility would be cleared and grubbed of vegetation, and grading may require both excavation and soil compaction. The Dry Lake Solar project EA states that site grading would be designed to maintain natural drainage patterns to the extent practical. Channel modifications, if necessary, would be designed to convey 100-year flood flows with the installation and use of culverts, riprap, and other structural methods as appropriate and where necessary.

It is our understanding that some PV solar companies have proposed designs that reduce the need for site clearing and grading by mounting PV modules at sufficient height above ground to maintain vegetation, which could also minimize drainage disturbance, the need for site grading and generation of fugitive dust. Some companies have also reduced grading by utilizing global positioning systems to set the height of the posts or H beams used to mount the PV modules, allowing a solar array to follow a site's natural contours.¹ EPA supports maintenance of natural soils and native seed sets for long term ecosystem functioning and reduced long-term active maintenance of fugitive dust suppression.

Recommendations:

Evaluate mounting PV modules at sufficient height above ground to maintain vegetation and minimize drainage disturbance. Quantify acreage that would not require clearing and grading as a result of utilizing alternate mounting systems.

9-5

Estimate the acreage and the amount of fugitive dust maintenance that could be avoided if areas with natural soils and vegetation can be maximized through project design.

9-6

Encourage companies to reduce grading activities as much as possible to maintain natural habitat, and reduce fugitive dust impacts to off-site areas, while also building solar arrays.

According to the Playa Solar EA, development could entail the removal of up to 31,995 cactus and 23,490 yucca within the Project Area. Likewise, development at the Harry Allen Solar Center could entail the removal of 48,653 cactus and yucca, respectively. Because of the project schedule, soliciting bids for a commercial salvage contract may not be practical. The Applicant may agree to purchase cactus and yucca at the salvage pricing.

9-7

Recommendation:

Avoidance and salvage should be utilized to the greatest extent possible to preserve cactus and yucca.

Dust Palliatives

According to the EAs, the BLM has allowed the use of several dust palliatives on other projects within the Southern Nevada District. We understand that BLM has only recently allowed the use of dust palliatives in areas with desert tortoise on an experimental basis. As noted in the Playa Solar EA, the Applicant would contribute funds to a BLM study to understand the effects of dust palliatives on the health of desert tortoises.

¹ Final Environmental Assessment for the California Valley Solar Ranch, August 2011.

Comment Letter 9

Recommendation:

Disclose, in the Decision Record, that the use of palliatives in areas with desert tortoise is experimental and that the Applicant must contribute funds in order to participate in this study. If considering a BLM study on the impacts of palliatives on the health of desert tortoises, consider also assessing the effects of dust suppressants on water quality and soil health.

9-8

Thin Film Modules

According to the Playa Solar EA, the Applicant will use thin-film cadmium telluride (CdTe) solar PV modules. Generally, the risk of exposure to cadmium and CdTe from the use of thin-film PV technology is low because the materials are enclosed within the modules. Some exposure may occur when the modules break. The Environmental Impact Statement for the Topaz Solar Farm near San Luis Obispo, California (a utility scale thin-film PV power plant), stated that, out of the 9,000,000 modules proposed for that facility, an anticipated 36,000 modules would break during the three-year construction period, and an average of 2,880 modules would break per year during operation. The Topaz project applicant developed a *Broken PV Module Detection and Handling Plan* as a means to ensure prompt detection, removal and proper disposal of broken modules.²

Recommendations:

Disclose, in the Decision Record, the amount of CdTe and Cd that would be on site in the modules for the thin-film alternative and any potential for human or environmental exposure to these materials during the projects lifetime.

9-9

Include, in the Decision Record, a *Broken PV Module Detection and Handling Plan* that will ensure that, if thin-film modules are used, broken modules will be promptly detected and properly disposed of.

9-10

² Final Draft Environmental Impact Statement and DOE Loan Guarantee for the Topaz Solar Farm, August 2011.



United States Department of the Interior



BUREAU OF LAND MANAGEMENT
Southern Nevada District Office
Las Vegas Field Office
4701 N. Torrey Pines Drive
Las Vegas, Nevada 89130
<http://www.blm.gov/nv/st/en.html>

In Reply Refer To:
N-93306, N-93321, N-93337
2800 (NVS1000)

FED-EX TRACKING NUMBER

Alex Daue
Assistant Director, Renewable Energy
The Wilderness Society/BLM Action Center
1660 Wynkoop St. Suite 850
Denver, Colorado 80202

Dear Mr. Daue:

Thank you for your comments on the Environmental Assessments (EAs) prepared for the Dry Lake Solar Energy Zone (SEZ) projects. This letter responds to all substantive comments made in your letter, which is attached for reference. A separate response is being provided to joint comments received from Defenders of Wildlife, the Wilderness Society, and The Nature Conservancy.

Tiering to the Western Solar Plan and Biological Opinion

As described in Section 1.1 of the subject EAs, the EAs are tiered to the Solar Programmatic Environmental Impact Statement (Solar PEIS) (BLM and DOE 2010; BLM and DOE 2012). Tiering allows for the preparation of an EA and Finding of No Significant Impact for a proposed action (also referred to as a "Finding of No *New* Significant Impact" (43 CFR 46.140(c)), so long as any significant effects of the individual action were analyzed in the Solar PEIS and any additional effects of the individual action not analyzed in the Solar PEIS are not significant. Additionally, each project is subject to the same requirements for additional project specific analysis and field surveys. Presence/absence surveys for desert tortoise have been conducted on all three project sites and the proposed translocation recipient sites according to U.S. Fish and Wildlife Service (USFWS) accepted protocol. Section 3.9 of each EA summarizes desert tortoise survey work that already has occurred on the project sites and analyzes potential impacts of translocation. Biological Opinions (BO) will be completed for each project prior to BLM issuing a Notice to Proceed. A single desert tortoise translocation plan is being prepared for the three projects proposed within the Dry Lake SEZ with direction and input provided by the BLM, USFWS, and the Desert Tortoise Recovery Office (DTRO) through the Endangered Species Act Section 7 process. Once finalized, the plan will be provided upon request.

As described in the Harry Allen and Dry Lake EAs, the construction contractor would be responsible for identifying and securing the rights to an existing permitted water source(s) for construction needs and brought in to each site. Water would not be obtained from any of the five over-appropriated nearby basins for the Harry Allen and Dry Lake projects.

The Playa Solar EA analyzed the potential impacts from this proposed amount and location of groundwater withdrawal and concluded that the project would not withdraw groundwater to the extent that adverse effects would be expected to occur beyond those identified in the Solar PEIS (see Section 3.22.5.1, p. 3.22-3; and Section 3.9.5.1, p. 3.9-5). As discussed in detail in the EA, this analysis tiered to Sections 5.9 (BLM and DOE 2010, p. 5-37 et seq.) and 11.3.9.2 (BLM and DOE 2010, p. 11.3-57) of the Draft Solar PEIS and Sections 5.9 (BLM and DOE 2012, p. 57 et seq.) and 11.3.9.2 (BLM and DOE 2012, p. 11.3-18) of the Final Solar PEIS and to Appendix M of the Draft Solar PEIS, which provides details of the aquifer characteristics of the Garnet Valley hydrologic basin and presents results of numeric groundwater flow model analysis conducted to examine the influence of potential groundwater withdrawal to support utility-scale solar energy development at the Dry Lake SEZ. In addition, the analysis was further substantiated by two additional existing studies for conclusions regarding impacts to listed and sensitive groundwater dependent species including the Moapa dace: USFWS's Intra-Service Programmatic Biological Opinion on Moapa Dace (USFWS 2006); and the Mifflin and Associates (Mifflin) Hydrogeologic and Groundwater Modeling Analysis for the Moapa Paiute Energy Center Study (Mifflin 2001).

In response to comments received on the Playa Solar EA and as part of the Endangered Species Act (ESA) Section 7 consultation process for the Playa Solar Project, the BLM has evaluated more recent hydrologic studies in formulating its conclusions namely: Tetra Tech Inc., 2012a. Development of a Numerical Groundwater Flow Model of Selected Basins within the Colorado Regional Groundwater Flow System, Southeastern Nevada: Consultants' Report to the National Park Service (NPS), U.S. Fish and Wildlife Service (FWS), and BLM September 2012; and Tetra Tech Inc., 2012b. Predictions of the Effects of Groundwater Pumping in the Colorado Regional Groundwater Flow System, Southeastern Nevada: Consultants' Report to the NPS, FWS, and BLM September 2012. The BLM believes that these studies represent sufficient hydrologic modeling to analyze groundwater withdrawal impacts from the proposed projects within the Dry Lake SEZ and, therefore, additional hydrologic modeling for individual projects in the SEZ is not necessary in order to adequately assess impacts. These studies provide more certainty regarding the hydrologic connectivity between the hydrogeomorphic basins in the White River Groundwater Flow System. Based on these studies, the BLM has determined that the use of up to 1,325 acre feet of groundwater for the 18-month construction window and minimal groundwater for operations of the Playa Solar Project could contribute to ongoing adverse effects to groundwater dependent springs and associated aquatic communities including listed and sensitive resources such as the Moapa dace. These impacts, however, would be short-term, occurring over a limited 18 month project construction window, and would not result in long-term adverse impacts to the groundwater system or listed or sensitive resources.

As discussed in the Playa Solar EA, the Applicant will incorporate design features into the project development process to avoid and minimize impacts to water resources (see Section 2.2.17.1, p. 2-24). This includes minimizing to the maximum extent possible the use of water during project construction and operation and maintenance through measures such as the use of

BLM approved dust palliatives for dust control (see 2.2.6.1, p. 2-9). The BLM has also initiated formal consultation with the FWS for the Playa Solar Project to address potential impacts to Moapa dace in compliance with Section 7 of the ESA.

The Playa Solar Project will implement the following applicable measures from the Solar Programmatic Biological Opinion (FWS 2012). In addition, as described further below, BLM has included an additional mitigation measure to further reduce potential impacts to Moapa dace which builds on BLM's already successful program along the Muddy River to further assist in the recovery of the Moapa dace.

- The Project is located in a BLM identified priority area for solar energy development (i.e., SEZ) and has been sited and designed to avoid impacts on important, sensitive, or unique resources, including aquatic habitat and habitats supporting listed species.
- As detailed in recent hydrologic modeling (Tetra Tech Inc. 2012a, b), the Project would not completely avoid surface water or groundwater withdrawals that have the potential to affect sensitive habitats (e.g., aquatic, wetland, and riparian habitats). The proposed groundwater withdrawal associated with the Project would be short-term, however, occurring over the 18 month Project construction window; no long-term adverse impacts are anticipated.
- As necessary, the Applicant would develop a Groundwater Monitoring and Reporting Plan (referred to in the Solar Programmatic Biological Opinion as a Water Resources Mitigation and Monitoring Plan) to be reviewed and approved by the BLM. The Groundwater Monitoring and Reporting Plan would document pre-construction baseline groundwater conditions, guide groundwater monitoring and reporting, and document project-related groundwater use to ensure that the Applicant stays within the volume analyzed pursuant to BLM's NEPA and ESA processes.
- The Project would not result in a point of groundwater withdrawal being moved closer to locations supporting the groundwater-dependent species and (or) increased pumping in the regional carbonate aquifer in areas with a significant potential to affect habitat for those species (albeit the total consumptive groundwater use may remain the same).
- The BLM will require the Applicant to implement conservation measures to offset the effects of groundwater withdrawal on groundwater-dependent species and their habitats. For the Playa Solar Project, the BLM will require the Applicant to fund the design and installation of crayfish barriers to protect Moapa dace from upstream migration of invasive species. These funds would further the BLM and its partner agencies' existing efforts to eradicate non-native species from the historic range of Moapa dace and thereby promote the continued recovery of this species.

Populations of Moapa dace have been declining since the species was federally listed in 1967. These fish populations were under threat from the upstream invasion of non-native fish, principally the blue tilapia (*Oreochromis aurea*). To combat the decline of these endangered and sensitive species, the BLM constructed three concrete fish barriers (Hidden Valley, Perkins, and the Narrows) on the Muddy River. Combined with the existing upstream barrier located within the Moapa Valley Wildlife Refuge and a water

diversion on Tribal land, the purpose of the fish barriers was to prevent the continued spread of non-native fishes up the Muddy River, thereby decreasing the predation and competitive pressure imposed by introduced fishes on the Moapa dace and other sensitive fish species. The project also facilitated the treatment with rotenone and eradication of non-native fishes in 2011 and 2012. The number of Moapa dace increased from approximately 450 in 2008 to over 2000 in 2014. In total, the BLM has spent over \$850,000 on recovery efforts for this species in the Muddy River.

Impending threats to the Moapa dace include invasion by the Red-Swamp crayfish in the Muddy River. The BLM plans to retrofit the existing Perkins fish barriers to install a crayfish barrier to keep this invasive species from threatening Moapa dace populations. For mitigation of potential adverse effects to Moapa dace from the Proposed Action through groundwater use, the Applicant will fund the design and installation of this crayfish barrier to prevent upstream movement of this invasive species. If the crayfish breaches the fish barrier, there could be detrimental effects to Moapa dace populations and eradication of this invasive species would be very difficult as they can bury themselves deep in the bottom of the river.

Although not described fully in the Harry Allen Dry Lake EAs, cactus and yucca were counted within sample plots distributed throughout each of the project areas in order to estimate density, by species, for each area. Those final reports will be provided on request.

