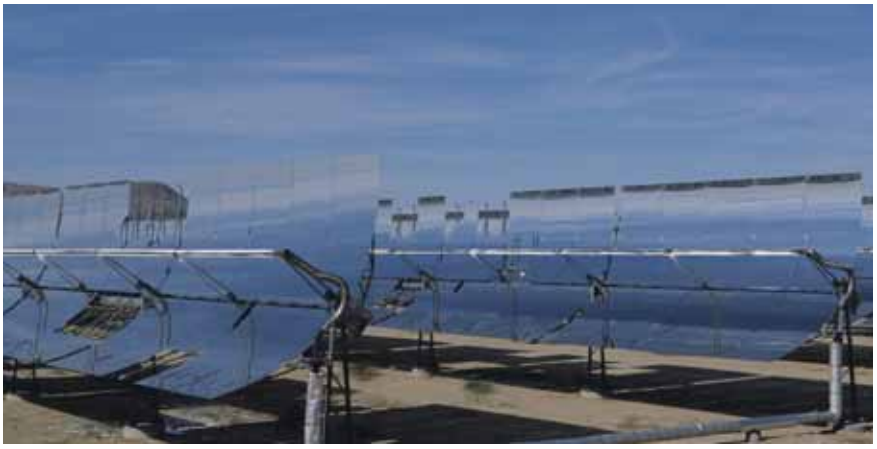

CITY OF CORONA
CLIMATE ACTION PLAN
ENVIRONMENTAL IMPACT REPORT

SCH No. 2011061054
Draft EIR

Prepared for:
City of Corona | Community Development Department, Planning Division
400 S. Vicentia Avenue Corona, California 92882-2187

Prepared by:
Atkins | 12301 Wilshire Boulevard, Suite 430 Los Angeles, California 90025

February 26, 2012

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CHAPTER 1 Introduction

The subject of this Draft Environmental Impact Report (Draft EIR) is the Corona Climate Action Plan (C-CAP or proposed project). The City of Corona is located in the northwestern portion of Riverside County, near the convergence of Los Angeles, Orange, and Riverside Counties, approximately 45 miles southeast of the City of Los Angeles. The lead agency for the C-CAP is the Community Development Department, Planning Division, of the City of Corona. A detailed description of the C-CAP is contained in Chapter 3 (Project Description) of this Draft EIR.

Because the C-CAP will require approval of certain discretionary actions by the City of Corona, the C-CAP is subject to the California Environmental Quality Act (CEQA). The City determined that the C-CAP may have a significant effect on the environment and that an EIR should be prepared.

1.1 PURPOSE OF THE EIR

The City has prepared this Draft EIR for the following purposes:

- To satisfy the requirements of CEQA (Public Resources Code, Sections 21000–21178) and the CEQA Guidelines (California Code of Regulations, Title 4, Chapter 14, Sections 15000–15387)
- To inform the general public, the local community, and responsible and interested public agencies of the nature of the C-CAP, its possible environmental effects, possible measures to mitigate those effects, and alternatives to the proposed project
- To enable the City to consider environmental consequences when deciding whether to approve the C-CAP
- To provide a basis for preparation of future environmental documents

The determination that the City of Corona is the "lead agency" is made in accordance with Sections 15051 and 15367 of the CEQA Guidelines, which define the lead agency as the public agency that has the principal responsibility for carrying out or approving a project. This Draft EIR reflects the independent judgment of the City regarding the potential environmental impacts, the level of significance of the impacts both before and after mitigation, and the mitigation measures proposed to reduce impacts.

As described in CEQA and the CEQA Guidelines, public agencies are charged with the duty to avoid or substantially lessen significant environmental impacts, where feasible. In discharging this duty, a public agency has an obligation to balance the project's significant impacts on the environment with other conditions, including economic, social, technological, legal, and other benefits. This Draft EIR is an informational document, the purpose of which is to identify the potentially significant impacts of the proposed project on the environment and to indicate the manner in which those significant impacts can be avoided or significantly lessened; to identify any significant and unavoidable adverse impacts that cannot be mitigated; and to identify reasonable and feasible alternatives to the proposed project that would eliminate any significant adverse environmental impacts or reduce the impacts to a less-than-significant level.

The lead agency is required to consider the information in the EIR, along with any other relevant information, in making its decision on the C-CAP. Although the EIR does not determine the ultimate decision that will be made regarding implementation of the proposed project, CEQA requires the City to consider the information in the EIR and make findings regarding each significant effect in the EIR.

The City will certify the EIR for the C-CAP. Once certified, the EIR will serve as the base environmental document for the C-CAP and will be used as a basis for decisions on development in the City of Corona and its Sphere of Influence (SOI), although it should be noted that the City does not have land use authority over the SOI areas, which are subject to the authority of the County of Riverside. Other agencies may also use this EIR in their review and approval process.

This Draft EIR was prepared in accordance with Section 15151 of the CEQA Guidelines, which defines the standards for EIR adequacy:

> An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR would summarize the main points of disagreement among the experts. The courts have looked not for perfection, but for adequacy, completeness, and a good faith effort at full disclosure.

This EIR has been prepared as a Program EIR pursuant to Section 15168 of the CEQA Guidelines. A Program EIR is an EIR that is prepared on a series of actions that can be characterized as one large project. As stated in the CEQA Guidelines, the use of a Program EIR can provide the following advantages:

1. Provide an occasion for a more exhaustive consideration of effects and alternatives than would be practical in an EIR on an individual action
2. Ensure consideration of cumulative impacts that might be slighted in a case-by-case analysis
3. Avoid duplicative reconsideration of basic policy considerations
4. Allow the Lead Agency to consider broad policy alternatives and program wide mitigation measures at an early time when the agency has greater flexibility to deal with basic problems or cumulative impacts
5. Allow reduction in paperwork

This EIR will review the existing conditions of the City of Corona, analyze potential environmental impacts from implementation of the C-CAP, identify policies from the C-CAP that serve to reduce and minimize impacts, and identify mitigation measures, if necessary, to reduce potentially significant impacts of the C-CAP. As the EIR does not focus on any specific development projects within the City, subsequent activities in the City that involve individual projects must be examined in light of the Program EIR to determine whether any additional environmental review is necessary. If it is determined that an individual project would result in adverse impacts on the environment, an additional environmental document would then be required.

1.2 PROPOSED PROJECT

The City of Corona is committed to providing a more livable, equitable and economically vibrant community through the reduction of greenhouse gas (GHG) emissions. By using energy more efficiently, harnessing renewable energy to power our buildings, recycling our waste, and enhancing access to sustainable transportation modes, we can keep dollars in our local economy, create new green jobs, and improve community quality of life. These efforts toward reducing GHG emission must be done in coordination with the City's land use decisions. The foundation of planning land use decisions is found in the General Plan policies and programs.

Chapter 5, the Environmental Resources Element, of the General Plan addresses a number of different resources within the City that must be managed properly. Among these resources are energy and air quality. Goals within the Environmental Resources Element specifically speak to energy conservation and air quality. In order to implement this goal, to provide a more livable, equitable and economically vibrant community, and preserve the attributes of its unique valley location and quality lifestyle, the City has committed to prepare and implement the C-CAP. The C-CAP will ensure that the impact of future development projects on air quality is minimized, energy conserved, and that land use decisions made by the City and all internal operations within the City are consistent with adopted state legislation.

The C-CAP was designed under the premise that the City and the community it represents are uniquely capable of addressing emissions associated with sources under the City's jurisdiction. The City's emission reduction efforts should coordinate with the state strategies in order to accomplish emission reductions in an efficient and cost-effective manner.

The proposed project includes a baseline GHG emissions inventory, a methodology for tracking and reporting emissions in the future, and recommendations for GHG reduction strategies as a foundation for these efforts. An indicator of the success of these efforts will be a measured reduction in greenhouse gas (GHG) emissions using the protocols in the C-CAP. The C-CAP is another implementation tool of the General Plan that can be used to guide development in the City by focusing on attaining the various goals and policies of the General Plan as well as the GHG reduction goals.

Implementation of the C-CAP could result in construction of energy-generating facilities such as wind turbines and photovoltaic/solar arrays that would primarily be installed on rooftops of new or existing buildings. It is possible that some energy-generating facilities that would be considered public utility installations could be placed in other areas, subject to a conditional use permit. It could also result in energy-efficiency retrofits in residential, commercial, and industrial buildings throughout the City. Opportunities for infill development and redevelopment under the C-CAP include a 0.5-mile radius around the Metrolink Station, mixed-use development within the growth areas of the City, and infill development within downtown Corona. These areas have previously been targeted as opportunity areas in the General Plan.

The C-CAP achieves the purpose and goals described above by providing: an analysis of GHG emissions and sources attributable to the City of Corona; estimates on how those emissions are expected to increase; recommended policies and actions that can reduce GHG emissions to meet state, federal, and

international targets; a timeline of implementation; and a defined tracking and reporting mechanism that will measure progress toward the goals.

1.3 SCOPE OF THE EIR

This EIR addresses the potential environmental effects of implementation of the proposed project within the City of Corona. As the C-CAP is a comprehensive plan for reducing GHG emissions, the scope of the EIR includes an examination of all environmental issues that are considered in Appendix G of the 2011 CEQA Guidelines. In addition, the environmental issues analyzed in this document will include those areas determined to be potentially significant by the Notice of Preparation (NOP), responses to the NOP, and City staff. The NOP and comment letters received during the NOP review period are included in Appendix A of this EIR. The NOP identified that the EIR would address potential impacts to the following issue areas associated with implementation of the proposed project:

- Aesthetics
- Cultural Resources
- Greenhouse Gas Emissions
- Hazards/Hazardous Materials
- Land Use/Planning
- Agriculture/Forestry Resources
- Mandatory Findings of Significance

In accordance with Section 15128 (Effects Not Found to Be Significant) of the CEQA Guidelines, Chapter 5 (Other CEQA Considerations) of this EIR provides the reasons some environmental impacts were not considered significant and, therefore, are not analyzed further in this EIR.

In preparing the EIR, pertinent policies of the C-CAP were evaluated for their ability to reduce impacts resulting from implementation of the C-CAP. Regional and local agencies that regulate and provide services to the City were also contacted for information. A list of references and persons consulted are provided at the end of each chapter.

Chapter 6 (Alternatives) of the EIR was prepared in accordance with Section 15126.6 of the CEQA Guidelines, which requires an evaluation of a reasonable range of alternatives, including the No Project Alternative. It also identifies the "environmentally superior" alternative among the alternatives assessed.

1.4 LEAD, RESPONSIBLE, AND TRUSTEE AGENCIES

Per the CEQA Guidelines, this EIR defines lead, responsible, and trustee agencies. The City of Corona is the lead agency for the project because it holds principal responsibility for approving the project. A responsible agency refers to a public agency other than the lead agency that has discretionary approval over the project. The proposed C-CAP is a planning document for the City of Corona to utilize moving forward. As such, the C-CAP does not address a specific or proposed development plan, and no responsible agencies are identified at this time. Subsequent development projects will be subject to discretionary approval by the City and, depending on the development proposal, other public agencies. In addition to the City of Corona, future projects within the City may require approval from the Regional Water Quality Control Board (RWQCB) regarding water quality and quantity, as well as potential

discharges into surface waters; California Department of Fish and Game (CDFG) regarding biological resources; California Department of Transportation (Caltrans) regarding area highways and other roadways within the City that are under the maintenance of the state; and the U.S. Army Corps of Engineers (USACE) regarding waters of the US and wetlands.

A trustee agency is a state agency having jurisdiction by law over natural resources affected by a project, which are held in trust for the people of the state. As discussed above, the C-CAP is a planning document for the City of Corona and does not address a specific or proposed development plan. As such, no trustee agencies are identified at this time. However, in relation to future development within the City, trustee agencies may include the California Department of Fish and Game (CDFG) regarding biological resources, USACE regarding waters of the US and wetlands; and the South Coast Air Quality Management District (SCAQMD) regarding issues of air quality and associated permitting.

1.5 AREAS OF CONTROVERSY AND ISSUES TO BE RESOLVED

During the environmental review process, only one NOP comment letter was received, from the Native American Heritage Commission, requesting that impacts to cultural resources be analyzed. A comment letter from the Western Municipal Water District stated that entity had no comments on the project. A letter from the South Coast Air Quality Management District outlined the preferred methodology for analyzing air quality impacts. No other comment letters were received and there are no areas of controversy or issues to be resolved.

1.6 EIR REVIEW PROCESS

1.6.1 Notice of Preparation

A Notice of Preparation (NOP) was prepared and distributed to the State Clearinghouse, trustee agencies, responsible agencies, and other interested parties on June 19, 2011. Distribution of the NOP established a 30-day review period for the public and agencies to identify environmental issues that should be addressed in the Draft EIR.

1.6.2 Draft EIR

Pursuant to CEQA Guidelines Section 15205(b)(2), the Draft EIR will be submitted to the State Clearinghouse for distribution to state agencies. Submittal of the Draft EIR to the State Clearinghouse will also commence the 45-day review period. This Draft EIR is being circulated for review and comment to the public and other interested parties, agencies, and organizations for a 45-day review period. During the review period, copies of the Draft EIR will be available for review at the City of Corona Community Development Department during normal business hours. The document is also available on the City's website at www.discovercorona.com/Community Development/Planning Division. The following is the address for the lead agency:

City of Corona
Community Development Department, Planning Division
400 S. Vicentia Avenue
Corona, California 92882-2187

Written comments on the Draft EIR may be sent via U.S. mail or email and addressed to the following:

City of Corona
Community Development Department, Planning Division
400 S. Vicentia Avenue
Corona, California 92882-2187
Attention: Terri Manuel, Planning Manager
Email: terrim@ci.corona.ca.us
Phone: 951-736-2299

1.6.3 Final EIR and EIR Certification

Following the close of the public review and comment period, the City will prepare and publish a document titled "Comments and Responses," which will contain a summary of all written and recorded oral comments on this Draft EIR and written responses to those comments, along with copies of the letters received, a transcript of the public hearings, and any necessary revisions to the EIR. This Draft EIR and the Comments and Responses document will constitute the Final EIR. The City Council, in an advertised public meeting(s), will consider the documents and then, if found adequate, certify the Final EIR as completed in compliance with CEQA and the CEQA Guidelines.

1.6.4 CEQA Findings for Project Approval

Where a certified EIR identifies significant environmental effects, CEQA Guidelines Sections 15091 and 15092 require the adoption of findings prior to approval of a project. According to PRC Section 21081, the Lead Agency must make specific Findings of Fact (Findings) before approving a project for which a Final EIR has been certified that identifies one or more significant effects on the environment that may result from that Project. The purpose of the Findings is to establish the connection between the contents of the Final EIR and the action of the Lead Agency with regard to approval of the project, if the Lead Agency approves the Project. Prior to approval of a project, one of three findings must be made, as required by PRC Sections 21081 and 15091 of the CEQA Guidelines:

- Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR
- Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency
- Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the Final EIR

If the City were to approve the C-CAP, despite significant impacts identified in the Final EIR that cannot be mitigated, if any, the City must state in writing the reasons for its actions, under CEQA Guidelines,

Section 15093. Those findings, called a Statement of Overriding Considerations, must be supported by substantial evidence in the record, and are used to explain the specific reasons why the benefits of a project make its unavoidable environmental effects acceptable.

1.6.5 Mitigation Monitoring and Reporting Program

At the time of project approval, CEQA and the CEQA Guidelines require lead agencies to adopt a reporting and mitigation monitoring program, which it has adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment (CEQA Section 21081.6; CEQA Guidelines Section 15097). This Draft EIR identifies and presents mitigation measures that would form the basis of such a monitoring and reporting program. Any measures adopted by the City as conditions for approval of the project would be included in the Mitigation Monitoring and Reporting Program (MMRP).

1.7 ORGANIZATION OF THE DRAFT EIR

This Draft EIR is organized into seven chapters, as follows:

- **Chapter 1: Introduction**—This chapter provides an introduction and a description of the intended uses of the EIR and the review and certification process.
- **Chapter 2: Summary**—This chapter includes a summary of the project description, environmental impacts that would result from implementation of the proposed project, proposed mitigation measures, and the level of significance of the impact before and after mitigation.
- **Chapter 3: Project Description**—This chapter presents a complete description of the proposed project, including project location, project characteristics, and project objectives. This section also provides an overview of the study area's environmental setting, including a description of existing and surrounding land uses, history and background of the project and project site, and a discussion of related projects to be analyzed in the EIR.
- **Chapter 4: Environmental Analysis**—This chapter is the primary focus of this Draft EIR. Each environmental issue is considered in a separate section and contains a discussion of existing conditions for the project area, including the regulatory setting, analysis methodology, thresholds of significance, and an assessment and discussion of the significance of impacts associated with the proposed project.
- **Chapter 5: Other CEQA Considerations**—This chapter provides a discussion of the potential growth inducement of the proposed project as well as a summary of any significant unavoidable impacts associated with the proposed project.
- **Chapter 6: Alternatives to the Proposed Project**—This chapter includes an analysis of a range of reasonable alternatives to the proposed project to provide informed decision making in accordance with Section 15126(f) of the CEQA Guidelines. The range of alternatives selected is based on their ability to feasibly attain most of the basic objectives of the project and avoid or substantially lessen any of the significant effects of the project.
- **Chapter 7: Report Preparers**—This section presents a list of lead agency, other agencies, and consultant team members that contributed to the preparation Draft EIR. This section also identifies persons consulted during preparation of the Draft EIR.

CHAPTER 2 Summary

2.1 PURPOSE OF THE SUMMARY

This section summarizes the characteristics of the proposed C-CAP (proposed project), the environmental impacts, mitigation measures, and residual impacts of the proposed project.

2.2 INTRODUCTION

This EIR is intended to provide decision-makers and the public with information that enables them to intelligently consider the environmental consequences of the proposed action. This EIR identifies significant or potentially significant environmental effects, as well as ways in which those impacts can be reduced to less-than-significant levels, through the imposition of mitigation measures (MMs), or through the implementation of alternatives to the project.

2.3 SUMMARY OF PROPOSED PROJECT

The City of Corona is committed to providing a more livable, equitable and economically vibrant community through the reduction of greenhouse gas (GHG) emissions. By using energy more efficiently, harnessing renewable energy to power our buildings, recycling our waste, and enhancing access to sustainable transportation modes, we can keep dollars in our local economy, create new green jobs, and improve community quality of life. These efforts toward reducing GHG emission must be done in coordination with the City's land use decisions. The foundation of planning land use decisions is found in the General Plan policies and programs.

Chapter 5, the Environmental Resources Element, of the General Plan addresses a number of different resources within the City that must be managed properly. Among these resources are energy and air quality. Goals within the Environmental Resources Element specifically speak to energy conservation and air quality. In order to implement this goal, to provide a more livable, equitable and economically vibrant community, and preserve the attributes of its unique valley location and quality lifestyle, the City has committed to prepare and implement the C-CAP. The C-CAP will ensure that the impact of future development projects on air quality is minimized, energy conserved, and that land use decisions made by the City and all internal operations within the City are consistent with adopted state legislation.

The C-CAP was designed under the premise that the City and the community it represents are uniquely capable of addressing emissions associated with sources under the City's jurisdiction. The City's emission reduction efforts should coordinate with the state strategies in order to accomplish emission reductions in an efficient and cost-effective manner.

The proposed project includes a baseline GHG emissions inventory, a methodology for tracking and reporting emissions in the future, and recommendations for GHG reduction strategies as a foundation for these efforts. An indicator of the success of these efforts will be a measured reduction in greenhouse gas (GHG) emissions using the protocols in the C-CAP. The C-CAP is another implementation tool of

the General Plan that can be used to guide development in the City by focusing on attaining the various goals and policies of the General Plan as well as the GHG reduction goals.

Implementation of the C-CAP could result in construction of energy-generating facilities such as wind turbines and photovoltaic/solar arrays that would primarily be installed on rooftops of new or existing buildings. It is possible that some energy-generating facilities that would be considered public utility installations could be placed in other areas, subject to a conditional use permit. It could also result in energy-efficiency retrofits in residential, commercial, and industrial buildings throughout the City. Opportunities for infill development and redevelopment under the C-CAP include a 0.5-mile radius around the Metrolink Station, mixed-use development within the growth areas of the City, and infill development within downtown Corona. These areas have previously been targeted as opportunity areas in the General Plan.

The C-CAP achieves the purpose and goals described above by providing: an analysis of GHG emissions and sources attributable to the City of Corona; estimates on how those emissions are expected to increase; recommended policies and actions that can reduce GHG emissions to meet state, federal, and international targets; a timeline of implementation; and a defined tracking and reporting mechanism that will measure progress toward the goals.

2.4 CLASSIFICATION OF ENVIRONMENTAL IMPACTS

Under CEQA, a "significant impact" represents a substantial or potentially substantial adverse physical change to the environment. In evaluating specific effects, this EIR identifies thresholds of significance for each effect, evaluates the potential environmental change associated with each effect, and then characterizes the effects as impacts in the following categories:

- **Less Than Significant**—Results in no substantial adverse change to existing environmental conditions
- **Potentially Significant**—Constitutes a substantial adverse change to existing environmental conditions that can be mitigated to less-than-significant levels by implementation of proposed potentially feasible mitigation measures or by the selection of an environmentally superior project alternative
- **Significant and Unavoidable**—Constitutes a substantial adverse change to existing environmental conditions that cannot be fully mitigated by implementation of all feasible mitigation measures.

2.5 SIGNIFICANT AND UNAVOIDABLE IMPACTS

No significant and unavoidable impacts would result from implementation of the proposed project.

2.6 ALTERNATIVES

As required by Section 15126.6(a) of the CEQA Guidelines and recent court cases, an EIR must:

> Describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives.

Further, Section 15126.6(b) Guidelines state:

> The discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.

As no significant adverse impacts were identified for the proposed project, the alternative analyzed in this chapter includes the No Project/Reasonably Foreseeable Development Alternative. CEQA Guidelines Section 15126.6(e)(3)(A) states that when the project is the revision of an existing land use or regulatory plan, policy, or ongoing operation, the "no project" alternative will be the continuation of the existing plan, policy, or operation into the future. As the C-CAP does not propose development, but includes policies to facilitate sustainable development and guide land use decisions together with and as part of the General Plan, there are no other project alternatives appropriate for analysis under CEQA.

Alternatives evaluated in this EIR include the following:

- Alternative 1: No Project/Reasonably Foreseeable Development

2.7 SUMMARY OF IMPACTS AND MITIGATION MEASURES

Pursuant to Section 15123(b)(1) of the CEQA Guidelines, Table 2-1 (Summary of Environmental Effects and Project Requirements/Mitigation Measures) contains a summary of less-than-significant, potentially significant, or significant and unavoidable environmental impacts associated with the proposed project, mitigation measures that would reduce or avoid those effects, and the level of significance of the impacts following the implementation of mitigation measures.

Table 2-1 Summary of Environmental Effects and Project Requirements/Mitigation Measures

Impact(s)	*Level of Significance Prior to Mitigation*	*Mitigation Measure(s) and/or Project Requirements*	*Level of Significance After Mitigation*
Impact 4.1-1 Implementation of the proposed project could adversely affect a scenic vista. Implementation of mitigation measures MM4.1-1(a) through (c) would reduce this impact to *less than significant*.	PS	MM4.1-1(a) Renewable energy generating facilities shall be placed or constructed below any major ridgeline when viewed from any designated scenic corridor as identified in the City of Corona General Plan. MM4.1-1(b) Renewable energy generating facilities shall not be: ■ Located within a scenic corridor as identified in the City of Corona General Plan ■ Located in an area that would substantially obstruct views of adjacent property owners ■ Allowed in areas where prohibited by the Alquist-Priolo Earthquake Fault Zoning Act, the terms of any easement, or the listing of the proposed site in the National Register of Historic Places or the California Register of Historical Resources, or on the City's Historic Inventory MM4.1-1(c) Renewable energy generating facilities shall be limited to a height of 80 feet on parcels between one and 5 acres, and limited to a height of 100 feet on parcels greater than 5 acres.	LTS
Impact 4.1-2 Implementation of the proposed project could degrade the visual character or quality of the City. Implementation of mitigation measures MM4.1-2(a) through (f) would reduce this impact to *less than significant*.	PS	MM4.1-2(a) The minimum setback from any non-residential property line shall be equal to the system height. MM4.1-2(b) The minimum setback from any residential property line shall be at least 1,500 feet. MM4.1-2(c) Only one unit per 10 acres shall be allowed. Units shall be installed with at least 240 feet separation from each other. If the units are to 50 feet in height, a maximum of two units may be installed for every 5 acres. For every additional 5 acres, one additional unit may be added not to exceed a maximum of five units and the separation between the units may be reduced to twice the height of the systems. MM4.1-2(d) Renewable energy generating facilities not considered an accessory structure to an existing residence shall be prohibited in urbanized residential neighborhoods. MM4.1-2(e) Residential properties less than 5 acres shall be limited to one accessory wind energy system that shall not exceed the height of the zone in which it is located. MM4.1-2(f) Residential properties that are 5 acres and more shall be limited to two accessory wind energy systems that shall not exceed the height of the zone in which it is located.	LTS

Table 2-1 Summary of Environmental Effects and Project Requirements/Mitigation Measures

Impact(s)	*Level of Significance Prior to Mitigation*	*Mitigation Measure(s) and/or Project Requirements*	*Level of Significance After Mitigation*
Impact 4.1-3 Implementation of the proposed project could result in new sources of substantial light or glare that could adversely affect day or nighttime views in the area. Implementation of mitigation measures MM4.1-3(a) and (b) would reduce this impact to *less than significant*.	PS	MM4.1-3(a) All proposed energy-generating structures shall be constructed utilizing non-reflective materials to the maximum extent feasible. If a reflective material is used, appropriate shielding shall be placed or the structure relocated to reduce the amount of visible glare. The City shall review all discretionary projects prior to issuance of building permits to ensure that appropriate shielding and placement of such structures are included in design plans. MM4.1-3(b) All proposed energy-generating structures in open spaces areas shall not be lighted unless required by code or regulation.	LTS
Impact 4.2-1 Implementation of the proposed project would not cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5. The impact would be *less than significant*.	LTS	No mitigation required.	LTS
Impact 4.3-2 Implementation of the proposed project would not conflict with AB 32 and SB 375, the policies adopted for the purpose of reducing the emissions of greenhouse gases at the state level. This would be a *less-than-significant* impact.	LTS	No mitigation required.	LTS
Impact 4.4-1 Implementation of the proposed project would not, if located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, result in a safety hazard for people residing or working in the project area. This would be a *less-than-significant* impact.	LTS	No mitigation required.	LTS
Impact 4.5-1 Implementation of the C-CAP would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect. This would be a *less-than-significant* impact.	LTS	No mitigation required.	LTS
Impact 4.6-1 Implementation of the C-CAP would not convert prime farmland, unique farmland, or farmland of statewide importance to non-agricultural use. Implementation of mitigation measure MM4.6-1 would ensure this impact remains *less than significant*.	LTS	MM4.6-1 Prior to issuance of a Conditional Use Permit for construction of renewable energy-generating facilities in open space areas, the project proponent must submit a Land Evaluation and Site Assessment to determine whether any soils of statewide importance occur on the site.	LTS

Table 2-1 Summary of Environmental Effects and Project Requirements/Mitigation Measures

Impact(s)	*Level of Significance Prior to Mitigation*	*Mitigation Measure(s) and/or Project Requirements*	*Level of Significance After Mitigation*
Impact 4.6-2 Implementation of the C-CAP would not involve other changes in the existing environment that could result in conversion of farmland to non-agricultural use or conversion of forest land to nonforest use. Implementation of mitigation measure MM4.6-1 would ensure this impact remains *less than significant*.	LTS	MM4.6-1 would also apply to this impact.	LTS

CHAPTER 3 Project Description

3.1 LEAD AGENCY

City of Corona
Community Development Department, Planning Division
400 S. Vicentia Avenue
Corona, California 92882-2187

3.2 ENVIRONMENTAL SETTING

The City of Corona is located in the northwestern portion of Riverside County, near the convergence of Los Angeles, Orange, and Riverside Counties, approximately 45 miles southeast of the City of Los Angeles as shown in Figure 3-1 (Regional Location Map). The City is in the South Coast Air Basin, and the South Coast Air Quality Management District (SCAQMD) is the agency principally responsible for comprehensive air pollution control in the Basin.

