

NATURAL RESOURCES DEFENSE COUNCIL
THE WILDERNESS SOCIETY

DOCKET
08-AFC-5

DATE MAY 26 2010

RECD. MAY 27 2010

May 26, 2010

Jim_Stobaugh@blm.gov

Re: Draft Environmental Impact Statement and California
Desert Conservation Area Plan Amendment for the
Proposed SES Solar Two Project

Mr. Jim Stobaugh:

This letter constitutes the comments on the above-captioned proposed solar project and draft environmental impact statement (DEIS) of the Natural Resources Defense Council (NRDC) and The Wilderness Society (TWS), national environmental membership organizations with long histories of advocacy on behalf of the lands and resources administered by the Bureau of Land Management (BLM). More recently these organizations have been intensively involved in the Bureau's work to develop a comprehensive solar program as well as its efforts to "fast track" the permitting of individual utility-scale solar projects in California so that they may be eligible for grant funding under the American Recovery and Reinvestment Act of 2009 (ARRA).

Introduction: Our organizations recognize the need to develop the nation's renewable energy resources and to do so rapidly in order to respond effectively to the challenge of climate change. Unique natural resources here in California are already being affected by climate change, including, for example, the pikas of Yosemite National Park and the Joshua trees in Joshua Tree National Park. We also recognize that renewables development can help create jobs in communities that are eager for them, because of the nation's economic crisis. For these and other related reasons, our organizations are working with regulators and project proponents to move renewables projects forward. That said, renewable development is not appropriate everywhere on the public lands and must be balanced against the equally urgent need to protect unique and sensitive resources of the California Desert Conservation Area (CDCA). California is lucky indeed that we have sufficient renewable resources, including solar resources, to do their development in an environmentally and fiscally sensitive way.¹

As we and our colleagues at sister organizations have repeatedly stated, the best way to develop the solar resources of the CDCA is through comprehensive, pro-active planning by both the federal government and the state to identify the most appropriate areas for such development -- *i.e.*, solar development zones -- and to guide development to those zones. *See, e.g.*, letter dated June 29, 2009 to Interior Secretary Salazar and California's Governor Schwarzenegger and signed by 11 organizations, including our own, attached as Exhibit 1.

We support the BLM's adoption of zone designation for its forthcoming solar programmatic EIS because of the benefits inherent in this approach, including but not limited to clustering

¹ California's Renewable Energy Transition Initiative found, for example, that the state potentially could access 500 GW of renewable energy, an order of magnitude greater than the state's peak demand and far beyond the ability of our electric grid could handle.

development of large-scale projects in appropriate places, rather than permitting them to be located across the landscape in numerous locations. We also applaud the agency's – and the Interior Department's – commitment to work closely with the State of California in the development of the Desert Renewable Energy Conservation Plan which, as you may already know, will designate not only renewable energy development zones, but also zones for conservation as well as include a comprehensive mitigation strategy. The integration and completion of both of these efforts offers the promise of a balanced plan that will facilitate development of renewable resources in the Desert while protecting desert resources.

Despite our fundamental belief in the critical importance of agency-guided development of renewables, rather than developer-initiated development, we have, as indicated, been investing a great deal of time and effort into the fast track projects. We have done so in response to the emphasis the Department, the BLM and the developers place on meeting ARRA deadlines as well as the potential role these projects could play in meeting the renewable generation and economic goals of the state and federal governments. We have also done so because we wanted to make the projects, and especially the utility-scale solar projects, as environmentally sensitive as they can be and because we wanted to ensure, to the extent possible, that their accompanying environmental documents are as sound as they can be. It is now apparent to us that not even the best of the environmental documents being produced for the fast track projects and/or the best projects should be models or precedents for the future.

The fast track project sites were chosen without the benefit of siting criteria developed either by desert activists, environmental organizations, scientists and others, *see* Renewable Siting Criteria for California Desert Conservation Area, attached to June 29, 2009 letter referred to above, or by the Bureau. The Bureau in fact has yet to develop any siting guidance that would help field staff, developers and others identify appropriate sites – i.e., those with relatively low resource values and fewer resource conflicts. Moreover, the projects themselves were designated by Interior and the BLM as fast track projects without consideration of potential environmental issues. And, equally important, the timetable established for review of these projects did not take into account their scale, the agency's lack of experience with the technologies involved, and the agency's lack of experience permitting these kinds of projects.