Minimization and Mitigation of Impacts to Biological and Other Resources

The BLM recognizes your concerns with additional specificity and clarity regarding the final mitigation strategy that will be utilized to offset unavoidable impacts from development in the SEZ. It is BLM's intent to collect the \$1,836 per acre fee identified in the Regional Mitigation Strategy for the Dry Lake Solar Energy Zone and to document that commitment in the Decision Records (DRs). The fee will be collected prior to BLM issuing a notice to proceed. The BLM intends to hold a workshop within 90 days of signing the DR(s) to gain your input on how to implement the mitigation strategy. Any necessary NEPA analysis on mitigation measures will be completed as soon as practicable and we look forward to your input during that NEPA process as well. As disclosed in the EAs, BLM's selection of any compensatory mitigation measures will be consistent with the procedures described by IM 2013-142 (June 13, 2013) and draft Manual Section 1794, "Regional Mitigation," which includes guidance for management of funds collected as part of the restoration, acquisition, or preservation portion of the total mitigation fee by an independent third party (Section 1.5 of the EAs).

The BLM understands your concerns with the translocation of desert tortoise and the desire for durable protections to ensure desert tortoise are not subject to additional translocations. Any future land use applications would consider the previous translocation of desert tortoise and require a BO. Additional utility-scale solar development within the translocation areas is already limited by the Las Vegas Resource Management Plan (RMP) as amended by the Record of Decision for the Solar PEIS, which designates the translocation area as either closed to solar development or subject to the variance process.

The BLMs "Affected Resources Form" was used to develop Tables 5 and 6 of the Harry Allen and Dry Lake EAs, and was used to inform the analysis of all three projects. The Affected Resources Form for each project is part of the administrative record and is available on request.

The area north of parcel one preserved for desert tortoise connectivity would also allow for the free movement of other wildlife species, including mammal species. In addition, the three project areas would have their own security fencing, leaving open corridors between their boundaries that would allow for the free movement of wildlife species across the SEZ.

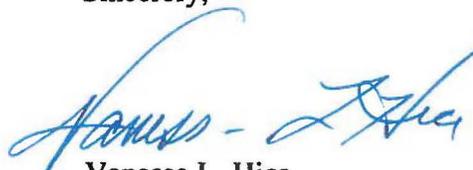
Other Resource Issues Requiring Mitigation

Biological Opinions will be issued for each project that includes comprehensive mitigation measures to reduce the potential impacts to desert tortoise. The \$836/acre remuneration fees collected for the loss of desert tortoise habitat are used specifically for the benefit of desert tortoise. A single translocation plan for the Dry Lake SEZ projects is being developed with direction and input provided by the BLM, USFWS and the DTRO through the Endangered Species Act Section 7 process. The plan will comply with all applicable guidance and policy, including Secretarial Order 3330. Any future land use applications would consider the previous translocation of desert tortoise and require a Biological Opinion. Additional utility-scale solar development within the translocation areas is already limited by the Las Vegas RMP (as amended by the ROD for the Solar PEIS), which designates the translocation area as either closed to solar development or subject to the variance process. In addition, Alternative 2 of the draft RMP revision considers designating the translocation area as closed to utility-scale solar projects.

As described in the Draft Solar PEIS; the Dry Lake SEZ states that waterfowl, wading birds, and shorebirds would be mostly absent to uncommon. The impacts related to the potential for a solar project to mimic a "lake effect" are described in Section 3.8 of the Harry Allen and Dry Lake EAs. In addition, required design features and mitigation measures are included in each of the EAs to address potential impacts to migratory birds including the preparation of project specific Bird and Bat Conservation Strategies that will include monitoring and adaptive management components to assist in avoiding and minimizing impacts to migratory birds.

The Harry Allen and Dry Lake projects would identify and secure the rights to existing, permitted water source(s) for construction and operational needs.

Sincerely,



Vanessa L. Hice
Assistant Field Manager
Division of Lands

Enclosures

Comment Letter 10

January 8, 2015

Submitted electronically via BLM's ePlanning website and via email to nchrist@blm.gov and Gregory_Helseth@blm.gov

Ms. Nancy Christ
Mr. Greg Helseth
BLM Southern Nevada District Office
SNPLMA Division
4701 North Torrey Pines Drive
Las Vegas Nevada, 89130
(702) 515-5120

Re: Harry Allen Solar Energy Center Project Environmental Assessment (Parcel 1)
Playa Solar Project Environmental Assessment (Parcels 2, 3 and 4)
Dry Lake Solar Energy Center Project Environmental Assessment (Parcels 5 and 6)

Dear Ms. Christ and Mr. Helseth,

The Wilderness Society appreciates the opportunity to comment on the Environmental Assessments (EAs) for solar projects within the Dry Lake Solar Energy Zone (SEZ) in Nevada. We submitted a joint letter with The Nature Conservancy and Defenders of Wildlife (Attachment 1) focused on the issues of highest importance to our organization with regards to these EAs. As stated in Attachment 1, most importantly, we are seeking the successful implementation of BLM's Solar Energy Program. BLM has made significant progress to-date. We support appropriate development of the Dry Lake SEZ, which provides an important opportunity for the BLM to demonstrate how directing development to lands of lower conflict and providing permitting efficiency and predictability incentives can allow the agency to successfully manage lands for both energy and natural resources. However, we have significant concerns with the current EAs, specifically the lack of inclusion of detail on compensatory mitigation elements, and the failure to adequately incorporate the Dry Lake Solar Regional Mitigation Strategy. Appropriate development of the Dry Lake SEZ depends on BLM addressing these issues.

10-1
10-2

We are also providing additional recommendations on other issues in the EAs in Attachment 2.

Sincerely,



Alex Daue
Assistant Director, Renewable Energy
The Wilderness Society | BLM Action Center
1660 Wynkoop St. Suite 850
Denver, CO 80202

Attachment 1

Comment Letter 10

January 8, 2015

Submitted electronically via BLM's ePlanning website and via email to nchrist@blm.gov and Gregory_Helseth@blm.gov

Ms. Nancy Christ
Mr. Greg Helseth
BLM Southern Nevada District Office
SNPLMA Division
4701 North Torrey Pines Drive
Las Vegas Nevada, 89130
(702) 515-5120

Subject: Dry Lake Solar Energy Zone Project Environmental Assessments

-Playa Solar Project (Dry Lake SEZ Parcels 2, 3 & 4; DOI-BLM-NV-S010-2014-0127-EA)
-Dry Lake Solar Energy Center Project (Dry Lake SEZ Parcels 5 and 6; DOI-BLM-NV-S010-2014-0126-EA)
-Harry Allen Solar Energy Center Project (Dry Lake SEZ Parcel 1; DOI-BLM-NV-S010-2014-0125-EA)

Dear Ms. Christ and Mr. Helseth,

The Nature Conservancy, The Wilderness Society and Defenders of Wildlife want to thank you for the opportunity to provide public comment on the Bureau of Land Management's (BLM) three Environmental Assessments (EA) for solar development on the Dry Lake Solar Energy Zone (SEZ) lease parcels. We are submitting these comments jointly to emphasize our shared desire to see responsible solar development on public lands move forward, while conserving important natural resources and values. Note we are also submitting separate, individual comment letters that highlight additional specific issues important to our respective organizations.

Most importantly, we are seeking the successful implementation of BLM's Solar Energy Program. BLM has made significant progress to-date. We support appropriate development of the Dry Lake SEZ, which provides an important opportunity for the BLM to demonstrate how directing development to lands of lower conflict and providing permitting efficiency and predictability incentives can allow the agency to successfully manage lands for both energy and natural resources. However, we share significant concerns with the current EAs, specifically the lack of inclusion of detail on compensatory mitigation elements, and the failure to adequately incorporate the Dry Lake Solar Regional Mitigation Strategy. Appropriate development of the Dry Lake SEZ depends on BLM addressing these issues.

Our organizations strongly support the focus that the BLM and the Department of the Interior (Interior) are giving to adopting the mitigation hierarchy, a focus underscored by the inclusion of regional mitigation within the Solar Programmatic Environmental Impact Statement (SPEIS), Secretary Jewell's first Secretarial Order and BLM's draft Regional Mitigation Policy and Manual.¹ We strongly support the

¹ The Secretary of the Interior's Order No. 3330 on "Improving Mitigation Policies and Practices of the Department of the Interior" outlines several key aspects of mitigation actions in an effective landscape scale planning approach: 1) the use of a landscape-scale approach to identify and facilitate investment in key conservation priorities in a region; 2) early integration of mitigation considerations in project planning and design; 3) ensuring

10-3

Comment Letter 10

intent and mandates of these initiatives, including the recognition of the importance of landscape-scale planning in applying the mitigation hierarchy to ensure conservation values are maintained while allowing responsible energy development to proceed, and that the mitigation hierarchy starts with avoidance first, then minimization, and finally investing in durable offsets to compensate for unavoidable impacts. BLM is making significant progress in these areas, and we support your continued efforts.

Our comments spring from the intent and mandates of the Bureau's Solar Energy Program, which directs development to lands identified as suitable for utility-scale solar development, including those lands in the Dry Lake Solar Energy Zone (SEZ). As the BLM looks to carry out the President's Climate Action Plan goal of permitting an additional 10,000 MW of renewable energy on public lands, it is important this goal not be met through the avoidable and irreplaceable loss of wildlife, critically important habitats, wildlife corridors, wildlands and ecosystem function. By directing development to lands of lower conflict and providing permitting efficiency and predictability incentives, the BLM can successfully manage lands for both energy and natural resources as intended under the Program. The development of the Dry Lake SRMS coupled with the successful auction of parcels in the low-conflict Dry Lake SEZ provides the opportunity to demonstrate the promise of this approach.

A key element of the Solar Energy Program is the commitment by the BLM to develop Regional Mitigation Plans to ensure effective and strategic off-site mitigation for unavoidable impacts of utility-scale solar development. To date, the only completed solar regional mitigation strategy (SRMS) is for the Dry Lake SEZ. Led by a BLM team including a national renewable energy project manager and local Nevada planning and resource specialists, the pilot involved stakeholders from local government, the solar industry, the environmental community, sportsmen and Native American tribes. The goal was to develop a consistent, regional approach to mitigating impacts and a strategy for how and where the unavoidable impacts of utility-scale solar development can be most efficiently and effectively mitigated off-site. Important elements of this approach include: identification of unavoidable impacts that warrant mitigation; creation of mitigation objectives; selection of sites and mitigation actions; setting a mitigation fee; establishing a fiduciary structure to hold and distribute funds; and establishing appropriate monitoring and adaptive management.

Consistent with the SRMS, BLM committed prior to the Dry Lake SEZ auction to requiring developers to provide off-site mitigation funds for development in Dry Lake SEZ. The Federal Register notice seeking public interest in development in Dry Lake SEZ states: "[t]his notice also announces the release of the 'Solar Regional Mitigation Strategy for the Dry Lake Solar Energy Zone' that describes off-site mitigation costs that will be required for the development of future solar energy projects in the Dry Lake SEZ." (emphasis added). BLM's draft Regional Mitigation Manual also provides important guidance to the agency on incorporating mitigation into project decisions. For example, the manual states: "[t]he BLM may expressly condition its approval of the land-use authorization on an applicant's commitment to perform or cover the costs of mitigation, both onsite and outside the area of impact."

Unfortunately, despite agency guidance from the Solar Energy Program and the draft Regional Mitigation Manual, the mitigation actions and fees recommended in the Dry Lake SRMS are not

the durability of mitigation measures over time; 4) ensuring transparency and consistency in mitigation decisions; and 5) a focus on mitigation efforts that improve the resilience of our Nation's resources in the face of climate change.

10-3
cont'd

Comment Letter 10

incorporated into or analyzed in the draft EAs and the EAs contain ambiguous, inconsistent language about required mitigation, mitigation fees and future offsite mitigation actions.

In particular for direct, indirect and cumulative impacts to plant and animal species, the three EAs provide little or no specificity about the degree and extent of unavoidable impacts that will be mitigated, compensatory offsite mitigation actions, compensatory mitigation fees, or even if compensatory mitigation will be required at all. For example, the following type of vague language is repeated in the mitigation sections for the three EA's (see also additional examples in Appendix A):

"To compensate for unavoidable impacts, a per-acre fee was recommended for acres disturbed by this Project. The BLM will decide as part of the decision record for this Project *if* fees will be collected, and if so, the amount of those fees. Off-site mitigation *may* include restoration of native vegetation and site protection activities proposed as part of the SRMS and would benefit wildlife because they would also protect and restore habitat and reverse effects of habitat fragmentation. Off-site mitigation actions funded to offset those impacts may require additional NEPA analysis by the BLM prior to implementation." (Dry Lake Solar Energy Center EA p.70; emphasis added).

BLM's use of words such as "if" and "may" provides little clarity or certainty regarding what the compensatory mitigation actions and fees will be, and whether the fees and subsequent compensatory mitigation actions will be sufficient to fully offset the unavoidable impacts. Without this information, BLM and stakeholders cannot evaluate environmental impacts from the proposed development. The EAs are also unclear what resource impacts BLM will require compensatory mitigation for and whether it will include and address all of the unavoidable impacts identified in the SRMS.

Similar to the predictability of conservation outcomes many stakeholders expect from implementation of the SRMS, solar developers are also seeking permitting and cost predictability from SRMS implementation. Throughout the Dry Lake SRMS process, the industry was very supportive of knowing what their impacts and associated compensatory mitigation costs would be up-front, and that the responsibility for implementing compensatory mitigation would be managed in a scientifically based, stakeholder driven way. A key reason for the success of the Dry Lake SEZ auction was the predictability the Solar Energy Program, Dry Lake SEZ designation and Dry Lake SRMS provided to developers. Unfortunately, without specific mitigation being included in the EA (detailed analysis of impacts, fees, and parameters on how, where and on what the fees would be applied) this predictability goes away.