Corona is located in a valley, framed by mountains and the Prado Basin. Original settlements focused development in an area within and adjacent to Grand Boulevard. As the City grew, the geographic limitations imposed by the Cleveland National Forest to the south and the Prado Basin to the northeast created natural barriers that confined the City. The City is bordered by the City of Norco to the north, the City of Riverside to the east, and Riverside County to the west and south. The City limits encompass 39.2 square miles and a population of approximately 152,374.[1]

Two major freeways and one railroad transect Corona. The Riverside Freeway (SR-91) runs east/west directly north of the City's center; Interstate 15 (I-15) runs north/south near the eastern edge of the City and the railroad parallels SR-91. These corridors are major transportation routes to the economic center of Orange County from the Inland Empire. Corona's convenient proximity to both freeways contributes to the City's growth and economic strengths; however, freeway traffic volumes are so high that commuter "cut through" traffic has caused internal traffic problems in the City.

Two geographical areas are considered to be within the boundaries of the City of Corona General Plan Planning Area: the City's corporate limits, and its Sphere of Influence (SOI), depicted in Figure 3-2 (City of Corona and Sphere of Influence). The SOI was defined by the City and the Riverside County Local Agency Formation Commission (LAFCO), and represents those areas likely to be served by and potentially annexed to the City. The Southern California Association of Governments (SCAG) is the designated Metropolitan Planning Organization for six Southern California counties (Los Angeles, Ventura, Orange, San Bernardino, Riverside, and Imperial) and is federally mandated to develop plans for transportation, growth management, hazardous waste management, and air quality. The SCAG regional plans cover Riverside County, which includes the City and SOI, and five other counties within

[1] U.S. Census Bureau, American FactFinder, http://factfinder2.census.gov/faces/tableservices/jsf/pages// (accessed April 18, 2011).

Southern California. SCAG has projected an approximate population of 155,819 in 2020 for the City only. The City currently includes 39.36 square miles, plus 34.3 square miles in Riverside County designated as being within the City's SOI. The SOI includes three geographically distinct areas, including the West, East, and South Spheres. The West Sphere encompasses two geographic areas: Coronita and the Foothill area. The East Sphere includes the areas of Home Gardens, Eagle Valley East, and El Cerrito. Temescal Canyon makes up the South Sphere.

3.3 PROJECT OBJECTIVES

The City developed the Corona Climate Action Plan (C-CAP) to:

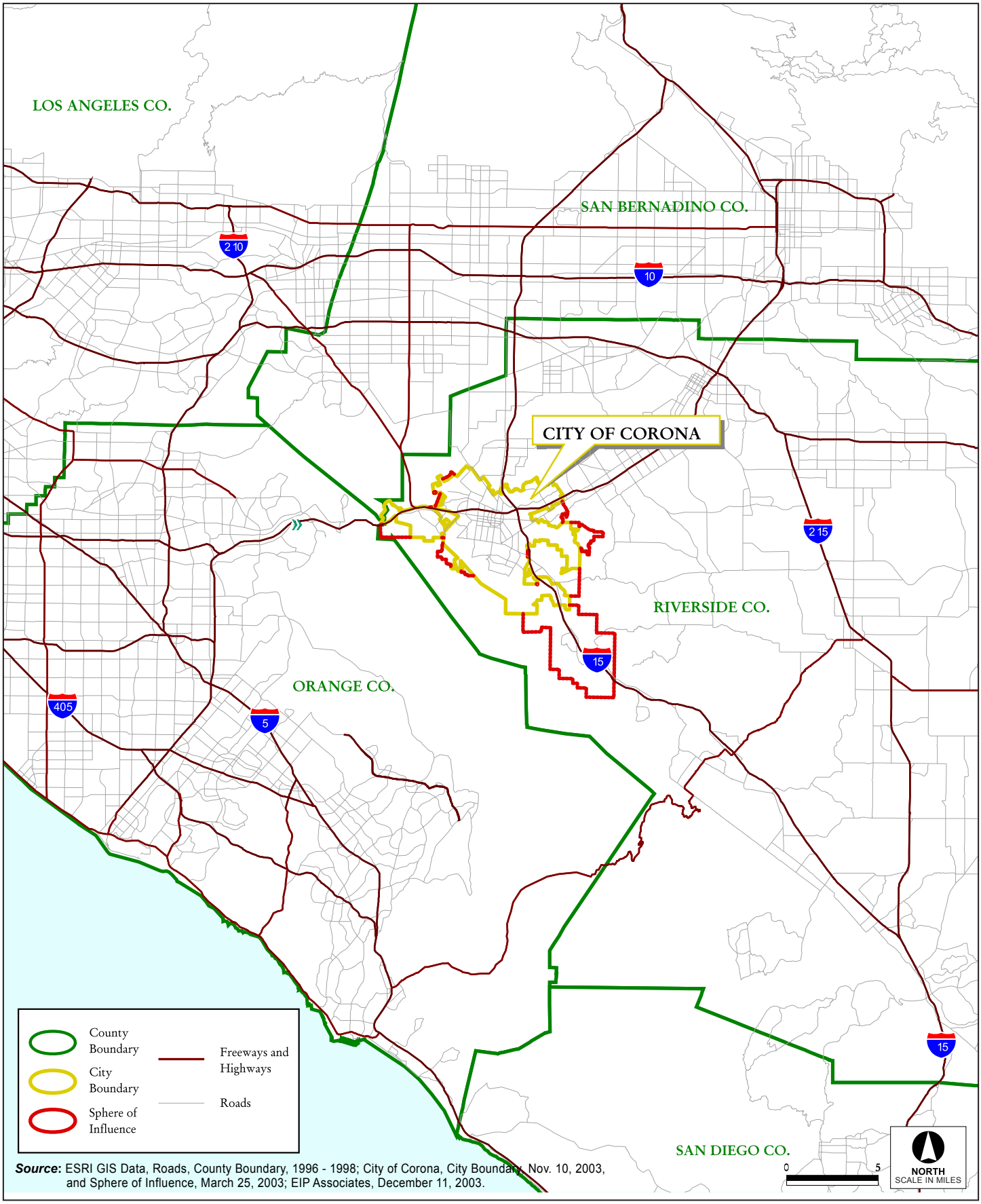
- Create a GHG baseline from which to benchmark GHG reductions
- Provide a plan that is consistent with and complementary to the GHG emissions reduction efforts being conducted by the State of California through the Global Warming Solutions Act (AB 32); the federal government through the actions of the Environmental Protection Agency; and the global community through the Kyoto Protocol
- Guide the development, enhancement, and implementation of actions that aggressively reduce GHG emissions
- Provide a policy document with specific implementation measures meant to be considered as part of the planning process for future development projects
- Provide a list of specific actions that will reduce GHG emissions, with the highest priority given to actions that provide the greatest reduction in GHG emissions and benefits to the community at the least cost
- Reduce emissions attributable to Corona to levels at or below 1990 GHG emissions by year 2020 consistent with the target reductions of AB 32
- Establish a qualified reduction plan from which future development within the City can tier and thereby streamline the environmental analysis necessary under the California Environmental Quality Act (CEQA)

3.4 PROJECT CHARACTERISTICS

The City of Corona is committed to providing a more livable, equitable and economically vibrant community through the reduction of greenhouse gas (GHG) emissions. By using energy more efficiently, harnessing renewable energy to power our buildings, recycling our waste, and enhancing access to sustainable transportation modes, the City can keep dollars in our local economy, create new green jobs, and improve community quality of life. These efforts toward reducing GHG emission must be done in coordination with the City's land use decisions. The foundation of planning land use decisions is found in the General Plan policies and programs.

The policies and programs of the City General Plan are intended to underlie most land use decisions. Preparing, adopting, implementing, and maintaining a general plan serves to:

- Define the community's environmental, social, and economic goals
- Provide citizens with information about their community and to provide them with opportunities to participate in the planning process



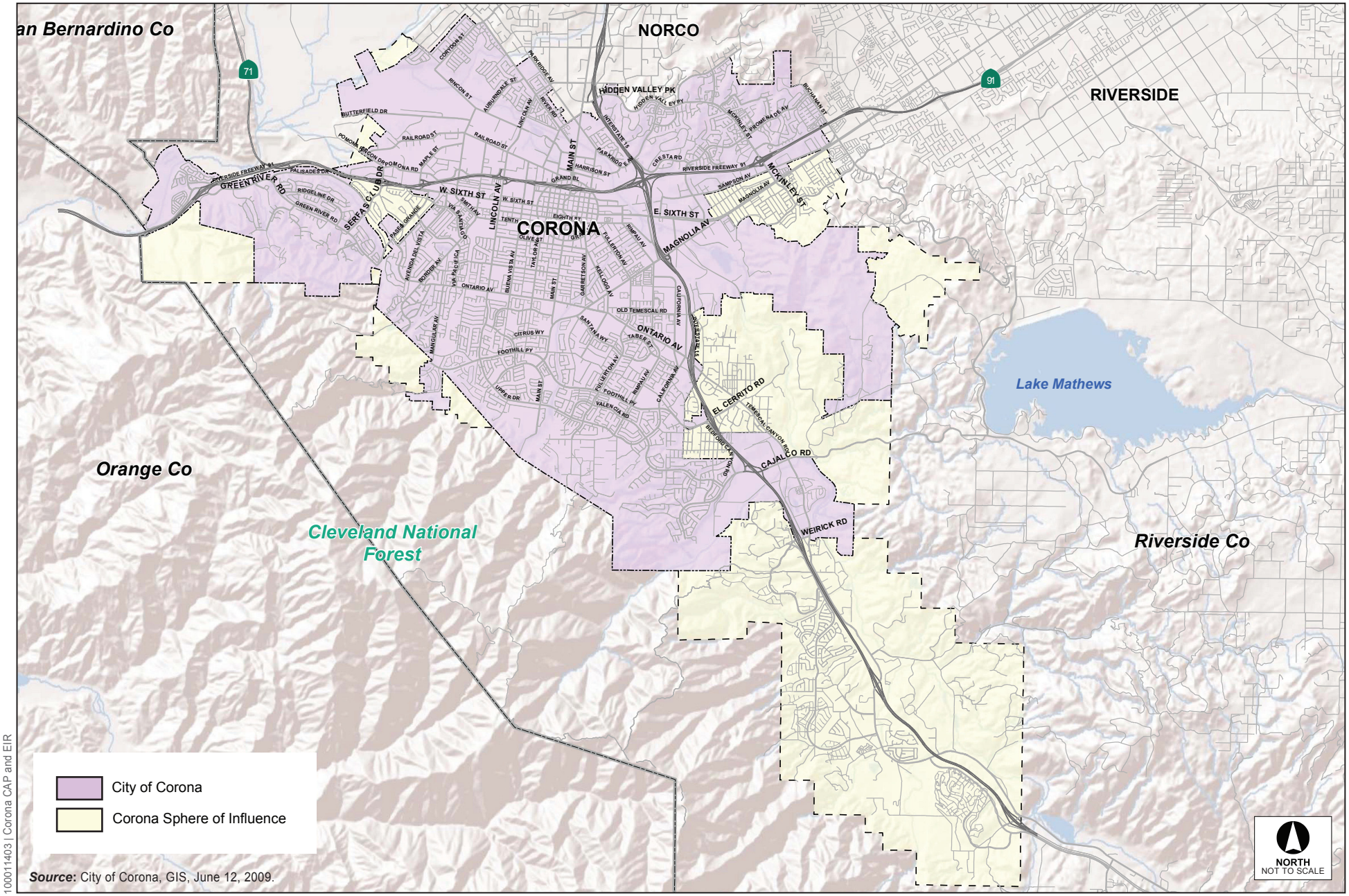
Source: ESRI GIS Data, Roads, County Boundary, 1996 - 1998; City of Corona, City Boundary, Nov. 10, 2003, and Sphere of Influence, March 25, 2003; EIP Associates, December 11, 2003.

100011403 | Corona CAP and EIR

Figure 3-1

Regional Location Map

ATKINS



***Source*:** City of Corona, GIS, June 12, 2009.

100011403 | Corona CAP and EIR

Figure 3-2

City of Corona and Sphere of Influence

ATKINS

- Provide residents with opportunities to participate in the planning and decision-making processes of their community
- Coordinate the community and environmental protection activities among local, regional, state and federal agencies
- Guide in the development of the community

Chapter 5 (Environmental Resources Element) of the General Plan addresses a number of different resources within the City that must be managed properly. Among these resources are energy and air quality. Goals within the Environmental Resources Element specifically speak to energy conservation and air quality. In order to implement this goal, to provide a more livable, equitable and economically vibrant community, and preserve the attributes of its unique valley location and quality lifestyle, the City has committed to prepare and implement the C-CAP. The C-CAP will ensure that the impact of future development projects on air quality is minimized, energy conserved, and that land use decisions made by the City and all internal operations within the City are consistent with adopted state legislation.

The C-CAP was designed under the premise that the City and the community it represents are uniquely capable of addressing emissions associated with sources under the City's jurisdiction. The City's emission reduction efforts should coordinate with the state strategies in order to accomplish emission reductions in an efficient and cost-effective manner.

The proposed project includes a baseline GHG emissions inventory, a methodology for tracking and reporting emissions in the future, and recommendations for GHG reduction strategies as a foundation for these efforts. An indicator of the success of these efforts will be a measured reduction in greenhouse gas (GHG) emissions using the protocols in the C-CAP. The C-CAP is another implementation tool of the General Plan that can be used to guide development in the City by focusing on attaining the various goals and policies of the General Plan as well as the GHG reduction goals.

Implementation of the C-CAP could result in construction of energy-generating facilities such as wind turbines and photovoltaic/solar arrays that would primarily be installed on rooftops of new or existing buildings. It is possible, although not likely, that some energy-generating facilities that would be considered public utility installations could be placed in other areas, subject to a conditional use permit. It could also result in energy-efficiency retrofits in residential, commercial, and industrial buildings throughout the City. Opportunities for infill development and redevelopment under the C-CAP include a 0.5-mile radius around the Metrolink Station, mixed-use development within the growth areas of the City, and infill development within downtown Corona. These areas have previously been targeted as opportunity areas in the General Plan.

The C-CAP achieves the purpose and goals described above by providing: an analysis of GHG emissions and sources attributable to the City of Corona; estimates on how those emissions are expected to increase; recommended policies and actions that can reduce GHG emissions to meet state, federal, and international targets; a timeline of implementation; and a defined tracking and reporting mechanism that will measure progress toward the goals.

The State of California has set specific targets for reducing greenhouse gas emissions from the burning of fossil fuels in both power plants and vehicles by adopting various regulations. In addition, state energy

efficiency and renewable requirements provide another level of reductions. In order to provide credit to Corona for regulatory actions already taken or planned by the State of California, this C-CAP first evaluates the greenhouse gas reductions that will occur within the City as a result of these actions. These will be identified in the C-CAP as R1 reduction measures. The R1 measures are included here to show all of the anticipated reduction strategies identified in the AB 32 Scoping Plan for implementation at the state level that will ultimately result in a reduction of greenhouse gas emissions at the City level. The R1 measures are not administered or enforced by the City, but the City—by describing them herein—substantiates the reductions associated with these state measures.

R2 and R3 reduction measures are measures that will be incorporated at the City level to provide additional reductions in greenhouse gas emissions. R2 measures are those measures that can be quantified to show the value of the reduction from the incorporation of those measures. A complete list of assumptions and reductions for each of the R1 and R2 measures is included in Appendix E of the C-CAP (Appendix B of this EIR).

R3 measures are those measures that, although they provide a vehicle through which reductions in emissions will occur, cannot be quantified at this time. The R3 measures are supportive measures or methods of implementation for the R2 measures. For example, R3-E2: Energy Efficiency Training and Public Education, is a measure that provides education to inform people of the programs, technology, and potential funding available to them to be more energy efficient, and provides the incentives to participate in the voluntary programs shown in R2-E1 through R2-E7. R3-E2 is supportive of measures R2-E1 through R2-E7 because it will provide more publicity, reduce the perceived challenge of being energy efficient, and provide information on potential rebates and other funding programs which will make retrofits more accessible to everyone. Therefore, although by itself R3-E2 cannot be quantified, its implementation provides a level of assurance that the reduction goals specified in the R2 measures will be achieved.

Also included in the R3 measures are reduction measures that reduce Corona's government operation emissions. Government operations make up less than 5 percent of the City's total emissions, but the City can set an example for residents by implementing reduction measures at the municipal level.

The CEQA guidelines support projects that lower the carbon footprint of new development, and encourage programmatic mitigation strategies that may include reliance on adopted regional blueprint plans, CAPs, and general plans that meet regional and local GHG emissions targets and that have also undergone CEQA review. The criteria needed to use adopted plans in evaluating impacts of GHG emissions from subsequent development projects is found in CEQA Guidelines Section 15183.5. Once adopted, the C-CAP fulfills these requirements. The City is responsible for ensuring that new projects conform to these guidelines and meet the goals and requirements outlined in the C-CAP.

The City will implement the reduction measures for new development during the CEQA review, through the use of a City GHG Significance Threshold document based upon the C-CAP. The City GHG Significance Threshold document will provide guidance for the analysis of discretionary development projects and divide projects into two broad categories based upon the CEQA review they are going through. For smaller projects, that through mitigation can support a Mitigated Negative Declaration (MND), a screening table will be developed. The screening table will provide a menu of reduction

options. If a project can garnish 100 points from the screening table, the mitigated project will implement pertinent reduction measures such that it meets the reduction goals of the C-CAP and a less-than-significant finding can be made for the project. The menu of options in the screening table is tied to the R2 Measures in the C-CAP such that 100 points will meet the emission reductions associated with the R2 Measures. This menu allows for maximum flexibility for projects to meet their reduction allocation. Screening tables may also be used if an EIR is the appropriate CEQA clearance document.

For larger projects that exceed the maximum size by land use in the top tier of the screening table, a more detailed analysis will need to be done. The City GHG Significance Threshold document will describe the methodology of quantifying and analyzing GHG emissions. The analysis for larger projects will need to quantify project-generated GHG emissions, compare project design features with the R2 Measures in the C-CAP, if required, provide mitigation such that the project is consistent with all relevant R2 Measures, and quantify the reduced (mitigated) GHG emissions attributable to the project. If a large project is consistent with all the relevant R2 Measures, then a less-than-significant GHG impact finding can be made for the project. The methodology discussed above and described in more detail in the forthcoming City GHG Significance Threshold document will be consistent with the analysis and quantification methodology used in the C-CAP.

The monitoring and reporting program will take advantage of the Screening Tables during the development review process. Once applicants choose the measures within the Screening Tables that best fit their projects, the completed Screening Table becomes a record of the reduction measures implemented by that project and the point values become a record of the anticipated GHG reductions anticipated once the project is built. Therefore, the completed Screening Tables will be used to record the implementation of the R2 measures related to new development.

3.5 RELATIONSHIP TO THE GENERAL PLAN

The Corona General Plan discusses the City's vision and the realization of this vision through four key areas: Community Development, Infrastructure and Public Services, Environmental Resources, and Environmental Hazards and Public Safety. The General Plan also includes implementation tools that are presented as separate policies and documents. The C-CAP is another implementation tool of the General Plan that can be used to guide development in the City by focusing on attaining the various goals and policies of the General Plan as well as GHG reduction goals.

3.6 OTHER APPLICABLE LAND USE PLANS

The City of Corona has numerous Specific Plans that are established to implement and regulate land use and development within a specific project boundary. In most instances specific plans supersede the original zoning of the land unless otherwise specified. Specific plans are created to achieve the following purposes:

- Comprehensively master plan a project area
- Minimize the intrusion of new development in environmentally sensitive areas
- Ensure the timely provision of essential public services and facilities consistent with the demand for such services

- Promote a harmonious variety of housing choices and commercial and industrial land uses, to attain a desirable balance of residential and employment opportunities, a high level of urban amenities, and to preserve natural and scenic open qualities of open space
- Facilitate quality development within the city by permitting greater flexibility and encouraging more creative and aesthetically pleasing designs for major urban development projects subject to large-scale community planning

Specific plans are adopted by the City Council. Once adopted, all subdivisions, land use, precise plans, permits, and local public works projects must be consistent with the adopted specific plan. Specific plans contain their own procedures and requirements by which the plans are regulatory documents adopted by ordinance; therefore, all development standards contained therein are enforceable by law in accordance with section 17.108.130 of the Corona Municipal Code.

The following Specific Plans have been adopted in the City of Corona:

- Lincoln Business Center Specific Plan SP81-1
- Northeast Corona Specific Plan SP81-2
- Township In Corona Specific Plan SP82-1
- Birtcher Business Center Specific Plan SP82-2
- Crown Properties Specific Plan SP83-1
- Concordia Specific Plan SP84-1
- Parkview Specific Plan SP84-2
- Prado Point Specific Plan SP85-1
- Sierra Del Oro Specific Plan SP85-2
- Corona Ranch Specific Plan SP85-3
- Westgate Specific Plan SP87-1
- Chase Ranch Specific Plan SP89-2
- Plaza on Sixth Street Specific Plan SP90-1
- Todd Ranch Specific Plan SP90-2
- Cherokee Ranch Specific Plan SP90-3
- Empire Homes Specific Plan SP90-4
- Corona Vista Specific Plan SP90-5
- Eagle Glen Specific Plan 90-6
- Main Street South Plaza Specific Plan SP91-01
- El Cerrito Specific Plan SP91-2
- The Cimarron Specific Plan SP95-01
- Downtown Corona Revitalization Specific Plan SP98-01
- North Main Street Specific Plan SP99-01
- Dos Lagos Specific Plan SP99-03
- Green River Ranch Specific Plan SP00-001
- Crown Ranch Estates Specific Plan SP01-001
- Corona Magnolia Specific Plan SP01-002
- Sierra Bella Specific Plan SP04-001

Although implementation of the C-CAP may result in retrofit and energy-generating projects throughout the City of Corona and its SOI that would be subject to the guidelines and policies of the applicable

Specific Plan(s), most redevelopment would occur in the Downtown and North Main Street areas, which represent targeted areas for redevelopment under the General Plan. Opportunities for infill development and redevelopment under the C-CAP include a 0.5-mile radius around the Metrolink Station, mixed-use development within the growth areas of the City, and infill development within downtown Corona. In addition, any development within the Corona Municipal Airport Comprehensive Land Use Plan (CLUP) area would be subject to requirements in that CLUP. The Specific Plans that govern development in these areas are described in greater detail, below.

3.6.1 Downtown Corona Revitalization Specific Plan (SP-98-01)

The Downtown Revitalization Specific Plan refines the concepts provided in the "Vision Plan for Downtown Corona" and designates land uses, formulates policies and design guidelines, determines an urban design framework/streetscape, and develops implementation programs and strategies to accomplish revitalization of the area. The Specific Plan provides a clear vision for future development within Downtown Corona and emphasizes higher-intensity land uses such as Mixed Use I (Commercial/Residential) that are now provided for in the Downtown by virtue of the General Plan. The City of Corona Downtown Revitalization Specific Plan area includes approximately 395 acres and generally consists of the commercial corridor along Sixth Street, from Lincoln Avenue on the west and the Temescal Creek Channel on the east, and the area within the Grand Boulevard Circle. The Riverside Freeway (91 Freeway) bisects a small portion of the plan area in the north. The Specific plan area includes commercial, industrial, residential, and public property in the original City center, or "Circle area," and the adjacent commercial areas along Sixth and Main Streets.

3.6.2 North Main Street District Specific Plan (SP-99-01)

The North Main Street Specific Plan implements City of Corona General Plan objectives and policies by presenting more detailed direction for future development and establishes development regulations and implementation mechanisms applicable solely to the various properties located within the North Main Street District Specific Plan area. This Specific Plan provides for orderly and efficient development/redevelopment in accordance with the provisions of the General Plan to enhance the visual quality and economic vitality of the Specific Plan area. The North Main Street District project area is located in the north central portion of the City. The project area is bisected in a north/south direction by North Main Street, which serves as the transportation spine for the plan area. The Street District Specific Plan area is located just north of the 91 freeway (SR-91), and west of the Interstate 15 (I-15) corridor. Just south of SR-91, on Main Street, is the area generally referred to as Downtown Corona. A creative, yet flexible, set of guidelines and design criteria for landscaping, architecture, and signage has been incorporated into the Specific Plan, providing direction for gateway concepts, streetscape improvements, project identification, theming, landmark elements, hardscape elements, and architectural guidelines, etc. The design concept creates an identifiable positive image for the overall Specific Plan area, while also recognizing and embracing the North Main Street District Specific Plan area as an integral part of the City of Corona. This Specific Plan includes Urban Density Residential and Mixed Use I classifications that allow for higher-intensity land uses that reduce vehicle miles traveled. In 2008, the Specific Plan was amended to reflect innovative development opportunities in the North Main Street District.

3.6.3 Corona Municipal Airport Comprehensive Land Use Plan

The Corona Municipal Airport CLUP contains policies governing the land uses surrounding the airport. Specifically, these policies establish development criteria that protect sensitive receptors from airport noise, persons from risk of operations, and height guidelines to ensure aircraft safety.

3.7 ADOPTION AND IMPLEMENTATION

The goals and policies set forth in the C-CAP would be implemented through a variety of mechanisms, including regulation and development review; financing and budgeting; and inter-departmental and inter-governmental coordination.

Many C-CAP policies would be implemented through regulations adopted by the City based on the city's "police power" to protect the public health, safety, and welfare of its citizens. City ordinances also require a development review process that provides for City review of individual project proposals and authorizes the City to approve, deny, or condition projects based on their consistency with the General or applicable Specific Plan. Some development review programs, such as the California Environmental Quality Act (CEQA), are ongoing and would continue to be used as a tool for land use decision making.

Coordination among City departments will be critical to the successful implementation of many C-CAP policies. While the C-CAP policies and implementation programs would be limited to authorities that can be implemented under the jurisdiction of the City of Corona, implementation of some C-CAP policies may also require coordination and joint actions with numerous local, regional, state, and federal agencies. These agencies provide services, facilities, or funding and administer regulations that directly or indirectly affect many issues addressed in the C-CAP. These external governmental agencies, such as the California Department of Transportation, water service providers, the Riverside County Local Agency Formation Commission, among others, would also look to the C-CAP for their planning and decision-making guidance.

