1032

March 11, 2010

BLM Arizona State Office
One North Central Avenue, Suite 800
Phoenix, AZ 85004-4427

Attention: BLM Restoration Design Energy Project

Dear Sir or Madam:

Thank you for the opportunity to provide comment on the Restoration Design Energy Project (RDEP). The following comments are submitted on behalf of the Southwest Transmission (SWAT) Sub-regional Planning Group's Transmission Corridor Planning Committee (TCPC). The TCPC is tasked with identifying opportunities to integrate utility infrastructure planning into federal, state, and local planning initiatives within the SWAT footprint. The TCPC has a goal of streamlining the process by which energy projects can be permitted and developed while improving utility and public communication as part of the planning process.

The BLM RDEP focuses on site-specific renewable generation sites throughout the state; however, each of these projects will require electrical transmission to convey the output of the facilities to the electrical grid and marketplace. The development of transmission line projects typically includes a variety of planning issues unique from generation projects, including those arising from the crossing of multiple jurisdictions over potentially long distances. In evaluating the RDEP and the specific projects included within, we would encourage that the BLM include in its studies the consideration and accommodation of electrical transmission necessary to support these facilities. This could come in the form of recommendations that the necessary transmission infrastructure be part of the approval for specific sites on a case-by-case basis, to general policy guidelines regarding the need for the timely review and approval of transmission to serve the identified sites. Accommodating the necessary transmission infrastructure to the RDEP sites will increase the viability and development potential of these areas.

The RDEP represents a unique opportunity for long-range renewable energy planning on federal land in Arizona. Electric utilities are seeing a high volume of requests for electrical interconnection for renewable generation projects in portions of the state with high concentrations of federal land. The TCPC and the Renewable Transmission Task Force of the SWAT Sub-regional Planning Group are actively evaluating potential transmission needs to support likely renewable energy development areas in Arizona. We invite the BLM to participate in SWAT planning activities through the following Web site: http://www.westconnect.com/planning_swat.php

We appreciate the opportunity to provide comment on the RDEP process and look forward to future announcements and notices regarding next steps.

Sincerely,

Greg Bernosky, AICP
Chairman, SWAT Transmission Corridor Planning Committee

1033

Yuma County, Arizona
DEPARTMENT OF DEVELOPMENT SERVICES
2351 W. 26th Street, Yuma, Arizona 85364
Phone: (928) 817-5000
Fax: (928) 817-5020

Monty M. Stansbury, AICP
Director

March 11, 2010

Lane Cowger
RECO Project Manager
Bureau of Land Management
One North Central Avenue, Suite 800
Phoenix, AZ 85004

Dear Mr. Cowger:

Thank you for the opportunity to comment on the Bureau of Land Management Arizona Restoration Design Energy Project. Yuma County has a continued interest in promoting renewable energy projects in its jurisdiction.

In relation to this restoration program, Yuma County is not proposing specific sites that could be made available for renewable energy projects beyond those identified on the consultant maps at the February 25, 2010 meeting at the Yuma Field Office. However, Yuma County would propose site ownership and planning considerations for the draft EIS.

When discussing site ownership, Yuma County proposes that BLM lands identified for restoration projects be sold to private parties whenever feasible utilizing existing BLM criteria. The county is proposing sale of these sites in order to maximize tax property tax revenues. For example, Yuma County currently has received from the Department of the Interior an average of $1.61 per acre in payment in lieu of tax (PILT) payments from 2006-2009, with 2009 representing the highest average per acre at $2.01 per acre.

For the purposes of calculating the dollar per acre in tax revenue that Yuma County would receive if a renewable energy project were sited on private property, the formula assumes a $1.73 tax rate, equivalent to $86.50 in taxes per $1,000,000 in real value. Based on a current solar energy project in Yuma County valued at approximately $1.5 billion and 2,400 acres in size, approximately $54.06 per acre per year in tax revenue would be generated ($1,500,000,000 / $1,000,000 = 1,500. 1,500 x $86.50 = $129,750 in tax revenues. $129,750 / 2,400 acres =$54.06 per acre). In addition, Yuma County would receive permitting fees at the time of construction based on the total project cost which would total approximately $1 million, fees that would not be collected from a BLM lease project.

From a planning standpoint, Yuma County would propose that site selection for projects be conducted utilizing a GIS system incorporating several layers. For example, this system could utilize layers showing including but not limited to potential kilowatts (kWh/m^2/day), 1° and 3°

Paul Melcher
Planning Director
Planning & Zoning
Fax: (928) 817-5157

Curtis Cansler
Chief Building Official
Building Safety
Fax: (928) 817-5050

Roger A. Patterson P.E.
County Engineer/FCM
Engineering Division/Flood Control District
Fax: (928) 817-5109

1033

slope, location to various transmission lines, Yuma County land use designations and zoning, and centerline information.

Again, thank you for the opportunity to comment. If you or BLM staff have any questions related to these comments, please contact me at your convenience by phone at (928) 817-5180 or by email at paul.melcher@yumacountyaz.gov.

Sincerely,

Paul Melcher,
Planning Director

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1034

Restoration Design Energy Project
BLM Az Site Submittal Form

I would like to submit a site to be considered for the Restoration Design Energy Project and the environmental analysis.

Name of Site: Adolfo L. and Kay Torrez /Azteca Wedding Enterprises, Inc.

Legal Description:

There are 5 different parcels on the same location totaling 320 acres of land:

All parcels are: Sec/Lot 4 Twn/Blk 45 Rng/Tr 10w

1) Parcel 401 86 040 B 7
W2 W2 S2 E2 SW4 Sec 4
Torrez, Adolfo L/ Kay Anne

2) Parcel 401 86 039 A 7
W2 W2 E2 NE4
Azteca Wedding Enterprises, Inc.

3) Parcel 401 86 037 3
W2 NE4 80Acres
Azteca Wedding Enterprises, Inc.

4) Parcel 401 86 041 6
N2 SE4 & S2 NE4 SE4 & W2 NW4 NE4 SE4 & SE4 SE4
Azteca Wedding Enterprises, Inc.

5) Parcel 401 86 040 A 8
E2 SW4 EX Fol DESC PROP W2 W2 S2 E2 SW4 Sec4
Azteca Wedding Enterprises, Inc.

There are an additional 80 acres adjoining our parcels that the owner is also interested in having considered for project. Together with ours, the Brant Property would become a 400 acre site available for development.

The Virginia Brant property legal description:
Section lot 4 Twn/Blk 4S Rng/Tr 10W
1) Parcel 401 86 004 2
NE4 NW4 40 acres

2) Parcel 401 86 002 8
SE4 NW4 40 acres

1034

Political Boundaries:

Our property is located in Maricopa County. 30 miles East of Gila Bend the property can be accessed off Highway 8 at the Sentinel Exit. The property is located approximately 16 miles North on Agua Caliente Road. The area is known as Hyder Valley. We are just east of the intersection of 571st Ave and High Line Road. The major part of the property extends from High Line Road to Lahman Road. I believe it is Congressional District 7.

Estimate of acreage available for development:

There are 320 acres owned by our family/company and a possible 80 acres owned by a Virginia Brant.

Brief Description of Disturbance or Previous Development:

Our family/company has owned this land for over 35 plus years. The property was previously owned by the State and sold as excess land. My parents built a house with a well on 10 acres of the property. The rest is undisturbed desert there is a wash and some areas of open pits. It is not in a flood plain area. It is not a specified wilderness area.

On the High Line Road there are electrical transmission lines which could be used to transmit renewable energy which could be generated on the property. When my mom was alive she had a dream that on the property would be technology that looked like large satellite dishes. The solar technology I have been researching look exactly like what she dreamt of. Hyder Valley and other communities surrounding Gila Bend have been earmarked for several renewable energy projects. The most recent unveiled project is known as the Agua Caliente Solar Project. We are within the 20 mile study area surrounding that project. The hope here is not to develop a large 3000 acre solar farm but a smaller 400 acre one which would be able to utilize the transmission lines on the south side of the property.