Without a thorough description of the residual unavoidable impacts and the mitigation measures adopted, we have significant concerns about the adequacy of the EAs. We generally strongly support the tiered approach outlined in the Solar Energy Program, since it fulfills the intent of the SPEIS and provides additional predictability to developers for projects in low-conflict SEZs. However, the absence of mitigation measures applicable to the Dry Lake SEZ impacts in the EAs does not meet NEPA requirements.

NEPA requires that BLM discuss mitigation measures in an Environmental Impact Statement (EIS). 40 C.F.R. §§ 1502.14, 1502.16. Under NEPA, BLM's Finding of No Significant Impact (FONSI) is lawful only if "BLM has made a convincing case that no significant impact will result there from or that any such impact will be reduced to insignificance by the adoption of appropriate mitigation measures." *Defenders of Wildlife*, 152 IBLA 1, 6 (2000) (citations omitted). In general, in order to show that mitigation will reduce environmental impacts to an insignificant level, BLM must discuss the

10-3
cont'd

Comment Letter 10

mitigation measures “in sufficient detail to ensure that environmental consequences have been fairly evaluated.” *Communities, Inc. v. Busey*, 956 F.2d 619, 626 (6th Cir. 1992). Simply identifying mitigation measures, without analyzing the effectiveness of the measures, violates NEPA. Agencies must “analyze the mitigation measures in detail [and] explain how effective the measures would be . . . A mere listing of mitigation measures is insufficient to qualify as the reasoned discussion required by NEPA.” *Nw. Indian Cemetery Protective Ass’n v. Peterson*, 764 F.2d 581, 588 (9th Cir. 1985), *rev’d on other grounds*, 485 U.S. 439 (1988). NEPA also directs that the “possibility of mitigation” should not be relied upon as a means to avoid further environmental analysis. Council on Environmental Quality, *Forty Most Asked Questions Concerning CEQ’s National Environmental Policy Act Regulations*, available at <http://ceq.hss.doe.gov/nepa/regs/40/40p3.htm>; *Davis v. Mineta*, 302 F.3d at 1125.

We ask BLM to modify the draft EAs and FONSI to address these NEPA concerns, and to ensure that the Decision Records (DRs) also include specific commitments for appropriate mitigation. We strongly believe additional specificity and clarity is required regarding the substance and process for assessing, funding and implementing mitigation to offset unavoidable impacts from development in the Dry Lake SEZ.

Recommendations:

The BLM must provide additional specificity and clarity regarding the mitigation strategy that will be utilized to offset unavoidable impacts from solar development within the Dry Lake SEZ. Specifically, the final EAs, FONSI, and DRs must:

- Clearly state that all residual unavoidable impacts identified in the SRMS will be mitigated.
- Include a commitment by BLM to collect from the developers the per-acre mitigation fees identified in the SRMS prior to issuing a Notice to Proceed for ground disturbance. BLM should state clearly the formula used to calculate the per-acre fee.²
- Include a commitment that mitigation fees will be placed into a secure fund as described in the Dry Lake SRMS that can only be used to implement mitigation actions to offset impacts from development in Dry Lake SEZ and a description of the mechanisms that will be used for accounting and distribution of the funds.
- Identify potential mitigation measures and geographic parameters that will be analyzed and implemented according to the prescriptions above. Potential mitigation measures should include those identified in the Dry Lake SRMS.
- Include a commitment to analyze and implement specific mitigation measures that would address development impacts within a reasonable and specified timeframe.

We recommend BLM establish timeframes for implementing mitigation measures, i.e. that BLM will initiate and complete any NEPA analysis necessary for implementation of mitigation for Dry Lake SEZ solar development within a reasonable timeframe after signing the DRs for the Dry Lake SEZ solar development EAs, and BLM will begin implementation of the mitigation measures shortly thereafter (e.g. within six months of completion of NEPA). Given that the unavoidable impacts will occur immediately, it is critically important for mitigation to begin as soon as possible after ground

² Note that BLM made an error in calculating the fee in the Final SRMS: BLM did not multiply the \$20/acre durability and effectiveness fee x 30 years (the duration of the permit).

10-3
cont'd

Comment Letter 10

disturbance to ensure mitigation goals can be met.

We also recommend BLM provide for a public comment period on the changes to the EAs, FONSI and on the draft DRs prior to finalizing the DRs.

Conclusion:

BLM led an open and participatory, stakeholder driven process to develop the Dry Lake SRMS, which we robustly supported and participated in. The EAs however, lack the specificity and clarity regarding mitigation identified in the SRMS, and thus are inconsistent with the Solar Energy Program, BLM's draft Regional Mitigation Manual and NEPA. We strongly recommend BLM amend the three EAs and FONSI as outlined above, and ensure the DRs reflect the changes recommended.

We are committed to the success of appropriate solar development in the Dry Lake SEZ and implementation of appropriate mitigation for impacts, as well as implementation of the Solar Energy Program, Regional Mitigation Manual and Secretarial Order 3330 overall. Getting development and mitigation right for Dry Lake SEZ and the SRMS is crucial to all of these efforts.

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

Sincerely,

Laura Crane
Director, Renewable Energy Initiative
The Nature Conservancy
lcrane@TNC.ORG

Alex Daue
Assistant Director, Renewable Energy
The Wilderness Society
alex_daue@tws.org

Erin Lieberman
Western Policy Advisor, Renewable Energy & Wildlife
Defenders of Wildlife
elieberman@defenders.org

CC: Ray Brady (rbrady@blm.gov)

10-3
cont'd

Comment Letter 10

Appendix A – additional examples of vague mitigation requirements from EAs

Example #1: Mitigation Measures for Threatened, Endangered and Candidate Wildlife Species for Playa Solar Project EA (Section 3.9-12)

"The SRMS identified the impact to wildlife from solar development within the SEZ that may warrant regional mitigation (BLM 2014a, Section 2.4.3.2). To compensate for unavoidable impacts, the SRMS recommended a per-acre fee that developers would pay for acres disturbed by development. The BLM will decide as part of the decision record for this Project *if* funds will be collected and, if so, the amount of those funds. Any compensatory mitigation measures will be consistent with the procedures described by IM 2013-142 (June 13, 2013) and draft Manual Section 1794, "Regional Mitigation," which includes guidance for management of funds collected as part of the restoration, acquisition, or preservation portion of the total mitigation fee by an independent third party." [emphasis added].

Example #2: Section Harry Allen Solar Energy Center EA, Sec 3.7.5.2.1. 3 Mitigation Measures for Sensitive Species

"Although application of the proposed design features would reduce impacts to sensitive wildlife, disturbance of 717 acres of habitat as a result of the Proposed Action would remain in the long term. During development of the Dry Lake SEZ SRMS, cumulative impacts to sensitive wildlife were identified as an unavoidable impact which cannot be mitigated on-site. Wildlife habitat is an ecosystem service provided by native vegetation. Impacts and mitigation for vegetation will also benefit general wildlife and sensitive wildlife. To compensate for unavoidable impacts, a per-acre fee was recommended for acres disturbed by this Project. The BLM will decide as part of the decision record for this Project if fees will be collected, and if so, the amount of those fees. Off-site mitigation may include restoration of native vegetation and site protection activities proposed as part of the SRMS and would benefit wildlife because they would also protect and restore habitat and reverse effects of habitat fragmentation. Off-site mitigation actions funded to offset those impacts may require additional NEPA analysis by the BLM prior to implementation.

Additionally, the measures from the Project-specific BO would be followed. These features are primarily designed to address impacts to federally listed species; however, many of them also benefit other sensitive wildlife species including burrowing owls (*Athene cunicularia*), Gila monster (*Heloderma suspectum*), and chuckwalla. Any remaining impacts to sensitive bird and bat species would be addressed through a Project-specific BBCS and Monitoring Plan that includes a robust systematic monitoring and adaptive management plan to assist in avoiding and minimizing impacts."

Example # 3: Section Harry Allen Solar Energy Center EA, Sec 3.5.5.1.3 Mitigation Measures for Cultural Resources

"During development of the Dry Lake SEZ SRMS, cumulative impacts to cultural resources were identified as an unavoidable impact which cannot be mitigated on-site. To compensate for unavoidable impacts, a per-acre fee was recommended for acres disturbed by this Project. The BLM will decide as part of the decision record for this Project if fees will be collected, and if so, the amount of those fees. Off-site mitigation may include interpretation of NRHP-eligible sites as well as off-site protection of the Old Spanish Trail. Off-site mitigation actions funded to offset those impacts may require additional NEPA analysis by the BLM prior to implementation."

10-3
cont'd

Comment Letter 10

Attachment 2 – Additional Recommendations

I. Tiering to the Western Solar Plan and Biological Opinion

a. Tiering should be applied consistently

We support the appropriate tiering of NEPA analysis for applications in SEZs to the NEPA analyses in the Western Solar Plan as well as to the Programmatic Biological Opinion for the plan. Some issues, including but not limited to those listed below, need supplemental information and analysis at the project level.

It is important that BLM consistently apply appropriate requirements for additional analysis and field surveys, as well as informing project applicants and the public about those requirements. The Dry Lake SEZ EAs are not consistent – for example, BLM required Playa Solar Project to conduct supplemental surveys and issue reports on cactus and yucca, but BLM did not require such surveys and reports for the other project applications.

Recommendation: BLM should consistently apply appropriate requirements for additional analysis and field surveys across the EAs.

b. Some resources require additional project-specific analysis

i. Desert Tortoise/Impacts on Coyote Springs ACEC

The Western Solar Plan contains significant discussion of desert tortoise habitat impacts from solar development as well as a list of design features. Consistent with the BO for the Western Solar Plan, BLM has also required site-specific Desert Tortoise field surveys for each project and for the proposed translocation areas to understand the site-specific impacts of development. We appreciate the inclusion of the survey results and the abundance estimates in the EA, but believe there should be a brief discussion in the EA to how these field survey findings compare to the expected densities of desert tortoise in the Dry Lake Zone to illustrate how accurate the models used in the Western Solar Plan were. According to the Draft Solar PEIS, “Desert tortoise surveys in the Mormon Mesa critical habitat 35 unit conducted by the USFWS have indicated a desert tortoise density of about 1.6 to 3.2 36 individuals per km² (Stout 2009). Extrapolated across the size of the Dry Lake SEZ, the USFWS 37 has estimated that the Dry Lake SEZ may support up to 213 desert tortoises.” (p. 11.3-161) Table 1 summarizes the results of desert tortoise field surveys from the three EAs, which are significantly lower than the estimate in the PEIS.

Table 1. Summary of Desert Tortoise Field Survey Results for 3 Solar Projects within the Dry Lake Solar Energy Zone, Nevada.

Project Name	Company	NEPA Number	Acres Surveyed within Project Area	Observed Adults	Estimated Mean Adult Abundance	Estimated Density
Harry Allen Solar Energy	Invenergy Solar Development	DOI-BLM-NV-S010-	717 By SWCA	7	14	4.83 per km ²

10-4

10-5

Comment Letter 10

Center Project (Dry Lake SEZ Parcel 1)	LLC	2014-0125-EA	Environmental Consultants			
Playa Solar Project (Dry Lake SEZ Parcels 2, 3, & 4)	Playa Solar, LLC (First Solar)	DOI-BLM-NV-S010-2014-0127-EA	2,150 By Environmental Science Associates, with assistance from Newfields and Ironwood Consulting biologist	22	44	Not Provided
Dry Lake Solar Energy Center Project (Dry Lake SEZ Parcels 5 and 6)	NV Energy	DOI-BLM-NV-S010-2014-0126-EA	660 by Power Engineers	1	2	1 per km ²

↑
10-5
cont'd

Each project will also require a project specific Biological Opinion (BO) to address site specific issues, such as the translocation location(s) and stipulations associated with that activity. The BO must be completed and issued before the BLM issues a Notice to Proceed.

10-6

Recommendations: Each EA and/or DR should contain a discussion of the desert tortoise field survey results relative to the predicted abundance of desert tortoise within the zone from the Western Solar Plan. The BO for each project must be completed and issued prior to BLM issuing a notice to proceed.

ii. Moapa Dace

Though the Playa Solar Project is the only project that proposes using groundwater, the EAs do not specify where the water needed for the other two projects will come from. Consistent with the Programmatic BO for the Western Solar Plan, the EAs need to analyze the project-level impacts to groundwater for all three applications.

10-7

Recommendation: The conclusion in the EA that “Given the studies summarized below, the BLM concludes that the limited water needs for the Proposed Action- an estimated 1,350 acre-feet of water over an approximately 18-month period for construction-related activities and five to 15afy for the duration of Project operations – would not withdraw groundwater to the extent that adverse effects would occur to habitat for the Moapa dace” should be better substantiated in the Decision Record (DR) and reviewed by the U.S. Fish and Wildlife Service.

iii. Cactus and Yucca

Though cactus and yucca are an important resource in the Dry Lake SEZ that is subject to unavoidable impacts from all three proposed solar projects, it appears that BLM only requested that the Playa Solar Project conduct a cactus and yucca survey. The other projects provided density estimates of the number of cactus and yucca plants present within the project area. The methods for those estimates not provided with the EAs.

