APPENDIX A

NOP, INITIAL STUDY AND COMMENT LETTERS

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#### Imperial County Planning & Development Services Department

#### NOTICE OF PREPARATION OF DRAFT PROGRAMMATIC EIR FOR RENEWABLE ENERGY AND TRANSMISSION ELEMENT UPDATE, ENVIRONMENTAL EVALUATION COMMITTEE MEETING AND NOTICE OF PUBLIC PROGRAMMATIC EIR SCOPING MEETING

The Imperial County Planning & Development Services Department intends to prepare a Programmatic Environmental Impact Report (EIR) for the Imperial County General Plan Renewable Energy and Transmission Element Update (proposed project), as described below. An Informational Item for the proposed project is included on the agenda for the County Environmental Evaluation Committee (EEC) Hearing scheduled for 1:30 p.m. on August 14, 2014. A public scoping meeting for the proposed Programmatic EIR will be held by the Imperial County Planning & Development Services Department at 6:00 p.m. on August 14, 2014. The scoping and EEC meetings will be held at the Board of Supervisors Chambers, 2nd Floor, County Administration Center located at 940 Main Street, EI Centro, CA 92243. Comments regarding the scope of the Programmatic EIR will be accepted at this meeting.

**SUBJECT**: Imperial County General Plan Renewable Energy and Transmission Element Update Programmatic Environmental Impact Report

#### PLANNING COMMISSION HEARING: February 2015

#### BOARD OF SUPERVISORS HEARING: March 2015

**PROJECT LOCATION**: The proposed project area includes all of Imperial County. However, the proposed project will include development of renewable energy overlay zones and implementation ordinances that will identify prioritized areas for renewable energy development, which will reduce the amount of land that may be developed.

**PROJECT DESCRIPTION**: The Renewable Energy and Transmission Element Update will update the existing 2006 Geothermal/Alternative Energy and Transmission Element and associated implementing ordinances. The proposed project will identify new opportunities for renewable energy and assure that the Imperial County General Plan can meet the needs for future development while remaining consistent with identified land use and environmental goals. The proposed project would support the development of expanded renewable energy power production and exportation to accommodate future growth in California and improve overall system reliability. The proposed project would expand the existing element to take into account additional forms of renewable energy, including wind, solar, deep solar ponds, biofuel, bio-mass, algae production, concentrated solar-thermal power, and concentrated photovoltaic. Consequently, the updated element will be re-titled as the Renewable Energy and Transmission Element.

The Renewable Energy and Transmission Element Update will provide a comprehensive document that contains the latest knowledge about renewable energy resources, feasible development technology, legal requirements, policies (County, State, and Federal), and implementation measures. The Element update will provide a framework for the review and approval of renewable energy projects in the County. The development projections presented in the Element update are based on forecasts obtained from the California Energy Commission, renewable energy industry, regional utilities, Desert Renewable Energy Conservation Plan, and County staff.

**URBAN AREA PLAN**: The proposed project area includes all of Imperial County, and therefore, includes all County Urban and Community Area plans.

**BOARD OF SUPERVISORS DISTRICT**: The proposed project area is located within all Board of Supervisor's Districts.

**ANTICIPATED SIGNIFICANT EFFECTS**: The Programmatic EIR will analyze potential impacts associated with the following: Aesthetics; Agricultural Resources; Air Quality; Biological Resources; Cultural Resources; Geology/Soils; Greenhouse Gas Emissions/Climate Change; Hazards/Hazardous Materials: Hydrology/Water Quality; Land Use/Planning; Mineral Resources; Noise; Population and Housing; Public Services; Recreation; Transportation/Circulation; Utilities and Service Systems; Cumulative Impacts; and Growth-inducing Impacts.

**COMMENTS REQUESTED**: The Imperial County Planning & Development Services Department would like to know your ideas about how future development associated with the Renewable Energy and Transmission Element Update may affect the environment. We would also like your comments and suggestions regarding Element update goals and objectives and mitigation measures that may be incorporated into the Element update to reduce or avoid any significant environmental impacts. Your comments will guide the scope and content of environmental issues to be examined in the Programmatic EIR. Your comments may be submitted in writing to: Jim Minnick, Interim Director, Imperial County Planning & Development Services Department, 801 Main Street, El Centro, CA 92243. Available project information may be reviewed at this location.

NOTICE OF PREPARATION REVIEW PERIOD: July 21, 2014 through August 22, 2014

Initial Study & Environmental Analysis For:

### DRAFT PROGRAMMATIC EIR FOR THE RENEWABLE ENERGY AND TRANSMISSION ELEMENT UPDATE AND IMPLEMENTING ORDINANCES



Prepared By.

### COUNTY OF IMPERIAL Planning & Development Services Department 801 Main Street El Centro, CA 92243 (760) 482-4236 www.icpds.com

August, 2014

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### SECTION 1 INTRODUCTION

#### A. PURPOSE

This document is a policy-level, project level Initial Study for evaluation of potential environmental impacts resulting with the proposed Imperial County General Plan Renewable Energy and Transmission Element Update (proposed project) (Refer to Exhibit "A"). For purposes of this document, the Renewable Energy and Transmission Element will be called the "proposed application".

# B. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) REQUIREMENTS AND THE IMPERIAL COUNTY'S GUIDELINES FOR IMPLEMENTING CEQA

As defined by Section 15063 of the State California Environmental Quality Act (CEQA) Guidelines and Section 7 of the County's "Rules and Regulations" for Implementing CEQA, an **Initial Study** is prepared primarily to provide the Lead Agency with information to use as the basis for determining whether an Environmental Impact Report (EIR), Negative Declaration, or Mitigated Negative Declaration would be appropriate for providing the necessary environmental documentation and clearance for any proposed project.

According to Section 15065, an **EIR** is deemed appropriate for a particular proposal if the following conditions occur:

- The proposal has the potential to substantially degrade quality of the environment.
- The proposal has the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals.
- The proposal has possible environmental effects that are individually limited but cumulatively considerable.
- The proposal could cause direct or indirect adverse effects on human beings.
- According to Section 15070(a), a **Negative Declaration** is deemed appropriate if the proposal would not result in any significant effect on the environment.
- According to Section 15070(b), a Mitigated Negative Declaration is deemed appropriate if it is determined that though a proposal could result in a significant effect, mitigation measures are available to reduce these significant effects to insignificant levels.

This Initial Study has determined that the proposed Element Update will result in potentially significant environmental impacts and therefore, a Programmatic EIR is deemed as the appropriate document.

This Initial Study is prepared in conformance with the California Environmental Quality Act of 1970, as amended (Public Resources Code, Section 21000 et. seq.); Section 15070 of the State & County of Imperial's Guidelines for Implementation of the California Environmental Quality Act of 1970, as amended (California Code of Regulations, Title 14, Chapter 3, Section 15000, et. seq.); applicable requirements of the County of Imperial; and the regulations, requirements, and procedures of any other responsible public agency or an agency with jurisdiction by law.

Pursuant to the County of Imperial "Rules and Regulations for Implementing CEQA," depending on the project

scope, the County of Imperial Board of Supervisors, Planning Commission and/or Planning Director is designated the Lead Agency, in accordance with Section 15050 of the CEQA Guidelines. The Lead Agency is the public agency which has the principal responsibility for approving the necessary environmental clearances and analyses for any project in the County.

#### C. INTENDED USES OF INITIAL STUDY

This Initial Study is an informational document which is intended to inform County of Imperial decision-makers, other responsible or interested agencies, and the general public of potential environmental effects of the proposed applications. The environmental review process has been established to enable public agencies to evaluate environmental consequences and to examine and implement methods of eliminating or reducing any potentially adverse impacts. While CEQA requires that consideration be given to avoiding environmental damage, the Lead Agency and other responsible public agencies must balance adverse environmental effects against other public objectives, including economic and social goals.

The Programmatic EIR prepared for the project will be circulated for a period of 35 days.

#### D. CONTENTS OF INITIAL STUDY

This Initial Study is organized to facilitate a basic understanding of the existing setting and environmental implications of the proposed applications.

#### SECTION 1

**I. INTRODUCTION** presents an introduction to the entire report. This section discusses the environmental process, scope of environmental review, and incorporation by reference documents.

#### SECTION 2

**II. ENVIRONMENTAL CHECKLIST FORM** contains the County's Environmental Checklist Form. The checklist form presents results of the environmental evaluation for the proposed applications and those issue areas that would have either a significant impact, potentially significant impact, or no impact.

**PROJECT SUMMARY, LOCATION AND EVIRONMENTAL SETTINGS** describes the proposed project entitlements and required applications. A description of discretionary approvals and permits required for project implementation is also included. It also identifies the location of the project and a general description of the surrounding environmental settings.

**ENVIRONMENTAL ANALYSIS** evaluates each response provided in the environmental checklist form. Each response checked in the checklist form is discussed and supported with sufficient data and analysis as necessary. As appropriate, each response discussion describes and identifies specific impacts anticipated with project implementation.

#### SECTION 3

**III. MANDATORY FINDINGS** presents Mandatory Findings of Significance in accordance with Section 15065 of the CEQA Guidelines.

**IV. PERSONS AND ORGANIZATIONS CONSULTED** identifies those persons consulted and involved in preparation of this Initial Study.

V. REFERENCES lists bibliographical materials used in preparation of this document.

#### VI. PROGRAMMATIC EIR

#### VII. FINDING/NOTICE

#### E. SCOPE OF ENVIRONMENTAL ANALYSIS

For evaluation of environmental impacts, each question from the Environmental Checklist Form is summarized and responses are provided according to the analysis undertaken as part of the Initial Study. Impacts and effects will be evaluated and quantified, when appropriate. To each question, there are four possible responses, including:

- 1. **No Impact:** A "No Impact" response is adequately supported if the impact simply does not apply to the proposed applications.
- 2. Less Than Significant Impact: The proposed applications will have the potential to impact the environment. These impacts, however, will be less than significant; no additional analysis is required.
- 3. Less Than Significant With Mitigation Incorporated: This applies where incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact".
- 4. **Potentially Significant Impact:** The proposed applications could have impacts that are considered significant. Additional analyses and possibly an EIR could be required to identify mitigation measures that could reduce these impacts to less than significant levels.

#### F. POLICY-LEVEL ENVIRONMENTAL ANALYSIS

This Initial Study is conducted under a  $\boxtimes$  policy-level,  $\square$  project level analysis.

Regarding mitigation measures, it is not the intent of this document to "overlap" or restate conditions of approval that are commonly established for future known projects or the proposed applications. Additionally, those other standard requirements and regulations that any development must comply with, that are outside the County's jurisdiction, are also not considered mitigation measures and therefore, will not be identified in this document.

#### G. TIERED DOCUMENTS AND INCORPORATION BY REFERENCE

Information, findings, and conclusions contained in this document are based on incorporation by reference of tiered documentation, which are discussed in the following section.

#### 1. <u>Tiered Documents</u>

As permitted in Section 15152(a) of the CEQA Guidelines, information and discussions from other documents can be included into this document. Tiering is defined as follows:

"Tiering refers to using the analysis of general matters contained in a broader EIR (such as the one prepared for a general plan or policy statement) with later EIRs and negative declarations on narrower projects; incorporating by reference the general discussions from the broader EIR; and concentrating the later EIR or negative declaration solely on the issues specific to the later project."

Tiering also allows this document to comply with Section 15152(b) of the CEQA Guidelines, which discourages redundant analyses, as follows:

"Agencies are encouraged to tier the environmental analyses which they prepare for separate but related projects including the general plans, zoning changes, and development projects. This approach can eliminate repetitive discussion of the same issues and focus the later EIR or negative declaration on the actual issues ripe for decision at each level of environmental review. Tiering is appropriate when the sequence of analysis is from an EIR prepared for a general plan, policy or program to an EIR or negative declaration for another plan, policy, or program of lesser scope, or to a site-specific EIR or negative declaration."

Further, Section 15152(d) of the CEQA Guidelines states:

"Where an EIR has been prepared and certified for a program, plan, policy, or ordinance consistent with the requirements of this section, any lead agency for a later project pursuant to or consistent with the program, plan, policy, or ordinance should limit the EIR or negative declaration on the later project to effects which:

(1) Were not examined as significant effects on the environment in the prior EIR; or

(2) Are susceptible to substantial reduction or avoidance by the choice of specific revisions in the project, by the imposition of conditions, or other means."

#### 2. Incorporation By Reference

Incorporation by reference is a procedure for reducing the size of EIRs/MND and is most appropriate for including long, descriptive, or technical materials that provide general background information, but do not contribute directly to the specific analysis of the project itself. This procedure is particularly useful when an EIR or Negative Declaration relies on a broadly-drafted EIR for its evaluation of cumulative impacts of related projects (*Las Virgenes Homeowners Federation v. County of Los Angeles* [1986, 177 Ca.3d 300]). If an EIR or Negative Declaration relies on information from a supporting study that is available to the public, the EIR or Negative Declaration cannot be deemed unsupported by evidence or analysis (*San Francisco Ecology Center v. City and County of San Francisco* [1975, 48 Ca.3d 584, 595]). This document incorporates by reference appropriate information from the "Final Environmental Impact Report and Environmental Assessment for the "County of Imperial General Plan EIR" prepared by Brian F. Mooney Associates in 1993.

When an EIR or Negative Declaration incorporates a document by reference, the incorporation must comply with Section 15150 of the CEQA Guidelines as follows:

- The incorporated document must be available to the public or be a matter of public record (CEQA Guidelines Section 15150[a]). The General Plan EIR is available, along with this document, at the County of Imperial Planning & Development Services Department, 801 Main Street, El Centro, CA 92243 Ph. (760) 482-4236.
- This document must be available for inspection by the public at an office of the lead agency (CEQA Guidelines Section 15150[b]). These documents are available at the County of Imperial Planning & Development Services Department, 801 Main Street, El Centro, CA 92243 Ph. (760) 482-4236.
- These documents must summarize the portion of the document being incorporated by reference or briefly describe information that cannot be summarized. Furthermore, these documents must describe the relationship between the incorporated information and the analysis in the tiered documents (CEQA Guidelines Section 15150[c]). As discussed above, the tiered EIRs address the entire project site and provide background and inventory information and data which apply to the project site. Incorporated information and/or data will be cited in the appropriate sections.

• These documents must include the State identification number of the incorporated documents (CEQA Guidelines Section 15150[d]). The State Clearinghouse Number for the 'County of Imperial General Plan EIR is SCH #93011023.

• The material to be incorporated in this document will include general background information (CEQA Guidelines Section 15150[f]). This has been previously discussed in this document.

### II. Environmental Checklist

- 1. **Project Title**: Imperial County General Plan Renewable Energy and Transmission Element Update and Implementing Ordinances
- 2. Lead Agency: Imperial County Planning & Development Services Department
- 3. Contact person and phone number: Jim Minnick, Interim Director, (760) 482-4236, ext. 4310
- 4. Address: 801 Main Street, El Centro CA, 92243
- 5. **E-mail**: JimMinnick@co.imperial.ca.us
- 6. Project location: Countywide
- 7. Project sponsor's name and address:

County of Imperial

Planning & Development Services

801 Main Street

El Centro, CA 92243

- 8. General Plan designation: Various
- 9. Zoning: Various

10. **Description of project**: The Renewable Energy and Transmission Element Update will update the existing 2006 Geothermal/Alternative Energy and Transmission Element and associated implementing ordinances, which focused primarily on geothermal energy production. The proposed project will identify new opportunities for renewable energy and assure that the Imperial County General Plan can meet the needs for future development while remaining consistent with identified land use and environmental goals. The proposed project would support the development of expanded renewable energy power production and exportation to accommodate future growth in California and improve overall system reliability. The proposed project would expand the geothermal energy focus of the existing element to take into account additional forms of renewable energy, including wind, solar, deep solar ponds, biofuels, bio-mass, algae production, concentrated solar-thermal power, and concentrated photovoltaic. Consequently, the updated element will be re-titled as the "Renewable Energy and Transmission Element."

The Renewable Energy and Transmission Element Update will provide a comprehensive document that contains the latest knowledge about renewable energy resources, feasible development technology, legal requirements, policies (Federal, State, and County), and implementation measures. The Element update will provide a framework for the review and approval of renewable energy projects in the County. The development projections presented in the Element update are based on forecasts obtained from the California Energy Commission, renewable energy industry, regional utilities, Desert Renewable Energy Conservation Plan, and County staff. This Initial Study has been prepared based on the attached comments received from the six community meetings and three Technical Advisory Group meetings.

11. **Surrounding land uses and setting**: The proposed project area includes all of Imperial County. However, the proposed project will include development of renewable energy overlay zones and implementation ordinances that will identify prioritized areas for renewable energy development, which will reduce the amount of land that may be developed.

12. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.):

#### ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

$\boxtimes$	Aesthetics	$\boxtimes$	Agriculture and Forestry Resources	$\boxtimes$	Air Quality
$\boxtimes$	Biological Resources	$\boxtimes$	Cultural Resources	$\boxtimes$	Geology /Soils
$\boxtimes$	Greenhouse Gas Emissions	$\boxtimes$	Hazards & Hazardous Materials	$\boxtimes$	Hydrology / Water Quality
$\boxtimes$	Land Use / Planning	$\boxtimes$	Mineral Resources	$\boxtimes$	Noise
	Population / Housing		Public Services	$\boxtimes$	Recreation
$\boxtimes$	Transportation/Traffic		Utilities / Service Systems	$\boxtimes$	Mandatory Findings of Significance

## ENVIRONMENTAL EVALUATION COMMITTEE (EEC) DETERMINATION

After Review of the Initial Study, the Environmental Evaluation Committee has:

Found that the proposed project COULD NOT have a significant effect on the environment, and a <u>NEGATIVE DECLARATION</u> will be prepared.

Found that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. <u>A MITIGATED NEGATIVE DECLARATION</u> will be prepared.

Found that the proposed project MAY have a significant effect on the environment, and an <u>ENVIRONMENTAL IMPACT</u> is required.

Found that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

Found that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE DE MINIMIS IMPACT FINDING:

EEC VOTES	YES	<u>NO</u>	<u>ABSENT</u>
PUBLIC WORKS			
ENVIRONMENTAL HEALTH			
OFFICE EMERGENCY SERVICES			
APCD			
AG			
SHERIFF DEPARTMENT			
ICPDS			

Jim Minnick, Interim Director of Planning/EEC Chairman

Date:

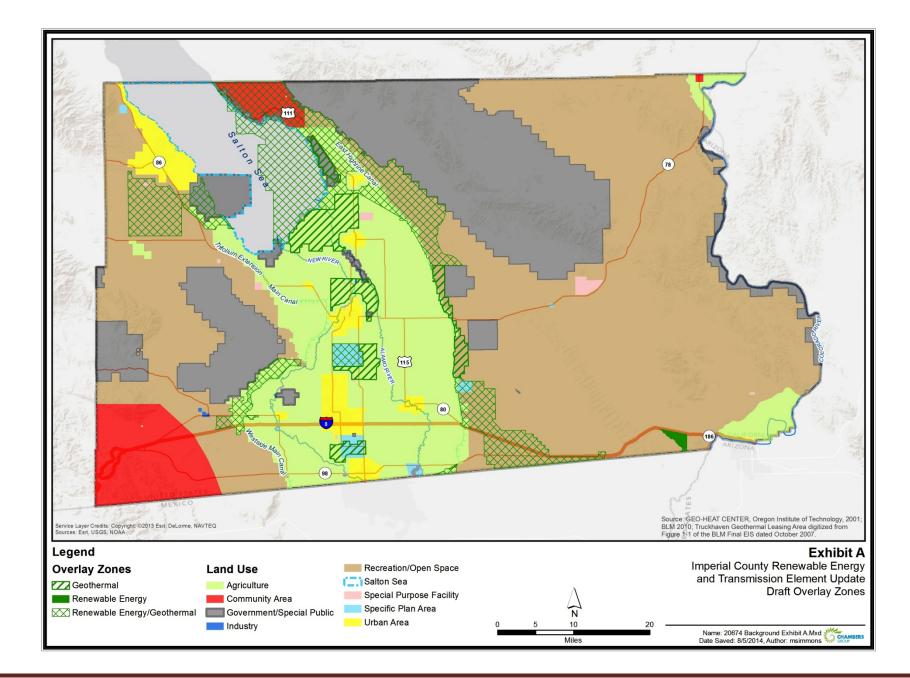
**A. Project Location**: The proposed project area includes all of Imperial County to include development of renewable energy overlay zones and implementation ordinances that will identify prioritized areas for renewable energy development, which will reduce the amount of land that may be developed.

**B. Project Summary**: The Renewable Energy and Transmission Element Update will update the existing 2006 Geothermal/Alternative Energy and Transmission Element and associated implementing ordinances, which focused primarily on geothermal energy production. The proposed project will identify new opportunities for renewable energy and assure that the Imperial County General Plan can meet the needs for future development while remaining consistent with identified land use and environmental goals. The proposed project would support the development of expanded renewable energy power production and exportation to accommodate future growth in California and improve overall system reliability. The proposed project would expand the geothermal energy focus of the existing element to take into account additional forms of renewable energy, including wind, solar, deep solar ponds, biofuels, bio-mass, algae production, concentrated solar-thermal power, and concentrated photovoltaic. Consequently, the updated element will be re-titled as the "Renewable Energy and Transmission Element."

The Renewable Energy and Transmission Element Update will provide a comprehensive document that contains the latest knowledge about renewable energy resources, feasible development technology, legal requirements, policies (Federal, State, and County), and implementation measures. The Element update will provide a framework for the review and approval of renewable energy projects in the County. The development projections presented in the Element update are based on forecasts obtained from the California Energy Commission, renewable energy industry, regional utilities, Desert Renewable Energy Conservation Plan, and County staff.

**C.** Environmental Setting: A detailed description of the environmental setting for Imperial County will be presented in the Programmatic EIR.

**D. General Plan Consistency**: The Programmatic EIR will evaluate consistency of the Renewable Energy and Transmission Element Update with other elements of the Imperial County General Plan. The Renewable Energy and Transmission Element Update has been developed with the intent of maintaining consistency with the other elements of the Imperial County General Plan and will include goals and policies to ensure this consistency.



#### EVALUATION OF ENVIRONMENTAL IMPACTS:

- 1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- 4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
  - a) Earlier Analysis Used. Identify and state where they are available for review.
  - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
  - c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- 9) The explanation of each issue should identify:
  - a) the significance criteria or threshold, if any, used to evaluate each question; and
  - b) the mitigation measure identified, if any, to reduce the impact to less than significance

		Potentially Significant Impact (PSI)	Potentially Significant Unless Mitigation Incorporated (PSUMI)	Less Than Significant Impact (LTSI)	No Impact (NI)
I.	AESTHETICS				
Wou	ld the project:				
a)	Have a substantial adverse effect on a scenic vista or scenic highway?	$\boxtimes$			
b)	Substantially damage scenic resources, including, but limited to, trees, rock outcroppings, and histori buildings within a state scenic highway?	c			
c)	Substantially degrade the existing visual character or quality of the site and its surroundings?	$\boxtimes$			
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime view in the area?	s	$\boxtimes$		

a,b,c) The visual character of Imperial County varies greatly, consisting of natural scenic visual resources such as deserts, sand dunes, mountains, recreation areas, and the Salton Sea. The visual character of Imperial County also includes agricultural areas, urban areas, and areas of solar development. Development of future renewable energy facilities would have the potential to impact existing visual character and quality, including scenic vistas, natural environment and existing landscape, general built environment and historic buildings, and scenic highways.

The Programmatic EIR will evaluate how the potential for future renewable energy projects would impact the existing aesthetics of the surrounding area due to their location in relation to key observation areas. Much of the County is visible from major roadways, and potential impacts to existing visual resources from proposed renewable energy projects would need to be considered. Although no highways in Imperial County are designated as state scenic highways, the routes considered eligible for designation are still recognized and would need to be taken into consideration for planning renewable energy projects. Recreational areas with scenic qualities such as the Salton Sea could also be impacted by renewable energy projects. Furthermore, the Programmatic EIR will evaluate the compatibility of future renewable energy projects with current visual resource ratings assigned to BLM-managed lands. The Programmatic EIR will also evaluate potential mitigation measures to reduce aesthetic impacts to a level less than significant.

d) Future renewable energy facilities may create new sources of substantial light or glare which would adversely affect day or nighttime views in the area. The Programmatic EIR will evaluate potential impacts associated with light and glare and potential mitigation measures to reduce impacts to a level less than significant.

#### II. AGRICULTURE AND FOREST RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. --Would the project:

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the

$\boxtimes$		

		Potentially Significant Impact (PSI)	Potentially Significant Unless Mitigation Incorporated (PSUMI)	Less Than Significant Impact (LTSI)	No Impact (NI)
	Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultura use?				
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?	$\boxtimes$			
c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Cod section 12220(g)), timberland (as defined by Publ Resources Code section 4526), or timberland zone Timberland Production (as defined by Governmen Code section 51104(g))?	ic ed			
d)	Result in the loss of forest land or conversion of forest land to non-forest use?				$\boxtimes$
e)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use of conversion of forest land to non-forest use?				

a) According to data from the California Department of Conservation (CDC), approximately 540,942 acres, or 18 percent, of the total land within Imperial County is classified as farmland. Agricultural production constitutes a major portion of the County's overall economy and was estimated to have yielded a gross income of approximately \$2.16 billion in 2013. Agricultural production has decreased slightly in recent years, however, due to conversion of agricultural land to nonfarming uses, including renewable energy facilities.

Future development of renewable energy facilities associated with the proposed project could convert agricultural resources to non-agricultural uses, which would constitute a significant impact. Given the level of regional reliance on the agricultural industry in Imperial County, the Programmatic EIR will evaluate policies to include in the Renewable Energy and Transmission Element Update to minimize impacts to agricultural resources. This will include development of general and specific standards intended to preserve farm operations by minimizing surface land usage and by avoiding disruption to existing irrigation and drainage patterns. The policy evaluation will also include development of a project alternative intended to preserve agricultural resources. The Programmatic EIR will also evaluate potential mitigation measures to reduce impacts to a level less than significant.

b) A substantial portion of land within Imperial County is zoned for agricultural usage within the irrigated portions of the valley. Furthermore, the County possesses a large number of properties protected by the California Land Conservation Act of 1965 (commonly referred to as the Williamson Act), which enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use. Although the Imperial County Board of Supervisors voted not to accept any new Williamson Act applications and not to renew any previous contracts under the program, each existing contract lasts for 10 years. As such, several parcels still remain throughout Imperial County that are subject to the land use restrictions of the Williamson Act agreements.

Future development of renewable energy facilities associated with the proposed project could convert land zoned for agricultural uses or protected by Williamson Act contracts to non-agricultural uses, which would constitute a significant impact. The Programmatic EIR will evaluate policies to include in the Renewable Energy and Transmission Element Update to minimize impacts to land zoned for agricultural uses or protected by Williamson Act contracts, including development of a project alternative intended to preserve agricultural resources. The Programmatic EIR will also evaluate potential mitigation measures to reduce impacts to a level less than significant.

	Potentially Significant		
Potential	y Unless	Less Than	
Significan	t Mitigation	Significant	No
Impact	Incorporated	Impact	Impact
(PSI)	(PSUMI)	(LTSI)	(NI)

- c,d) Imperial County does not possess any forest land. Therefore, no impacts would occur.
- e) Future development of renewable energy facilities associated with the proposed project could indirectly convert agricultural resources to non-agricultural uses through land use modifications that could affect adjacent parcels used for cultivation of agricultural resources. The Programmatic EIR will evaluate policies to include in the Renewable Energy and Transmission Element Update to minimize indirect impacts to active farmland and evaluate potential mitigation measures to reduce impacts to a level less than significant.

#### III. AIR QUALITY

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to the following determinations. Would the Project:

a)	Conflict with or obstruct implementation of the applicable air quality plan?	$\boxtimes$		
b)	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	$\boxtimes$		
c)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			
d)	Expose sensitive receptors to substantial pollutants concentrations?	$\boxtimes$		
e)	Create objectionable odors affecting a substantial number of people?	$\boxtimes$		

- a) The proposed project is located within the jurisdiction of the Imperial County Air Pollution Control District (ICAPCD) in the Salton Sea Air Basin (SSAB). Construction of future renewable energy facilities associated with the proposed project would temporarily result in harmful emissions that may conflict with rules and regulations of the ICAPCD. Therefore, the potential for the construction of future renewable energy facilities to conflict with the ICAPCD and potential mitigation measures will be evaluated in the Programmatic EIR.
- b,c) The SSAB is currently designated as a nonattainment area for the National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards for 8-hour ozone and PM<sub>10</sub>. A portion of Imperial County is designated as a nonattainment area for the NAAQS for PM<sub>2.5</sub>. Construction of future renewable energy facilities associated with the proposed project could temporarily increase emissions of PM<sub>10</sub> and PM<sub>2.5</sub>, which would contribute to the existing designations of nonattainment for these pollutants. Furthermore, the construction of renewable energy facilities would result in emissions of other pollutants that could change their attainment status. Therefore, the potential for the construction of future renewable energy facilities to violate any air quality standard, contribute substantially to an existing or projected air quality violation, or result in considerable net increase for any criteria pollutant for which the project region is non-attainment, and potential mitigation measures will be evaluated in the Programmatic EIR.
- d) The proposed project will develop renewable energy overlay zones based on a review of the existing County of Imperial Land Use Policy Map to identify areas suitable for development of renewable energy facilities. This land use evaluation will identify areas for development of renewable energy facilities that would avoid developed areas, which in turn, would minimize potential exposure of sensitive receptors to substantial pollutant concentrations. Nonetheless, the potential would remain for sensitive receptors to be exposed to substantial pollutant

	Potentially Significant		
Potentially	Unless	Less Than	
Significant	Mitigation	Significant	No
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concentrations during construction. The Programmatic EIR will address valley fever and asthma data for possible impacts on the public's health. Potential impacts and mitigation measures will be evaluated in the Programmatic EIR.

e) The proposed project will develop renewable energy overlay zones that would avoid developed areas, which in turn, would minimize potential exposure of sensitive receptors to objectionable odors. Nonetheless, the potential would remain for sensitive receptors to be exposed to objectionable odors during construction. Potential impacts and mitigation measures will be evaluated in the Programmatic EIR.

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#### IV. BIOLOGICAL RESOURCES

Would the project:

- a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?
- b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?
- c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?
- d) Interfere substantially with the movement of any resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?
- e) Conflict with any local polices or ordinances Protecting biological resource, such as a tree preservation policy or ordinance?
- f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?
  - a, b, c, d) A California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) search indicates that several species listed as threatened or endangered under the California Endangered Species Act (CESA) and Federal Endangered Species Act (FESA), as well as CDFW species of special concern (SSC), occur or have historically occurred within the County. These species include but are not limited to Penisular Bighorn Sheep, Yuma Clapper Rail, California Black Rail, Southwestern Willow Flycatcher, Willow Flycatcher, Western Yellow-Billed Cuckoo, Arizona Bell's Vireo, Least Bell's Vireo, Gilded Flicker, Swainson's Hawk, Desert Tortoise, Desert Pupfish, Razorback Sucker, Burrowing Owl, Flat-Tailed Horned Lizard, Barefoot Gecko, Boneytail, Gila Woodpecker, Western Snowy Plover, Peirson's Milkvetch, and Algodones Dunes Sunflower. Imperial County, primarily the Salton Sea, and adjacent agricultural lands are host to

$\boxtimes$	
$\boxtimes$	

	Potentially Significant		
Potentially	Unless	Less Than	
Significant	Mitigation	Significant	No
Impact	Incorporated	Impact	Impact
(PSI)	(PSUMI)	(LTSI)	(NI)

many species such as burrowing owl and Swainson's Hawk and which forage in or occupy the adjacent canals and waterways. Yuma Clapper Rail, California Black Rail, several sensitive fish species, and migrating passerines can be found in the riparian and wetland areas surrounding the Salton Sea, New River, Alamo River, Colorado River and its tributaries, and Imperial Irrigation District (IID) and privately maintained canals and seeps. These impacts may be indirect in nature and associated with disruption of current hydrological conditions. The Salton Sea and its shorelines are host to hundreds of thousands or migrating, wintering, and resident waterfowl and shorebird species protected under the Migratory Bird Treaty Act (MBTA), including Western Snowy Plover, and provide large scale breeding areas for colonial species such as Double-Crested Cormorant and American White Pelican. Dunes and native scrub habitats within the County support sensitive plant species including Peirson's Milkvetch and Algodones Dunes Sunflower, and the sensitive Flat-Tailed Horned Lizard, whose range remains limited almost exclusively within the County. On the western mountain range of the County, Penisular bighorn sheep occupy eastern mountain slopes and low scublands for foraging. Because of the wide range of the proposed project and large diversity of sensitive wildlife occurring within the County, development poses Potentially Significant Impacts to biological resources. Individual projects shall conduct Biological Technical Studies aimed at addressing specific resources within the defined project area and impacts on biological resources. Potential impacts and mitigation measures shall be evaluated in the Programmatic EIR.