Regardless of the outcome of the environmental review process for this or any other fast track project, we urge the BLM and the Interior Department to acknowledge publicly the deficiencies of the current process and to commit publicly to improving it. More specifically, we urge both entities to affirm that neither the current process, nor any of the project sites, nor any of the environmental documents, establish any legal or procedural precedents for future decision-making, siting or environmental review. We make this urgent recommendation notwithstanding the fact that this particular project appears to be proposed for an appropriate site and the accompanying DEIS represents an improvement in several respects over other such documents.

The SES Solar Two Project: The proposed project site appears to have potential for developing large scale solar energy with fewer impacts to sensitive resources than some other areas with high solar potential being considered for such development by the BLM. Site characteristics that are conducive to solar development include the presence of disturbed acreage, “approximately 1,039 acres of dirt and off highway vehicle (OHV) roads on BLM administered land” *see* SES Solar Two Project CEC-BLM SA/DEIS at C.2-1. In addition, there are “a rail line, transmission line and buildings in the study area” *id.*C-2.11. Another characteristic conducive to solar development is the existing transmission capacity that exists to support the first 300 MW of the project without any upgrades, *id.* ES-2. The site is also served by existing road access from Interstate 8, *id.* ES-5, although miles of new roads are contemplated as part of the project proposal.

Equally important, the lands subject to this Right of Way (ROW) application appear to be of comparatively lower natural resource values than some of the other ROW applications currently being considered for ARRA funding: the site includes no critical habitat for any listed species, and implicates no Area of Critical Environmental Concern (ACEC) designated by the BLM. Also, no desert tortoise, a federally endangered species, were found on the site, id. ES-21, unlike other ARRA project sites such as Brightsource's Ivanpah project and Solar Millennium's Ridgecrest project which support sizable populations of this endangered species. See Ivanpah Solar Electric Generating System CEC-BLM SA/DEIS at 6.2-29 and Ridgecrest Solar Power Project CEC-BLM SA/DEIS 5.3-1 (Solar Millennium's Ridgecrest project is no longer on the ARRA "fast track" list). While the above characteristics render the site more appropriate than some other locations for solar development, we do still have concerns about project impacts and the draft EIS document.

Our principal concerns with the impacts of the Solar Two project at this time relate to three biological resources: Peninsular bighorn sheep which are federally endangered; the flat-tailed horned lizard, currently proposed for federal listing as threatened; and water resources and the habitat values associated with these resources in a desert environment, see "U.S. Army Corps of Engineers Public Notice/Application No.: SPL-2008-01244-MLM, pg. 11". In addition, we have identified several other issues requiring more robust analysis, namely the use of hydrogen and the potential for project phasing.

Biological Resources: The DEIS treatment of the observance of federally endangered bighorn sheep on the project site is particularly deficient. Merely attributing the occurrence of a ewe group of bighorn sheep to a "transient occurrence" without further investigation and analysis is inadequate, id. ES-21. The DEIS indicates that the project site provides marginal foraging habitat, id. C.2-18. Under varying precipitation conditions and levels of vegetation growth, marginal foraging habitat may supply an important part of the sheep's diet and could continue to attract foraging activity on an ongoing basis.

The document indicates that Department of Fish and Game biologists, and biologist for the project applicant "have speculated that the bighorn sheep sited at the project location could have been flushed by OHV activity and possibly became disoriented and wandered onto the project site," id. C.2-24. While OHV activity in the area can certainly affect movement patterns of sheep, this is not the only possible explanation for the presence of the ewe group on the site, and the DEIS must not assume that it is. The final EIS must analyze avoidance, minimization and mitigation measures based on the assumption that bighorn sheep will continue to use the site on an ongoing basis for forage as their previous visitation suggests rather than simply dismiss their presence as an anomaly. For example, we would suggest consideration of concrete measures to mitigate for loss of habitat, such as purchase of replacement lands, as well as ongoing monitoring on the site to ensure that any subsequent usage by the sheep is well-documented and any necessary modifications to operations are made.

A second species of concern found on the project site is the flat-tailed horned lizard. As noted above, this species is currently being considered for listing as federally threatened, id. ES-12. Estimates of population in the project area vary widely from 2,000 to 5000, id. C.2-22. Greater specificity regarding this population is needed to fully understand possible impacts to this species especially in the context of the pending listing.

The third area of concern related to biological resources is the impacts to water resources, in particular jurisdictional water of the United States and the state of California and biological values

associated with those waters. The Army Corps of Engineers has published detailed comments on the impacts that the proposed project and alternatives identified in this DEIS would have on the Westside Main Canal and the Coyote Wash, water resources which are deemed jurisdictional waters of the United States. Given the scarcity of such water resources in the desert environment; it is critical that the BLM fully consider the comments provided by the Army Corps. The DEIS includes the alternatives proposed by the Army Corps which supports a robust and full analysis of real alternatives.