Point of Contact:

Royna Torrez Rosell
Azteca Wedding Plaza
1010 E. Washington
Phoenix, Az 85034

602-253-2171 xt 215
Royna@Azbride.com

1035

NATIONAL SYSTEM OF PUBLIC LANDS

RESTORATION DESIGN ENERGY PROJECT
BLM AZ SITE SUBMITTAL FORM

Criteria: Parcels of public or private land that may require remediation or do not have higher resource values and may be suitable for renewable energy development. Examples include; hazardous material sites or brownfields, Abandoned Mine Lands sites, former land fill sites, inactive or exhausted mineral material sites or gravel pits, sites damaged or disturbed to the extent that restoration potential is limited, or sites with very limited productivity due to a disruption of natural processes (i.e. isolation from hydrological processes).

Submit a proposal: To submit a site to be considered for inclusion in the environmental analysis, please complete and send this form to az_arra_rdep@blm.gov or BLM Arizona State Office, One North Central Avenue, Suite 800, Phoenix, AZ 85004-4427, Attention: Restoration Design Energy Project.

Name of Site: Former Cave Creek Landfill (County owned property)

Legal Description: Maricopa County Assessor's Parcel Numbers: 211-27-006 and 211-27-007
Within the eastern half of Section 12, Township 5 North, Range 3 (full legal description attached)

Political Boundaries (Congressional District, County, Municipality): AZ Congressional District 3, Maricopa County, City of Phoenix

Estimate of acreage available for development: 75 total acres, 40 acres of which have been landfilled

Brief Description of Disturbance or Previous Development: Maricopa County operated a municipal Title D solid waste landfill on the property from 1984 until 1997. There is currently a small solid waste transfer station located at northern portion of the property on a part of the property that was not used for landfilling. The site is adjacent to the BLM Cave Creek Landfill which is currently on the RDE list. The BLM property was also a municipal solid waste landfill that was operated by Maricopa County from 1965 to 1984. The County currently is under a Consent Order from ADEQ to address groundwater contamination that is believed to have originated from the two landfills.

Point of Contact (include phone number and e-mail address): contacts for this site are:

Rita Neill
Environmental Programs Manager
Maricopa County Risk Management
rneill@mail.maricopa.gov
602-506-5063

Bill Thornton
Director
Maricopa County Solid Waste Department
billthornton@mail.maricopa.gov
602-506-7336

1035

94069821

CAVE CREEK LANDFILL
LEGAL DESCRIPTION

EXHIBIT "A"

A parcel of land lying within the East one-half of the Southeast one-quarter (E1/2 of SE1/4) and within the Southeast one-quarter of the Northeast one-quarter (SE1/4 of NE1/4) of Section Twelve (12), Township Five (5) North, Range Three (3) East of the Gila and Salt River Base and Meridian, Maricopa County, Arizona;

Said parcel is more particularly described as follows:

BEGINNING at the Southeast corner of said Section Twelve (12), THENCE Westerly along the South line of said Section a distance of 950.00 feet; THENCE leaving said South line, North a distance of 155.00 feet; THENCE West a distance of 133.67 feet; THENCE North 01°59'10" East a distance of 2540.00 feet; THENCE North 72°00'00" East a distance of 458.04 feet; THENCE North a distance of 299.45 feet; THENCE East a distance of 560.00 feet; THENCE Southerly along the East line of said Section, a distance of 3135.00 feet to the Southeast corner and the POINT OF BEGINNING.

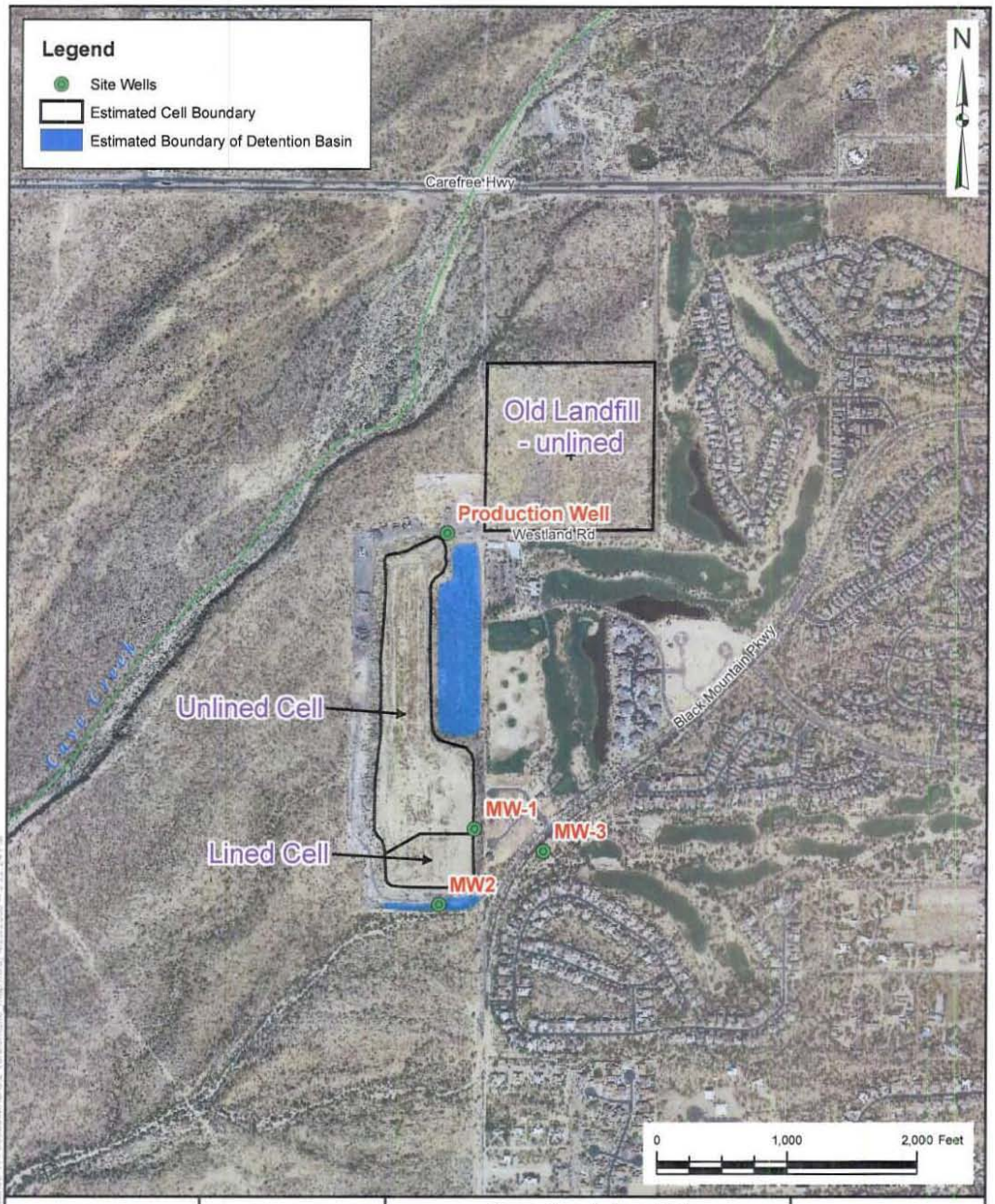
Together with the North 200.00 feet of the East 950.00 feet of the Northeast one-quarter (NE1/4) of Section Thirteen (13), Township Five (5) North, Range Three (3) East of the Gila and Salt River Base and Meridian, Maricopa County, Arizona.

MCR 3 of 4

1035

Old Cave Creek Landfill (BLM)
Cave Creek Landfill
(Maricopa County)

1035



JOB NO. 09-114-03000 DESIGN: BK DATE: 03/09/2009 SCALE: 1" = 1000'	The map shown here has been created with all due and reasonable care and is strictly for use with AMEC Project Number 09-114-03000. This map has not been certified by a licensed land surveyor, and any third party use of this map comes without warranties of any kind as AMEC assumes no liability, direct or indirect, whatsoever for any such third party or unintended use.	Cave Creek Landfill Maricopa County, AZ Site Location Map	FIGURE 1

1036

RESTORATION DESIGN ENERGY PROJECT
BLM AZ SITE SUBMITTAL FORM

Criteria: Parcels of public or private land that may require remediation or do not have higher resource values and may be suitable for renewable energy development. Examples include; hazardous material sites or brownfields, Abandoned Mine Lands sites, former land fill sites, inactive or exhausted mineral material sites or gravel pits, sites damaged or disturbed to the extent that restoration potential is limited, or sites with very limited productivity due to a disruption of natural processes (i.e. isolation from hydrological processes).