- e) The Programmatic EIR will review the existing County of Imperial General Plan to determine if the construction of future renewable energy facilities associated with the proposed project would conflict with any local polices or ordinances protecting biological resources, such as a tree preservation policy or ordinance. Potential impacts and mitigation measures will be evaluated in the Programmatic EIR.
- f) Agency designated sensitive habitats within the County include United States Fish and Wildlife Service (USFWS) Critical Habitat, USFWS National Wildlife Refuges, USFWS National Wetlands Inventory (NWI) habitats, BLM National Landscape Conservation System (NLCS), BLM Desert Wildlife Management Areas (DWMAs) and Areas of Critical Environmental Concern (ACECs), United States Geological Survey (USGS) identified Wilderness and Wildlife Areas, and CNDDB listed sensitive habitats. Construction of future renewable energy facilities associated with the proposed project would have the potential to conflict with the provisions of these habitat protection areas. Therefore, potential impacts and mitigation measures will be evaluated in the Programmatic EIR.

#### V. CULTURAL RESOURCES

Would the project:

a)	Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	$\boxtimes$	
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	$\boxtimes$	
c)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	$\boxtimes$	
d)	Disturb any human remains, including those interred outside of formal cemeteries?	$\boxtimes$	

a) While parts of Imperial County have undergone some degree of environmental analysis with regard to historical resources, large portions have never been surveyed for their resource potential. Given the large number of historical resources already identified within its boundaries, the likelihood for previously unidentified historical resources remains high.

Without further study and efforts to properly identify historical resources, projects involving

	Potentially Significant		
Potentially	Unless	Less Than	
Significant	Mitigation	Significant	No
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(PSI)	(PSUMI)	(LTSI)	(NI)

renewable energy development have the potential to cause a substantial adverse change in the significance of historical resources. Therefore, the potential for future renewable energy facilities to impact sensitive historic resources and potential mitigation measures will be evaluated in the Programmatic EIR.

- b) At least ten archaeological sites and districts within the County have been listed as eligible to the National Register of Historic Places (NRHP). Listed prehistoric resources include four geoglyphs and two archaeological districts. It is known that the Southwest Lake Cahuilla Recessional Shoreline Archaeological District and Yuha Basin Discontinuous District have the potential to yield further information regarding the general prehistory of the region and represent areas with a higher risk of prehistoric cultural sensitivity. However, given the positive results from the Sacred Lands File Records Search for the project area conducted by the Native American Heritage Commission. the presence of archaeological resources that have not been previously recorded is highly likely. During discussions with Native American tribal representatives in the area, impacts to archaeological resources were underscored as a strong concern. Therefore, the potential for future renewable energy facilities to impact sensitive archaeological resources and potential mitigation measures will be evaluated in the Programmatic EIR.
- c) Knowledge of the geological formations and records of previous fossils recovered from localities within Imperial County served as the basis for determining the paleontological sensitivity of projects. Areas of high paleontological sensitivity exist in geological formations known to produce significant, nonrenewable vertebrate and invertebrate fossil resources. Although current data suggest that Imperial County does not have areas of high paleontological sensitivity, grounddisturbing activities may impact fossil localities in areas of potentially low-sensitivity Quaternary recent alluvium that may overlie high sensitivity Quaternary older alluvium. Therefore, the degree to which the underlying high-sensitivity alluvium may be impacted by subsurface activities and potential mitigation measures will be evaluated in the Programmatic EIR.
- d) Any project that includes subsurface activities in previously undisturbed soil has the potential to encounter human remains. A Sacred Lands File Records search was requested from the Native American Heritage Commission. The results indicated that Imperial County does include lands considered sacred by Native American tribes in the region. While the presence of sacred lands does not indicate that human remains are necessarily present, it infers that traditionally these lands were consistently used by members of the various tribes. These findings were echoed during meetings with Native American groups throughout the County. Although it is often difficult to discern the location of interred human remains, the Programmatic EIR will focus on identifying areas where the likelihood of encountering remains may be higher, including traditional sacred lands, and will describe in detail all appropriate mitigation measures such as construction monitoring.

#### VI. **GEOLOGY AND SOILS**

Would the project:

- $\boxtimes$ a) Expose people or structures to potential substantial adverse effects, including risk of loss, injury, or death involving:  $\boxtimes$ 1) Rupture of a known earthquake fault, as delineated on the most recent Alguist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to
- $\square$ Division of Mines and Geology Special  $\boxtimes$  $\boxtimes$  $\square$  $\square$ 
  - 3) Seismic-related ground failure, including

2) Strong Seismic ground shaking?

Publication 42?

		Potentially Significant Impact (PSI)	Potentially Significant Unless Mitigation Incorporated (PSUMI)	Less Than Significant Impact (LTSI)	No Impact (NI)
	liquefaction and seiche/tsunami?				
	4) Landslides?				$\boxtimes$
b)	Result in substantial soil erosion or the loss of topso	pil?	$\boxtimes$		
c)	Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project, and potentially result in on- or off-site landslides, lateral spreading, subsidence liquefaction or collapse?	9			
d)	Be located on expansive soil, as defined in the latest Uniform Building Code, creating substanti risk to life or property?	al			
e)	Have soils incapable of adequately supporting the use of septic tanks or alternative waste wate disposal systems where sewers are not available for the disposal of waste water?				

- a1 a3) Because southern California is a seismically active region, the potential exists for future renewable energy facilities associated with the proposed project to be affected by regional earthquakes. The Programmatic EIR will identify the locations of faults delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map and other faults to determine the potential for future renewable energy facilities to be impacted by seismic activity.
- a4) Substantial amounts of the topography of Imperial County is relatively flat and does not pose the risk of exposure to landslides. The renewable energy overlay zones to be developed for the proposed project would not include areas with steep topography and avoid impacts associated with landslides. Therefore, no impacts would occur.
- b) Construction of renewable energy facilities would have the potential to expose soils that could result in erosion. Therefore, the potential for construction of future renewable energy facilities to result in substantial soil erosion or the loss of topsoil and potential mitigation measures will be evaluated in the Programmatic EIR.
- c,d,e) Renewable energy facilities associated with the proposed project would have the potential to be located on sites with unstable and/or expansive soils that may pose geologic risks. Similarly, such unstable and/or expansive soils may be incapable of supporting alternative waste water disposal systems where sewers are not available for the disposal of waste water. Therefore, the potential for future renewable energy facilities to be located on unstable and/or expansive soils and mitigation measures will be evaluated in the Programmatic EIR. This evaluation will include an analysis of the potential for geothermal renewable energy facilities that may result in subsidence.

#### VII. GREENHOUSE GAS EMISSION

Would the project:

a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	$\boxtimes$		
b)	Conflict with an applicable plan or policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	$\boxtimes$		

a,b) Operation of future renewable energy facilities would not generate greenhouse gas emissions.

	Potentially Significant		
Potentially	Unless	Less Than	
Significant	Mitigation	Significant	No
İmpact	Incorporated	Impact	Impact
(PSI)	(PSUMI)	(LTSI)	(NI)

However, construction of future renewable energy facilities associated with the proposed project could generate greenhouse gas emissions. Therefore, potential impacts and mitigation measures will be evaluated in the Programmatic EIR.

#### VIII. HAZARDS AND HAZARDOUS MATERIALS

Would the project:

a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	$\boxtimes$		
b)	Create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	$\boxtimes$		
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			
d)	Be located on a site, which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?			
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?			
f)	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?			
g)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			
h)	Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or			

- a,b) Construction of renewable energy facilities associated with the proposed project would require use of hazardous materials. Therefore, the potential for future renewable energy facilities to create significant hazards and potential mitigation measures will be evaluated in the Programmatic EIR.
- c) The proposed project will develop renewable energy overlay zones based on a review of the existing County of Imperial Land Use Policy Map to identify areas suitable for development of renewable energy facilities. This land use evaluation will identify areas for development of renewable energy facilities that would avoid developed areas, which in turn, would prevent impacts to existing schools. Therefore, impacts would be less than significant.
- d) Renewable energy facilities associated with the proposed project would have the potential to be located on sites that posses hazardous materials which could be exposed during construction.

where residences are intermixed with wildlands?

	Potentially Significant		
Potentially	Unless	Less Than	
Significant	Mitigation	Significant	No
İmpact	Incorporated	Impact	Impact
(PSI)	(PSUMI)	(LTSI)	(NI)

Therefore, the potential for future renewable energy facilities to be located on hazardous materials sites and potential mitigation measures will be evaluated in the Programmatic EIR.

- e) The renewable energy overlay zones to be developed for the proposed project would not include areas within an airport land use plan or within two miles of public airport or public use airport. Therefore, no impacts would occur.
- f) The renewable energy overlay zones to be developed for the proposed project would not include areas within the vicinity of a private airstrip. Therefore, no impacts would occur.
- g) Operation of renewable energy facilities would not generate large numbers of vehicle trips that could degrade traffic levels of service (LOS) that would interfere with an adopted emergency plan. However, construction of renewable energy facilities could temporarily reduce LOS on roadways within Imperial County, which could in turn affect emergency evacuation routes. Therefore, the potential for construction of renewable energy facilities to interfere with an adopted emergency plan and potential mitigation measures will be evaluated in the Programmatic EIR.
- h) Land in Imperial County consists primarily of urban areas, active farmlands, recreation areas, and undeveloped land; The County does not possess wildlands with the potential for fires. Therefore, no impacts would occur.

#### IX. HYDROLOGY AND WATER QUALITY

Would the project:

a)	Violate any water quality standards or waste discharge requirements?	$\boxtimes$	
b)	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?		
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?		
d)	Substantially alter the existing drainage patterns of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off- site?		
e)	Create or contribute runoff water, which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?		
f)	Otherwise substantially degrade water quality?	$\boxtimes$	
g)	Place housing within a 100-year flood hazard area as mapped on a Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard		$\boxtimes$

		Potentially Significant Impact (PSI)	Potentially Significant Unless Mitigation Incorporated (PSUMI)	Less Than Significant Impact (LTSI)	No Impact (NI)
	delineation map?				
h)	Place within a 100-year flood hazard area structures which would impede or redirect the flood flows?	s 🛛			
i)	Expose people or structures to a significant risk of loss injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				
j)	Inundation by seiche, tsunami, or mudflow?				$\boxtimes$

- a) The potential for future renewable energy facilities to violate any water quality standards or waste discharge requirements and mitigation measures will be evaluated in the Programmatic EIR.
- b) Due to the large amount of undeveloped land within Imperial County that allows for groundwater recharge, development of renewable energy facilities associated with the proposed project would not interfere with groundwater recharge. No impacts would occur.
- c,d) Construction of future renewable energy facilities could substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river due to possible subsidence. Therefore, the potential for future renewable energy facilities to result in substantial erosion or siltation on- or off-site and substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site will be evaluated in the Programmatic EIR.
- e,f) The potential for future renewable energy facilities to create or contribute runoff water, which would exceed the capacity of existing or planned stormwater drainage systems, provide substantial additional sources of polluted runoff, or otherwise degrade water quality will be evaluated in the Programmatic EIR.
- g) The proposed project does not include the construction of housing, and therefore, would not place housing within a 100-year flood hazard area. No impacts would occur.
- h,i) The programmatic EIR will evaluate whether locations identified for future renewable energy facilities would be located in the 100-year flood zone or within the flood inundation zones of levees and dams.
- j) Future renewable energy facilities associated with the proposed project would not be impacted by tsunamis, due to Imperial County's location approximately 60 miles east of the Pacific Ocean. Substantial amounts of the topography of Imperial County is relatively flat and does not pose the risk of exposure to landslides. The renewable energy overlay zones to be developed for the proposed project would not include areas with steep topography and avoid impacts associated with mudflow. However, renewable energy facilities constructed near the Salton Sea may be impacted by sieches. Therefore, the potential for future renewable energy facilities to be impacted by seiches and potential mitigation measures will be evaluated in the Programmatic EIR.

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 $\boxtimes$ 

#### X. LAND USE AND PLANNING

Would the project:

- a) Physically divide an established community?
- b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (include, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

		Potentially Significant Impact (PSI)	Potentially Significant Unless Mitigation Incorporated (PSUMI)	Less Than Significant Impact (LTSI)	No Impact (NI)
c)	Conflict with any applicable habitat conservation				
,	plan or natural community conservation plan?				

- a) Imperial County covers an area of approximately 2,942,080 acres and consists of a variety of land uses, including urban areas, active farmlands, recreation areas, and undeveloped land. The proposed project will develop renewable energy overlay zones based on a review of the existing County of Imperial Land Use Policy Map to identify areas suitable for development of renewable energy facilities. This land use evaluation will identify areas for development of renewable energy facilities that would avoid physical impacts to developed areas to avoid dividing established communities. Therefore, impacts would be less than significant.
- b) The Programmatic EIR will evaluate consistency of the Renewable Energy and Transmission Element Update with other elements of the Imperial County General Plan. The Renewable Energy and Transmission Element Update has been developed with the intent of maintaining consistency with the other elements of the Imperial County General Plan and will include goals and policies to ensure this consistency. Therefore, impacts would be less than significant.
- c) As described in Section IVb), implementation of the proposed project may result in significant impacts to biological resources that would conflict with the provisions of applicable habitat conservations. The Programmatic EIR would analyze potential impacts to biological resources and evaluate mitigation measures that would minimize impacts to biological resources and reduce impacts to a level less than significant.

#### XI. MINERAL RESOURCES

Would the project:

a)	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	$\boxtimes$		
b)	Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local		$\boxtimes$	

- a) Future development of renewable energy facilities associated with the proposed project may occur in locations identified as Mineral Resource Zones (MRZs) by the California Geological Survey. This could occur during construction of renewable energy facilities on top of areas identified as MRZs that would prevent future extraction of mineral resources, or form the operation of geothermal facilities that would use mineral resources during the process of generating energy. The Programmatic EIR will evaluate potential impacts associated with the loss of known mineral resources and potential mitigation measures to reduce impacts to a level less than significant.
- b) It is not anticipated the proposed project would result in the loss of locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan. The proposed project will develop renewable energy overlay zones based on a review of the existing County of Imperial Land Use Policy Map to identify areas suitable for renewable energy development. This review will exclude properties designated mineral resource recovery sites. Therefore, impacts would be less than significant.

 $\boxtimes$ 

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#### XII. NOISE

Would the project result in:

 a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

general plan, specific plan or other land use plan?

Imperial County Planning & Development Services Department Initial Study, Environmental Checklist Form for Element Update 

		Potentially Significant Impact (PSI)	Potentially Significant Unless Mitigation Incorporated (PSUMI)	Less Than Significant Impact (LTSI)	No Impact (NI)
b)	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	$\boxtimes$			
c)	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	$\boxtimes$			
d)	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?				
e)	For a project located within an airport land use plan or where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				
f)	For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	$\boxtimes$			

- a,c,d) The proposed project will develop renewable energy overlay zones based on a review of the existing County of Imperial Land Use Policy Map to develop renewable energy overlay zones that are not located adjacent to sensitive receptors to the greatest extent that is feasible. However, construction of renewable energy facilities associated with the proposed project would still have the potential to temporarily generate noise levels that would increase ambient noise levels and exceed standards established in the County of Imperial General Plan or Noise Ordinance. Therefore, potential temporary and permanent impacts related to noise and potential mitigation measures will be evaluated in the Programmatic EIR.
- b) Construction of renewable energy facilities associated with the proposed project would have the potential to generate groundborne vibration that exceeds standards established in the County of Imperial General Plan. Therefore, potential impacts related to groundborne vibration and potential mitigation measures will be evaluated in the Programmatic EIR.
- e) The renewable energy overlay zones to be developed for the proposed project would not include areas within an airport land use plan or within two miles of public airport or public use airport. Therefore, no impacts would occur.
- f) The renewable energy overlay zones to be developed for the proposed project would not include areas within the vicinity of a private airstrip. Therefore, no impacts would occur.

#### XIII. POPULATION AND HOUSING

Would the project:

a)	Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example through extension of roads or other infrastructure)?		
b)	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?		$\boxtimes$
c)	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?		$\boxtimes$

	Potentially Significant		
Potentially	Unless	Less Than	
Significant	Mitigation	Significant	No
Impact	Incorporated	Impact	Impact
(PSI)	(PSUMI)	(LTSI)	(NI)

- a) The proposed project would result in the expansion of renewable energy uses within the County and its planning area. The development of housing is not included as part of the renewable energy projects. Population growth and the associated need for new residential development could potentially increase the need for services including energy needs. Future renewable energy facilities associated with the proposed project would help the County meet these energy needs. Therefore, no impacts would occur.
- b) The Imperial County Renewable Energy and Transmission Element Update would primarily involve the expansion of renewable energy uses within the County. The Project sites which would be used for renewable energy projects would not be located where housing currently exists. Therefore, future renewable energy facilities would not displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere. No impacts would occur.
- c) The Imperial County Renewable Energy and Transmission Element Update would primarily involve the expansion of renewable energy uses within the County. The Project sites which would be used for renewable energy projects would not be located where housing currently exists. Therefore, future renewable energy facilities would not displace substantial numbers of people, necessitating the construction of replacement housing elsewhere. No impacts would occur.

#### XIV. PUBLIC SERVICES

a)	physi new need faciliti signif maint or ot	d the project result in substantial adverse cal impacts associated with the provision of or physically altered governmental facilities, for new or physically altered governmental ies, the construction of which could cause icant environmental impacts, in order to tain acceptable service ratios, response times ther performance objectives for any of the c services:		
	1)	Fire protection?	$\boxtimes$	
	2)	Police protection?	$\boxtimes$	
	3)	Schools?		$\boxtimes$
	4)	Parks?		$\boxtimes$
	5)	Other public facilities?		$\square$

- a)
  - a1) Fire department and emergency services personnel are provided by the Imperial County Fire/OES Department. Future renewable energy facilities associated with the proposed project would be required to comply with all existing regulations and requirements of the Imperial County Fire/OES Department and would be reviewed for adherence to prevention measures for fires. Construction and operation activities associated with energy projects may result in an increased need for fire-fighting personnel and facilities in the area. Therefore, potential impacts associated with fire protection and potential mitigation measures will be evaluated in the Programmatic EIR.
  - a2) Police protection services are provided by the Imperial County Sheriff's Department. Although the potential is low, renewable energy facilities associated with the proposed project may require additional police protection services. Therefore, potential impacts associated with police protection and potential mitigation measures will be evaluated in the Programmatic EIR.
  - a3) The energy projects associated with the Renewable Energy and Transmission Element Update would not include the development of residential land uses that would result in an increase in

	Potentially Significant		
Potentially	Unless	Less Than	
Significant	Mitigation	Significant	No
Impact	Incorporated	İmpact	Impact
(PSI)	(PSUMI)	(LTSI)	(NI)

population or student generation. Construction of energy projects would not result in an increase in student population within Imperial County's school districts, since it is anticipated that construction workers would commute in during construction operations. Therefore, no impacts would occur.

- a4) Operation of energy projects associated with the Renewable Energy and Transmission Element Update would require minimal full-time staff (for security, maintenance, etc.). Therefore, substantial permanent increases in population that would adversely affect local parks are not expected, and the energy projects are not expected to have an impact on parks. No impacts would occur.
- a5) Operation of energy projects associated with the Renewable Energy and Transmission Element Update would require minimal full-time staff (for security, maintenance, etc.). Therefore, substantial permanent increases in population that would adversely affect libraries, post offices, and other public facilities are not expected. Future projects are not expected to have an impact on libraries, post offices, or other public facilities. Therefore, no impacts would occur.

#### XV. RECREATION

- Would the project increase the use of the existing  $\square$  $\square$  $\boxtimes$ a) neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? b) Does the project include recreational facilities or  $\square$  $\square$  $\boxtimes$ require the construction or expansion of recreational facilities which might have an adverse
  - a) Construction of renewable energy facilities associated with the proposed project would have the potential to impact existing parks and recreational facilities. However, energy projects will conform to local setbacks near recreational areas that are frequented by visitors. This will allow the proper protection necessary to ensure the safety of park or open space visitors. In addition, proper buffer areas will be provided in areas where views are part of the recreational value of the park or open space area. In addition, the construction of renewable energy facilities will not cause a population increase that would significantly impact the use of existing parks or recreational facilities. With the conformance with setbacks near recreational areas, no significant impacts to parks or recreational facilities will occur.
  - b) Construction of renewable energy facilities associated with the proposed project would not include the construction of recreational facilities or require the construction of recreational facilities which might have an adverse effect on the environment. Therefore, no significant impacts would occur due to the construction or expansion of recreational facilities that may have an adverse impact on the environment.

 $\square$ 

#### XVI. TRANSPORTATION / TRAFFIC

effect on the environment?

Would the project:

a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit? 

		Potentially Significant Impact (PSI)	Potentially Significant Unless Mitigation Incorporated (PSUMI)	Less Than Significant Impact (LTSI)	No Impact (NI)
b)	Conflict with an applicable congestion management program, including but not limited to level of service standard and travel demand measures, or other standards established by the county congestion/management agency for designated roads or highways?	9 - 1			
c)	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?		$\boxtimes$		
d)	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				
e)	Result in inadequate emergency access		$\boxtimes$		
f)	Conflicts with adopted policies, plans, programs, regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance of				

- safety of such facilities?
- a,b) Operation of renewable energy facilities would not generate large numbers of vehicle trips that could degrade traffic LOS. However, construction of renewable energy facilities could temporarily reduce LOS on roadways within Imperial County, which could in turn conflict with an applicable traffic plan, ordinance, policy or congestion management program. Therefore, the potential for construction of renewable energy facilities to degrade traffic LOS and potential mitigation measures will be evaluated in the Programmatic EIR.
- c) The proposed project does not include the construction of housing, and therefore, would not increase air travel demand. However, renewable energy facilities such as windmills and concentrated solar photovoltaic structures may affect air traffic patterns due to their substantial height. Therefore, potential impacts related to air traffic patterns and potential mitigation measures will be evaluated in the Programmatic EIR.
- d) In the event that future renewable energy facilities would require changes to existing roadways, such modifications would be designed to be consistent with existing safety standards and would not create unsafe conditions that could increase the risk of car accidents. Therefore, impacts would be less than significant.
- e) Operation of renewable energy facilities would not generate large numbers of vehicle trips that could degrade traffic LOS that would interfere with emergency access. However, construction of renewable energy facilities could temporarily reduce LOS on roadways within Imperial County, which could in turn affect emergency access. Therefore, the potential for construction of renewable energy facilities to interfere with emergency access and potential mitigation measures will be evaluated in the Programmatic EIR.
- f) It is not anticipated that renewable energy facilities associated with the proposed project would conflict with adopted policies, plans, and programs regarding alternative transportation. The proposed project will develop renewable energy overlay zones based on a review of the existing County of Imperial Land Use Policy Map to identify areas suitable for development of renewable energy facilities. This land use evaluation will avoid developed areas, which in turn, would prevent impacts to existing alternative transportation facilities. Therefore, impacts would be less than significant.

#### XVII. UTILITIES AND SERVICE SYSTEMS

		Potentially Significant Impact (PSI)	Potentially Significant Unless Mitigation Incorporated (PSUMI)	Less Than Significant Impact (LTSI)	No Impact (NI)
Would	d the project:				
a)	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				$\boxtimes$
b)	Require or result in the construction of new water or water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				
c)	Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				
d)	Have sufficient water supplies available to serve the project from existing entitlements and resources, o are new or expanded entitlements needed?		$\boxtimes$		
e)	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	e			
f)	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?				
g)	Comply with federal, state, and local statutes and regulations related to solid waste?		$\boxtimes$		

- a) Renewable energy projects associated with the Imperial County Renewable Energy and Transmission Element Update would generate a minimal amount of wastewater during construction. Wastewater would most likely be contained within portable toilet facilities and disposed of at an approved site. Wastewater associated with the operation of renewable energy projects would be treated via on-site septic systems. The proposed project would not exceed wastewater treatment requirements of the Regional Water Quality Control Board. No significant impacts are expected, and no further study of this issue is required.
- b) Future renewable energy projects associated with the Imperial County Renewable Energy and Transmission Element Update are not anticipated to result in a significant increase in water demand/use; however, water will be needed for domestic use within operations and maintenance buildings, solar panel washing, and fire protection once the projects are fully operational. Potential impacts and potential mitigation measures will be evaluated in the Programmatic EIR.
- c) Future renewable energy projects associated with the Imperial County Renewable Energy and Transmission Element Update do not include the construction of a storm drainage system. Site drainage will be analyzed in the Hydrology/Water Quality section of the Programmatic EIR. No significant impacts are expected, and no further study of this issue is required.
- d) Future renewable energy projects associated with the Imperial County Renewable Energy and Transmission Element Update are not anticipated to result in a significant increase in water demand/use; however, water will be needed for domestic use within operations and maintenance buildings, solar panel washing, and fire protection once the projects are fully operational. Potential impacts and mitigation measures will be evaluated in the Programmatic EIR.
- e) Future renewable energy projects associated with the Imperial County Renewable Energy and Transmission Element Update would generate a minimal amount of wastewater during construction. Wastewater would most likely be contained within portable toilet facilities and

	Potentially Significant		
Potentially	Unless	Less Than	
Significant	Mitigation	Significant	No
Impact	Incorporated	İmpact	Impact
(PSI)	(PSUMI)	(LTSI)	(NI)

disposed of at an approved site. Wastewater associated with the operation of renewable energy projects would be treated via on-site septic systems. The proposed project would not increase the demands of a wastewater treatment provider. No significant impacts are expected, and no further study of this issue is required.

- f) During construction and operation of the renewable energy projects associated with the Imperial County Renewable Energy and Transmission Element Update, waste generation would occur. Solid waste would likely be disposed of using a locally-licensed waste hauling service, and solid waste would be transported to a permitted facility. The County has 10 County-operated Class III disposal sites throughout the County that do not accept hazardous waste. In addition, there are three private waste disposal facilities located within the County. Potential impacts and mitigation measures will be evaluated in the Programmatic EIR.
- g) Future renewable energy projects associated with the Imperial County Renewable Energy and Transmission Element Update would generate solid waste during construction and operation; however, they would be required to comply with State and local requirements for waste reduction and recycling. The projects would be required to comply with the 1989 California Integrated Waste Management Act and the 1991 California Solid Waste Reuse and Recycling Access Act of 1991. Potential impacts and mitigation measures will be evaluated in the Programmatic EIR.

Note: Authority cited: Sections 21083 and 21083.05, Public Resources Code. Reference: Section 65088.4, Gov. Code; Sections 21080(c), 21080.1, 21080.3, 21083, 21083.05, 21083.3, 21093, 21094, 21095, and 21151, Public Resources Code; Sundstrom v. County of Mendocino, (1988) 202 Cal. App.3d 296; Leonoff v. Monterey Board of Supervisors, (1990) 222 Cal. App.3d 1337; Eureka Citizens for Responsible Govt. v. City of Eureka (2007) 147 Cal. App.4th 357; Protect the Historic Amador Waterways v. Amador Water Agency (2004) 116 Cal. App.4th at 1109; San Franciscans Upholding the Downtown Plan v. City and County of San Francisco (2002) 102 Cal. App.4th 656.

Revised 2009- CEQA Revised 2011- ICPDS

Potentially Significant Impact (PSI)	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
 (PSI)	(PSUMI)	(LTSI)	(NI)

#### **III. MANDATORY FINDINGS OF SIGNIFICANCE**

The following are Mandatory Findings of Significance in accordance with Section 15065 of the CEQA Guidelines.

a)	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?			
b)	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)			
c)	Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	$\boxtimes$		

a,b,c) Renewable energy projects associated with the proposed project would have the potential to result in significant environmental impacts. Additionally, renewable energy projects associated with the proposed project would have the potential to result in cumulatively considerable impacts due to the incremental effects of a project in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects. Therefore, potential environmental impacts, mitigation measures, and cumulative impacts will be evaluated in the Programmatic EIR.

#### IV. PERSONS AND ORGANIZATIONS CONSULTED

This section identifies those persons who prepared or contributed to preparation of this document. This section is prepared in accordance with Section 15129 of the CEQA Guidelines.

#### A. COUNTY OF IMPERIAL

- Jim Minnick, Interim Director of Planning & Development Services
- Michael Abraham, AICP, Planning Division Manager
- Imperial County Air Pollution-Control District
- Department of Public Works
- Fire Department
- Ag Commissioner
- Environmental Health Services
- Sheriff's Office

#### **B. OTHER AGENCIES/ORGANIZATIONS**

- Bureau of Land Management
- USFWS
- CDF&W
- Farm Bureau
- Imperial Irrigation District

#### V. REFERENCES

1. "County of Imperial General Plan EIR", prepared by Brian F. Mooney & Associates in 1993; and as Amended by County in 1996, 1998, 2001, 2003, 2006 & 2008

(Please see the attached references identified in the comment letters attached and in this Initial Study)

#### VI. PROGRAMMATIC EIR – COUNTY OF IMPERIAL

Project Name: Imperial County General Plan Renewable Energy and Transmission Element Update

Project Applicant: County of Imperial Planning & Development Services

Project Location: Countywide

**Description of Project:** The Renewable Energy and Transmission Element Update will update the existing 2006 Geothermal/Alternative Energy and Transmission Element and associated implementing ordinances. The proposed project will identify new opportunities for renewable energy and assure that the Imperial County General Plan can meet the needs for future development while remaining consistent with identified land use and environmental goals. The proposed project would support the development of expanded renewable energy power production and exportation to accommodate future growth in California and improve overall system reliability. The proposed project would expand the existing element to take into account additional forms of renewable energy, including wind, solar, deep solar ponds, biofuel, bio-mass, algae production, concentrated solar-thermal power, and concentrated photovoltaic. Consequently, the updated element will be re-titled as the "Renewable Energy and Transmission Element."

The Renewable Energy and Transmission Element Update will provide a comprehensive document that contains the latest knowledge about renewable energy resources, feasible development technology, legal requirements, policies (Federal, State, and County), and implementation measures. The Element update will provide a framework for the review and approval of renewable energy projects in the County. The development projections presented in the Element update are based on forecasts obtained from the California Energy Commission, renewable energy industry, regional utilities, Desert Renewable Energy Conservation Plan, and County staff.

#### VII. FINDING/NOTICE

This is to advise that the County of Imperial, acting as the lead agency, has conducted an Initial Study to determine if the project may have a significant effect on the environment based upon the following findings:



The Initial Study shows that there is substantial evidence that the project may have a significant effect on the environment and a **PROGRAMMATIC EIR** will be prepared.



The Initial Study identifies potentially significant effects but:

- (1) Proposals made or agreed to by the applicant before this proposed Mitigated Negative Declaration was released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur.
- (2) There is no substantial evidence before the agency that the project may have a significant effect on the environment.
- (3) Mitigation measures are required to ensure all potentially significant impacts are reduced to levels of insignificance.

A PROGRAMMATIC EIR will be prepared for this updated element.

The project file and all related documents are available for review at the County of Imperial, Planning & Development Services Department, 801 Main Street, El Centro, CA 92243 (760) 482-4236.

NOTICE

The public is invited to comment on the proposed Programmatic EIR during the review period.

Date of Determination

Jim Minnick, Interim Director of Planning & Development Services

S:\FORMS\_LISTS\General Office Forms\Initial Study RETE Update.docx



### United States Department of the Interior

FISH AND WILDLIFE SERVICE Ecological Services Palm Springs Fish and Wildlife Office 777 East Tahquitz Canyon Way, Suite 208 Palm Springs, California 92262



In Reply Refer To: FWS-IMP-14B0291-14CPA0303

AUG 2 2 2014

Mr. Jim Minnick Interim Director Imperial County Planning and Development Services 801 Main Street El Centro, California 92243

## Subject: Comments on the Baseline Notice of Preparation for the Imperial County General Plan Renewable Energy and Transmission Amendment

Dear Mr. Minnick:

The U.S. Fish and Wildlife Service (Service) appreciates the opportunity to comment on the Notice of Preparation (NOP). We previously commented on the *Baseline Environmental Inventory Report for the Imperial County Geothermal/Alternative Energy and Transmission Element Update*, in a letter dated July 11, 2014. This letter provides some of the same information and additional detail more specific to the general plan amendment.