In addition to the alternatives analyzed in the DEIS, we understand that a variation on the project has been proposed to the Army Corp based on their concerns – this new proposal apparently would reduce the 750 MW proposal to a 709 MW facility. This modification may reduce impacts to water resources and must be presented to the public along with a full analysis of its impacts in order to permit its selection.

Water resources are also important with regard to the project's on-site water use -- an important factor to analyze in the review of all solar projects proposed for desert environments. The DEIS does not indicate what source of water will be used if the upgrades to the Seeley Wastewater Treatment Plant are not complete prior to water being needed at the project site for construction, operations and maintenance – and in fact we understand that they will not.

We understand through documents available on the California Energy Commission website that the applicant has obtained purchase rights to 40 acre feet per year of water under an existing permit for water from a single source aquifer (see Supplement to the Imperial Valley Solar Application for Certification dated May 2010). These documents indicate that there will be no change in use at the well which has been operated by the Dan Boyer Water Company as a source for commercial water under a permit since the 1950s. CEC staff are still in the process of reviewing these supplemental materials. Regardless of the CEC determination, the issue of interim water use must be acknowledged and addressed in the final EIS as well.

Of significant concern overall regarding impacts to biological resources is the statement that, “With implementation of staff's proposed conditions of certification, staff is still uncertain if construction and operation of the proposed SES Solar Two Project would comply with all federal state and local LORS relating to biological resources,” id. ES-23. The DEIS indicates that this uncertainty is due to the lack of information regarding impacts to, and mitigation for, impacts to waters of the U.S. id. ES-23. We expect to see greater certainty related to impacts to these waters of the U.S. and by association overall biological resources in the final EIS. In addition, we note that plant surveys have been deemed insufficient by staff and per staff recommendations in the DEIS are to be completed in the spring and fall of 2010 id. C.2-3

Hydrogen Use: Since the filing of the original AFC several modifications have been made to the plan for hydrogen storage, circulation and use at the site. The original AFC proposed a distributed hydrogen system, with hydrogen bottles on each dish. In a Supplement to the AFC filed in June 2009, the Project was updated to include a centralized hydrogen gas supply, storage and distribution system which is analyzed in the DEIS id D.3-3.

After the release of the DEIS, another supplement was filed by the applicant on May 10, 2010 proposing to increase the amounts of hydrogen piped to each of the “sunflowers” to bring them online every morning. It is our understanding that this increase in volume of hydrogen does not require any additional infrastructure, however, this needs to be clarified in the final EIS. Also, given the possibility of hydrogen leakage and the flammable nature of this gas, the potential

impacts of this increase in the volume of hydrogen on site and in use must be acknowledged and analyzed fully.

Cultural Resources: The BLM and CEC must fully consider the comments submitted by the National Park Service (see National Park Service comments dated May 4, 2010 on the Proposed Imperial Valley Solar Project Draft EIS) and comments that are submitted by local stakeholders regarding important cultural resources in the project vicinity and the impacts to these resources must be fully analyzed and mitigated.

Project Phasing: As previously mentioned in scoping comments submitted by our organizations on December 31, 2008, the technology for the Stirling Two plant has not been deployed at commercial scale, and we would urge the BLM to consider issuing a condition on the permit to limit construction of the first 300 MW of the project until such time that commercial application of this technology at this site has been demonstrated. This would allow the project proponent and the permitting agencies to learn from the first 300 MW of development and make any necessary adjustments to construction and operation practices based on lessons learned from this experience.

DEIS Elements: Our concerns with the draft environmental review document itself relate to three key elements: the purpose and need statement, the alternatives considered, and the cumulative impact analysis, all of which were problems with the Bureau's first solar DEIS, the Ivanpah DEIS, and are showing incremental improvement with subsequent DEIS documents including the Solar Two DEIS. We are also concerned about how the BLM will ensure that the new proposal(s) and new information that have come to light since the DEIS was published will be fully analyzed and made available to the public.

The purpose and need statement for this project is slightly broader than the one in the Ivanpah draft, but it remains too narrow. Ivanpah's purpose and need was explicitly limited to a stark dichotomy: "approve" or "deny" the company's application for a solar project and, as the result, the document addressed only the "no action" option and the "proposed project." A supplemental draft with a revised purpose and need and additional alternatives was issued in an attempt to remedy this egregious approach to "the heart" of the process established by the National Environmental Policy Act (NEPA).