3.7.1 Required Approvals and Actions

The following actions will be required in order to implement the C-CAP:

- Adoption of the C-CAP by the Corona City Council
- Certification of the EIR for the C-CAP by the Corona City Council

3.7.2 Amending the C-CAP

The C-CAP is viewed by the City as a dynamic program that requires implementation, monitoring, evaluation and adaptation. A critical provision of any dynamic program anticipates amendments that will result in adaptation based on the experience gained from the evaluation of implementation and monitoring. The C-CAP will be amended as needed to achieve the 2020 reduction target and to incorporate future reduction strategies, such as those that are anticipated to result from regional scale reduction planning required by SB 375. Amendments will also be necessary to incorporate new or improved methodologies and protocols for measuring emission generation and mitigation reductions. The City anticipates that both major and minor amendments will be needed as C-CAP implementation

progresses over time. Major amendments will require review by the City Community Development Department, Planning Commission, and adoption by City Council. Minor amendments can be accomplished upon review and approval by the Community Development Director.

Based on comprehensive updates to the GHG inventory, the City will evaluate whether the actual GHG emissions from activities over which the City has jurisdictional and operational control reflect the reductions anticipated in the C-CAP. If target reductions are not met at the 2015 re-inventory, the City will re-evaluate and adjust the measures and overall targets to reach the established 2020 targets. A second re-inventory is planned to coincide with an evaluation in 2018 as to Plan success.

Minor Amendments are anticipated as part of the Department's annual monitoring review of the Screening Tables and inventory update using the GHG inventory calculation tool. An assessment will be made as to the function of the Screening Table and the effectiveness of mitigation. Recommendations for changes to the process will be made by Planning Staff and approved by the Community Development Department Director.

Major Amendments will be more comprehensive and are anticipated to occur in conjunction with the three year interval for re-inventorying that will be synchronized with the reduction measure phasing. At a minimum, one major amendment is anticipated to be required between the date of Plan adoption and 2020. Implementation Phases 1 and 2 (described in Section 7.3) will be concluded in 2014 with re-inventorying completed in 2015. At this point, an important milestone assessment in the progress that the City is making with C-CAP implementation will occur. By this time, regional emissions reduction strategies resulting from SB 375 should be completed. Results from monitoring, re-inventorying and new regional reduction strategies will provide the appropriate data for a comprehensive amendment.

The next inventory is intended to occur in 2018 to assess continued progress toward the 2020 target date and implementation of the Phase 3 reduction measures. This inventory will provide a more comprehensive assessment of the Plan's success while providing a basis for adjusting the C-CAP for post 2020 target setting and continued reductions beyond 2020.

3.8 INTENDED USES OF THE EIR

CEQA Guidelines Section 15183.5, Tiering and Streamlining the Analysis of GHG Emissions, was added as part of the CEQA Guideline amendments and describes the criteria needed in a Climate Action Plan that would allow for the tiering and streamlining of CEQA analysis for subsequent development projects. The following quote is from the CEQA Guideline amendments:

> Section 15183.5. Tiering and Streamlining the Analysis of Greenhouse Gas Emissions.
>
> (a) Lead agencies may analyze and mitigate the significant effects of greenhouse gas emissions at a programmatic level, such as in a general plan, a long range development plan, or a separate plan to reduce greenhouse gas emissions. Later project-specific environmental documents may tier from and/or incorporate by reference that existing programmatic review. Project-specific environmental documents may rely on an EIR containing a programmatic analysis of greenhouse gas emissions as provided in section 15152 (tiering), 15167 (staged EIRs) 15168 (program EIRs), 15175-15179.5 (Master EIRs), 15182 (EIRs Prepared for Specific Plans), and 15183 (EIRs Prepared for General Plans, Community Plans, or Zoning).

> (b) Plans for the Reduction of Greenhouse Gas Emissions. Public agencies may choose to analyze and mitigate significant greenhouse gas emissions in a plan for the reduction of greenhouse gas emissions or similar document. A plan to reduce greenhouse gas emissions may be used in a cumulative impacts analysis as set forth below. Pursuant to Sections 15064(h)(3) and 15130(d), a lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project complies with the requirements in a previously adopted plan or mitigation program under specified circumstances.
>
> (1) Plan Elements. A plan for the reduction of greenhouse gas emissions should:
>
> (A) Quantify greenhouse gas emissions, both existing and projected over a specified time period, resulting from activities within a defined geographic area;
>
> (B) Establish a level, based on substantial evidence, below which the contribution to greenhouse gas emissions from activities covered by the plan would not be cumulatively considerable;
>
> (C) Identify and analyze the greenhouse gas emissions resulting from specific actions or categories of actions anticipated within the geographic area;
>
> (D) Specify measures or a group of measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level;
>
> (E) Establish a mechanism to monitor the plan's progress toward achieving the level and to require amendment if the plan is not achieving specified levels;
>
> (F) Be adopted in a public process following environmental review.
>
> (2) Use with Later Activities. A plan for the reduction of greenhouse gas emissions, once adopted following certification of an EIR or adoption of an environmental document, may be used in the cumulative impacts analysis of later projects. An environmental document that relies on a greenhouse gas reduction plan for a cumulative impacts analysis must identify those requirements specified in the plan that apply to the project, and, if those requirements are not otherwise binding and enforceable, incorporate those requirements as mitigation measures applicable to the project. If there is substantial evidence that the effects of a particular project may be cumulatively considerable notwithstanding the project's compliance with the specified requirements in the plan for the reduction of greenhouse gas emissions, an EIR must be prepared for the project.

One of the goals of the C-CAP is to allow programmatic level review and mitigation of GHG emissions that allows for the streamlining of CEQA review for subsequent development projects. To accomplish this, the C-CAP framework is designed to fulfill the requirements identified in CEQA Guidelines Section 15183.5, above.

This EIR is a program-level EIR pursuant to CEQA Guidelines Section 15168(a)(3), prepared in connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program. This EIR has been prepared to analyze environmental impacts associated with implementation of the C-CAP and to also address appropriate and feasible mitigation measures or project alternatives that would minimize or eliminate these impacts. This document is intended to serve as an informational document. Additionally, this EIR would provide the primary source of environmental information for the Lead Agency to consider when exercising any permitting authority or approval power directly related to implementation of the proposed project.

This EIR is intended to provide decision-makers and the public with information that enables them to consider the environmental consequences of the proposed action. This EIR identifies significant or

potentially significant environmental effects, as well as ways in which those impacts can be reduced to less-than-significant levels, whether through the imposition of mitigation measures or through the implementation of specific alternatives to the proposed project.

CHAPTER 4 Environmental Analysis

4.0 INTRODUCTION TO THE ANALYSIS

This chapter contains a discussion of the possible environmental effects of the City of Corona Climate Action Plan (C-CAP, or proposed project) for the specific issue areas that were identified through the Initial Study process as having the potential to experience significant impacts. This chapter is the primary component of the EIR, as it provides information on the existing conditions in the City of Corona and its Sphere of Influence (SOI), the type and magnitude of the project's potential individual and cumulative environmental impacts, and feasible mitigation measures that could reduce or avoid such impacts. The existing conditions component of the analysis defines the environmental conditions as they exist in the City of Corona at the time the Notice of Preparation (NOP) was published, while project impacts are defined as the project's effect on the existing environment. Mitigation measures are designed to reduce a project's potential impact to less-than-significant levels. The purpose of this chapter is to inform readers of the type and magnitude of the project's environmental impacts and how such impacts would affect the existing environment.

4.0.1 Comments Received on the Notice of Preparation

During the 30-day public review period for the NOP, which began on June 19, 2011, comment letters were received from public agencies and individuals. The NOP and the NOP comments are included in Appendix A (Notice of Preparation and Comments on the NOP) of this EIR and were considered in the EIR analyses.

4.0.2 Scope of the EIR

The environmental analyses are presented in the following order:

- Aesthetics
- Cultural Resources
- Greenhouse Gas Emissions
- Hazards/Hazardous Materials
- Land Use/Planning
- Agriculture/Forestry Resources
- Mandatory Findings of Significance

All impacts associated with air quality, biological resources, hydrology and water quality, noise, population and housing, public services, recreation, traffic, and utilities and service systems have been determined to be "Effects Not Found to Be Significant" according to Section 15128 of the CEQA Guidelines, and are briefly discussed in Chapter 5 (Other CEQA Considerations) of this EIR. Alternatives to the project are discussed in Chapter 6 (Alternatives to the Proposed Project).

4.0.3 Format of the Environmental Analysis

Each environmental topic in Section 4.1 through Section 4.7 of the EIR presents a program-level analysis of the project's environmental impacts on the environment. Each section includes an introduction, a description of the environmental setting, the regulatory framework, program-level impacts and proposed mitigation measures, and cumulative impacts. The organization of each of the technical sections follows the outline below:

Introduction

The Introduction provides a brief description of the types of impacts that are analyzed in the section. For sections that are lengthy or analytically complex, an introductory overview of the format and structure of the section is presented.

Environmental Setting and Regulatory Framework

The assessment of each issue area begins with a discussion of the existing conditions (or setting) as of the date of issuance of the Notice of Preparation (June 19, 2011), as well as a discussion of the regulatory framework relevant to that issue area. The environmental baseline for an analysis of Greenhouse Gas Emissions (GHG) is a 2008 emissions inventory developed as part of the C-CAP. As required by the CEQA Guidelines, this document discusses any inconsistencies between the proposed project and the City of Corona General Plan and applicable Specific Plans. However, consistent with the scope and purpose of this document, the discussion primarily focuses on those requirements adopted for the purpose of avoiding or mitigating an environmental effect and an assessment of whether any inconsistency with these standards creates a significant physical impact on the environment. The ultimate determination of whether this project is consistent with the City's General Plan is a decision that resides exclusively with the decision-making body (i.e., the Planning Commission or City Council), not with this environmental document.

Project Impacts and Mitigation

The impacts and mitigation discussion is divided into the following subsections, as described below.

Thresholds of Significance

The impact significance criteria used in this EIR are based on Appendix G of the 2011 CEQA Guidelines. The significance criteria used for each environmental topic/resource are presented at the beginning of the impact discussion in each section of Chapter 4 of this EIR.

Analytic Method

This subsection identifies the methodology used to analyze potential environmental impacts for each environmental topic under the identified significance criteria. The evaluations in the EIR are qualitative, given the resources that are analyzed in the EIR.

Impacts and Mitigation Measures

This subsection describes the potential direct and/or indirect environmental impacts of the project and, based on the significance criteria, determines the significance of each environmental impact. Each impact is summarized in an "impact statement" that is separately numbered, coincides with an identified significance criterion, and is followed by a detailed discussion. The impact statement also identifies the level of significance after implementation of all feasible mitigation measures. This format is designed to assist the reader in quickly identifying the subject and conclusion of the impact analyses.

CEQA does not treat project consequences relating solely to land use, socio-economic, or population, employment, or housing issues as direct physical impacts to the environment. This chapter, therefore, presents land use and demographics as informational sections that provide the setting for land use and population-related changes that could occur under the proposed C-CAP. To the extent that land use and population-related changes resulting from the proposed C-CAP could result in physical environmental effects, those effects are addressed in the appropriate sections in this chapter.

This document focuses on the overall effects of the proposed C-CAP within the City; the EIR does not examine the effects of the potential site-specific projects that may occur in the future under the C-CAP. The nature of the C-CAP is such that many proposed policies are intended to be general, with details to be determined during implementation. Therefore, this EIR assumes that specific development projects and infrastructure improvement proposals submitted to the City of Corona will necessitate an independent environmental assessment consistent with the requirements of CEQA. Thus, many of the impacts and mitigation measures can only be described in this EIR in general or qualitative terms.

The proposed C-CAP is intended to be self-mitigating, in that the policies and programs of the proposed C-CAP, in concert with its implementing ordinances, are designed to mitigate environmental impacts. This EIR shows how the impacts of future development in Corona will be mitigated through compliance with existing regulations and implementation of the policies and programs of the proposed C-CAP. Any residual impact after implementation of these proposed policies and programs is measured against the significance criteria established for each impact area. Depending on the issue area, the significance criteria are identifiable quantitative, qualitative, or performance thresholds beyond which the proposed project would be considered to result in a significant effect.

This EIR represents the best effort to evaluate the potential environmental effects of the proposed C-CAP given its long-term planning horizon. It can be anticipated that conditions will change over this planning horizon; however, the assumptions used are the best available at the time of preparation and reflect existing knowledge of patterns of development and travel patterns.

The C-CAP EIR is based on the assumption that all policies in the proposed C-CAP will be implemented and all development will be consistent with the General Plan Land Use Diagram. It is assumed that future development in the City of Corona will occur incrementally through growth management policies that ensure urban growth is balanced with infrastructure improvements and natural resources conservation over the next 20 years. Another key assumption of the C-CAP EIR is that development under the proposed C-CAP will occur over 20 years. It is understood that development under the proposed C-CAP will be incremental and the timing of development will be influenced by market conditions.

The proposed project represents a land use plan rather than a specific development project. Development-specific construction and operational impacts are not known. Therefore, the impact analysis in this EIR is on a program level; that is, it focuses on indirect environmental impacts that could occur with implementation of the proposed policies rather than on direct physical environmental impacts that would occur with a specific development project. However, impacts that could occur as a result of retrofits or energy-generating structures allowed under the C-CAP must be considered because they would be indirect impacts of implementation of the C-CAP. For example, construction activities could exceed SCAQMD thresholds of significance for air quality, as the South Coast Air Basin, in which the City of Corona lies, is in nonattainment for several criteria pollutants, and construction emissions could result in a significant impact despite implementation of mitigation measures. Because specific development projects are not known at this time, it is uncertain whether a significant impact would actually occur. Therefore, on a program level, impacts of this type could be considered significant and unavoidable even though individual development projects following the C-CAP may or may not exceed significance thresholds.

The geographic scope of the impact analyses varies depending upon the specific environmental issue being analyzed. Where the impact analysis identifies significant adverse environmental effects that could be reduced or avoided through implementation of a mitigation measure, the measure is presented after the relevant impact discussion. Mitigation measures identify specific and measurable actions that could be taken to reduce potentially significant environmental impacts.

Project impacts are also assessed in light of existing regulatory requirements that could serve to mitigate potential impacts. The effectiveness of existing regulations to mitigate potential impacts is often affected by discretionary requirements, site characteristics, and project features and design-level considerations that are not yet detailed. Because there is some discretion in how these regulations can be applied, for some impacts, these requirements are included as mitigation measures to outline the specific process by which development in the City of Corona will comply with these regulations.

Program-level mitigation measures are proposed that would apply to all subsequent development under the C-CAP, although site-specific mitigation measures may also be implemented as identified in subsequent environmental analysis, as appropriate. The mitigation measures identify the parties responsible for implementation, a timeframe for implementation, and any applicable public agency approval, oversight, or monitoring that may be required. Mitigation measures would usually be implemented by individual development applicants, with oversight by one or more public agencies, unless indicated otherwise.

The City of Corona imposes conditions of approval (COA) for the purpose of controlling or reducing potential environmental and/or safety issues associated with a proposed project. These COA may include, but are not necessarily limited to, development standards, infrastructure improvements, and/or operational requirements. In this EIR, standard COA that would apply to specific development projects constructed under the C-CAP and are relevant to the environmental analysis are identified along with the discussion of mitigation measures in each resource-specific discussion provided in Chapter 3 (Project Description) of this document. COA often have the effect of reducing an environmental impact and, as such, take the place of mitigation measures that would otherwise be required to address impacts. COA

identified in this document are not inclusive of all code requirements that would be imposed on future development; only those COA relevant to the environmental analysis are included.

This subsection concludes with a statement regarding whether the impact, after implementation of the mitigation measures and/or compliance with existing local, state, and federal laws and regulations, would remain significant or be reduced to a less-than-significant level.

Cumulative Impacts

CEQA requires that EIRs discuss a project's potential contributions to cumulative impacts, in addition to project-specific impacts. CEQA Guidelines Section 15130(a)(1) states that a "cumulative impact consists of an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts." Other projects include past, present, and reasonably probable future projects.

CEQA Guidelines Section 15130(b)(1) states that the approach to the cumulative impact analysis may be based on either of the following approaches, or a combination thereof:

- A list of past, present, and probable future projects producing related or cumulative impacts
- A summary of projections contained in an adopted general plan or related planning document designed to evaluate regional or areawide conditions

For the purposes of this EIR, the analysis of the potential for the project's incremental effects to be cumulatively considerable is based upon full build-out of the Corona General Plan and the General Plans of neighboring jurisdictions.

The geographic scope of the cumulative impact analyses and the specific related projects that are included in the analyses may also vary depending on the specific environmental issue being analyzed. Each technical section of this EIR designates the cumulative context for each cumulative impact analysis.

The EIR presents a cumulative impact analysis only where the project's incremental effect would result in a less-than-significant or significant and unavoidable cumulative impact.

CEQA requires that an EIR discuss cumulative impacts to determine whether they are significant. If the cumulative impact is significant, the Project's incremental effects must be analyzed to determine if the Project's contribution to the cumulative impact is cumulatively considerable. In accordance with CEQA Guidelines Section 15065(a)(3), this determination is based on an assessment of the Project's incremental effects viewed in combination with the effects of past, present, and probable future related projects. The existence of a currently existing significant cumulative impact does not necessarily mean that the project's contribution to that impact must be significant. Instead, a project's contribution to a significant cumulative impact is significant only if its contribution is cumulatively considerable.

CEQA recognizes that the analysis of cumulative impacts need not be as detailed as the analysis of project- level impacts, but instead should "be guided by the standards of practicality and reasonableness" (CEQA Guidelines Section 15130(b)). The discussion of cumulative impacts must reflect the severity of the impacts and the likelihood of their occurrence; however, the discussion need not be as detailed as the discussion of environmental impacts attributable to the Project alone.

The impact analysis concludes with a discussion of cumulative effects, which evaluates the impacts associated with the proposed project in conjunction with other past, present, and probable future development in areas causing related impacts.

4.0.4 Levels of Significance

A "significant effect" is defined by CEQA Guidelines Section 15382 as "a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, or ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment, but may be considered in determining whether the physical change is significant."

The Draft EIR uses the following terms to describe the level of significance of impacts identified during the course of the environmental analysis:

- **No Impact**—Where the project would have no effect whatsoever on the identified resource as established by the threshold of significance, a discussion is included in the subsection of each section entitled "Effects Found Not to be Significant."
- **Less-Than-Significant Impact**—Impacts that are adverse, but that do not exceed the specified standards of significance
- **Potentially Significant Impact**—Significant impacts that may ultimately be determined to be less than significant; the level of significance may be reduced in the future through further definition of the project detail; potentially significant impacts may also be impacts about which there is not enough information to draw a final conclusion; however, for the purpose of this EIR, they are considered significant; such impacts are equivalent to significant impacts and require the identification of feasible mitigation measures
- **Significant and Unavoidable Impact**—Impacts that exceed the defined standards of significance and that cannot be eliminated or reduced to a less-than-significant level through the implementation of feasible mitigation measures

4.1 AESTHETICS

This section of the EIR analyzes the potential environmental effects on visual quality and character in the City from implementation of the C-CAP. Environmental effects related to increased light and glare, scenic vistas, or scenic resources as a result of the C-CAP were determined in the Initial Study (IS) to be less than significant and these issue areas are not analyzed in this section. Further discussion concerning these thresholds can be found in Chapter 5 (Other CEQA Considerations, Effects Not Found to Be Significant).

No comment letters addressing aesthetics were received in response to the notice of preparation (NOP) circulated for the proposed project. Data for this section were taken from the City of Corona General Plan (2004), City of Corona General Plan Environmental Impact Report (March 2004), the City of Corona Downtown Revitalization Specific Plan (1998), and the City of Corona North Main Street District Specific Plan (2000). Full reference-list entries for all cited materials are provided in Section 4.1.5 (References).

4.1.1 Environmental Setting

As set forth in CEQA Guidelines Section 15125(a) this section describes the physical environmental conditions in the City and SOI at the time the environmental analysis commenced. It constitutes the baseline physical conditions by which the City of Corona will determine whether an Aesthetic impact is significant.

Urban Visual Character

The City is sited on a river plain and is bounded on three sides by the Santa Ana and San Bernardino Mountains and Chino Hills, which are visible from all parts of the City and dominate most viewsheds from within the City. The Temescal Wash, a major drainage facility on the Santa Ana River, bisects the City. The Cleveland National Forest abuts the City on the south. This combination and intersection of mountains, valleys, and plains create a visually dynamic landscape of urban development surrounded by mountains and open space. The sense of arrival into the City of Corona from adjoining communities is defined principally by the visual transition from rural open spaces to urban and suburban development patterns and from mountainous topography into an open valley.

The City consists of a diversity of residential neighborhoods, commercial and industrial districts, and civic places that are differentiated in their functional role and physical form and character. Their form varies from those that recognize the primacy of the automobile in our culture during recent decades to revitalized historic districts and new places that induce walkability and social interaction through their concentration of multiple destination uses and attractive design of streets, plazas, and other public amenities.

The character and quality of Corona's residential neighborhoods, commercial centers, and business and industrial districts are largely reflective of the era of their construction. The City of Corona is built around a historic core defined by a 1-mile diameter circular street, Grand Boulevard. Downtown

Corona's development pattern and character are uniquely defined by the Grand Boulevard circle that is overlaid by a regular street grid, within which commercial, office, and civic structures are principally located directly along the street frontages and housing is set back from the street with landscaped front yards and parkways.

Much of the architecture is representative of design styles visible in early developments throughout southern California, with simple storefront styles for commercial structures and a range of residential idioms including Craftsman, Spanish Colonial, Gothic Revival, Victorian, Spanish/Mission Revival, and Queen Anne. Fragments of these historic styles and buildings remain in the Downtown area and, coupled with mature trees along the street frontages, convey the City's history and contribute to the area's distinct identity. However, some of this building and landscape fabric has been modified over time, with the addition of nondescript single- and multi-family houses and commercial structures diminishing the area's character and distinctiveness.

Post World War II, the Downtown's grid development pattern was extended outward. Housing was constructed in comparable development forms but used simpler, somewhat anonymous, functional design styles. Commercial buildings were grouped in multi-tenant centers or independent structures that were set back from the street, surrounded by minimally landscaped parking lots, and facilitated automobile rather than pedestrian access. The growing primacy of the automobile also resulted in a reduction in the intensity of public street trees.

More recent development, occurring from the mid 1970s to the present, embraced development typologies typical of suburban master planned communities throughout California. These established neighborhoods characterized by homogeneous residential types, primarily single-family detached units, built within a street pattern that limited neighborhood entries, emphasized discontinuity with cul-de-sacs, and became more curvilinear. Schools and parks were incorporated within or on the edges of the neighborhoods. Grocery stores and commercial centers were pulled outside and to the edges of the neighborhoods rather than as their focus, primarily to major street intersections. Higher density, multi-family neighborhoods tended to be concentrated along the primary travel corridors and adjacent to the commercial centers.

Corona's built places consider its natural setting at the base of mountains and canyons that is traversed by creeks and drainages. Throughout Corona, parklands, greenways, and open spaces are integrated with development to protect important resources, provide public safety, and as relief from patterns of urban and suburban development. Larger contiguous areas of passive open space and agriculture are concentrated in the western and southeastern portions of the City. A large (approximately 920-acre), vegetated flood control area is located in the northwestern portion of the City, adjacent to the Prado Dam spillway, and parks are interspersed throughout generally residential areas in the other portions of the City, as well as adjacent to the Prado Basin area. The City currently maintains 33 parks, including recreational areas at the Corona Municipal Airport, which provide approximately 385 acres of parkland and passive open space, as well as 601 acres of agricultural areas. Physical development is located and designed to maintain the City's hillsides and canyons, creeks, and other natural open spaces as a visual backdrop and amenity for its residents and visitors. Remnants of the historic citrus industry era are seen throughout Corona. Double rows of palm trees, once lining driveways, dot the skyline, and contribute to

the perception of the City's agricultural history. A number of these palm rows have been integrated into subsequently developed master planned communities.

Design quality is achieved through the City's streetscapes, entry treatments, architecture, signage, and physical form and architecture of private buildings and public places. The City contains street trees and landscape along its primary transportation corridors that unify its neighborhoods and districts. Within the citywide framework, these are differentiated among neighborhoods and key business and civic locations to convey a unique identity for each. Entries from the freeways are clearly delineated by landscape, signage, lighting, and public art to ensure the sense of arrival into and identity for Corona. These are integrated with improvements of adjoining private property to establish a unified sense of place.

On downtown public streets, the General Plan provides that they are designed to promote active pedestrian use. Street trees serve as visual landmarks to define the area and a dense tree canopy provides shade. Sidewalks are paved with distinctive materials and incorporate well-designed planters, benches, newsracks, trash receptacles, and public art. Public signage is designed in a coordinated manner. Street lighting is scaled to the pedestrian, while providing adequate illumination for automobiles on the street. Architectural and landscape design elements and markers are used to reflect Corona's history. North Main Street contains well-designed signage, landscape, lighting, and other unified streetscape improvements that promote its identity as a key activity and business area of the City. This establishes a consistent visual framework that unifies the diversity of uses and building types of the district.

Freeway and neighborhood-serving commercial centers are consistently designed to complement adjoining residential neighborhoods. Each contains signage, landscape, and other elements that visually distinguish the center. As these centers evolve and are improved over time, they will incorporate additional amenities such as landscaped sidewalks and public plazas that will enhance neighborhood socialization and pedestrian activity. Business and industrial parks are designed to convey a unique and high quality identity. Each contains unifying signage, landscape, street lighting, entry identification, and common open spaces. Architectural styles and building materials among individual businesses complement one another.

Residential neighborhoods are planned and designed to enhance livability and maintain high economic value. Each is uniquely identified by signage, landscape, lighting, and other distinctive elements. Landscape is used extensively to assure high aesthetic values.

Sphere of Influence Visual Character

The most dominant visual resources within the SOI generally consist of the continuations of the landforms visible from within the City. Prominent visual resources within the Temescal Valley portion of the SOI include the Temescal wash and associated hills. Although Lake Matthews is located immediately east of this area, the lake is not visible from the SOI. I-15, from the City of Corona to the San Diego County line, is a state-eligible scenic highway, and provides motorists with views of dramatic topographic variation as it passes through the Temecula Valley area, ranging from agricultural and open space areas immediately adjacent to the freeway, to foothill and mountainous topography. Views of the Santa Ana Mountains and the Cleveland National Forest, located to the west, are also available. Some hillside residential development is visible, but is generally dominated by the mountainous backdrop. Glen Ivy

Hot Springs is also nestled among the foothills in the western portion of the valley. Further south, however, some of the slopes along the western portion of the valley have been scarred by extensive mining activities.

The eastern portions of the SOI (Home Gardens and El Cerrito) share the visual resources of the eastern portion of the City. Home Gardens is a largely developed area nestled among the low hills along the eastern boundary of the City. The developed area is relatively flat, and the neighboring hills, which generally have 25 percent or greater slopes, provide a stark visual contrast and some feeling of enclosure, though without the dominance of the taller mountains in the San Bernardino and Santa Ana ranges.

The El Cerrito portion of the SOI is a peninsula of unincorporated land that extends into the southeastern portion of the City. The eastern portion of El Cerrito is almost completely mountainous, and includes an extension of the low hills along the eastern boundary of the City. Although views of the hills exist, extensive mining activity in this area has scarred many of the hillsides, and the quality of these views is generally considered low.

Prado Basin

The Prado Basin was removed from the City's SOI in 2006. This area encompasses a large geographic area west of Highway 71. Although it is no longer within the City's SOI, it is a significant visual element from SR-91 and SR-71. The Basin includes the Prado Dam structure and spillway, as well as the Prado Wetlands and the Santa Ana River. Large expanses of open space and agriculture also lie in this area, with vegetation ranging from scrub-like to dense woodland, and are readily visible from either Highway 71 or SR-91, as are portions of the Santa Ana River. Highway 71 generally follows the foot of the Chino Hills, and east of Highway 71, the topography of the area changes dramatically, as the relatively flat terrain of the Prado Basin gives way to steep, scrubby slopes of the Chino Hills.