Submit a proposal: To submit a site to be considered for inclusion in the environmental analysis, please complete and send this form to az_arra_rdep@blm.gov or BLM Arizona State Office, One North Central Avenue, Suite 800, Phoenix, AZ 85004-4427, Attention: Restoration Design Energy Project.

Name of Site: Former Hassayampa Landfill (County owned property)

Legal Description: Maricopa County Assessor's Parcel Numbers: 401-30-004B and 401-30-015B Southern portion of Section 3 Township 1 South, Range 5 West (full legal description attached)

Political Boundaries (Congressional District, County, Municipality): AZ Congressional District 7, Maricopa County, City of Buckeye

Estimate of acreage available for development: Each parcel is ~70 acres. Parcel 401-30-004B contains the landfill (~50 acres) and storm water retention and a 10 acre parcel cut out that contains the Hassayampa Federal Superfund Site. Parcel 401-30-015B contains a solid waste transfer station and storm water retention.

Brief Description of Disturbance or Previous Development: Maricopa County operated a municipal Title D solid waste landfill on the property from 1963 until 1998. There is currently a small solid waste transfer station located at northern portion of the property on a part of the property that was not used for landfilling. A 10-acre portion of the site accepted hazardous wastes in 1979 and 1980, that portion is now a Federal Superfund site for groundwater contamination. The Superfund site, while a portion of Maricopa County's property, is under the control of the Hassayampa Steering Committee, of which Maricopa County is a member and for the purposes of this application will be the contact.

Point of Contact (include phone number and e-mail address): contacts for this site are:

Rita Neill
Environmental Programs Manager
Maricopa County Risk Management
rneill@mail.maricopa.gov
602-506-5063

Bill Thornton
Director
Maricopa County Solid Waste Department
billthornton@mail.maricopa.gov
602-506-7336

1036

HASSAYAMPA LANDFILL
LEGAL DESCRIPTION

EXHIBIT "A"

That portion of the South one-half (S1/2) of Section Three (3), Township One (1) South, Range Five (5) West of the Gila and Salt River Base and Meridian, Maricopa County, Arizona, lying Northerly of the Hassayampa Salome Highway.

MCR 3 of 4

1036

Neighboring Development
Baseline Road
0
0.25
0.5 miles
N
S. Wickenburg Rd.
Proposed Well Location
Proposed Tire Facility (on hold)
County Transfer Station
COUNTY PROPERTIES
Mountain Avenue
Caldwell Street
Ardmore Road
Euclid Avenue
Siesta Way
West Dobbins Road
West Salome Highway
OLD LANDFILL
Hassayampa Site
Hickman Family Farms
West Ward Road
South 331st Avenue
Railroad Tracks
Hickman Wells

1037

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

MAR 1 2 2010

Kathy Pedrick
Bureau of Land Management – Arizona State Office
One North Central Avenue, Suite 800
Phoenix, AZ 85004

Subject: Notice of Intent to Prepare an Environmental Impact Statement for the Arizona Restoration Design Energy Project and Possible Land Use Amendment

Dear Ms. Pedrick:

The U.S. Environmental Protection Agency (EPA) has reviewed the January 13, 2010, Notice of Intent (NOI) to prepare an Environmental Impact Statement (EIS) for the Arizona Restoration Design Energy Project (ARDEP) and Possible Land Use Amendment. Our review was conducted pursuant to Section 309 of the Clean Air Act, the National Environmental Policy Act (NEPA), and the Council on Environmental Quality (CEQ) NEPA implementing regulations (40 CFR Parts 1500-1508).

EPA supports increasing the development of renewable energy resources, as recommended in the National Energy Policy Act of 2005, in an expeditious and well planned manner. Using renewable energy resources such as solar and wind power can help the nation meet its energy requirements while reducing greenhouse gas emissions. Given the large number of renewable energy project applications currently under consideration, particularly in the Desert Southwest, we believe it is imperative that BLM and project applicants coordinate early with other agencies, land owners and stakeholders on site selection and project design in order to facilitate timely environmental reviews. In particular, EPA encourages environmentally responsible siting of renewable energy projects, preferably on disturbed land, rather than pristine areas, away from endangered species, near transmission lines, avoiding impacts to waters, and utilizing best available technologies to minimize environmental impacts.

We commend BLM for pursuing this Project to identify sites managed by the BLM that are already disturbed and may be suitable for the development of renewable energy and to establish appropriate design criteria for such projects. EPA supports the efforts of the BLM to site renewable energy on impaired or damaged lands through the ARDEP. The project supports our mutual goals to build America's energy resources and to protect and restore valued landscapes. We believe that the ARDEP is an appropriate venue to identify mitigation measures and approaches that are designed to minimize adverse impacts to sensitive resources in the surrounding landscape. We encourage BLM to draft a document that will result in the successful and environmentally-responsible development of renewable resources within Arizona.

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1037

With that in mind, we would like to offer the enclosed detailed comments for your consideration. Our comments provide specific recommendations on 1) the overall content and scope of the ARDEP and 2) recommendations pertaining to NEPA/renewable energy projects.

We appreciate the opportunity to provide comments on the preparation of the Arizona Restoration Design Energy Project and look forward to continued participation in this process as more information becomes available. When the Draft EIS is released for public review, please send two hard copies and one CD to the address above (mail code: CED-2) at the same time it is officially filed with our Washington D.C. Office. If you have any questions, please contact me at (415) 972-3238 or plenys.thomas@epa.gov.

Sincerely,

Tom Plenys
Environmental Review Office

Enclosures: EPA's Detailed Comments

2

US EPA DETAILED COMMENTS ON THE SCOPING NOTICE OF INTENT TO PREPARE AN ENVIRONMENTAL IMPACT STATEMENT FOR THE ARIZONA RESTORATION DESIGN ENERGY PROJECT AND POSSIBLE LAND USE AMENDMENT – MARCH 12, 2010

Project Background

The Bureau of Land Management (BLM) proposes to prepare a Draft Environmental Impact Statement (DEIS) to identify sites and/or areas managed by the BLM that may be suitable for the development of renewable energy and to establish appropriate design criteria for such projects. The purpose of the Arizona Restoration Design Energy Project (ARDEP) is to foster environmentally responsible production of renewable energy; to identify sites or areas that are already disturbed or that may be in need of some level of remediation; and, to allocate such sites or areas for siting of renewable energy projects. As part of the environmental analysis, BLM will address, at each site or area, both existing remediation needs and any potential for renewable energy generation, and may also identify project design criteria to address environmental issues particular to the site or area identified. BLM is requesting information on the relevant issues that would influence the scope of the environmental analysis, and guide the process for developing the DEIS.

I. Recommendations on the Overall Content and Scope of the ARDEP

A. Environmental Analysis

Recommendations: Identification of Renewable Resource Development Sites
The ARDEP should describe and summarize the key studies and information used to identify the renewable resource areas and sites. The DEIS should specify which areas within Arizona were included in the analysis and clarify whether the analysis was limited to BLM-administered lands, or also included Federal, State, tribal, and private lands. The DEIS should disclose the entities and agencies BLM contacted and the types of responses received. Providing information on the full extent to which property owners were engaged in considering this type of future use would help inform EPA on how specific areas were selected for evaluation in the DEIS.

Recommendations: Incorporation of Future Renewable Resource Development Sites
EPA encourages private owners of Superfund sites, as well as owners of municipal, county, state and federal lands impacted by past practices, to consider renewable energy development for future use. We agree with the ARDEP's premise that the environment will benefit if renewable energy developments can be sited on lands that may already be disturbed due to prior industrial, agricultural or other commercial uses. We recommend that the ARDEP set up a clear process that provides renewable resource development sites identified in the future the opportunity to be incorporated into the ARDEP. The announcement of the ARDEP has created a level of interest amongst some property owners, although, they may not be ready to commit today to renewable energy for future use. However, prior to the completion of the EIS, these owners may want their land

considered. If offered, including such sites later could provide a broader and more diverse array of potential projects to include as part of the ARDEP.