#### **Migratory Birds**

The General Plan amendment process should address effects to migratory birds. Given the large numbers of water-associated birds using the Salton Sea, and the proportionally high levels of mortality of water-associated birds involved with solar panel collisions (approximately 40 percent of total bird mortality at several projects in Riverside and San Bernardino counties, likely due to what is commonly referred to as the "lake effect"), a renewable energy development avoidance zone around the Salton Sea for technologies with lethal potential to avian species (photovoltaic and concentrated solar thermal technologies, wind energy, and electrical transmission lines) would be appropriate to reduce the numbers of those species placed at risk. Geothermal energy is not known to pose a significant hazard to birdlife because of its relatively small development footprint and generally can be considered compatible with avian conservation objectives associated with wetland and agricultural habitat values throughout the Imperial Valley. Salinity gradient solar ponds also are not known to pose a hazard to birds, so building this technology on the receding shoreline of the sea may prove compatible but an experimental approach to determine potential attraction and adverse effects would be appropriate prior to widespread adoption and development of this technology. In addition, an avoidance zone around State, Federal, Imperial Irrigation District, and private wetlands managed around the southern

#### Mr. Jim Minnick (FWS-IMP-14B0291-14CPA0303)

end of the Sea is appropriate to minimize conflicts with water-associated and other birds that might be attracted to those areas. The dimensions of an avoidance zone should be discussed among biologists, wildlife managers, and other interests to support the scale needed to optimize effectiveness.

However, water-associated birds and numerous other groups of bird species fly widely, use a variety of agricultural habitats across the valley, and are not restricted to the Sea proper. Given the abundance and diversity of birds that use the valley during migration, on a seasonal basis, or as residents, renewable energy technologies known to be generally lethal to birdlife, such as the various solar and wind technologies currently in common use, are anticipated to result in potentially significant avian mortality anywhere in the agricultural or bordering desert habitats because reasonably feasible and proven avoidance and minimization measures on project sites have not been demonstrated to date. Solar technologies with lower potential lethality should be selectively placed in least damaging locations and configurations to the extent known, monitored to determine mortality levels to vulnerable species, and mitigated to reduce and offset impacts to populations of affected species.

#### Yuma Clapper Rail

Two Yuma clapper rails [recently renamed as Yuma Ridgway's rail (*Rallus obsoletus yumanensis*)] have been reported dead from collisions with structures on solar sites, one in the Imperial Valley and one at a facility in natural desert habitat. In Imperial Valley, where proposed and approved solar projects are nearby and potentially inter-mixed with patches of rail habitat, mortality rates could be higher than where more remote solar projects are located farther away from the rail population centers in the Imperial Valley and along the lower Colorado River.

Therefore, we recommend that local, State, and Federal agencies initiate the development of regional conservation strategies as part of our respective planning and regulatory processes, of which the County's General Plan amendment provides one such opportunity. One approach would entail the establishment of a bird mortality mitigation fee, with a predetermined portion dedicated to the restoration or creation of marsh habitats suitable for rail Yuma clapper rail and other species.

#### Burrowing Owl and Mountain Plover

Given the regional and national importance of the populations of these two species in the Imperial Valley (Rosenberg 2004, 2013, <u>http://www.bioone.org/doi/abs/10.1648/0273-8570-74.1.74?journalCode=forn; http://ca.audubon.org/newsroom/press-releases/2013/imperial-valley-agricultural-fields-becoming-increasingly-important-rar)</u>, and the potential for renewable energy development to eliminate large amounts of foraging, wintering, and breeding habitat for the owl, and winter range for the plover, cumulative losses of continued solar development (over 22,000 acres proposed and approved to date) are potentially significant for both species. Therefore, the General Plan amendment process provides an opportunity to design and implement a County-

#### Mr. Jim Minnick (FWS-IMP-14B0291-14CPA0303)

wide strategy to ensure impacts are mitigated consistent with long-term conservation of these species in Imperial County.

Key elements of such a conservation strategy for both species should include: (1) owl and plover-friendly farming practices implemented through an incentive program with cooperating landowners, (2) a menu of mitigation options for loss of foraging and nesting habitats, and (3) development of a standardized owl displacement strategy that optimizes survivorship based on the results of a comparative study between active and passive translocation methods.

Potential in-kind mitigation options for the loss of foraging/nesting habitat include:

(1) permanent mitigation (fee title or conservation easement) for loss of agricultural burrowing owl and mountain plover foraging habitat at a discounted ratio (habitat replacement to loss ratio), based on the premise that loss of the number of displaced burrowing owls and plovers supported by incidentally compatible agricultural practices could be offset at a higher density on a reduced land base of agricultural habitat if farmed with more intensive owl and plover-friendly agricultural and wildlife management practices; and

(2) temporary mitigation on an equivalent acreage basis for loss of agricultural burrowing owl or mountain plover habitat by the purchase of conservation easements for the duration of the County's solar development temporary use permit from cooperating landowners to grow owl/plover-friendly crops using owl/plover-friendly practices, assuming agricultural practices would resume after the temporary use permits expire for solar development projects.

## Mojave Desert Tortoise, Desert Pupfish, Peirson's Milk-vetch, Flat-tailed Horned Lizard, Desert Bighorn Sheep, Burro Deer

With the exception of electrical transmission lines within currently-established utility corridors, renewable energy development should not be contemplated within designated critical habitat for federally listed species, essential habitat identified in recovery plans for federally listed species (e.g., Peninsular bighorn sheep), BLM-designated management areas for the flat-tailed horned lizard, and BLM-designated areas of critical environmental concern, desert wildlife management areas, and recreation area management plan areas. In addition, the Cargo Muchacho district between the Imperial Sand Dunes Recreational Area Management Plan area and the Colorado River also should be avoided for renewable energy development because of the important habitat values associated with the desert dry wash (microphyll) woodlands that are widely distributed across this area. Because of these woodlands, the private (Desert Wildlife Unlimited and other sportsman groups) and public (California Department of Fish and Wildlife and BLM) sectors have historically focused significant work on improving wildlife habitat values for desert bighorn sheep and burro deer to support core populations of these species in the Cargo Muchacho district. Significant amounts of project mitigation for these species (for impacts from the lining of the Coachella and All-American canals) also have been focused in this area.

#### Mr. Jim Minnick (FWS-IMP-14B0291-14CPA0303)

We appreciate the opportunity to provide comments on the Notice of Preparation. The concepts discussed above would be appropriate for including in any mix of environmentally preferred alternatives and the preferred alternative in the draft environmental impact statement for the proposed General Plan amendment. We look forward to working with County on the plan amendment process by continuing to provide technical assistance to maintain healthy wildlife populations in the planning area.

Should you have any questions regarding these comments, or wish further technical assistance, please contact Pete Sorensen of my staff at 760-322-2070, extension 202, or Chris Schoneman at the Sonny Bono Salton Sea National Wildlife Refuge at 760-348-5278.

Sincerely,

Kennon A. Corey Assistant Field Supervisor

cc:

Chris Schoneman, Sonny Bono Salton Sea NWR, Calipatria, CA Jack Crayon, California Department of Fish and Wildlife, Bermuda Dunes, CA

#### Literature Cited

Rosenberg, D.K. and K.L. Haley. 2004. The ecology of burrowing owls in the agroecosystem of the Imperial Valley, California. Pages 120–135 in W.D. Shuford and K.C. Molina (editors). Ecology and Conservation of Birds of the Salton Sink: An Endangered Ecosystem. Studies in Avian Biology 27, University of California Press, Berkeley, CA. 169 pp.

Rosenberg, D.K. 2013. Conservation Relevant Science Burrowing Owls in the Imperial Valley Making Research and Monitoring Matter. Oregon Wildlife Institute and Oregon State University. Power Point presentation at the Imperial Valley Burrowing Owl Workshop, sponsored by Imperial Irrigation District, February 6, 2013.



August 21, 2014

Mr. Jim Minnick Interim Planning and Building Director 801 Main Street El Centro, CA 92243

Re: Notice of Preparation (NOP) for the Programmatic Environmental Impact Report (EIR) for the Imperial County General Plan Renewable Energy and Transmission Element Update

Dear Mr. Minnick,

The Imperial County Air Pollution Control District (Air District) appreciates the opportunity to comment on the above mentioned document. The Air District is concerned about projected increases in emissions from Ozone, PM10, and PM2.5. Since the Imperial County is currently "moderate" non-attainment for ozone, "serious" non-attainment for  $PM_{10}$ , "moderate " non attainment for PM2.5 the Air District implements specific programs to keep air quality from declining in Imperial County. Such programs include the Rules and Regulations of the Air District, the California Environmental Quality Act (CEQA), CEQA Air Quality Handbook for Imperial County, and the Air District State Implementation Plans (SIP's) for Ozone and  $PM_{10}$ .

COUNTY GENERAL PLAN RENEWABLE ENERGY AND TRANSMISSION ELEMENT UPDATE PROGRAMMATIC EIR (County Update PEIR)

CEQA Guidelines section 15168 (a) through (e), gives the general description and advantages of lead agencies using such EIR's. Programmatic EIR's "can be characterized as one large project..." with such advantages as providing for more exhaustive consideration of effects and alternatives, ensuring the consideration of cumulative impacts, avoidance of duplicative reconsideration, reduction in paperwork and allowing a lead agency to consider broad policy alternatives and program wide mitigation measures. CEQA explains that these type of Program EIR's allow for "later activities" considered as within the scope of the Program EIR to fall under

"CEQA compliance" by simply making a statement that the activity is within the scope of the program EIR and that it adequately describes the activity for the purpose of CEQA.

The County Update PEIR, is a broad policy program and not an exhaustive PEIR making any future "later activities" deemed within the scope of the County Update PEIR subject to "CEQA compliance" by virtue of statements. Therefore, the Air District is formally remitting this comment letter in direct response to this very real possibility. The County Update PEIR does not examine the air quality impacts to a degree necessary to make a proper determination of significance. Rather, the lack of a proper analysis would deem any project falling under the County Update PEIR as significant if no Air Quality Study is submitted to properly analyze the impacts to Ozone, by virtue of its precursors,  $PM_{10}$  and  $PM_{2.5}$ . Therefore, in order to protect the public health and welfare any project that falls within the scope of this County Update PEIR must submit at a minimum an Air Quality Study following the program guidelines identified above.

For your reference the Air District's rule book, including all new regulations can be accessed via internet at <u>http://www.co.imperial.ca.us</u> under "Air Pollution Control". Again, thank you for allowing the Air District an opportunity to comment on this project. Should you have any questions please do not hesitate to call the office at 760-482-4606.

Respectfully Submitted,

APC Environmental Coordinator

Cc: Richard Cabanilla Monica Soucier

DEPARTMENT OF TRANSPORTATION DISTRICT 11, DIVISION OF PLANNING 4050 TAYLOR ST, M.S. 240 SAN DIEGO, CA 92110 PHONE (619) 688-6960 FAX (619) 688-4299 TTY 711 www.dot.ca.gov



Serious drought. Help save water!

August 11, 2014

11-IMP-VAR **PM Various** Draft Renewable Energy & Transmission Element NOP / SCH #2014071062

Mr. Jim Minnick Imperial County 801 Main Street El Centro, CA 92243

Dear Mr. Minnick:

The California Department of Transportation (Caltrans) appreciates the opportunity to review the Notice of Preparation (NOP) for the Draft Renewable Energy & Transmission Element Draft Environmental Impact Report (DEIR) - SCH #2014071062. Caltrans has the following comments:

Any future project proposal for encroachment or work performed within Caltrans right-of-way (R/W) will require discretionary review and approval by Caltrans and an encroachment permit will be required for any work within the Caltrans R/W prior to construction.

If you have any questions, please contact Leila Ibrahim of the Development Review branch at (619) 688-6802.

Sincerely

JACOB ARMSTRONG, Branch Chief Development Review Branch







Jim Minnick Interim Director Imperial County Planning & Development Services Department 801 Main St. El Centro, CA 92243

#### VIA EMAIL: jimminnick@imperialcounty.net

RE: Notice of Preparation of Draft Programmatic EIR for Renewable Energy and Transmission Element Update

Dear Mr. Minnick,

Thank you for the opportunity to provide the Imperial County Planning & Development Services Department with comments on the Renewable Energy and Transmission Element Update and its impacts on the environment. Our organizations are actively engaged in planning for renewable energy and conservation in the California deserts. Additionally, Defenders of Wildlife, Sierra Club and Audubon California have been participating in the Technical Advisory Group ("TAG") for County Update since February 2014, and provided previous public comment to the County on the Baseline Environmental Report on July 11, 2014 (attached here). We support Imperial County's ("County") effort to proactively plan for renewable energy development and conservation across the lands under its jurisdiction. As state and federal agencies continue to plan for renewable energy and conservation across the entire California desert through the Desert Renewable Energy Conservation Plan (DRECP), the County of Imperial must continue to pursue localized planning that is specific to the unique biological, cultural, health and economic needs of the County.

Enclosed in this letter is a list of environmental factors specific to Imperial County that we think need to be addressed as the County proceeds with an Environmental Impact Report ("EIR") for the Renewable Energy and Transmission Update to the County General Plan ("Element Update"). Additionally, public comment was requested to inform the goals and objectives and mitigation measures to be incorporated into the Element update. We appreciate the County reviewing the enclosed comments and considering them in the scoping for the EIR.

#### 1. Introduction

Defenders is dedicated to protecting all wild animals and plants in their natural communities. To that end, Defenders employs science, public education and participation, media, legislative advocacy, litigation, and proactive on-the-ground solutions in order to prevent the extinction of species, associated loss of biological diversity, habitat alteration, and destruction.

The Sierra Club is a national nonprofit organization of approximately 2.5 million members and supporters (over 380,000 who live in California) dedicated to exploring, enjoying, and protecting the wild places of the earth. The Sierra Club's concerns encompass protecting our lands, wildlife, air and water while at the same time rapidly increasing use of renewable energy to transition towards a carbon-free future.







Now in its second century, Audubon connects people with birds, nature and the environment that supports us all. Our national network of state programs, community-based nature centers, chapters, scientific, education, and advocacy programs engages millions of people from all walks of life in conservation action to protect and restore the natural world focusing on birds, other wildlife and their habitat.

Our organizations strongly support the emission reduction goals found in the Global Warming Solutions Act of 2006 (AB 32), including the development of renewable energy in California. However, we urge that in seeking to meet our renewable energy portfolio standard in California, environmental information be integrated into the renewable energy planning process to identify the most suitable locations for development. This is essential to ensure that project approval moves forward expeditiously and in a manner that does not sacrifice our fragile landscapes and wildlife in the rush to meet our renewable energy goals.

We commend the County for initiating a Renewable Energy and Transmission Element Update in its General Plan and look forward to working with the County in achieving a plan that supports healthy communities and sustains populations of plants and animals. Planning for renewable energy development at the scale of the County is essential to ensuring that projects are sited in the most appropriate manner possible and that sensitive resources are not sacrificed unnecessarily.

#### 2. Biological Resources

Imperial County is home to unique biological resources which are addressed individually below. We encourage the County to establish policies that follow the mitigation hierarchy to first avoid impacts to these resources, then minimize impacts and finally, once options for avoidance and minimization have been exhausted, to mitigate for impacts to resources as a result of renewable energy development. We recommend the following biological resources be fully considering in the EIR for the Element Update.

• <u>Migratory Birds</u>: The Salton Sea is home to the largest wintering population of migratory birds in the state of California. Many of these birds formerly frequented other wetlands that have since been converted to other land uses. Approximately 90% of the wetlands in the state have been converted and are no longer suitable habitat for migratory birds which makes the Salton Sea even more important. Additionally, the agricultural lands of Imperial Valley are often used as foraging for many species of birds during over-wintering periods.

Due to its importance to birds, the Salton Sea has been identified as a globally significant "Important Bird Area" by the National Audubon Society. <sup>1</sup> The Important Bird Areas Program is part of an international effort by BirdLife International to designate and support conservation efforts at sites that provide significant breeding, wintering, or migratory habitats for specific species or concentrations of birds. Sites are designated based on specific and standardized criteria and supporting data. Imperial Valley was labeled as "globally significant" because of the presence of a significant portion of the global population of **Mountain Plover** wintering here. Mountain Plover is currently being reviewed by the United States Fish & Wildlife Service (USFWS) for listing under the

<sup>&</sup>lt;sup>1</sup> National Audubon Society. 2010. <u>http://web4.audubon.org/bird/IBA/</u>







Endangered Species Act as Federally Threatened and is listed under the International Union for the Conservation of Nature Red List as "Near Threatened" and decreasing in population.

The Imperial Valley Important Bird Area (IBA) is also notable for "the largest California populations of several species occur here, including 30-40% of the global population of wintering Mountain Plover, 70% the state's Burrowing Owls, and the only California population of Gila Woodpecker away from the Colorado River. Late summer, birds dispersing north from the Gulf of California utilize the marshes and flooded fields of the Valley, including Yellow-footed and Laughing gulls and Gull-billed Tern. The impoundments within Finney-Ramer Lakes provide year-round nocturnal roosting sites for herons. Fall roost surveys during 1999 (Shuford et al., 2000) recorded 40,000 Cattle Egrets and nearly 40,000 White-faced Ibis. About half California's winter population of White-faced Ibis occurs here (16,000 birds in mid-1990s, Shuford et al. 1996). About 300 Sandhill Cranes forage during the day in grain fields. Major nesting colonies of egrets are found at Ramer Lake (Great Egret) and Westmoreland (Cattle Egret). Agricultural fields support thousands of wintering White-faced Ibis, Long-billed Curlew, both Snow and Ross' geese, and tens of thousands of gulls. Nearly 10,000 Whimbrel were recorded here on one count in April 1989 (Shuford et al., 2000). Unlined irrigation canals support Least Bittern and scarce rails, including small numbers of California Black and federally endangered Yuma Clapper Rail. These are often concentrated around water seeps out of the bases of some levees that support mesquite and riparian vegetation. These micro-wetlands support desert riparian species such as Lucy's Warbler and California's largest population of Vermilion Flycatchers. This vegetation is also critical for the persistence of Colorado Desert species in the area, including Crissal Thrasher, Black-tailed Gnatcatcher, and Albert's Towhee."2

Salton Sea Important Bird Area (IBA) is notable in that "several bird species occur regularly here and nowhere else in western North America, contributing to the exceptionally high year-round diversity of birds. These include one breeding species, Laughing Gull; two regular, post-breeding visitors: Wood Stork and Yellow-footed Gull; and a migrant and winter-resident shorebird, Stilt Sandpiper. The rare vanrossemii race of Gull-billed Tern breeds in the U.S. only here and at San Diego Bay. The wintering population of **Eared Grebes** on the Sea is the largest concentration in the world (estimates range from 0.3 to 3.5 million birds), and they are joined by thousands of Western and Clark's grebes, likely the largest aggregation of these two species in California (Small 1994). Each summer, tens of thousands of American White Pelicans descend on the Sea, in all about 30% of the North American breeding population. Mullet Island, near the mouth of the Alamo River, hosts one of the largest breeding colonies of **Double-crested Cormorants** in western North America. About 40% of the U.S. population of federally endangered Yuma Clapper Rail, occurs in marshes here. The 2-300 resident Snowy Plover represent one of the largest aggregations in the interior of the U.S., with most of the birds concentrated along the shoreline and adjacent alkali flats in the southwest and southeast corners of the sea. The thousands of Black Terns summering on the Sea may be the largest concentration in North America. Waterfowl (c. 50,000 winter, more in migration)

<sup>&</sup>lt;sup>2</sup> National Audubon Society Important Bird Areas, Site Profile, <u>http://netapp.audubon.org/iba/site/269</u>







and shorebirds (nearly 100,000 in migration) tend to concentrate primarily along the southeast shoreline and secondarily in the north. Waders and their rookeries (thousands of pairs) have also been found to concentrate in the far north and in the southeast. Land bird populations are strongest in remaining areas of native desert scrub or riparian habitat, including along the main rivers and creeks leading into the sea, and within the Torres Martinez Indian Reservation on the north side of the Sea."<sup>3</sup>

We recommend that you note the extraordinary abundance of bird life described above, and that you update the sensitive species list to include any sensitive species you find in the narrative above.

Recently, data has come in from large-scale solar projects that birds, including the federally endangered Yuma Clapper Rail, have been found dead at solar facilities, one of which is located in Imperial County. Due to the fact that there is no standardized mortality monitoring for migratory birds, we do not know the actual impacts of solar energy facilities on populations of bird species; however, evidence is accumulating to support a theory that solar photovoltaic fields reflect light in the same way that a body of water does. Considering the proximity to an area known for high densities of migratory birds, the potential for mortality of threatened or endangered species at solar photovoltaic projects in Imperial Valley must be considered in the EIR for the Element Update.

- Burrowing Owl: The County of Imperial is the stronghold of the Western Burrowing Owl, an iconic species for the people of Imperial County with up to 70% of the total population of California. Burrowing owls nest in water canals owned by the Imperial Irrigation District or private landowners and forage on the agricultural fields most likely to be converted to solar photovoltaic energy. Because the species has been extirpated from its native habitat in most of the rest of California, Defenders of Wildlife and other conservation organizations petitioned to have this species listed under California's Endangered Species Act due to its dwindling populations in throughout the state. The petition was denied in large part due to the stronghold the species has in Imperial Valley. Not including a robust discussion of the opportunities and constraints related to burrowing owl habitat, ecology and population in the Report is a serious omission and does not lead to an accurate assessment of areas appropriate for renewable energy development. We recommend the County work with IID, CA DFW and USGWS and others engaged in burrowing owl conservation and management to develop a robust discussion of current burrowing owl occurrences, best management practices and recommended avoidance, minimization and mitigation measures.
- <u>Flat-tailed Horned Lizard</u>: The flat-tailed horned lizard inhabits portions of the Sonoran Desert, including areas within Imperial County. The lizard has been declining for many years due to habitat conversion to urban development and agriculture. Other threats include climate change, off-road vehicles use, geothermal leases, gravel pits and highways. Flat-tailed horned lizard feeds primarily on native harvester ants, and pesticide drift likely affects ant populations near agricultural areas. Decades of inaction from the federal government to list the species under the federal Endangered Species Act means that it is not sufficiently protected from off-highway vehicles, energy development or other

<sup>&</sup>lt;sup>3</sup> <u>http://netapp.audubon.org/iba/site/215</u>







human uses of land. In 1997, a voluntary Rangewide Management Strategy was implemented to help set aside habitat for the species. These areas need to be included in the Report as sensitive habitat areas that are in need of more durable protection.

• <u>Microphyll Woodland</u>: Microphyll Woodlands refer to assemblages of Blue Palo Verde and Ironwood woodlands that occur in ephemeral washes of the Sonoran desert. Due to the habitat and refuge this plant assemblage provides in the desert for other desert birds, reptiles and mammals, microphyll woodlands are a covered plant community in the DRECP, and conservation areas for this plant assemblage will be identified. In A Natural History of the Sonoran Desert (2000), Mark Dimmit wrote that "dry washes occupy less than five percent of this subsection (the Lower Colorado River subsection) of the Sonoran Desert, but support ninety percent of its bird life. For these reason, we recommend that you calculate plant assemblages that are known as "microphyll woodlands" separately and report the importance of this plant assemblage to birds, especially in the areas such as the Algodones Dunes.

#### 3. Coordination with State and Federal Policies, Laws and Planning Processes

- <u>Desert Renewable Energy Conservation Plan</u>: The DRECP, if approved, will be a Land Use Plan Amendment (LUPA) for the BLM, a Habitat Conservation Plan (HCP) under the Fish and Wildlife Service (FWS), and a Natural Communities Conservation Plan under CA Department of Fish and Wildlife (DFW). The plan is a coordinated planning and analysis process involving federal agencies, tribal governments and other stakeholders. The DRECP aims to identify those areas most suitable for development while providing conservation for species and natural communities that are impacted by the planned level of renewable energy development. The majority of Imperial County falls within the DRECP planning area which highlights the importance of cooperation and collaboration to ensure identification of development areas for renewable energy that take into consideration local considerations while not undermining the landscape-level conservation strategy for the desert as a whole. We hope the County will integrate its planning with that of the DRECP. Specifically, we encourage the County to use the DRECP biological conservation information available on the DRECP DataBasin Gateway<sup>4</sup> to help guide its planning process.
- <u>BLM Solar Energy Program</u>: The Bureau of Land Management (BLM) has identified areas of public land having suitable insolation and relatively low environmental conflicts that are zoned for streamlined permitting of renewable energy projects that employ standardized design features. The BLM Solar Energy Program, and the analysis that accompanied it, included one solar energy zones within Imperial County. The Solar Energy Program called for the identification of new zones on public and/or private lands via processes such as the DRECP. Thus any areas proposed for development by the County on public lands should be screened and ultimately approved through the DRECP, which is also a Land Use Plan Amendment for the BLM, the agency with jurisdiction on the public lands.

<sup>&</sup>lt;sup>4</sup> www.drecp.databasin.org

Imperial County Renewable Energy and Transmission Element Update EIR – NOP Comments Defenders of Wildlife, et al., August 22, 2014







The Solar Energy Program also identified "variance lands," areas that could be subject to development pending a thorough pre-screening process (as outlined in the EIS for the BLM's solar program) but for which development is in no way guaranteed. Some of these lands exist in Imperial County. While some of these lands *may* ultimately be suitable for development, they are subject to a rigorous review process and should be the exception, not the rule. The variance lands should be subject to a thorough analysis not only via the Element Update but via the DRECP. We expect the DRECP will contain substantial biological and other information that will identify areas of likely conflict with BLM variance lands; any such lands should not be proposed as development areas in the Element Update.

#### <u>Salton Sea Planning and Restoration</u>

In partnership with Imperial County, IID is developing a plan that encompasses directed development of renewable energy resources and wildlife habitat on Salton Sea playa. This program will also provide a funding source for further Salton Sea revitalization. Defenders encourages the County to coordinate it's Element Update with this IID and Imperial County planning program to direct renewable energy development and Salton Sea revitalization.

Additionally, there are other efforts underway to revitalize the fish and bird habitat that the Salton Sea provides. We encourage coordination between these Salton Sea restoration efforts and the County Element Update. It is critical to identify where significant investments have been made in habitat and restoration around the Salton Sea so that these investments can be fully realized and not undermined by misplaced renewable energy development.

#### • <u>Relevant federal laws, policies and planning processes</u>

- Endangered Species Act (ESA) (USFWS 1973)
- Invasive Species Executive Order 13112 (FR 1999)
- o Migratory Bird Treaty Act and Executive Order 1318 (FR 2001)
- o Bald and Golden Eagle Protection Act (USFWS 1940)
- o Clean Water Act (USEPA 1972)
- o Protection of Wetlands Executive Order 11990 (USEPA 1977)
- The Bureau of Land Management (BLM) California Desert Conservation Area Plan (BLM 1999)
- Flat-tailed Horned Lizard Rangewide Management Strategy and BLM conservation management areas for this species;
- Habitat Conservation Plan and Natural Communities Conservation Plan for the Quantification Settlement Agreement (QSA) which is jointly managed by Imperial Irrigation District, U.S. Fish and Wildlife Service and the California Department of Fish and Wildlife;
- o BLM's West Chocolate Mountain Renewable Energy Evaluation Area;
- o Imperial Sand Dunes Recreation Area Management Plan;
- Northeastern Colorado (NECO) Desert Plan Amendment to the California Desert Conservation Area;







- Department of Interior's Energy and Climate Task Force Report titled, "A strategy for improving the mitigation policies and practices of the Department of the Interior";
- Department of Defense Guidance regarding development of renewable energy on military lands;
- o Environmental Protection Agency's Repowering America's Lands Program.
- <u>Relevant State laws, policies and planning processes</u>:
  - Quantification Settlement Agreement legislation;
  - o Salton Sea Restoration legislation;
  - o California Department of Fish and Wildlife Staff Report on Burrowing Owl (March 2012).

#### 4. Renewable Energy Technology Considerations

We understand the need to decarbonize our energy sector and support the county in planning for renewable energy technologies that will provide fossil-fuel free electricity. Unfortunately, every form of energy generation, including alternative and renewable sources, comes with impacts to people and the environment. We encourage the County to clearly define each of the technologies that will be addressed in the EIR and to identify the impacts specific to each. Below we offer an overview of the technologies most likely to occur in Imperial Valley, a suggested definition and the associated known impacts to people, wildlife and the environment.

- <u>Utility-scale Photovoltaic Solar Energy</u>: Utility-scale solar energy generation is solar energy generation that is sold to a utility for distribution to load centers. Often the term, utility-scale solar energy generation is used interchangeably with large-scale solar as any solar project that is greater than 20 MW in nameplate capacity. The potential impacts of solar energy development include but are not limited to: loss of wildlife habitat and/or agricultural land, on-going avian mortality, dust emissions and visual impacts.
- <u>Concentrated Solar Power (CSP)</u>: Concentrated solar power facilities use mirrors to reflect sunlight onto a specific location where a heat transfer fluid is used to run a conventional steam turbine. There are parabolic trough CSP facilities and power tower CSP facilities. Each impacts the landscape in unique ways. Some potential impacts from CSP facilities include: loss of wildlife and plant habitat and/or agricultural land, on-going avian and insect mortality, dust emissions, and visual impacts.
- <u>Wind Energy</u>: Wind energy uses wind turbine generators (WTGs) to produce electricity. WTGs come in varying sizes and styles with the newer generation turbines tending towards being very tall with a capacity of 2-3 MWs. All WTGs have the potential to harm avian and bat species. Additionally, large-scale wind farms can consist of 50 or more WTGs that require service roads and other land-based impacts that disrupt landscape connectivity and intactness.
- <u>Geothermal Energy</u>: Geothermal energy is geographically and geologically restricted to areas where magma is close to the Earth's surface. One of these areas is around the southeastern side of the Salton Sea. Water is heated near the magma below the Earth's surface and wells bring the heated water and steam to the surface to run steam turbine generators. Geothermal takes up much less land and air space than either wind or solar and thus has few impacts. The Element Update EIR should address potential impacts to water resources. Additionally, due to the high upfront costs of drilling, the Element Update EIR should include an economic analysis of this renewable resource that includes valuation of the resource in terms of reliability, longevity and impacts to the environment.







- <u>Small-scale Distributed Solar</u>: The Element Update should address and provide incentives for localized distributed generation. As renewable energy technology becomes more sophisticated, the opportunities for community-based renewable energy that is generated close to the point of use will expand. The Element Update should anticipate this potential future and encourage well-planned distributed generation and small-scale power projects. These types of projects are expected to reduce impacts to species and agricultural lands that result from large-scale remote power plants and their associated transmission facilities. The Element Update should ensure that small-scale projects that supply multiple users, such as a homeowner's association rooftops or local solar panel facilities, are not excluded from areas outside the areas identified for development in the Element Update. For example, a commercial park would potentially have significant rooftop area which could be used to supply power to all entities in the commercial park. The Element Update should consider and address any current limitation on rooftop or parking lot solar facilities, as well as other areas outside identified development areas that could be suitable for solar, and ensure they are promoted.
- <u>Other Alternative Energy Technologies</u>: Imperial Valley and the Salton Sea has seen interest from developers of other types of alternative energy technologies such as deep solar ponds and hypersaline brine ponds, algae and biofuels. The Element Update EIR should closely examine each of these alternative energy technologies and carefully decide if they will be included in the Element Update and therefore evaluated in the EIR. In analyzing each of these potential alternative energies, close attention should be paid to impacts to water resources, agricultural land and wildlife and plant habitat. Additionally, the County should carefully consider the viability of new alternative energy technologies when determining the need to plan for them in this current Renewable Energy and Transmission Element Update.

#### 5. Transmission Considerations

Transmission is a major constraint for Imperial County renewable energy development. The Element Update EIR should address the remaining transmission capacity and likely upgrades and new capacity. Resources for this information would include the California Independent System Operator (CalISO) or Imperial Irrigation District, depending on which balancing authority governs the project location. In order to site generation near transmission, the transmission must have available capacity.