4.1.2 Regulatory Framework

Federal

There are no federal regulations pertaining to visual quality.

State

The only state regulation pertaining to visual quality is the State Scenic Highways program administered by the California Department of Transportation. As the proposed project would not have a significant impact on scenic highways, these regulations are not applicable.

Regional

County Ordinance 655

The County of Riverside adopted an ordinance to restrict the permitted use of certain light fixtures that emit into the night sky. The primary intent of the ordinance is the protection of astronomical observation and research.

Riverside County Integrated Project (RCIP)

The RCIP includes a range of land use policies that help to preserve scenic resources and visual quality. Although these policies do not generally apply to development within the City, development in the SOI areas would occur under the County policy framework; consequently, edge conditions of the urban areas could be affected, and scenic resources that lie outside of City limits but within City viewsheds could be similarly affected. Relevant County policies generally emphasize concentrating growth near or within existing urban boundaries; permanently preserving important natural and scenic resources; incorporating open space within urban areas; ensuring compatibility of historic and new development; conserving view corridors, skylines, and scenic vistas; and imposing restrictions on development activities that may adversely affect scenic resources.

Local

City of Corona General Plan

The City of Corona General Plan, updated in 2004, provides the framework for the City's physical, economic, social, and environmental development and addressing all geographic areas in the City, as well as those areas that surround the City that may be served by the City in the future. The General Plan contains numerous policies aimed at preserving the visual character and quality of the City. It further contains policies regarding the city's potential annexation of its Sphere of Influence (SOI). The goal of any annexation within the City's SOI is to have adjoining lands in unincorporated County areas whose types, patterns, and intensities of use complement existing development within the City reflect their natural environmental setting, and contribute sufficient revenue to maintain the City's fiscal balance. General Plan policies and its SOI that are applicable to the proposed project,[2] are as follows:

Policy 1.2.1 Locate and design development to reflect Corona's unique physical setting considering its natural topography, environmental resources, natural hazards, and opportunities for views in accordance with this Plan's policies for *Natural Resources* and *Public Safety*.

Policy 1.4.2 Distribute and phase the timing of growth to protect the viability, character, and quality of existing residential neighborhoods, commercial districts, and industrial/business areas.

Policy 1.4.4 Pro-actively promote the adaptive re-use and infill of economically underutilized, obsolete, and dilapidated commercial and industrial sites within existing urbanized areas, in consideration of the uses, scale, and character of adjoining uses.

Policy 1.4.7 Manage the timing and design of development to assure the quality and character that distinguish Corona's neighborhoods and business districts.

Policy 1.5.1 Promote the development of residential neighborhoods, commercial and industrial districts, and public places that are distinguished by their physical design, image, effectiveness in nurturing community socialization and economic

[2] These policies are not a complete listing of all design policies contained in the General Plan; those policies that would be most applicable to the proposed project are included here.

activity, and perception as valued places by residents, business persons, and visitors to the City.

Policy 1.5.2 Promote the development of development patterns and structures that recognize and maintain the historic character of recognized heritage properties.

Policy 1.5.3 Distinguish the City's neighborhoods and districts in their character and physical appearance by considering their physical and visual separation, edge and entry treatment, architecture, landscape, streetscape, and comparable elements during their design and development.

Policy 1.5.5 Require adherence to the design and development guidelines as subsequently stipulated by this Plan's policies for each land use district, as well as implementing ordinances and Specific Plans.

Policy 1.17.7 Ensure that new Downtown development is attractive and creates an image conducive to economic revitalization in accordance with the adopted Specific Plan.

Policy 1.17.8 Maintain the generally small scale, "village-like" character of Downtown's buildings, avoiding large "box-like" structures.

Policy 1.17.9 Promote the consolidation of individual lots for the development of cohesive and well-designed commercial and mixed-use projects that maintain the area's character of low-rise and pedestrian-oriented buildings with distinctive storefronts.

Policy 1.17.11 Require that commercial uses be designed to exhibit a high level of architectural and site quality in accordance with the principles defined by Policies 1.11.11–1.11.13 and 1.11.15.

Policy 1.17.12 Require that mixed-use projects that integrate commercial uses with housing be designed to exhibit a high level of quality in accordance with the principles defined by Policy 1.13.7.

Policy 1.17.15 Enhance the historic character of the Downtown by requiring new construction to be architecturally compatible with existing structures.

Policy 1.18.5 Promote a high quality of architectural and landscape design of new construction and renovated buildings in accordance with the principles defined by Policies 1.11.11–1.11.13 for commercial projects, Policy 1.12.7 for industrial projects, and Policy 1.13.7 for mixed-use commercial and residential project.

Policy 1.18.6 Encourage the use of diverse and eclectic architectural design styles, varying building forms and geometries, combinations and juxtapositions of exterior materials and finishes, and the use of climatically sensitive building elements.

Policy 1.23.2 Ensure that annexations to the City of Corona are consistent with the overall goals and policies of the General Plan and do not adversely impact the City's fiscal viability, environmental resources, infrastructure and services, and quality of life.

Policy 1.23.8 Require that existing and future land uses in the proposed annexation area complement with adjoining city uses and character.

Policy 1.23.9 Encourage the County of Riverside to promote the development of the SOI in accordance with the [Corona General Plan] SOI Land Use Plan, as shown in Figure 12 and applicable density standards and design and development policies for such designations that have been previously defined by this [Land Use] Element. Should these lands be annexed to the city, they shall be subject to this Plan's policies.

Policy 2.5.3 Require that the renovation of existing buildings and new construction exhibit a high level of architectural character and foster pedestrian activity, by adherence to Policies 1.17.8–1.17.16. These should be flexible to allow for design creativity.

Policy 4.2.2 Continue to implement design guidelines for restoring historic and architecturally significant structures, including but not limited to, the Secretary of the Interior's Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic buildings.

City of Corona Municipal Code

Title 17 (Zoning) of the Municipal Code contains regulations pertaining to development that, in part, protect visual resources and the character and quality of the City.

4.1.3 Impacts and Mitigation Measures

Analytic Method

The following analysis takes into account the attribute of aesthetics or visual character, which pertains to aspects of the visual character of existing development and of the City, such as architecture, color, design, décor, mass, and height. The inherent subjectivity of issues and values of visual character creates a challenge in arriving at a conclusive determination of what constitutes a "significant impact" for the purposes of CEQA. Impacts regarding visual character typically include changes to the style or ambiance of a community, the insertion of a prominent feature that changes the original visual character of an area, or the elimination of a significant natural feature (or open space).

Thresholds of Significance

The following thresholds of significance are based on the 2012 CEQA Guidelines Appendix G. For purposes of this EIR, implementation of the C-CAP may have a significant adverse impact on aesthetics if it would:

- Have a substantial adverse effect on a scenic vista
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway
- Substantially degrade the existing visual character or quality of the site and its surroundings
- Create a new source of substantial light or glare that could adversely affect day or nighttime views in the area

Effects Not Found to Be Significant

Threshold	Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Grand Boulevard, Main Street, Ontario Avenue, Magnolia Avenue, and Foothill Parkway that traverse the City are designated by the City as scenic highways. Within this designation, the City's highways and corridors are protected for scenic purposes. The City's historic downtown, which includes all of Grand Boulevard, designated as a scenic corridor, could be subject to further redevelopment intensification. Implementation of the C-CAP could also result in alteration of historic buildings due to energy retrofits (see Cultural Resources). General Plan Policies 10.22.1 through 10.22.5 and 10.23.1 and 10.23.2 protect scenic resources and are implemented through the programs outlined in Chapter 7 of the General Plan. Further, Implementation Program 9 requires that all projects be reviewed for consistency with General Plan policies prior to approval. Therefore, any facilities constructed under the C-CAP would be evaluated for conformance to these policies to ensure that scenic resources are not adversely affected. The impact would be less than significant, and no further evaluation is required.

Project Impacts and Mitigation

Threshold	Would the project have a substantial adverse effect on a scenic vista?

Impact 4.1-1 **Implementation of the proposed project could adversely affect a scenic vista. Implementation of mitigation measures MM4.1-1(a) through (c) would reduce this impact to *less than significant*.**

Significant scenic vistas within the City include: views of the Prado Basin from Sierra del Oro that encompass the basin on the south and canyon areas on the west; views of the Santa Ana Mountains from the I-15/SR-91 Freeway interchange; southern view of the foothills from major north-south streets south of Ontario Avenue; views from the higher elevations south of Ontario Avenue, which encompass panoramic views to the north and San Gabriel Mountains; and Grand Boulevard, including the circle of palm trees visible from a variety of locations. General Plan Policies 10.22.1 through 10.22.5 and 10.23.1 and 10.23.2 protect scenic views and are implemented through the implementation programs outlined in Chapter 7 of the General Plan. Further, Implementation Program 9 requires that all projects be reviewed for consistency with General Plan policies prior to approval.

Renewable energy-generating facilities such as wind farms or solar arrays could be developed in open space areas that currently provide scenic vistas. These facilities could adversely affect the scenic view of the area by introducing numerous man-made structures into a natural setting, a potentially significant impact. To reduce this potential impact, the following mitigation measures shall be implemented:

MM4.1-1(a) *Renewable energy generating facilities shall be placed or constructed below any major ridgeline when viewed from any designated scenic corridor as identified in the City of Corona General Plan.*

MM4.1-1 (b) *Renewable energy generating facilities shall not be:*

- *Located within a scenic corridor as identified in the City of Corona General Plan*
- *Located in an area that would substantially obstruct views of adjacent property owners*

- *Allowed in areas where prohibited by the Alquist-Priolo Earthquake Fault Zoning Act, the terms of any easement, or the listing of the proposed site in the National Register of Historic Places or the California Register of Historical Resources, or on the City's Historic Inventory*

MM4.1-1(c) *Renewable energy generating facilities shall be limited to a height of 80 feet on parcels between one and 5 acres, and limited to a height of 100 feet on parcels greater than 5 acres.*

Implementation of mitigation measures MM4.1-1(a) through (c) would reduce potential adverse impacts from energy systems in open space areas on scenic views by limiting structure heights and restricting locations such that views would not be obstructed. In addition, any future facilities under the C-CAP would be evaluated for conformance to these policies to ensure that scenic views are not adversely affected. The impact would be *less than significant*.

Threshold	Would the project substantially degrade the visual character or quality of the area?

Impact 4.1-2 **Implementation of the proposed project could degrade the visual character or quality of the City. Implementation of mitigation measures MM4.1-2(a) through (f) would reduce this impact to *less than significant*.**

The C-CAP does not propose specific development. Rather, it encourages densification in the Downtown and along transit corridors, furthering the goals of the General Plan, the Corona Downtown Revitalization Specific Plan, and the North Main Street Specific Plan. The C-CAP establishes policies that encourage energy-saving retrofits to existing buildings and incorporation of energy-generating components in new construction, such as solar arrays and wind turbines. These structures would likely be visible to visitors, employees, and residents, and screening would inhibit energy production. In addition, renewable energy generating facilities could be developed in open space areas that would introduce man-made structures into a natural setting. Depending on the size and mass of these energy-generating components, future redevelopment or development could result in degradation of the visual character and quality of an individual site and its surroundings.

Future development that would incorporate renewable energy systems on the building, such as photovoltaic panels, would be required to comply with proposed policies that regulate the design of new buildings as well as protect the existing visual quality of the City. For example, Policy 1.4.4 promotes the adaptive re-use and infill of economically underutilized, obsolete, and dilapidated commercial and industrial sites within existing urbanized areas, while considering the uses, scale, and character of adjoining uses. Policy 1.5.5 requires all development to adhere to the design and development guidelines as subsequently stipulated by General Plan policies for each land use district, as well as implementing ordinances and Specific Plans. Policy 1.17.7 is designed to ensure that new Downtown development is attractive and creates an image conducive to economic revitalization in accordance with the adopted Specific Plan. In addition, all development or redevelopment projects would undergo further environmental and design review on a project-by-project basis to ensure that the visual quality of the surrounding environment is not substantially compromised.

The City has also adopted design guidelines for industrial and residential development to guide developers, architects and other design professionals in understanding the City's objective of providing for well-designed, attractive, quality industrial and residential development. The guidelines complement

the City's development regulations and identify key architecture and site design elements that are important to the City. They also provide examples of desirable design methods and features. The City requires that industrial project sites are designed so that areas used for loading, outdoor storage (where allowed), and other potentially unsightly areas are screened from public view. In addition, Specific Plans contain their own design guidelines that supersede and supplement the overall City guidelines to guide development in specific areas. For example, as stated in the North Main Street Specific Plan, architectural diversity and eclecticism are encouraged and shall emerge from: 1)varied building forms and geometrics; 2) interesting combinations and juxtapositions of exterior materials and finishes; and 3) the use of climatically sensitive building elements. In addition to new construction, the renovation or rehabilitation of existing buildings, developments, and shopping centers within the Specific Plan area is strongly encouraged. When renovating and rehabilitating existing facilities, as many of the design guidelines for new architecture as possible should be incorporated. By applying design guidelines proposed for new architecture to the rehabilitation of existing architecture, the entire district, over time, will eventually be unified into a cohesive whole that accommodates diversity of forms, follows guidelines for the use of color and materials, and therefore, reinforces district identity while minimizing visual clutter. The combination of architectural diversity and environmental sensitivity is intended to provide the City of Corona with a comfortable environment for City residents.

It is also possible that photovoltaic or wind energy systems could be installed in existing residential neighborhoods as an accessory structure to an existing residence which could also result in an adverse change in the visual character and quality of the site. Land use designations under the General Plan include open space and several residential categories ranging from Rural Residential 1 (lowest density) to Urban Density Residential (highest density). As previously discussed regarding Impact 4.1-1, projects in open space areas could have an impact on a scenic vista. However, the implementation of mitigation measures MM4.1-1(a) through (c) would reduce those impacts to less than significant. That same mitigation would also be applied here to protect the visual character and quality of the area. To ensure that any proposed renewable energy generating facility in open space areas would not adversely affect visual character or quality, the following mitigation measures shall be implemented:

MM4.1-2(a) *The minimum setback from any nonresidential property line shall be equal to the system height.*

MM4.1-2(b) *The minimum setback from any residential property line shall be at least 1,500 feet.*

MM4.1-2(c) *Only one unit per 10 acres shall be allowed. Units shall be installed with at least 240 feet separation from each other. If the units are to 50 feet in height, a maximum of two units may be installed for every 5 acres. For every additional 5 acres, one additional unit may be added not to exceed a maximum of five units and the separation between the units may be reduced to twice the height of the systems.*

To ensure that any proposed renewable energy generating facility in residential areas would not adversely affect visual character or quality, the following mitigation measures shall be implemented:

MM4.1-2(d) *Renewable energy generating facilities not considered an accessory structure to an existing residence shall be prohibited in urbanized residential neighborhoods.*

MM4.1-2(e) *Residential properties less than 5 acres shall be limited to one accessory wind energy system that shall not exceed the height of the zone in which it is located.*

MM4.1-2(f) *Residential properties that are 5 acres and more shall be limited to two accessory wind energy systems that shall not exceed the height of the zone in which it is located.*

With implementation of the identified mitigation, potential adverse impacts to visual character or quality of energy systems developed in open space areas and accessory wind energy systems in urbanized residential areas would be reduced to less than significant. Energy retrofits on existing structures and installation of solar arrays on rooftops of buildings would not substantially degrade the visual quality or character of the City, as future projects are required to comply with all City ordinances and relevant specific plans, including consistency with General Plan policies and city adopted design guidelines. On a program level, this impact would be *less than significant*.

Threshold	Would the project create a new source of substantial light or glare that could adversely affect day or nighttime views in the area?

Impact 4.1-3 **Implementation of the proposed project could result in new sources of substantial light or glare that could adversely affect day or nighttime views in the area. Implementation of mitigation measures MM4.1-3(a) and (b) would reduce this impact to *less than significant*.**

The City of Corona is primarily built out and a significant amount of ambient light and glare from urban uses already exists. The energy-generating structures that could be constructed under the C-CAP would not generally include lighting and, therefore, there would be no increased sources of light as a result of implementation of the proposed project. However, it is possible that increased glare could result from energy-generating structures. Glare results from sharply reflected light caused by sunlight or artificial light reflecting from highly finished surfaces such as window glass or brightly colored surfaces. The types of land uses that are typically sensitive to excess glare include homes, hospitals, senior housing, and other types of uses where excessive glare may disrupt sleep. In addition, glare may interfere with the vision of drivers. Implementation of the C-CAP could result in energy-efficient or energy-generating rooftop structures such as solar panels, photovoltaic arrays, and wind turbines that could introduce substantial new sources of glare. Rooftop solar panels, to be effective, must be oriented to maximize solar radiation absorption. If these structures were to be constructed adjacent to residential uses or sensitive receptors, the impact from increased glare would be potentially significant.

Solar panels are designed to maximize sunlight absorption and are generally constructed of dark, light-absorbing materials and are composed of a minimum of reflective surfaces. Therefore, it is not anticipated that solar arrays would result in an increased amount of glare even if they were oriented in such a way as to face sensitive receptors or drivers. Other energy-generating structures such as wind turbines could consist of reflective materials that could increase localized glare.

General Plan policies related to quality of design and maintenance of existing neighborhood character are contained in the Land Use Element. Although none of these policies specifically addresses light and glare effects, and it is unknown at this time where or how many such structures would be constructed under the C-CAP, each discretionary project pursuant to the C-CAP would be required to undergo individual design and environmental review to develop appropriate mitigation measures particular to each project site. In addition, the following mitigation measure shall be implemented for all discretionary projects under the C-CAP to reduce glare impacts:

MM4.1-3(a) *All proposed energy-generating structures shall be constructed utilizing non-reflective materials to the maximum extent feasible. If a reflective material is used, appropriate shielding shall be placed or the structure relocated to reduce the amount of visible glare. The City shall review all discretionary projects prior to issuance of building permits to ensure that appropriate shielding and placement of such structures are included in design plans.*

MM4.1-3(b) *All proposed energy-generating structures in open spaces areas shall not be lighted unless required by code or regulation.*

With implementation of mitigation measures MM4.1-3(a) and (b), impacts of glare from implementation of the proposed project would be reduced to less than significant by ensuring that energy-generating structures do not pose a safety risk to drivers or adversely affect sensitive receptors.

4.1.4 Cumulative Impacts

Threshold	Would the project have a substantial adverse effect on a scenic vista?

The geographic context for an analysis of cumulative impacts on a scenic vista is the City and the view seen from beyond the City, as existing scenic views are confined to this geographic area. Past and present development has somewhat affected scenic views to the extent that development has been allowed in hillside areas. However, the City of Corona General Plan contains Policies 10.22.1 through 10.22.5 and 10.23.1 and 10.23.2, which protect scenic views and are implemented through the implementation programs outlined in Chapter 7 of the General Plan. Further, Implementation Program 9 requires that all projects be reviewed for consistency with General Plan policies prior to approval. Therefore, future development in the City would not likely result in a significant adverse impact on scenic views. Implementation of project-level mitigation measures MM4.1-1(a) through (c) would reduce this impact to less than significant by establishing maximum tower height, prohibiting development on major ridgelines viewable from any designated scenic corridor as defined in the General Plan, and prohibiting location of facilities that would substantially obstruct scenic views of adjacent property owners. Therefore, the proposed project would not make a cumulatively considerable contribution to any significant cumulative impact on scenic views. The project's cumulative impact would be ***less than significant***.

Threshold	Would the project substantially degrade the existing visual character or quality of the site and its surroundings?

Due to the City's location where certain areas are bounded by mountains and hills, the geographic context for this cumulative analysis is the City and the view seen from beyond the City, as the affected area would not be visible from surrounding areas nor would the C-CAP have an influence on surrounding areas. Since the C-CAP covers the entire City, cumulative impacts would be same as the impacts identified above for the proposed project, and would be potentially significant if substantial development occurs in open space areas. All future development would be required to comply with proposed policies that regulate the design of new buildings as well as protect the existing visual quality of the City. Implementation of General Plan Program 9 requires that all projects be reviewed for consistency with General Plan policies prior to approval. In addition, implementation of project-level mitigation measures MM4.1-2(a) through (f) would ensure that the proposed project would not make a

cumulatively considerable contribution to adverse impacts relating to visual character and quality. Therefore, on a cumulative level, implementation of the proposed project would not substantially degrade the visual quality or character of the City, and the cumulative impact would be ***less than significant***.

Threshold	Would the project create a new source of substantial light or glare that could adversely affect day or nighttime views in the area?

Impacts from light and glare are generally localized and site-specific; therefore, the context for an analysis of cumulative impacts from light and glare would be geographically limited to the City. Cumulative development in this geographic area has resulted in moderate to high levels of ambient light and glare typical of urban areas in the more developed areas, and lower levels of light and glare near City boundaries. Future development in this geographic context would further increase sources of light and glare, which could be potentially significant if future projects introduce light and glare into areas of the City that have lower levels of ambient lighting. The proposed project would not result in new sources of substantial light, since future energy-generating structures would generally not be lighted. Therefore, the proposed project would not make a cumulatively considerable contribution to any cumulative light impact. The proposed project could result in localized increases sources of glare. However, implementation of project-level mitigation measures MM4.1-3(a) and (b) would reduce any localized glare impact to less than significant and the project would not make a cumulatively considerable contribution to any cumulative glare impact. The cumulative impact would be ***less than significant***.

4.1.5 References

Corona, City of. 1998. *Downtown Revitalization Specific Plan*, June.

———. 2000. *North Main Street District Specific Plan*, January 5.

_____. 2000. *City of Corona Industrial Development Design Guidelines*, February 2.

———. 2004a. *City of Corona General Plan*, March 17.

———. 2004b. *City of Corona General Plan Final Environmental Impact Report*, March.

4.2 CULTURAL RESOURCES

This section of the EIR analyzes the potential environmental effects on cultural resources from implementation of the C-CAP. Environmental effects related to archaeological resources pursuant to 15064.5; paleontological resources, sites and unique geologic features; and human remains as a result of the C-CAP were determined in the Initial Study (IS) to be less than significant, and these issue areas are not analyzed in this section. Further discussion concerning these thresholds can be found in Chapter 5 (Other CEQA Considerations), Effects Not Found to Be Significant.

One comment letter addressing cultural resources was received from the Native American Heritage Commission (NAHC) in response to the Notice of Preparation (NOP) circulated for the proposed project. The NAHC requested that impacts on cultural resources be analyzed, and provided a list of local Native American groups and organizations to contact regarding the presence or absence of cultural resources within the City and SOI.

Data for this section were taken from the City of Corona General Plan (2004), City of Corona General Plan Environmental Impact Report (2004), City of Corona Municipal Code (2011), and additional resources to inform the environmental setting (City of Corona Historic Resource Markers Listing (2011); Corona Historic Preservation Society (2011); OHP 2011; Freel 2007; Heizer 1978; Kellogg 1891; Lech 2004; Moratto 1984; Swanson and Hatheway 1989). Full reference-list entries for all cited materials are provided in Section 4.2.5 (References).

4.2.1 Environmental Setting

Cultural resources are frequently defined in terms of tangible materials attributed to a culture. These include districts, sites, structures, artifacts, and other evidence of human use considered important to a culture or community for scientific, traditional, religious, or other reasons. Resources may be historical, archaeological, architectural, or archival in nature. Cultural resources may also consist of less tangible attributes, such as landscapes considered sacred to particular groups.

Prehistoric Setting

The City of Corona and SOI lies within an area known to contain prehistoric archaeological materials, which include the material culture reflective of groups that preceded Euro-American contact and settlement. The prehistoric setting for this area includes several thousand years of land use and resource adaptation evidenced by chipped and ground stone tools, as well as associated smooth, milling surfaces found on granite bedrock outcrops. The stone tools recovered and studied in the region generally reflect technological refinement occurring over time, and their many uses provide valuable information about the subsistence patterns and life ways of the peoples who once inhabited the area.

Ethnohistoric Setting

The Corona area includes artifacts associated with the Luiseño occupation of the region, and is located near the ethnographically mapped boundaries of several groups, including the Luiseño, Gabrieliño,

Serrano, and Cahuilla. This portion of Riverside County includes the northwestern-most portion of documented Cahuilla territory, mapped as extending just beyond the City of Riverside. The Luiseño traditional use area is mapped as extending from the Pacific Ocean inland to Lake Elsinore and Palomar Mountain in the east, and extending from Agua Hedionda in the south to Aliso Creek in the north. The Gabrieliño tribal territory is mapped as extending north from Aliso Creek to just beyond Topanga Canyon along the Pacific Coast, and inland to the City of San Bernardino. Their territory would have included portions of the Santa Ana River situated in the northwestern-most quarter of the northwestern quarter of the modern County of Riverside. The Serrano traditional use area is then mapped to the northeast and east of Gabrieliño lands, encompassing much of the San Bernardino Mountains from the Cajon Pass in the west, past modern Twenty-nine Palms in the east. It is likely that these tribal boundaries were fluid and allowed for trade and diffusion of ideas among the groups.

Historic Setting

Originally named South Riverside, the history of the modern City of Corona can be traced to a series of rancho lands belonging to prominent Spanish-Mexican families. In April of 1876, the lands of the original Rancho La Sierra, located between Temescal Wash and the east side of the Santa Ana Mountains, were divided among the many heirs of Don Bernardo Yorba. After this division, the central portion of modern Corona was located in the Rancho La Sierra (Yorba).

In 1886, R.B. Taylor bought a large quantity of land once located within the Yorba rancho and beyond, considered the water resources available, and began to look for investors in his native state of Iowa to establish a new townsite. Taylor then formed the South Riverside Land and Water Company, and appointed himself as a director along with his business partners from Iowa. The consortium decided to name the proposed townsite South Riverside, in an effort to capitalize on the already established Riverside colony, and they purchased 12,000 acres of agricultural land. Thereafter, Taylor and his investors focused on the development of agricultural enterprises, the establishment of water rights, and the sale of smaller parcels to prospective homesteaders.

H.C. Kellogg began surveying the townsite in July of 1886, with the known version of the completed survey map available in 1891. The most notable feature of the Kellogg survey map was a circular drive approximately 3-miles in length. Known as Grand Boulevard, this circular road encompassed 407 acres, divided into 193 town-blocks. This area would eventually serve as a buggy route for the earliest inhabitants of South Riverside, where they could find all the amenities a community had to offer, including stores, residences, churches, and schools.

Throughout 1886 and 1887, approximately $275,725 worth of lots had been sold to prospective homesteaders and entrepreneurs, water had been supplied by the Temescal Water Company, and the first hotel had been erected. While the early inhabitants began to plant orange and lemon trees upon arriving, it would be several years before any of the groves would yield enough fruit to be profitable. In the meantime, South Riverside began to entice additional residents with its mineral wealth. The Pacific Clay Company was established to produce pottery, tableware, and sewer pipe from the clay available on nearby lands, and the construction of a factory was announced in 1888. About this same time, the Porphyry Paving Company began to bring in equipment and laborers to make use of the porphyry deposits known to the east of the town. These endeavors stimulated an increase in the population of the

town; however, it was the arrival of the Santa Ana and Los Angeles Railroad that greatly influenced the population explosion in the area. By June of 1887, the first train arrived at the townsite, and South Riverside became an official stop on the rail line.