Recommendation: Identification of Sensitive Resources
When identifying renewable energy resource areas, the DEIS should also identify environmentally sensitive areas and areas with potential use conflict, including: 1) those areas that contain species that are threatened or endangered; 2) migratory bird flyways; 3) aquatic resources, including wetlands and other Waters of the U.S. (WOUS); 4) bodies of water listed on the Clean Water Act (CWA) 303(d) list; 5) ambient air conditions and criteria pollutant nonattainment areas; 6) sole source aquifers; 7) areas that are affiliated with Native American tribes; 8) historic properties, Native American sacred sites or sensitive areas, and cultural resources; 9) paleontological resources; 10) large residential areas in close proximity; 11) environmental justice communities; 12) military bases or areas with air and ground traffic; and 13) recreational use areas. Measures should then be taken to either exclude these areas from development or identify appropriate stipulations to protect the resources. The DEIS should disclose the potential impacts due to renewable energy development to the greatest extent possible, while setting up structures to protect sensitive resources.

Recommendation: Development of Landscape Level Analysis
The DEIS should utilize existing sources of information to develop a general, landscape-level analysis that identifies environmentally sensitive areas and areas with potential use conflicts. BLM should develop an analysis approach that identifies low, medium, and high sensitivity areas for these resource areas and describe this process in detail in the DEIS. BLM should coordinate with local, state, and federal agencies to compile this information.

Recommendation: Development of Best Management Practices for Mitigation
The ARDEP should include a compilation of best management practices to avoid and minimize environmental impacts due to future siting of renewable energy facilities. EPA has various concerns with respect to potential impacts to biological and aquatic resources, as well as impacts to habitat, wildlife and sensitive species, among others. We recommend that the DEIS discuss and include recommendations for a diverse range of mitigations that can be incorporated as part of future project design criteria. Please see our "General Recommendations Pertaining to NEPA/Renewable Energy Projects" (beginning on page 6) for specific resource areas of concern and types of mitigation strategies that should be included as part of the ARDEP to inform future projects that may 'tier' off the proposed project.

B. Siting of Renewable Energy on Disturbed or Contaminated Land

EPA has worked closely with the Department of Energy's (DOE) National Renewable Energy Laboratory (NREL) to develop maps[1] showing contaminated lands and mining

[1] To develop the maps, EPA and NREL collected renewable energy resource information and merged it with EPA and state data on contaminated lands and mining sites across the country. The mapping analysis applied basic

sites with renewable energy generation potential. These maps were developed in conjunction with the *RE-Powering America's Land: Renewable Energy on Contaminated Land and Mining Sites* program,[2] which was launched by the EPA Office of Solid Waste and Emergency Response (OSWER) in September 2008. Under this initiative, EPA is taking a multi-pronged approach[3] to encouraging reuse of EPA tracked lands[4] into clean and renewable energy production facilities. EPA has developed a Renewable Energy Interactive Mapping Tool[5] that utilizes Google Earth to display these sites. We estimate that there are approximately 480,000 disturbed and contaminated sites and almost 15 million acres of potentially contaminated properties across the United States. Many of the contaminated properties are suitable for renewable energy development and have existing transmission capacity and infrastructure in place, as well as adequate zoning.

Recommendation:
EPA recommends that BLM utilize the Renewable Energy Interactive Mapping Tool to explore whether there are disturbed sites located in Arizona that might also be appropriate for renewable energy development. Some types of technology can be subdivided in different areas and the availability of disturbed land nearby, either in combination with areas identified in the ARDEP or separately, might provide a more attractive option for large-scale development of renewable energy.

C. Associated Infrastructure

Recommendation: Impacts due to Associated Infrastructure
The DEIS should address at a general, landscape level the potential impacts due to the associated infrastructure required for renewable energy development projects in Arizona. Activities that may cause direct and indirect impacts include installing and maintaining renewable energy facilities; building access roads; constructing transmission lines; and pumping groundwater. The indirect and cumulative effects of these infrastructure changes should be identified. This DEIS is the appropriate stage to identify landscape-level mitigation measures to minimize unacceptable impacts to sensitive resources in the surrounding landscape. The DEIS should also address how impacts will be assessed and mitigated at the project-level.

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screening criteria, such as distance to electric transmission lines, distance to roads, renewable energy potential, and site acreage in order to identify EPA tracked lands that might be good candidates for solar, wind, or biomass energy production facilities.

[2] For additional information on EPA's RE-Powering America's Land, please use the following weblink: http://www.epa.gov/renewableenergyland/index.htm

[3] See Internet site: http://www.epa.gov/renewableenergyland/docs/repower_contaminated_land_factsheet.pdf

[4] EPA tracks abandoned mine lands, Brownfields, Resource Conservation and Recovery Act (RCRA) sites, Federal Superfund Sites, and Non-Federal Superfund Sites.

[5] See Internet site: http://www.epa.gov/renewableenergyland/mapping_tool.htm. Open the Renewable Energy Interactive Map (KMZ) to launch the Renewable Energy Mapping Tool. More detailed information on the EPA tracked sites is available at: http://epa.gov/renewableenergyland/maps/ocpa_renewable_energy_data.xls.

Recommendation: Transmissions Lines Needs Analysis
When identifying renewable energy resource sites and areas, the DEIS should also identify: 1) areas with established transmissions lines; 2) areas where there is a lack of available transmission capacity; 3) areas where new transmission lines have been proposed in conjunction with other projects; and 4) areas that should be designated as transmission corridors in scenic areas.

D. *Coordinated Planning & Processing of Renewable Energy Applications*

Recommendation: Consistency between BLM and DOE objectives
Through the joint Department of Energy (DOE) and BLM Programmatic EIS to evaluate Solar Energy Development in six western states, DOE proposes to develop environmental policies and mitigation strategies that would apply to the deployment of DOE-supported solar energy projects on BLM-administered lands or other Federal, State, tribal, or private lands. The BLM proposes to establish its own environmental policies and mitigation strategies to use when making decisions on whether to issue ROW for utility-scale solar energy development projects on public lands administered by the BLM. The DEIS should clarify how the ARDEP will be consistent with these programs being developed through the Solar Programmatic EIS and clearly distinguish how, and under what circumstances, the environmental policies and mitigation strategies may differ.

Recommendation: Environmental Review Process
The DEIS should describe: 1) how the DEIS will serve as a "tiering" document for subsequent, site-specific NEPA documentation; 2) the factors used to determine when a subsequent EIS is required; and 3) the factors used to determine when an Environmental Assessment (EA) is required. The environmental review process should be explained in detail. This will ensure that the appropriate environmental review, permitting, or compliance measures will be identified, defined, and implemented during each phase of the project.

Recommendation: Applicable Federal Laws/Permits
The DEIS should describe the permitting requirements from a national perspective, in terms of compliance with federal regulations such as the Clean Air Act (CAA), CWA, Endangered Species Act (ESA), Migratory Bird Treaty Act, National Historic Preservation Act, and NEPA. The process should be clearly defined and include all permits and approvals that may be required, their sequence, and the interrelationships between them.

Recommendation: State Requirements/Plans
The DEIS should provide comprehensive information on state regulatory requirements and permits necessary to develop renewable energy resources within Arizona. The DEIS should contain:

- comprehensive summary of Arizona's applicable regulations, including local laws;
- a list of permits that may be required; and

- flow-charts illustrating the steps required to obtain the necessary permits to comply with environmental regulations.

Recommendations: Procedures to Amend or Revise Land Use Management Plans
The DEIS should contain references and descriptions of land use plans and resource management plans associated with areas or sites that have been identified as renewable energy resources. The DEIS should discuss how the proposed action would support or conflict with the objectives of federal, state, tribal, or local land use plans, policies and controls in the selected areas. The term "land use plans" includes all types of formally adopted documents for land use planning, conservation, zoning and related regulatory requirements. Proposed plans not yet developed should also be addressed if they have been formally proposed by the appropriate government body in written form (CEQ's Forty Questions, #23b). The DEIS should describe the procedures necessary to amend or revise these plans, as necessary to allow for renewable energy development.

Recommendation: Categorical Exclusions
The DEIS should describe categorical exclusions that pertain to any potential renewable energy sites or areas, if any.

Recommendation: Potential Use Conflicts
The DEIS should outline special procedures used to evaluate potential conflicts of use in areas that are located in close proximity to National Parks, National Monuments, or in areas with high recreational use. The DEIS should provide direction on how to balance competing demands for uses.