Recently Audubon California, Sierra Club, Defenders of Wildlife and NRDC submitted comments<sup>5</sup> to the California Independent System Operator regarding an Imperial County draft discussion paper and a California Energy Commission-funded environmental feasibility study<sup>6</sup> for transmission from Imperial County to load centers along the coast. In these comments, we stress that sustainably-sited and operated renewable energy generation, especially geothermal, could bring multiple benefits to Southern California. Transmission lines to deliver these resources to San Diego and the LA Basin should be sited in accordance

<sup>&</sup>lt;sup>5</sup> Sierra Club, et al. Comments RE: California Independent System Operator's Imperial County draft discussion paper comments. July 28, 2014.

<sup>&</sup>lt;sup>6</sup> Lee, Susan, Brewster Birdsall (Aspen Environmental Group) 2014. *Transmission Options and Potential Corridor Designations in Southern California in Response to Closure of San Onofre Nuclear Generating Stations (SONGS): Environmental Feasibility Analysis.* California Energy Commission. Publication Number: CEC-700-2014 ("Aspen Analysis").







with the Garamendi Principles<sup>7</sup> and avoid or minimize harm to sensitive wildlife and wild places. We recommend that Imperial County include this data from the CalISO and CEC in the transmission analysis of the Element Update.

#### 5. Conclusion

We appreciate the opportunity to provide these comments in response the County's Notice of Preparation of an EIR for their Element Update. These comments included in this letter are intended to highlight some of the key issues related to renewable energy and transmission that we would like to see the County address in its EIR for the Element Update. Please call or email if you would like to discuss the comments further.

Respectfully Submitted,

Hephenie Pashiel

Stephanie Dashiell California Representative Defenders of Wildlife

Saran K. Friedman

Sarah Friedman Senior Campaign Representative Beyond Coal Campaign Sierra Club

CC: Richard Cabanilla, Richard.Cabanilla@co.imperial.ca.us Andy Horne, AndyHorne@co.imperial.ca.us

Garry George Renewable Energy Director Audubon California

<sup>&</sup>lt;sup>7</sup> Senate Bill 2431, Garamendi, Chapter 1457, Statutes of 1988.

Imperial County Renewable Energy and Transmission Element Update EIR – NOP Comments Defenders of Wildlife, et al., August 22, 2014





protecting and restoring natural ecosystems and imperiled species through science, education, policy, and environmental law

8/22/2014

Jim Minnick, Interim Director, Planning & Development Services Department, Imperial County 801 Main Street, El Centro, CA 92243 jimminnick@co.imperial.ca.us jimminnick@imperialcounty.net

## **RE:** Scoping Comments on Imperial County General Plan Renewable Energy and Transmission Element Update Programmatic Environmental Impact Report.

Dear Director Minnick,

These comments are submitted on behalf of the Center for Biological Diversity's 775,000 staff, members and on-line activists in California and throughout the United States including members and activists in Imperial County, regarding Imperial County's General Plan Renewable Energy and Transmission Element Update Programmatic Environmental Impact Report.

The development of renewable energy is a critical component of efforts to reduce greenhouse gas emissions, avoid the worst consequences of global warming, and to assist California in meeting its climate goals. The Center for Biological Diversity (the "Center") strongly supports the development of renewable energy production, and particularly supports planning efforts to ensure that projects are sited appropriately to protect wildlife and other natural resources. Like all types of development, renewable energy projects should be thoughtfully planned to minimize impacts to the environment. In particular, renewable energy generation and transmission projects should avoid impacts to sensitive plant and animal species and habitats.

We support Imperial County seeking and acquiring state funding to implement effective renewable energy planning in the County – planning is a good idea. The Desert Renewable Energy Conservation Plan (DRECP) provides a unique opportunity to effectively plan for both renewable energy and conservation at a landscape level in parts of Imperial County. We believe the DRECP may play a valuable role in identifying those lands most appropriate for renewable energy development and those lands that are most important to conserve as well as actions that can be undertaken to protect sensitive plant and animals and their habitat. Therefore, further coordination with the DRECP may provide a cohesive strategy for Imperial County's unique natural resources.

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As proposed in the Notice of Preparation, the Renewable Energy and Transmission Element Update will provide a comprehensive document that contains the latest knowledge about renewable energy resources, feasible development technology, legal requirements, policies (County, State, and Federal), and implementation measures. It conjunction with this Element Update, the County should maximize the value of its planning effort and also update the Conservation Element to assure that areas determined to be inappropriate for renewable energy development (and other types of development) because of sensitive resources constraints are appropriately identified and mapped in the Conservation Element as well. All sensitive resources should be identified and included in the Conservation Element to provide a conservation framework for the General Plan and head off setting up conflicts between sensitive resources and renewable energy development or other development in the future.

#### A. The DEIR Needs to Adequately Describe Environmental Baseline

The DEIR needs to provide adequate baseline information and description of the environmental setting for many resources including in particular the status of rare plants, animals and communities such as the flat-tailed horned lizard, desert tortoise, golden eagles, rare plants, riparian resources, and sand transport corridors. Although we are pleased to see the County develop an Environmental Impact Report (EIR) for this plan update, we are concerned that the County is beginning this process relying on inaccurate and outdated data sets as presented in the Baseline Environmental Inventory Report – Draft – Imperial County Geothermal/Alternative Energy and Transmission Element Update. We submitted comments to the County on that document, attach them here for your reference (attachment), and incorporate them herein.

## **B.** The DEIR Must Identify a Reasonable Range of Alternatives to Analyze as Part of the CEQA Process.

We urge the County to create a reasonable set of development alternatives that do not include lands with protective land use designations, known habitat and known occurrences of special status species or other key resources including flat-tailed horned lizard habitat, desert tortoise habitat and other key species. We believe by selecting lands with few environmental values for development the County will conserve financial resources and reduce resource conflicts. Including high conflict areas for development will only lead to permitting complexity, project delays and controversy, making them unattractive locations for development. Given the very high quality solar resources in the County, the EIR should also consider at least one alternative that focuses on distributed energy within the County including programs to increase rooftop and parking lot solar and to integrate electric cars and other storage elements into the local grid. Micro-grids can provide significant benefit to local areas on a daily basis and in emergency situations and deliver energy even when larger network grids fail.

The County may want to consider phasing the development of areas based on on-going renewable energy technological improvements, efforts to increase energy efficiency and reduce energy consumption, and increasing distributed energy generation at the site of consumption. It is likely that the new clean energy economy will use all of these solutions and more. In addition, a mechanism for reviewing new information regarding the impacts of large-scale renewable

energy projects should be integrated into the plan so that if, for example, new design features or set backs from key resources are found to avoid impacts to species the development areas can be more easily redesigned to include the new information.

## C. The DEIR Must Be Coordinated With BLM's Renewable Energy PEISs and the DRECP

With so much planning occurring in the California deserts at this time, we strongly urge the County to take into account and coordinate planning that is occurring on public lands within the County and outside of the County's boundaries. We presume that the County will be dovetailing their General Plan update with the ongoing planning for the DRECP. While we recognize that the BLM's Solar PEIS designated a Solar Energy Zone in Imperial County that appears to be terrestrially well sited, we would not recommend including BLM Solar Energy Program variance lands areas as suitable for renewable energy development because the variance lands have *not* necessarily been vetted as optimal for renewable energy facility development and we believe no variance lands should be developed until the Solar Energy Zones, identified in the Solar PEIS, are built out.

# **D.** Identify the most appropriate locations in the planning area for the development of utility-scale renewable energy projects, taking into account potential impacts to threatened and endangered species, sensitive natural communities, and cultural resources:

We suggest that the best way to approach determining the most appropriate locations for utility-scale renewable energy projects is after the biological resources conservation goals, objectives and reserves are identified and transmission fully mapped. It becomes essentially a step-down or filtering process, with identification of the biological conservation strategy taking priority over identification of where utility-scale energy projects may be located – preferably near existing transmission.

#### E. Additional issues to be addressed:

Additional issues that need to be included analyzed and addressed:

- Avoid impacts to the Important Bird Areas including the Salton Sea, Imperial Valley, Lower Colorado River Valley, and the Colorado Desert Microphyll Woodlands. These areas are crucial breeding, resting and feeding locations for migratory and resident birds.
- Raptors avoid impacts to the Swainson's hawk migration corridor on the west side of the County by precluding any additional wind development in the area.
- Avoid impacts to golden eagles throughout the County and if projects are proposed in eagle territories.
- Avoid impacts to flat-tailed horned lizard habitat.
- Require all renewable energy projects to monitor for impacts to species and to report to the County on a monthly basis and require that those reports be made available to the public. The County should prohibit any project from claiming confidentiality regarding reports on impacts to natural resources within the County—if the County is permitting

the project it must require full transparency regarding impacts to public trust resources in the County including water and wildlife.

- Minimize and track water usage: water usage needs to be evaluated and minimized. Excessive water usage should disqualify a project even if they are minimizing water usage to the extent possible – especially given current and likely future problems with water availability from the Colorado River.
- In general, preference should given to the least disruptive technologies even if not most profitable. Technology will change so the general plan amendment and associated maps, etc. should have a mechanism for ongoing adaptive revision based on new/additional information and technology (not just wait for possible overall revision of renewable energy and transmission element at some possible future date).
- Small scale projects also need to be considered including distributed generation (residential and commercial roof top, parking lots, etc.) Small scale co-op projects are being now developed in some states. For example, a commercial park would potentially have significant rooftop area which could be used to supply power to all entities in the commercial park.
- Appropriate levels of renewable energy intensity should be incorporated e.g., an area might be suitable for some low intensity development but for not for high.

In moving forward with renewable energy planning, we encourage the County to begin with a realistic initial proposal and alternatives for the General Plan Renewable Energy and Transmission Element Update and provide a mechanism to add more lands for development if needed at a later time. The County should accurately address the community/stakeholder perspectives and concerns raised regarding the baseline issues as noted above.

We appreciate the opportunity to comment on this scoping notice for the **General Plan Renewable Energy and Transmission Element Update DEIR**, and look forward to working with the County to develop a reasonable planning strategy to implement renewable energy and transmission in Imperial County while protecting its world class wildlife resources and natural communities from degradation.

Sincerely,

16 3 Centra

Ileene Anderson Center for Biological Diversity

cc via email: Andy Horne, Deputy County Executive Officer, <u>andyhorne@co.imperial.ca.us</u> Richard Cabanilla, Planner IV, <u>richardcabanilla@co.imperial.ca.us</u>

Attachment: Center Comments on Baseline Environmental Inventory Report – Draft – Imperial County Geothermal/Alternative Energy and Transmission Element Update

Attachment



protecting and restoring natural ecosystems and imperiled species through science, education, policy, and environmental law

via email and USPS

7/11/2014

Richard Cabanilla Imperial County Planning & Development Services 801 Main Street El Centro, CA 92243 <u>RichardCabanilla@co.imperial.ca.us</u>

## **Re:** Comments on Baseline Environmental Inventory Report – Draft – Imperial County Geothermal/Alternative Energy and Transmission Element Update.

Dear Mr. Cabanilla

These comments are submitted on behalf of the Center for Biological Diversity's 775,000 staff, members and on-line activists regarding Baseline Environmental Inventory Report – Draft – Imperial County Geothermal /Alternative Energy and Transmission Element Update. Via this process, the County proposes to generate and adopt a General Plan Land Use Designation that would steer renewable energy development into the adopted zones. The Center supports the County's efforts begin a rational process of planning for renewable energy development on private and public lands within the County. Continued work is needed to ensure that this planning process will have the desired results and that the development of renewable energy in Imperial County is properly sited to avoid significant impacts to environmental resources to the greatest extent feasible.

The development of renewable energy is a critical component of efforts to reduce greenhouse gas emissions, avoid the worst consequences of global warming, and to assist California in meeting carbon emission reductions. The Center for Biological Diversity (the "Center") strongly supports the development of renewable energy production, and we particularly support planning efforts to ensure that projects are sited appropriately. Like any industrial project, renewable energy projects should be thoughtfully planned to minimize impacts to the environment. In particular, renewable energy projects should avoid impacts to sensitive species and habitats, and should be sited in proximity to the areas of electricity end-use and existing transmission in order to reduce the need for extensive new transmission corridors or lines and the efficiency loss associated with extended energy transmission. Only by maintaining the highest environmental standards with regard to local impacts, and effects on species and habitat, can renewable energy production be truly sustainable.

While the development of renewable energy on already heavily disturbed or type converted lands can is preferable to avoid and reduce impacts, recent data from the recently-constructed large-scale solar and wind projects raises additional concerns. For example, the *Arizona* • *California* • *Nevada* • *New Mexico* • *Alaska* • *Oregon* • *Washington* • *Illinois* • *Minnesota* • *Vermont* • *Washington, DC* 

recent USFWS report<sup>1</sup> on the potential attraction of avian species to solar projects – photovoltaic, power tower and trough technologies-- raises particular concerns for Imperial County which provides world-class migratory bird habitat. The County will need to address fully this issue through this process in light of the fact that the Salton Sea and the Colorado River are meccas for birds, part of the Pacific Flyway, and act as funnels for migratory birds. We found the Baseline Environmental Inventory Report sorely lacking in its "inventory" of biological resources and offer the following comments on Baseline Environmental Inventory Report.

#### I. Missing Data Sets

The Baseline Environmental Inventory Report – Draft – Imperial County Geothermal/ Alternative Energy and Transmission Element Update document is insufficient in its biological inventory, because it is missing numerous key data sets that are critical to analyses of resources in the County as the renewable energy planning moves forward. The mere mention of a very rare or listed species interspersed with more common species, downplays the vulnerability of these species and the need for a comprehensive evaluation of their status within the County's boundaries prior to developing the energy and transmission element. While Appendix C provides an extensive *list* of rare, threatened and endangered species in Imperial County, the report itself provides little information on the actual status of the species in the County. More comprehensive baseline information is requisite in order to evaluate the "best places" (i.e. places with the lowest conflicts to rare species and communities) to put renewable energy in Imperial county.

#### Flat –tailed Horned Lizard

The Draft Baseline Environmental Inventory Report fails to recognize or include any of the Management Areas established for the critically imperiled flat-tailed horned lizard. BLM has established the East Mesa, West Mesa and Yuha Basin as Management Areas for flat-tailed horned lizard, in which a 1% acreage development cap has been instituted. In addition, parts of Ocotillo Wells State Vehicular Recreation Area are also designated as a Research Management Area for the flat-tailed horned lizard. These areas are all available as GIS layers. Information on this declining and threatened species needs to be included in the baseline report and subsequent analyses.

Because ongoing declines in the species due to conversion of and impacts to its habitat, the Center recently petitioned the California Fish and Game Commission to list the species as threatened under the California Endangered Species Act<sup>2</sup>.

Based on current reports of high mortalities, including daily translocations of up to a dozen flat-tailed horned lizards in violation of permitting conditions at a solar project currently under construction, the Baseline Environmental Inventory Report should also include standardized

<sup>1</sup> Kagan et al 2014.

<sup>2</sup> http://www.biologicaldiversity.org/species/reptiles/flat-

tailed\_horned\_lizard/pdfs/FTHL\_CESA\_Petiton\_June\_9\_2014.pdf

protocols in consultation with the state and federal wildlife agencies for avoidance of flat-tailed horned lizards and preservation of their habitats.

#### **Raptors**

As the County is aware, raptors are an integral part of the ecological fabric, providing many services through predation of small mammals, insects etc. Below we discuss some of the high profile raptor species that are documented to occur in Imperial County. However, numerous other raptors also call Imperial County home and the Baseline Environmental Inventory Report needs to include a comprehensive write-up on all of them.

#### Swainson's Hawk

As the County is also aware, one of the great migration corridors for the state-listed threatened Swainson's hawk (*Buteo swainsoni*), and a sizeable migration corridor for turkey vultures (*Cathartes aura*) which are protected under the Migratory Bird Treaty Act, have been documented in Imperial County. The Swainson's hawk migration corridor was first detected in 2003. This migration corridor for both species has been systematically documented annually each spring since 2003 from February through April. In 2011 alone, 8,902 Swainson's hawks were counted in nearby Borrego Valley. 1,437 turkey vultures were also documented last year. All these data are available at <u>http://hawkcount.org/siteinfo.php?rsite=545</u>. Clearly these data need to be included as part of the Baseline Environmental Report.

#### Golden Eagle

The County also supports breeding populations of golden eagles, a fully protected species in California and protected federally under the Bald and Golden Eagle Protection Act. The BLM's 1980 Desert Plan identified golden eagle nesting territories, at least ten of which are in or overlap with Imperial County boundaries. While desert eagles have great fidelity to their nesting territories, the BLM has also done recent surveys for eagle territories showing wide ranging use of varying habitat types, and we urge the County to include all of these data sets in the Baseline Environmental Report

#### Burrowing Owl

The Baseline Environmental Report fails to address the burrowing owl, despite the fact that Imperial County is the last stronghold for the owl remaining in California. Much effort has been put into monitoring of burrowing owl populations in Imperial County and the most recent monitoring results<sup>3</sup> indicate an 18% decline in the number of territories. Converting additional agricultural lands to renewable energy projects could have significant impacts on burrowing owls, who depend on agriculture for foraging.

<sup>3</sup> http://www.iid.com/Modules/ShowDocument.aspx?documentid=8171

#### Peninsular Bighorn Sheep

While the Baseline Environmental Report maps the federally and state endangered Peninsular bighorn sheep's critical habitat, and mentions the bighorn population, critical habitat is not the only habitat that is necessary for the sheep's survival and recovery. Indeed, surveys for a renewable energy project in 2009 documented a ewe group dozens of miles from critical habitat in the flatlands between Evan Hawes Highway and Interstate 8. Low elevation habitats including alluvial fan areas adjacent to designated critical habitat and other areas, while clearly not lambing habitat, still provide crucial foraging areas for the bighorn, and must be identified as such in the Baseline Environmental Report.

#### Rails

The Yuma clapper rail is critically endangered and protected by both state and federal Endangered Species Acts. Over the last year and two months, two Yuma clapper rail deaths have been reported on PV solar sites, one in Imperial County. It is unclear if the population can sustain this level of mortality or the likely mortality from additional projects already approved and under construction. The baseline information needs to be robust and direct, indirect and cumulative impacts to this species must be fully considered in this planning effort.

The California black rail is a state threatened and fully protected species that also needs to be evaluated.

The Baseline Environmental Inventory Report needs to include much more data on the status of both rails in Imperial County and great care needs to be taken to craft an alternative energy and transmission element that does not further endangered these unique and declining birds.

#### **Bats**

Over a dozen different species of bats are documented to occur in Imperial County, including the Townsend's big eared bat, which we have petitioned<sup>4</sup> for Endangered Species Act protection in California. The California Fish and Wildlife Commission subsequently named the Townsend's big-eared bat a candidate for protection as an endangered species. Candidate status provides immediate protection to the bat. The full diversity of bats needs to be well documented in the Baseline Environmental Inventory Report.

#### Cryptobiotic Soil Crusts Should be Identified and Evaluated.

One of our concerns in Imperial County is the generally poor air quality, and its effects on not only wildlife, but the human population. The Imperial Air Pollution Control District regularly documents non-attainment for PM-10 particulate matter<sup>5</sup>. Disruption of naturally occurring cryptobiotic soil crusts will further increases emissions of these types of particles.

<sup>4</sup> http://www.biologicaldiversity.org/species/mammals/pdfs/CBD\_TBEB\_petition.pdf

<sup>5</sup> http://www.co.imperial.ca.us/airpollution/default.htm

Cryptobiotic soil crusts are an essential ecological component in arid lands. They are the "glue" that holds surface soil particles together precluding erosion, provide "safe sites" for seed germination, trap and slowly release soil moisture, and provide  $CO_2$  uptake through photosynthesis<sup>6</sup>.

Satellite technologies have now improved to the point that these types of soils can be detected, and indeed the BLM is inventorying the cryptobiotic soils remotely in the Riverside-East Solar Energy Zone, as part of their monitoring efforts. The Baseline Environmental Inventory Report needs to include information on and mapping of these important cryptobiotic soil crusts and include information on their extent within the County. It would benefit the environment overall and the County's residents in particular to keep these soils in place, through avoidance of disturbance.

#### Desert Washes, Ephemeral Streams, and Riparian Areas

Because of the uniqueness of water resources in the desert, all desert washes, ephemeral streams and riparian areas should be identified and ultimately avoided by development. As the County is well aware desert riparian areas are fragile and disturbance of the soils in these areas can significantly increase erosion and sedimentation. Although water is scarce and flooding infrequent in desert regions, ephemeral and intermittent streams are a significant ecosystem component and washes are critical to the survival of many native plants and animals. See, e.g., Levick, et al. (2008). "Ephemeral and intermittent streams make up approximately 59% of all streams in the United States (excluding Alaska), and over 81% in the arid and semiarid Southwest (Arizona, New Mexico, Nevada, Utah, Colorado and California)." Id. at iii. Ephemeral and intermittent streams provide the same ecological and hydrological functions as perennial streams by moving water, nutrients, and sediment throughout the watershed. When functioning properly, these streams provide landscape hydrologic connections; stream energy dissipation during high-water flows to reduce erosion and improve water quality; surface and subsurface water storage and exchange; ground-water recharge and discharge; sediment transport, storage, and deposition to aid in floodplain maintenance and development; nutrient storage and cycling; wildlife habitat and migration corridors; support for vegetation communities to help stabilize stream banks and provide wildlife services; and water supply and water-quality filtering. They provide a wide array of ecological functions including forage, cover, nesting, and movement corridors for wildlife. Because of the relatively higher moisture content in arid and semiarid region streams, vegetation and wildlife abundance and diversity in and near them is proportionally higher than in the surrounding uplands. Id.

#### Groundwater

The very limited groundwater information in the Report is inadequate to provide a meaningful baseline for analysis. For example, the Report fails to identify the Ocotillo-Coyote Wells Aquifer as a sole source aquifer designated on September 10, 1996. 61 Fed. Reg. 47752-53. The EPA determined that the aquifer "serves as the 'sole source' of drinking water for the

<sup>6</sup> Belnap 2003, Belnap et al 2003, Belnap 2006, Belnap et al. 2007

residents of Ocotillo, Coyote Wells, Yuha Estates and Nomirage." *Id.* at 47753. Further, the EPA determined that the aquifer should be protected because "[t]here is no economically feasible alternative drinking water source near the designated area." *Id.* As the EPA noted the boundary of the sole source aquifer area at the Elsinore Fault "separates the sole source aquifer area, which contains high quality, potable water, from high saline, non-potable water to the east of the fault." *Id.* This designation protects this aquifer from contamination by all activities whether by actively polluting the water source or by degradation of water quality due to excessive pumping and overdraft. The baseline report must be revised to include this information.

#### **Important Bird Areas**

The Baseline Environmental Inventory Report fails to include Audubon's Important Bird Areas within the County. The IBAs are a key biological designation that provides baseline information that is otherwise absent. The IBAs need to be used as part of the baseline for analysis of how to craft a sustainable alternative energy and transmission element in Imperial County.

#### Wildlife Connectivity

Wildlife connectivity is a critical feature of landscape-level planning for species survival and recovery, including adaptation to climate change. The Baseline Environmental Inventory Report fails to include any identification of key wildlife connectivity corridors. Numerous studies<sup>7</sup> are available for this issue and connectivity needs to be included in the baseline.

#### **II. Baseline Environmental Inventory Report Inaccuracies**

In our quick review of the Baseline Environmental Inventory Report, in addition to the failure to include crucial biological information noted above, the Baseline Environmental Inventory Report also includes inaccuracies.

- Figure 2.1 (pg 24 of the PDF) shows the "Yuma Desert", when it is actually the **Yuha** Desert. It also treats areas inconsistently. For example, the Picacho State Recreation Area is prominently featured, yet other State-managed areas, including Anza Borrego Desert State Park and the Salton Sea State Recreation Area are not.
- Table 5-2: CNDDB Sensitive Habitats within Imperial County (pg 56 of the PDF) fails to include **Active Desert Dunes** as a CNDDB Sensitive Habitat, which it is.
- Figure 5.4 (pg 60 of the PDF) the Peirson's milkvetch critical habitat is inaccurate and missing a large swath of this federal designation. Also on this map, it is hard to see the critical habitat designations because of scale for some very localized species: for example

<sup>7</sup> http://scwildlands.org/reports/ALinkageNetworkForTheCaliforniaDeserts.pdf;

http://scwildlands.org/reports/CEHC Plan MASTER 030210 3.pdf ; Spencer, W.D., P. Beier, K. Penrod, K. Winters, C. Paulman, H. Rustigian-Romsos, J. Strittholt, M. Parisi, and A. Pettler. 2010. California Essential Habitat Connectivity Project: A Strategy for Conserving a Connected California. Prepared for California Department of Transportation, California Department of Fish and Game, and Federal Highways Administration (available at http://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18366 )

the southwestern willow flycatcher designated critical habitat looks like it is a CDFW Wildlife Areas & Ecological Reserve (note also the typo on the map legend for this designation) or a U.S. Fish & Wildlife Service National Wildlife Refuge. While we recognize scale is an issue here, appropriate color selection can help to clarify what is being represented.

- Pg. 64 of PDF last bullet. "Future development should not prevent wildlife movement by removal of foraging and resting habitat for migratory birds within the Pacific Flyway corridor or movement within large and small open space corridors for amphibians, reptiles, and mammal species." This bullet should not be restricted to animals; plants also need to move on the landscape.
- Figure 8-1 (pg 96 of PDF). The US Gypsum/Plaster City Plant is mislocated.
- Figure 11-1 (PDF 123) appears to have significant data gaps that are not acknowledged (e.g., showing no surface waters near the Colorado River).

#### III. Protocol level Surveys Required

We recognize that the Baseline Environmental Inventory Report is intended to be an initial reckoning of what occurs in Imperial County and that the County in subsequent documents will require wildlife agency protocol surveys as part of the County's requirements for development. While this list is not comprehensive, the following are easily accessible protocols that the County should require to be followed, among others, as part of this general plan element update:

- Rare plants & plant communities: <u>https://www.dfg.ca.gov/biogeodata/cnddb/pdfs/Protocols\_for\_Surveying\_and\_Evaluating\_Impacts.pdf</u>
   <u>http://www.fws.gov/sacramento/es/Survey-Protocols-Guidelines/Documents/Listed\_plant\_survey\_guidelines.pdf</u>
   <u>http://www.fws.gov/sacramento/es/Survey-Protocols-Guidelines/Documents/rare\_plant\_protocol.pdf</u>
   <u>Dec\_adadage\_for\_adadage\_for\_for\_for\_for\_black\_comments/commen</u>
- Barefoot Banded Gecko <u>https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=39305</u>
- Desert tortoise <u>https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83918</u> <u>http://www.fws.gov/ventura/docs/species/protocols/dt/DT%20Pre-project%20Survey%20Protocol\_2010%20Field%20Season.pdf</u> <u>http://www.fws.gov/ventura/docs/species/protocols/dt/Table%203\_DT%20Preproject%20Survey%20Protocol\_2010.xls</u>
- Burrowing owl <u>https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83842</u>

#### **IV.** Alternatives

Because this document is a Baseline Environmental Inventory Report, we were surprised to see three "Alternative Energy and Transmission Element" alternatives. We believe these alternatives belong in the CEQA documents and not the Baseline Environmental Report. That said, all of the alternatives include DFAs in East Mesa flat-tailed horned lizard Management Areas and Ocotillo Wells Research Area that appear to encompass much more than 1% of the Management Area, exceeding the permitted development level. This is unacceptable.

#### **V.** Conclusion

The Center urges Imperial County to revise the Baseline Environmental Report to more comprehensively document the existing environmental baseline, so that it fully identifies the current baseline and can be used as a basis for the analyses of impacts as the County develops a supplemental DEIS/R. The revised Report should address all of the inadequacies detailed in our letter above and others. Please feel free to contact me with any questions.

Sincerely,

Henrico

Ileene Anderson Biologist/Public Lands Desert Director Center for Biological Diversity

cc: via email Pete Sorensen, USFWS, <u>Pete\_Sorensen@fws.gov</u> Madgalena Rodriguez, CDFW <u>Magdalena.Rodriguez@wildlife.ca.gov</u> Tom Plenys, EPA, <u>plenys.thomas@epa.gov</u>

#### **References: (Provided on CD-Rom disc)**

Belnap, J., S. L. Phillips, J. E. Herrick, J. R. Johansen. 2007. Wind erodibility of soils at Fort Irwin, California (Mojave Desert), USA, before and after trampling disturbance: Implications for land management. Earth Surface Processes and Landforms 32(1):75-84.

Belnap, J. 2006. The potential roles of biological soil crusts in dryland hydrologic cycles. Hydrological Processes 20: 3159-3178.

Belnap J. 2003. The world at your feet: Desert biological soil crusts. Frontiers in Ecology and the Environment 1(5):181-189.

Belnap J., S. L. Phillips, M. Duniway, R. Reynolds. 2003. Soil fertility in deserts: A review on the influence of biological soil crusts and the effect of soil surface disturbance on nutrient inputs and losses. In: A. S. Alsharhan, W. W. Wood, A. Goudie, A. R. Fowler, and E. M. Abdellatif, editors. Desertification in the Third Millennium: Lisse, The Netherlands, Swets & Zeitlinger (Balkema), pp.245-252.

Kagan, R.A., T.C. Viner, P.W. Trail, E.O. Espinoza. 2014. Avian mortality at solar energy facilities in southern California: a preliminary analysis. National Fish and Wildlife Forensics Laboratory. Pgs. 28.

Levick, L., J. Fonseca, D. Goodrich, M. Hernandez, D. Semmens, J. Stromberg, R. Leidy, M. Scianni, D. P. Guertin, M. Tluczek, and W. Kepner. 2008. The Ecological and Hydrological Significance of Ephemeral and Intermittent Streams in the Arid and Semi-arid American Southwest. U.S. Environmental Protection Agency and USDA/ARS Southwest Watershed Research Center, EPA/600/R-08/134, ARS/233046, 116 pp.

#### **Supporting Documents Provided as Internet Links:**

United States Fish and Wildlife Service

2003. Status Assessment and Conservation Plan for the Western Burrowing Owl in the United States. Biological Technical Publication BTP-R6001- 2003. Pgs 120. <u>http://www.fws.gov/mountain-prairie/species/birds/wbo/Western%20Burrowing%20Owlrev73003a.pdf</u>

2000. Recovery Plan for bighorn sheep in the Peninsular Ranges. U.S. Fish and Wildlife Service, Portland, OR. xv+251 pp. http://www.fws.gov/carlsbad/SpeciesStatusList/RP/20001025 RP PBS.pdf



August 15, 2014

Jim Minnick, Interim Director Imperial County Planning & Development Services Department 801 Main Street El Centro, CA 92243

The Protect Our Communities Foundation P.O. Box 305 Santa Ysabel, CA 92070 Send correspondence to: <u>kelly@kellyfuller.net</u>



AUG 18 2014

#### IMPERIAL COUNTY PLANNING & DEVELOPMENT SERVICES

#### Subject: Scoping Comments for the Renewable Energy and Transmission Element Update's Programmatic Environmental Impact Report

Dear Mr. Minnick:

Thank you for the opportunity to participate in scoping for Imperial County's Renewable Energy and Transmission Element's (RETE's) Programmatic Environmental Impact Report (PEIR). These comments are provided on behalf of The Protect Our Communities Foundation (POC). POC protects rural communities and natural resources from unnecessary and harmful large-scale and industrial energy projects, and advances smart energy solutions. POC's areas of focus are San Diego and Imperial Counties, and northern Baja Mexico.

#### I. Alternatives to Be Analyzed in the PEIR

To reduce the impacts of renewable energy and transmission line development on wildlife, habitat, groundwater, and fertile farmland, the PEIR should include an alternative consisting of renewable energy distributed generation projects near demand centers in already-disturbed areas. It should include, but not be limited to, rooftop solar on residential and commercial structures.

