

3.0 ENVIRONMENTAL IMPACT ANALYSIS

Approach to Environmental Analysis

In accordance with CEQA Guidelines Section 15126.2, this Draft EIR identifies and focuses on the significant direct and indirect environmental effects of the proposed project, given due consideration to both its short-term and long-term effects. Short-term effects are generally those associated with construction of the proposed project, while long-term effects are generally those associated with operation of project components. As described in Section 1.0, Introduction, of this Draft EIR, this analysis focuses on a limited number of environmental resource topics, as other topics have already been addressed in the analysis that accompanied the NOP (Appendix A). Sections 3.1 through 3.12 of this Draft EIR contain discussions of the potential environmental impacts related to the construction and operation of the proposed project.

Environmental Topics

The potential environmental effects associated with the implementation of the proposed project are evaluated in the following environmental resource areas:

- Aesthetics
- Agriculture
- Air Quality and Greenhouse Gases
- Biological Resources
- Cultural Resources
- Geology and Soils
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use, Population and Housing
- Noise
- Public Services, Utilities, Service Systems, and Recreation
- Transportation and Traffic

Organization of Issue Areas

Each environmental issue section contains the following components:

Regulatory Setting presents the laws, regulations, plans, and policies that are relevant to each issue area. Regulations originating from the federal, State, and/or local levels are each discussed as appropriate.

Environmental Setting presents the existing environmental conditions on the project site and within the surrounding area as appropriate, in accordance with CEQA Guidelines Section 15125. The extent of the environmental setting area evaluated (the project study area) differs among resources, depending on the locations where impacts would be expected. For example, air quality impacts are assessed for the air basin (macro-scale), as well as the site vicinity (micro-scale), whereas aesthetic impacts are assessed for the project vicinity only.

Thresholds of Significance identifies the thresholds of significance used to determine the level of significance of the environmental impacts for each resource topic, in accordance with CEQA Guidelines Sections 15126, 15126.2, and 15143. The thresholds of significance used in this Draft EIR are based on the checklist presented in Appendix G of the CEQA Guidelines; best available data; and regulatory standards of federal, State, and local agencies.

Project Impacts identify the level of each environmental impact by comparing the effects of the proposed project to the environmental setting. Key methods and assumptions used to frame and conduct the impact analysis, as well as issues or potential impacts not discussed further (i.e., such issues for which the project would have no impact), are also described.

Project impacts are organized numerically in each subsection (e.g., Impact AES-1, Impact AES-2, Impact AES-3, etc.). A bold-font environmental impact statement precedes the discussion of each impact while its level of significance succeeds the discussion of each impact. The discussion that follows the impact summary includes the substantial evidence supporting the impact significance conclusion.

Mitigation Measures describe any feasible measures that could avoid, minimize, rectify, reduce, or compensate for significant adverse impacts, with measures having to be fully enforceable through incorporation into the project (PRC` Section 21081.6[b]). Mitigation measures are not required for environmental impacts that are found to be less than significant. Where feasible mitigation for a significant environmental impact is available, it is described following the impact. Where sufficient feasible mitigation is not available to reduce environmental impacts to a less than significant level, or where the lead agency lacks the authority to ensure that the mitigation is implemented when needed, the impacts are identified as significant and unavoidable.

Level of Significance After Mitigation describes the level of impact significance remaining after mitigation measures are implemented.

Cumulative Impacts describes two or more individual impacts that, when considered together, are significant or that compound or increase other significant environmental impacts. Cumulative impacts can result from individually minor, but collectively significant projects taking place over a period of time (State CEQA Guidelines Section 15355). The incremental impact of a project, although less than significant on its own, may be considerable when viewed in the cumulative context of other closely related past, present, and reasonably foreseeable probable future projects. A considerable

contribution is considered to be significant from the point of view of cumulative impact analysis.

Level of Significance

Determining the severity of project impacts is fundamental to achieving the objectives of CEQA. CEQA Guidelines Section 15091 requires that decision makers mitigate, as completely as is feasible, the significant impacts identified in the Final EIR. If the EIR identifies any significant unmitigated impacts, CEQA Guidelines Section 15093 requires decision makers to adopt a statement of overriding considerations that explains why the benefits of the project outweigh the adverse environmental consequences identified in the EIR.

The level of significance for each impact examined in this Draft EIR is determined by considering the predicted magnitude of the impact against the applicable threshold. Thresholds were developed using criteria from the CEQA Guidelines and Appendix G Checklist; State, federal, and local regulatory schemes; local/regional plans and ordinances; accepted practice; consultation with recognized experts; and other professional opinions.

Format Used for Impact Analysis and Mitigation Measures

The format adopted in this Draft EIR to present the evaluation of environmental impacts is described and illustrated below.

Summary Heading of Impact

Impact AIR-1: An impact summary heading appears immediately preceding the impact description (Summary Heading of Impact in this example). The impact abbreviation identifies the section of the report (AIR for Air Quality in this example) and the sequential order of the impact (1 in this example) within that section. To the right of the impact number is the impact statement, which identifies the potential impact.