E. Regulatory Context

Recommendations: Federal Renewable Energy Policy and State Renewable Portfolio Standards
The DEIS should summarize current and past legislation regarding the development of renewable energy resources in the United States, including the Energy Policy Act of 2005 and Executive Order 13212. The provisions in the Energy Policy Act of 2005 that are designed to promote the development of renewable resources and address challenges associated with the development should be summarized. The DEIS should also summarize Arizona's Renewable Portfolio Standards (RPS) program goals. The DEIS should fully describe the specific Federal and State renewable energy targets, timelines, and underlying needs to which BLM is responding, and explain how the Project meets those needs in the context of the many renewable energy project applications in the Desert Southwest and Arizona. To the extent practicable, the DEIS should also discuss how many of the total renewable energy applications received by BLM are likely to proceed pursuant to the joint DOE/BLM Programmatic Solar DEIS effort and the level of energy production those applications represent.

Recommendation: Power Sales Agreements
Any signed power sales agreements that are associated with federal, state, or private lands that are located in the vicinity of an identified renewable energy development area should be disclosed in the DEIS as part of the cumulative impacts analysis.

F. Right-of-Way Stipulations

Recommendation: Retain Flexibility to Provide Additional Resource Protection
Standard Rights-of-Way (ROW) authorizations should contain appropriate stipulations relating to all aspects of project development, including, but not limited to road construction and maintenance, vegetation removal, natural, cultural and biological resources mitigation and monitoring, and site reclamation. Standard ROW stipulations may not provide adequate resource protection, especially in areas where little resource data currently exist. In the instance that important resources are discovered, EPA recommends that BLM retain the flexibility to require appropriate mitigation measures to adequately protect resources.

Recommendation: Proposed Activities Subject to NEPA
EPA recommends the DEIS provide detailed information on ROW authorizations and that ROW grants acknowledge that any proposed activity is subject to NEPA.

Recommendation: Spill Prevention, Planning, and Cleanup
EPA recommends that the DEIS address the issue of spill prevention, planning, and clean up. This topic could be incorporated in ROW authorization stipulations that would apply to all lands subject to development. This stipulation would name the grantee as the responsible party for any discharge of hazardous substances that may occur during operations and would commit the grantee to specified spill prevention techniques to be outlined by the BLM.

II. General Recommendations Pertaining to NEPA/Renewable Energy Projects

Statement of Purpose and Need

The EIS should clearly identify the underlying purpose and need to which the BLM is responding in proposing the alternatives (40 CFR 1502.13). The *purpose* of the proposed action is typically the specific objectives of the activity, while the *need* for the proposed action may be to eliminate a broader underlying problem or take advantage of an opportunity.

Recommendation:
The purpose and need should be a clear, objective statement of the rationale for the proposed project, as it provides the framework for identifying project alternatives. The EIS should discuss the proposed project in the context of the larger energy market that this project would serve and identify potential purchasers of the power produced. The

EIS should also discuss how the project will assist the state in meeting its Renewable Portfolio Standards and goals.

Alternatives Analysis

NEPA requires evaluation of reasonable alternatives, including those that may not be within the jurisdiction of the lead agency (40 CFR Section 1502.14(c)). A robust range of alternatives will include options for avoiding significant environmental impacts. The EIS should provide a clear discussion of the reasons for the elimination of alternatives which are not evaluated in detail. Reasonable alternatives should include, but are not necessarily limited to, alternative sites, capacities, and technologies as well as alternatives that identify environmentally sensitive areas or areas with potential use conflicts. The alternatives analysis should describe the approach used to identify environmentally sensitive areas and describe the process that was used to designate them in terms of sensitivity (low, medium, and high).

The environmental impacts of the proposal and alternatives should be presented in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decision maker and the public (40 CFR 1502.14). The potential environmental impacts of each alternative should be quantified to the greatest extent possible (e.g., acres of wetlands impacted, tons per year of emissions produced, etc.).

Recommendations:
The EIS should describe how each alternative was developed, how it addresses each project objective, and how it would be implemented. The alternatives analysis should include a discussion of alternative sites, capacities, and generating technologies including different types of renewable energy technologies, and describe the benefits associated with the proposed technology.

The EIS should clearly describe the rationale used to determine whether impacts of an alternative are significant or not. Thresholds of significance should be determined by considering the context and intensity of an action and its effects (40 CFR 1508.27).

The EIS should reflect a purpose and need statement for BLM that allows for a full evaluation, in the EIS, of other alternatives, including off-site locations and other environmentally preferable on-site alternatives. BLM should also consider evaluating an alternative that combines on and off site locations in an EIS.

The EIS should discuss each alternative's potential to impact air traffic and safety in the vicinity of the proposed project.

Water Resources Impacts

Water Supply and Water Quality

The EIS should estimate the quantity of water the project will require and describe the source of this water and potential effects on other water users and natural resources in the project's area of influence. The EIS should clearly describe existing groundwater conditions, potential cumulative impacts to groundwater quantity and quality, and avoidance measures to prevent impacts. The EIS should clearly depict reasonably foreseeable direct, indirect, and cumulative impacts to this resource. Specifically, the potentially-affected groundwater basin should be identified and any potential for subsidence and impacts to springs or other open water bodies and biologic resources should be analyzed. The EIS should include:

- A discussion of the amount of water needed for the proposed solar facility, where this water will be obtained, and the amount and source of power that would be needed to move the water to and through the facility;
- A discussion of availability of groundwater within the basin and annual recharge rates;
- A description of the water right permitting process and the status of water rights within that basin, including an analysis of whether water rights have been over-allocated;
- A description of any water right permits that contain special conditions; measures to mitigate direct, indirect, and cumulative impacts; and provisions for monitoring and adaptive management;
- A detailed discussion of cumulative impacts to groundwater supply within the hydrographic basin(s) that would support the alternatives, including impacts from other large-scale solar installations that have also been proposed;
- An analysis of different types of technology that can be used to minimize water use for the solar thermal power plant;
- A discussion of whether it would be feasible to use other sources of water, including wastewater or deep-aquifer water, as cooling water for the proposed solar thermal power plant;
- A discussion of whether it is possible to recycle the water that would be sent to the evaporation pond (if wet cooling is utilized) and re-inject or reuse this water; and
- An analysis of the potential for alternatives to cause adverse aquatic impacts such as impacts to water quality and aquatic habitats.

Large-scale solar installations that utilize wet-cooling may require significant water resources. Solar installations that utilize dry-cooling require much less water—up to 90 percent less. We recognize that wet cooling technology has performance advantages over dry cooling, especially in arid regions, and may be less expensive; however, due to the general scarcity of water in the region, the large number of solar project applications submitted to BLM, and the ever-increasing demand for this commodity, EPA is concerned about the depletion of this resource, particularly in desert regions.

Recommendation:
EPA recommends that the EIS discuss the water demands of various solar technologies, including wet cooling and dry cooling systems. We also recommend that BLM consider utilization of technologies that will minimize water use and the implementation of conservation measures that will reduce water demands.

EPA encourages BLM to include in the EIS a description of all water conservation measures that will be implemented to reduce water demands. Project designs should maximize conservation measures such as appropriate use of recycled water for landscaping and industry, xeric landscaping, and water conservation education. Water saving strategies can be found in the EPA's publications *Protecting Water Resources with Smart Growth* at www.epa.gov/piedpage/pdf/waterresources_with_sg.pdf, and *USEPA Water Conservation Guidelines* at www.epa.gov/watersense/docs/app_a508.pdf.

In addition, the EIS should describe water reliability for the proposed project and clarify how existing and/or proposed sources will be affected by climate change. At a minimum, EPA expects a qualitative discussion of impacts of climate change to water supply, and the adaptability of the project to these changes.

Disposal of Discharges

The EIS should address the potential effects of project discharges, if any, on surface and groundwater quality. Discharges may include, but are not limited to, thermal changes, suspended solids, toxicity, metals, oil and grease, chlorine, salinity, and pH. At the project level, the specific discharges should be identified and potential effects of discharges on designated beneficial uses of affected waters should be analyzed. The EIS should note that a National Pollutant Discharge Elimination System (NPDES) permit would be required for discharges to waters of the United States. The disposal of wastewater or other fluids into the subsurface is subject to the requirements of the Underground Injection Control Program, pursuant to the Safe Drinking Water Act. Permits may or may not be required, depending on project specifications and federal and/or state requirements. In addition, BLM and state well construction requirements are required to ensure that groundwater is protected. The subsequent EISs/EAs should address how the proposed project would be designed and operated to ensure that the facility meets federal and state water quality standards that provide for the protection and maintenance of beneficial uses downstream from the facility.