10-8
↓

Comment Letter 10

Recommendation: To ensure that the unavoidable impacts to cactus and yucca are fully mitigated, the EAs should provide well documented estimates of the density and type of cactus and yucca present on site.

↑
10-8
cont'd

II. Minimization and mitigation of impacts to biological and other resources.

a. Adjustments prior to competitive auction (Configuration of the auction parcels)

We appreciate that within the Dry Lake Zone, *prior* to offering lands within the SEZ at auction, BLM refined the developable acres within the SEZ to, among other things, exclude sensitive resources, including desert tortoise connectivity areas as well as other areas important to wildlife in the northwestern corner of the SEZ. (Playa Solar Project EA, p. 2-32; Dry Lake Solar Energy Center EA, p. 30) As noted in the Playa Solar Project EA (p. 3.9-3), “The potential for both genetic and demographic connectivity occurs throughout the Dry Lake Valley, particularly within the Coyote Springs Critical Habitat Unit to the northwest of the Project area (BLM 2014b). A connectivity area is located on the northwestern boundary of the SEZ. The corridor is designated as desert tortoise Critical Habitat within the Coyote Springs Desert Wildlife Management Area (DWMA) (Clark County 2007), and is approximately 1.5 miles to 3 miles wide within the area of indirect effects, and averaging 6 miles across its full length. The connectivity area narrows to the terminus at the Nellis Small Arms Range approximately 5 miles southwest of the SEZ, and continues to the north for approximately 25 miles where it widens and connects with additional Critical Habitat to the east.” Exclusion of this connectivity area from the SEZ prior to auction is an important action to minimize the impacts of the projects on desert tortoise and their habitat.”

According to the Dry Lake Solar Energy Center EA, BLM also made changes to the Dry Lake SEZ prior to the auction: “in boundaries of the Dry Lake SEZ and the designation of non-development areas within the 100-year floodplain [that] have reduced potential impacts surface disturbance on surface water features.” (Dry Lake Solar Energy Center EA, p. 101)

Recommendation: We commend BLM for taking actions to avoid impacts to sensitive resources before the competitive auction for Dry Lake SEZ, a critical step in the mitigation hierarchy. In addition to designating those areas as non-development areas for solar energy, we recommend that BLM also establish durable protections against other incompatible uses.

↑
10-9

b. Incorporation of Design Features from Western Solar Plan

i. General

The Western Solar Plan requires BLM to incorporate the design features included in the Western Solar Plan for project applications, including programmatic, site-specific and SEZ-specific design features. BLM also committed to this approach in the SRMS, stating that “design features will be included as stipulations in right-of-way leases for SEZs.” (SRMS, p. 3) Design Features are a good starting point for avoiding and minimizing impacts from solar development

Comment Letter 10

during the various project phases.¹ The EAs are not consistent in the way they identify relevant design features, nor do the EAs make clear that compliance with *all* relevant design features is a stipulation of the lease and/or ROW grant. The “Affected Resources Form” in the Playa Solar Project EA is preferable to “Table 4. Dry Lake Programmatic Design Features” in the Dry Lake Solar Project EA and the Harry Allen Solar Energy Center Project EA.

Recommendation: Incorporation of the “Affected Resources Form” table in all three EAs would help clarify where design features have been addressed and incorporated into both the lease/permit and the NEPA analysis and make monitoring implementation of the design features simpler.

10-10

Language discussing the significance of design features in the mitigation sections of the EAs should be changed to read “Although ~~application~~ **implementation** of the ~~proposed~~ **required** design features ~~would~~ **will** reduce impacts to” These changes make clear that the “proposed” designed features are required avoidance and minimization actions and part of the overall mitigation strategy for development within the SEZ.

10-11

ii. Fencing

In previous comments about development within Dry Lake, we have raised the need to minimize impacts to mammal species through requiring that fencing avoids wildlife movement corridors. The EAs assert that fencing will not be a significant problem, but do not provide even cursory analysis. The Playa Solar Project EA says “In accordance with Dry Lake SEZ specific design features, the fencing around the Project is not expected to block the free movement of mammals, particularly big game species.” (Playa Solar Project EA, p. 3.7-7)

The EAS for the Harry Allen Solar Energy Center EA (p. 52) and the Dry Lake Energy Center EA (p. 52) each say: **3.7.4 Proposed Design Features, 3.7.4.1 GENERAL WILDLIFE:** In addition, the Final Solar PEIS includes a specific design feature for mammals: to the extent practicable, the fencing around the solar energy development should not block the free movement of mammals, particularly big-game species (BLM and DOE 2012:Vol. 4, pg. 11.3-38).

Recommendation: BLM should provide analysis in the DR to substantiate claims that fencing will not block the free movement of mammals.

10-12

III. Other Resource Issues Requiring Mitigation

a. Desert Tortoise

The SRMS for the Dry Lake SEZ does not specifically address desert tortoise mitigation because it is addressed through the remuneration fee process under the existing Clark County Multispecies Habitat Conservation Plan. According to the Playa Solar Project EA, the proponent

¹ See for example, http://blmsolar.anl.gov/documents/docs/peis/programmatic-design-features/Ecological_Resources.pdf

Comment Letter 10

will be required to pay remuneration fees for loss of habitat that will be based on the current year's rate of \$836/acre of disturbance. This rate is subject to change if fees are paid after March 1, 2015.

The EAs also say that the proponent must develop a translocation plan and secure approval of the plan from the U.S. Fish and Wildlife Service. The proposed project area is not within an ACEC or any designated critical habitat for any federally listed species. However, the project proposes to displace a large number of desert tortoises which requires an approved translocation plan and associated permits. A portion of the translocation area selected by BLM/FWS is within the Coyote Springs ACEC. This ACEC is designated Critical Habitat for the species and has Relevant & Importance Criteria to manage desert tortoise habitat for recovery of the species. This ACEC is approximately 1/2 mile from the SEZ boundary. The ACEC's configuration is intended to provide functional corridors of habitat between tortoise recovery units in order to enhance long term persistence of the species. It consists of the western portion of the Mormon Mesa Critical Habitat Unit, protecting moderate to high densities of desert tortoises between the Desert National Wildlife Refuge, the Arrow Canyon Wilderness, and the Mormon Mesa ACEC. The EA should evaluate potential effects to this ACEC such as genetics, disease transmission, lack of information on carrying capacity of the recipient areas, and translocation during drought, etc. if translocation proceeds in the Coyote Springs ACEC.

Recommendations: The BLM must complete a mitigation plan for impacts to desert tortoise that includes, but is not limited to, a translocation plan. The mitigation plan should, among other things, make clear how the remuneration fee will be used to mitigate impacts and where. Asking project applicants to develop the mitigation and translocation plans for each project, rather than BLM developing a plan for the entire SEZ may result in missed opportunities to best avoid, minimize and compensate for unavoidable impacts.

The mitigation plan should also commit BLM to protection all translocation habitat from future degradation through durable protections. The BLM should designate as an ACEC any translocation lands outside of existing ACECs. The BLM should issuance to Nevada Department of Wildlife or to Clark County, Nevada, a land use authorization for conservation for all translocation lands (whether inside or outside an existing ACEC) through a right-of-way pursuant to 43 U.S.C. § 1761, et seq.; permits, leases, or easements pursuant to 43 C.F.R. § 2920; or leases pursuant to the Recreation and Public Purposes Act, 43 U.S.C. § 869, et seq. (RPPA) as being proposed in the California Desert Renewable Energy Conservation Plan. See <http://www.blm.gov/style/medialib/blm/ca/pdf/pa/energy/drecp.Par.84076.File.dat/Draft%20Durability%20Agreement%20for%20NCCP%20Reserve%20Sept%202014.pdf>.

10-13

b. Lake Effect

An emerging concern that we recommended BLM examine in the SRMS is waterbird movements through the area and the potential for "Lake Effect" collision mortality with large arrays of photovoltaic cells. This is a potentially serious concern that has been recognized as an emerging problem with utility scale photovoltaic projects established near waterbird concentration areas and migratory flyways. Yet the EAs barely address this issue.

Comment Letter 10

The “Affected Resources Form” for the Playa Solar Project EA states that: “Discussion on potential for solar projects to mimic a “lake effect” or “polarized light pollution” and attraction by waterbirds or other birds should be included.” (Playa Solar Project EA, p. C-10). Yet there is no specific discussion of this issue in the EA.

In general, the EAs assume that bird collisions with solar panels will be small and rely on the development and implementation of Bird and Bat Conservation Strategies (BBCS) to identify unanticipated impacts. (Harry Allen Solar Energy Center EA, p. 59; Dry Lake Solar Energy Center EA, p. 59)

Recommendation: The BLM should provide more detailed analysis of potential lake effect impacts and needed mitigation measures in the DR.

10-14

c. Groundwater

Dry Lake Valley groundwater basin is over 99% allocated prior to any solar development. We recommend that any groundwater use be based on the purchase of existing water rights only and, if the basin is currently over-appropriated, that additional quantities above what is projected to be used be purchased so the excess water can be retired and returned to the groundwater table. The Nature Conservancy is submitting more detailed comments that address this issue.

10-15



United States Department of the Interior



BUREAU OF LAND MANAGEMENT
Southern Nevada District Office
Las Vegas Field Office
4701 N. Torrey Pines Drive
Las Vegas, Nevada 89130
<http://www.blm.gov/nv/st/en.html>

In Reply Refer To:
N-93306, N-93321, N-93337
2800 (NVS1000)

FED-EX TRACKING NUMBER

Jared Fuller
1026 N 1300 W
Pleasant Grove, Utah 84062

Dear Mr. Fuller:

Thank you for your comments on the Environmental Assessments (EAs) prepared for the Dry Lake Solar Energy Zone projects. This letter responds to all substantive comments made in your letters, which are attached for reference.

Loss of Sensitive Species

The Environmental Assessments (EA) for the three solar projects considered impacts to sensitive species and their habitat in accordance with NEPA. As described in Section 1.1 of the subject EAs, the EAs are tiered to the Solar PEIS (BLM and DOE 2010; BLM and DOE 2012). Tiering allows for the preparation of an EA and Finding of No Significant Impact (FONSI) for a proposed action (also referred to as a “Finding of No *New* Significant Impact” (43 CFR 46.140(c)), so long as any significant effects of the individual action were analyzed in the Solar PEIS and any additional effects of the individual action not analyzed in the Solar PEIS are not significant. The BLM’s conclusion that impacts associated with sensitive species would not result in a new significant impact beyond the analysis and expectations in the Solar PEIS that resulted in the BLM identifying the lands as a priority area for solar energy development remains valid.

Additional Mitigation Measures

The BLM understands your concerns with the translocation of desert tortoise and the desire for durable protections to ensure desert tortoise are not subject to additional translocations. Any future land use applications would consider the previous translocation of desert tortoise and require a Biological Opinion. Additional utility-scale solar development within the translocation areas is already limited by the Las Vegas Resource Management Plan (as amended by the Record of Decision for the Programmatic Environmental Impact Statement for Solar Energy Development in Six Southwestern States, which designates the translocation area as either closed to solar development or subject to the variance process. Although expanding the Coyote Springs

ACEC is outside the scope of the EAs, Alternative 2 of the draft Resource Management Plan revision considers designating the translocation area as closed to utility-scale solar projects.

Sincerely,



Vanessa L. Hice
Assistant Field Manager
Division of Lands

Enclosures

<{#1

Comment Number: 1

Comment Title:

Comment:

The construction of the Playa Solar Project would result in the loss of individuals and habitat of sensitive species including desert tortoise and rosy two-toned penstemon, as well as other species. Mitigation for the loss of these species, in addition to the measures already proposed, should include the expansion of the Coyote Springs ACEC to include the desert tortoise relocation areas to the north. At minimum these areas should be excluded from future renewable energy development. This would also provide mitigation for the other projects proposed in the solar energy zone.

#1}>

<{#1

Comment Number: 1

Comment Title:

Comment:

The construction of the Dry Lake solar project would result in the loss of individuals and habitat of sensitive species including desert tortoise and rosy two-toned penstemon, as well as other species. Mitigation for the loss of these species, in addition to the measures already proposed, should include the expansion of the Coyote Springs ACEC to include the desert tortoise relocation areas to the north. At minimum these areas should be excluded from future renewable energy development. This would also provide mitigation for the other projects proposed in the solar energy zon
#1})>

<([#1

Comment Number: 1

Comment Title:

Comment:

The construction of the Harry Allen Solar Project would result in the loss of individuals and habitat of sensitive species including desert tortoise and rosy two-toned penstemon, as well as other species. Mitigation for the loss of these species, in addition to the measures already proposed, should include the expansion of the Coyote Springs ACEC to include the desert tortoise relocation areas to the north. At minimum these areas should be excluded from future renewable energy development. This would also provide mitigation for the other projects proposed in the solar energy zone.

#1))>



United States Department of the Interior



BUREAU OF LAND MANAGEMENT
Southern Nevada District Office
Las Vegas Field Office
4701 N. Torrey Pines Drive
Las Vegas, Nevada 89130
<http://www.blm.gov/nv/st/en.html>

In Reply Refer To:

N-93306, N-93321, N-93337
2800 (NVS1000)

MAR 16 2015

FED-EX TRACKING NUMBER 773145987260

Gary Vesperman
588 Lake Huron Lane
Boulder City, Nevada 89005-1018

Dear Mr. Vesperman:

Thank you for your comments on the Environmental Assessments (EAs) prepared for the Dry Lake Solar Energy Zone projects. This letter responds to all substantive comments made in your letters, which are attached for reference. The 246-page "Gallery of Clean Energy Inventions" exhibit you submitted with your letters is not included in this response but will be placed in the administrative record.