In 1896, the name of South Riverside was officially changed to Corona. This followed an election to determine whether the town should incorporate and whether the townspeople wanted to change the name of the townsite. The results of the election revealed that the name Corona was found to be popular. Meaning "crown" in Spanish, the townspeople thought it aptly described and honored circular Grand Boulevard. This election also determined that the City of Corona would incorporate as the first city in the newly formed County of Riverside.

Since Corona's incorporation, the population has steadily grown, and the agricultural and mineral resources of the area have been profitable. By 1912, there were 5,000 acres of established lemon and orange groves in the City, and by 1913, Corona shipped more citrus than any other town in southern California. In addition, the lands to the northwest of downtown were planted in alfalfa, sugar beets, tomatoes, beans, and walnuts. This area also served as pasturage for dairy farms, beginning in about 1914.

The lands to the northwest of Corona were especially suitable for agriculture, as the Santa Ana River offered water and rich soils. However, flooding events associated with the River eventually forced Riverside and adjacent counties to consider the idea of a Dam in the region. This first engineering investigation occurred in 1918, followed by an in-depth study commissioned by Orange County in 1925. Work on the Prado Dam commenced in the 1930s under the auspices of the Orange County Flood Control District, and was completed in 1941 by the USACE, Los Angeles District. Completed, the Dam is the second largest earthen dam in southern California.

In 1962, the Riverside Freeway (State Route 91) was constructed through Corona. Thereafter, downtown Corona went through urban renewal and made great efforts to update the area with new buildings. In the 1980s, citrus and dairy farming began to be phased out, due to their decreasing profitability and the increasing value of agricultural lands for residential development. Then, with the construction of Interstate-15 on the east side of Corona in the late 1980s, new commercial and residential developments began, heralding a citywide revitalization. By 1996, 100 years after incorporation, Corona's population had grown to more than 100,000 people, and the City contained 32 parks and 30 schools in the Corona-Norco Unified School District.

Historical Resources

Designation Process

There are four general types of designations for significant cultural resources within the City and SOI, including archaeological resources, historical structures, historical districts, traditional cultural properties, and landscapes. The system includes federal designation in the National Register of Historic Places (NRHP) for resources of importance and relevance to national heritage, state-level designation in the California Register of Historical Resources (CRHR), County-level designation as a Riverside County Historic Landmark (RCHL), and designation in the Corona Register of Historic Resources for resources of importance to local history and culture. Each of these registers employs different criteria to determine

whether a resource could be determined eligible for inclusion, and these criteria are further discussed below, in the Regulatory Framework. Several structures within the City and within the SOI are eligible or potentially eligible for listing on the NRHP, CRHR, RCHL, or the Corona Register of Historic Resources, particularly in and near the historic core (i.e., the Grand Boulevard Circle).

4.2.2 Regulatory Framework

Federal

Federal regulations for cultural resources are primarily governed by Section 106 of the National Historic Preservation Act (NHPA) of 1966, which applies to actions taken by federal agencies. The goal of the Section 106 review process is to offer a measure of protection to sites that are listed or determined eligible for listing on the NRHP. The criteria for determining NRHP eligibility are found in 36 Code of Federal Regulations (CFR) Part 60. Section 106 of the NHPA requires federal agencies to take into account the effects of their undertakings on Historic Properties and affords the federal Advisory Council on Historic Preservation a reasonable opportunity to comment on such undertakings. The Council's implementing regulations, "Protection of Historic Properties," are found in 36 CFR Part 800. The NRHP criteria (36 CFR 60.4) are used to evaluate resources when complying with Section 106 of the NHPA. Those criteria state that eligible resources comprise districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and any of the following:

(a) Are associated with events that have made a significant contribution to the broad patterns of our history

(b) Are associated with the lives of persons significant in our past

(c) Embody the distinctive characteristics of a type, period, or method of construction, or that possess high artistic values, or that represent a significant distinguishable entity whose components may lack individual distinction

(d) Have yielded or may be likely to yield, information important to history or prehistory

Eligible properties must meet at least one of the criteria and exhibit integrity. Historical integrity is measured by the degree to which the resource retains its historical attributes and conveys its historical character, the degree to which the original fabric has been retained, and the reversibility of changes to the property.

Historic Districts derive their importance from being considered a unified entity, even though they are often composed of a variety of resources. The identity of a district results from the interrelationship of its resources, which can be an arrangement of historically or functionally related properties. A district is defined as a geographically definable area of land containing a significant concentration of buildings, sites, structures, or objects united by past events or aesthetically by plan or physical development. A district's significance and integrity should help determine the boundaries.

Within historic districts, resources are identified as contributing and noncontributing. A contributing building, site, structure, or object adds to the historic associations, historic architectural qualities, or archaeological values for which a district is significant because it was either present during the period of

significance, relates to the significance of the district, and retains its physical integrity; or it independently meets the criteria for listing in the NRHP.

Archaeological site evaluation assesses the potential of each site to meet one or more of the criteria for NRHP eligibility based upon visual surface and subsurface evidence (if available) at each site location, information gathered during the literature and records searches, and the researcher's knowledge of and familiarity with the historic or prehistoric context associated with each site.

Paleontological resources are considered under Section 106 of the NHPA primarily when found in a culturally related context (i.e., fossil shells included as mortuary offerings in a burial or a rock formation containing petrified wood used as a chipped stone quarry). In such instances, the material is considered a cultural resource and is treated in the manner prescribed for the site by Section 106.

The Antiquities Act of 1906 (Title 16, United States Code, Sections 431-433) protects any historic or prehistoric ruin or monument, or any object of antiquity, situated on lands owned or controlled by the Government of the United States from appropriation, excavation, injure or destruction without the permission of the Secretary of the Department of the Government having jurisdiction over the lands on which the antiquities are situated. The California Department of Transportation, the National Park Service, Bureau of Land Management, U.S. Forest Service, and other federal agencies have interpreted objects of antiquity to include fossils. The Antiquities Act provides for the issuance of permits to collect fossils on lands administered by federal agencies and requires projects involving federal lands to obtain permits for both paleontological resource evaluation and mitigation efforts.

The federal Paleontological Resources Preservation Act of 2002 was enacted to codify the generally accepted practice of limiting the collection of vertebrate fossils and other rare and scientifically significant fossils to qualified researchers; these researchers must obtain a permit from the appropriate state or federal agency and agree to donate any materials recovered to recognized public institutions, where they will remain accessible to the public and to other researchers.

State

Under CEQA, public agencies must consider the impacts of their actions on both historical resources and unique archaeological resources. Pursuant to Public Resources Code (PRC) Section 21084.1, a "project that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment." Section 21083.2 requires agencies to determine whether proposed projects would have effects on unique archaeological resources.

Historical resource is a term with a defined statutory meaning (refer to PRC Section 21084.1 and CEQA Guidelines, Section 15064.5(a) and (b)). The term applies to any resource listed in or determined to be eligible for listing in the CRHR. The CRHR includes California resources listed in or formally determined eligible for listing in the NRHP, as well as certain California Historic Landmark (CHLs) and Points of Historical Interest (PHIs).

Properties of local significance that have been designated under a local preservation ordinance (local landmarks or landmark districts) or that have been identified in a local historical resources inventory may be eligible for listing in the CRHR and are presumed to be historical resources for purposes of CEQA

unless a preponderance of evidence indicates otherwise (PRC Section 5024.1 and California Code of Regulations, Title 14, Section 4850). Unless a resource listed in a survey has been demolished, lost substantial integrity, or there is a preponderance of evidence indicating that it is otherwise not eligible for listing, a lead agency should consider the resource to be potentially eligible for the CRHR.

In addition to assessing whether historical resources potentially impacted by a proposed project are listed or have been identified in a survey process, lead agencies have a responsibility to evaluate them against the CRHR criteria prior to making a finding as to a proposed project's impacts to historical resources (PRC Section 21084.1 and CEQA Guidelines Section 15064.5(a)(3)). In general, a historical resource, under this approach, is defined as any object, building, structure, site, area, place, record, or manuscript that:

> (a) Is historically or archeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political or cultural annals of California; and
>
> (b) Meets any of the following criteria:
>
> 1) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
>
> 2) Is associated with the lives of persons important in our past;
>
> 3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
>
> 4) Has yielded, or may be likely to yield, information important in prehistory or history.
>
> (CEQA Guidelines, Section 15064.5(a)(3))

Archaeological resources can sometimes qualify as historical resources (CEQA Guidelines, Section 15064.5(c)(1)). In addition, PRC Section 5024 requires consultation with the Office of Historic Preservation when a project may impact historical resources located on state-owned land.

For historic structures, CEQA Guidelines Section 15064.5(b)(3) indicate that a project that follows the Secretary of the Interior (SOI) Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings, or the SOI Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings, shall mitigate impacts to a level of less than significant. Potential eligibility also rests upon the integrity of the resource. Integrity is defined as the retention of the resource's physical identity that existed during its period of significance. Integrity is determined through considering the setting, design, workmanship, materials, location, feeling, and association of the resource.

As noted above, CEQA also requires lead agencies to consider whether projects will impact unique archaeological resources. PRC Section 21083.2(g) states that 'unique archaeological resource means an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
- Has a special and particular quality such as being the oldest of its type or the best available example of its type.

- Is directly associated with a scientifically recognized important prehistoric or historic event or person.

(Public Resources Code Section 21083.2(g))

Treatment options under Section 21083.2 include activities that preserve such resources in place and in an undisturbed state. Other acceptable methods of mitigation under Section 21083.2 include excavation and curation, or study in place without excavation and curation (if the study finds that the artifacts would not meet one or more of the criteria for defining a unique archaeological resource).

Advice on procedures to identify cultural resources, evaluate their importance, and estimate potential effects is given in several agency publications such as the series produced by the Governor's Office of Planning and Research (OPR). The technical advice series produced by OPR strongly recommends that Native American concerns and the concerns of other interested persons and corporate entities, including, but not limited to, museums, historical commissions, associations, and societies, be solicited as part of the process of cultural resources inventory. In addition, California law protects Native American burials, skeletal remains, and associated grave goods regardless of their antiquity and provides for the sensitive treatment and disposition of those remains.

CEQA affords protection to paleontological resources, as CEQA Guidelines indicate that a project would have a significant environmental impact if it would disturb or destroy a unique paleontological resource or site or unique geologic feature. Although CEQA does not specifically define a unique paleontological resource or site, the definition of a unique archaeological resource (Section 21083.2) can be applied to a unique paleontological resource or site and a paleontological resource could be considered a historical resource if it has yielded, or may be likely to yield, information important in prehistory or history under Section 15064.5 (a)(3)(D).

California Public Resources Code 5097.5

Section 5097.5 of the California Public Resources Code (PRC) provides protection for cultural and paleontological resources, where PRC 5097.5(a)) states, in part, that:

> No person shall knowingly and willfully excavate upon, or remove, destroy, injure, or deface, any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, rock art, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over the lands.

California Health and Safety Code Sections 7050.5, 7051, and 7054

Section 7050.5(b) of the California Health and Safety code specifies protocol when human remains are discovered. The code states:

> In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined, in accordance with Chapter 10 (commencing with section 27460) of Part 3 of Division 2 of Title 3 of the Government Code, that the remains are not subject to the provisions of section 27492 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of death, and the recommendations concerning treatment and disposition of the human remains have been made to the person responsible for the

excavation, or to his or her authorized representative, in the manner provided in section 5097.98 of the Public Resources Code.

California Public Resources Code Section 15064.5 (e)

CEQA Guidelines Section 15064.5(e) requires that excavation activities be stopped whenever human remains are uncovered and that the county coroner be called in to assess the remains. If the county coroner determines that the remains are those of Native Americans, the NAHC must be contacted within 24 hours. At that time, the lead agency must consult with the appropriate Native Americans, if any, as timely identified by the NAHC. Section 15064.5 directs the lead agency (or project proponent), under certain circumstances, to develop an agreement with the Native Americans for the treatment and disposition of the remains.

Senate Bill 18

As of March 1, 2005, Senate Bill 18 (Government Code Sections 65352.3 and 65352.4) requires that, prior to the adoption or amendment of a general plan proposed on or after March 1, 2005, a city or county must consult with Native American tribes with respect to the possible preservation of, or the mitigation of impacts to, specified Native American places, features, and objects located within that jurisdiction.

Regional

The County of Riverside established the Riverside County Historical Commission (Commission) on May 6, 1968, by Resolution No. 2005-345. The resolution of 1968 was amended on March 15, 1971, May 4, 1982 (Resolution 82-131), and September 13, 2005 (Resolution 2005-345), and the Commission operates under established Bylaws approved by the Board on September 13, 2005. The Commission has the power to identify and advise the County Board of Supervisors concerning historical matters. To this end, the Commission established criteria and procedures to identify and recognize Historic Landmarks in Riverside County.

Eligibility

To be eligible for consideration as a RCHL, a historic resource must be nominated through the prescribed County application and approval process described below.

A. Historical resources that may be considered by nomination include:
   - Historical resources found as eligible for local, state, or national landmark status during CEQA cultural review.
   - Historical resources found as eligible for local, state, or national landmark status during a historic resource survey.
   - A historic resource or district already so designated under a municipal or county preservation or landmark ordinance (Riverside County Historic Preservation Districts are established by a different set of criteria under Riverside County Ordinance 578 and are not established under the criteria and procedures for Riverside County Historic Landmarks).
   - Nominations for historic resources not already having some level of landmark designation, or found to be eligible for such, will be reviewed under criteria established below (Types of Historical Resources and Criteria for Listing).

B. Owner Consent: Written consent of the property owner(s) is required for landmark designation. The Commission may deem a resource eligible for designation but will not officially landmark the property without owner consent.

Types of Historic Resources and Criteria for Listing

A. Types of resources eligible for nomination:

- **Building:** A resource, such as a house, barn, church, factory, hotel, or similar structure created principally to shelter or assist in carrying out any form of human activity.
- **Site:** A site is the location of a significant event, a prehistoric or historic occupation or activity, or a building or structure, whether standing, ruined, or vanished, where the location itself possessed historical, cultural, or archaeological value. A site need not be marked by physical remains if it is the location of a prehistoric or historic event. Nor is it required that a building, structure, or object marked the site at the time of it is historic significance, occupation, or activity. Examples: trails, landscapes features, battlefields, habitation sites, Native American ceremonial areas, and rock art.
- **Structure:** The term "structure" is used to describe a construction made for a functional purpose rather than creating human shelter. Examples: mines, flumes, roads, bridges, and tunnels.
- **Object:** The term "object" is used to describe those constructions that are primarily artistic or commemorative in nature, relatively small in scale, and associated with a specific setting or environment. Objects that are located in museums are not eligible for landmark listing. Examples: fountains, monuments, maritime resources, sculptures, and boundary markers.
- **Historic Districts:** A geographic area designated as containing multiple historic resources that collectively have a special character or value—historical, cultural, architectural, archaeological, community, or aesthetic. A district must meet at least one of the criteria discussed below in **Section B**.

B. Criteria for evaluating the significance of historic resources:

- To be considered a historic resource eligible for landmark listing, the resource must be at least 45 years of age at the time of nomination.
- A historic resource must be significant under one or more of the following criteria in order to qualify for listing as a Riverside County Historic Landmark.
- Is associated with events that have made a significant contribution to the broad patterns of Riverside County's history and cultural heritage.
- Is associated with the lives of persons important to the history of Riverside County or its communities.
- Embodies the distinctive characteristics of a type, period, Riverside County region, or method of construction, or represents the work of an important creative individual or possesses high artistic values.
- Has yielded or may be likely to yield, information important in Riverside County, state of California, or national prehistory or history.

Integrity: Historical resources that have been preserved, rehabilitated, or restored according to the U. S. Secretary of Interiors Standards for integrity will be given the highest consideration in the approval process.

Reconstructed buildings will not be considered for landmark status unless they are more than 45 years old and embody traditional building methods and techniques or they exhibit high artistic values in the execution of the reconstruction.

Local

City of Corona Municipal Code

The City of Corona Municipal Code Chapter 17.63 (Historic Resources) establishes the Corona Heritage Inventory and the Corona Register of Historic Resources. The Corona Heritage Inventory includes only heritage properties listed by the Planning Commission in accordance with the Municipal Code. Heritage properties listed on the Corona Heritage Inventory may or may not be eligible for listing on the Corona Register of Historic Resources.

Corona Heritage Inventory

A site, improvement, or natural feature is eligible for listing on the Corona Heritage Inventory as a heritage property if the Planning Commission finds that all the following criteria are satisfied:

A. An official survey describing the features, merits, and quality of the site, improvement, or natural feature has been prepared;
B. The site, improvement or natural feature is identified as a potential resource to be conserved because of its age, and either its context in the neighborhood, its association with a historic event or period or its significance to the architectural, engineering, scientific, economic, agricultural, educational, cultural, social, artistic, political or military history of Corona.

Corona Register of Historic Resources

The Corona Register of Historic Resources is a local register comparable with the CRHR and the NRHP, with similar criteria, definitions, and considerations. The Corona Register of Historic Resources includes landmarks, historic districts, and historic markers, and the contributing historic resources within historic districts, as listed by the City Council in accordance with the Municipal Code. All sites, improvements, and natural features within the City boundaries that are listed on the CRHR or the NRHP are automatically listed on the Corona Register of Historic Resources. To be eligible for consideration in the Corona Register of Historic Resources, a resource must be nominated through a City application and must meet the criteria outlined below:

Landmark Listing Criteria

A. Landmarks are those physical elements of Corona's historical development that provide the community with its own unique civic identity and character. A site, improvement, or natural feature shall be eligible for listing on the Corona Register of Historic Resources as a landmark if the City Council finds that all of the following criteria are satisfied:
    1. It has been in existence for a period of at least 50 years, or if less than 50 years old, is of exceptional importance to the community.
    2. It has significant historic, cultural, or architectural value and its designation as a landmark is reasonable, appropriate, and necessary to promote, preserve, and further the purposes and intent of this Chapter.

3. It exhibits one or more of the following characteristics:
    a. It is associated with events that have made a significant contribution to the history of Corona, the region, the state or the nation.
    b. It is associated with the lives of persons significant in Corona's past.
    c. It embodies distinctive characteristics of a style, type, period, or method of construction, or a valuable example of the use of materials or craftsmanship.
    d. It exemplifies or reflects special elements of the City's cultural, social, economic, political, aesthetic, engineering, and architectural or natural history.
    e. It is representative of the work of a notable builder, designer, or architect.
    f. It exemplifies one of the best remaining architectural styles or types in a neighborhood, or contains outstanding elements of architectural design, detail, materials, or craftsmanship of a particular historic period.
    g. It is in a unique location or contains physical characteristics representing an established and familiar visual feature of a neighborhood.
    h. It is a potential source of archeological or paleontological interest.
    i. It is or contains a natural setting or feature that strongly contributes to the well being of the people of the City.
4. It has integrity of location, design, setting, materials, workmanship, feeling, and association.
    a. Integrity is the authenticity of a historic resource's physical identity, as evidenced by the survival of characteristics that existed during the historic resource's period of significance, to be recognizable and to convey the reasons for its significance. To be eligible for consideration as a Historic Landmark, a historic resource must be nominated through the prescribed City application and approval process described below.
    b. A site, improvement, or natural feature that has diminished historic character or appearance may still have sufficient integrity for the Corona Register if it retains the potential to yield significant scientific or historical information or specific data, or retains sufficient character to convey the reasons for its significance. Thus, it is possible that a site, improvement, or natural feature may not retain sufficient integrity to meet the criteria for listing on the California Register or National Register, but it may still be eligible for listing on the Corona Register.
    c. Integrity shall be judged with reference to the particular criterion or criteria which provide its eligibility.

B. An improvement removed from its original location shall be eligible if it is significant primarily for its architectural value or it is the surviving structure most importantly associated with a historic person or event.

C. A reconstructed improvement shall be eligible if the reconstruction is historically accurate, the improvement is presented in a dignified manner as part of a restoration master plan, and no other original improvement survives that has the same association.

D. A site, improvement, or natural feature that is intended to be primarily commemorative shall be eligible if its design, age, tradition, or symbolic value creates its own historic significance. Examples include, but are not limited to, public statuary, murals, monuments, sculptures, graves, and birthplaces. These sites or improvements may be identified by the placement of a historic marker.

Historic District Listing Criteria

A. A historic district is a geographically defined area possessing a concentration of contributing historic resources that relate to each other and are unified by physical development or historical context.

B. A defined area shall be eligible for listing on the Corona Register as a historic district if the City Council finds that all the following criteria are satisfied:

   1. The defined area is unified geographically area with precisely defined boundaries.
   2. The defined area contains a significant concentration of individually recognized contributing historic resources united in character by a historic plan, physical development, cultural heritage, past events, a historic period or prehistory era, aesthetics design, or architectural traditions.
   3. At least seventy-five percent (75 percent) of the contributing historic resources in the defined area are fifty (50) years of age or older, and retain their original architectural character.
   4. The civic and historic value of the contributing historic resources is greater as a collective whole than as individual historic resources.
   5. The defined area has significant historic, cultural, or architectural value and its designation as a historic district promotes, preserves, and furthers the purposes and intent of this chapter.

C. Upon the listing of a historic district on the Corona Register, all identified contributing historic resources in the historic district shall be individually listed on the Corona Register, along with notation of the historic district's non-contributing resources.

Historic Markers

Historic Markers are monuments or plaques placed at various sites within the City of Corona to commemorate a particular event in the history of the City, or at the prior location of a structure of particular historical merit. The Markers are traditionally selected and placed by the Corona Historical Preservation Society, and may be listed on the Corona Register of Historic Resources by resolution of the City Council. Markers are placed for the purpose of recognizing one or more of the following:

1. Events that have made a significant contribution to the history of Corona, the region, the state, or the nation
2. Persons significant in Corona's past
3. Examples of distinctive characteristics of a style, type, period, or method of construction or a valuable example of the use of materials or craftsmanship
4. Special elements of the city's cultural, social, economic, political, aesthetic, engineering, architectural, or natural history
5. The work of a notable builder, designer, or architect
6. Outstanding elements of architectural design, detail, materials, or craftsmanship of a particular historic period
7. A unique location or physical characteristic representing an established and familiar visual feature of a neighborhood
8. An archeological or paleontological site
9. A natural setting or feature that strongly contributes to the well being of the people of the city. The actual site, improvement or natural feature that is designated by the historic marker may or

may not be listed, or may or may not be eligible for listing, on the Corona Register of Historic Resources or the Corona Heritage Inventory.

City of Corona General Plan

The City of Corona General Plan, updated in 2004, provides the framework for the City's physical, economic, social, and environmental development and addressing all geographic areas in the City, as well as those areas that surround the City that may be served by the City in the future. The General Plan contains numerous policies aimed at the preservation, understanding, and appreciation of the history of the City and the SOI that are applicable to the proposed project, which are listed and discussed in Section 4.5 (Land Use and Planning) of this chapter.

4.2.3 Impacts and Mitigation Measures

Analytic Method

The following analysis considers the presence and absence of historical resources within the City and SOI, which includes any resource listed in or determined to be eligible for listing in the CRHR. The CRHR includes all California resources listed in or formally determined eligible for listing in the NRHP, certain CHLs and PHIs, as well as resources of regional or local significance that have been designated under a local preservation ordinance (local landmarks or landmark districts) or that have been identified in a local historical resources inventory. Such regional or locally designated resources are presumed to be historical resources for purposes of CEQA unless a preponderance of evidence indicates otherwise. The presence of historical resources is then considered against the potential impacts on such resources from implementation of the C-CAP. To gather information on known historical resources within the CPA, searches were conducted on-line for the NRHP, CRHR, CHL and PHI (OHP 2011), the City of Corona Register of Historic Resources, and the City of Corona Historic Resource Markers (City of Corona 2011; Corona Historic Preservation Society 2011). Several books and documents were also reviewed to supplement and contextualize listings of significant resources in the City and SOI: City of Corona General Plan (2004); City of Corona General Plan Environmental Impact Report (2004); Freel (2007); Heizer (1978); Kellogg (1891); Lech (2004); Moratto (1984); and Swanson and Hatheway (1989). A significant impact would occur if the implementation of the C-CAP alters, directly or indirectly, any of the characteristics which render a resource eligible for inclusion in the CRHR or any other register of significant resources considered as historical resources under CEQA (e.g. regional and local registers of resources).

Thresholds of Significance

The following thresholds of significance are based on the 2012 CEQA Guidelines Appendix G. For purposes of this EIR, implementation of the C-CAP may have a significant adverse impact on cultural resources if it would do any of the following:

- Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5

- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature
- Disturb any human remains, including those interred outside of formal cemeteries

Effects Not Found to Be Significant

Threshold	Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?

The City and its SOI are known to have been home to Native American groups prior to settlement by Euro-Americans. Archaeological materials associated with occupation of the Planning Area are known to exist and have the potential to provide important scientific information regarding history and prehistory. Ground-disturbing activities, particularly in areas that have not previously been developed with urban uses ("native soils," which include agricultural lands), have the potential to damage or destroy historic or prehistoric archaeological resources that may be present on or below the ground surface. Such resources are generally considered to be historic resources, as defined in Section 15064.5(a)(3)(D) ("[h]as yielded, or may be likely to yield, information important in history or prehistory"). In addition to the status of archaeological resources as historical resources, a resource may also be a "unique archaeological resource," as defined in Section 21083.2(g)(1)–(3) of CEQA. Further, archaeological resources are often of cultural or religious importance to Native American groups, particularly if the resource includes human and/or animal burials. Consequently, damage to or destruction of these resources could occur as a result of development of energy-generating facilities under the C-CAP.

General Plan Policies 4.3-1 to 4.3-5 and 4.3-8 incorporate specific measures to identify, protect, and preserve cultural resources into the City planning and environmental review processes. These policies also require monitoring of earth-disturbing activities in archaeologically and culturally sensitive areas, as well as evaluation by a qualified archaeologist of cultural resources found prior to or during construction, application of appropriate mitigation measures, and consultation, as appropriate, with Native American Tribes before resumption of development activities. Implementation of these policies reduce impacts to archaeological and Native American cultural resources to a less-than-significant level by requiring the scientific recovery and evaluation of any archaeological resources encountered, which would ensure that important scientific information that could be provided by these resources regarding history or prehistory is not lost. Consequently, potential impacts to archaeological and Native American cultural resources as a result of implementation of the C-CAP would be less than significant. No further analysis is required.

Threshold	Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

There are no unique geologic features in the City or SOI that would be adversely affected by implementation of the C-CAP, as the proposed project would implement measures aimed at reducing VMT and improving energy efficiency and would not result in substantial construction. General Plan Policy 1.10.2 requires that development project be located and designed to maintain predominant topographic forms, contours, and elevations in the City's foothills and canyons. The impact would be less than significant, and no further analysis is required.

Threshold	Would the project disturb any human remains, including those interred outside of formal cemeteries?

Human burials, in addition to being potential archaeological resources, have specific provisions for treatment in Section 5097 of the California Public Resources Code. Disturbing human remains could violate the health code, as well as destroy the resource. General Plan Policies 4.3-1 to 4.3-5 incorporate specific measures to identify, protect, and preserve cultural resources into the City planning and environmental review processes. These policies also require monitoring of earth-disturbing activities in archaeologically and culturally sensitive areas, as well as evaluation by a qualified archaeologist of cultural resources found prior to or during construction, application of appropriate mitigation measures, and consultation, as appropriate, with Native American Tribes before resumption of development activities. These policies provide substantial protection to human burials by protecting and ensuring the appropriate treatment of the archaeological contexts within which these burials would be most likely to be encountered. Additionally, Policy 4.3-8 would ensure the appropriate treatment of human burials and Native American cultural resources, according to the applicable provisions of state law. Compliance with General Plan policies is assured through the implementation programs described in Chapter 7 of the General Plan. Consequently, any potential impacts to human remains from discrete development projects would be reduced to less than significant. No further analysis is required.