The draft states that the BLM's purpose and need is "to respond to" the company's ROW application, id. A-12. The BLM should avoid both this mindset as well as too narrow a statement of purpose and need in order to help ensure that its EISs are legally defensible documents. In place of the statement that was used here, our organizations urge the adoption of the following to achieve these goals:

The purpose of the proposed action is to "facilitate environmentally responsible commercial development of solar energy projects"² consistent with the statutory authorities and policies applicable to the Bureau of Land Management, including those providing for contributions towards achieving the renewable energy and economic stimulus and renewable energy development objectives under the Energy Policy Act of 2005 (EPAAct), the American Recovery and Re-Investment Act, and Presidential and Secretarial orders.

² This quotation is from Secretary Salazar himself.

The need for this action is to implement Federal policies, orders and laws that mandate or encourage the development of renewable energy sources, including the Energy Policy Act of 2005, which requires the Department of the Interior to seek to approve at least 10,000 MW of non-hydropower renewable energy on public lands by 2015, and the Federal policy goal of producing 10% of the nation's electricity from renewable resources by 2010 and 25% by 2025; to enable effective implementation of the economic incentives for qualifying projects intended by the American Recovery and Reinvestment Act; and to support the State of California's renewable energy and climate change objectives, consistent with BLM's mandates and responsibilities.

This kind of purpose and need statement would clearly satisfy applicable legal requirements, see, e.g., National Parks Conservation Assn v. BLM, 586 F.3rd 735 (9th Cir. 2009), and thus help ensure that environmentally acceptable projects – which this project may end up being –will not only be permitted but will also be built without unnecessary delays.

The DEIS for the Stirling Two projects shows marked improvement over the Ivanpah DEIS in its treatment of alternatives – six are presented, including three build alternatives and three no project approval alternatives id.ES-8. The alternatives proposed by the Army Corps of Engineers are included in the DEIS and must be given full consideration id. ES-8. We commend the BLM for including these options which are key to establishing a real range of alternatives as well as to providing readers a fuller understanding of the tradeoffs inherent in the other larger “action” alternatives.

Cumulative Impacts: In order to properly site renewable energy projects, it is essential that a cumulative impacts analysis be conducted to fully evaluate the implications of this type of development on public lands. There are several wind and transmission projects in the vicinity of the Solar Two power plant that will contribute to overall cumulative impacts to sensitive resources in this area. A list of existing and future foreseeable projects is included in the DEIS, id. B.3-7 to B.3-10. In addition, the DEIS utilizes qualitative information about these existing and foreseeable projects to develop estimates and model impacts on key topics such as air quality and biological resources. More quantitative information is highly desirable, to supplement this quantitative material.

Moreover, additional evaluation is needed to understand the cumulative impacts on recreational resources, specifically the Juan Bautista de Anza National Historic Trail, see National Park Service comments dated May 4, 2010 on the Proposed Imperial Valley Solar Project Draft EIS, pg. 3. A comprehensive cumulative impacts analysis including the evaluation of such information strengthens this document including associated mitigation measures and contributes to more informed decision-making.

In addition to the proposed solar and wind projects, the draft EIS identifies 8 mixed use residential and commercial development projects, the pedestrian border fence, continued growth of use of open OHV areas, and several other projects that will also contribute to cumulative impacts, id. B.3-10. While these projects are not being permitted by the Bureau, all reasonable efforts must be made to obtain information regarding their potential impacts and construction timing so that a full picture of cumulative impacts can be presented in the final EIS.

Lastly, we are concerned, as indicated above, about the new information, including the new proposal, new project features and new biological information that have been developed since the

DEIS was printed. BLM should make every effort to ensure that this information is made available to the public (and other agencies) along with assessments and analyses of the information as well as that the public is given an opportunity to comment thereon. Public input on agency proposals is one of the hallmarks of NEPA review and it is to prevent the undermining of that critical aspect that limits have been imposed on agency efforts to “load up” final EISs with excessive amounts of new information.

In conclusion, this project appears to have fewer resource conflicts than some of the other sites currently being reviewed for fast-track projects, but nonetheless the impacts to the resources identified in these comments and to other desert resources must be fully analyzed and mitigated through the BLM process. As we have previously noted, renewable development is not appropriate everywhere on the public lands and must be balanced against the equally urgent need to protect unique and sensitive resources of the CDCA. California is lucky indeed that we have sufficient renewable resources, including solar resources, to do their development in an environmentally responsible manner.

Thank you in advance for considering our comments. If you have any questions about them, please do not hesitate to contact us.