The purpose and need statements of the subject EAs are consistent with BLM authorities and policies, including Instruction Memorandum 2011-59 which reiterates and clarifies BLM NEPA policy regarding analyzing externally generated utility-scale renewable energy right-of-way applications. The two alternatives considered satisfy the purpose and need in that they fulfill BLM's obligation to consider the right-of-way application, meet federal renewable energy mandates and respond to impacts identified in the NEPA analysis.

Sincerely,

Vanessa L. Hice
Assistant Field Manager
Division of Lands

Enclosures



United States Department of the Interior



BUREAU OF LAND MANAGEMENT
Southern Nevada District Office
Las Vegas Field Office
4701 N. Torrey Pines Drive
Las Vegas, Nevada 89130
<http://www.blm.gov/nv/st/en.html>

In Reply Refer To:
N-93337
2800 (NVS1000)

FED-EXTRACKING NUMBER

Edward L. LaRue, Jr., M.S.
Desert Tortoise Council
Ecosystems Advisory Committee, Chairman
4654 East Avenue S #257B
Palmdale, California, 93552

Dear Mr. LaRue:

Thank you for the comments on the Environmental Assessment (EA) prepared for the Dry Lake Solar Energy Center Project proposed on Parcels 5 and 6 of the Dry Lake Solar Energy Zone (SEZ). This letter responds to all substantive comments made in your letter, which is attached for reference.

Response to Comment 1: The Bureau of Land Management (BLM) is responding to your comments in this letter and does not intend to republish or reissue a new EA. This approach is consistent with Section 6.9.2 of BLM NEPA Handbook H-1790-1 (2008), which states (with italics added): “If a substantive and timely comment does not lead to changes in the EA or decision, you may reply directly to the commenter, and we recommend that you document the reply in *either* the EA *or* the decision record.” The decision record for this project will include a copy of your letter as well as this reply.

Response to Comment 2: All desert tortoise identified for translocation that are large enough to be safely fitted with a transmitter would be transmitted and monitored in accordance with a U.S. Fish and Wildlife Service (USFWS) approved translocation plan.

Response to Comment 3: A single desert tortoise translocation plan is being prepared for the three projects proposed within the Dry Lake SEZ with direction and input provided by the BLM, USFWS, and the Desert Tortoise Recovery Office through the Endangered Species Act Section 7 process. The plan will comply with all applicable guidance and policy, including Secretarial Order 3330. Any future land use applications would consider the previous translocation of desert tortoise and require a biological opinion. Additional utility-scale solar development within the translocation areas is already limited by the Las Vegas Resource Management Plan (RMP) as amended by the Record of Decision for the Solar PEIS, which designates the translocation area

as either closed to solar development or subject to the variance process. In addition, Alternative 2 of the draft RMP revision considers designating the translocation area as closed to utility-scale solar projects.

Response to Comment 4, 5, and 6: The translocation of desert tortoise into the ACEC will not exceed density requirements as determined by the Desert Tortoise Recovery Office (DTRO) and will be consistent with the goals and objectives of the USFWS 2011 revised desert tortoise recovery plan. The BLM is considering long-term monitoring in coordination with the local USFWS office and the DTRO.

Response to Comment 7 and 9: Table 4 in Section 2.2.9 of the EA identifies programmatic design features and summarizes how they are addressed in the EA. Section 2.2.9.2 identifies the preparation of a desert tortoise translocation plan, which will include a monitoring, adaptive management, and reporting section as a requirement.

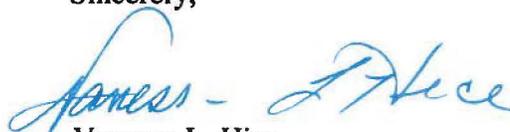
Response to Comment 8: The translocation of desert tortoise into the ACEC would not exceed density requirements as determined by the DTRO. This will be described in the final approved translocation plan for the Dry Lake SEZ.

Response to Comment 10: Survey of the approximately 10,000 acre translocation area was divided among the three applicants in the Dry Lake SEZ; the data will be combined and reflected in the Desert Tortoise Translocation Plan for the SEZ. Desert tortoise translocation monitoring requirements will be provided in the desert tortoise translocation plan now under development.

Response to Comment 11 and 12: Management plans, including the desert tortoise translocation plan, are stipulations of the right-of-way grant and are not required to be released publically prior to being finalized. A single desert tortoise translocation plan is being prepared for the three projects proposed within the Dry Lake SEZ with direction and input provided by the BLM, USFWS, and the DTRO. Once finalized, the plan will be provided upon request.

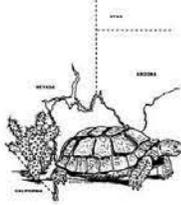
Regarding your request to be considered an Affected Party: The Desert Tortoise Council is on the BLM mailing list and will continue to receive notice of all projects in the Southern Nevada District that could result in impacts to desert tortoise.

Sincerely,



Vanessa L. Hice
Assistant Field Manager
Division of Lands

Enclosures



DESERT TORTOISE COUNCIL
4654 East Avenue S #257B
Palmdale, California 93552
www.deserttortoise.org
ed.laruc@verizon.net

7 January 2015

Via email only to: nancy_christ@blm.gov

Ms. Nancy Christ, Bureau of Land Management

RE: Dry Lake Solar Energy Center (Dry Lake SEZ Parcels 5 & 6) Environmental Assessment
(NEPA#: DOI-BLM-NV-S010-2014-0126-EA; Case file #: N-93337)

The Desert Tortoise Council (Council) is a private, non-profit organization comprised of hundreds of professionals and laypersons who share a common concern for wild desert tortoises and a commitment to advancing the public's understanding of this species. Established in 1975 to promote conservation of tortoises in the deserts of the southwestern United States and Mexico, the Council regularly provides information to individuals, organizations and regulatory agencies on matters potentially affecting the desert tortoise within its historical range.

We appreciate the opportunity to comment on this Environmental Assessment (EA) for the Dry Lake Solar Energy Center (Dry Lake SEZ Parcels 5 & 6), File Number: N-93337, by NV Energy. In the following comments, we have excerpted pertinent portions of the EA, which are shown in *italics*, and followed by our comments.

1. Page 1, Section 1.1: In our experience, the Bureau of Land Management (BLM) typically releases a *draft* EA first and a *final* EA later that incorporates comments and makes necessary modifications. Should we consider this EA to be draft or final? Will there be a subsequent (final) EA that incorporates changes that result from these and other comments submitted to the BLM?

15-1

2. Page 18, Section 2.2.5.5: With regards to the following statement, "*Tortoise exclusion fencing would be installed around the 660-acre solar facility footprint prior to desert tortoise clearance surveys being conducted. In addition, plant salvage and geotechnical investigations may occur prior to desert tortoise clearance surveys being completed,*" would it be possible to fit any tortoises discovered during plant salvage and geotechnical investigations with radio transmitters so they may be located later when tortoises are to be removed during the clearance survey? This measure would facilitate finding the tortoises again, and assumes that translocated tortoises would be fit with transmitters for post-translocation monitoring.

15-2

3. Page 18, Section 2.2.5.5: With regards to the following sentences, "*Desert tortoises will be relocated from the Project in accordance with an approved Desert Tortoise Translocation Plan for the Dry Lake SEZ... Tortoise would be relocated to a translocation area identified in the*

15-3

approved Translocation Plan,” has this translocation plan been completed? In the text, it is cited as “Ironwood 2014” but in the literature section it is cited as “Ironwood 2014 *In Progress*;” does this mean the plan is not available for review? We understand that portions of the translocation area are within the Coyote Springs ACEC. Would those portions outside the ACEC be primarily managed for tortoise conservation, or are there foreseeable threats, like future solar projects, that may affect displaced tortoises? Are these translocation areas outside the ACEC within portions of the Solar Energy Zone that may be developed at a later date?

15-3
(cont'd)

4. Page 31, Table 5: We see in Table 5 and elsewhere that tortoises are to be displaced from the 660-acre site into a translocation area that would include portions of the Coyote Springs ACEC. In the absence of a translocation plan available for review at the time of this EA was distributed, we feel that the Council cannot adequately assess the proposed displacement of tortoises, particularly as it would impact critical habitat in the Coyote Springs ACEC. What is the estimated population of tortoises inside the translocation area and how may they be affected? How does NV Energy plan to determine (monitor) the success or failure of translocation within tortoise critical habitat? We are unable to answer any of these questions with the information included in the EA and in the absence of the translocation plan.

15-4

5. Page 31, Table 5: With regards to the following paragraph, “*The project area is not within an ACEC. However, the Project proposes to displace desert tortoises in accordance with an approved translocation plan. A portion of the translocation area selected by the BLM and U.S. Fish and Wildlife Service is within the Coyote Springs ACEC,*” we understand this ACEC is designated as tortoise critical habitat. Is deposition of displaced tortoises into the Coyote Springs ACEC consistent with goals and objectives of the USFWS 2011 revised desert tortoise recovery plan? Was translocation of tortoises into ACECs envisioned and analyzed in the Final Solar PEIS? Has the population to be affected within this ACEC been studied to determine population densities, existing threats, evidence of disease, etc.?

15-5

6. Page 42, Section 3.4.1: With regards to the following statements, “... *approximately 1,500 acres of the proposed desert tortoise translocation area identified by the BLM and the USFWS occurs partially within the southern end of the Coyote Springs ACEC (Figure 5). The Coyote Springs ACEC is designated as critical habitat for desert tortoise and is being managed by the BLM for the recovery of the species,*” how much of the proposed translocation area is inside the ACEC? Did BLM consider that displaced tortoises may occupy more than a two-square-mile area and, unless the translocation area is fenced, not be contained within the intended 1,500-acre area? Have disease studies been performed on the tortoises to be translocated and those within the portions of the tortoise critical habitat located within the translocation area?

15-6

7. Page 45, Section 3.4.4: With regards to the following statement, “*All appropriate and feasible design features outlined in Volume 4, Section 11.3.10.3 and in Section A.2.2 of Appendix A in the PEIS (BLM and DOE 2012) would be implemented,*” we feel that the EA should be required to identify which “appropriate and feasible” measures are to be implemented. Referring to a large document and stating that feasible portions will be implemented does not adequately describe those measures that NV Energy plans to implement. For example, if there are 100 measures identified in the Solar PEIS of which you consider only 30 to be “appropriate and feasible,” we would need to know which ones would be implemented to analyze NV Energy’s ability to protect tortoises.

15-7

8. Page 45, Section 3.4.5.1.2: The latter half of the following sentence, "*There is a potential to impact the critical habitat through translocation if it results in exceeding the carrying capacity of the area, although this impact is likely to be small,*" implies that the carrying capacity of the translocation area is known. How many tortoises currently occur there, how many will be introduced, and how was the carrying capacity of the translocation area determined? 15-8

9. Page 45, Section 3.4.5.1.3: Similar to Comment 7 above, we note that Section 3.4.4., which is referenced in this subsection, does not provide the design features that are intended to address impacts to the ACEC; rather it refers to appendices in the Solar PEIS without specifically identifying which measures will be implemented. Do the mitigation measures, for example, require long-term monitoring of displaced tortoises to determine the success of the translocation effort? If so, how does it define "long term?" 15-9

10. Page 60 and 61, Section 3.9.1: Whereas Table 8 reports that as many as 11 and as few as 1 adult desert tortoises occur on the 660-acre subject property, where are the data indicating how many tortoises occur within the translocation area? We note that the following sentence, "*Desert tortoise surveys were completed for the translocation area between September 8 and October 17, 2014*" indicates the surveys were performed, but where in the EA are the results reported? 15-10

11. Page 63, Section 3.9.5.1.2: We see in this section that Ironwood (2014) was cited as the translocation plan to be used for this project. However, that plan was not attached to the EA for our review. At a minimum, we stress that both displaced tortoises and resident tortoises within the translocation area be monitored a sufficient amount of time to determine efficacy of the translocation, and we ask that the results be made available to the Council upon publication. We also believe that any translocated tortoises that subsequently die be tallied against the USFWS' incidental take statement in the biological opinion issued for this project. 15-11

12. Page 64, Section 3.9.5.1.3: We see in the following statement that a Biological Assessment is required: "*Each proposed project within the SEZ boundary will require a Biological Assessment that outlines project actions and avoidance and minimization measures to protect the species.*" Has the BA been completed and is it available for review? 15-12

We thank you for the opportunity to review this EA and trust that you will address the comments given above. We also ask that the Desert Tortoise Council be considered an Affected Party for this and other environmental documents affecting tortoises by BLM projects in Nevada. Finally, neither the Biological Assessment nor the Translocation Plan for the proposed action was made available as an attachment or appendix to this EA. Given how much the EA refers to the translocation plan, we find that our ability to effectively analyze the approach is undermined, and we ask that these documents be provided when they become available. 15-13
15-14

Regards,



Edward L., LaRue, Jr., M.S.
Desert Tortoise Council, Ecosystems Advisory Committee, Chairperson



United States Department of the Interior



BUREAU OF LAND MANAGEMENT
Southern Nevada District Office
Las Vegas Field Office
4701 N. Torrey Pines Drive
Las Vegas, Nevada 89130
<http://www.blm.gov/nv/st/en.html>

In Reply Refer To:
N-93321
2800 (NVS1000)

FED-EX TRACKING NUMBER

Edward L. LaRue, Jr., M.S.
Desert Tortoise Council
Ecosystems Advisory Committee Chairman
4654 East Avenue S #257B
Palmdale, California, 93552

Dear Mr. LaRue:

Thank you for your comments on the Environmental Assessment (EA) prepared for the Harry Allen Solar Energy Project proposed on Parcel 1 of the Dry Lake Solar Energy Zone (SEZ). This letter responds to all substantive comments made in your letter, which is attached for reference.