#### II. Impacts to be Analyzed in the PEIR

The PEIR should analyze the following impacts:

• Impacts to fertile farmland and ranchland, the people who are dependent on fertile farmland and ranchland for their livelihoods, and other socio-economic impacts of increasing renewable energy development and transmission lines in Imperial County's heavily agricultural economy. This should include the impacts of reducing the availability of fertile farmland to agricultural producers, including the next generation of farmers attempting to become established, as well as to agricultural service providers such as baling services and general farm laborers. The socio-economic impacts and impacts on biological resources as a result of changes in water availability and decreased water runoff to the Salton Sea triggered by conversion of fertile farmland and ranchland to energy production and transmission should also be analyzed. Because of the inherent difficulties in restoring desert soils, conversion of fertile farmland and ranchland to energy production and transmission should be treated as a permanent, not temporary, impact.

- Impacts to biological resources including
  - Destruction and modification of wildlife habitat;
  - Direct mortality of wildlife, including species protected by state and federal law. The wildlife impacts of some renewable energy technologies are better known than others. For example, wind energy impacts to birds and bats are fairly well known, while the potential impacts of deep solar ponds are not. Will avian species mistake deep solar ponds for available bodies of water and collide with the pond coverings, similar to the "lake effect" that can happen at solar projects?;
  - Dust and dust-suppression effects;
  - Road effects;
  - Habitat fragmentation and barriers to movement and gene flow;
  - Noise effects, which can include changes to wildlife's foraging behavior, reproductive success, and others;<sup>1</sup>
  - Electromagnetic field effects;
  - Microclimate effects;
  - Pollution effects from spills, including, but not limited to, hydraulic fluid spills;
  - Water consumption effects;
  - o Fire effects;
  - Light pollution effects<sup>2</sup>; and
  - Cumulative impacts, including in Mexico.
- Impacts to public health and safety, including
  - Increased risk of fire from energy projects and transmission lines, as well as increased difficulty of fighting fires. For example, wind turbines can catch fire, such as the December 16, 2013 wind turbine fire at the Kumeyaay Wind facility in San Diego County. Transmission lines can prevent the free movement of fire-fighting aircraft and fire fighters. Large-scale solar projects cannot be readily de-electrified in case of a fire.
  - o Noise effects
  - o Electromagnetic field effects;
  - Light pollution effects;<sup>3</sup>
  - Dust and dust suppression effects;
  - Glare effects;
  - Increased risk of Valley Fever associated with the disturbance of desert soils during project construction. The U.S. Environmental Protection Agency (EPA) has identified

<sup>2</sup> See International Dark Sky Association. "Light Pollution and Wildlife." Available at <u>http://www.darksky.org/assets/documents/ida\_wildlife\_brochure.pdf</u>. See also Bier, Paul, "Effects of Artificial Night

Lighting on Terrestrial Mammals." In Rich, Catherine and Travis Longcore, eds. "Ecological Consequences of Artificial Night Lighting." (2006) Island Press. Available at shttp://oak.ucc.nau.edu/pb1/vitac/Beier-Lights-Mammals-FINAL%5Bw.%20my%20edits%5D.pdf.

<sup>&</sup>lt;sup>1</sup> See the National Park Service's annotated bibliography of research on noise impacts and wildlife, available at <u>http://www.nature.nps.gov/sound/assets/docs/Wildlife\_AnnotatedBiblio\_Aug2011.pdf</u>.

<sup>&</sup>lt;sup>3</sup> See International Dark Sky Association. "Light Pollution and Human Health." Available at <u>http://www.darksky.org/assets/documents/ida\_human-health\_brochure.pdf</u>.

Valley Fever as a concern during solar power plant construction in the California desert<sup>4</sup>; and

- o Cumulative impacts, including in Mexico.
- Impacts to groundwater.

#### **III.** Other impacts

The draft PEIR should also analyze how the County's RETE will interact with the upcoming state and federal Desert Renewable Energy Conservation Plan.

#### **IV.** Mitigation and Monitoring

The PEIR should specify that bat and bird mortality monitoring will be done at renewable energy projects and for transmission lines, and that the resulting mortality reports will be given to the County and be available to the public. In addition, all power lines built in Imperial County should follow Avian Power Line Interaction Committee guidelines for protecting birds.<sup>5</sup>

Thank you for your consideration of POC's scoping comments. Please add POC to the notification list for this proceeding using this email address: <u>kelly@kellyfuller.net</u>.

Sincerely yours,

Key Fuller

Kelly Fuller Consultant to The Protect Our Communities Foundation kelly@kellyfuller.net

<sup>&</sup>lt;sup>4</sup> See pages 10 and 11 in Kathleen Martyn Goforth (EPA)'s November 14, 2013 letter to Frank McMenimen (U.S. Bureau of Land Management). Available at <u>http://www.epa.gov/region9/nepa/letters/ca/riverside/chevron-energy-solutions-solar-millennium-solar-power-proj-sdeis.pdf</u>. See also Cart, Julie. (April 23, 2013) "Officials study valley fever outbreak at solar power projects." Los Angeles Times. Available at <u>http://articles.latimes.com/2013/apr/30/local/la-me-solar-fever-20130501</u>. See also Goodyear, Dana. (January 20, 2014) "Death Dust." The New Yorker. Available at <u>http://www.newyorker.com/magazine/2014/01/20/death-dust</u>.

<sup>&</sup>lt;sup>5</sup> See <u>http://www.aplic.org/mission.php</u>.

10.549.01

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August 22, 2014

Via Electronic Mail and U.S. Mail email: JimMinnick@co.imperial.ca.us

Jim Minnick Interim Director Imperial County Planning and Development Services Department 801 Main Street El Centro, CA 92243

#### Re: Scoping Comments of Backcountry Against Dumps, Backcountry Resource Advocacy Group, Donna Tisdale and Carolyn Allen on Imperial County's Proposal to Update the Geothermal/Alternative Energy and Transmission Element of Its General Plan

Pursuant to the California Environmental Quality Act ("CEQA"), Public Resources Code section 21000 *et seq.*, and Imperial County's (the "County's") Notice of Preparation ("NOP") of Draft Programmatic EIR for Renewable Energy and Transmission Element Update ("Energy Element Update Project" or the "Project"), Backcountry Against Dumps, Backcountry Resource Advocacy Group, Donna Tisdale and Carolyn Allen (collectively, "Conservation Groups") submit the following Scoping Comments for the Draft Programmatic Environmental Impact Report ("DPEIR") being prepared by the County. These Scoping Comments follow and incorporate by reference in their entirety Conservation Groups' April 2, 2014 Initial Comments. Conservation Groups request that the County make these Scoping Comments, like their Initial Comments, a part of the public record for the Energy Element Update Project.

#### I. OBJECTIVES, NEEDS AND OPPORTUNITIES – THE COUNTY MUST NOT ABANDON ITS CONSTITUENTS, ITS PUBLIC TRUST DUTIES OR ITS AGRICULTURAL HERITAGE.

Through its NOP and its August 2014 Initial Study and Environmental Analysis ("Initial Study") for the Energy Element Update Project, the County asserts broad Project objectives of "support[ing] the development of expanded renewable energy power production and exportation to accommodate future growth in California and improve overall system reliability." NOP at 1

(quote); Initial Study at 2-1 (same). The County's stated objectives are troubling in at least three significant respects and must be thoroughly reconsidered.

First, the County's objectives focus on serving the *State's* rather than the *County's* interests. The County's first and foremost responsibility is to the people and public trust resources of the County, *not* the State. As discussed in detail throughout these Scoping Comments, turning the County into a sacrifice zone for industrial-scale electrical generation and transmission facilities would cause significant harm to the County's residents, wildlife and ecosystems. The County may not abandon its duties to serve and protect its constituents and the County's public trust resources in order to ostensibly benefit the State as a whole. The County must be very careful not to let the State or anyone else bias its goals and decisions, particularly in light of the County's acceptance of a \$700,000 grant from the California Energy Commission to initiate and help pay for the Project.

Second, the County's objective of "accommodat[ing] future growth in California" disturbingly assumes that even California's arid regions such as Imperial County should and will grow. Initial Study at 2-1. Given the current drought in California (and the western United States in general), the State's long history of even worse droughts, and the fact that global warming will both increase the likelihood of and worsen future droughts, among other current and likely future resource and equity constraints, we should no longer assume that all of even most of California should and will grow. Before reflexively acting to accommodate such future growth, the County must examine its feasibility, desirability and sustainability. It is folly to turn the County into an industrial engine for speculative and likely unsustainable future growth, particularly growth whose ostensible benefits are located *outside* the County.

Third, the County's statement of objectives assumes without any supporting evidence that there is a need for additional electrical generation. Before plowing full speed ahead with its efforts to promote industrial-scale renewable energy generation, the County must take a step back and analyze the current and future need for such projects in both the County and the State as a whole.

In sum, before proceeding any further with the Project, the County must take stock of the needs and desires of its constituents, its formidable agricultural heritage and economy, and its unique ecosystems and bountiful public trust resources, and balance those against the need for and wisdom of developing additional industrial-scale energy generation and transmission facilities in the County. For the following reasons and others, Conservation Groups urge the County to protect the County's agricultural lands, rich ecology and agricultural economy for future generations to the greatest extent possible.

### A. Agriculture Is the County's Lifeblood.

As the County affirms in its General Plan Update News Release, Imperial County

"possesses . . . some of the richest, most productive agricultural land in California." That included 194,137 acres of Prime Farmland and 539,273 total acres of "important" farmland as of 2010. California Department of Conservation, "Imperial County 2008-2010 Land Use Conversion" (attached hereto as Exhibit 1); County, June 2014, "Draft Baseline Environmental Inventory Report" ("Draft Inventory"), p. 3-2. This fertile farmland is irreplaceable, and the food and fiber it produces year in and year out for Americans throughout our country are of inestimable value to present and future generations. Locally, agriculture is even more important. It is the County's cultural and economic lifeblood.

Nearly 20 percent of the County's entire land area was harvested in 2012.<sup>1</sup> Imperial County Agricultural Commissioner, October 22, 2013, "2012 Imperial County Agricultural Crop and Livestock Report" ("2012 Crop Report"), p. 1 (attached hereto as Exhibit 2). Those 565,372 acres of harvested farmland produced a gross value that year of more than *\$1.94 billion* in agricultural goods, including livestock, field crops like wheat, cotton and various hays, vegetable and melon crops like broccoli, carrots, lettuces and cantaloupes, fruit and nut crops like dates, lemons and grapefruits, seed and nursery crops, and apiary products like honey. *Id.* at 1-9. The County's vegetable and melon crops alone produced a value of more than \$700 million in 2012. *Id.* at 1.

Such prodigious agricultural resources and crop yields also produce lots of jobs. Direct farm jobs constitute nearly 20 percent of all jobs in the County. In February of this year, for example, farm work employed 11,900 people, accounting for 18.5 percent of all occupied jobs in the County. California Employment Development Department, February 2014 employment by industry data for Imperial County (attached hereto as Exhibit 3).<sup>2</sup> And that only includes *direct* farm jobs. There are about *three times* as many jobs *indirectly* attributed to agriculture as there are direct farm jobs. Imperial County Planning & Development Services Department, 2011, PowerPoint presentation for Solar Development on Agricultural Land Workshop (attached hereto as Exhibit 4). This means that nearly 75 percent of County jobs are related to agriculture. And in 2013, the County's agricultural production "was estimated to have yielded a gross income of approximately \$2.16 billion." Initial Study at 2-7.

The County's farmland and open space lands also contribute to the County's economy through the ecosystem services they provide (discussed below in Section I.B) and the resulting

<sup>&</sup>lt;sup>1</sup> That percentage would be even higher if the Salton Sea were excluded from the County's approximately 4,500 square-mile (2.88 million acre) area.

<sup>&</sup>lt;sup>2</sup> This and other employment data for Imperial County is available here: http://www.labormarketinfo.edd.ca.gov/cgi/databrowsing/localAreaProfileQSMoreResult.asp?m enuChoice=localAreaPro&criteria=current+employment+statistics+%28ces%29&categoryType= employment&geogArea=0604000025&more=More

tourism they generate. The Salton Sea, for example, "serves two important functions for the economy of Imperial County:"

First, it is a recreational resource that attracts visitors from other areas of Southern California and the greater United States [for bird watching, wildlife-related photography and other activities]. It therefore generates tourist-based income and employment for the surrounding communities. Second, it serves as the repository for stormwater and agricultural runoff from Imperial County, and thus represents an essential infrastructure for the local economy.

The U.S. Army Corps of Engineers and the California Natural Resources Agency, Draft EIS/EIR for the Salton Sea Species Conservation Habitat Project ("Salton Sea Draft EIS/EIR"), August 2011, pp. 3.19-2 to 3.19-3 (section 3.19 of the Draft EIS/EIR is attached hereto as Exhibit 5).

# **B.** The County's Farmland and Open Space Lands Provide Critical Wildlife Habitat and Ecosystem Services.

The County's agricultural and open space lands provide critical wildlife habitat and ecosystem services. As the County correctly recognizes:

The conditions created by the arid desert climate, water associated habitats, and continued expansion of agriculture have resulted in an abundance and diversity of wildlife habitats. As a result of the diverse habitat, the County contains over 400 species of wildlife that are highly localized and dependent upon these vegetation communities, including agriculture, which provides important foraging habitat for multiple birds and small mammals.

Draft Inventory at 5-4.

The Imperial Valley is especially important for its bird habitat, and is an Audubon Society-designated Globally Important Bird Area. "More than 400 resident, migratory, and special-status bird species have been recorded in the Salton Sea Basin" alone, including "33 bird species that are threatened, endangered, or of special concern" and "use the Basin on a regular basis." Salton Sea Draft EIS/EIR at 3.4-16 (section 3.4 of the Draft EIS/EIR is attached hereto as Exhibit 6); Initial Study at 2-10 ("The Salton Sea and its shorelines are host to hundreds of thousands of migrating, wintering, and resident waterfowl and shorebird species protected under the Migratory Bird Treaty Act (MBTA), including Western Snowy Plover, and provide large scale breeding areas for colonial species such as Double-Crested Cormorant and American White Pelican"). Indeed, the Salton Sea is "one of the most important migratory bird flyways in North America." California Natural Resources Agency *et al.*, 2014, "California Water Action Plan," p. 10 (attached hereto as Exhibit 7). County agriculture is crucial to the preservation of the Salton Sea because irrigation drainwater is the Sea's primary source of fresh water.

County agriculture also plays an essential role in sustaining the County's ecosystems outside of the Salton Sea. Hundreds of bird species use County farmland and its associated irrigation canals for nesting, hunting and other activities, including burrowing owls, mountain plovers, multiple species of egrets, great blue herons, peregrine falcons and many more. Initial Study at 2-8 to 2-9 ("agricultural lands [adjacent to the Salton Sea] are host to many species such as burrowing owl and Swainson's Hawk and which forage in or occupy the adjacent canals and waterways"). For example, "Imperial Valley agricultural fields [are] becoming increasingly important for [the] rare Mountain Plover." Schmierer, January 15, 2013, "Imperial Valley Agricultural Fields Becoming Increasingly Important for Rare Mountain Plover," Audubon California Press Release, p. 1 (attached hereto as Exhibit 8). The mountain plover "has traditionally been a grassland bird, but as those habitats have declined, the bird is adapting to agricultural areas . . . ." *Id.* (quoting Andrea Jones, Audubon California's Director of Important Bird Areas). Audubon California's complete 2012 Mountain Plover Winter Survey, which shows the species' increasing use of farmland, is attached hereto as Exhibit 9.

Given agriculture's immense importance to the County – culturally, economically and ecologically – and as a breadbasket for the entire nation, the County should use this Energy Element update process to reaffirm and improve the agricultural protections in the General Plan.

# C. The County Should Take This Opportunity to Reaffirm and Strengthen the General Plan's Agricultural Protections.

The County General Plan's Land Use Element provides strong protections for farmland within the "Agriculture" plan designation, which the County should reaffirm through this Energy Element update process. The Land Use Element directs that lands designated as "Agriculture" may not be developed with uses that do not preserve and protect agricultural production and related activities. It states in pertinent part as follows:

### 1. Agriculture.

This category is intended to preserve lands for agricultural production and related industries including aquaculture (fish farms), ranging from light to heavy agriculture. Packing and processing of agricultural products may also be allowed in certain areas, and other uses necessary or supportive of agriculture....

Where this designation is applied, agriculture shall be promoted as the principal and dominant use to which all other uses shall be subordinate. Where questions of land use compatibility arise, the burden of proof shall be on the non-agricultural use to clearly demonstrate that an existing or proposed use does not conflict with agricultural operations and will not result in the premature elimination of such agricultural operations. No use should be permitted that would have a significant adverse effect on agricultural production, including

food and fiber production, horticulture, floraculture, or animal husbandry....

No land shall be removed from the Agriculture category except for annexation to a city, where needed for use by a public agency, for geothermal purposes, where a mapping error may have occurred, or where a clear long term economic benefit to the County can be demonstrated through the planning and environmental review process.

Imperial County General Plan, Land Use Element (Revised 2008) ("Land Use Element"), p. 48 (emphasis added).

It is clear from the foregoing language that lands designated as "Agriculture" in the General Plan must be used *only* for agriculture and related industries that support agricultural production, and should rarely be removed from that protective designation. Because most utility-scale electrical generation projects – including solar and wind energy projects – would "conflict with agricultural operations," result in the "elimination" of agricultural operations and "have a significant adverse effect on agricultural production," both on the Project sites and elsewhere in the County (as discussed in detail below), the Land Use Element generally prohibits their construction and operation on agricultural land. *See also* Land Use Element, p. 49 ("Industrial uses are not permitted except those directly associated with agricultural products and processes," though "[g]eothermal plants may be permitted with a conditional use permit subject to zoning and environmental review").

This prohibition of most electrical generation uses on designated agricultural land is essential for the long-term protection of agriculture in Imperial County. As such, the County should reaffirm the Land Use Element's agricultural protections through this Energy Element update process and ensure that any revisions it makes to the General Plan do not conflict with them. Government Code § 65300.5 ("the Legislature intends that the general plan and elements and parts thereof comprise an integrated, internally consistent and compatible statement of policies for the adopting agency"); *Concerned Citizens of Calaveras County v. Board of Supervisors* (1985) 166 Cal.App.3d 90, 97 ("a general plan must be reasonably consistent and integrated on its face"); *Sierra Club v. Kern County* (1981) 126 Cal.App.3d 698, 704 ("Since the general plan was internally inconsistent, the zoning ordinance under review . . . could not be consistent with such plan and was invalid when passed."). In doing so, the County should make at least the following two revisions to its Land Use Ordinance and General Plan and horizontal consistency between all Plan elements.

First, the County should amend its Land Use Ordinance to *remove* from the list of uses permitted with a conditional use permit in the Limited Agriculture (A-1) zone "Solar Energy generation at more than 10 (10) kilowatts." Land Use Ordinance § 90507.02(mm). The County should also remove from the list of uses permitted with a conditional use permit in the General

Agriculture (A-2) and General Agriculture Rural Zone (A-2-R) zones "[e]lectrical generation plants (less than 50 mw)," "Electrical Power Generating Plant[s]," "[e]lectrical substations in an electrical transmission system (500 kv/230 kv/161 kv)," "[m]ajor facilities relating to the generation and transmission of electrical energy . . .," "Solar Energy Electrical Generator[s]," and "Wind Driven Electrical Generator[s], for commercial sale." Land Use Ordinance §§ 90508.02(y), (z), (aa), (uu), (fff), (mmm). The County should similarly remove from the list of uses permitted with a conditional use permit in the Heavy Agriculture (A-3) zone "[m]ajor facilities relating to the generation and transmission of electrical energy . . .," and "[s]olar energy plants." *Id.* §§ 90509.02(qq), (ccc).

As discussed, these industrial electrical generation uses are *prohibited* by the General Plan Land Use Element on designated agricultural lands. Land Use Element, pp. 48, 49 ("Industrial uses are not permitted except those directly associated with agricultural products and processes," though "[g]eothermal plants may be permitted with a conditional use permit subject to zoning and environmental review"). Thus, because the law requires that the County's "zoning law . . . comply with the adopted general plan," the County must revise its Land Use Ordinance to likewise prohibit these electrical generation uses. *Neighborhood Action Group v. County of Calaveras* ("*Neighborhood*") (1984) 156 Cal.App.3d 1176, 1184 (further holding that a "permit action taken without compliance with the hierarchy of land use laws is *ultra vires* as to any defect implicated by the uses sought by the permit"); Government Code § 65860(a).

Second, the County should revise Section II(G)(1) of the Energy Element to make clear that (with the possible exception of geothermal plants) industrial-scale electrical generation projects are *prohibited* on designated agricultural lands. Section II(G)(1) ("Preservation of Agricultural Lands and Biological Resources") currently reads:

With the gradual construction of geothermal/alternative energy plants, overall agricultural production levels should not be adversely affected. However, since some prime farmland will be affected, it is essential that any impacts be minimized. Careful planning, analysis of potential impacts and mitigation measures, and development can minimize impacts and in some cases can benefit biological resources.

The County should replace that language with the following:

The construction and operation of geothermal or any other alternative energy electrical generation facilities must not eliminate agricultural operations, have a significant adverse effect on agricultural production, or otherwise conflict with agricultural operations. To ensure that the County's agricultural lands and economy are protection, Section IV(C)(1) of the Land Use Element prohibits all major electrical generation uses on land designated as "Agriculture," with the lone exception that geothermal plants may be permitted with a conditional use permit

> subject to zoning and environmental review. For any geothermal projects proposed for construction and operation on designated agricultural land, it is essential that any agricultural impacts be minimized. Careful planning and analysis must be done to minimize and mitigate any potential resulting biological impacts for all proposed geothermal or other alternative energy facilities anywhere in the County.

In sum, the County should reaffirm the Land Use Element's agricultural protections through this Energy Element update process and ensure that any revisions it makes to the General Plan do not conflict with them.

### II. PROJECT ALTERNATIVES – NEW ENERGY PROJECTS SHOULD NOT REPLACE OR IMPEDE COUNTY AGRICULTURE.

As discussed above in Sections I.A and I.B, Imperial County agriculture is immensely important as the predominant driver of the County's economy, the County's cultural lifeblood, a bastion of wildlife habitat and ecosystem services, and a vital source of farm goods for the entire nation. But the future prosperity of County agriculture is far from assured. One of the biggest threats to the long-term viability of County agriculture is the ongoing and rapid conversion of farmland to industrial use by utility-scale electrical generation projects and related industrial facilities. Utility-scale energy projects are simply incompatible with County agriculture. Initial Study at 2-7 ("[f]uture development of renewable energy facilities associated with the proposed project could convert agricultural resources," including farmland protected by Williamson Act contracts, "to non-agricultural uses, which would constitute a significant impact").

Conservation Groups are staunch advocates of local solutions to reduce greenhouse gas emissions and stem global warming. However, remote utility-scale renewable energy generation is not the best answer to this problem. It is inefficient and fraught with environmental impacts. In order to protect the County's agricultural resources and economy, as well as its biological resources and ecology, the County should consider distributed generation alternatives to harnessing its renewable energy resources. Large-scale energy projects intended to produce electricity for offsite use should be discouraged, particularly in areas of agriculturally or ecologically valuable use. The County's map of proposed renewable energy overlay zones shows that a substantial amount of agricultural land would be opened by the Project for industrial-scale renewable energy project. Initial Study at Exhibit A. The County should rethink this proposal.

# A. Utility-Scale Electrical Generation Projects Are Not Compatible with County Agriculture.

Utility-scale electrical generation projects – particularly wind and solar energy projects – are almost invariably incompatible with agricultural uses. For example, they generally require the cessation of all agricultural production on the project site, while at the same time causing

substantial loss of fertile topsoil and thereby reducing the likelihood that the site could ever be used again for commercial agriculture. As the California Department of Conservation has determined multiple times with respect to commercial solar energy generation projects in Imperial County, including in its November 1, 2011, and July 16, 2010 letters (attached hereto as Exhibits 10 and 11) to the Imperial County Planning and Development Services Department, "the construction of a solar facility that removes and replaces agriculture on agricultural lands [has] a significant impact on those agricultural lands, including grazing land." Exhibit 11 at 2 (quote); Exhibit 10 at 3 ("The Department has determined that commercial solar facilities are an industrial use of the land and *inconsistent with the intent of the Williamson Act and its protection of open space and agricultural resources*" (emphasis added)); Initial Study at 2-7 ("[f]uture development of renewable energy facilities associated with the proposed project could convert agricultural resources," including farmland protected by Williamson Act contracts, "to non-agricultural uses, which would constitute a significant impact").

Furthermore, utility-scale electrical generation projects commonly also impede agricultural operations on *surrounding* lands, including by disrupting agricultural aircraft operations from, *e.g.*, the glint and glare caused by solar panels and the hazards posed by tall structures (wind turbines, transmission lines and towers, etc.). The ultimate result is a reduction in employment, income, sales and tax revenue in the County. As Imperial County Agricultural Commissioner Valenzuela noted in her February 25, 2011 comments (attached hereto as Exhibit 12) on the DEIR for a large-scale solar energy project, "removal of any farmland out of production would have a *direct negative impact on employment, income, sales and tax revenue*" (emphasis added). As these projects convert more and more agricultural land to non-agricultural uses, more and more agriculture-serving businesses will be forced to close. And as the quantity and quality of agriculture-serving businesses decreases in the County, more and more farmers will find it uneconomical or impractical to continue farming and be forced to sell, lease or use their lands for non-agriculture purposes. The pressures on farmers to put their lands to nonagricultural uses will only increase once all the Williamson Act contracts in the County expire pursuant to the County Board of Supervisors' decision in 2010 to non-renew all such contracts. That makes it all the more important that the County retain and strengthen what agricultural protections remain in the General Plan.

# B. Utility-Scale Electrical Generation Projects Harm Wildlife and the Local Ecosystems.

Large-scale energy generation projects almost invariably harm wildlife and destroy habitat, both during construction and operation. With respect to construction, most projects, including solar- and wind-energy generation projects, generally require that the project site be cleared of most if not all vegetation. This not only destroys nesting and foraging habitat for many species, like the burrowing owl, the mountain plover and others, it usually causes significant topsoil erosions, which makes it difficult to revegetate the area if and when the project is decommissioned. Furthermore, many projects kill all burrowing animals on site and destroy

their burrows, which in turn harms burrowing owls by (1) reducing the abundance of prey for the owls, and (2) destroying their nesting habitat, as burrowing owls use burrows created by other animals instead of making their own.

With respect to operation, both solar- and wind-energy projects create a substantial collision risk for birds and bats. Solar "power tower" projects like BrightSource Energy's Ivanpah project, for example, will even incinerate birds as they "fly through the plant's concentrated sun rays."<sup>3</sup> And even the most seemingly benign solar photovoltaic ("PV") panels present a substantial collision risk to many birds, particularly burrowing owls, given that the height of the panels – usually ranging from about 10 to 30 feet above the ground – is often about the same height at which the owls typically forage. These PV projects also create significant collision risks due to the "pseudo-lake effect," which is suspected to be one of the main causes of migratory bird trauma and death at the Desert Sunlight PV facility. *See e.g.* National Fish and Wildlife Forensics Laboratory *Avian Mortality at Solar Energy Facilities in Southern California: A Preliminary Analysis*, Rebecca A. Kagan, Tabitha C. Viner, Pepper W. Trail, and Edgard O. Espinoza, pp. 1, 11.<sup>4</sup> The "pseudo-lake effect" is also suspected in the recent death at the Solar Gen 2 PV facility in Imperial County of a Yuma clapper rail, a bird listed as endangered under the federal Endangered Species Act.

Solar- and wind-energy projects both also hinder birds' ability to forage by occluding the ground, creating reflective surfaces and causing long-term area avoidance due to the risk of collision with wind turbine blades or solar panels.

In addition, these projects often produce enough noise to harm birds. Dr. Travis Longcore concluded in his expert testimony (attached hereto as Exhibit 13) given in the California Public Utility Commission proceeding on SDG&E's application for a certificate of public convenience and necessity for the Sunrise Powerlink Transmission Line that "[f]rom the published literature . . . a reasonable threshold based on similar species for least Bell's vireo and southwestern willow flycatcher would be 40 dB(A) or below." Exhibit 13 at 12. Dr. Loncore also explained that empirical data from California "indicat[es] with certainty that territory occupancy is reduced by sound levels in the 50 - 60 Db(A) range" for the southwestern willow flycatcher (*id.* at 13), which is similarly susceptible to noise impacts as many of the "small songbirds" in Imperial County "that rely on hearing songs to attract mates and defend territories."

<sup>&</sup>lt;sup>3</sup> Ellen Knickmeyer, August 18, 2014, "Emerging Solar Plants Scorch Birds in Mid-Air: California Weighing Bird Deaths from Concentrated Solar Plants," *Associated Press*, available at <u>http://abcnews.go.com/Technology/print?id=25017031</u>.

<sup>&</sup>lt;sup>4</sup> This study is available for download here:

http://docketpublic.energy.ca.gov/PublicDocuments/09-AFC-07C/TN201977\_20140407T16150 4\_Center\_Supplemental\_Opposition\_to\_Motion.pdf

*Id.* at 12.

The significant harm utility-scale electrical generation projects cause to wildlife is yet another reason that the County should retain and strengthen what agricultural and open space protections remain in the General Plan.

## C. The County Should Analyze Distributed Generation Alternatives for Harnessing Its Renewable Energy Resources and Combating Global Warming.

Distributed energy projects such as rooftop solar PV have substantial environmental, aesthetic, economic and public safety benefits over remote, industrial-scale solar energy facilities. They preserve precious agricultural land. They do not mar the landscape with massive wind turbines or glare-producing and unsightly solar panels, or their associated powerlines, substations and industrial operations and maintenance buildings. They are much less likely to ignite catastrophic wildfires. They do not displace agriculture and wildlife habitat. They present a much smaller threat to wildlife. They do not waste electricity due to conductor resistance and corona discharges along lengthy transmission lines.<sup>5</sup> Their reliability is far greater. And they are easier to upgrade as technology improves.

In addition, as these solar PV technologies improve and the liability costs of utility-scale renewable energy facilities become clearer, the per-watt installed price for distributed solar PV systems should soon drop below that of remote, utility-scale projects. In likely recognition of this trend, many utility-scale renewable energy project developers themselves agree that distributed generation is the future of renewable energy power. For example, NRG Energy, Inc., CEO David Crane stated the following in a 2011 conference call with financial analysts:

Ultimately, however, we fully recognize that the current generation of utility-sized solar and wind projects in the United States is largely enabled by favorable government policies and financial assistance. It seems likely that much of that special assistance is going to be phased out over the next few years, leaving renewable technologies to fend for themselves in the open market.

We do not believe that this will be the end of the flourishing market for solar generation. We do believe that it will lead to a *stronger and more accelerated* 

<sup>&</sup>lt;sup>5</sup> The U.S. Energy Information Administration estimates that California lost nearly *18 million* kilowatt-hours of electricity in 2010, due primarily to conductor resistance, corona discharges and other transmission and distribution line losses. Energy Information Administration, January 27, 2012, *State Electricity Profiles 2010*, DOE/EIA-0348(01)/2, at p. 30, *available at:* http://www.eia.gov/electricity/state/pdf/sep2010.pdf.

> transition from an industry that is currently biased towards utility-sized solar plants to one that's focused more on distributed and even residential solar solutions on rooftops and parking lots.

We are already planning for this transition now within NRG, so that any potential decline in either the availability of utility-sized solar projects or in the attractiveness of the returns being realized on these projects, *will be exceeded in aggregate by the increase in the business we are doing on smaller distributed and residential solar projects*.... (emphasis added).<sup>6</sup>

Distributed generation is thus not only feasible, it is environmentally and economically preferable to remote, utility-scale renewable energy generation facilities.

The Imperial Irrigation District ("IID") already has a number of programs encouraging the development and use of distributed generation, including the PV/Solar Solutions Incentive Program, the Net Energy Metering Program, the Distributed Generation Program and the Feed-in Tariff (FIT) Program.<sup>7</sup> Through this Energy Element update process, the County should attempt to build on IID's programs and encourage even more distributed generation development and use.

There are many politically workable options for Imperial County to incentivize installation and operation of distributed solar PV. The County could start by outfitting its own infrastructure with renewable energy generation systems, such as rooftop solar or solar roads, such as those being developed by Solar Roadways, Inc.<sup>8</sup> The County could also adopt a local loan program to help property owners in the County finance PV installations on their properties, pursuant to Streets and Highways Code section 5898.20 *et seq.* An example of this type of program is Sonoma County's Property Assessed Clean Energy financing program.<sup>9</sup> Imperial

<sup>7</sup> More information on those programs is available here: <u>http://www.iid.com/index.aspx?page=581</u>

<sup>8</sup> For an overview of this emerging technology, visit <u>http://www.solarroadways.com/intro.shtml</u>.