Project Impacts and Mitigation

Threshold	Would the project cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5?

Impact 4.2-1 **Implementation of the proposed project would not cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5. The impact would be *less than significant*.**

Implementation of the C-CAP will include energy-efficiency retrofit activities, which could be proposed at the site of a historical resource or at the site of a resource considered to be a potential historical resource. Future energy-efficiency retrofit activities have the potential to result in significant impacts on individual historical resources within the City and the SOI, including resources listed in or eligible for listing in the NRHP, CRHR, RCHL, and the Corona Register of Historic Resources. This could include the delisting or loss of eligibility of such resources. In addition, the completion of energy-efficiency retrofit activities has the potential to result in significant impacts on buildings or structures of historic age (50 years old or older), or buildings or structures which may eventually be of historic age, and which may qualify as historical resources pursuant to CEQA upon evaluation. Similarly, any ground disturbing activities have the potential to result in significant impacts on historical resources if an archaeological site or paleontological resource is present and is considered a historical resource pursuant to CEQA.

CEQA Guidelines Section 15064.5(b) states that "a project with an effect that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment." The C-CAP may allow for energy-efficiency retrofit activities, and these activities have the potential to cause a substantial adverse change in the significance of a historical resource through

alteration of a historical resource's physical characteristics that conveys its historical significance. This is considered a potentially significant impact. Policy 4.2.5 of the General Plan requires, for any modification to a historic structure, compliance with *The Secretary of the Interior's Standards for Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings*. According to Section 15064.5(b)(3) of the CEQA Guidelines, a project that follows these standards and guidelines shall generally be considered to have mitigated impacts on a historic structure to less than significant. Some activities, such as solar panel installations that can be demonstrated to not be visible from a public street per the Corona Municipal Code requirements for minor alterations for historic resources can be administratively approved. All discretionary projects pursuant to the C-CAP would be required to comply with these standards and guidelines if renovations or modifications are proposed to a listed historic structure.

As noted above, the City of Corona Municipal Code Chapter 17.63 (Historic Resources) establishes the Corona Heritage Inventory and the Corona Register of Historic Resources. The Corona Heritage Inventory includes only heritage properties listed by the Planning Commission in accordance with the Municipal Code. Heritage properties listed on the Corona Heritage Inventory may or may not be eligible for listing on the Corona Register of Historic Resources. The Corona Register of Historic Resources is a local register comparable with the CRHR and the NRHP, with similar criteria, definitions, and considerations. The Corona Register of Historic Resources includes landmarks, historic districts, and historic markers, and the contributing historic resources within historic districts, as listed by the City Council in accordance with the Municipal Code. All sites, improvements, and natural features within the City boundaries that are listed on the CRHR or the NRHP are automatically listed on the Corona Register of Historic Resources. To be eligible for consideration in the Corona Register of Historic Resources, a resource must be nominated through a City application and meet identified criteria. Thus, all structures included in the Corona Register would be protected, and all modifications would be subject to the City's historic review process. The impact would be ***less than significant***, and no mitigation is required.

4.2.4 Cumulative Impacts

The cumulative analysis for impacts on cultural resources considers a broad regional system of which the resources are a part. The cumulative context for the cultural resources analysis is the Santa Ana River Valley and Prado Basin within western Riverside County, the southwestern portion of San Bernardino County, and eastern Orange County. In these areas, common patterns of prehistoric and historic development have occurred. The analysis accounts for anticipated cumulative growth within the region.

Threshold	Would the project cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5?

Urban development that has occurred over the past several decades in the Santa Ana River Valley and Prado Basin has resulted in the demolition and alteration of innumerable historical resources, and it is reasonable to assume that present and future development activities will continue to result in impacts on historical resources. Because all historical resources are unique and non-renewable members of finite classes, all adverse effects or negative impacts erode a dwindling resource base. Federal, state, and local

laws protect historical resources in most instances. Even so, it is not always feasible to protect cultural resources, particularly when preservation in place would prevent implementation of projects. For this reason, the cumulative effects of development in the region are considered significant. Compliance with existing policies will ensure that proposed alterations to historic structures that could result from implementation of the C-CAP would occur in accordance with *The Secretary of the Interior's Standards for Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings*. The project's incremental contribution to cumulative effects on historical resources would not be cumulatively considerable, and cumulative impacts are considered ***less than significant***.

4.2.5 References

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4.3 GREENHOUSE GAS EMISSIONS

This section of the EIR analyzes the potential environmental effects of greenhouse gas (GHG) emissions and climate change from implementation of the Corona Climate Action Plan (C-CAP), the proposed project. No comment letters addressing GHG emissions were received in response to the Initial Study/Notice of Preparation (IS/NOP) circulated for the proposed project.

Data used to prepare this section were taken from various sources, including publications prepared by a number of professional associations and agencies that have suggested approaches and strategies for complying with CEQA's environmental disclosure requirements. Such organizations include the California Attorney General's Office (AGO), the California Air Pollution Controls Officers Association (CAPCOA), the United Nations and World Meteorological Organization's Intergovernmental Panel on Climate Change (IPCC), and the Association of Environmental Professionals (AEP). Full reference-list entries for all cited materials are provided in Section 4.3.4 (References).

4.3.1 Environmental Setting

The proposed project is located within the South Coast Air Basin (Basin). The regional climate within the Basin is considered semi-arid and is characterized by warm summers, mild winters, infrequent seasonal rainfall, moderate daytime onshore breezes, and moderate humidity. Climate change within the Basin is influenced by a wide range of emission sources, such as utility usage, heavy vehicular traffic, industry, and meteorology.

The City of Corona emitted approximately 1.7 MMT CO_2e in 2008. The emissions were calculated based on traffic modeling, data from utilities, and land use. The largest portion of the City's 2008 emissions were from transportation (48 percent), followed by emissions from electricity and natural gas use in buildings (44 percent). Table 4.3-1 (2008 Net Total Emissions) summarizes the City's net 2008 emissions of CO_2e as broken down by emissions category. This represents the baseline against which GHG emissions as a result of implementation of the C-CAP are analyzed. A detailed breakdown of 2008 emissions by category is available in the C-CAP.

Table 4.3-1 2008 Net Total Emissions

Category	*Metric tons of CO_2e*
Transportation	832,888
Energy	770,657
Area Sources	75,922
Water and Wastewater	25,783
Solid Waste	40,354
Agriculture	236
Total	*1,745,839*

Climate Change Background

Parts of the Earth's atmosphere act as an insulating blanket of the right thickness to trap sufficient solar energy and keep the global average temperature in a suitable range. The 'blanket' is a collection of atmospheric gases called 'greenhouse gases' based on the idea that these gases trap heat like the glass walls of a greenhouse. These gases, mainly water vapor, carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), ozone (O_3), and chlorofluorocarbons (CFCs), all act as effective global insulators, reflecting visible light and infrared radiation back to earth. Human activities, such as producing electricity and driving internal combustion vehicles, have contributed to the elevated concentration of these gases in the atmosphere. This in turn is causing the Earth's temperature to rise. A warmer Earth may lead to changes in rainfall patterns, smaller polar ice caps, a rise in sea level, and a wide range of impacts on plants, wildlife, and humans.

The relationships of water vapor and ozone as GHGs are poorly understood. It is unclear how much water vapor acts as a GHG. The uncertainty is due to the fact that water vapor can also produce cloud cover, which reflects sunlight away from Earth and can counteract its effect as a GHG. Also, water vapor tends to increase as the Earth warms, so it is not well understood whether the increase in water vapor is contributing to or rather a result of climate change. Ozone tends to break down in the presence of solar radiation but is not understood well enough for evaluation. For these reasons, methodologies approved by the IPCC, United States Environmental Protection Agency (USEPA), and the California Air Resources Board (California ARB) focus on carbon dioxide, nitrous oxide, methane, and chlorofluorocarbons. The following provides a brief description of each of these GHGs.

Carbon Dioxide

The natural production and absorption of carbon dioxide occurs through the burning of fossil fuels (e.g., oil, natural gas, and coal), solid waste, trees and wood products, and as a result of other chemical reactions, such as those required to manufacture cement. Globally, the largest source of CO_2 emissions is the combustion of fossil fuels such as coal, oil, and gas in power plants, automobiles, and industrial facilities. A number of specialized industrial production processes and product uses, such as mineral or metal production, and the use of petroleum-based products, leads to CO_2 emissions.

CO_2 is removed from the atmosphere (or sequestered) when it is absorbed by plants as part of the biological carbon cycle. Natural sources of CO_2 occur within the carbon cycle where billions of tons of atmospheric CO_2 are removed by oceans and growing plants and are emitted back into the atmosphere through natural processes. When in balance, total CO_2 emissions and removals from the entire carbon cycle are roughly equal. Since the Industrial Revolution in the 1700s, human activities, including burning of oil, coal, and gas and deforestation, increased CO_2 concentrations in the atmosphere by 35 percent as of 2005.

Methane

Methane is emitted from a variety of both human-related and natural sources. CH_4 is emitted during the production and transport of coal, natural gas, and oil, from livestock and other agricultural practices, and from the decay of organic waste in municipal solid waste landfills. It is estimated that 60 percent of global CH_4 emissions are related to human activities. Natural sources of CH_4 include wetlands, gas

hydrates,[3] permafrost, termites, oceans, freshwater bodies, non-wetland soils, and wildfires. CH_4 emissions levels from a particular source can vary significantly from one country or region to another. These variances depend on many factors, such as climate, industrial and agricultural production characteristics, energy types and usage, and waste management practices. For example, temperature and moisture have a significant effect on the anaerobic digestion process, which is one of the key biological processes resulting in CH_4 emissions from both human and natural sources. Also, the implementation of technologies to capture and utilize CH_4 from sources such as landfills, coal mines, and manure management systems affects the emissions levels from these sources.

Nitrous Oxide

Concentrations of nitrous oxide also began to rise at the beginning of the Industrial Revolution reaching 314 parts per billion (ppb) by 1998. Microbial processes in soil and water, including those reactions that occur in fertilizer containing nitrogen, produce nitrous oxide. In addition to agricultural sources, some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to the atmospheric load of N_2O.

Chlorofluorocarbons

Chlorofluorocarbons have no natural source, but were synthesized for uses as refrigerants, aerosol propellants, and cleaning solvents. Since their creation in 1928, the concentrations of CFCs in the atmosphere have been rising. Due to the discovery that they are able to destroy stratospheric ozone, a global effort to halt their production was undertaken, and levels of the major CFCs are now remaining static or declining. However, their long atmospheric lifetimes mean that some of the CFCs will remain in the atmosphere for over 100 years. Since they are also a GHG, along with such other long-lived synthesized gases as CF_4 (carbontetrafluoride) and SF_6 (sulfurhexafluoride), they are of concern. Another set of synthesized compounds called HFCs (hydrofluorocarbons) are also considered GHGs, though they are less stable in the atmosphere and therefore have a shorter lifetime and less of an impact. CFCs, CF_4, SF_6, and HFCs have been banned and are no longer available. Therefore, these GHGs are not included further in this analysis.

Potential Effects of Global Climate Change

Climate change could have a number of adverse effects. Although these effects would have global consequences, in most cases they would not disproportionately affect any one site or activity. In other words, many of the effects of climate change are not site-specific. Emission of GHGs would contribute to the changes in the global climate, which would in turn, have a number of physical and environmental effects. A number of general effects are discussed below.

Sea Level Rise and Flooding. The California Climate Change Center predicts that sea level in California would rise between 10.9 to 71.6 centimeters (cm) (0.36 to 2.3 feet) above existing mean sea level (MSL) by 2099 as a result of climate change (CCCC 2006a). Measurements taken in the City of Alameda indicate that the current rate of sea level rise is about 0.29 foot per century. Therefore,

[3] Gas hydrates are crystalline solids that consist of a gas molecule, usually methane, surrounded by a "cage" of water molecules.

projected climate change effects on sea level would increase the existing rate of sea level rise by 0.07 to 1.94 feet per century (CCCC 2006b). When combined with astronomical tides, even a 1-foot increase in MSL would result in the 100-year event high tide peak occurring at the 10-year event frequency (CCCC 2006b). In other words, the frequency of a current 100-year high tide (about 9.5 feet above current MSL) would occur 10 times more often if sea levels increase by 1 foot above current MSL.

In the future, precipitation events are predicted to vary in terms of timing, intensity, and volume according to many climate change models. Extreme storm events may occur with greater frequency. Changes in rainfall and runoff could affect flows in surface water bodies, causing increased flooding and runoff to the storm drain system.

Water Supply. California Health and Safety Code Section 38501(a) recognizes that climate change "poses a serious threat to the economic well-being, public health, natural resources, and the environment of California," and notes, "the potential adverse impacts of [climate change] include…reduction in the quality and supply of water to the state from the Sierra snowpack." As most of the state, including the City of Corona, depends on surface water supplies originating in the Sierra Nevada, this potential water supply reduction is a concern.

Most of the scientific models addressing climate change show that the primary effect on California's climate would be a reduced snow pack and a shift in stream-flow seasonality. A higher percentage of the winter precipitation in the mountains would likely fall as rain rather than as snow in some locations, reducing the overall snowpack. Further, as temperatures rise, snowmelt is expected to occur earlier in the year. As a result, peak runoff would likely come a month or so earlier. The end result of this would be that the state may not have sufficient surface storage to capture the early runoff, and so, absent construction of additional water storage projects, a portion of the current supplies would flow to the oceans and be unavailable for use in the state's water delivery systems.

Water Quality. Climate change could have adverse effects on water quality, which would in turn affect the beneficial uses (habitat, water supply, etc.) of surface water bodies and groundwater. The changes in precipitation discussed above could result in increased sedimentation, higher concentration of pollutants, higher dissolved oxygen levels, increased temperatures, and an increase in the amount of runoff constituents reaching surface water bodies. Sea level rise, discussed above, could result in the encroachment of saline water into freshwater bodies.

Ecosystems and Biodiversity. Climate change could have effects on diverse types of ecosystems, from alpine to deep sea habitat. As temperatures and precipitation change, seasonal shifts in vegetation would occur, which would potentially have an effect on the distribution of associated flora and fauna species. As the range of species shifts, habitat fragmentation could occur, with acute impacts on the distribution of certain sensitive species. The IPCC states that "20 percent to 30 percent of species assessed may be at risk of extinction from climate change impacts within this century if global mean temperatures exceed 2 to 3°C (3.6 to 5.4°F) relative to pre-industrial levels" (IPCC 2007). Shifts in existing biomes[4] could also make ecosystems vulnerable to invasive species encroachment. Wildfires, which are an important control mechanism in many ecosystems, may become more severe and more frequent, making it difficult for

[4] A biome is a major ecological community classified by the predominant vegetation, and hence animal inhabitants.

native plant species to repeatedly re-germinate. In general terms, climate change would put a number of stressors on ecosystems, with potentially catastrophic effects on biodiversity.

Human Health Impacts. Climate change may increase the risk of vector-borne infectious diseases, particularly those found in tropical areas and spread by insects—malaria, dengue fever, yellow fever, and encephalitis (USEPA 2008). While these health impacts would largely affect tropical areas in other parts of the world, effects would also be felt in California. Warming of the atmosphere would be expected to increase smog and particulate pollution, which could adversely affect individuals with heart and respiratory problems, such as asthma. Extreme heat events would also be expected to occur with more frequency, and could adversely affect the elderly, children, and the homeless. Finally, the water supply impacts and seasonal temperature variations which could occur as a result of climate change could affect the viability of existing agricultural operations, making the food supply more vulnerable.

Potential Effects of Human Activity on Climate Change

The burning of fossil fuels, such as coal and oil, especially for the generation of electricity and powering of motor vehicles, has led to substantial increases in CO_2 emissions (and thus substantial increases in atmospheric concentrations). In 1994, atmospheric CO_2 concentrations were found to have increased by nearly 30 percent above pre-industrial (c.1760) concentrations.

The effect each GHG has on climate change is measured as a combination of the volume of its emissions, and its global warming potential (GWP), and is expressed as a function of how much warming would be caused by the same mass of CO_2. Thus, GHG emissions are typically measured in terms of pounds or tons of CO_2 equivalents (CO_2e), and are often expressed in metric tons (MT CO_2e) or millions of metric tons of CO_2 equivalents (MMT CO_2e).

- **Global Emissions.** Worldwide emissions of GHGs in 2004 were nearly 30 billion tons of CO_2e per year (including both on-going emissions from industrial and agricultural sources, but excluding emissions from land-use changes) (United Nations 2007).
- **U.S. Emissions.** In 2004, the United States emitted 7.1 billion tons of CO_2e. Of the four major sectors nationwide — residential, commercial, industrial, and transportation — transportation accounts for the highest percentage of GHG emissions (approximately 35 to 40 percent); these emissions are entirely generated from direct fossil fuel combustion. In 2008, the United States emitted 6.9 billion tons of CO_2e, with transportation accounting for the highest percentage of GHG emissions, approximately 32 percent (USEPA 2011).
- **State of California Emissions.** In 2004, California emitted approximately 483 million tons of CO_2e, or about 6 percent of the U.S. emissions. This large number is due primarily to the sheer size of California compared to other states. By contrast, California has one of the fourth lowest per-capita GHG emission rates in the country, due to the success of its energy-efficiency and renewable energy programs and commitments that have lowered the state's GHG emissions rate of growth by more than half of what it would have been otherwise. Another factor that has reduced California's fuel use and GHG emissions is its mild climate compared to that of many other states. In 2008, California's GHG emissions were approximately 478 million metric tons CO_2e, generally attributed to the reduced travel, and therefore, transportation emissions (USEPA 2010).

> The California Energy Commission (CEC) found that transportation is the source of approximately 41 percent of the state's GHG emissions, followed by electricity generation (both in-state and out-of-state) at 23 percent, and industrial sources at 20 percent. Agriculture and forestry is the source of approximately 8.3 percent, as is the source categorized as "other," which includes residential and commercial activities (CEC 2007).

Various aspects of constructing, operating, and eventually discontinuing (demolition and disposal of waste) the use of industrial, commercial, and residential development will result in GHG emissions. Operational GHG emissions result from energy use associated with heating, lighting, and powering buildings (typically through natural gas and electricity consumption), pumping and processing water (which consumes electricity), as well as fuel used for transportation and decomposition of waste associated with building occupants. New development can also create GHG emissions in its construction and demolition phases in connection with the use of fuels in construction equipment, creation and decomposition of building materials, vegetation clearing, and other activities. However, it is noted that new development does not necessarily create entirely new GHG emissions. Occupants of new buildings are often relocating and shifting their operational-phase emissions from other locations.

4.3.2 Regulatory Framework

Federal

U.S. Environmental Protection Agency

The USEPA is responsible for implementing federal policy to address global climate change. The federal government administers a wide array of public-private partnerships to reduce GHG intensity generated by the United States. These programs focus on energy efficiency, renewable energy, methane and other non-CO_2 gases, agricultural practices, and implementation of technologies to achieve GHG reductions.

State

California Air Resources Board

California ARB, a part of the California EPA, is responsible for the coordination and administration of both federal and state air pollution control programs within California. In this capacity, California ARB conducts research, sets state ambient air quality standards, compiles emission inventories, develops suggested control measures, and provides oversight of local programs. California ARB establishes emissions standards for motor vehicles sold in California, consumer products (such as hairspray, aerosol paints, and barbecue lighter fluid), and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions. California ARB has primary responsibility for the development of California's State Implementation Plan (SIP), for which it works closely with the federal government and the local air districts.

Executive Order S-3-05

California Governor Arnold Schwarzenegger announced on June 1, 2005, through Executive Order S-3-05, the following GHG emission reduction targets:

- By 2010, California shall reduce GHG emissions to 2000 levels
- By 2020, California shall reduce GHG emissions to 1990 levels
- By 2050, California shall reduce GHG emissions to 80 percent below 1990 levels

Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006

In 2006, the California State Legislature adopted AB 32, the California Global Warming Solutions Act of 2006. AB 32 focuses on reducing GHGs in California. California ARB has determined the statewide levels of GHG emissions in 1990 to be 427 MMT CO_2e. California ARB has adopted the Climate Change Scoping Plan, which outlines the state's strategy to achieve the 2020 GHG limit set by AB 32. This Scoping Plan proposes a comprehensive set of actions designed to reduce overall greenhouse gas emissions in California, improve the environment, reduce dependence on oil, diversify energy sources, save energy, create new jobs, and enhance public health.

Part of California's strategy for achieving GHG reductions under AB 32 are the early action greenhouse gas reduction measures, which include the following: a low carbon fuel standard; reduction of emissions from non-professional servicing of motor vehicle air conditioning systems; and improved landfill methane capture (California ARB 2007).

State Bill 375

Senate Bill 375 (SB 375), which establishes mechanisms for the development of regional targets for reducing passenger vehicle greenhouse gas emissions, was adopted by the State on September 30, 2008. On September 23, 2010, California ARB adopted the vehicular greenhouse gas emissions reduction targets that had been developed in consultation with the metropolitan planning organizations (MPOs); the targets require a 7 to 8 percent reduction by 2020 and between 13 to 16 percent reduction by 2035 for each MPO. SB 375 recognizes the importance of achieving significant greenhouse gas reductions by working with cities and counties to change land use patterns and improve transportation alternatives. Through the SB 375 process, MPOs, such as the Southern California Council of Governments (SCAG), which includes Orange County, will work with local jurisdictions in the development of sustainable communities strategies (SCS) designed to integrate development patterns and the transportation network in a way that reduces greenhouse gas emissions while meeting housing needs and other regional planning objectives. SCAG's reduction target for per capita vehicular emissions is 8 percent by 2020 and 13 percent by 2035 (California ARB 2010). The MPOs will prepare their first SCS according to their respective regional transportation plan (RTP) update schedule; to date, no region has adopted an SCS. The first of the RTP updates with SCS strategies are expected in 2012.

Senate Bill 97

SB 97, enacted in 2007, amends the CEQA statute to clearly establish that GHG emissions and the effects of GHG emissions are appropriate subjects for CEQA analysis. In March 2010, the California Office of Administrative Law codified into law CEQA amendments that provide regulatory guidance with respect to the analysis and mitigation of the potential effects of GHG emissions, as found in CEQA Guidelines Section 15183.5. To streamline analysis, CEQA provides for analysis through compliance with a previously adopted plan or mitigation program under special circumstances.

Executive Order S-13-08

Executive Order S-13-08, the Climate Adaptation and Sea Level Rise Planning Directive, provides clear direction for how the state should plan for future climate impacts. The first result is the 2009 California Adaptation Strategy (CAS) report which summarizes the best known science on climate change impacts in the state to assess vulnerability and outlines possible solutions that can be implemented within and across state agencies to promote resiliency.

California Code of Regulations (CCR) Title 24

CCR Title 24, Part 6 (California's Energy Efficiency Standards for Residential and Nonresidential Buildings) (Title 24) were first established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to increase the baseline energy efficiency requirements. Although it was not originally intended to reduce GHG emissions, electricity production by fossil fuels results in GHG emissions and energy efficient buildings require less electricity. Therefore, increased energy efficiency results in decreased GHG emissions. The 2008 standards are the most recent version which went into effect in January 1, 2010.

CCR Title 24, Part 11 (California's Green Building Standard Code) (CALGreen) was adopted in 2010 and went into effect January 1, 2011. CALGreen is the first statewide mandatory green building code and significantly raises the minimum environmental standards for construction of new buildings in California. The mandatory provisions in CALGreen will reduce the use of VOC-emitting materials, strengthen water conservation, and require construction waste recycling.

Regional

Southern California Association of Governments (SCAG)

SCAG is the designated Metropolitan Planning Organization for six Southern California counties (Los Angeles, Ventura, Orange, San Bernardino, Riverside, and Imperial), and is federally mandated to develop plans for transportation, growth management, hazardous waste management, and air quality. The Southern California Association of Governments (SCAG) regional plans cover Riverside County, which includes the City and SOI, and five other counties within Southern California.

Regional Comprehensive Plan

The Regional Comprehensive Plan (RCP) is a problem-solving guidance document that responds to SCAG's Regional Council directive in the 2002 Strategic Plan to develop a holistic, strategic plan for defining and solving the region's interrelated housing, traffic, water, air quality, and other regional challenges. The RCP is a voluntary framework that links broad principles to an action plan that moves the region towards balanced goals. The RCP's guiding principles include:

- Improve mobility for all residents. Improve the efficiency of the transportation system by strategically adding new travel choices to enhance system connectivity in concert with land use decisions and environmental objectives.
- Foster livability in all communities.

- Foster safe, healthy, walkable communities with diverse services, strong civic participation, affordable housing, and equal distribution of environmental benefits.
- Enable prosperity for all people. Promote economic vitality and new economies by providing housing, education, and job training opportunities for all people.
- Promote sustainability for future generations.
- Promote a region where quality of life and economic prosperity for future generations are supported by the sustainable use of natural resources.

Further, the RCP seeks to successfully integrate land and transportation planning and achieve land use and housing sustainability by implementing Compass Blueprint and 2 percent Strategy:

- Focusing growth in existing and emerging centers and along major transportation corridors
- Creating significant areas of mixed-use development and walkable, "people-scaled" communities
- Providing new housing opportunities, with building types and locations that respond to the region's changing demographics
- Targeting growth in housing, employment and commercial development within walking distance of existing and planned transit stations
- Injecting new life into under-used areas by creating vibrant new business districts, redeveloping old buildings and building new businesses and housing on vacant lots
- Preserving existing, stable, single-family neighborhoods
- Protecting important open space, environmentally sensitive areas and agricultural lands from development
- Reduce emissions of criteria pollutants to attain federal air quality standards by prescribed dates and state ambient air quality standards as soon as practicable
- Reverse current trends in greenhouse gas emissions to support sustainability goals for energy, water supply, agriculture, and other resource areas
- Minimize land uses that increase the risk of adverse air pollution-related health impacts from exposure to toxic air contaminants, particulates (PM_{10}, $PM_{2.5}$, ultrafine), and carbon monoxide

Regional Transportation Plan

On May 8, 2008, the Regional Council of SCAG adopted the 2008 Regional Transportation Plan (RTP): Making the Connections. The 2008 RTP strives to provide a regional investment framework to address the region's transportation and related challenges, and looks to strategies that preserve and enhance the existing transportation system and integrate land use into transportation planning. The RTP also provides the framework for aggregating sub-regional and local efforts to institute measures aimed at mitigating the adverse air pollution impacts from increased transportation activities. These measures are known as transportation control measures (TCMs). The RTP links the goal of sustaining mobility with the goals of fostering economic development, enhancing the environment, reducing energy consumption, promoting transportation-friendly development patterns, and encouraging fair and equitable access to residents affected by socio-economic, geographic, and commercial limitations. The Regional Transportation Implementation Plan (RTIP) is the vehicle used to implement the RTP. The RTIP also provides the schedule and framework for the timely implementation of the Region's TCM strategies.

SCAG is currently in the process of developing the 2012 RTP and SCS for their jurisdiction aimed at attaining the reduction targets of an 8 percent per capita reduction in GHG emissions from passenger vehicles by the year 2020 and a 13 percent reduction by 2035. SCAG is currently developing the SCS and expecting to adopt the SCS, RTP, and the associated programmatic EIR in April 2012. Many of the transportation-related reduction measures included in this CAP will coordinate with efforts in SCAG's SCS.