Response to Comment 1: The Bureau of Land Management (BLM) is responding to your comments in this letter and does not intend to republish or reissue a new EA. This approach is consistent with Section 6.9.2 of BLM NEPA Handbook H-1790-1 (2008), which states (with italics added): “If a substantive and timely comment does not lead to changes in the EA or decision, you may reply directly to the commenter, and we recommend that you document the reply in *either* the EA *or* the decision record.” The decision record for this project will include a copy of your letter as well as this reply.

Response to Comments 2, 6, and 9: Table 4 in Section 2.2.9 of the EA identifies programmatic design features and summarizes how they are addressed in the EA. Section 2.2.9.2 identifies the preparation of a desert tortoise translocation plan, which will include a monitoring, adaptive management, and reporting section, as a requirement.

Response to Comment 3: All desert tortoise identified for translocation that are large enough to be safely fitted with a transmitter would be transmitted and monitored in accordance with a U.S. Fish and Wildlife Service (USFWS) approved translocation plan.

Response to Comment 4: A single desert tortoise translocation plan is being prepared for the three projects proposed within the Dry Lake SEZ with direction and input provided by the BLM, USFWS, and the Desert Tortoise Recovery Office (DTRO) through the Endangered Species Act Section 7 process. The plan will comply with all applicable guidance and policy, including

Secretarial Order 3330. Any future land use applications would consider the previous translocation of desert tortoise and require a biological opinion. Additional utility-scale solar development within the translocation areas is already limited by the Las Vegas Resource Management Plan (RMP) as amended by the Record of Decision for the Solar PEIS, which designates the translocation area as either closed to solar development or subject to the variance process. In addition, Alternative 2 of the draft RMP revision considers designating the translocation area as closed to utility-scale solar projects.

Response to Comment 5: The translocation of desert tortoise into the Area of Critical Environmental Concern (ACEC) will not exceed density requirements as determined by the DTRO and will be consistent with the goals and objectives of the USFWS 2011 revised desert tortoise recovery plan. The BLM is considering long-term monitoring in coordination with the local USFWS office and the DTRO.

Response to Comment 7: As described in Section 3.9.5.1.2 of the EA, and in compliance with USFWS guidelines; only tortoise determined to be healthy and asymptomatic will be translocated.

Response to Comment 8 and 10: The translocation of desert tortoise into the ACEC would not exceed density requirements as determined by the DTRO. This will be described in the final approved translocation plan for the Dry Lake SEZ.

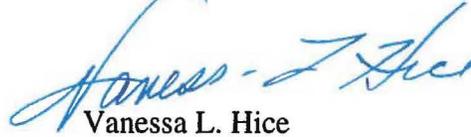
Response to Comment 11: The BLM recognizes your concerns with additional specificity and clarity regarding the final mitigation strategy that will be utilized to offset unavoidable impacts from development in the SEZ. It is BLM's intent to collect the \$1,836 per acre fee identified in the Regional Mitigation Strategy for the Dry Lake Solar Energy Zone and to document that commitment in the Decision Records (DRs). The fee will be collected prior to BLM issuing a notice to proceed. The BLM intends to hold a workshop within 90 days of signing the DR(s) to gain your input on how to implement the mitigation strategy. Any necessary NEPA analysis on mitigation measures will be completed as soon as practicable and we look forward to your input during that NEPA process as well. As disclosed in the EAs, BLM's selection of any compensatory mitigation measures will be consistent with the procedures described by IM 2013-142 (June 13, 2013) and draft Manual Section 1794, "Regional Mitigation," which includes guidance for management of funds collected as part of the restoration, acquisition, or preservation portion of the total mitigation fee by an independent third party (Section 1.5 of the EAs).

Response to Comment 12: Survey of the approximately 10,000 acre translocation area was divided among the three applicants in the Dry Lake SEZ; the data will be combined and reflected in the Desert Tortoise Translocation Plan for the SEZ. Desert tortoise translocation monitoring requirements will be provided in the desert tortoise translocation plan now under development.

Response to Comment 13 and 14: The Final Translocation Plan, Biological Opinion and monitoring reports will be available upon request to the BLM.

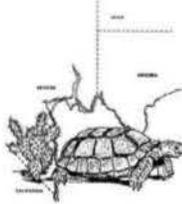
Regarding your request to be considered an Affected Party: The Desert Tortoise Council is on the BLM mailing list and will continue to receive notice of all projects in the Southern Nevada District that could result in impacts to desert tortoise.

Sincerely,



Vanessa L. Hice
Assistant Field Manager
Division of Lands

Enclosure



DESERT TORTOISE COUNCIL
4654 East Avenue S #257B
Palmdale, California 93552
www.deserttortoise.org
ed.larue@verizon.net

7 January 2015

Via email only to: nancy_christ@blm.gov

Ms. Nancy Christ, Bureau of Land Management

RE: Harry Allen Solar Energy Center Project Environmental Assessment (NEPA#: DOI-BLM-NV-S010-2014-0125-EA; Case file #: N-93321)

The Desert Tortoise Council (Council) is a private, non-profit organization comprised of hundreds of professionals and laypersons who share a common concern for wild desert tortoises and a commitment to advancing the public's understanding of this species. Established in 1975 to promote conservation of tortoises in the deserts of the southwestern United States and Mexico, the Council regularly provides information to individuals, organizations and regulatory agencies on matters potentially affecting the desert tortoise within its historical range.

We appreciate the opportunity to comment on this Environmental Assessment (EA) for the Harry Allen Solar Energy Center Project, File Number: N-93321, by Invenergy Solar Development, LLC. In the following comments, we have excerpted pertinent portions of the EA, which are shown in *italics*, and followed by our comments.

1. Page 1, Section 1.1: In our experience, the Bureau of Land Management (BLM) typically releases a *draft* EA first and a *final* EA later that incorporates comments and makes necessary modifications. Should we consider this EA to be draft or final? Will there be a subsequent (final) EA that incorporates changes that result from these and other comments submitted to the BLM?

17-1

2. Page 1, Section 1.1: With regards to the following statement, "*Tiering allows for the preparation of an EA and Finding of No Significant Impact (FONSI) for the Proposed Action ... so long as any significant effects of the individual action were analyzed in the Solar PEIS and any additional effects of the individual action not analyzed in the Solar PEIS are not significant.*" we note on page 44, Section 3.4.4 that "*No SEZ[Solar Energy Zone]-specific design features to address impacts to ACECs were identified in the Final Solar PEIS.*" One of our main concerns is how tortoises in critical habitat within the Coyote Springs ACEC will be affected by translocation of displaced tortoises into that area. Since the Final Solar EIS did not analyze (or foresee?) impacts to the ACEC, where in the EA are specific design features identified and analyzed for their efficacy to minimize impacts of translocated tortoises to resident tortoises within the Coyote Springs ACEC?

17-2

3. Page 17, Section 2.2.5.5: Given the following protective measure, *“In addition, geotechnical investigations may occur prior to desert tortoise clearance surveys being completed. It is anticipated that these activities would occur under a limited Notice to Proceed and would require authorized desert tortoise biologists and monitors to be present,”* would it be possible to fit any tortoises discovered during these preliminary surveys with radio transmitters so they may be located later when tortoises are to be removed during the clearance survey? This measure would facilitate finding the tortoises again, and assumes that translocated tortoises would be fit with transmitters for post-translocation monitoring.

17-3

4. Page 17, Section 2.2.5.5: With regards to the following statements, *“Desert tortoises would be relocated from the Project in accordance with an approved Desert Tortoise Translocation Plan for the Dry Lake SEZ ... Tortoise would be relocated to a translocation area identified in the approved Desert Tortoise Translocation Plan,”* has this translocation plan already been written? In the text, it is cited as *“Ironwood 2014”* but in the literature section it is cited as *“Ironwood 2014 In Progress;”* does this mean the plan is not available for review? We understand that portions of the 1,500-acre translocation area are within the Coyote Springs ACEC. Would those portions outside the ACEC be primarily managed for tortoise conservation, or are there foreseeable threats, like future solar projects, that may affect displaced tortoises? Are these translocation areas outside the ACEC within portions of the Solar Energy Zone that may be developed at a later date?

17-4

5. Page 32, Table 5: With regards to the following paragraph, *“The project area is not within an ACEC. However, the Project proposes to displace desert tortoises in accordance with an approved translocation plan. A portion of the translocation area selected by the BLM and U.S. Fish and Wildlife Service is within the Coyote Springs ACEC,”* we understand this ACEC is designated as tortoise critical habitat. Is deposition of displaced tortoises into the Coyote Springs ACEC consistent with goals and objectives of the USFWS 2011 revised desert tortoise recovery plan? Was translocation of tortoises into ACECs envisioned and analyzed in the Final Solar PEIS? Has the population to be affected within this ACEC been studied to determine population densities, existing threats, evidence of disease, etc.?

17-5

6. Page 44, Section 3.4.4: With regards to the following statement, *“All appropriate and feasible design features outlined in Volume 4, Section 11.3.10.3 and in Section A.2.2 of Appendix A in the PEIS (BLM and DOE 2012) would be implemented,”* we feel that the EA should be required to identify which *“appropriate and feasible”* measures are to be implemented. Referring to a large document and stating that feasible portions will be implemented does not adequately describe those measures that the proponent plans to implement. For example, if there are 100 measures identified in the Solar PEIS of which you consider only 30 to be *“appropriate and feasible,”* we would need to know which ones would be implemented to analyze the proponent’s ability to protect tortoises.

17-6

7. Page 45, Section 3.4.5.1.2: We note that there is no mention in this portion of the impacts section for the potential to introduce diseased tortoises into the host population. Have disease studies been performed on the tortoises to be translocated and those within the portions of the tortoise critical habitat located within the translocation area?

17-7

8. Page 45, Section 3.4.5.1.2: The latter half of the following sentence, “*There is a potential to impact the critical habitat through translocation if it results in exceeding the carrying capacity of the area, although this impact is likely to be small,*” implies that the carrying capacity of the translocation area is known. How many tortoises currently occur there, how many will be introduced, and how was the carrying capacity of the translocation area determined? 17-8

9. Page 45, Section 3.4.5.1.3: Similar to Comment 6 above, we note that Section 3.4.4., which is referenced in this subsection, does not provide the design features that are intended to address impacts to the ACEC; rather it refers to appendices in the Solar PEIS without specifically identifying which measures will be implemented. Do the mitigation measures, for example, require long-term monitoring of displaced tortoises to determine the success of the translocation effort? 17-9

10. Page 55, Section 3.7.5.2.1.2 addressing direct and indirect impacts does not mention impacts to tortoises within the ACEC that may be affected by the introduction of translocated tortoises. What is the estimated population of tortoises inside the translocation area and how may they be affected? How does the proponent plan to determine (monitor) the success or failure of translocation within tortoise critical habitat? Will those portions of the translocation area outside the ACEC be subject to development that may affect the translocated tortoises? We find that we are unable to answer any of these questions with the information included in the EA. 17-10

11. Page 5, Section 3.7.5.2.1.3: With regards to the following statements, “*To compensate for unavoidable impacts, a per-acre fee was recommended for acres disturbed by this Project. The BLM will decide as part of the decision record for this Project if fees will be collected, and if so, the amount of those fees,*” what makes these fees discretionary? Why is there some potential that they may not be required? The Council feels that, not only should these fees be required, they should be applied to the Coyote Springs ACEC that is most likely to be affected by the proposed action. We note on page 64, Section 3.9.5.1.3 that these fees “will be required,” so perhaps the above wording should be modified in the Final EA? 17-11

12. Page 60 and 61, Section 3.9.1: Whereas Table 5 reports that as many as 35 and as few as 6 adult desert tortoises occur on the 717-acre subject property, where are the data indicating how many tortoises occur within the translocation area? We note that the following sentence, “*Desert tortoise surveys were completed for the translocation area between September 8 and October 17, 2014*” indicates the surveys were performed, but where in the EA are the results reported? 17-12

13. Page 63, Section 3.9.5.1.2: We see in this section that Ironwood (2014) was cited as the translocation plan to be used for this project. However, that plan was not attached to the EA for our review. At a minimum, we stress that both displaced tortoises and resident tortoises within the translocation area be monitored a sufficient amount of time to determine efficacy of the translocation, and we ask that the results be made available to the Council upon publication. We also believe that any translocated tortoises that subsequently die be tallied against the USFWS’ incidental take statement in the biological opinion issued for this project. 17-13

14. Page 64, Section 3.9.5.1.3: We see in the following statement that a Biological Assessment is required: *“Each proposed project within the SEZ boundary will require a Biological Assessment that outlines project actions and avoidance and minimization measures to protect the species.”* Has the BA been completed and is it available for review? 17-14

We thank you for the opportunity to review this EA and trust that you will address the comments given above. We also ask that the Desert Tortoise Council be considered an Affected Party for this and other environmental documents affecting tortoises by BLM projects in Nevada. Finally, neither the Biological Assessment nor the Translocation Plan was made available as an attachment or appendix to this EA. Given how much the EA refers to the translocation plan, we find that our ability to effectively analyze the approach is undermined, and we ask that these documents be provided when they become available. 17-15
17-16

Regards,



Edward L., LaRue, Jr., M.S.
Desert Tortoise Council, Ecosystems Advisory Committee, Chairperson



United States Department of the Interior



BUREAU OF LAND MANAGEMENT
Southern Nevada District Office
Las Vegas Field Office
4701 N. Torrey Pines Drive
Las Vegas, Nevada 89130
<http://www.blm.gov/nv/st/en.html>

In Reply Refer To:
N-93306, N-93321, N-93337
2800 (NVS1000)

FED-EX TRACKING NUMBER

Lisa M. Lupowitz
Environmental Resources Division Manager
Southern Nevada Water Agency
100 City Parkway, Suite 700
Las Vegas, NV 89193-9956

Dear Ms. Lupowitz:

Thank you for your comments on the Environmental Assessments (EAs) prepared for Dry Lake Solar Energy Zone projects. This letter responds to all substantive comments made in your letters, which are attached for reference.