<sup>9</sup> Sonoma County's program is summarized on the U.S. Department of Energy's Database of State Incentives for Renewables & Efficiency website, available here: http://www.dsireusa.org/incentives/incentive.cfm?Incentive\_Code=CA188F&re=1&ee=1 (last accessed June 6, 2014).

<sup>&</sup>lt;sup>6</sup> Seeking Alpha, April 22, 2011, "NRG Energy's CEO Discusses Q4 2010 Results – Earnings Call Transcript," at p. 7, *available at:* 

http://seekingalpha.com/article/254272-nrg-energy-s-ceo-discusses-q4-2010-results-earnings-call -transcript (attached hereto as Exhibit 14)

County could also institute a local rebate program for installation of PV systems, such as the program developed by the City and County of San Francisco that gives money directly to qualifying PV system purchasers for residential, commercial and other non-residential PV installations.<sup>10</sup> These and many other types of PV incentivization programs Imperial County could adopt are conveniently outlined on the CleanEnergyAuthority's website on "California Solar Rebates and Incentives."<sup>11</sup>

## D. The County Should Analyze Alternative Locations for Any Future Utility-Scale Electrical Generation Projects.

Given that the County's primary Project objective appears to be "support[ing] the development of expanded renewable energy power production and exportation to accommodate future growth in California" as a whole, rather than in Imperial County, the County should focus on partnering with other entities throughout the State to locate the proposed utility-scale electrical generation projects on impaired or polluted lands ill-suited for other uses, rather than on the County's productive agricultural land. For example, the County could work with renewable energy developers, Westlands Water District, Kings County and Fresno County to locate future utility-scale energy projects within the Competitive Renewable Energy Zone on Westlands' vast expanses of salt- and drainage-impaired lands.

## III. THE COUNTY MUST CONDUCT A ROBUST ANALYSIS OF THE PROJECT AND ITS ENVIRONMENTAL IMPACTS.

In addition to the foregoing suggestions to the County regarding the substance of its proposed Energy Element Update Project, Conservation Groups offer the following comments on and suggestions for this and any subsequent environmental review of the Project.

## A. Project Need.

As discussed above in Section I, before proceeding any further with the Project, the County must take stock of the needs and desires of its constituents, its extraordinary agricultural heritage and economy, and its unique ecosystems and bountiful public trust resources, and balance those against the need for and wisdom of developing additional industrial-scale energy

<sup>&</sup>lt;sup>10</sup> San Francisco's program is summarized on the U.S. Department of Energy's Database of State Incentives for Renewables & Efficiency website, available here:

http://www.dsireusa.org/incentives/incentive.cfm?Incentive\_Code=CA168F&re=1&ee=1 (last accessed June 6, 2014).

<sup>&</sup>lt;sup>11</sup> http://www.cleanenergyauthority.com/solar-rebates-and-incentives/california/ (last accessed June 6, 2014).

generation and transmission facilities in Imperial County. The County should not continue with this Project if it cannot demonstrate a actual need for additional utility-scale renewable energy generation facilities.

## **B. Project Description.**

"An accurate, stable and finite project description is the *sine qua non* of an informative and legally sufficient EIR." *County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 193. Here, the Initial Study and the NOP omit many critical details about the Project that the County must provide in the DPEIR. For example, the County must specify which types of renewable energy generation and transmission facilities it proposes to allow in each overlay zone. The County must also discuss whether and what types of non-renewable-energy backup electrical generation facilities would be required to ensure reliability on the grid.

## C. Project Alternatives.

As discussed above in sections II.C and II.D, Conservation Groups recommend a distributed generation alternative to the Project. The County must analyze both a distributed generation alternative and an out-of-County location alternative in its DPEIR.

### D. Impacts to Agriculture and the Agricultural Economy.

As discussed above in Section II.A, utility-scale energy projects are simply incompatible with County agriculture. The County must analyze these impacts in its DPEIR. In so doing, the County must ensure that it is using up-to-date soils maps and measures of soil productivity. In addition, as part of its analysis, the County should prepare or commission an economic analysis comparing the loss in agricultural jobs, income and County revenue that the Project would cause with any potential increase in other jobs, income and revenue from the development of the additional utility-scale renewable energy generation and transmission projects proposed as part of the Project.

### E. Water Supply and Groundwater Impacts.

The groundwater supply in Imperial County is precarious and, if the projects rely on groundwater pumping, the development of additional utility-scale renewable energy generation facilities risks overdraft of the County's aquifers. This risk is particularly acute for the Ocotillo-Coyote Wells Sole Source Aquifer, which the Draft Inventory *entirely fails to mention*. The County must analyze in the DPEIR (1) the likely sources of water for the energy generation and transmission facilities contemplated by the Project, and (2) the impacts of supplying that water to the facilities, including the impacts of local groundwater supplies. *Vineyard Area Citizens for Responsible Growth v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 421, 434, 440-441. "An EIR that neglects to explain the likely sources of water and analyze their impacts, but leaves

long-term water supply considerations to later stages of the project, does not serve the purpose of sounding an environmental alarm bell." *Id.* at 441 (internal quotations and citations omitted); *San Diego Citizenry Group v. County of San Diego* (2013) 219 Cal.App.4th 1, 23; *Watsonville Pilots Association v. City of Watsonville* (2010) 183 Cal.App.4th 1059, 1092.

### F. Biological Impacts.

As discussed above in sections I.B and II.B, the County's agricultural and open space lands provide critical wildlife habitat and ecosystem services that the Project would endanger. The County must fully analyze these impacts in its DPEIR.

Relatedly, the County must also analyze the Project's hydrological and biological impacts on the Salton Sea. As discussed above, the Salton Sea provides essential wildlife habitat. However, the Salton Sea's ability to provide this important wildlife habitat for migratory birds and other species, as well as its ability to serve as a recreational haven, is increasingly threatened by rapidly rising salinity, increasing concentrations of numerous other pollutants, and decreasing inflows.<sup>12</sup> By reducing the amount of agricultural drainage inflow into the Sea (by converting active farmland to industrial energy generation uses), among other things, the Project threatens to greatly exacerbate the Sea's ecological decline. The County must therefore incorporate into its DPEIR a thorough analysis of the Project's hydrological and biological impacts on the Salton Sea and the species dependent on it, including those impacts caused by the reduction in water currently discharged from the farmland within the Project's renewable energy overlay zones.

### G. Global Warming Impacts.

The County admits in the Initial Study that "construction of future renewable energy facilities associated with the proposed project could generation greenhouse gas emissions." Initial Study at 2-13. But the County must do more in the DPEIR than just analyze the global warming impacts of Project construction. The County must also (1) assess the substantial *embedded* greenhouse gas emissions of the facilities contemplated by the Project: the GHG emissions associated with production of the materials used to construct the Project, such as the photovoltaic panels; (2) compute the change in greenhouse gas emissions from and carbon sequestration in the soil on the farmland proposed by the Project for conversion to electrical generation facilities; and (3) assess the embedded, construction and operations greenhouse gas emissions of the backup non-renewable-energy "peaker" plants that will likely be necessary to

<sup>&</sup>lt;sup>12</sup> See, e.g., Michael J. Cohen, "Past and Future of the Salton Sea," Water Brief 2 in *The World's Water: 2008-2009*, available at: <u>http://www.worldwater.org/data20082009/WB02.pdf</u>; Sue McLurg, "The Salton Sea: The Environmental and Economic Values of this Vast Inland Lake Prompt Local Officials to Launch a New Restoration Effort," *Western Water*, March/April 1994, available at: <u>http://www.sci.sdsu.edu/salton/EnvirnEconValueSaltonSea.html.</u>

ensure grid reliability and stability with such a large planned influx of intermittent renewable energy generation sources. Additionally, the County must ascertain whether the electricity produced by the contemplated renewable energy generation facilities would actually either (1) supplant electricity currently generated by fossil fuel-based systems, or (2) meet a future energy demand that would otherwise be met with fossil fuel-based generation.

One example of a life-cycle analysis for a renewable energy generation facility is the one conducted for a solar installation in Tucson, Arizona, which examined the emissions associated with the energy required to construct and operate the facility, using the average fuel mix and power-plant efficiency for the United States.<sup>13</sup> The Tucson study addressed the GHG emissions of "carbon dioxide, nitrous oxide, methane, sulfur hexafluoride, PFCs, and CFCs" which it expressed in kilograms of CO<sub>2</sub> equivalent. *Id.* For the solar modules examined in the study, the primary sources of GHG emissions were in producing the solar panels and frames, at over 25 kilograms of CO<sub>2</sub> equivalent per square meter of solar panels produced. Tucson Study, figure 4. In addition, the frames for the solar panels produced approximately 23 kilograms of CO<sub>2</sub> equivalent per square meterial. *Id.*<sup>14</sup> The frames for the PV modules created 184 metric tons of CO<sub>2</sub> equivalent per peak MW. *Id.*, Table 2.

### H. Noise Impacts.

The County must fully analyze in the DPEIR the audible, inaudible, high-frequency and low-frequency noise impacts from the renewable energy generation and transmission facilities contemplated by the Project. The County should analyze not only the Project's audible noise emissions and impacts, but its inaudible infrasound and low-frequency noise emissions too, which have recently been shown to have a much greater potential to impact humans than previously thought.<sup>15</sup>

<sup>&</sup>lt;sup>13</sup> J. M. Mason, V. M. Fthenakis, T. Hansen & H.C. Kim, 2006, "Energy Pay-Back and Life Cycle CO<sub>2</sub> Emissions of the BOS in an Optimized 3.5 MW PV Installation," *Progress in Photovoltaics Research and Applications*, 14:179-190 (the "Tucson Study"), as downloaded from http://www.bnl.gov/pv/files/pdf/abs\_197.pdf, at p. 7 (attached hereto as Exhibit 15).

<sup>&</sup>lt;sup>14</sup> The Tucson study utilized a number of Life Cycle Inventory databases, including: (1) Franklin Associates (http://www.fal.com/lifecycle-services.html#lca); (2) Ecoinvent (http://www.ecoinvent.org/); and, (3) the National Renewable Energy Laboratory (http://www.nrel.gov/lci/). Exhibit 15 at 6, 13.

<sup>&</sup>lt;sup>15</sup> "[I]nfrasound elicits larger electrical potentials in the apical regions of the cochlea than those generated by any other frequencies in the range of audibility.... The apical regions of the cochlea should therefore be regarded as highly responsive to infrasound stimulation with responses occurring at stimulus levels well below the estimated level that is perceived" (*i.e.* heard). Salt *et al.*, 2013, "Large Endolymphatic Potentials from Low-Frequency and Infrasonic

#### I. Electromagnetic Field Pollution.

The County recognizes that electrical transmission facilities "generate electromagnetic radiation and, therefore require a wide, undeveloped corridor for health and safety purposes." Draft Inventory at 14-10. Electrical generation facilities create the same health and safety risks from electromagnetic fields ("EMFs"). The County must analyze these impacts in the DPEIR. Recent studies, such as those by Dr. Samuel Milham and Dr. Magda Havas, have linked EMF exposure with an increase in ailments such as diabetes, fibromyalgia, chronic fatigue syndrome and attention deficit disorder, among others.<sup>16</sup> Similarly, as reported in Jeffrey Lovich's and Joshua Ennen's recent *BioScience* article, Doctor Alfonso Balmori (in a 2010 article) found the "possible impacts of chronic exposure to athermal electromagnetic radiation" on mammal species to include "damage to the nervous system, disruption of circadian rhythms, changes in heart function, impairment of immunity and fertility, and genetic and developmental problems." Exhibit 20 at 987. Furthermore, even though there remains some disagreement over the impacts of EMF, many "authors suggest that [this] . . . should not be cause for inaction. Instead, they argue that the precautionary principle should be applied in order to prevent a recurrence of the 'late lessons from early warnings' scenario that has been repeated throughout history." *Id*.

### J. Valley Fever.

Valley Fever is a potentially fatal illness with pneumonia-like symptoms that is caused by

http://d1fj3024k72gdx.cloudfront.net/health\_effects.pdf.

Tones in the Guinea Pig," *The Journal of the Acoustical Society of America*, 133(3): 1561-1571, at p. 1569 (attached hereto as Exhibit 16).

<sup>&</sup>lt;sup>16</sup> See, e.g., Samuel Milham, "Attention Deficit Hyperactivity Disorder and Dirty Electricity," *Journal of Developmental and Behavioral Pediatrics*, September 2011 (attached hereto as Exhibit 17); Samuel Milham, "Historical Evidence That Electrification Caused the 20th Century Epidemic of 'Diseases of Civilization,'" *Medical Hypotheses*, 74:337-345, 2010 (attached hereto as Exhibit 18); Samuel Milham and L. Lloyd Morgan, "A New Electromagnetic Exposure Metric: High Frequency Voltage Transients Associated With Increased Cancer Incidence in Teachers in a California School," *American Journal of Industrial Medicine*, 2008 (attached hereto as Exhibit 19); Magda Havas, "Dirty Electricity Elevates Blood Sugar among Electrically Sensitive Diabetics and May Explain Brittle Diabetes," *Electromagnetic Biology and Medicine*, 27:135-146, 2008; Magda Havas, "Electromagnetic Hypersensitivity: Biological Effects of Dirty Electricity with Emphasis on Diabetes and Multiple Sclerosis," *Electromagnetic Biology and Medicine*, 25:259-268, 2006, available at:

http://www.next-up.org/pdf/Magda\_Havas\_EHS\_Biological\_Effets\_Electricity\_Emphasis\_Diabe tes\_Multiple\_Sclerosis.pdf; The National Foundation for Alternative Medicine, "The health effects of electrical pollution," available at:

the fungus *Coccidioides immitis* that lives in the soil in arid areas, including parts of Imperial County. "Workers who dig or otherwise disturb soil containing the *Coccidioides immitis* fungus are at risk of getting the illness."<sup>17</sup> Because *Coccidioides immitis* occurs in some Imperial County soils and has caused Valley Fever there, and because the renewable energy generation and transmission facilities contemplated by the Project would entail substantial grading and other soil-disturbing activities, workers and users are at risk of contracting Valley Fever. The County must analyze that risk and measures to mitigate it in its DPEIR for the Project.

## K. Aviation Hazards.

As poignantly illustrated by the June 4, 2014 military jet crash in the City of Imperial, which severely damaged at least three homes and hospitalized the pilot, aircraft accidents are a huge public safety hazard.<sup>18</sup> It is especially important that the County analyze these risks here because, in conjunction with the glare produced by other projects in the area, the skyward glare caused by the renewable energy generation facilities contemplated by the Project could affect the training and operations at the Naval Air Facility (El Centro) that are critical to our national defense. Without an analysis of this potentially significant risk to aviation and public safety caused by skyward glare from the Project's solar panels, the DPEIR would violate CEQA. 14 Cal. Code Reg. [("CEQA Guidelines")] §§ 15126, 15126.2, 15130.

<sup>&</sup>lt;sup>17</sup> California Department of Public Health, "Preventing Work-Related Valley Fever (Coccidiomycosis)," website (last updated July 28, 2014), http://www.cdph.ca.gov/programs/ohb/Pages/Cocci.aspx

<sup>&</sup>lt;sup>18</sup> Tony Perry, June 4, 2014, "No injuries in crash of military jet into homes in Imperial County," *Los Angeles Times* (attached hereto as Exhibit 21).

#### **IV. CONCLUSION**

Given agriculture's immense importance to the County – culturally, economically and ecologically – and as a breadbasket for the entire nation, the County should use this Energy Element update process to reaffirm and improve the agricultural and open space protections in the General Plan. The County should not reduce these protections to allow additional utilityscale electrical generation projects on agricultural land. Large-scale energy projects are simply incompatible with County agriculture. If anywhere, those projects should be located on impaired or polluted lands ill-suited for other uses, rather than on the County's productive agricultural land. Instead of promoting additional utility scale energy projects, the County should adopt policies encouraging more distributed generation development and use. In any event, the County may not amend the Energy Element or any other element of the General Plan without first completing a robust environmental impact analysis pursuant to the CEQA.

Respectfully submitted

Stephan C. Volker Attorney for Backcountry Against Dumps, Backcountry Resource Advocacy Group, Donna Tisdale and Carolyn Allen

SCV:taf

### LIST OF EXHIBITS

- 1. California Department of Conservation, "Imperial County 2008-2010 Land Use Conversion;"
- 2. Imperial County Agricultural Commissioner, October 22, 2013, "2012 Imperial County Agricultural Crop and Livestock Report;"
- 3. California Employment Development Department, February 2014 employment by industry data for Imperial County ;
- 4. Imperial County Planning & Development Services Department, 2011, PowerPoint presentation for Solar Development on Agricultural Land Workshop;
- 5. The U.S. Army Corps of Engineers and the California Natural Resources Agency, Draft EIS/EIR for the Salton Sea Species Conservation Habitat Project, Section 3.19;
- 6. The U.S. Army Corps of Engineers and the California Natural Resources Agency, Draft EIS/EIR for the Salton Sea Species Conservation Habitat Project, Section 3.4;
- 7. California Natural Resources Agency, California Department of Food and Agriculture, and California Environmental Protection Agency, 2014, "California Water Action Plan;"
- 8. Alan Schmierer, January 15, 2013, "Imperial Valley Agricultural Fields Becoming Increasingly Important for Rare Mountain Plover," Audubon California Press Release;
- 9. Audobon California, 2012, "2012 Mountain Plover Winter Survey;"
- 10. John M. Lowrie, California Department of Conservation, Letter to Armando Villa re: Cancellation of Land Conservation (Williamson Act) Contract No. 2001-00706, November 1, 2011;
- 11. Dan Otis, California Department of Conservation, Letter to Patricia Valenzuela re: Notice of Preparation for a DEIR for Imperial Solar Energy Center South, July 16, 2010;
- Connie L. Valenzuela, Imperial County Agricultural Commissioner, Letter to Armando Villa re: CUP 10-0035 8 Minutenergy Renewables, LLC, Calipatria Solar Farm II, February 25, 2011;
- 13. Phase II Direct Testimony of Travis Longcore on Behalf of the Center for Biological Diversity and the Sierra Club before the California Public Utilities Commission, Application 06-08-010, March 12, 2008;

- 14. Seeking Alpha, April 22, 2011, "NRG Energy's CEO Discusses Q4 2010 Results Earnings Call Transcript;"
- 15. J. M. Mason, V. M. Fthenakis, T. Hansen & H.C. Kim, 2006, "Energy Pay-Back and Life Cycle CO<sub>2</sub> Emissions of the BOS in an Optimized 3.5 MW PV Installation," *Progress in Photovoltaics Research and Applications*, 14:179-190;
- 16. Salt *et al.*, 2013, "Large Endolymphatic Potentials from Low-Frequency and Infrasonic Tones in the Guinea Pig," *The Journal of the Acoustical Society of America*, 133(3): 1561-1571;
- 17. Milham, Samuel, September 2011, "Attention Deficit Hyperactivity Disorder and Dirty Electricity," Letter to Editor, *Journal of Developmental and Behavioral Pediatrics*;
- 18. Milham, Samuel, 2010, "Historical Evidence That Electrification Caused the 20th Century Epidemic of 'Diseases of Civilization." *Medical Hypotheses*, 74:337-345;
- 19. Milham, Samuel & L. Lloyd Morgan, 2008, "A New Electromagnetic Exposure Metric: High Frequency Voltage Transients Associated with Increased Cancer Incidence in Teachers in a California School," *American Journal of Industrial Medicine*;
- 20. Lovich, Jeffrey E., and Joshua R. Ennen, 2011, "Wildlife Conservation and Solar Energy Development in the Desert Southwest, United States," *BioScience* 61(12):982-992;
- 21. Perry, Tony, June 4, 2014, "No injuries in crash of military jet into homes in Imperial County," *Los Angeles Times*.

Exhibits 1 through 21 attached to the comment letter submitted by Law Office of Stephan C. Volker are on file at the Imperial County Development Services Department and are available for public review.



August22, 2014

To: Patricia Valenzuela, Imperial County Planning Department, patriciavalenzuela@co.imperial.ca.us

Andy Horne, AndyHorne@co.imperial.ca.us,

Brian Mooney, <a href="mailto:bmooney@mooneyplanning.com">bmooney@mooneyplanning.com</a>

Oliver Alvorado, oalvorado@chambersgroupinc.com

From: Imperial County Environmental Justice Task Force

## ICPDS Notice of Preparation (NOP) of Draft Programmatic EIR (DPEIR) for Renewable Energy and Transmission Element (RETE) General Plan Update (GPU)

At our August 21, 2014 task force meeting, at the DTSC Imperial CUPA office in El Centro, public members of the Imperial County Environmental Justice Taskforce (excluding any government entities or representatives) endorsed this comment letter, by consensus.

The guidelines for the proposed Imperial County General Plan element on alternative energy must include assessments of public health issues (e.g. Valley Fever), propensity for releases of hazardous materials, and a mechanism with public oversight and control, to minimize these public health and environmental issues.

We ask for a 90 day public comment period on the EIR given the significance of the issues before the residents of Imperial County with this General Plan update on alternative energy

- To: Jim Minnick , Imperial County Planning Dept jimminnick@co.imperial.ca.us Patricia Valenzuela, Imperial County Planning Dept. patriciavalenzuela@co.imperial.ca.us Andy Horne <u>AndyHorne@co.imperial.ca.us</u>, Brian Mooney <u>bmooney@mooneyplanning.com</u> Oliver Alvorado <u>oalvorado@chambersgroupinc.com</u>
- From : Edie Harmon, as an individual <u>desertharmon@gmail.com</u>, and for SC CNRCC Desert Ctte, and for BackCountry Against Dumps (BAD), Backcountry Resource Advocacy Group (BRAG), Desert Protective Council (DPC), Comite Civico Del Valle, Inc., Morongo Basin Conservation Association, and Pat Flanagan
- CC: Terry Frewin, Chair, Sierra Club CNRCC Desert Committee; Donna Tisdale, BAD, BRAG; Terry Weiner, DPC; Pat Flanagan; Larry Silver, CELP; Lisa Belenky, CBD; Steven Volker, Volker Law, Luis Olmedo
- Date: August 22, 2014
- Re: ICPDS Notice of Preparation (NOP) of Draft Programmatic EIR (DPEIR) for Renewable Energy and Transmission Element (RETE) General Plan Update (GPU), Environmental Evaluation Committee Meeting on August 14, 2014 at 1:30 PM And Notice of Public Programmatic EIR Scoping Meeting at August 14, 2014 6:00 PM
- 1. **Request for 90 day comment period for EIR**. Please consider this to be Harmon's **SECOND** written request for the CEQA review and comment period to be for <u>90 days</u> not the shorter 45 day period announced at the Scoping meeting on August 14, 2014. During the meeting Harmon turned in a written request for a 90 day comment period as directed by Consultant Mooney. It is extremely important that the comment period be 90 days because both the RETE GPU EIR under CEQA and the DRECP NEPA document of what we have been informed as about 10,000 pages will be subject to public review at the same time. If decision makers are truly interested in receiving thoughtful substantive comments it is imperative that there be adequate time for the public to review both documents. Indeed, in addition to staff and consultants for the County, BLM's Tom Zale made a presentation abut the DRECP at the same meeting and stated a 90 day comment period for DRECP.
- 2. Our apologies, these comments were originally prepared by Harmon and then other individuals and organizations asked to be added as submitters. Accordingly, there has been inadequate time to change all references to the author(s) and to remove text that may be repetitive.
- 3. We support the efforts for renewable energy development, but with better planning to reduce environmental, cultural, environmental justice, and public health impacts than have been associated with already approved projects in Imperial County. Distributed energy projects closer to the point of use and closer to the built environment of end use would both reduce energy losses through transmission and reduce the above listed adverse environmental impacts from both construction of projects and transmission lines. Imperial County cannot ignore the consequences of renewable energy development in times of water shortages/long term drought which some scientists believe will lead to possible population out-migration rather than continued growth in existing coastal urban areas assumed to be end use sites for renewable energy to be exported from Imperial County projects.
- 4. To reduce the impacts to sensitive environmental, geological, and cultural resources and environmental justice communities, to the extent possible, Imperial County decision-makers and the County's General Plan and Ordinances should take strong positions to support the siting of any renewable energy projects in close proximity to the locations f or electricity end use, and to the extent possible as close as possible to the existing transmission lines/corridors rather than at remote or environmentally sensitive marginally productive sites such as Ocotillo Wind. Distributed energy and roof-top photovoltaic installations over parking lots and large flat roofs in San Diego will do much to reduce impacts to the more sensitive desert environment and sensitive biological and human

or environmental justice communities and at the same time reduce transmission losses. We believe it is important that Imperial County not agree to be considered as a sacrifice area for more affluent urban areas on or closer to the coast served by investor owned utilities in San Diego and Los Angeles Counties.

- 5. Evidence from recent monitoring of projects in many locations has disclosed to both the US FWS and public that large industrial scale wind and solar project sites have resulted in serious adverse impacts to bats and birds of a magnitude far greater than anticipated by biologists and US FWS. Indeed, there have been problems associated with the "lake effect" created by light on photovoltaic panels at projects in Imperial County during the day and even from reflections of moonlight and star light according to biologists. Developing large areas of reflective solar projects within the area of the Pacific Flyway and so close to Salton Sea could be creating a biological experiment with as yet unknown negative consequences far more serious than earlier assumed.
- 6. These and other issues should be addressed in the DEIR. Appended to the comments in response to the NOP, have been added the comments and concerns in a review of a portion of the Imperial County Baseline Environmental Inventory Report (IC BEIR) for the General Plan Update.
- 7. IC RETE GPU Project Location: Any General Plan Update includes as its geographic location the entire county, although defined areas of the County would be more heavily impacted than others. The GPU would include both urban and unincorporated areas of the County. Maps for this project are found at: <u>http://www.icpds.com/?pid=4036.</u>, with general information for this General Plan Update to be found at: <u>http://www.icpds.com/?pid=4030.</u>
- 8. **IC RETE GPU Project Description**: According to the NOP, the proposed RETE GPU would update the 2006 Geothermal and Alternative Energy Element and the ordinances associated with that element. The GPU is being funded by a \$700,000 grant from the California Energy Commission and as such, it appears that the intended goals fo the GPU will be to ensure that Imperial County can be convinced to, in the words of the NOP:

" identify new opportunities for renewable energy and assure that the Imperial County General Plan can meet the needs for future development while remaining consistent with identified land use and environmental goals. The proposed project would support the development of expanded renewable <u>energy power production and exportation to</u> <u>accommodate future growth in California and improve overall system reliability</u>. The proposed project would expand the existing element to take into account additional forms of renewable energy, including wind, solar, deep solar ponds, biofuel, bio-mass, algae production, concentrated solar-thermal power, and concentrated photovoltaic." (NOP text, emphasis added)

9. The NOP continues by stating that the RETE GPU would:

"provide a comprehensive document that contains the latest knowledge about renewable energy resources, feasible development technology, legal requirements, policies (County, State, and Federal), and implementation measures. The Element update will provide a framework for the review and approval of renewable energy projects in the County. The development projections presented in the Element update are based on forecasts obtained from the California Energy Commission, renewable energy industry, regional utilities, Desert Renewable Energy Conservation Plan, and County staff." (NOP text)

10. Based on the text of the NOP which states that "The proposed project would support the development of expanded renewable energy power production and <u>exportation to accommodate future growth in</u> <u>California</u> and improve overall system reliability", (NOP, emphasis added) it apparent that the County is seen as a location to be exploited for the benefit of more affluent areas elsewhere in the state of California and likely to the detriment of the economic well being and public health of the residents of Imperial County as agricultural jobs are lost and air quality deteriorates.

#### 11. The NOP continues by stating that:

The Programmatic EIR will analyze potential impacts associated with the following: Aesthetics; Agricultural Resources; Air Quality; Biological Resources; Cultural Resources; Geology/Soils; Greenhouse Gas Emissions/Climate Change; Hazards/Hazardous Materials: Hydrology/Water Quality; Land Use/Planning; Mineral Resources; Noise; Population and Housing; Public Services; Recreation; Transportation/Circulation; Utilities and Service Systems; Cumulative Impacts; and Growth-inducing Impacts. The Imperial County Planning & Development Services Department would like to know your ideas about <u>how future development</u> associated with the Renewable Energy and Transmission Element Update <u>may affect the environment</u>. We would also like your comments and <u>suggestions regarding Element update goals and objectives and mitigation measures that may</u> be incorporated into the Element update to reduce or avoid any significant environmental <u>impacts</u>. Your comments will guide the scope and content of environmental issues to be examined in the Programmatic EIR. (NOP with emphasis added)

- 12. The Goals and Objectives for the RETE GPU were provided at the TAG meeting in June, but cannot be found at a County website for the RETE GPU and discussed in more detail later.
- 13. **Public Health is an Environmental Justice Issue in Imperial County**: Conspicuously missing form the NOP environmental analysis/concerns and request for comments is any mention of any concern for public health. Concerns about adverse <u>public health impacts have been raised at each of the community meetings Harmon attended and Brian Mooney assured the public that "public health" would be added to the list of potential impacts to be addressed by the EIR. So why does the NOP fail to list public health as an issue to be analyzed? Public health is an environmental justice issue in a place like Imperial County. As such, it must be addressed in any CEQA or NEPA analysis. It seems well recognized that Imperial County is economically challenged, with poor air quality, so there can be no doubt that public health issues are environmental justice issues.</u>
- 14. There are more public health issues that just worsening air quality, increased particulates, asthma and allergies that are associated with heavy land clearing and construction affecting large acreages. What are the impacts of access to adequate health and dental care for families impacted by either change in employment opportunities or medical problems associated with poorer air quality or serious infections that create challenges to employment and the ability to provide adequate support for other family members? These questions are as relevant when applied to the land owners/growers and also to every field worker and to all residents of the County and those who come to the County to work or recreate no matter where they might live or work.
- 15. PBS documentary on valley fever: KVIE Health series: Deadly Dust Valley Fever (Exhibit 2) notes that: "The growing problem of Valley Fever in California and other western states that affects 150,000 people each year." That documentary included footage and reference to the Army research Harmon has been sharing for years related to concerns about siting renewable energy projects in arid areas known as cocci hot spots, such as the lands used for military activity in areas between Yuma and Desert Center, areas in SE Imperial County with evidence of WW II training activities still obvious today. See: http://history.amedd.army.mil/booksdocs/wwii/PM4/CH16.Cocciodioidomycosis.htm (Exhibit 3) However, recent articles in recent years and what has been learned in the past more than 50 years have documented serious cocci problem areas that were not identified as such or were thought by the Army to not have high incidences of valley fever spores in the soils and dust. Blowing sand and dust can travel long distances as noted in the New Yorker article and as noted by the fact that a gorilla in the Los Angeles zoo was recently diagnosed and treated for valley fever, not likely that the gorilla had visited what were considered cocci hot spots. See Exhibit 39. http://www.latimes.com/science/la-me-0620-gorilla-20140620-story.html .
- 16. <u>http://www.newyorker.com/reporting/2014/01/20/140120fa\_fact\_goodyear?printable=true</u>. "Death Dust: The valley fever menace." (Exhibit 4) The article describes the 1977 dust storm in Bakersfield

that carried the dust more than 400 miles to Sacramento where more than 100 people got valley fever. CDPH also stated that there were cases in San Francisco from that dust storm. This article also mentions what military knew about cocci and cocci hot spots during and after WW II, in addition to problems related to solar development in Antelope Valley and San Luis Obispo County.