If the facility is a zero discharge facility, the EIS should disclose the amount of process water that would be disposed of onsite and explain methods of onsite containment. If evaporation ponds will be used for disposal of geothermal effluents, condensate or other process water, identify chemical characteristics of the pond water and how seepage into groundwater will be prevented. Identify the storm design containment capacity of ponds, explain how overflow in larger storm events will be managed, and discuss potential environmental impacts (drainage channels affected, water quality, biological resources) in the event of overflow.

Clean Water Act Section 404

The project applicant should coordinate with the U.S. Army Corps of Engineers (Corps) to determine if the proposed project requires a Section 404 permit under the Clean Water Act (CWA). Section 404 regulates the discharge of dredged or fill material into waters of the United States (WOUS), including wetlands and other *special aquatic sites*. The EIS should describe all WOUS that could be affected by the project alternatives, and include maps that clearly identify all waters within the project area. The discussion should include acreages and channel lengths, habitat types, values, and functions of these waters. In addition, EPA suggests that BLM include a jurisdictional delineation for all WOUS, including ephemeral drainages, in accordance with the 1987 *Corps of Engineers Wetlands Delineation Manual* and the December 2006 *Arid West Region Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region*. A jurisdictional delineation will confirm the presence of WOUS in the project area and help determine impact avoidance or if state and federal permits would be required for activities that affect WOUS.

If a permit is required, EPA will review the project for compliance with *Federal Guidelines for Specification of Disposal Sites for Dredged or Fill Materials* (40 CFR 230), promulgated pursuant to Section 404(b)(1) of the CWA ("404(b)(1) Guidelines"). Pursuant to 40 CFR 230, any permitted discharge into WOUS must be the least environmentally damaging practicable alternative (LEDPA) available to achieve the project purpose. The EIS should include an evaluation of the project alternatives in this context in order to demonstrate the project's compliance with the 404(b)(1) Guidelines.

If a discharge to WOUS is anticipated, the EIS should discuss alternatives to avoid these discharges and how potential impacts would be minimized and mitigated. This discussion should include: (a) acreage and habitat type of WOUS that would be created or restored; (b) water sources to maintain the mitigation area; (c) revegetation plans, including the numbers and age of each species to be planted, as well as special techniques that may be necessary for planting; (d) maintenance and monitoring plans, including performance standards to determine mitigation success; (e) the size and location of mitigation zones; (f) the parties that would be ultimately responsible for the plan's success; and (g) contingency plans that would be enacted if the original plan fails. Mitigation should be implemented in advance of the impacts to avoid habitat losses due to the lag time between the occurrence of the impact and successful mitigation.

The EIS should describe the original (natural) drainage patterns in the project locale, as well as the drainage patterns of the area during project operations, and identify whether any components of the proposed project are within a 50 or 100-year floodplain. We also recommend the EIS include information on the functions and locations of WOUS, as well as ephemeral washes in the project area, because of the important hydrologic and biogeochemical role these washes play in direct relationship to higher-order waters downstream.

Clean Water Act Section 303(d)

The CWA requires States to develop a list of impaired waters that do not meet water quality standards, establish priority rankings, and develop action plans, called Total Maximum Daily Loads (TMDLs), to improve water quality.

Recommendation:
The EIS should provide information on CWA Section 303(d) impaired waters in the project area, if any, and efforts to develop and revise TMDLs. The EIS should describe existing restoration and enhancement efforts for those waters, how the proposed project will coordinate with on-going protection efforts, and any mitigation measures that will be implemented to avoid further degradation of impaired waters.

Biological Resources

The EIS should identify all petitioned and listed threatened and endangered species and critical habitat that might occur within the project area. The document should identify and quantify which species or critical habitat might be directly, indirectly, or cumulatively affected by each alternative and mitigate impacts to these species. Emphasis should be placed on the protection and recovery of species due to their status or potential status under the Endangered Species Act (ESA). We recommend that BLM consult with the U.S. Fish and Wildlife Service and prepare a Biological Opinion under Section 7 of the ESA if there are threatened or endangered species present. The EIS should provide a recent status update of this report if this action has been or will be undertaken. Analysis of impacts and mitigation on covered species should include:

- Baseline conditions of habitats and populations of the covered species;
- A clear description of how avoidance, mitigation and conservation measures will protect and encourage the recovery of the covered species and their habitats in the project area;
- Monitoring, reporting and adaptive management efforts to ensure species and habitat conservation effectiveness.

EPA is also concerned about the potential impact of construction, installation, operation, and maintenance activities (deep trenching, grading, filling, and fencing) on habitat. The EIS should describe the extent of these activities and the associated impacts on habitat and threatened and endangered species. We encourage habitat conservation alternatives that avoid and protect high value habitat and create or preserve linkages between habitat areas to better conserve the covered species. EPA is also concerned about the potential for adverse impacts to native vegetation and/or animal species due to increased shade from solar collectors (heliostats, photovoltaic systems, parabolic troughs) after installation is complete.

Recommendations:
The EIS should indicate what measures will be taken to protect important wildlife habitat areas from potential adverse effects of proposed covered activities and to ensure that

desert areas are minimally impacted. We encourage BLM to maximize options to protect habitat and minimize habitat loss and habitat fragmentation.

The BLM should discuss the impacts associated with constructing fences around the project site(s), and consider whether there are options that could facilitate better protection of covered species.

The EIS should discuss the impacts associated with an increase of shade in the desert environment on vegetation and/or species.

The EIS should discuss the potential impacts on avian species due to collisions with wind turbines, power tower and/or heliostats and whether there is potential for the concentrating solar rays to burn avian species in flight.

If the project includes evaporation and/or storm water ponds, potential hazards and impacts to humans and wildlife, especially birds, should be discussed.

Recommendation:
Explain whether any ponded water or bioremediation area associated with the project has the potential to attract wildlife, particularly migratory waterfowl. If there is potential for exposure of wildlife to contaminants in these waters, identify mitigation measures to avoid such impacts.

Invasive Species

Executive Order 13112, *Invasive Species* (February 3, 1999), mandates that federal agencies take actions to prevent the introduction of invasive species, provide for their control, and minimize the economic, ecological, and human health impacts that invasive species cause. Executive Order 13112 also calls for the restoration of native plants and tree species. If the proposed project will entail new landscaping, the EIS should describe how the project will meet the requirements of Executive Order 13112.

Recommendation:
The EIS should include an invasive plant management plan to monitor and control noxious weeds.

Indirect and Cumulative Impacts

The cumulative impacts analysis should provide the context for understanding the magnitude of the impacts of the alternatives by analyzing the impacts of other past, present, and reasonably foreseeable projects or actions and then considering those cumulative impacts in their entirety (CEQ's Forty Questions, #18). The EIS should clearly identify the resources that may be cumulatively impacted, the time over which impacts are going to occur, and the geographic area that will be impacted by the proposed project. The EIS should focus on resources of concern – those resources that are "at risk" and/or are significantly impacted by the proposed project,

before mitigation. In the introduction to the *Cumulative Impacts Section*, identify which resources are analyzed, which ones are not, and why. For each resource analyzed, the EIS should:

- Identify the current condition of the resource as a measure of past impacts. For example, the percentage of species habitat lost to date.
- Identify the trend in the condition of the resource as a measure of present impacts. For example, the health of the resource is improving, declining, or in stasis.
- Identify all on-going, planned, and reasonably foreseeable projects in the study area that may contribute to cumulative impacts.
- Identify the future condition of the resource based on an analysis of impacts from reasonably foreseeable projects or actions added to existing conditions and current trends.
- Assess the cumulative impacts contribution of the proposed alternatives to the long-term health of the resource, and provide a specific measure for the projected impact from the proposed alternatives.
- Disclose the parties that would be responsible for avoiding, minimizing, and mitigating those adverse impacts.
- Identify opportunities to avoid and minimize impacts, including working with other entities.

The BLM has received more than 300 applications for renewable energy projects in the desert southwest. The BLM and Department of Energy (DOE) are preparing a Programmatic EIS to explain how they will address existing and future solar energy development applications on BLM-administered lands in six Western states. EPA is concerned about the cumulative impacts associated with the development of multiple large-scale solar projects in the desert region.