Sincerely,

Johanna Wald
Senior Attorney, NRDC
111 Sutter Street, 20th Floor
San Francisco CA 94104

Helen O'Shea
Deputy Director, Western Renewable Energy Project, NRDC
111 Sutter Street, 20th Floor
San Francisco, CA 94104

Alice Bond
California Public Lands Policy Analyst, The Wilderness Society
655 Montgomery Street, Suite 1000
San Francisco, CA 94111

cc: Jim Abbott, Acting California State Director, BLM
cc: Chris Meyer, Project Manager, California Energy Commission

**Audubon California * California Wilderness Coalition
Center for Biological Diversity * Defenders of Wildlife * Desert Protective Council
Mojave Desert Land Trust * Natural Resources Defense Council * Sierra Club
The Nature Conservancy * The Wilderness Society * The Wildlands Conservancy**

June 29, 2009

The Honorable Ken Salazar
1849 C Street, NW
Washington, DC 20240

The Honorable Arnold Schwarzenegger
State Capitol
Sacramento, CA 95814

Re: Recommendations for Renewable Energy Development
and Resource Conservation in the California Desert

Gentlemen:

We write on behalf of our tens of thousands of California members regarding an issue of critical importance: achieving the state's ambitious renewable energy goals while protecting its unique and sensitive resources including, in particular, the California Desert Conservation Area (CDCA). Our groups recognize that both the state and the federal government share this over-arching objective and have made progress toward achieving it. State agencies, for example, are moving ahead in compliance with Governor Schwarzenegger's Executive Order to develop a conservation strategy for the desert, and the Bureau of Land Management (BLM), an Interior Department agency, is moving ahead in an effort to fast-track a subset of solar applications that have been filed in the desert as well as with a programmatic review of potential solar zones. Our groups too have been engaged in efforts to achieve this objective.

In particular, our groups have developed a set of criteria for use in identifying appropriate areas for solar development in the CDCA as well as a vision for both the kind of planning and the kind of plan needed to protect the desert's remarkable resources while addressing the climate challenge effectively. Fundamentally, success in selecting appropriate areas and achieving the over-arching objective which we all share will require an unprecedented degree of state and federal cooperation as well as close collaboration with our community. Given what is at stake, such cooperation is unquestionably warranted and it is our hope that this letter will contribute to that result.

I. Introduction

The California Desert is a unique and special environment, as recognized by Federal Land Policy Management Act in establishing the California Desert Conservation Area. The vast landscape is home to diverse biological communities, cultural sites, scenic and wild places, and other valuable areas which survive despite pressures from various human activities over the past century. The desert lands also potentially sequester carbon in the fragile desert crust, a benefit in the state's effort to reduce carbon emissions. These lands also are attractive for renewable energy projects, and have fueled a rush by companies to file applications on public lands for potential projects. The need to find alternatives to carbon based energy is great. In California, we are moving forward to meet a Renewable Portfolio Standard of 33% by 2020, a goal which is widely

supported as necessary to address climate change. Our groups strongly endorse increased conservation, energy efficiency and demand-side management actions of the sort that California has pioneered, but we recognize that, despite those efforts, it is likely that some utility scale projects will be sited in the desert, potentially as early as December 2010. It is of critical importance that they be sited appropriately. To that end, our groups have developed a set of criteria which are attached to this letter.

II. Environmentalists' Siting Criteria

Our criteria are designed to help guide renewable development, principally solar development, to appropriate locations. More specifically, the criteria are intended to inform current and future planning processes and to provide ecosystem level protection to the CDCA (including public, private and military lands) by giving preference for development to disturbed lands, steering development away from lands with high environmental values, and protecting the desert's undeveloped cores. Developed with input from field scientists, land managers and conservation professionals, the criteria in essence seek to steer renewable energy projects to areas with comparatively low potential for conflict and controversy in order to facilitate their timely development. In other words, the "message" our criteria are intended to deliver is that to expedite development, avoid areas that will generate significant controversy. In the section below, we describe how our criteria could be used in the two federal processes that are now underway as well as in the comprehensive desert-wide planning that we believe is necessary.

III. Current Federal Planning Efforts

The federal government is currently engaged in two planning efforts – one that focuses on a number of projects that might potentially be approved by December 2010 (the "fast-track projects") and the other on identifying "energy zones" in the California Desert as areas appropriate for solar development. The areas under consideration are known as "solar energy zones" or SEZ. Both of these efforts are moving forward more or less simultaneously and both to date involve only federal lands. We will be employing the criteria set out above in both of these planning efforts, and we urge that you both do as well. As helpful as the criteria will be, however, they are not the complete solution.