Clarification of the role of the Southern Nevada Water Agency (SNWA) in meeting the water service needs of the proposed project is noted. Clarifications also are noted regarding the mechanism by which water would be supplied by the City of North Las Vegas and SNWA for the project and the entity that would apply for a new water well. However, these important clarifications do not affect the environmental context or the potential severity of project-related groundwater withdrawal or use. Therefore, they do not affect the adequacy of the EA.

Revisions to details about the Clark, Lincoln, and White Pine Counties Groundwater Development Project are acknowledged and appreciated. These revisions reduce the length of pipelines, pumping stations, regulating tanks, overhead power lines, and secondary substations required for that project and therefore would reduce the incremental environmental impacts that the project would contribute to the cumulative scenario because less disturbance, fewer structures and less infrastructure would be introduced into the existing environment. As a result, the cumulative effects analysis in the EA is slightly more conservative than it would be if the details of this cumulative project were corrected as proposed.

Playa Solar EA

Increased groundwater withdrawal and use consistent with information known about the Dry Lake Groundwater Testing and Monitoring Wells and the 2,233 acre-feet per year associated with the Clark, Lincoln, and White Pine Counties Groundwater Development Project has been

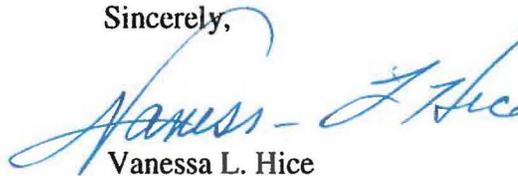
considered and determined not to affect the conclusions of the cumulative effects analysis in the EA (see Playa Solar EA, p. 3.22-6 et seq.).

The Groundwater Monitoring and Reporting Plan will be available upon request once it is finalized. To assure that you receive a copy, please continue to coordinate with this office.

Harry Allen Solar Energy Center and Dry Lake Solar Energy Center and EAs

As described in Harry Allen Solar Energy Center and Dry Lake Solar Energy Center EAs, the construction contractor would be responsible for identifying and securing the rights to an existing permitted water source(s) for construction needs and brought in to each site. Water would not be obtained from the Garnet Valley Basin or from any of the five over-appropriated nearby basins for these two projects. As described in Section 3.22 of the EAs for these two projects there would be no impacts as a result of groundwater withdrawal.

Sincerely,



Vanessa L. Hice
Assistant Field Manager
Division of Lands

Enclosures



SOUTHERN NEVADA WATER AUTHORITY

100 City Parkway, Suite 700 • Las Vegas, NV 89106
MAILING ADDRESS: P.O. Box 99956 • Las Vegas, NV 89193-9956
(702) 862-3400 • snwa.com

January 7, 2015

Nancy Christ
Bureau of Land Management
4701 N. Torrey Pines Drive
Las Vegas, NV 89130

Dear Ms. Christ:

**SUBJECT: PLAYA SOLAR PROJECT (DRY LAKE SOLAR ENERGY ZONE
PARCELS 2, 3, & 4) ENVIRONMENTAL ASSESSMENT SCOPING
COMMENTS**

Southern Nevada Water Authority (SNWA) appreciates the opportunity to provide comments on the Playa Solar Project (Dry Lake Solar Energy Zone Parcels 2, 3, & 4) (Proposed Project) Environmental Assessment (EA). SNWA is a political subdivision of the State of Nevada formed by a cooperative agreement between seven water and wastewater agencies in southern Nevada, including Big Bend Water District, City of Boulder City, City of Henderson, City of Las Vegas, City of North Las Vegas, Clark County Water Reclamation District, and Las Vegas Valley Water District. SNWA is responsible for managing the regional water resources of southern Nevada and developing solutions that will ensure adequate future water supplies for Las Vegas through the development and implementation of regional water resource management and conservation programs and initiatives. Part of SNWA's resource portfolio includes groundwater rights in Garnet Valley, where the Proposed Project is located. While the City of North Las Vegas is the retail water supplier to Garnet Valley, SNWA is the water rights owner and wholesale water provider to the City of North Las Vegas.

The following are SNWA's comments on the Proposed Project EA:

The description of water use and supply in the EA is vague and needs be corrected so the reader has accurate information. The project applicant proposes to obtain a water supply for the Proposed Project through purchases of water from holders of existing water rights. Specifically, up to 900 acre-feet of water for construction would be purchased from the City of North Las Vegas. Please clarify the statement about the "purchase of water". It can be interpreted as either the applicant proposes to 1) purchase existing water rights, or 2) purchase water through retail water services. Neither SNWA nor the City of North Las Vegas would sell the project applicant any existing water rights. Instead, the project applicant would apply for retail water service from the City of North Las Vegas and SNWA, as the water rights owner and wholesale water provider, would provide water service to the City of North Las Vegas.

SNWA MEMBER AGENCIES

Big Bend Water District • Boulder City • Clark County Water Reclamation District • City of Henderson • City of Las Vegas • City of North Las Vegas • Las Vegas Valley Water District

The EA also states that the project applicant anticipates that the City of North Las Vegas would file an application for a new groundwater well, which the project applicant would construct and operate during construction, and then turn over to the City of North Las Vegas. In this description, clarification is needed because SNWA is the water rights owner, not the City of North Las Vegas. Since only the water rights owner can apply for a new well to use their water right, SNWA would be the entity that files the application. The project applicant would apply for retail water service from the City of North Las Vegas, and SNWA and the City of North Las Vegas together would evaluate the City of North Las Vegas' ability to supply water for the Proposed Project. Any agreed upon water rights modifications or change of place of use, manner of use or point of diversion would be filed with the Nevada State Engineer's Office by SNWA, not by the City of North Las Vegas.

Please make the following corrections in the EA (*please note that SNWA does not speak on behalf of the other holders of existing water rights mentioned in the EA, and as such, slight modifications may be needed to the suggested edits below*):

- Page 2-9 Water supply for the Proposed Action would be met through ~~purchases of water~~ retail water service from holders of existing water rights. Specifically, up to 900 AF of water for construction would be ~~purchased~~ requested from the City of North Las Vegas and up to 450 AF from a private holder of water rights...It is anticipated that ~~the City of North Las Vegas~~ SNWA, as the wholesale water provider to the City of North Las Vegas, would file an application for the new well.
- Page 2-27 The Applicant is negotiating with Southern Nevada Water Authority/City of North Las Vegas to apply for retail water service from the City of North Las Vegas ~~to purchase existing water rights held by the Southern Nevada Water Authority/City of North Las Vegas and the~~ and is negotiating with Black Mountain Water Company to purchase existing water rights held by that company.
- Page 3.9-8 The Applicant would ~~purchase~~ request up to 1,350 acre-feet of water for construction via retail municipal water service requests ~~from existing water rights held by municipal and private entities~~ and from private entity holders of existing water rights...Specifically, up to 900 acre-feet of water for construction would be ~~purchased~~ requested from the City of North Las Vegas and up to 450 acre-feet from a private holder of water rights. Water supply for the Proposed Action would be met through ~~purchases of water from holders~~ the use of existing water rights and as such would not exceed Nevada Department of Water Resources (NDWR) authorized pumping.
- Pages 3.9-8 and 3.9-9 Because the Garnet Valley groundwater basin is over-appropriated with up to approximately 3,400 ac-ft/yr committed for beneficial uses in Garnet Valley, the Applicant plans to meet supply requirements through retail water service from municipal and private holders of existing water rights. ~~obtained from municipal and private holders.~~
- Page 3.22-5 As described above, Garnet Valley groundwater basin is over-appropriated with up to approximately 3,400 ac-ft/yr committed for beneficial uses, hence the Applicant proposes to meet supply requirements through retail water service from municipal and private holders of existing water rights. ~~obtained from municipal and private holders.~~

- Page 3.22-6 The Applicant would purchase request up to 1,350 AF of water for construction ~~from existing water rights held by municipal and private entities~~ via retail municipal water service requests and from private entity holders of existing water rights....Specifically, up to 900 AF of water for construction would be purchased requested from the City of North Las Vegas and up to 450 AF from a private holder of water rights. Water supply for the Proposed Action would be met through ~~purchases of water from holders of existing water rights~~ use of existing water rights and as such would not exceed NDWR authorized pumping.

Footnote 2 on page 3.2-1 lists the *Dry Lake Groundwater Testing and Monitoring Wells (SNWA)* as a project that has been cancelled or delayed indefinitely such that it is no longer considered reasonably foreseeable. For clarification SNWA has been granted a right-of-way (ROW) for the construction of the Dry Lake Valley Groundwater Testing Wells (NVN 084217, granted August 08, 2009, please see attached Bureau of Land Management Serial Register Page). Although construction of the project has not begun, the project has not been cancelled, delayed indefinitely, abandoned or withdrawn, and should be considered reasonably foreseeable and analyzed as such in the EA.

Table 3.2-1 on page 3.2-4 lists the Clark, Lincoln, and White Pine Counties Groundwater Development Project / SNWA, as an ongoing and reasonably foreseeable action near the Dry Lake Solar Energy Zone. The *Description, Status, and Primary Impact Location* are outdated and should be revised according to SNWA's November 2012 Conceptual Plan of Development and BLM-granted ROW (May 2013):

- Under *Description*, please edit the text according to the following corrections: Transport approximately ~~122,755~~ 124,988 ac-ft/yr of groundwater. Production wells, ~~306~~ 263 mi (~~490~~ 423 km) of buried water pipelines, ~~5~~ 3 pumping stations, ~~6~~ 5 regulating tanks, 3 pressure reducing stations, a buried storage reservoir, a water treatment facility, and about ~~323~~ 272 mi (~~517~~ 437 km) of 230-kV overhead power lines, 2 primary and ~~5~~ 4 secondary substations.
- Under *Status*, please edit the text according to the following corrections: ROD signed December 2012, ROWs issued May 2013. Construction expected to be complete by 2022.
- Under *Primary Impact Location*, please replace the current text with the following: SNWA plans to develop 91,988 ac-ft/yr of its existing water rights in Spring, Delamar, Dry Lake, and Cave valleys as part of the project. For the Delamar and Dry Lake valleys specifically, the Nevada State Engineer issued water right rulings to SNWA on March 22, 2012 for 6,042 ac-ft/yr and 11,584 ac-ft/yr, respectively.
(Please note: The last sentence under *Primary Impact Location* [i.e., "In addition, an undetermined amount of water could be developed and transferred from Coyote Spring Valley, which is north of the SEZ and downgradient of the other two basins."] was deleted because Coyote Spring Valley is not a valley SNWA would transport or withdraw groundwater from for the Clark, Lincoln, and White Pine Counties Groundwater Development Project.)

Ms. Nancy Christ
January 7, 2015
Page 4

As part of the Proposed Project, the applicant will prepare a Groundwater Monitoring and Reporting Plan to be reviewed and approved by the BLM if groundwater is used. As described in the EA, the plan will document pre-construction baseline groundwater conditions, guide groundwater monitoring and reporting, and document groundwater use in order to avoid or reduce potential impacts of the Proposed Project (see pages 3.7-6 and 3.22-2). Since SNWA is responsible for the management and development of water resources for southern Nevada, we respectfully request to be notified when the Groundwater Monitoring and Reporting Plan is final and available to the public.

SNWA appreciates the opportunity to comment on the Proposed Project. Please continue to keep us informed of the status of this proposal and notify SNWA when the groundwater plan is final. If you have any questions regarding these comments or need additional information, please contact Kimberly Reinhart, Senior Environmental Planner, at (702) 862-3457.