Recommendations:
The EIS should identify whether the proposed project is located within one of the solar energy study areas or in close proximity to one.

The EIS should consider the cumulative impacts associated with multiple large-scale renewable energy projects proposed in the desert southwest and the potential impacts on various resources including: water supply, endangered species, and habitat.

As an indirect result of providing additional power, it can be anticipated that this project will allow for development and population growth to occur in those areas that receive the generated electricity.

Recommendations:
The EIS should describe the reasonably foreseeable future land use and associated impacts that will result from the additional power supply. The document should provide an estimate of the amount of growth, its likely location, and the biological and environmental resources at risk.

The EIS should consider the direct and indirect effects of the inter-connecting transmission line for the proposed project, as well as the cumulative effects associated with the transmission needs of other reasonably foreseeable projects.

Implementation of Adaptive Management Techniques for Mitigation Measures

Adaptive management is an iterative process that requires selecting and implementing management actions, monitoring, comparing results with management and project objectives, and using feedback to make future management decisions. The process recognizes the importance of continually improving management techniques through flexibility and adaptation instead of adhering rigidly to a standard set of management actions. Although adaptive management is not a new concept, it may be relatively new in its application to specific projects. The effectiveness of adaptive management monitoring depends on a variety of factors including:

a) The ability to establish clear monitoring objectives;
b) Agreement on the impact thresholds being monitored;
c) The existence of a baseline or the ability to develop a baseline for the resources being monitored;
d) The ability to see the effects within an appropriate time frame after the action is taken;
e) The technical capabilities of the procedures and equipment used to identify and measure changes in the affected resources and the ability to analyze the changes;
f) The resources needed to perform the monitoring and respond to the results.

Recommendation:
EPA recommends that BLM consider adopting a formal adaptive management plan to evaluate and monitor impacted resources and ensure the successful implementation of mitigation measures. EPA recommends that BLM review the specific discussion on Adaptive Management in the NEPA Task Force Report to the Council on Environmental Quality (CEQ) on *Modernizing NEPA*.

Climate Change

Scientific evidence supports the concern that continued increases in greenhouse gas emissions resulting from human activities will contribute to climate change. Global warming is caused by emissions of carbon dioxide and other heat-trapping gases. Global warming can affect weather patterns, sea level, ocean acidification, chemical reaction rates, and precipitation rates, resulting in climate change. Reports also indicate that deserts may store as much carbon as temperate forests.

Recommendations:
The EIS should consider how climate change could potentially influence the proposed project, specifically within sensitive areas, and assess how the projected impacts could be exacerbated by climate change.

The EIS should consider the cumulative impacts associated with multiple large-scale renewable energy projects proposed in the desert southwest and clarify how existing and/or proposed resources will be affected by climate change.

The EIS should quantify and disclose the anticipated climate change *benefits* of renewable energy. We suggest quantifying greenhouse gas emissions from different types of generating facilities including solar, geothermal, natural gas, coal-burning, and nuclear and compiling and comparing these values.

The EIS should discuss whether the trenching, grading, and filling associated with the construction of this project and the installation of the heliostats, will affect the deserts ability to store carbon, and to what degree this may occur.

Air Quality

The EIS should provide a detailed discussion of ambient air conditions (baseline or existing conditions), National Ambient Air Quality Standards (NAAQS), criteria pollutant nonattainment areas, and potential air quality impacts of the proposed project (including cumulative and indirect impacts). Such an evaluation is necessary to assure compliance with State and Federal air quality regulations, and to disclose the potential impacts from temporary or cumulative degradation of air quality.

The EIS should describe and estimate air emissions from the proposed power plant, including potential construction and maintenance activities, as well as proposed mitigation measures to minimize those emissions. EPA recommends an evaluation of the following measures to reduce emissions of criteria air pollutants and hazardous air pollutants (air toxics).

Recommendations:

- *Existing Conditions* – The EIS should provide a detailed discussion of ambient air conditions, NAAQS, and criteria pollutant nonattainment areas in all areas considered for renewable energy development.

- *Quantify Emissions* – The EIS should estimate emissions of criteria pollutants from the proposed project and discuss the timeframe for release of these emissions over the lifespan of the project. The EIS should describe and estimate emissions from potential construction activities, as well as proposed mitigation measures to minimize these emissions.

- *Specify Emission Sources* – The EIS should specify the emission sources by pollutant from mobile sources, stationary sources, and ground disturbance. This source specific information should be used to identify appropriate mitigation measures and areas in need of the greatest attention.

- *Equipment Emissions Mitigation Plan (EEMP)* – The EIS should identify the need for an EEMP. An EEMP will identify actions to reduce diesel particulate, carbon

monoxide, hydrocarbons, and NOx associated with construction activities. We recommend that the EEMP require that all construction-related engines:

- are tuned to the engine manufacturer's specification in accordance with an appropriate time frame;
- do not idle for more than five minutes (unless, in the case of certain drilling engines, it is necessary for the operating scope);
- are not tampered with in order to increase engine horsepower;
- include particulate traps, oxidation catalysts and other suitable control devices on all construction equipment used at the project site;
- use diesel fuel having a sulfur content of 15 parts per million or less, or other suitable alternative diesel fuel, unless such fuel cannot be reasonably procured in the market area; and
- include control devices to reduce air emissions. The determination of which equipment is suitable for control devices should be made by an independent Licensed Mechanical Engineer. Equipment suitable for control devices may include drilling equipment, generators, compressors, graders, bulldozers, and dump trucks.

- *Fugitive Dust Control Plan* - The EIS should identify the need for *Fugitive Dust Control Plan.* We recommend that it include these general recommendations:

  - Stabilize open storage piles and by covering and/or applying water or chemical/organic dust palliative where appropriate. This applies to both inactive and active sites, during workdays, weekends, holidays, and windy conditions.
  - Install wind fencing and phase grading operations where appropriate, and operate water trucks for stabilization of surfaces under windy conditions; and
  - When hauling material and operating non-earthmoving equipment, prevent spillage and limit speeds to 15 miles per hour (mph). Limit speed of earth-moving equipment to 10 mph.

General Conformity

The EIS should address the applicability of CAA Section 176 and EPA's general conformity regulations at 40 CFR Parts 51 and 93. Federal agencies need to ensure that their actions, including construction emissions subject to state jurisdiction, conform to an approved implementation plan. Emissions authorized by a CAA permit issued by the State or the local air pollution control district would not be assessed under general conformity but through the permitting process.

Recommendation:
Cumulative impacts to air quality should be analyzed given the potential air quality impacts from construction activities.

New Source Review (NSR) Construction Permit Program

New major stationary sources of air pollution and major modifications to existing sources are required by the CAA to obtain an air pollution permit before commencing construction. This process is called new source review (NSR) and is required whether the major source or modification is planned for an area where the NAAQS are exceeded (nonattainment areas) or an area where air quality is acceptable (attainment and unclassifiable areas). Permits for sources in attainment areas are referred to as Prevention of Significant Deterioration (PSD) permits, while permits for sources located in nonattainment areas are referred to as nonattainment (NAA) NSR permits. The entire program, including both PSD and NAA permitting, is referred to as the NSR program and is established in Parts C and D of Title I of the CAA. Based upon an area's attainment/nonattainment designations and a proposed project's anticipated criteria pollutant emission rates, a project may require both a PSD and NAA permit.

Recommendation:
The EIS should discuss if NSR program permits will be required for any geothermal, solar, or wind power plants that may be constructed. If so, the EIS should describe the permitting process and the information that must be addressed in the permits.

Coordination with Tribal Governments

Executive Order 13175, *Consultation and Coordination with Indian Tribal Governments* (November 6, 2000), was issued in order to establish regular and meaningful consultation and collaboration with tribal officials in the development of federal policies that have tribal implications, and to strengthen the United States government-to-government relationships with Indian tribes.

Recommendation:
The EIS should describe the process and outcome of government-to-government consultation between BLM and each of the tribal governments within the project area, issues that were raised (if any), and how those issues were addressed in the selection of the proposed alternative.