SCAG Compass Growth Visioning

The Compass Blueprint Growth Vision effort by SCAG is a response, supported by a regional consensus, to the land use and transportation challenges facing Southern California now and in the coming years. The Growth Vision is driven by four key principles:

- Mobility—Getting where we want to go
- Livability—Creating positive communities
- Prosperity—Long-term health for the region
- Sustainability—Preserving natural surroundings

The fundamental goal of the Compass Growth Visioning effort is to make the SCAG region a better place to live, work, and play for all residents regardless of race, ethnicity, or income class. Thus, decisions regarding growth, transportation, land use and economic development should be made to promote and sustain for future generations the region's mobility, livability and prosperity.

South Coast Air Quality Management District

The South Coast Air Quality Management District (SCAQMD) is the agency principally responsible for comprehensive air pollution control in the South Coast Air Basin, which includes the counties of Los Angeles, Riverside, San Bernardino, and Orange. In order to provide GHG emission guidance to the local jurisdictions within the Basin, the SCAQMD has organized a Working Group to develop GHG emissions analysis guidance and thresholds.

SCAQMD released a draft guidance document regarding interim CEQA GHG significance thresholds in October 2008. On December 5, 2008, the SCAQMD Governing Board adopted the staff proposal for an interim GHG significance threshold for projects where the SCAQMD is the lead agency. SCAQMD proposed a tiered approach, whereby the level of detail and refinement needed to determine significance increases with a project's total GHG emissions. The tiered approach defines projects that are exempt under CEQA and projects that are within the jurisdiction of and subject to the policies of a GHG Reduction Plan as less than significant.

Air Quality Management Plan

The SCAQMD and the SCAG are the agencies responsible for preparing the Air Quality Management Plan (AQMP) for the Basin. The most recent comprehensive plan is the 2007 AQMP adopted on July 13, 2007. The 2007 AQMP is designed to meet the state and federal Clean Air Act planning requirements and focuses on ozone and $PM_{2.5}$. The 2007 AQMP incorporates significant new emissions inventories, ambient measurements, scientific data, control strategies, and air quality modeling. SCAQMD is currently working on an updated AQMP that is anticipated to be completed in 2012.

Local

Riverside County Integrated Project (RCIP)

The RCIP is comprised of the Community Environmental Transportation Corridor Acceptability Process (CETAP), a Multiple Species Habitat Conservation Plan (MSHCP) and the Riverside County General Plan update.

The CETAP incorporates three levels of effort: identification of transportation corridors, development of the General Plan Circulation Element (Chapter 4), and exploration of options for transit system development in the County. Further, guidance for the implementation of the four CETAP corridors and the transit system concepts identified, is incorporated into the General Plan's policies and Implementation Plan. As stated in the Riverside County Vision and Land Use Element, the County is moving away from a growth pattern of random sprawl toward a pattern of concentrated growth and increased job creation. Linking areas of concentrated growth is an integrated system of mobility that includes vehicular, pedestrian, transit, equestrian, bicycle, and air transportation options. The intent of new growth patterns and the new mobility systems is to accommodate the transportation demands created by future growth and to provide mobility options that help reduce the need to utilize the automobile. The circulation system is designed to fit into the fabric of the land use patterns, including the open space systems.

The Riverside County General Plan maps the County's land use designations for the unincorporated areas; develops a streamlined, consistent set of land use categories for the County; and updates and restructures the existing Community Plans and translates them into a new set of 19 Area Plans covering most of the western County area, the Coachella Valley, Desert Center and the Palo Verde Valley. The General Plan outlines policies, standards, and programs to guide day-to-day decisions concerning Riverside County's future. Updating and revising the County's General Plan also serves several other important purposes, providing clarity and stability in community development policy; establishing a comprehensive and sound database for further implementation, project evaluation, administration, and monitoring; and providing a basis for collaborative planning initiatives by cities, councils of government, the County and other governmental agencies. The General Plan is grounded in the RCIP Vision, sets the direction for the County's land use and development in strategic locations, as well as the development of its economic base, the framework of its transportation system, and the preservation of the extremely valuable natural and cultural resources it contains. The Riverside County General Plan serves as a "guidebook" containing direction that will enable achievement of its Vision Statement.

City of Corona General Plan

The Corona General Plan discusses the City's vision and the realization of this vision through four key areas: Community Development, Infrastructure and Public Services, Environmental Resources, and Environmental Hazards and Public Safety. The General Plan also includes implementation tools that are presented as separate policies and documents. Chapter 5, the Environmental Resources Element, of the General Plan addresses a number of different natural resources within the City that must be managed properly. Among these resources are energy, air quality, and the control of GHG emissions. Goals within the Environmental Resources Element specifically speak to energy conservation and air quality. In order

to implement this goal, to provide a more livable, equitable and economically vibrant community, and preserve the attributes of its unique valley location and quality lifestyle, the City has committed to prepare and implement the Corona Climate Action Plan (C-CAP). Further, the plan will ensure that the impact of development on air quality is minimized, energy conserved, and that land use decisions made by the City and all internal operations within the City are consistent with adopted state legislation.

4.3.3 Impacts and Mitigation Measures

Analytic Method

The impact analysis for the C-CAP project is based on a GHG emissions analysis, which is presented in the environmental analysis, below. The C-CAP document includes community-wide GHG emissions inventories for the City of Corona for the following scenarios: 2008, 2020 business-as-usual, and 2020 reduced. The 2008 inventory is the baseline; this was the most recent year for which adequate data was available. The baseline emissions inventory was also used to establish the reduction target for the year 2020.

AB 32 established the target for the State to reduce emissions back to 1990 levels by the year 2020; California ARB explained in the AB 32 Scoping Plan that in order to meet this goal, emissions would need to be reduced by 15 percent below current levels by 2020. The City of Corona would also need to achieve the same GHG target in order to be consistent with AB 32. California ARB states, "… ARB recommended a greenhouse gas reduction goal for local governments of 15 percent below today's levels by 2020 to ensure that their municipal and community-wide emissions match the state's reduction target." (California ARB 2008)

The 2020 business-as-usual (BAU) scenario represents the forecasted emissions for the City of Corona without the incorporation of recently adopted measures to reduce GHG emissions. The 2020 reduced scenario demonstrates the effects of the C-CAP reduction measures and their ability to reduce Corona's emissions to levels at or below the reduction target. The methodology and assumptions used in this analysis are detailed below. Refer to Appendix D of the C-CAP (included in Appendix B of this EIR) for model output and detailed calculations.

The following summarizes the basis of the GHG calculations by emission source. The emissions calculations follow the California Climate Action Registry (CCAR) General Reporting Protocol, version 3.1 (CCAR 2009), Local Government Protocol, version 1.1 (Climate Action Reserve 2008), the Urban Forestry Protocol, version 1.1 (Climate Action Reserve 2010) and California ARB's Mandatory GHG Reporting Regulations (Title 17, California Code of Regulations, Sections 95100 et seq.). These protocols are consistent with the methodology and emission factors endorsed by SCAQMD, California ARB, and USEPA. In cases where these protocols do not contain specific source emission factors, current industry standards or the USEPA's AP 42 Compilation of Air Pollution Emission Factors were used.

Because the impact each GHG has on climate change varies, a common metric of CO_2e is used to report a combined impact from all of the GHGs. The effect each GHG has on climate change is measured as a combination of the volume of its emissions, and its global warming potential, and is expressed as a

function of how much warming would be caused by the same mass of CO_2. Thus, GHG emissions in this analysis are measured in terms of metric tons of CO_2 equivalents (MT CO_2e).

Emission Calculations by Source

On-Road Vehicles. Carbon dioxide emissions from vehicles were calculated utilizing EMFAC2007 emission factors for the existing and 2020 inventories. The Emission Factors (EMFAC) model was developed by California ARB and used to calculate emission rates from on-road motor vehicles from light-duty passenger vehicles to heavy-duty trucks that operate on highways, freeways, and local roads in California. Motor vehicle emissions of CH_4, and N_2O were also calculated using USEPA emission factors for on-road vehicles based on the total annual mileage driven multiplied by their respective emission factors by year.

Vehicle miles traveled (VMT) were determined by the City specific traffic forecaster, LSA Associates Inc., through a select-zone analysis for the City of Corona. This model estimates VMT for all trips that begin and/or end within the City limits. This accounts for traffic entering or exiting Corona and traffic within the City, but excludes pass-through traffic. Corona's VMT includes miles from all trips within Corona and half of the miles from trips that begin or end in Corona; Corona is held accountable for all trips within the city limits while the City shares accountability with other jurisdictions for trips that have only one end point in Corona. Each trip was assigned to a land use class (residential, commercial, or industrial) based upon the origin of the trip.

The estimates do not account for electrical, biodiesel (a blend of diesel and vegetable oil), or hydrogen powered systems. Any electrically powered vehicle which draws power from a residence, commercial or industrial land use will be accounted for in the electrical usage for the City. Predicted 2020 BAU vehicle trips were estimated by using predicted land use changes and growth.

Airport Usage. Corona operates a small airport that is only used for recreational purposes; there are no commercial or commuter flights into or out of the Corona Airport. The airport is managed by the City's Parks and Community Services Department. It is home to approximately 423 planes, and is an active airport with approximately 60,000 takeoffs and landings each year. The annual fuel use by these planes is included in the transportation emissions for Corona.

Electricity. The City emits CO_2, CH_4, and N_2O indirectly through the use of electricity provided by Southern California Edison (SCE) and the City's own Department of Water and Power; SCE and the City provided annual energy usage for 2008. The City-provided electricity is purchased from the California Independent Systems Operator (CAISO) and delivered to City facilities as well as customers in new development areas. 2020 business as usual electricity use was estimated based on anticipated growth in the residential and commercial/industrial areas.

SCE and CAISO provide electricity from a variety of sources including natural gas, nuclear energy, large hydroelectric systems, and coal. Each of these sources of electricity emits different levels of GHGs. The annual usage in megawatt hours per year (MWh/year) was multiplied by the emission factors appropriate to the inventory year for CO_2, CH_4, and N_2O to determine emissions from these sources.

The City of Riverside owns and operates the Clearwater Power Plant located in the City of Corona, which is a direct source of GHG emissions. The electricity produced by Clearwater is entirely from natural gas combustion. These emissions from electricity generation are included in the Energy section of this analysis.

Natural Gas Combustion. The City emits GHGs from the combustion of natural gas. The annual natural gas usage for the City in thousand cubic feet (Mcf) was converted to million British Thermal Units (MMBTUs) and multiplied by the respective emissions factors for CO_2, CH_4, and N_2O to determine the emissions from natural gas combustion, typically used for heating. Natural gas usage for 2008 was obtained from The Gas Company. Anticipated 2020 natural gas data was based on the per unit usage in 2008 and the anticipated unit growth by 2020.

Landscaping. Emissions of CO_2, CH_4, and N_2O are generated by the use of landscape equipment through the combustion of gasoline. CO_2 emissions were determined directly through URBEMIS2007 for the existing and 2020 inventories. URBEMIS2007 is a computer software package that is used for modeling projected emissions of air quality pollutants including carbon dioxide. From the CO_2 emissions, the approximate number of gallons of gasoline consumed through landscape equipment use was calculated. This number was then multiplied by emission factors presented in the General Reporting Protocol, version 3.1 to determine both CH_4 and N_2O emissions (CCAR 2009).

Wood Burning. Direct CO_2 emissions are produced from the burning of wood in wood stoves, fireplaces, and natural gas fired stoves. The emissions from natural gas fired stoves are included in the Energy source category. CO_2, CH_4, and N_2O emissions from wood stoves and fireplaces are calculated based on the percentage of residential units using each type of hearth and the estimated annual amount of wood burned. The emission coefficients used are taken from the USEPA's AP-42 document.

Potable Water Use. Electricity is needed to move and treat water. Corona residents and businesses currently use approximately 14 billion gallons of drinking water. The City's water system contains twenty-two wells, forty-five booster pumps, and sixteen reservoirs; 56 percent of that water is pumped from groundwater wells owned and operated by the City of Corona. Another 34 percent comes from the Colorado River by way of Lake Mathews. The final 10 percent is State Project water from Northern California, by way of the California Aqueduct. There are additional emissions associated with this purchased water from the Colorado River and the State Water Project due to the electricity used to transport the water over a long distance.

Wastewater Treatment. Corona provides recycled water to the City by treating the wastewater in its three wastewater reclamation facilities. GHG emissions arise from the electricity used to pump and treat the water, the transportation fuel used to truck the biosolids to an off-site disposal area, and the direct methane emissions from the anaerobic digesters used in the treatment process. The electricity and transportation emissions are included in their respective categories. The direct emissions are calculated based on the amount of methane gas produced by the anaerobic digester and the amount of biochemical oxygen demand (BOD) removed from the water.

Solid Waste. Emissions from solid waste are determined as the sum of emissions generated by transportation from its source to the landfill, the equipment used in its disposal at the landfill, fugitive

emissions from decomposition in landfills, and the anthropogenic carbon sink generated by the incomplete decomposition of materials in the landfill.

Emissions from the transportation of solid waste is determined based on the annual lbs/year (pounds per year) of total waste disposed in landfills including biosolids waste from wastewater treatment plants, the density of the waste, the capacity of the hauling trucks, the average number of miles traveled by each truck; and the CO_2, CH_4, and N_2O emissions generated per mile traveled.

Emissions from the equipment used at the landfills is calculated by determining the average hours of operation per day, the number of days of operation, and the emission factors for disposal equipment for CO_2, CH_4, and N_2O as determined from USEPA off-road mobile source emission factors. Landfill equipment emissions are only included in the inventory if the landfill is under the direct control of the City or County of interest. As the solid waste landfill El Sobrante used for the disposal of waste for Corona is not under the City's direct control, emissions from onsite equipment are not included in this inventory.

Fugitive emissions of methane from the decomposition of solid waste are calculated based on the annual waste generation multiplied by the USEPA emission factor for waste production for CH_4. The emission factor to determine CH_4 generation varies if the landfill operations are known to operate a methane flare or to generate electricity from methane capture. Carbon dioxide generated by decomposition of waste in landfills is not considered anthropogenic because it would be produced through the natural decomposition process regardless of its disposition in the landfill. Nitrous Oxide is not a bi-product of decomposition and therefore no fugitive emissions of nitrous oxide are anticipated from this source.

Agriculture. Corona has a very small amount of agriculture dominated by citrus and avocado production; the total acreage of agricultural land totals roughly 100 acres. Corona's agricultural emissions are primarily N_2O from leaching, fertilizer use, and soil management. These emissions were estimated using the USEPA's State Inventory Tool for Agriculture with emissions factors specific to fruit trees.

Thresholds of Significance

The following thresholds of significance are based on the 2012 CEQA Guidelines Appendix G. For purposes of this EIR, implementation of the proposed project may have a significant adverse impact on greenhouse gas emissions if it would do any of the following:

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

Effects Not Found to Be Significant

Threshold	Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

As determined in the Initial Study, included as Appendix A, implementation of the C-CAP would result in reduction of greenhouse gas emissions over the long term, which would be a beneficial effect. Area

source reduction strategies such as landscape strategies, cool roofs, cool pavement, and parking lot shading would reduce GHG emissions. Construction activities, such as building energy retrofits and grading or excavation activities, if required, for installation of energy-generating structures, would result in temporary, short-term emissions of GHGs. These temporary, short-term emissions would not be substantial, and would be offset by the operation of energy-efficiency retrofits and renewable energy projects that are part of the reduction measures in the CAP that would result in an overall reduction in GHG emissions.

In addition, the City of Corona has been working on vehicle trip and vehicle miles traveled (VMT) reduction strategies for over a decade. The result of this work has been a network of Transit Demand Management (TDM) Traffic Management System (TMS) programs, combined with a City-wide Bicycle Master Plan of linked bicycle lanes that link the Metrolink Station, downtown, and residential areas within the City. More recently, the City of Corona has emphasized mixed-use development within infill areas near downtown and the Metrolink station, with pedestrian linkages between land uses. As a result of these efforts, vehicle trips and VMT within the City have decreased. One problem faced by the City is the fact that the State Route (SR) 91, SR-71, and Interstate 15 freeways all converge in the City of Corona. While City-attributed vehicle trips and VMT have dropped, pass-through traffic continues to cause congestion on the freeways to the point that commuters get off the freeways in Corona to find shortcuts around the congestion on the local roadways. The City is reviewing ways to address the pass-through traffic problem within the City. Even though pass-through traffic remains a challenge, the City has had great success in reducing locally generated vehicle trips and VMT. The C-CAP looks at additional reduction strategies that build from these existing programs. The proposed project will result in a reduction of greenhouse gas emissions. Therefore, this impact is less than significant, and no further analysis is required.

Project Impacts and Mitigation

Threshold	Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Impact 4.3-2 **Implementation of the proposed project would not conflict with AB 32 and SB 375, the policies adopted for the purpose of reducing the emissions of greenhouse gases at the state level. This would be a *less-than-significant* impact.**

The proposed project includes a baseline GHG emissions inventory for the year 2008, an emission reduction target for the year 2020, a forecasted emissions inventory under a business-as-usual scenario for 2020, and a reduced 2020 inventory that demonstrates the emissions reductions achieved with the implementation of the C-CAP reduction measures. Appendices B through D of the C-CAP contain the modeling coefficients and data assumptions, the data inputs, and the GHG inventory calculations that support the analysis described below; the C-CAP document is included in Appendix B of this EIR. Table 4.3-2 (2008 Baseline Emissions Inventory) summarizes the 2008 GHG emissions for the City of Corona. The emissions in 2008 totaled 1.7 million metric tons (MMT) CO_2e. The largest source of emissions was transportation, followed closely by energy use. A 15 percent reduction from this baseline

is approximately 1.5 MMT CO_2e and is established in the C-CAP as the reduction target for 2020 emissions.

Table 4.3-2 2008 Baseline Emissions Inventory

Emission Source	*Metric Tons CO_2e*
Transportation	832,888
Energy	770,657
Area Sources	75,922
Water and Wastewater	25,783
Solid Waste	40,354
Agriculture	236
Total	*1,745,839*
2020 Reduction Target (15 percent below existing)	1,483,963

SOURCE: Atkins, *Draft Corona Climate Action Plan* (2011).

The 2020 BAU emissions inventory was estimated in the C-CAP using residential and commercial growth rates for the City from 2008 to the year 2020. The BAU inventory represents the projected Corona emissions without the incorporation of recently adopted sustainability measures or reduction measures included in the proposed project. Table 4.3-3 (2020 BAU Emissions Inventory) summarizes the 2020 BAU emissions inventory. The emissions are an estimated at 1.96 MMT CO_2e, an increase of 218,394 MT CO_2e (or 12.5 percent) from the 2008 baseline. Similar to the 2008 inventory, the largest source of emissions is predicted to be transportation followed closely by emissions associated with energy use. The difference between the BAU-forecasted emissions and the established reduction target for the year 2020 is 480,270 MT CO_2e. This is the amount the City of Corona must reduce in order to reach their target and match the state's AB 32 reduction target.

Table 4.3-3 2020 BAU Emissions Inventory

Emission Source	*Metric Tons CO_2e*
Transportation	952,252
Energy	849,138
Area Sources	82,221
Water and Wastewater	27,456
Solid Waste	45,929
Agriculture	236
Total	*1,964,233*
2020 Reduction Target (15 percent below existing)	1,483,963
Amount to Reduce by 2020	*480,270*

SOURCE: Draft Corona Climate Action Plan, Atkins 2011

Senate Bill 375 (SB 375) sets regional targets for the reduction of GHG emissions from passenger vehicles. The targets for the SCAG region are an 8 percent decrease and a 13 percent decrease per capita from 2005 for the year 2020 and 2035 respectively. These targets are quantified as 3.07 and 2.90 MT CO_2e per capita for 2020 and 2035, respectively (California ARB 2010). Because the C-CAP only analyzes emissions through to the year 2020, that is the target used in this analysis. Table 4.3-4 (2020 BAU Passenger Vehicle Emissions) summarizes the 2020 BAU passenger vehicle emissions, 2020 population, and 2020 BAU emissions per capita for passenger vehicle emissions.

Table 4.3-4 2020 BAU Passenger Vehicle Emissions

Passenger Vehicle Emissions (MT CO_2e)	523,694
2020 Corona Population	155,819
MT CO_2e per capita	*3.36*
2020 Reduction Target (8 percent below 2005)	3.07

SOURCE: Atkins, *Draft Corona Climate Action Plan* (2011).

Note that in comparing 2008, 2020 BAU, and Reduced 2020, the greatest reductions were achieved in transportation. This is due to three factors: first, the City has been working on vehicle trip and VMT reductions for over a decade and now has data to document proven transportation-related reductions; second, implementing the vehicle trip and VMT-reducing measures such as TDM and ATMS has resulted in reductions that the City can now build upon; lastly, the City of Corona has been able to better predict future transportation related reductions using the Riverside County Traffic Analysis Model (RIVTAM), which includes origin and destination of trips through subroutines.

In order to reduce the BAU emissions, the C-CAP identifies reduction measures that are specific to each of the emissions sources described in the inventories above. The C-CAP includes three types of reduction measures: R1, R2, and R3. R1 measures are implemented at the state level, but result in GHG reductions at the local level. R2 measures are those that are implemented at the City level, and R3 measures those that support R2 measures, but cannot be quantified.

The State of California has set specific targets for reducing greenhouse gas emissions from the burning of fossil fuels in both power plants and vehicles by adopting various regulations. In addition, state energy efficiency and renewable requirements provide another level of reductions. In order to provide credit to Corona for regulatory actions already taken or planned by the State of California, this C-CAP first evaluates the greenhouse gas reductions that will occur within the City as a result of these actions. These will be identified in the C-CAP as R1 reduction measures. The R1 measures are included to show all of the anticipated reduction strategies identified in the AB 32 Scoping Plan for implementation at the state level that will ultimately result in a reduction of greenhouse gas emissions at the City level. The R1 measures are not administered or enforced by the City, but the City—by describing them herein-substantiates the reductions associated with these state measures.

R2 and R3 reduction measures will be incorporated at the City level to provide additional reductions in greenhouse gas emissions. R2 measures can be quantified to show the value of the reduction from their

incorporation. The R1 and R2 measures are summarized below with a complete list of assumptions and reductions for each included in Appendix E of the C-CAP (Appendix B of this EIR).

R3 measures are those measures that, although they provide a vehicle through which reductions in emissions will occur, cannot be quantified at this time. The R3 measures are supportive measures or methods of implementation for the R2 measures. For example, R3-E2: Energy Efficiency Training and Public education, is a measure that provides education to inform people of the programs, technology, and potential funding available to them to be more energy efficient, and provides the incentives to participate in the voluntary programs shown in R2-E1 through R2-E7. R3-E2 is supportive of measures R2-E1 through R2-E7 because it will provide more publicity, reduce the perceived challenge of being energy efficient, and provide information on potential rebates and other funding programs which will make retrofits more accessible to everyone. Therefore, although by itself R3-E2 cannot be quantified, its implementation provides a level of assurance that the reduction goals specified in the R2 measures will be achieved.

Also included in the R3 measures are reduction measures that reduce Corona's government operation emissions. Government operations make up less than 5 percent of the City's total emissions, but the City can set an example for residents by implementing reduction measures at the municipal level.

The reduction measures are primarily implemented through the C-CAP's accompanying document, the Screening Tables for New Development, included in Appendix F of the C-CAP (Appendix B of this EIR). The Screening Tables document is a CEQA streamlining tool that allows new development projects to demonstrate consistency with the C-CAP goals and policies by earning 100 points for incorporating GHG-reducing design features into the project. If a project earns 100 points, it is consistent with the reduction measures of the C-CAP.

Reduction Measures

Transportation

R1 Transportation Measures

The following list of R1 transportation related measures are those measures that California has identified in the AB 32 Scoping Plan that will result in emission reductions within the City.

R1-T1: Assembly Bill 1493: Pavley I

Assembly Bill (AB) 1493 (Pavley) required the California ARB to adopt regulations that will reduce GHG from automobiles and light-duty trucks by 30 percent below 2002 levels by the year 2016, effective with 2009 models. By 2020, this requirement will reduce emissions in California by approximately 16.4 MMT CO_2e, representing 17.3 percent of emissions from passenger/light-duty vehicles in the state (California ARB 2008). Implementation of Pavley I was delayed by the USEPA's denial of California's waiver request to set state standards that are more stringent than the federal standards, but in June 2009 the denial of the waiver was reversed and California was able to begin enforcing the Pavley requirements.

R1-T2: Assembly Bill 1493: Pavley II

California committed to further strengthening the AB 1493 standards beginning in 2017 to obtain a 45 percent GHG reduction in 2020 model year vehicles. This requirement will reduce emissions in California by approximately 4.0 MMT CO_2e, representing 2.5 percent of emissions from passenger/light-duty vehicles in the state beyond the reductions from the Pavley I regulations described above (California ARB 2008).

R1-T3: Executive Order S-1-07 (Low Carbon Fuel Standard)

The Low Carbon Fuel Standard (LCFS) will require a reduction of at least 10 percent in the carbon intensity of California's transportation fuels by 2020. By 2020, this requirement will reduce emissions in California by approximately 15 MMT CO_2e, representing 6.9 percent of emissions from passenger/light-duty vehicles in the state (California ARB 2008). The emissions reduced by this strategy overlap with emissions as a result of the Pavley legislation; adding the emissions reductions would be an overestimate of the actual emissions reductions. This is accounted for in the emission reduction calculations following the methodology used by California ARB to calculate emissions reductions in the AB 32 Scoping Plan.

R1-T4: Tire Pressure Program

The AB 32 early action measure involves actions to ensure that vehicle tire pressure is maintained to manufacturer specifications. The state's plan for implementing this measure is directed at automotive service providers. California ARB is requiring automotive service providers to check and inflate each vehicle's tires to the recommended tire pressure rating at the time of performing any automotive maintenance or repair service, indicate on the vehicle service invoice that a tire inflation service was completed and the tire pressure measurements after the services were performed, and keep a copy of the service invoice for a minimum of three years, and make the vehicle service invoice available to the ARB, or its authorized representative upon request. By 2020, California ARB estimates that this requirement will reduce emissions in California by approximately 0.55 MMT CO_2e, representing 0.3 percent of emissions from passenger/light-duty vehicles in the state (California ARB 2008).

R1-T5: Low Rolling Resistance Tires

This AB 32 early action measure would increase vehicle efficiency by creating an energy efficiency standard for automobile tires to reduce rolling resistance. By 2020, this requirement will reduce emissions in California by approximately 0.3 MMT CO_2e, representing 0.2 percent of emissions from passenger/light-duty vehicles in the state (California ARB 2008).

R1-T6: Low Friction Engine Oils

This AB 32 early action measure would increase vehicle efficiency by mandating the use of engine oils that meet certain low friction specifications. By 2020, this requirement will reduce emissions in California by approximately 2.8 MMT CO_2e, representing 1.7 percent of emissions from passenger light-duty vehicles in the state (California ARB 2008).

R1-T7: Goods Movement Efficiency Measures

This AB 32 early action measure targets system wide efficiency improvements in goods movement to achieve GHG reductions from reduced diesel combustion. By 2020, this requirement will reduce emissions in California by approximately 3.5 MMT CO_2e, representing 1.6 Percent of emissions from all mobile sources (on-road and off-road) in the state (California ARB 2008).