- 17. Harmon is aware of at least 4 cases of valley fever in Imperial County in persons who are not inmates at one of the state prisons, in addition to a dog whose death was determined by a veterinarian to be caused by valley fever most likely acquired in Ocotillo where the dog lived. She has been told of the challenges of getting adequate and effective treatments by a relative of the person who got valley fever after getting a face full of dust at a ground-breaking ceremony in the city of Imperial. Many visits to physicians resulted in incorrect diagnosis, until the person was finally sent to Arizona for diagnosis and treatment. Late diagnosis has necessitated very expensive and long term antifungal treatments and health problems that have affected the entire family.
- 18. The concerns about valley fever related to construction dust exposures to fungal pathogens is an issue well documented by Dr. Jason Wilken and epidemiologists at California Department of Public Health (CDPH) at the solar projects in San Luis Obispo County and discussed by the lead researcher at the July 17, 2014 meeting of the Imperial County Environmental Justice Task Force (EJ TF). There will soon be a journal article published incorporating the information about the 43 cases of valley fever in workers at solar projects in San Luis Obispo County in the 44 slide presentation to the EJ Task Force. The published article will be provided as soon as available, but the 44 slide presentation to the Imperial County Environmental Justice Task Force is also available. (Exhibit 5)
- 19. At the EJ TF meeting we were informed of probable cases of valley fever in workers from Mexicali who were working at solar projects in Imperial County.
- 20. There are other and very different <u>public health impacts</u> associated with <u>construction and operation</u> of industrial scale wind and solar projects that have been well documented by residents of Ocotillo and other wind turbine sites, by measurements made near industrial scale wind and photovoltaic sites by Sr. Sam Milham, and first hand experiences near such industrial scale sites. Dr. Sam Milham is a retired epidemiologist from Washington state . He splits his time between Washington state and his home in Indio, CA. Dr. Milham has made site visits and measurements in southern California. See the article in August 2013 <u>San Diego Reader</u>) about problems associated with wind: <u>http://www.sandiegoreader.com/news/2013/aug/21/cover-wind-turbines-are-everywhere-out-here/</u> (Exhibit 6). In addition, it is our understanding that some solar companies have "bought out" properties that would be surrounded by industrial scale solar projects in Imperial County.
- 21. The County would be making a serious mistake if it chooses to ignore the adverse impacts to wildlife, birds and public health that have now been documented at other industrial scale renewable energy projects in southern California and Nevada. Such issues must be addressed in any EIR related to renewable energy for any place in Imperial County. For example very recent articles include: <a href="http://abcnews.go.com/Technology/wireStory/emerging-solar-plants-scorch-birds-mid-air-25017031?singlePage=true">http://abcnews.go.com/Technology/wireStory/emerging-solar-plants-scorch-birds-mid-air-25017031?singlePage=true</a> (Exhibit 7) Knickmeyer & Locher 2014-08-18 Emerging solar plants scorch birds in Mid-air ABC News. And there is additional concern about impacts of concentrations of solar panels in the desert areas being mistaken as water by birds, bats and insects at all times of day, and including reflections by stars and moonlight. This concern has been confirmed by biologists with US FWS.
- <u>22.</u> <u>https://www.reviewjournal.com/news/water-environment/bat-deaths-prompt-change-wind-farm</u> (Exhibit 8)
- 23. There must be details of meaningful mitigation and monitoring programs and a very serious effort to enforce implementation rather than ignore monitoring and mitigation programs. In the past, this has been a problem both with respect to US Gypsum mitigation and monitoring approved in 2008, but still not fully implemented and subject of recent court decision, and with respect to monitoring and

mitigation related to the ongoing very serious air quality and other issues at Ocotillo Wind Energy Project, approved in 2012. For both projects, the County appears to have chosen to ignore mitigation and monitoring programs that were approved by the Board of Supervisors and been recorded at the County Recorder's office. The concerned and impacted public should not be repeatedly expected to file legal actions or submit formal reports to California state agencies when the County fails to respond to public health and environmental justice issues.

- 24. As part of any socio-economic environmental review related to the proposed and existing renewable energy projects on private lands removed from long term production, there must be consideration what the drop in property taxes associated with conversion of agricultural lands to solar which cannot be taxed will mean for the County's General Budget and the impact of loss of property taxes on schools and other essential and desirable public services. Loss of revenues associated with conversion of agricultural lands includes the loss of sales and use taxes due to exemptions for utility scale solar uses. As jobs are lost related to reduced agricultural activity, there must also be an analysis of what this means to affordability of housing for families whose employment is adversely impacted. What will loss of economic activity mean for the ability of impacted families to afford medical and dental care for all family members in addition to safe and affordable housing?
- 25. See comments related to IC BEIR concerns related to conversion of farm lands to industrial scale solar projects. Lands used for utility scale solar projects cannot be used for other activities, and at least for the time being cannot be taxed. Both issues should be analyzed for their economic and environmental justice issues.
- 26. EIR must consider potential implications of <u>serious long term drought</u> and the impact of increasing water shortages on development and population growth or relocations in the future. "America might soon witness a dust bowl like migration" by Saunders. <u>Business Insider</u> July 27, 2014. (Exhibit 9) <u>http://www.businessinsider.com/america-may-soon-witness-a-second-dust-bowl-like-migration-2014-7</u> <u>http://www.pbs.org/wgbh/americanexperience/features/general-article/dustbowl-drought/</u>(Exhibit 10) <u>http://www.pbs.org/wgbh/americanexperience/features/general-article/dustbowl-mass-exodus-plains/</u>(Exhibit 11)\_

http://www.vox.com/2014/8/15/6006467/california-hasnt-had-a-drought-this-bad-since-at-least-1895 (Exhibit 12)

http://news.nationalgeographic.com/news/2014/02/140213-california-drought-record-agriculture-pdo-cli mate/ Kostigian 2014 "Could California's drought last 200 years? Clues from the past suggest ocean's temperature may be a driver." National Geographic Daily News Feb 13, 2014 (Exhibit 13) (This article even quotes Celeste Cantu, originally from Imperial County, but now the general manager for the Santa ana Watershed Project authority.

That Kostigian article continues by stating: "During the medieval period, there was over a century of drought in the Southwest and California. The past repeats itself," says Ingram, who is co-author of the book: <u>The West Without Water: What Past Floods, Droughts, and Other Climate Clues Tell Us About Tomorrow</u>. (Exhibit 14) Indeed, Ingram believes the 20th century may have been a wet anomaly.

http://www.mercurynews.com/science/ci 24993601/california-drought-past-dry-periods-have-lasted-mo re Rogers 2014-01-25. "California drought: Past dry periods have lasted more than 200 years, scientists say" <u>San Jose Mercury News</u> (Exhibit 15) states that: "Through studies of tree rings, sediment and other natural evidence, researchers have documented multiple droughts in California that lasted 10 or 20 years in a row during the past 1,000 years -- compared to the mere three-year duration of the current dry spell. The two most severe megadroughts make the Dust Bowl of the 1930s look tame: a 240-year-long drought that started in 850 and, 50 years after the conclusion of that one, another that stretched at least 180 years."

27. If the drought is as long term and as severe as some scientists project it could be, it is reasonable to plan for the future development of Imperial County to benefit the increased electrical consumption and growth in southern California, growth and development which may be extremely questionable? Thus,

the question for the propose and need for many aspects of the RETE GPU and the assumed need for new transmission corridors to support such increased growth are in question. What would be the alternative based on population declines or out migration from coastal and other water short portions of San Diego County? If for no other reason than drought, decision-makers should be realistic that conversion of agricultural lands and loss of water use on those lands for a period of 20 to 30 years, most likely means forever.

- 28. Increasing concerns about the availability of water resources in California can be seen in the Los <u>Angeles Times</u> article of August 19, 2014 "Rights to California surface water far greater than runoff" (Exhibit 16) which noted that: "While the annual statewide flow averages 70 million acre feet, water rights issued since 1914 allocate 370 million acre feet. (An acre foot of water is sufficient to supply two households for a year.)" ... the appropriated rights are so much more than the actual full natural flow. In many cases, we've five to 10 times over-promised. The article makes no mention of how the California water picture might change if agricultural lands served by Colorado River water were converted from agricultural use to industrial scale solar projects, supposedly temporarily for 20 to 30 years. The EIR must address drought, over-allocation of water resources and the possibility, or lack thereof, for Williamson Act lands to be returned to agricultural use given all this and other information. See: <u>http://www.latimes.com/science/sciencenow/la-sci-sn-california-water-rights-20140819-story.html</u> And <u>http://www.kpbs.org/news/2014/aug/20/study-california-water-allocations-far-exceed-supp/</u> (Exhibit 17)
- 29. <u>http://www.bloombergview.com/articles/2014-08-19/coming-to-your-dinner-table-california-s-drought</u> (Exhibit 18)
- 30. Obviously there are many issues related to drought, water availability, and conversion of agricultural lands for industrial scale solar projects that have long term implications for the future of Imperial County, issues that must be thoughtfully and carefully addressed in the EIR for the General Plan Update. How will the state wide concerns related to population growth vs. agricultural production and resulting seasonal dietary changes and food availability impact the General Plan Update decisions? Will County decision-makers have adequate options if their choice is not to effectively agree to conversion of Imperial County to a renewable energy sacrifice area? Are there pre-decisional implications that accompany the acceptance of a \$700,000 grant from the California Energy Commission to prepare a renewable energy and transmission element for the General Plan Update?
- 31. There must be a discussion of Imperial County's Right to Farm Ordinance vs. the conflicts between supposedly protected agricultural practices and solar conversion of agricultural lands. Are there consistency and/or compatibility issues related to such contrasting land uses on adjoining parcels? See: <a href="http://www.icpds.com/CMS/Media/M-Appendix-B---Right-to-Farm-Ordinance.pdf">http://www.icpds.com/CMS/Media/M-Appendix-B---Right-to-Farm-Ordinance.pdf</a> (Exhibit 19)
- 32. EIR must consider using financial resources to reduce energy usage in Imperial County as a means of reaching reduced reliance on traditional electrical generation. What are the total number of mobile homes occupied for residential purposes in Imperial County? What is the average per capita energy usage for residents of mobile homes, especially in mobile home parks where such homes are older and have few, if any, shade trees to reduce external ambient temperatures? Mobile homes often have only (2) two inch thick insulation and have air circulating all around home, being essentially an oven in the summer and an ice box in winter, both extremes requiring either air conditioning or heating to make such housing comfortable and/or safe for sensitive occupants, especially the elderly. Rather than use money to construct industrial scale solar electrical generating facilities, the money might be better spent to weatherize or install double pane windows to reduce energy needs of older homes or mobile homes in Imperial County and elsewhere. One might consider rooftop solar or planting of native vegetation shade trees whose roots would soon reach the water table and require little or no additional watering even in Imperial County. There could and should be workshops to educate and inform local residents about passive solar options for home heating and hot water production.
- 33. The same is true of all the "portable" classrooms that are used at some of the schools and office buildings. What is the per occupant energy use for portable or temporary classrooms or business or

office space. I visited one middle school classroom which was miserably hot with cooling system operating and shades drawn so lights had to be on. An uncomfortable environment in which to be a student.

- 34. Parking lots and big-box commercial spaces should consider photovoltaic panels to be installed on structures over parking lots. If the schools in Big Pine in Inyo County can install PV panels over the school parking lot, why can't this be done in Imperial County to make shade and generate electricity?
- 35. To reduce reliance on traditional energy sources for pumping water, could IID use photovoltacics at point of use? Perhaps it already does.
- 36. For any and all construction projects, including industrial scale solar and wind projects any permits or Conditional Use Permit must include the requirement for education of work related valley fever prevention. See Cal OSHA info for employers & employees <u>http://www.dir.ca.gov/dosh/valley-feverhome.html</u> (Exhibit 20) or from CDPH at <u>http://www.cdph.ca.gov/programs/ohb/Pages/Cocci.aspx.</u> (Exhibit 21) See also: <u>http://www.cdph.ca.gov/programs/hesis/documents/coccifact.pdf</u> (Exhibit 22) for the most detailed information and recommendations. Every contractor and employee should be provided a copy of this last document with the detailed information. Every employee should be required to attend a valley fever education training program and sign that he or she has been provided the information. This is especially important because workers may come from states or locations where physicians might not consider valley fever in a differential diagnosis for an ill worker seen by a health care provider or in an Emergency Room elsewhere as noted by CDPH from the experience of the valley fever outbreak at solar sites in San Luis Obispo County.
- 37. For all Conditional Use Permits there must be a requirement that the project applicant and all contractors and subcontractors provide information about county and state of residence before working on any project in Imperial County, together with start and finish dates of employment, requirements for health and safety training for all employees and enforceable mitigation and monitoring related to dust generation at a project work site both during and after construction. This is especially important for the CDPH in the event that there may be an exposure environmental pathogen such as the fungus that causes valley fever and created an outbreak of valley fever in San Luis Obispo County where workers from as far away as Georgia became ill.
- 38. Contractors and employers should be required to cooperate with CDPH in tracking county and state of residence for all workers at renewable energy projects, and keeping names and addresses, start and finish dates of employment because valley fever is a reportable information for both CDPH and CDC. Both agencies should be encouraged to keep records of both location of residence for patients and location where Coccidioidomycosis or other pathogen exposure is suspected. This recommendation is based on experiences of CDPH epidemiologists tracking the valley fever outbreak associated with workers at San Luis Obispo solar project construction. Public health is more than a local concern.
- 39. Criteria should be established for stopping construction activities during periods of high dust because that will help protect workers and down-wind residents. Consultants may not be residents of Imperial County and therefore not so concerned about exposures to airborne fungal spores that cause valley fever, but Imperial County decision-makers and their families cannot escape exposures to blowing dust, sand and biological materials where they live, work and play. So, all County residents are "down-winders" and exposed to whatever may be in the dust originating at project sites, or simply worsening air quality creating additional challenges for those with asthma and allergies.
- 40. There must be a system for dual reporting to both CDPH and the local APCD in the event that the County APCD fails to enforce strict measures related to workplace dust generation associated with renewable energy projects.
- 41. Mitigation and monitoring conditions, and within a CUP, should include requiring project applicants and contractors to contribute substantial sums of money for long term monitoring of possible public health impacts related to asthma and allergies from worsening air quality and wind blown dust related to construction and to cover costs for laboratory texts for all persons going to Emergency Rooms in

Imperial County with cases of Community Acquired Pneumonia (CAP). CAP is pneumonia that is not acquired as a result of being a patient in a hospital or other care facility. If CDPH or a treating physician determines that valley fever may be related to dust from construction sites, the costs of long-term treatment of valley fever should be covered by the pooled public health mitigation funds. Pooling of funds is essential because with so many projects so close together it may not be possible to identify the specific project site whose dust-generating construction activities were the source of the fungal spores causing valley fever. The pooled public health mitigation fund should be large enough to cover life-time antifungal treatments for valley fever if deemed required by physicians and/or CDPH. Given the costs of life-time monitoring and antifungal treatments it is obvious that most residents in Imperial County cannot afford to pay for such without substantial financial support and/or serious adverse impacts to family and relatives. It can never again be acceptable to deny testing for fungal infections as a possible cause of CAP when causes remain unknown and bacterial infections have been ruled out.

- 42. Mitigation and monitoring public health pool of funding should be available to help cover costs of asthma treatments for County residents. Quality of life for County residents should not be compromised for corporate profits. There should also be a requirement for owners and construction of transmission lines to contribute to the pooled public health fund because construction for transmission lines has been documented as causing many dust problems for already completed sections of the Sunrise Powerlink.
- 43. Biological resource inventory data collected by biologists must not be withheld or covered by confidentiality agreements required by contractors. Indeed, we have been informed that it is "illegal" for contractors to require biologists to sign any confidentiality agreement as a term of employment. With regard to biological resources inventories, it is imperative that both the County and BLM insist that contractors never require biologists to sign confidentiality agreements and that reports of any biological resources inventories be provided directly to US Fish and Wildlife Service and to California Department of Fish and Wildlife without first going to any contractors related to a project applicant. Biological resources information must not be considered confidential, unless so determined by US FWS. Preparers of NEPA/CEQA research for wind or solar projects must be required to comply with FWS regulations., even if it means changing the way the County and BLM have accepted biological resources survey asserting that the list of plants at expansion of a sand and gravel operation by the Coyote Mountains Wilderness was "confidential".
- 44. However, it is well understood that information provided by consultants on archeological and cultural resources is expected and required to be kept confidential and not shared with the general public.
- 45. The EIR should discuss the benefits of passive solar for heating of indoor spaces in winter using appropriately sited thermal mass structure in the building and proper orientation of windows to take advantage of solar gain in winter and shading to prevent excess solar gain and heating in the summer. The EIR must also consider the alternative means of heating water for all purposes by considering passive solar hot water systems that can be as simple as heating water in coiled hoses or pipes in the sun and storing the water in an insulated tank. Homeowners can make many systems themselves or local persons could be trained to help designing and installing such systems. If there are concerns about such hot water systems on roofs, then they might be considered as being mounted above an outdoor patio so water leakage is not a concern. Harmon knows such systems work because she has neither supplemental heating nor any means of utility generated hot water where she lives, and sees no need for either. Life-style and advanced planning solve many perceived energy needs and save money.
- 46. Based on Harmon's review, the Imperial County Baseline Environmental Inventory Report (IC BEIR) is more than woefully inadequate for inclusion as part of the EIR process without major updating and serious revisions and corrections to eliminate internal inconsistencies.
- 47. The Baseline Environmental Inventory Report (IC BEIR) dated June 2014 is found at: <u>https://chambersgroupinc.egnyte.com/publicController.do?folderName=20140605&fileName=2JAURG</u> <u>dgeE#folder-link/</u>

- 48. Based on information in the Imperial County Baseline Environmental Inventory Report (IC BEIR) dated 6-2-14, and consistent with the language of the first few paragraphs of the NOP, there is <u>serious concern</u> or doubt that the GPU would actually intend to "reduce the amount of land that may be developed " for renewable energy in Imperial County. Because I was unable to submit comments on the ICBEIR prior to being advised of the NOP, comments on the IC BEIR will be incorporated into these comments.
- 49. Based on information in ICBEIR and calculations based on that information, it appears there is the potential for significantly increased conversion of lands for industrial scale renewable energy projects to export electricity to more affluent urban areas on the coast at the expense of Imperial County residents and taxpayers. Based on information in the IC BEIR and the Goals and Objectives for the Renewable Energy General Plan Update as provided to the Technical Advisory Group, Imperial County appears to be more than willing to find itself as a de facto Sacrifice Area for both the state of California and potentially elsewhere.
- 50. Indeed, several years ago Sempra Energy told a public meeting that for every new industrial scale wind or solar project there would have to be a new electrical generating facility of equal or greater electrical generating capacity for back up. This would mean many new power plants likely natural gas or other fuel sources and lots of new transmission lines crossing the County at several locations.

#### Closing thoughts to consider for analysis in any RETE GPU EIR related to renewable energy projects:

- 51. **Eisenhower's Farewell Address to the Nation in 1961** is relevant here where he cautioned the American people that "we must guard against the acquisition of unwarranted influence, whether sought or unsought, by the military-industrial complex." There was also a second less well remembered warning . Eisenhower said that, yes, science and research played a crucial role in national security, "Yet, in holding scientific research and discovery in respect, as we should, we must also be alert to the equal and opposite danger that public policy could itself become the captive of a scientific-technological elite."
- 52. Today, many include climate change as being related to national security and are determined to increase use of "renewable" energy as if there were no energy or raw materials to be used in manufacturing, transporting and constructing such projects or new transmission lines, thus ignoring the life- cycle costs of such energy sources from cradle to grave. Appropriate siting of any such industrial scale energy project is critical to reduce environmental and environmental justice and public health impacts.
- 53. For discussion of life-cycle costs for various types of renewable energy projects, see detailed discussions in Zehner, Ozzie. 2012. Green Illusions: The dirty secrets of clean energy and the future of environmentalism. Univ. Of Nebraska Press. We would strongly recommend that reviewers read Ozzie Zehner's 2012 Green Illusions: The Dirty Secrets of Clean Energy and the Future of Environmentalism, Chapter 2 "Wind Power's flurry of limitations." He notes that "Producing more energy simply increases supply, lowers costs, and stimulates additional energy consumption." (Zehner at p. 59) In addition, issues surrounding wind energy "diverts attention from competing solutions that promise social and ecological value. Citing Waldermann, he points out "when it comes to climate change, investments in wind and solar energy are not very efficient. Preventing one ton of CO<sub>2</sub> emissions requires a relatively large amount of money. Other measures, especially building renovations, cost much less– and have the same effect." (Zehner at p. 59) And building renovations would provide far more quality of life and employment opportunities for residents of Imperial County.
- 54. Life-cycle costs include discussions of the impacts and costs of resource use from point of origin, mining, manufacturing, transportation, construction, operations and disposal at end of project or product life. There are impacts and costs associated with activities at each step/location related to the ultimate project and then disposal site. And for each aspect of the entirety of the renewable energy project and its transmission lines there are soil, water, dust, air-quality, biodiversity and human health issues that must not be ignored. The chapters on solar and wind power are worthy of serious consideration prior to the consideration in any General Plan Update and changes to ordinances relating to renewable energy projects anywhere in Imperial County or even in California.

- 55. Zehner concludes his discussion of wind energy by noting that "it is time to put away the clean energy pom-poms, and get back to work speaking up for global ecosystems, which are hurt not helped, by additional energy production", especially in the developed and more affluent world. "Because as we shall see, the United States doesn't have an energy crisis. It has a consumption crisis. Flashy diversions created through disingenuous grandstanding of alternative-energy mechanisms act to obscure this simple reality." (Zehner at p.60)
- 56. Zehner's assessment of solar energy projects is no more encouraging than his assessment for wind and other alternative energy sources. Zehner notes that the manufacturing solar cells:
  - 57. "is one of the largest emitters of hexafluoroethane (C2F6), nitrogen trifluoride (NF3) and sulfur hexafluoride (SF6).. Used for cleaning plasma production equipment, these three gruesome greenhouse gases make CO2 seem harmless. As a greenhouse gas, C2F6 is twelve thousand times more potent than CO2, is 100 percent manufactured by humans, and survives ten thousand years once released into the atmosphere. NF3 is seventeen thousand times more virulent than CO2, and Sf6, the most treacherous greenhouse gas, according to the Intergovernmental Panel on Climate Change, is twenty-five thousand times more threatening. The solar photovoltaic industry is one of the leading and fastest growing emitters of these gases, which are now measurably accumulating within the earth's atmosphere. A [2008] recent study on NF3, reports that atmospheric concentrations of the gas have been raising at an alarming 11 percent per year." (Zehner at . 18)
- 58. He states that "Collected and assembled into one narrative, the costs, side effects, and limitations of solar photovoltaics become particularly worrisome, especially within the context of our current national finances and limited resources for environmental investments." (Zehner at p. 26) Add to that the problems with temperature sensitivity for photovoltaics in an environment as hot as Imperial County in the summer months, one must question the long term wisdom of undertaking many large utility scale solar projects in hot desert locations where blowing dust and sand may compromise moving parts of the moveable solar arrays, in addition to the accumulation of dust reducing efficiency of panels.
- 59. And what about the life cycle costs and disposal issues with a tremendous amount of electronic waste at the end of their useful life, estimated to be 20 to 25 years? Where will the waste go and what might be the potential environmental and human health impacts associated with the manufacturing and disposal of potentially extremely toxic materials? Will some of the embedded chemicals and compounds end up seeping into groundwater if panels end up in landfills, or enter waterways or air if incinerated? What about the toxics issues at point of mining and manufacture? What is the estimated cubic volume of waste at the ends of the useful life of the solar projects, where and how will it be disposed of safely?
- 60. Zehner's discussion of solar energy notes that: "even if the United States expands solar energy capacity, this may *increase* coal use rather than replace it." Consider the life cycle costs from cradle to grave.
- 61. This raises the question of whether an economically challenged, rural county, with a high percent Spanish speaking population, such as Imperial County is being set up to become captive of a scientifictechnological and affluent elite that reside more than 100 miles away in a milder coastal climate such as San Diego which is served by power from SDG&E.
- 62. Where is the discussion of alternatives that include reduction in energy consumption through increased conservation and energy efficiency and life-style changes for the affluent in addition to increased energy efficiency projects and home renovation to help the economically challenged residents living in extreme temperatures?
- 63. See: Hernandez, et al. 2014 Environmental impacts of utility-scale solar energy. <u>Renewable and</u> <u>Sustainable Energy Reviews</u>. V. 29, Jan 2014, pp. 766-779. <u>http://www.sciencedirect.com/science/article/pii/S1364032113005819</u> 10.1016/j.rser.2013.08.041 for discussion of complex environmental tradeoffs for utility-scale solar energy development impacts on "on biodiversity, land-use and land-cover change, soils, water resources, and human health."

- 64. These are among the many issues that must be addressed in the EIR. See additional issues in the comments on the IC BEIR which is incorporated by reference as part of these NOP issues to be addressed in the EIR. Why? Because we have been told by Brian Mooney that the BEIR is a part of the RETE GPU documentation.
- 65. In closing, we urge that the County respect and honor the statement that appears on each agenda for the Imperial County Environmental Justice Task Force which includes the following from Cal/EPA that all Boards, Departments, and Office "shall accord the highest respect and value to every individual and community, by developing and conducting public health environmental protection programs, policies, and activities in a manner that promotes equity and affords fair treatment, accessibility, and protection for all Californians, regardless of race, age, culture, income, or geographic location." Thank you, Cal EPA for that message of hope and inspiration!

#### Combined list of Exhibits for both comments for the N OP and comments on the IC BEIR follows.

#### Exhibits re NOP and IC BEIR for Imperial County Renewable Energy Transmission Ele GPU

- 1. Pelley 2014 June 19. Video recording of General Plan Update Community Meeting in Ocotillo
- 2. PBS documentary on valley fever 2014: KVIE Health series: <u>Deadly Dust Valley Fever</u>
- 3. Smith C.E. undated Chapter on Coccididiomycosis for Dept. of Army http://history.amedd.army.mil/booksdocs/wwii/PM4/CH16.Cocciodioidomycosis.htm
- 4. <u>http://www.newyorker.com/reporting/2014/01/20/140120fa\_fact\_goodyear?printable=true</u>. "Death Dust: The valley fever menace."
- 5. Wilken, CDPH 2014 Valley fever outbreak at solar projects in San Luis Obispo County, article to be published soon.
- 6. August 2013 <u>San Diego Reader</u> about problems associated with wind turbines: http://www.sandiegoreader.com/news/2013/aug/21/cover-wind-turbines-are-everywhere-out-here/
- 7. <u>http://abcnews.go.com/Technology/wireStory/emerging-solar-plants-scorch-birds-mid-air-25017031?si</u> <u>nglePage=true</u> Knickmeyer & Locher 2014-08-18 Emerging solar plants scorch birds in Mid-air ABC News. And http://www.detroitnews.com/article/20140818/SCIENCE/308180048#ixzz3B4yEaYoJ
- 8. <u>https://www.reviewjournal.com/news/water-environment/bat-deaths-prompt-change-wind-farm</u>
- 9. "America might soon witness a dust bowl like migration" by Saunders. <u>Business Insider</u> July 27, 2014. <u>http://www.businessinsider.com/america-may-soon-witness-a-second-dust-bowl-like-migration-2014-7</u>
- 10. <u>http://www.pbs.org/wgbh/americanexperience/features/general-article/dustbowl-drought/</u>
- 11. http://www.pbs.org/wgbh/americanexperience/features/general-article/dustbowl-mass-exodus-plains/\_\_\_\_\_
- 12. http://www.vox.com/2014/8/15/6006467/california-hasnt-had-a-drought-this-bad-since-at-least-1895
- 13. <u>http://news.nationalgeographic.com/news/2014/02/140213-california-drought-record-agriculture-pdo-cli</u> <u>mate/</u> Kostigian 2014 "Could California's drought last 200 years? Clues from the past suggest ocean's temperature may be a driver." National Geographic Daily News Feb 13, 2014
- 14. Ingram 2013 <u>The West Without Water: What Past Floods</u>, Droughts, and Other Climate Clues <u>Tell Us</u> <u>About Tomorrow</u>. A link to the book.
- 15. <u>http://www.mercurynews.com/science/ci\_24993601/california-drought-past-dry-periods-have-lasted-mo</u> <u>re</u> Rogers 2014-01-25. "California drought: Past dry periods have lasted more than 200 years, scientists say" <u>San Jose Mercury News</u>
- 16. http://www.latimes.com/science/sciencenow/la-sci-sn-california-water-rights-20140819-story.html Los

Angeles Times August 19, 2014 "Rights to California surface water far greater than runoff"

- 17. <u>http://www.kpbs.org/news/2014/aug/20/study-california-water-allocations-far-exceed-supp/</u>
- 18. http://www.bloombergview.com/articles/2014-08-19/coming-to-your-dinner-table-california-s-drought
- <u>19.</u> <u>http://www.icpds.com/CMS/Media/M-Appendix-B---Right-to-Farm-Ordinance.pdf</u>
- 20. http://www.dir.ca.gov/dosh/valley-fever-home.html
- 21. http://www.cdph.ca.gov/programs/ohb/Pages/Cocci.aspx.
- 22. http://www.cdph.ca.gov/programs/hesis/documents/coccifact.pdf
- 23. <u>http://saltonsea.ca.gov/geography.html</u>
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- 25. Raftery 2014 "Was it Fraud? Experts Raise Serious Questions after Low First-year Energy Production at Ocotillo Wind Project" April 30, 2014 <u>http://www.eastcountymagazine.org/print/15554</u>
- 26. <u>sb 618 bill-20111008 chaptered.pdf</u> SB 618 Chap. 6.9 "Solar-Use Easement
- 27. Raftery 2013 <u>http://www.eastcountymagazine.org/ca-native-american-heritage-commission-issues-report-backing-viej</u> as-and-quechan-claims-ocotoillo-wind http://www.eastcountymagazine.org/print/12270
- 28. Perry 2010–4-12 "Buildings, nerves under stress in border region a week after quake: As california and Mexican officials work to assess harm to infrastructure, a series of 'robust' aftershocks have added to emotional turmoil in area hardest hit by the 7.2 earthquake" Los Angeles Times. http://articles.latimes.com/2010/apr/12/local/la-me-quake-damage12-2010apr12
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- 30. Robbins 2011-04-04 "Big Mexican quake changed thinking about faults." <u>San Diego Union Tribune</u> http://www.utsandiego.com/news/2011/apr/04/large-mexican-earthquake-eye-opener-scientists/?pri.
- 31. Beccera 2010-06-24 "Easter Sunday earthquake shifted Earth's crust nearly 3 feet near Calexico: The Mexicali-area quake moved the crust south of the border up to 10 feet, radar images and data from NASA show." Los Angeles Times http://articles.latimes.com/2010/jun/24/local/la-me-624-mexicali-earthquake-20100624
- 32. SDG&E's Imperial Valley Substation was damaged in the Easter 2010 earthquake. ) http://tdworld.com/substations/sdge-prepares-future-seismic-events
- 33. Ocotillo-Coyote Wells Groundwater Basin in 1996 "Ocotillo0Coyote Wells Aquifer in Imperial County California Sole source Aquifer Final Determination" <u>Federal Register Vol. 61, No. 176, Sept. 10, 1996</u> <u>Notice</u> US EPA. <u>http://www.gpo.gov/fdsys/pkg/FR-1996-09-10/pdf/96-23066.pdf</u>
- 34. EPA qrg\_ssamap\_ocotillocoyotewells 2001 http://www.epa.gov/safewater/sourcewater/pubs/qrg\_ssamap\_ocotillocoyotewells.pdf
- 35. ECM 2013 Video inside a flash flood at the Ocotillo wind facility http://www.eastcountymagazine.org/wild-ride-video-inside-flash-flood-ocotillo-wind-facility
- 36. <u>http://www.eastcountymagazine.org/ocotillo-residents%E2%80%99-woes-continue-new-dust-storm-floo</u> <u>ding-white-sludge-flow-strikes-community</u> <u>http://www.eastcountymagazine.org/print/13947</u>
- 37. http://www.eastcountymagazine.org/massive-dust-storm-strikes-ocotillo

- 38. <u>http://articles.latimes.com/2013/may/01/local/la-me-ln-valley-fever-solar-sites-20130501</u> 28 workers sickened by valley fever in San Luis Obispo County
- 39. Healthcare for apes. 2014 Los Angeles Times http://www.latimes.com/science/la-me-0620-gorilla-20140620-story.html
- 40. Imperial County gets failing air quality grade from lung association IV Press April 24, 2013 http://articles.ivpressonline.com/2013-04-24/ozone-or-particle-pollution 38797351
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- 42. http://www.eastcountymagazine.org/ecological-disaster-making
- 43. <u>http://www.eastcountymagazine.org/where-wind-government-sdge-pattern-energy-refuse-provide-record</u> <u>s-energy-produced-ocotillo</u>
- 44. <u>http://www.eastcountymagazine.org/readers-editorial-get-politics-out-wind-energy</u>
- 45. <u>http://www.utsandiego.com/news/2014/aug/20/hueso-geothermal-sdge-assembly</u>/ A recent article with concerns issues related to geothermal development in Imperial County and apparently might have the result of circumventing environmental review for what geothermal projects, many of which have documented adverse environmental impacts.