National Historic Preservation Act and Executive Order 13007

Consultation for tribal cultural resources is required under Section 106 of the National Historic Preservation Act (NHPA). Historic properties under the National Historic Preservation Act (NHPA) are properties that are included in the National Register of Historic Places (NRHP) or that meet the criteria for the National Register. Section 106 of the NHPA requires a federal agency, upon determining that activities under its control could affect historic properties, consult with the appropriate State Historic Preservation Officer/Tribal Historic Preservation Officer (SHPO/THPO). Under NEPA, any impacts to tribal, cultural, or other treaty resources must be discussed and mitigated. Section 106 of the NHPA requires that Federal agencies consider the effects of their actions on cultural resources, following regulation in 36 CFR 800.

Executive Order 13007, *Indian Sacred Sites* (May 24, 1996), requires federal land managing agencies to accommodate access to, and ceremonial use of, Indian sacred sites by Indian Religious practitioners, and to avoid adversely affecting the physical integrity, accessibility, or use of sacred sites. It is important to note that a sacred site may not meet the National Register criteria for a historic property and that, conversely, a historic property may not meet the criteria for a sacred site.

Recommendation:
The EIS should address the existence of Indian sacred sites in the project areas. It should address Executive Order 13007, distinguish it from Section 106 of the NHPA, and discuss how BLM will avoid adversely affecting the physical integrity, accessibility, or use of sacred sites, if they exist. The EIS should provide a summary of all coordination with Tribes and with the SHPO/THPO, including identification of NRHP eligible sites, and development of a Cultural Resource Management Plan.

Environmental Justice

Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* (February 11, 1994), directs federal agencies to identify and address disproportionately high and adverse human health or environmental effects on minority and low-income populations, allowing those populations a meaningful opportunity to participate in the decision-making process. Guidance[6] by CEQ clarifies the terms low-income and minority population (which includes American Indians) and describes the factors to consider when evaluating disproportionately high and adverse human health effects.

Recommendation:
The EIS should include an evaluation of environmental justice populations within the geographic scope of the project. If such populations exist, the EIS should address the potential for disproportionate adverse impacts to minority and low-income populations, and the approaches used to foster public participation by these populations. Assessment of the project's impact on minority and low-income populations should reflect coordination with those affected populations.

Impacts on Off-Highway Vehicles and Recreational Use

BLM is entrusted with the multiple-use management of natural resources on public land, and that public land must be managed for outdoor recreation and natural, scenic, scientific, and historical values. The development of renewable energy resources could restrict or reduce the opportunities for recreational use, including off-highway vehicles (OHV) that may access areas that may have been designated as open for recreational use. Alternatives requesting

[6]Environmental Justice Guidance under the National Environmental Policy Act, Appendix A (Guidance for Federal Agencies on Key Terms in Executive Order 12898), CEQ, December 10, 1997.

compensation for impacted recreation lands may or may not be considered because of feasibility and cost. In many cases, OHV use is generally not confined to trails, but tends to be unrestricted.

Recommendations:
EPA recommends that the EIS describe BLM's overall guidance for addressing OHV management in the areas identified for renewable energy development and specifically how that guidance will be modified, should geothermal, solar or wind projects be approved.

The EIS should outline procedures used to evaluate conflicts of use in areas with high recreational use. The EIS should provide direction on how to balance competing uses.

EPA recommends that BLM fully evaluate current and projected recreational use within the lands identified for geothermal, solar, or wind development. An accurate and complete route inventory will be necessary to complete this evaluation. Emissions from OHV use can be considered as cumulative impacts on air quality; consequently, the subsequent EIS/EA should describe and estimate emissions from OHV, as well as any mitigation measures to minimize these emissions.

EPA recommends that there be full disclosure of the impacts to recreational users in the lands identified for renewable energy development. Construction, operations, and maintenance will likely impact recreational users. We recommend that BLM provide information about costs associated with compensatory measures.

The EIS should clarify what general measures will be incorporated to ensure that OHV and other users are not injured due to hazards associated with exposed collectors, piping, and transmission lines. It would be reasonable to assume that OHV users do not always stay on designated trails or may not know which trails are in fact designated. Some precautions regarding safety should be implemented.

Hazardous Materials/Hazardous Waste/Solid Waste

The EIS should address potential direct, indirect and cumulative impacts of hazardous waste from construction and operation of the proposed project. The document should identify projected hazardous waste types and volumes, and expected storage, disposal, and management plans. It should address the applicability of state and federal hazardous waste requirements. Appropriate mitigation should be evaluated, including measures to minimize the generation of hazardous waste (i.e., hazardous waste minimization). Alternate industrial processes using less toxic materials should be evaluated as mitigation. This potentially reduces the volume or toxicity of hazardous materials requiring management and disposal as hazardous waste.

Formerly Used Defense Sites

If there are any inactive Formerly Used Defense Sites (FUDS) located on the federal lands that have been earmarked for geothermal, solar, or wind development, these sites should be

identified. Inactive FUDS could present a public danger from unexploded ordnance and this could affect parties involved with construction or recreation. The EIS should identify which agency is responsible for ensuring that these hazards have been evaluated and eliminated and describe what measures BLM will implement to ensure that FUDS no longer represent a public danger to anyone accessing these lands.

Evaporation Ponds

Should the proposed project utilize evaporation ponds, the EIS should describe the concentrated, dewatered solid waste associated with the evaporation pond(s) and describe whether this waste product will be transported off site for disposal.

Life Cycle Analysis/Recycling

Production can and should address the full product life cycle, from raw material sourcing through end of life collection and reuse or recycling. Companies can minimize their environmental impacts during raw material extraction, and facilitate future material recovery for reuse or recycling. Solar, wind, and geothermal companies can facilitate collection and recycling through buy-back programs or collection and recycling guarantees.

Recommendation:
EPA recommends that the proponent strive to address the full product life cycle by sourcing power tower components from a company that: 1) minimizes environmental impacts during raw material extraction; 2) manufactures components in a zero waste facility; and 3) provides future component disassembly for material recovery for reuse and recycling.

Mitigation and Pollution Prevention

The EIS should evaluate the feasibility of adopting mitigation to avoid, reduce or compensate for adverse environmental impacts from construction and operation. NEPA does not require that an impact be "significant" before mitigation can be presented in an EIS. "All relevant, reasonable mitigation measures that could improve the project are to be identified. . . . Mitigation measures must be considered even for impacts that by themselves would not be considered 'significant.' Once the proposal itself is considered as a whole to have significant effects . . . mitigation measures must be developed where it is feasible to do so." (CEQ's Forty Questions, #19a)

CEQ also issued guidance[7] on integrating pollution prevention measures in NEPA documents. Many strategies can reduce pollution and protect resources, including using fewer toxic inputs, altering manufacturing and facility maintenance processes, and conserving energy. Consistent with CEQ's guidance, we recommend presenting all reasonable mitigation and pollution prevention measures and how these may be incorporated into future agreements.

[7]Memorandum to Heads of Federal Departments and Agencies Regarding Pollution Prevention and the National Environmental Policy Act, CEQ, January 12, 1993.

1037

Coordination with Land Use Planning Activities

The EIS should discuss how the proposed action would support or conflict with the objectives of federal, state, tribal or local land use plans, policies and controls in the project area. The term "land use plans" includes all types of formally adopted documents for land use planning, conservation, zoning and related regulatory requirements. Proposed plans not yet developed should also be addressed it they have been formally proposed by the appropriate government body in a written form (CEQ's Forty Questions, #23b).

21

1038

Written Comment Sheet

Public Scoping Meeting for the Bureau of Land Management Restoration Design Energy Project

Thank you for your input!

Please hand this form in or mail before **MARCH 11, 2010** to:

Restoration Design Energy Project
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Please note that all submissions will be made available for public inspection in their entirety. Your name and address will become part of the public record. If you wish to withhold your name or address from public review or from disclosure under the Freedom of Information Act (FOIA), you must state this prominently at the beginning of your comments. Such requests will be honored to the extent allowed by law.

PLEASE PRINT **DATE:** March 15 2010

Sorry to be late - please accept in spite of -
The San Pedro River Valley Watershed needs
the attention of all concerned with the
integrity of natural systems. Amid
some private property, there are many
State and BLM lands and mitigation properties.
As TNC has observed, there are very few
areas left for mitigation - this area must
be preserved. It needs protection from all
intrusive infrastructure, CAVs, military
aviation.

Comments can also be sent to: az_arra_rdep@blm.gov **For more information visit:** http://www.blm.gov/az/st/en.html

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