What is needed in the long run is a comprehensive and strategic landscape level plan for the Desert – one that addresses the siting of all types of renewable energy development, that is coordinated with state and local agencies across the region, and that addresses private and public lands. The planning processes underway by the federal government at this time are not comprehensive and will not produce the kind of plan that is needed. They will nonetheless provide the opportunity for both the state and the federal government to begin working together in a coordinated and effective way and, we hope, will set the stage for the comprehensive desert planning process that is so urgently needed.

A. Fast-track process

The fast-track initiative involves a limited number of proposed solar projects. It offers an opportunity to gain experience with processing these projects in compliance with existing environmental laws. As indicated above, the environmental community will be applying our criteria to the fast-track projects, and we encourage you both to do so as well. Our criteria

should be helpful in this effort. Since the overarching objective is to get some projects approved by a specific deadline and on line as fast as possible, it is important to know which, if any, of the projects under consideration are likely to generate controversy and, if so, how much. Applying our criteria to the lands covered by those applications will provide information for use in answering those key questions, information that can help the BLM, the state and project proponents prioritize their respective investments of time, staff and money.

We also hope that the state and federal agencies will take this opportunity to begin to work together in new and effective ways. In particular, because of the importance of ensuring that California's renewable energy needs are met from a combination of private and public lands – a principle adopted by the state's Renewable Energy Transmission Initiative – the state and the federal government should incorporate a landscape perspective in evaluating where facilities should be sited, including lands beyond their respective jurisdictional boundaries. For example, the state should evaluate the fast-track projects located on federal lands specifically in terms of 1) their adjacency to private lands that meet our criteria, and 2) the potential suitability of those lands for renewable development. Because BLM only manages public lands, the agency is unlikely to engage in such analysis on its own. Where projects have this potential advantage it should not be ignored as it will likely mean more public support for them.

B. The PEIS process

We support the BLM's decision to prepare a programmatic environmental impact statement (PEIS) on large-scale solar development on public lands and its decision to identify particular public land areas for that development. We emphatically believe that some areas are better for such development than others and support clustering large-scale projects in such areas, rather than see them strewn across California's deserts. Again, however, the agency's PEIS process is not a comprehensive effort – like the fast track effort, it will focus only on public land and only on solar projects. Nonetheless, it offers the opportunity to make progress toward the critically important comprehensive plan that is urgently needed.

The state should supplement the BLM's analysis of federal lands with its own contemporaneous analysis of the suitability of private lands adjacent to at least some of proposed SEZ for renewable development. Such an examination would have multiple benefits. It would assist both BLM and the state in assessing the cumulative impacts of proposed renewable development in the Desert. It would also assist both the BLM and the state in rating the zones and determining which of them should actually be designated as pilot project areas. And it would provide a forum for integrating the current Renewable Energy Action Team (REAT) planning and mapping into the SEZ planning.

This kind of integrated planning across the state-federal boundary is absolutely necessary. It can only happen, however, if both of you commit to it and instruct your staffs to engage in it. Without direction, past experience has shown that communication and coordination will be fragmented and progress toward shared goals will be delayed and in some cases compromised.

IV. Long-term planning

In the end, what is needed is a long-term blueprint for the CDCA: a comprehensive, strategic planning process for renewable energy development that addresses the multiple land uses and values in the desert, including conservation, recreation, tourism, cultural sites, military testing and training, local economic development, and transportation infrastructure, as well as renewable energy. We urge the federal and state agencies to commit to working together in a transparent public process to develop such a common plan. This blueprint should include well-defined, measurable standards, developed via public involvement processes (e.g. habitat condition and/or population-level objectives).

The blueprint should also reflect the best science available and specifically assess:

- Direct and indirect cumulative impacts
- Rare, sensitive, threatened and endangered species and wildlife corridor needs
- Climate change adaptation needs
- Carbon sequestration value of intact habitat
- Ecological process needs
- Ecological thresholds /limits for development
- Maintenance of hydrology in these arid environments

Finally, this planning process must also provide meaningful opportunities for public participation by a broad array of stakeholders.

The Desert Renewable Energy Conservation Plan, created as a state Natural Community Conservation Plan (NCCP) and coupled with the federal Habitat Conservation Plan (HCP) process, would provide an appropriate framework for a long-term blueprint, but will require a strong commitment between the federal and state agencies to work in partnership to produce this plan. In addition, local jurisdictions with land use authority (e.g., counties) should also be included as partners in this effort since they permit the other renewable energy facilities outside of the California Energy Commission's jurisdiction. The NCCP process provides sound conservation standards for long-term regional planning, independent science, and a broad public process. The NCCP with an HCP will also result in streamlined endangered species permitting, a considerable benefit for renewable energy companies.