Sincerely,



Lisa M. Luptowitz
Environmental Resources Division Manager

LML:KR:CL:dg

Attachment

**DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
CASE RECORDATION
(MASS) Serial Register Page**

Run Time: 06:25 PM
Page 1 of 2

Run Date: 12/22/2014

01 10-21-1976;090STAT2776;43USC1761

Total Acres Serial Number
14.000 NVN--- - 084217

Case Type 287001: ROW-WATER FACILITY
Commodity 970: OTHER ENERGY FACILITIES

Case Disposition: AUTHORIZED

Name & Address		Serial Number: NVN--- - 084217		Int Rel	% Interest
SOUTHERN NV WATER AUTHORITY	PO BOX 99956	LAS VEGAS NV 891939956	HOLDER		100.00000000

Serial Number: NVN--- - 084217								
Mer Twp	Rng	Sec	S Typ	SNr SUFF	Subdivision	District/Field Office	County	Mgmt Agency
21	0050N	0640E	020	ALIQ	NWNESE;	SCHELL FIELD OFFICE	LINCOLN	BUREAU OF LAND MGMT
21	0050N	0640E	020	ALIQ	SWSWSE,W2SWSE,;	SCHELL FIELD OFFICE	LINCOLN	BUREAU OF LAND MGMT
21	0050N	0640E	020	ALIQ	S2NWSE,NENWSE;	SCHELL FIELD OFFICE	LINCOLN	BUREAU OF LAND MGMT
21	0020S	0650E	008	RSDL	SESESE;	CALIENTE FIELD OFFICE	LINCOLN	BUREAU OF LAND MGMT
21	0020S	0650E	031	RSDL	SESESE,NESESE;	CALIENTE FIELD OFFICE	LINCOLN	BUREAU OF LAND MGMT
21	0020S	0650E	032	RSDL	SWNWSW,NWSWSW;	CALIENTE FIELD OFFICE	LINCOLN	BUREAU OF LAND MGMT
21	0020S	0650E	032	RSDL	SEENNW;	CALIENTE FIELD OFFICE	LINCOLN	BUREAU OF LAND MGMT
21	0020S	0650E	032	RSDL	S2NENW;	CALIENTE FIELD OFFICE	LINCOLN	BUREAU OF LAND MGMT
21	0030N	0650E	030	ALIQ	NENW;	ELY FIELD OFFICE	LINCOLN	BUREAU OF LAND MGMT

Serial Number: NVN--- - 084217				
Act Date	Code	Action	Action Remark	Pending Office
10/09/2007	124	APLN RECD		
10/17/2007	669	LAND STATUS CHECKED		
10/23/2007	845	CAT 6 COST RECOVERY-PROC		
02/27/2008	114	AMEND/CORR APLN RECD	/A/	
02/28/2008	110	APLN COMPLETE		
06/23/2009	005	NEPA ANALYSIS APPROVED	NV-L000-2008-001-DR;	
06/30/2009	241	AUTH OFFERED APPLICANT		
08/10/2009	307	ROW GRANTED-ISSUED		
08/10/2009	852	RENTAL EXEMPT		
08/10/2009	883	CAT 6 COST RECOVERY-MON		
02/18/2010	600	RECORDS NOTED		
07/01/2011	853	COMPL/REVIEW DUE DATE		
08/10/2011	247	FUTURE ACTION SUSPENSE	/B/	
12/31/2038	763	EXPIRES		

Serial Number: NVN--- - 084217	
Line Nr	Remarks
0001	4 HYDROLOGIC TESTING WELLS, ASSOCIATED FACILITIES &
0002	3 ACCESS ROADS IN DRY LAKE VALLEY
0003	COST RECOVERY AGREEMENT 5101 ER F345
0004	/A/ REPLACE EXISTING APPL WITH THIS AMENDED APPL:
0005	5 WELLS & 4 ACCESS ROADS
0006	WELL SITE DRY5003X (T3N, R65E, SEC 30)
0007	WELL SITE DRY5004X (T2S, R65E, SEC 31 & 32)
0008	WELL SITE DRY5005X (T2S, R65E, SEC 32)
0009	WELL SITE DRY5006X (T2S, R65E, SEC 8)
0010	WELL SITE DRY5007X (T5N, R64E, SEC. 20)
0011	/B/ SHORT TERM ROW FOR CONSTRUCTION AREA EXPIRES

NO WARRANTY IS MADE BY BLM FOR USE OF THE DATA FOR PURPOSES NOT INTENDED BY BLM

**DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
CASE RECORDATION
(MASS) Serial Register Page**

Run Time: 06:25 PM
Page 2 of 2

Run Date: 12/22/2014

0012

ON 8/10/2011 (REDUCE TOTAL ACRES ABOVE)

NO WARRANTY IS MADE BY BLM FOR USE OF THE DATA FOR PURPOSES NOT INTENDED BY BLM



SOUTHERN NEVADA WATER AUTHORITY

100 City Parkway, Suite 700 • Las Vegas, NV 89106
MAILING ADDRESS: P.O. Box 99956 • Las Vegas, NV 89193-9956
(702) 862-3400 • snwa.com

RECEIVED
JAN 14 2015

January 7, 2015

Nancy Christ
Bureau of Land Management
4701 N. Torrey Pines Drive
Las Vegas, NV 89130

Dear Ms. Christ:

SUBJECT: HARRY ALLEN SOLAR ENERGY CENTER PROJECT (DRY LAKE SOLAR ENERGY ZONE PARCEL 1) ENVIRONMENTAL ASSESSMENT COMMENTS

Southern Nevada Water Authority (SNWA) appreciates the opportunity to provide comments on the Harry Allen Solar Energy Center Project (Dry Lake Solar Energy Zone Parcel 1) (Proposed Project) Environmental Assessment (EA). SNWA is a political subdivision of the State of Nevada formed by a cooperative agreement between seven water and wastewater agencies in southern Nevada, including Big Bend Water District, City of Boulder City, City of Henderson, City of Las Vegas, City of North Las Vegas, Clark County Water Reclamation District, and Las Vegas Valley Water District. SNWA is responsible for managing the regional water resources of southern Nevada and developing solutions that will ensure adequate future water supplies for Las Vegas through the development and implementation of regional water resource management and conservation programs and initiatives. Part of SNWA's resource portfolio includes groundwater rights in Garnet Valley, where the Proposed Project is located. While the City of North Las Vegas is the retail water supplier to Garnet Valley, SNWA is the water rights owner and wholesale water provider to the City of North Las Vegas.

The following are SNWA's comments on the Proposed Project EA:

The total amount of water needed during the Proposed Project construction would be approximately 140 million gallons (430 acre-feet) and the annual demand for operation and maintenance would be approximately 350,000 gallons (1 acre-foot). The project applicant proposes to obtain a water supply for the Proposed Project from existing off-site sources in the Las Vegas Valley as needed, while avoiding the use of on-site groundwater and avoiding all surface waters (see pages 19, 25, and 33). Since SNWA is responsible for managing the regional water resources of southern Nevada, SNWA requests the inclusion of additional information in the EA describing the existing off-site sources of water supply from the Las Vegas Valley.

Table 7 on page 38 lists the Clark, Lincoln, and White Pine Counties Groundwater Development Project / SNWA, as a past, present or reasonably foreseeable future action considered for cumulative impacts analysis. The *Description, Status, and Primary Impact Location* are

SNWA MEMBER AGENCIES

Big Bend Water District • Boulder City • Clark County Water Reclamation District • City of Henderson • City of Las Vegas • City of North Las Vegas • Las Vegas Valley Water District

outdated and should be revised according to SNWA's November 2012 Conceptual Plan of Development and BLM-granted ROW (May 2013):

- Under *Description*, please edit the text according to the following corrections: Transport approximately ~~122,755~~ 124,988 ac-ft/yr of groundwater. Production wells, ~~306~~ 263 mi (~~490~~ 423 km) of buried water pipelines, ~~5~~ 3 pumping stations, ~~6~~ 5 regulating tanks, 3 pressure reducing stations, a buried storage reservoir, a water treatment facility, and about ~~323~~ 272 mi (~~517~~ 437 km) of 230-kV overhead power lines, 2 primary and ~~5~~ 4 secondary substations.
- Under *Status*, please edit the text according to the following corrections: ROD signed December 2012, ROWs issued May 2013. Construction expected to be complete by 2022.
- Under *Primary Impact Location*, please replace the current text with the following: SNWA plans to develop 91,988 ac-ft/yr of its existing water rights in Spring, Delamar, Dry Lake, and Cave valleys as part of the project. For the Delamar and Dry Lake valleys specifically, the Nevada State Engineer issued water right rulings to SNWA on March 22, 2012 for 6,042 ac-ft/yr and 11,584 ac-ft/yr, respectively.
(Please note: The last sentence under Primary Impact Location [i.e., "In addition, an undetermined amount of water could be developed and transferred from Coyote Spring Valley, which is north of the SEZ and downgradient of the other two basins."] was deleted because Coyote Spring Valley is not a valley SNWA would transport or withdraw groundwater from for the Clark, Lincoln, and White Pine Counties Groundwater Development Project.).

SNWA appreciates the opportunity to comment on the Proposed Project and please continue to keep us informed of the status of this proposal. If you have any questions regarding these comments or need additional information, please contact Kimberly Reinhart, Senior Environmental Planner, at (702) 862-3457.

Sincerely,



Lisa M. Luptowitz
Environmental Resources Division Manager

LML:KR:CL:dg



SOUTHERN NEVADA WATER AUTHORITY

100 City Parkway, Suite 700 • Las Vegas, NV 89106
MAILING ADDRESS: P.O. Box 99956 • Las Vegas, NV 89193-9956
(702) 862-3400 • snwa.com

January 7, 2015

Nancy Christ
Bureau of Land Management
4701 N. Torrey Pines Drive
Las Vegas, NV 89130

Dear Ms. Christ:

SUBJECT: DRY LAKE SOLAR ENERGY CENTER PROJECT (DRY LAKE SOLAR ENERGY ZONE PARCELS 5 AND 6) ENVIRONMENTAL ASSESSMENT COMMENTS

Southern Nevada Water Authority (SNWA) appreciates the opportunity to provide comments on the Dry Lake Solar Energy Center Project (Dry Lake Solar Energy Zone Parcels 5 and 6) (Proposed Project) Environmental Assessment (EA). SNWA is a political subdivision of the State of Nevada formed by a cooperative agreement between seven water and wastewater agencies in southern Nevada, including Big Bend Water District, City of Boulder City, City of Henderson, City of Las Vegas, City of North Las Vegas, Clark County Water Reclamation District, and Las Vegas Valley Water District. SNWA is responsible for managing the regional water resources of southern Nevada and developing solutions that will ensure adequate future water supplies for Las Vegas through the development and implementation of regional water resource management and conservation programs and initiatives. Part of SNWA's resource portfolio includes groundwater rights in Garnet Valley, where the Proposed Project is located. While the City of North Las Vegas is the retail water supplier to Garnet Valley, SNWA is the water rights owner and wholesale water provider to the City of North Las Vegas.

The following are SNWA's comments on the Proposed Project EA:

The total amount of water needed during the Proposed Project construction would be approximately 140 million gallons (430 acre-feet) and the annual demand for washing the panels would be approximately 350,000 gallons (1 acre-foot). The EA states that the construction contractor would be responsible for identifying and securing the rights to a permitted water source(s) for construction, but there is no mention of the source of water for washing the panels. The EA also states that the Proposed Project is designed to avoid using on-site groundwater and that the project area avoids all surface waters (see pages 19 and 26). Since SNWA is responsible for managing the regional water resources of southern Nevada, SNWA requests the inclusion of additional information in the EA describing potential sources of water supply for the construction, operation, and maintenance of the Proposed Project. A first key step in preparing a planning-level inventory of water resources should include an analysis of water rights, water rights ownership, and potential water availability. For the Proposed Project area, the Nevada State Engineer's Office may have already evaluated potential water resource availability and/or

SNWA MEMBER AGENCIES

Big Bend Water District • Boulder City • Clark County Water Reclamation District • City of Henderson • City of Las Vegas • City of North Las Vegas • Las Vegas Valley Water District

limited additional water uses. The water resources inventory should also verify owners of water rights which could be used to determine stakeholders and/or contacts for water supply. These steps should be included in the initial planning process since they have the potential to dramatically change a proponent's remaining actions regarding water resources.

Table 7 on page 38 lists the Clark, Lincoln, and White Pine Counties Groundwater Development Project / Southern Nevada Water Authority, as a past, present or reasonably foreseeable future action considered for cumulative impacts analysis. The *Description*, *Status*, and *Primary Impact Location* are outdated and should be revised according to SNWA's November 2012 Conceptual Plan of Development and BLM-granted ROW (May 2013):

- Under *Description*, please edit the text according to the following corrections: Transport approximately ~~122,755~~ 124,988 acre-feet per year of groundwater; production wells, ~~306~~ 263 miles (~~490~~ 423 km) of buried water pipelines, ~~five~~ three pumping stations, ~~six~~ five regulating tanks, three pressure-reducing stations, a buried storage reservoir, a water treatment facility, and about ~~323~~ 272 miles (~~517~~ 437 km) of 230-kV overhead power lines, two primary, and ~~five~~ four secondary substations.
- Under *Status*, please edit the text according to the following corrections: ROD signed December 2012, ROWs issued May 2013. Construction expected to be complete by 2022.
- Under *Primary Impact Location*, please replace the current text with the following: SNWA plans to develop 91,988 acre-feet per year of its existing water rights in Spring, Delamar, Dry Lake, and Cave valleys as part of the project. For the Delamar and Dry Lake valleys specifically, the Nevada State Engineer issued water right rulings to SNWA on March 22, 2012 for 6,042 acre-feet per year and 11,584 acre-feet per year, respectively.

(Please note: The last sentence under Primary Impact Location [i.e., "In addition, an undetermined amount of water could be developed and transferred from Coyote Spring Valley, which is north of the SEZ and downgradient of the other two basins."] was deleted because Coyote Spring Valley is not a valley SNWA would transport or withdraw groundwater from for the Clark, Lincoln, and White Pine Counties Groundwater Development Project.)

SNWA appreciates the opportunity to comment on the Proposed Project and please continue to keep us informed of the status of this proposal. If you have any questions regarding these comments or need additional information, please contact Kimberly Reinhart, Senior Environmental Planner, at (702) 862-3457.

Sincerely,



Lisa M. Luptowitz
Environmental Resources Division Manager

LML:KR:CL:dg