Impact Analysis

A narrative analysis follows the impact statement.

Level of Significance Before Mitigation

This section identifies the level of significance of the impact before any mitigation is proposed.

Mitigation Measures

In some cases, following the impact discussion, reference is made to State and federal regulations and agency policies that would fully or partially mitigate the impact. In addition, policies and programs from applicable local land use plans that partially or fully mitigate the impact may be cited.

Project-specific mitigation measures, beyond those contained in other documents, are set off with a summary heading and described using the format presented below:

MM AIR-1: Project-specific mitigation is identified that would reduce the impact to the lowest degree feasible. The mitigation number links the particular mitigation to the impact with which it is associated (AIR-1 in this example);

Level of Significance After Mitigation

This section identifies the resulting level of significance of the impact following mitigation. Abbreviations used in the mitigation measure numbering are shown in Table 3-1, Environmental Issue Abbreviations:

Table 3-1: Environmental Issue Abbreviations

Code	Environmental Issue
AES	Aesthetics
AG	Agriculture
AQ	Air Quality and Greenhouse Gases
BIO	Biological Resources
CR	Cultural Resources
GEO	Geology and Soils
HAZ	Hazards and Hazardous Materials
HYD	Hydrology and Water Quality
LUP	Land Use, Population and Housing
NOI	Noise
PSU	Public Services, Utilities, Service Systems, and Recreation
TRA	Transportation and Traffic

Cumulative Impacts

Cumulative impacts refer to the combined effect of proposed project's impacts with the impacts of other past, present, and reasonably foreseeable future projects. As established in the CEQA Guidelines, the discussion of cumulative impacts must reflect the severity of the impacts, as well as the likelihood of their occurrence attributable to the project alone. As stated in CEQA, Title 14, Section 21083(b), "a project may have a significant effect on the environment if the possible effects of a project are individually limited but cumulatively considerable."

According to the CEQA Guidelines:

Cumulative impacts refers to two or more individual effects which, when considered together, are considerable and which compound or increase other environmental impacts.

- a) The individual effects may be changes resulting from a single project or a number of separate projects.

- b) "The cumulative impact from several projects is the change in the environment, which results from the incremental impact of the project when added to other closely related past, present, and reasonable foreseeable probably future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time." (CCR, Title 14, Division 6, Chapter 3, Section 15355)

In addition, as stated in CEQA Guidelines:

The mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the proposed project's incremental effects are cumulatively considerable (CCR, Title 14, Division 6, Chapter 3, Section 15064[T][5]).

Cumulative Impact Setting

Cumulative impact discussions for each environmental issue area are provided within each individual impact section. As established in the CEQA Guidelines, related projects consist of "closely related past, present, and reasonably foreseeable probable future projects that would likely result in similar impacts and are located in the same geographic area" (CCR, Title 14, Division 6, Chapter 3, Section 15355).

The State CEQA Guidelines define a cumulative impact as two or more individual impacts that, when considered together, are significant or that compound or increase other significant environmental impacts. Cumulative impacts can result from individually minor, but collectively significant projects taking place over a period of time (State CEQA Guidelines Section 15355). The incremental impact of a project, although less than significant on its own, may be considerable when viewed in the cumulative context of other closely related past, present, and reasonably foreseeable projects. A considerable contribution is considered to be significant from the point of view of cumulative impact analysis.

The State CEQA Guidelines provide that cumulative context may be described through either the list approach or the plan/projections approach. The list approach involves identifying and listing the past, present, and reasonably foreseeable projects that contribute to a given significant cumulative impact. The plan/projections approach relies on an adopted plan or reliable projection that describes the significant cumulative impact. This Draft EIR combines both the project list and projection approaches to generate the most reliable future projections possible.

Geographic Scope

The geographic area analyzed for cumulative impacts is dependent on the resource being analyzed. The geographic area associated with the proposed project's environmental impacts defines the boundaries of the area used for compiling the list of past, present, and reasonably foreseeable projects considered in the cumulative impact analysis.

Each section of this Draft EIR considers the specific geographic area that is directly related to the individual topic addressed within that section. For example, the analysis of air quality is based on a regional level because air quality impacts are regional in nature; whereas, analysis

of aesthetic impacts only considers related projects in the vicinity of the project site because of the localized nature of the impact.

The geographic area that could be affected by implementation of the proposed project in combination with other projects varies depending on the type of environmental resource being considered. Table 3-2 provides the geographic area and the method of evaluation utilized in the cumulative analysis for each resource areas.