Our groups look forward to discussing the attached criteria with you and your staffs as well as the processes underway and the long-term blueprint summarized above. In conclusion, we again urge you to use our criteria in these processes and to work closely together to maximize the protection of biologically important lands across land ownerships in the California Desert.

Sincerely,

Johanna H. Wald, Senior Attorney
Natural Resources Defense Council

Kim Delfino, Regional Director
Defenders of Wildlife

Nancy Karl, Executive Director
Mojave Desert Land Trust

April Sall, Conservation Director
The Wildlands Conservancy

Dan Taylor, Director of Public Policy
California Audubon Society

Nick Ervin, Board President
Desert Protective Council

Carl Zichella
Western Renewable Projects Director
Sierra Club

Ileene Anderson, Public Lands Desert
Director - Center for Biological Diversity

Alice Bond, Public Lands Associate
The Wilderness Society

Monica Argandona, Desert Program
Director - California Wilderness
Coalition

Michael Sweeney,
Executive Director, California
Chapter - The Nature Conservancy

Audubon California
California Native Plant Society * California Wilderness Coalition
Center for Biological Diversity * Defenders of Wildlife
Desert Protective Council * Mojave Desert Land Trust
National Parks Conservation Association
Natural Resources Defense Council * Sierra Club * The Nature Conservancy
The Wilderness Society * The Wildlands Conservancy

Renewable Siting Criteria for California Desert Conservation Area

Environmental stakeholders have been asked by land management agencies, elected officials, other decision-makers, and renewable energy proponents to provide criteria for use in identifying potential renewable energy sites in the California Desert Conservation Area (CDCA). Large parts of the California desert ecosystem have survived despite pressures from mining, grazing, ORV, real estate development and military uses over the last century. Now, utility scale renewable energy development presents the challenge of new land consumptive activities on a potentially unprecedented scale. Without careful planning, the surviving desert ecosystems may be further fragmented, degraded and lost.

The criteria below primarily address the siting of solar energy projects and would need to be further refined to address factors that are specific to the siting of wind and geothermal facilities. While the criteria listed below are not ranked, they are intended to inform planning processes and were designed to provide ecosystem level protection to the CDCA (including public, private and military lands) by giving preference to disturbed lands, steering development away from lands with high environmental values, and avoiding the deserts' undeveloped cores. They were developed with input from field scientists, land managers, and conservation professionals and fall into two categories: 1) areas to prioritize for siting and 2) high conflict areas. The criteria are intended to guide solar development to areas with comparatively low potential for conflict and controversy in an effort to help California meet its ambitious renewable energy goals in a timely manner.

Areas to Prioritize for Siting

- Lands that have been mechanically disturbed, i.e., locations that are degraded and disturbed by mechanical disturbance:
 - Lands that have been “type-converted” from native vegetation through plowing, bulldozing or other mechanical impact often in support of agriculture or other land cover change activities (mining, clearance for development, heavy off-road vehicle use).¹
- Public lands of comparatively low resource value located adjacent to degraded and impacted private lands on the fringes of the CDCA:²
 - Allow for the expansion of renewable energy development onto private lands.
 - Private lands development offers tax benefits to local government.
- Brownfields:
 - Revitalize idle or underutilized industrialized sites.
 - Existing transmission capacity and infrastructure are typically in place.

- Locations adjacent to urbanized areas:³
 - Provide jobs for local residents often in underserved communities;
 - Minimize growth-inducing impacts;
 - Provide homes and services for the workforce that will be required at new energy facilities;
 - Minimize workforce commute and associated greenhouse gas emissions.
- Locations that minimize the need to build new roads.
- Locations that could be served by existing substations.
- Areas proximate to sources of municipal wastewater for use in cleaning.
- Locations proximate to load centers.
- Locations adjacent to federally designated corridors with existing major transmission lines.⁴

High Conflict Areas

In an effort to flag areas that will generate significant controversy the environmental community has developed the following list of criteria for areas to avoid in siting renewable projects. These criteria are fairly broad. They are intended to minimize resource conflicts and thereby help California meet its ambitious renewable goals. The criteria are not intended to serve as a substitute for project specific review. They do not include the categories of lands within the California desert that are off limits to all development by statute or policy.⁵

- Locations that support sensitive biological resources, including: federally designated and proposed critical habitat; significant⁶ populations of federal or state threatened and endangered species,⁷ significant populations of sensitive, rare and special status species,⁸ and rare or unique plant communities.⁹
- Areas of Critical Environmental Concern, Wildlife Habitat Management Areas, proposed HCP and NCCP Conservation Reserves.¹⁰
- Lands purchased for conservation including those conveyed to the BLM.¹¹
- Landscape-level biological linkage areas required for the continued functioning of biological and ecological processes.¹²
- Proposed Wilderness Areas, proposed National Monuments, and Citizens' Wilderness Inventory Areas.¹³
- Wetlands and riparian areas, including the upland habitat and groundwater resources required to protect the integrity of seeps, springs, streams or wetlands.¹⁴
- National Historic Register eligible sites and other known cultural resources.
- Locations directly adjacent to National or State Park units.¹⁵

EXPLANATIONS

¹ Some of these lands may be currently abandoned from those prior activities, allowing some natural vegetation to be sparsely re-established. However, because the desert is slow to heal, these lands do not support the high level of ecological functioning that undisturbed natural lands do.