#### **References other than County documents:**

Hernandez, et al. 2014 Environmental impacts of utility-scale solar energy. Renewable and Sustainable Energy Reviews. V. 29, Jan 2014, pp. 766-779. <u>http://www.sciencedirect.com/science/article/pii/S1364032113005819</u> 10.1016/j.rser.2013.08.041

Wilshire, H.G., JE Nielson, R.W. Hazlett 2008. The American West at Risk: Science, Myths, and Politics of Land Abuse and Recovery. Oxford University Press. 617 pp. And for additional information and photos see: www.theamericanwestatrisk.com

Zehner, Ozzie. 2012. Green Illusions: The dirty secrets of clean energy and the future of environmentalism. Univ. Of Nebraska Press. 437pp.

<u>Sierra Club v. Imperial County and Imperial County Planning Commission, United States Gypsum Company,</u> <u>Real Party in Interest</u>, Superior Court Case No. 97911 the July 8, 2014 Superior Court "Order Awarding Attorney Fees as Costs" p. 2.

#### PUBLIC COMMENTS ON NOTICE OF PREPARATION (NOP) DRAFT PROGRAMMATIC EIR FOR RENEWABLE ENERGY AND TRANSMISSION ELEMENT UPDATE, ENVIRONMENTAL EVALUATION COMMITTEE MEETING @ 1:30 PM AND PROGRAMMATIC EIR SCOPING MEETING HELD @ 6PM ON AUGUST 14, 2014

TO: Imperial County EEC & Planning & Development Services via hand delivery

**FROM:** Donna Tisdale as an individual and for Backcountry Against Dumps (BAD)and Backcountry Resource Advocacy Group (BRAG); PO Box 1275, Boulevard, CA 91905 619-766-4170; <u>tisdale.donna@gmail.com</u>

#### INITIAL MAJOR CONCERNS:

- Programmatic EIR's are problematic and may lock in Designated Focus Areas or Renewable Energy Overlay Zones for development/ conversion when those areas may prove to have more economically lucrative and less environmentally destructive uses in the future. They can also adversely impact property values for those who want to continue to farm and do not want to participate in conversion or being stigmatized.
- The California Energy Commission's \$700, 000 grant is paying for this Programmatic EIR for the General Plan Update which can lead to bias in support of agendas driven by Governor Brown and others who view Imperial County as a Renewable Energy Sacrifice Zone to benefit the urbanized coastal areas
- The Baseline Environmental Impact Report is an inadequate combination of multiple other inadequate reports and contains incorrect and biased information
- Out dated soils maps that undervalue productivity are supporting inappropriate conversions
- Misrepresentation of productive farm land, including produce land, as low-value land is a big problem and borders on such misrepresentation by developers and support by the County borders on fraud and false advertisement.
- New information on use of land previously identified as low-value that now support organics/greens with the addition of soil amendments.
- Inappropriate focus on utility scale energy projects and expensive transmission infrastructure when trends are moving to distributed point of use energy generation and storage options that reduce the need for major new transmission infrastructure and the unnecessary and destructive conversion of public and private lands.

#### THE NOP STILL FAILS TO INCLUDE THE FOLLOWING ANTICIPATED SIGNIFICANT EFFECTS:

- PUBLIC HEALTH & SAFETY is still not included in the NOP despite repeated public requests at previous TAG meetings and public meetings
- Environmental Justice is a major issue that must be addressed due to the fact that Imperial County constantly ranks high in unemployment and low-income. Short term gains at the expense of long-term losses are not progress!



AUG 1 4 2014

IMPERIAL COUNTY PLANNING & DEVELOPMENT SERVICES

- Accelerated loss of ag related jobs and businesses due to conversion of tens of thousands of acres of irrigated productive farmland—a non-renewable resource—represent adverse economic impacts.
- All Water Resources must be included, including project related IID water use for large-scale projects and potential loss of long-term water rights. How much water is being used for each project, on average?

#### **DIRECT & INDIRECT EFFECTS**

- IID's proposed \$430 million \$1.7 billion Strategic Transmission Expansion Plan (STEP) to export increased generation of up to 2,200 MW 4,100 MW of renewable energy
- Increased utility infrastructure costs, impacts, eminent domain, and increased rates
- Loss of water flow to Salton Sea and related habitat , wetlands, and wildlife
- Loss of carbon sequestration by growing crops and desert soils

#### CUMULATIVE IMPACT PROJECTS

- IID STEP project represents cumulative impacts
- IID STEP maps <u>are available and must be **included** in the PEIR</u> for full disclosure and public review of proposed transmission line routes and other related utility infrastructure locations.
- Too much Imperial Valley farm land has already been converted and approved for conversion for industrial scale solar projects, yet no economic impact studies have been conducted to determine if promises made have been kept by existing projects --and at what cost.
- Loss of property taxes, sales and use taxes, from solar and wind projects and related negative impacts
- Reduced property values and County income for impacted farms, businesses, and homes
- How many homes have already been purchased by solar developers due to adverse impacts?
- How many property value reductions have been applied for around industrial scale wind and solar projects that already exist in the Valley?
- BLM established the 10,759 acre West Chocolate Mountains SEZ within the 64,000 Renewable Energy Evaluation Area.
- However, As of June 2014, the BLM reported that no expressions of interest had been received
- The Desert Renewable Energy Conservation Plan (DRECP) is still unresolved and is the exact opposite of a conservation plan—it is an Imperial Valley conversion plan.

#### **ALTERNATIVES:**

- Increased energy efficiency and reduced consumption are the fastest way to reduce emissions
- If renewable energy mandates must be met, then all public buildings and military bases, parking lots and contaminated brown fields should be converted first, along with willing businesses and homeowners.

COMMENTS FOR THE AUGUST 14, 2014 IMPERIAL COUNTY EEC AND PROGRAMMATIC ENVIRONMENTAL IMPACT REPORT FOR IMPERIAL COUNTY GENERAL PLAN RENEWABLE ENERGY AND TRANSMISSION ELEMENT UPDATE SCOPING MEETIN

THESE COMMENTS ARE MADE ON BEHALF OF MYSELF ( Carolyn Allen ) AND ON BEHALF OF BACKCOUNTRY AGAINST DUMPS

I want to use this opportunity to once again say how worried I am about the direction leaders of Imperial Valley have taken and continue to take regarding renewable energy. I feel the welfare of our citizens of Imperial Valley was placed in jeopardy when local leaders accepted the approx.. \$700,000Grant from Calif. Energy Commission to update our General Plan. State officials just want to sacrifice Imperial Valley for their own ill conceived energy plans. A good General Plan protects people from such schemes.

In general these renewable energy projects (Solar and Wind) will have huge negative impacts to this valley and its residents. Impacts including but not limited to loss of open spaces, loss of farmland, loss of agricultural jobs, heavy industrialization of rural areas, inevitable further increases in electrical costs to IID consumers and peoples homes and lives affected by proposed expansion of electrical grid to handle renewable projects. Imperial Valley gets all of the negative impacts and other areas receive the benefits.

I support point of use projects (rooftop solar).

Thank you for the opportunity to make these comments for the record.

**Carolyn Allen** 

P O Box 301 Brawley, CA



AUG 1 4 2014

IMPERIAL COUNTY PLANNING & DEVELOPMENT SERVICES From: Donna Tisdale [mailto:tisdale.donna@gmail.com]
Sent: Friday, August 22, 2014 4:10 PM
To: Patricia Valenzuela; Jim Minnick
Cc: svolker; jvolker; Stephanie Clarke
Subject: IC Genreal Plan update NOP comments

Date: 8-22-14

### To: Jim Minnick & Patricia Valenzuela Imperial County PDS

**From**: Donna Tisdale as an individual, an Imperial Valley land owner and farmer, and on behalf of Backcountry Against Dumps and Backcountry Resource Advocacy Group; 619-766-4170; <u>tisdale.donna@gmail.com</u>; PO Box 1275, Boulevard, CA

## RE: ADDITIONAL COMMENTS ON IMPERIAL COUNTY GENERAL PLAN UPDATE NOTICE OF PREPARATION OF DRAFT PROGRAMMATIC EIR

Please add the attached Desert Sun news article, dated August 21, 2014, into the record to address the reported death of a Yuma clapper rail, a listed endangered species, at the Solar Gen 2 project that was approved by Imperial County, and the pending litigation. The emerging lake effect issue and related wildlife impacts must be fully and honestly addressed in the Draft PEIR.

# Lawsuit over desert solar plants' bird deaths

Sammy Roth, The Desert Sun10:48 p.m. PDT August 21, 2014



(Photo: Desert Sun file )

7 connect 11 tweet 3 linkedin 3 commentemailmore

The Center for Biological Diversity plans to sue two federal agencies for failing to protect the endangered Yuma clapper rail at desert solar projects, the center <u>announced</u> Thursday.

Two of the birds have been found dead at large-scale solar plants over the past 15 months: One at the 550-megawatt Desert Sunlight project in eastern Riverside County, and one at the 150-megawatt Solar Gen 2 project in Imperial County. Both plants use solar photovoltaic technology and are being built by First Solar.



DESERTSUN Feds approve large Riverside County solar project

The Yuma clapper rail has been classified as <u>endangered</u> since 1967, when it was listed under the Endangered Species Preservation Act, a forerunner to the Endangered Species Act. The U.S. Fish and Wildlife Service has found that there are<u>fewer than 1,000</u> Yuma clapper rails left in the wild.

"They've been listed for decades, and despite all good intentions, we still haven't reached a point where they're a recovered species," Ileene Anderson, a senior scientist with the Center for Biological Diversity, said. "They're still highly endangered."

Scientists believe that Yuma clapper rails and other waterbirds sometimes mistake large fields of solar panels for lakes, leading to fatal collisions. While it's unclear what killed the two Yuma clapper rails found dead at solar plants — the bird discovered at Desert Sunlight was too decomposed to identify the cause of death — Anderson said the so-called <u>"lake effect"</u> was probably to blame.

"That was virtually the last bird you'd expect to be found dead on that project site, because there isn't any water around up there," Anderson said, referring to the bird found at Desert Sunlight. She added that she wasn't aware of any other endangered species that have been found dead at solar projects.

The Center for Biological Diversity issued a "notice of intent" to sue FWS and the Bureau of Land Management, meaning the agencies have 60 days to take action before the center officially files suit. The agencies could render the lawsuit unnecessary by moving to protect Yuma clapper rails before then.

Jane Hendron, a spokeswoman for the Fish and Wildlife Service, said she couldn't comment on any "litigation-sensitive issues." Bureau of Land Management spokeswoman Martha Maciel said the agency was still reviewing the Center for Biological Diversity's notice of intent to sue and wouldn't be able to comment Thursday.

First Solar spokesman Steve Krum said in a statement that the company "takes the health of native wildlife and plant species very seriously and is committed to protecting wildlife at all of our projects."

"Daily monitoring is conducted at sites to ensure activities are compliant with applicable permits," Krum said. "First Solar is working on a broader level with wildlife agencies and industry groups to gather more information and to develop a measured approach to addressing concerns."



#### DESERTSUN Blythe Mesa solar project wins environmental supporters

The Yuma clapper rail is found along the Colorado River from Mexico to Utah. Anderson said that while regulators have required solar companies to contribute to efforts to enhance the bird's habitat, they haven't required those companies to take action to avoid attracting the bird to solar projects.

"All we're asking is for them to look at the impacts, and make recommendations on how to avoid impacts," Anderson said.

She added that while researchers are "in the infancy" of understanding waterbirds' apparent attraction to solar panels, she believes the problem can be solved. German researchers, she noted, found that breaking up solar panels with white tape seemed to prevent certain insects from mistaking them for water.

"I do think there are opportunities there, and very likely a technological fix, to break up the pattern of these big solar arrays and tip off the birds or insects that this is not a lake," she said.

The Yuma clapper rail, Anderson said, is particularly important because it is a "bellwether" for the health of desert waterways, including the Colorado River.

"If the Yuma clapper rail is going downhill, it means there's definitely something wrong with what's happening on the river," she said.

Energy Reporter Sammy Roth can be reached at Sammy.Roth@desertsun.com, (760) 778-4622, and @Sammy\_Roth.

http://www.desertsun.com/story/news/environment/2014/08/22/solar-plant-agencieslawsuit/14426871/ From: Edie Harmon [mailto:desertharmon@gmail.com]
Sent: Friday, August 22, 2014 4:51 PM
To: Jim Minnick; Patricia Valenzuela; bmooney@mooneyplanning.com
Cc: Edie Harmon; Donna Tisdale!; Luis Olmedo; Pat Flanagan; Terry Weiner; laurens silver; Terry Frewin
Subject: NOP for General Plan Update additional comments from Comite Civico that got missed in longer NOP comments

Mr. Minnick, Please accept this additional comment forwarded by Luis Olmedo re the NOP. Edie

From: Luis Olmedo <<u>comitecivico@sbcglobal.net</u>> Date: Fri, Aug 22, 2014 at 3:23 PM Subject: Re: Still prelim draft comments for NOP for renewable energy general plan update To: Edie Harmon <<u>desertharmon@gmail.com</u>>, Donna Tisdale <<u>tisdale.donna@gmail.com</u>>

Dear Edie Comite Civico shares your concerns expressed in your comment letter please add us to your letter as an additional signature. I would do a comite civico letterhead however I am also upon a deadline and will not be able to get the comments in on time so Please add comite civico to your letter.

I did not see calenviroscreen mentioned on the comments, I suggest a reference to be used in general plan update.

http://oehha.ca.gov/ej/ces2.html

## signature:

Luis Olmedo Executive Director Comite Civico Del Valle, Inc. Comitecivico@sbcglobal.net On 8/22/14, 5:48 AM, "Edie Harmon" <<u>desertharmon@gmail.com</u>> wrote:

Mr. Minnick,

Anita asked that I forward this to you because the original email address was incomplete. Thank you for accepting her comment letter. My NOP response will be sent later today. Edie

------ Forwarded message ------From: **Tina Nelk** <<u>anitanicklen26@gmail.com</u>> Date: Thu, Aug 21, 2014 at 10:56 PM Subject: NOTICE OF PREPARATION To: <u>jimminnick@co.imperial.ca</u>, Edie Harmon <<u>desertharmon@gmail.com</u>>

Dear Mr. Minnick,

I would really appreciate if you can add my name to your emailing list. I didn't receive the notice of preparation of the draft EIR for the Imperial County General Plan. I found out today that the deadline to submit comments or questions is tomorrow August 22, 2014. The current County general plan doesn't meet the needs of our communities and doesn't address areas of concerns.

One question that comes to my mind, does the County general plan include a section on AIR QUALITY? How is PM 2.5, PM 5 and PM 10 being monitored? How is the county monitoring air pollutants and green house gases? What policies does the Imperial County have in place to monitor air quality? What are the air quality standards in Imperial county? Is the Imperial County complying with the National Ambient Air Quality Standards (NAAQS) established by EPA under authority of the Clean Air Act (42 U.S.C. 7401 et seq.) that apply for outdoor air throughout the country. Primary standards are designed to protect human health, with an adequate margin of safety or sensitive populations such as children, the elderly, and individuals suffering from respiratory diseases. Secondary standards are designed to protect public welfare from any known or anticipated adverse effects of a pollutant.

Within this section of **AIR QUALITY**, environmental justice needs to be addressed. Many so called green energy projects have been approved by the Imperial county without considering the cumulative impacts on air quality and our health.

Airborne pesticides, green house gases, toxic air, radiation, or any source of specific emissions and the presence of contaminants need to be identified and their levels need to be monitored in order to better protect our health and environment. As we all know, the percentage of children that have asthma in this county is alarming. My oldest daughter and I have asthma, our health suffers when we experience dust storms, the air blows furiously on the west side of EI Centro near the open agricultural fields.

I WOULD LIKE TO REQUEST A **90 DAY PERIOD** INSTEAD OF A 45 DAY PERIOD TO REVIEW THE EIR DOCUMENT THAT YOU ARE GOING TO PREPARE.

Sincerely,

ANITA NICKEN COMMUNITY ADVOCATE

"LET NOT EDUCATION BE DOGMA THAT BRUTALIZES, KILLS CREATIVITY AND ENSLAVES" a.n. ....////....////....////

"Do not follow the voice of fear and doubt!"



## IMPERIAL COUNTY SCOPING MEETING /

REUNIÓN DE ALCANCE DEL CONDADO DE IMPERIAL

Thursday, August 14, 2014 / Jueves 14 de mayo 2014

## **COMMENT CARD/**TARJETA PARA COMENTARIOS

Board of Supervisors Chambers, 2nd Floor, County Administration Center 940 Main Street, El Centro, CA 92243.

Name / Nombre Cindy A. Thiefman - Braun	
City & ZIP / Ciudad y Código Postal Riversid e	, CA 92501
Address / Domicilio 4080 Le	mon St., 12th floor
Email / Correo ElectrónicoCTHIELMA@	RCTLMA, ORG

Organization, if any / Organización si pertenece alguna

I would like to provide the following comment / Me gustaría proporcionar el siguiente comentario:

coordi ounty ou name due QIAN a: INAA AA in RECEVED AUG 1 4 2014 IMPERIAL COUNTY **PLANNING & DEVELOPMENT SERVICES** 

## **Riverside County Renewable Energy Planning Project**

August 11, 2014

**CEC Grant:** In July 2014, the County of Riverside was awarded a grant from the California Energy Commission (CEC) to perform mapping and planning coordination for the purpose of facilitating eligible renewable energy resource development ("eRED") within Riverside County.

**General Plan Amendment (GPA):** The project result will be a General Plan Amendment (GPA) to facilitate the permitting of eligible renewable energy resources and their associated electric transmission facilities, and the processing of permits for eligible renewable energy resource development throughout the County.

**Project Goals:** Impediments, issues and knowledge gaps to be addressed include:

- a. Identify various eligible renewable energy resource technologies currently being, or predicted to be, deployed within Riverside County;
- b. Map eligible renewable energy resources throughout the county and Salton Sea.
- c. Identify and map land borders to improve infrastructure planning.
- d. Define transmission corridors.

5 D

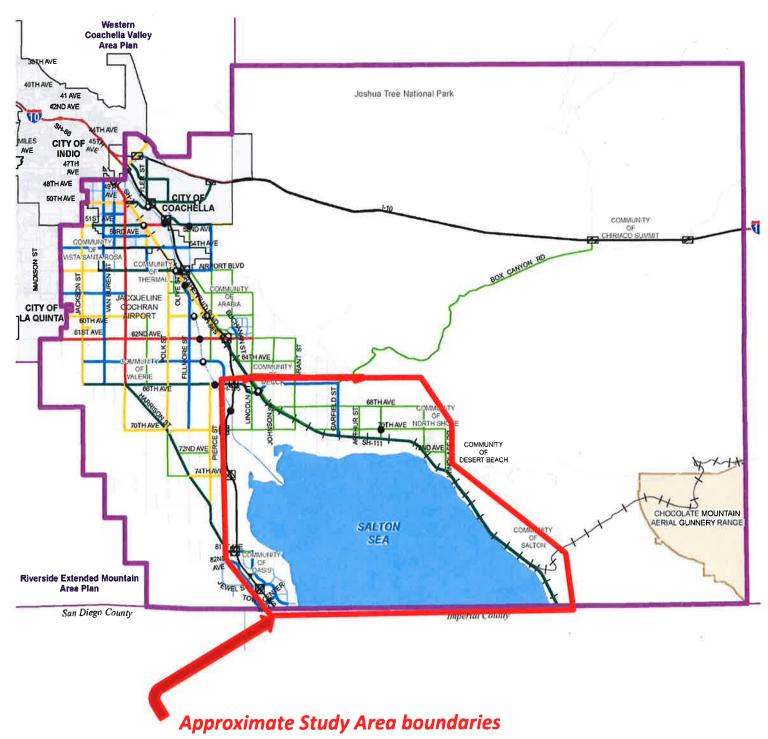
e. Align the Riverside County General Plan with the State's proposed Desert Renewable Energy Conservation Plan (DRECP) to streamline permitting processes for future solar or other eligible renewable energy resources.

**Project Objectives:** The objectives of the project are to:

- a. Create a general inventory/overview of the eRED opportunities throughout Riverside County.
- b. Identify, through mapping of resources, constraints and infrastructure, areas potentially suitable for eRED. Focus on identifying areas to be addressed by new Policy Areas under the GPA.
- c. Coordinate General Plan update to ensure consistency with the conservation strategies of the DRECP. For example, review and revise the conservation and preservation policies and plans of the Multipurpose Open Space Element.
- d. Develop framework in the General Plan for eRED, including county policies and planning instruments for eRED implementation. Develop policies to facilitate and streamline permitting of eligible renewable energy resource development.
- e. Develop local maps, policies and plans for Area Plans for use in implementing eRED within the Salton Sea region, with an emphasis on developing geothermal energy potential, furthering regional electric transmission plans and integrating these features as components of financially and environmentally sustainable dust mitigation and ecosystem restoration efforts.

## Tentative Boundaries of Salton Sea Renewable Energy Study Area

Approximately bounded by Hwy. 86 to the west; 66<sup>th</sup> Ave./Box Canyon Rd. to the north; Riverside County line to the south; and Windlass Dr. or shores of the Salton Sea itself to the east (as appropriate – TBD).



#### Salton Sea Tasks

An engineering firm will be retained to perform mapping work for the Salton Sea Study Region to help identify areas with potential eligible renewable energy resources and sufficient infrastructure to facilitate their development, in particular the associated electric transmission facilities that are critical to the successful siting of eRED. For the Study Region, the focus shall be on the development of local maps, policies and plans to aid in implementing eRED within the Salton Sea region of Riverside County, with an emphasis on geothermal energy potential, furthering the region's electric transmission plans, and integrating these developments as components of financially and environmentally sustainable dust mitigation and ecosystem restoration efforts. The resultant data and plans will generally be made available online to also aid potential eligible renewable energy resource development applicants and public agencies coordinating planning for future infrastructure.

The Salton Sea planning efforts all fall under Task 4, which focuses on development of data, maps, policies and implementing measures needed for the Study Region.

## Task 4: Develop data and plans for the Salton Sea Eligible Renewable Energy Resource Development Study Region

Task 4.1 - Collect, Assemble and Map Eligible Renewable Energy Resources Opportunities and Constraints Data for Salton Sea Eligible Renewable Energy Resource Development Study Region: The goal of this task is the development of data needed to create specific maps and plans for eRED in the Salton Sea region of Riverside County. This effort will include detailed mapping and opportunities/constraint analysis, performed primarily by a qualified subcontractor selected by RFP within an area to be identified as the "Salton Sea Eligible Renewable Energy Resource Development (ERERD) Study Region." This effort will be performed in close coordination with the Salton Sea Authority (see Task 4.4) to identify areas suitable for geothermal resource development or other opportunities for eRED as a potential aid to achieving the various restoration goals identified by the Salton Sea Authority for the region. The results of this task will be incorporated into the Riverside County General Plan via the proposed GPA, if the GPA is ultimately adopted by the Board of Supervisors. The work to be performed under Task 4.1 includes:

- a. Develop data and maps identifying critical opportunities and constraints within the Salton Sea Study Region. Such resources may include the following information to be used to inform development of the General Plan Amendment, as well as other information relevant to informing the General Plan Amendment:
  - 1. Specific resource indicators (solar gradients, geothermal anomalies, etc.)
  - 2. Topography/slope/geology
  - 3. Land ownership / control
  - 4. Access (existing/proposed roadways)
  - 5. Infrastructure availability (with emphasis on electric transmission lines and corridors)
  - 6. Prime farmland / State Farmland Mapping and Monitoring Program data
  - 7. Existing and proposed Habitat Conservation Plans (HCPs) and Natural Community Conservation Plans (NCCPs), as well as already conserved lands
  - 8. Sensitive biological resources, protected species and designated habitats

- 9. Hydrology, drainage and water availability
- 10. Existing and planned roadway network
- 11. Existing and planned land uses
- b. Develop GIS layers identifying existing/planned infrastructure related to potential eligible renewable energy resources. Such infrastructure could include roads, power lines and electric substations, as well as water and sewer lines, drainage facilities, and treatment plants. Engineering specifications/data prepared by the engineering sub-consultant will be provided as necessary, in relation to the level of required planning and coordination.
- c. Produce GIS layers and maps identifying opportunities and constraints for eligible renewable energy resource development within the Salton Sea Study Region.
- d. Produce a mapping report and presentation graphics of same, as needed.
- e. Produce GIS layers of publicly-available data used to support area identification.

**Task 4.2 - Analyze Opportunities and Constraints Data for Salton Sea Eligible Renewable Energy Resource Development Study Region:** The goal of this task is to determine the locations most suitable for eRED within the Salton Sea Study Region and the type(s) of renewable energy resources suitable to for the area (focusing on geothermal potential) through analysis of the opportunities and constraints maps and data developed under the prior task (4.1). The work to be performed under Task 4.2 includes:

- a. Analyze the opportunities and constraints data for the Salton Sea Study Region developed under Task 4.1 using the matrix approach developed under Task 3.2 to assess the region's eligible renewable energy resource development potential.
- b. Survey and assemble data on factors determining suitability (opportunities) for eRED. Such factors may include the following, as well as other reasonably applicable factors: resource indicators (solar gradient and geothermal anomalies), topography, land ownership and infrastructure availability.
- c. Survey and assemble data on factors determining constraints to eRED, particularly geothermal resources. Such factors may include the following, as well as other reasonably applicable factors: sensitive biological resources, lack of available infrastructure (e.g., water), geology, cultural/tribal resources, land use conflicts and climate.
- d. Produce a matrix of relevant opportunities and constraints criteria for use in identifying areas suitable for eligible renewable energy resource development.

Task 4.3 - Develop Implementation Criteria and Policies for Salton Sea Eligible Renewable Energy Resource Development Study Region: The goal of this task is to develop implementation criteria and policies to enable eligible renewable energy resource development within the Salton Sea Study Region and identify the needed General Plan revisions necessary to accommodate them. The work to be performed under Task 4.3 includes:

a. Determine the types of General Plan instruments most suitable for implementing eligible renewable energy resource development in the Salton Sea Study Region. Examples of

the types of instruments to be considered include: General Plan policy areas, land use overlays, land use designations or other reasonably applicable means. The resultant information shall be used to revise the General Plan pursuant to the proposed GPA (under Task 5).

- b. Policies and plans developed for implementation will emphasize addressing barriers to eligible renewable energy resource development, which may include the following, as well as any other reasonably applicable barriers: constraints caused by existing General Plan policies (e.g., land use criteria); consistency with General Plan conservation policies and maps; consistency with the Certainty System and Foundation Components integral to the long-term implementation of the General Plan. The resultant information shall be used to revise the General Plan pursuant to the proposed GPA (under Task 5).
- c. This effort will also identify any areas in which the GPA is not the appropriate planning instrument, but where other instruments would be more appropriate, to ensure implementation plans are focused at the appropriate level. (Note: study and/or preparation of any of these other instruments, such as new Board of Supervisors policies, zoning ordinance revisions or entirely new ordinances, are not proposed as part of this project.)
- d. Produce a list of General Plan Elements, policies and maps proposed to be revised to implement eligible renewable energy resource development within the Salton Sea Eligible Renewable Energy Resource Development Study Region.

**Task 4.4 - Outreach and Coordination with Salton Sea Authority:** The goal of this task is to closely coordinate GPA development with the Salton Sea Authority to identify areas suitable for geothermal resource development or other opportunities to develop eligible renewable energy resource development in a manner that enhances long term restoration – especially facilitation of habitat restoration or mitigation of emissive soils. A key outcome of this task will be the fostering and strengthening of cooperation and communication amongst the agencies and entities involved in the Salton Sea Authority. By creating an environment in which innovative ideas and plans can be conceived, the groundwork will be in place for successfully tackling the various restoration goals identified by the Salton Sea Authority for the region. The outcome of this coordination will be the development of specific revisions, such as the creation of a Policy Area, addressing the Salton Sea region and eligible renewable energy resources in the General Plan. The work to be performed under Task 4.4 includes:

- a. Coordinate with the Salton Sea Authority in conducting meetings with the agencies and stakeholders involved in planning for the region.
- b. Use meetings to coordinate the development of the various eligible renewable energy resource data identified above and determine the County's role in furthering restoration goals for the region in conjunction with the proposed General Plan Amendment.
- c. Coordinate with the Salton Sea Authority and its members on cross-jurisdictional planning, data acquisition and sharing, and identification of additional studies or planning needed for the region. The focus shall be on identifying the additional work that can be accomplished under this scope of work and incorporated into the Riverside County General Plan via the GPA proposed for this project

Task 4.5 - Technical Coordination and Outreach with Utilities and Other Agencies Serving the Salton Sea Eligible Renewable Energy Resource Development Study Region: In addition to strengthening cross-jurisdictional planning and coordination, this task focuses on development of technical data for the Salton Sea region prepared collaboratively with the various utilities and other public agencies serving the area. Emphasis is to be on sharing data and plans to avoid duplication of work efforts. The work to be performed under Task 4.5 includes:

- a. Identify the various public utilities and providers serving the Salton Sea area that may need to be consulted and/or coordinated with in the preparation of implementation plans for the Salton Sea Eligible Renewable Energy Resource Development Study Region. Emphasis will be on the electrical providers and the agencies involved in transmission line / corridor planning.
- b. In addition to using these meetings to obtain technical data, the County will also make use of the opportunity to coordinate with the various providers in providing long-range planning information (e.g., County buildout projections; land use scenarios; roadway network improvement plans; etc.) to the various agencies, as warranted. Such information, updated through coordination and information exchange with relevant involved agencies (e.g., Imperial County, IID or water districts) will be integrated into the General Plan via the GPA proposed for this work effort.
- c. The County shall organize these technical meetings with the Salton Sea Authority in a manner that focuses on achieving a coordinated approach to cross-jurisdictional planning and data acquisition/development that is appropriate for the preparation of the General Plan Amendment proposed for this work effort.

#### **Other Tasks**

 $\mathbf{y} \in \mathbf{x}$ 

For reference sake, a related task within the project's scope of work includes the following:

Task 5.1 - Revise Eastern Coachella Valley Area Plan to Implement Salton Sea Eligible Renewable Energy Resource Development Study Region: The goal of this task is to develop the maps, data, policies and plans needed within the Eastern Coachella Valley Area Plan (ECVAP) in order to implement eligible renewable energy resource development in the Salton Sea region. In addition to the required and optional Elements, the Riverside County General Plan also contains 23 "Area Plans" that provide focused policies and plans implementing the broader Element policies at the more local level. The Salton Sea area, including the portion envisioned as the Salton Sea eRED Study Region, is within the ECVAP. Thus, revisions to this Area Plan are necessary to provide the localized maps, policies and plans necessary for future eligible renewable energy resource development around the Salton Sea, as well as establishing the cornerstone for all geothermal policies and plans within the County.

- a. Prepare redline/strike-out draft ECVAP (including text, policies, maps, tables, etc.) for the review, consultation and processing of the GPA necessary to authorize the changes.
- b. Produce a redline/strike-out draft of the Eastern Coachella Valley Area Plan showing the proposed changes to its text, maps, tables, policies, etc., to add Salton Sea eRED Study Region and/or any other implementing policies, plans, and maps, as needed. Will include specific additional policies for development/approval of future eRED projects (geothermal projects, in particular) and also streamlining of County processing.



## IMPERIAL COUNTY SCOPING MEETING /

REUNIÓN DE ALCANCE DEL CONDADO DE IMPERIAL

Thursday, August 14, 2014 / Jueves 14 de mayo 2014

## **COMMENT CARD/**TARJETA PARA COMENTARIOS

Board of Supervisors Chambers, 2nd Floor, County Administration Center 940 Main Street, El Centro, CA 92243.

Name / Nombre Annette Lean	
City & ZIP / Ciudad y Código Postal 92243 El CENTRO	
Address / Domicilio 10105 State Smit	
Email/Correo Electrónico Aleme de de factor net	

Organization, if any / Organización si pertenece alguna

I would like to provide the following comment / Me gustaría proporcionar el siguiente comentario:

MIN

RECEIVED

AUG 1 4 2014

PLANNING & DEVELOPMENT SERVICES 1:30 pm