Table 3-2: Geographic Scope of Cumulative Impact and Method of Evaluation

Resource Topic	Geographic Area	Method of Evaluation
Aesthetics	Immediate project vicinity	Projects
Agriculture	City of Lancaster/Los Angeles County	Projects
Air Quality and Greenhouse Gases	Local (Toxic Air Contaminants) Air Basin (Construction Related and Mobile Sources) GHG (State)	Projects and Projections
Biological Resources	Immediate project vicinity and region	Projects
Cultural Resources	Project site only (does not contribute to cumulative impacts)	Projects
Geology and Soils	Project site only (does not contribute to cumulative impacts)	Projects
Hazards and Hazardous Materials	Project site only (does not contribute to cumulative impacts)	Projects
Hydrology and Water Quality	Immediate project vicinity and Antelope Valley watershed regional area	Projects and Projections
Land Use, Population and Housing	Immediate project vicinity	Projects
Noise	Immediate project vicinity (effects are highly localized)	Projects
Public Services, Utilities, Service Systems, and Recreation	Immediate project vicinity	Projects
Transportation and Traffic	Immediate project vicinity	Projects and Projections
Notes: Projects = the use of a list of past, present, and reasonable foreseeable projects Projections = the use of projections contained in relevant planning documents		

For those environmental resources that were evaluated based on the projections approach, the projections take into consideration future projects that are not included in the below list of related plans and projects.

List of Related Plans and Projects

The list of past, present, and reasonably foreseeable projects used for this cumulative analysis is restricted to those projects that have occurred or are planned to occur within or directly adjacent to the City. For the purposes of this discussion, these projects that may have a cumulative effect on the resources of the project area will often be referred to as the “related projects.” These related projects are described in Table 3-3.

Table 3-3: List of Related Projects

Lead Agency	Project Name	Project Description
City of Lancaster	CUP 10-03 – operational	20 MW Solar Project
City of Lancaster	CUP 10-22	38 MW Solar Project
City of Lancaster	CUP 11-02 – operational	3.4 MW Solar Project
City of Lancaster	CUP 11-03 - operational	9 MW Solar Project
City of Lancaster	CUP 11-05	20 MW Solar Project
City of Lancaster	CUP 11-07 – under construction	10 MW Solar Project
City of Lancaster	CUP 12-08 – operational	12 MW Solar Project
City of Lancaster	CUP 12-09	40 MW Solar Project
City of Lancaster	CUP 12-11 – operational	1.5 MW Solar Project
City of Lancaster	CUP 13-06 – under construction	30 MW Solar Project
City of Lancaster	TPM 61949	Subdivision into 4 residential lots
City of Lancaster	TTM 66062	111 lot residential subdivision in the R-10,000 zone
City of Lancaster	TPM 69977	Subdivide 2 parcels: school and residential
City of Lancaster	TTM 62925	183 lot residential subdivision in the R-10,000 zone
City of Lancaster	TTM 60057	302 lot residential subdivision in the R-10,000 zone
City of Lancaster	TTM 64843	64 lot residential subdivision in the R-10,000 zone
City of Lancaster	TTM 62403	205 lot residential subdivision in the R-10,000 zone
City of Lancaster	TTM 62759	Subdivide 650 single family lots in the R-7,000
City of Lancaster	TTM 53229	Subdivide 1,594 single family lots, 1

Lead Agency	Project Name	Project Description
		park, 1 school
City of Lancaster	TTM 61989	Subdivide 56 single family lots in the R-10,000 zone
City of Lancaster	TTM 66802	Subdivide 110 single family lots in the R-10,000 zone
City of Lancaster	TTM 68150/CUP 06-09	374,753 sq ft Walmart Shopping Center
City of Lancaster	TTM 64922	Subdivide 84 single family lots in the R-7,000 zone
City of Lancaster	TTM 62409	Subdivide 36 single family residential lots in the R-7,000 zone
City of Lancaster	TTM 61734	Subdivide 19 single family lots in the R-7,000 zone
City of Lancaster	TTM 60885	Subdivide 49 single family lots in the R-7,000
City of Lancaster	TTM 72565	Subdivide 36 single family residential lots in the R-7,000 zone
City of Lancaster	TTM 72534	Subdivide 78 single family residential lots in the R-7,000 zone
Los Angeles County	Silver Sun Greenworks R2011 – 00801	20MW Photovoltaic Solar - Approved
Los Angeles County	West Antelope Solar Project R2012-01589	20MW Photovoltaic Solar - Approved
Los Angeles County	Western Antelope Blue Sky Ranch R2011 – 00798	40 MW Photovoltaic Solar - Approved
Los Angeles County	Antelope Solar Greenworks R2011-00807	52 MW Photovoltaic Solar - Approved
Los Angeles County	American Solar Greenworks R2011-00799	35 MW Photovoltaic Solar - Approved
Los Angeles County	Lancaster WAD R2011-00805	5 MW Photovoltaic Solar – Approved
Los Angeles County	Rutan R2012-00849	4 MW Photovoltaic Solar – Approved
Source: Data compiled by the City of Lancaster, 2014; adapted by Stantec in 2014; and Los Angeles County, 2015; adapted by Stantec in 2015		

The regional cumulative analysis area covers the City of Lancaster west of Highway 14, Los Angeles County west of Highway 14 to approximately 110th Street West, and the western portion of City of Palmdale (no solar facilities exist within the western portion of the City of Palmdale), and includes an evaluation of these municipalities listed above having jurisdictional authority within the vicinity of the proposed project site.