² Based on currently available data.

³ Urbanized areas include desert communities that welcome local industrial development but do not include communities that are dependent on tourism for their economic survival.

⁴ The term "federally designated corridors" does not include contingent corridors.

⁵ Lands where development is prohibited by statute or policy include but are not limited to:

National Park Service units; designated Wilderness Areas; Wilderness Study Areas; BLM National Conservation Areas; National Recreation Areas; National Monuments; private preserves and reserves; Inventoried Roadless Areas on USFS lands; National Historic and National Scenic Trails; National Wild, Scenic and Recreational Rivers; HCP and NCCP lands precluded from development; conservation mitigation banks under conservation easements approved by the state Department of Fish and Game, U.S. Fish and Wildlife Service or Army Corps of Engineers a; California State Wetlands; California State Parks; Department of Fish and Game Wildlife Areas and Ecological Reserves; National Historic Register sites.

⁶ Determining “significance” requires consideration of factors that include population size and characteristics, linkage, and feasibility of mitigation.

⁷ Some listed species have no designated critical habitat or occupy habitat outside of designated critical habitat. Locations with significant occurrences of federal or state threatened and endangered species should be avoided even if these locations are outside of designated critical habitat or conservation areas in order to minimize take and provide connectivity between critical habitat units.

⁸ Significant populations/occurrences of sensitive, rare and special status species including CNPS list 1B and list 2 plants, and federal or state agency species of concern.

⁹ Rare plant communities/assemblages include those defined by the California Native Plant Society’s Rare Plant Communities Initiative and by federal, state and county agencies.

¹⁰ ACECs include Desert Tortoise Desert Wildlife Management Areas (DWMAs). The CDCA Plan has designated specific Wildlife Habitat Management Areas (HMAs) to conserve habitat for species such as the Mohave ground squirrel and bighorn sheep. Some of these designated areas are subject to development caps which apply to renewable energy projects (as well as other activities).

¹¹ These lands include compensation lands purchased for mitigation by other parties and transferred to the BLM and compensation lands purchased directly by the BLM.

¹² Landscape-level linkages provide connectivity between species populations, wildlife movement corridors, ecological process corridors (e.g., sand movement corridors), and climate change adaptation corridors. They also provide connections between protected ecological reserves such as National Park units and Wilderness Areas. The long-term viability of existing populations within such reserves may be dependent upon habitat, populations or processes that extend outside of their boundaries. While it is possible to describe current wildlife movement corridors, the problem of forecasting the future locations of such corridors is confounded by the lack of certainty inherent in global climate change. Hence the need to maintain broad, landscape-level connections. To maintain ecological functions and natural history values inherent in parks, wilderness and other biological reserves, trans-boundary ecological processes must be identified and protected. Specific and cumulative impacts that may threaten vital corridors and trans-boundary processes should be avoided.

¹³ Proposed Wilderness Areas: lands proposed by a member of Congress to be set aside to preserve wilderness values. The proposal must be: 1) introduced as legislation, or 2) announced by a member of Congress with publicly available maps. Proposed National Monuments: areas proposed by the President or a member of Congress to protect objects of historic or scientific interest. The proposal must be: 1) introduced as legislation or 2) announced by a member of Congress with publicly available maps. Citizens' Wilderness Inventory Areas: lands that have been inventoried by citizens groups, conservationists, and agencies and found to have defined “wilderness characteristics.” The proposal has been publicly announced.

¹⁴ The extent of upland habitat that needs to be protected is sensitive to site-specific resources. For example: the NECO Amendment to the CDCA Plan protects streams within a 5-mile radius of Townsend big-eared bat maternity roosts; aquatic and riparian species may be highly sensitive to changes in groundwater levels.

¹⁵ Adjacent: lying contiguous, adjoining or within 2 miles of park or state boundaries. (Note: lands more than 2 miles from a park boundary should be evaluated for importance from a landscape-level linkage perspective, as further defined in footnote 12).