R1-T8: Heavy-Duty Vehicle GHG Emission Reduction (Aerodynamic Efficiency)

This AB 32 early action measure would increase heavy-duty vehicle (long-haul trucks) efficiency by requiring installation of best available technology and/or California ARB approved technology to reduce aerodynamic drag and rolling resistance. By 2020, this requirement will reduce emissions in California by approximately 0.93 MMT CO_2e, representing 1.9 percent of emissions from heavy-duty vehicles in the state (California ARB 2008).

R1-T9: Medium and Heavy-Duty Vehicle Hybridization

The implementation approach for this AB 32 measure is to adopt a regulation and/or incentive program that reduces the GHG emissions of new trucks (parcel delivery trucks and vans, utility trucks, garbage trucks, transit buses, and other vocational work trucks) sold in California by replacing them with hybrids. By 2020, this requirement will reduce emissions in California by approximately 0.5 MMT CO_2e, representing 0.2 percent of emissions from all on-road mobile sources in the state. This reduction is also equivalent to a 1.0 percent reduction of emissions from all heavy-duty trucks in the state (California ARB 2008).

R2 Transportation Measures

The following list of R2 measures are measures the City can implement to achieve an AB 32 compliant reduction target.

R2-T1: Land Use Based trips and VMT Reduction Policies

This measure complements the City's existing Transportation Demand Management (TDM) program to achieve greater vehicle trip and VMT reductions.

The demand for transportation is influenced by the density and geographic distribution of people and places. Whether neighborhoods have sidewalks or bike paths, whether homes are within walking distance of shops or transit stops will influence the type and amount of transportation that is utilized. By changing the focus of land use from automobile centered transportation, a reduction in vehicle miles traveled will occur. Opportunities include a 0.5-mile radius around the Metrolink Station, mixed use development within the growth areas of the City, and infill development within downtown Corona. See Appendix E for detailed emissions reduction calculations for this strategy and all of the reduction strategies.

R2-T2: Residential Permit Parking

Residential Permit Parking is an existing City program that allows residents of qualified neighborhoods to obtain special permits that exempt them and their guests from certain on-street parking time limits or prohibitions in their areas. Anticipated reductions from this measure come from the future qualified

neighborhoods that will become part of the program. The neighborhood must meet the following eligibility requirements:

- Area must be located within a Preferential Parking District. Preferential parking districts are created by the City Council for areas with potential traffic parking intrusion, near some schools, and parks.
- 67 percent of the area's residents must request the program.
- 80 percent of on-street parking spaces in the area must by occupied during peak parking periods, or out of area traffic is causing public nuisance.
- The area's boundaries are such that designating it for preferential parking will not shift the parking problem to an adjacent area.

R2-T3: Bicycle Master Plan

Corona's Bicycle Master Plan is extensive and describes the construction on 11.5 miles of Class I bike paths and 23 miles of Class II and Class III bikeways to build upon the current 8 miles of bikeways (Corona 2001). The reduction associated with bicycle infrastructure was calculated following CAPCOA's methodology and are based on the increased miles of bike paths and bikeways.

R2-T4: WRCOG Neighborhood Electric Vehicle Plan

Implementation of the WRCOG's Neighborhood Electric Vehicle (NEV) Plan has the potential to decrease VMT from traditional passenger vehicles by encouraging the replacements of trips in passenger vehicles with trips in electric vehicles (WRCOG 2010). A conservative estimate for adoption of NEVs by residents is 4 percent. Each household with an NEV replaces, on average, 12.7 percent of traditional passenger vehicle trips with electric vehicle trips (CAPCOA 2010). This equates to a 0.5 percent reduction in VMT community-wide.

R3 Transportation Measures

The following R3 measures enhance and/or ensure the reductions accounted for within the R2 measures through education programs or are measures that will reduce emissions but cannot be quantified. Also, reduction measures implemented at the municipal level are described.

R3-T1: Regional Land Use and Transportation Coordination

Promoting the development and use of transit between Corona and other jurisdictions including the County and neighboring cities enhances the implementation of R2-T1 and R2-T4 described above.

R3-T2: City of Corona Employee Rideshare

In order to cut down on transportation emissions and commute costs, the City has organized carpools for its municipal employees that share similar commutes. Currently there are twelve active carpools. This measure supports rideshare programs for all employers in the City by providing an example of a successful rideshare program.

R3-T3: Municipal Fleet Alternative Vehicles

Corona's municipal fleet consists of over 400 vehicles ranging from small passenger cars to dump trucks and fire engines. In an effort to save on fuel costs and reduce air pollution and greenhouse gas emissions, the City has 33 fleet vehicles that are powered on compressed natural gas (CNG). As older vehicles retire, the new replacement vehicles will continue to increase the fuel efficiency of the municipal fleet. The City's use of fuel efficient and alternative fuel vehicles helps to promote their use by local residents.

Energy

R1 Energy Reduction Measures

The following list of R1 building energy efficiency related measures are those measures that California has identified in the AB 32 Scoping Plan that will result in emission reductions within the City.

R1-E1: Renewable Portfolio Standard for Building Energy Use

Senate Bills (SBs) 1075 (2002) and 107 (2006) created the state's Renewable Portfolio Standard (RPS), with an initial goal of 20 percent renewable energy production by 2010. Executive Order (EO) S-14-08 establishes a RPS target of 33 percent by the year 2020 and requires state agencies to take all appropriate actions to ensure the target is met. In April 2011, Governor Jerry Brown signed Senate Bill 2 (2011), which codified the Executive Order and requires the State to reach the 2020 goal (California ARB 2008).

R1-E2 and R1-E3: AB 1109 Energy Efficiency Standards for Lighting (Residential and Commercial Indoor and Outdoor Lighting)

Assembly Bill (AB 1109) mandated that the California Energy Commission (CEC) on or before December 31, 2008, adopt energy efficiency standards for general purpose lighting. These regulations, combined with other state efforts, shall be structured to reduce statewide electricity consumption in the following ways:

- R1-E2: At least 50 percent reduction from 2007 levels for indoor residential lighting by 2018
- R1-E3: At least 25 percent reduction from 2007 levels for indoor commercial and outdoor lighting by 2018 (California ARB 2008)

R1-E4: Electricity Energy Efficiency (AB 32)

This measure captures the emission reductions associated with electricity energy efficiency activities included in California ARB's AB 32 Scoping Plan that are not attributed to other R1 or R2 reductions, as described in this report. This measure includes energy efficiency measures that California ARB views as crucial to meeting the statewide 2020 target, and will result in additional emissions reductions beyond those already accounted for in California's Energy Efficiency Standards for Residential and Non-Residential Buildings (Title 24, Part 6 of the California Code of Regulations; hereinafter referred to as, "Title 24 Energy Efficiency Standards") of California's Green Building Standards Code (Title 24, Part 11 of the California Code of Regulations; hereinafter referred to as "CALGreen").

By 2020, this requirement will reduce emissions in California by approximately 21.3 MMT CO2e, representing 17.5 percent of emissions from all electricity in the state (California ARB 2008). This measure includes the following strategies:

- "Zero Net Energy" buildings (buildings that combine energy efficiency and renewable generation so that they, based on an annual average, extract no energy from the grid)
- Broader standards for new types of appliances and for water efficiency
- Improved compliance and enforcement of existing standards
- Voluntary efficiency and green building targets beyond mandatory codes
- Voluntary and mandatory whole-building retrofits for existing buildings
- Innovative financing to overcome first-cost and split incentives for energy efficiency, on-site renewables, and high efficiency distributed generation
- More aggressive utility programs to achieve long-term savings
- Water system and water use efficiency and conservation measures
- Additional industrial and agricultural efficiency initiatives
- Providing real time energy information technologies to help consumers conserve and optimize energy performance

R1-E5: Natural Gas Energy Efficiency (AB 32)

This measure captures the emission reductions associated with natural gas energy efficiency activities included in California ARB's AB 32 Scoping Plan that are not attributed to other R1 or R2 reductions, as described in this report. This measure includes energy efficiency measures that California ARB views as crucial to meeting the statewide 2020 target, and will result in additional emissions reductions beyond those already accounted for in the Title 24 Energy Efficiency Standards or CALGreen. By 2020, this requirement will reduce emissions in California by approximately 4.3 MMT CO2e, representing 6.2 percent of emissions from all natural gas combustion in the state (California ARB 2008). This measure includes the following strategies:

- "Zero Net Energy" buildings (buildings that combine energy efficiency and renewable generation so that they, based on an annual average, extract no energy from the grid)
- Broader standards for new types of appliances and for water efficiency
- Improved compliance and enforcement of existing standards
- Voluntary efficiency and green building targets beyond mandatory codes
- Voluntary and mandatory whole-building retrofits for existing buildings
- Innovative financing to overcome first-cost and split incentives for energy efficiency, on-site renewables, and high efficiency distributed generation
- More aggressive utility programs to achieve long-term savings
- Water system and water use efficiency and conservation measures
- Additional industrial and agricultural efficiency initiatives
- Providing real time energy information technologies to help consumers conserve and optimize energy performance

R1-E6: Increased Combined Heat and Power (AB 32)

This measure captures the reduction in building electricity emissions associated with the increase of combined heat and power activities, as outlined in California ARB's AB 32 Scoping Plan. The Scoping

Plan suggests that increased combined heat and power systems, which capture "waste heat" produced during power generation for local use, will offset 30,000 GWh statewide in 2020. Approaches to lowering market barriers include utility-provided incentive payments, a possible CHP portfolio standard, transmission and distribution support systems, or the use of feed-in tariffs. By 2020, this requirement will reduce emissions in California by approximately 6.7 MMT CO_2e, representing 7.6 percent of emissions from all electricity in the state (California ARB 2008).

R1-E7: Industrial Efficiency Measures (AB 32)

This measure captures the reduction in industrial building energy emissions associated with the energy efficiency measures for industrial sources included in California ARB's AB 32 Scoping Plan. By 2020, this requirement will reduce emissions in California by approximately 1.0 MMT CO_2e, representing 3.9 percent of emissions from all industrial natural gas combustion in the state (California ARB 2008). California ARB proposes the following possible statewide measures:

- Oil and gas extraction regulations and programs to reduce fugitive CH_4 emissions
- GHG leak reduction from oil and gas transmission
- Refinery flare recovery process improvements
- Removal of methane exemption from existing refinery regulations

R2 Energy Reduction Measures

The following list of R2 measures are candidate measures related to building energy efficiency the City can implement to achieve an AB 32 compliant reduction target.

R2-E1: New Construction Residential Energy Efficiency Requirements

This measure facilitates the implementation of energy efficient design for all new residential buildings to be 20 percent beyond the current Title 24 Standards. This energy efficiency requirement is equal to that of the LEED for Homes and ENERGY STAR programs.

The 2008 Title 24 Energy Standards were adopted by the Energy Commission on April 23, 2008, with the 2008 Residential Compliance Manual adopted by the Commission on December 17, 2008. Compliance with the 2008 standards went into effect January 1, 2010. In an effort to meet the overall goal of the California Energy Efficiency Strategic Plan of reaching zero net energy for residential buildings by 2020, the stringency of the Title 24 Energy Standards as regulated and required by the state will continue to increase every three years. As energy efficiency standards increase Corona may want to periodically re-evaluate their percentage beyond Title 24 goal to ensure it is still a feasibly achievable goal.

The City would provide all developers with a list of potentially feasible GHG reduction measures that reflect the current state of the regulatory environment prior to design development. The developer will then submit to the City a mitigation report demonstrating which of the proposed reduction measures are feasible as well as why the unselected measures are infeasible. The Screening Table provided in Appendix F of the C-CAP includes a menu of options with points assigned to them. As long as a developer meets the required point allotment (100 points) the developer will meet the requirements of this measure. This system will assure flexibility in the implementation of this reduction measure.

Although not limited to these actions, this reduction goal can be achieved through the incorporation of the following:

- Install energy efficient appliances, including air conditioning and heating units, dishwashers, water heaters, etc.
- Install solar water heaters.
- Install top quality windows and insulation.
- Install energy efficient lighting.
- Optimize conditions for natural heating, cooling and lighting by building siting and orientation.
- Use features that incorporate natural ventilation.
- Install light-colored "cool" pavements, and strategically located shade trees along all bicycle and pedestrian routes.
- Incorporate skylights; reflective surfaces, and natural shading in building design and layouts.

R2-E2: New Construction Residential Renewable Energy

This measure facilitates the voluntary incorporation of renewable energy (such as photovoltaic panels) into new residential developments. For participating developments, renewable energy application should be such that the new home's projected energy use from the grid is reduced by 50 percent. The California Energy Commissions' New Solar Homes Partnership is a component of the California Solar Initiative and provides rebates to developers of 6 or more units where 50 percent of the units include solar power. In addition this measure would encourage that all residents be equipped with "solar ready" features where feasible, to encourage future installation of solar energy systems. These features should include the proper solar orientation (south facing roof sloped at 20° to 55° from the horizontal), clear access on south sloped roofs, electrical conduit installed for solar electric system wiring, plumbing installed for solar hot water systems, and space provided for a solar hot water tank. The incentive program should provide enough funding and other incentives as shown in the R3 measures to result in approximately 50 percent of new residential development participation in this program, thereby resulting in a 25 percent reduction in electrical consumption from new residential developments.

As an alternative to, or in support of, providing onsite renewable energy, the project proponent can buy into a purchased energy offset program that will allow for the purchase of electricity generated from renewable energy resources offsite. The purchased energy offsets must come from a registered project of the Climate Action Reserve. The Climate Action Reserve ensures the environmental integrity of GHG emissions reduction projects for use in the U.S. carbon markets. Purchased energy offsets (or a combination of incorporated renewables and purchased offsets) must be equal to 25 percent of the total projected energy consumption for the development. See R3-E3 for further details on the financing program.

R2-E3: Residential Energy Efficiency Retrofits

This reduction measure sets a goal for the City to increase energy efficiency in existing homes. The reductions calculated assume that 20 percent of home will participate and each home will be able to reduce energy consumption by 15 percent. There are a variety of financial incentives and programs to assist homeowners that make the implementation of these goals feasible. One key program ensuring the

achievement of this reduction measures is Corona's partnership with the Western Riverside Council of Governments (WRCOG) surrounding their Energy Efficiency and Water Conservation Program (WRCOG 2009). The program would provide residences with low-interest loans that can be used to implement energy efficient improvements on their homes. This program has the potential to reduce energy consumption in retrofitted homes by a minimum of 15 percent. Additionally, the screening tables for new development include an option for developers to earn point by contributing toward the energy efficiency retrofits of existing homes (see Appendix F). Although not limited to these actions, this reduction goal can be achieved through the incorporation of the following:

- Replace inefficient air conditioning and heating units with new energy efficient models.
- Replace older, inefficient appliances with new energy efficient models.
- Replace old windows and insulation with top-quality windows and insulation.
- Install solar water heaters.
- Replace inefficient and incandescent lighting with energy efficient lighting.
- Weatherize the existing building to increase energy efficiency.

R2-E4: Residential Renewable Energy Retrofits

This measure sets a goal for City residents to retrofit their homes with photovoltaic panels such that 50 percent of all of the home's electrical usage is from renewable energy. The emissions reductions calculated for this measure assume that 20 percent of existing home will participate. The 20 percent participation depends on the financial incentives and programs described in Chapter 7: Implementation of this report. In particular, the California Energy Commission's Solar Initiative has incentives available to home owners. In addition, WRCOG's Energy Efficiency and Water Conservation Program helps finance solar photovoltaic systems for residents. As with R2-E3, developers will be able to earn points in the screening table by contributing to renewable energy retrofits for existing homes.

R2-E5: New Construction Commercial Energy Efficiency Requirements

This measure facilitates the implementation of energy efficient design for all new commercial buildings to be 20 percent beyond the current Title 24 Standards. This energy efficiency requirement is 10 percent greater than the minimum requirements of the LEED and ENERGY STAR programs. As energy efficiency standards increase the City may want to periodically re-evaluate their percentage beyond Title 24 goal to ensure it is still a feasibly achievable goal.

As described in R2-E1 above, the City would provide all developers with a list of potentially feasible GHG reduction measures that reflect the current state of the regulatory environment. The City will develop a menu of options with points assigned to them. As long as a developer meets the required point allotment (100 points) the developer will meet the requirements of this measure. This system will provide flexibility in the implementation of this reduction measure. Although not limited to these actions, this reduction goal can be achieved through the incorporation of the following:

- Install energy efficient appliances, including air conditioning and heating units, dishwashers, water heaters, etc.
- Install solar water heaters.
- Install top quality windows and insulation.

- Install energy efficient lighting.
- Optimize conditions for natural heating, cooling and lighting by building siting and orientation.
- Use features that incorporate natural ventilation.
- Install light-colored "cool" pavements, and strategically located shade trees along all bicycle and pedestrian routes.
- Incorporate skylights; reflective surfaces, and natural shading in building design and layouts.

R2-E6: New Construction Commercial/Industrial Renewable Energy

This measure would facilitate the voluntary incorporation of renewable (solar or other renewable) energy generation into the design and construction of new commercial, office, and industrial developments. Renewable energy generation shall be incorporated such that a minimum of 20 percent of the project's total energy needs are offset. In addition this measure would encourage all facilities be equipped with "solar ready" features where feasible, to facilitate future installation of solar energy systems. These features should include the proper solar orientation (south facing roof sloped at 20° to 55° from the horizontal), clear access on south sloped roofs, electrical conduit installed for solar electric system wiring, plumbing installed for solar hot water systems, and space provided for a solar hot water tank.

As an alternative to, or in support of, providing onsite renewable energy, the project proponent can buy into an offset program that will allow for the purchase of renewable energy resources offsite. Purchased energy offsets (or a combination of incorporated renewables and purchased offsets) must be equal 20 percent of the total projected energy consumption for the development. See R3-E3 for further details on the financing program.

R2-E7: Commercial/Industrial Energy Efficiency and Renewable Energy Retrofits

This measure sets a goal for all commercial or industrial buildings undergoing major renovations to reduce their energy consumption by a minimum of 20 percent. The emissions calculations assume that by 2020, 25 percent of commercial or industrial buildings will have reduced their energy consumption by 20 percent through energy efficiency and renewable energy retrofits. The State offers incentives and programs that contribute toward the implementation of this goal. Similar to the residential goals described above, WRCOG's Energy Efficiency and Water Conservation Program could help finance energy efficiency and renewable energy projects for commercial buildings. New developers can also earn points in the screening table document by contributing to energy efficiency or renewable energy projects for existing commercial buildings. Although not limited to these actions, this reduction goal can be achieved through the incorporation of the following:

- Replace inefficient air conditioning and heating units with new energy efficient models.
- Replace older, inefficient appliances with new energy efficient models.
- Replace old windows and insulation with top-quality windows and insulation.
- Install solar water heaters.
- Replace inefficient and incandescent lighting with energy efficient lighting.
- Weatherize the existing building to increase energy efficiency.

R2-E8: Induction Streetlight Retrofits

Corona Department of Public Works maintains 12,265 street and safety lights city-wide. With the aid of the Energy Efficiency and Conservation Block Grant (EECBG) funds, the City will replace approximately 16 percent or 1,920 of the existing standard High Pressure Sodium (HPS) lamps with Induction Lighting. The new lamps are estimated to last 5 times longer and consume 50 percent less energy than the HPS lamps.

R2-E9: Solar Power for Water Reclamation Facility #1

In addition to the induction streetlight retrofits, the City plans to utilize funds from the EECBG to increase the number of solar panels at their Water Reclamation Facility #1. The City Department of Water and Power (DWP) is investing $1 million into the project which will be combined with the $727,100 from EECBG. This will help reduce the energy load of the facility by an estimated 572,000 kWh annually.

R2-E10: Additional Energy Efficiency Retrofit Projects

The Community Energy Partnership assists the City in tracking future energy efficiency projects. Additional projects will be identified through the resources of the program and discussed with City team members and other Community Energy Partnership Partners. As of December 2010 this list includes:

- Thirteen wells have are scheduled for pump optimization upgrades to improve their efficiency. These projects are projected to save the City 2.45 million kWh annually.
- The Corona City Hall is in the process of upgrading their cooling systems and is estimated to save the City over 300,000 kWh once the retrofits are completed.
- In addition to the first phase of induction street light retrofits, the City anticipates changing out the remaining street lights over four total phases to save the City over 4 million kWh annually.

The City's current list of municipal project will achieve approximately 6,906,447 annual kWh savings. This is 84 percent of their C-CAP goals towards municipal energy savings. City staff will continue to work with the Community Energy Partnership to identify and implement additional energy saving retrofit projects over the coming years.

R3 Energy Reduction Measures

The following R3 measures enhance and/or ensure the reductions accounted for within the R2 measures through education programs or are measures that will reduce emissions but cannot be quantified.

R3-E1: Energy Efficient Development, and Renewable Energy Deployment Facilitation and Streamlining

This measure would encourage the City to identify and remove any regulatory and procedural barriers to the implementation of green building practices and the incorporation of renewable energy systems. This could include the updating of codes and zoning requirements and guidelines. This measure could be further enhanced by providing incentives for energy efficient projects such as priority in the reviewing, permitting, and inspection process. Additional incentives could include flexibility in building

requirements such as height limits or set-backs in exchange for incorporating green building practices or renewable energy systems.

R3-E2: Energy Efficiency Training & Public Education

This measure would strengthen Corona General Plan Policy Infrastructure & Utilities 7.6.8 which provides public education and publicity about energy efficiency measures and reduction programs available within the City through a variety of methods including newsletters, brochures, and the City's Website. This measure would enhance this existing program by including rebates and incentives available for residences and businesses as well as providing training in green building materials, techniques, and practices for all plan review and building inspection staff.

R3-E3: Energy Efficiency and Solar Energy Financing

This measure would facilitate the incorporation of innovative, grant funded or low-interest financing programs for energy efficiency and renewable energy projects for both existing and new developments. This would include financing for heating, ventilation, air conditioning, lighting, water heating equipment, insulation, weatherization, and residential and commercial renewable energy. The City is a member of a partnership with WRCOG surrounding their Energy Efficiency and Water Conservation Program. The program would provide property with low-interest loans that would be repaid over time through annual property tax payments.

R3-E4: Cross-Jurisdictional Coordination

Under this reduction measure the City would coordinate with other local governments, special districts, nonprofit, and other organizations in order to optimize energy efficiency and renewable resource development and usage. This would allow for economies of scale and shared resources to more effectively implement these environmental enhancements.

R3-E5: Alternative Energy Development Plan

The accomplishment of this measure would encourage the City to work with SCE to explore the possibilities for producing energy by renewable means within the built environment. This would be developed to identify appropriate alternative energy facilities (i.e., photovoltaic) for use within residential and commercial developments. The Alternative Energy Development Plan will encourage the establishment of City policies and ordinances to address how alternative energy production would be conducted. This measure would identify the most optimal locations and the best means by which to avoid noise, aesthetics, and other land use compatibility conflicts. Another provision of this Plan could be to identify possible sites for the production of renewable energy using local renewable sources such as solar, wind, small hydro, and/or biogas. This would encourage adopting measures to protect these resources and providing right-of-way easements, utility easements, or by setting aside land for future development of these potential production sites.

Area Source

The following list includes measures related to landscaping and wood burning emissions that will reduce emissions and help the City to achieve an AB 32 compliant reduction target.

R1 Area Source Reduction Measures

R1-L1: SCAQMD Healthy Hearths Program

SCAQMD's Rule 445 (Wood Burning Devices), adopted on March 7, 2008, applies to residents in the South Coast Air Basin and includes the following key components:

- No permanently installed indoor or outdoor wood burning devices in new developments
- Establishes a mandatory wood burning curtailment program on high pollution days during November through February, beginning November 1, 2011. Based on current air quality conditions, there may be 10 to 25 mandatory curtailment days in specific areas (SCAQMD 2008).

R3 Area Source Reduction Measures

The following R3 measures are related to landscape strategies that will help reduce greenhouse gas emissions and can be incorporated into development projects without additional cost. These measures strategically place trees and other landscape mechanisms that create shade to reduce the heat island effect within parking lots and adjacent to buildings, which in turn, reduces the temperature of buildings and cars during the summer.

R3-L1: Expand City Tree Planting

This program evaluates the feasibility of expanding tree planting within the City. This includes the evaluation of potential carbon sequestration from different tree species, potential reductions of building energy use from shading, and GHG emissions associated with pumping water used for irrigation. Commercial and retail development should be encouraged to exceed shading requirements by a minimum of 10 percent and to plant low emission trees. In support of Environmental Resources Goal 10.10 from Corona's General Plan, all future development shall be encouraged to preserve native trees and vegetation to the furthest extent possible.

R3-L2: Heat Island Plan

The implementation of this measure would include promoting the use of cool roofs, cool pavements, and parking lot shading to the entire City and expanding upon Corona's General Plan Community Design Policy 2.1.1 by increasing the number of strategically placed shade trees. Further, City wide Design Guidelines should be amended to include that all new developments and major renovations (additions of 25,000 square feet or more) would be encouraged to incorporate the following strategies such that heat gain would be reduced for 50 percent of the non-roof impervious site landscape (including parking, roads, sidewalks, courtyards, and driveways). The strategies include:

- Strategically placed shade trees
- Paving materials with a Solar Reflective Index (SRI) of at least 29
- Open grid pavement system
- Covered parking (with shade or cover having an SRI of at least 29).

Water

R1 Water Reduction Measure

The following R1 water related reduction measure has been identified in the AB 32 Scoping Plan and will result in emission reductions within the City.

R1-W1: Renewable Portfolio Standard (33 percent by 2020) Related to Water Supply and Conveyance

This measure would increase electricity production from eligible renewable power sources to 33 percent by 2020. A reduction in GHG emissions results from replacing natural gas-fired electricity production with zero GHG-emitting renewable sources of power. By 2020, this requirement will reduce emissions from electricity used for water supply and conveyance in California by approximately 21.3 MMT CO_2e, representing 15.2 percent of emissions from electricity generation (in-state and imports) (California ARB 2008).

R2 Water Reduction Measure

The following R2 measure is a candidate measure related to water that the City can implement to achieve an AB 32 compliant reduction target.

R2-W1: Water Use Reduction Initiative

This initiative would reduce emissions associated with electricity consumption for water treatment and conveyance. This measure encourages the City to adopt a per capita water use reduction goal in support of the Governors Executive Order S-14-08 which mandates the reduction of water use of 20 percent per capita. The City's adoption of a water use reduction goal would introduce requirements for new development and would provide cooperative support for water purveyors that are required to implement these reductions for existing developments. The City would also provide internal reduction measures such that City facilities will support this reduction requirement. The following represent potential programs that can be implemented to attain this reduction goal.

Water Conservation Program

Under this program the excessive watering of landscaping, excessive fountain operation, watering during peak daylight hours, water of non-permeable surfaces, excessive water use for noncommercial washing, and water use resulting in flooding or runoff would be prohibited. In addition the program would encourage efficient water use for construction activities, the installation of low-flow toilets and showerheads for all new developments, use of drought-tolerant plants with efficient landscape watering systems for all new developments, recycling of water used for cooling systems, use of pool covers, and the posting of water conservation signage at all hotels.

New Development Incentives

Provide incentives for developers to comply with the California Green Building Standards Code as requirements for all new development. Under this Code new developments are required to reduce indoor potable water use by 20 percent beyond the Energy Policy Act of 1992 fixture performance requirements, and to reduce outdoor potable water use by 50 percent from a mid-summer baseline

average consumption through irrigation efficiency, native plant selection, the use of recycled water and/or captured rainwater for example.

Water Efficiency Retrofit Program

This program would encourage upgrades in water efficiency for renovations or additions of residential, commercial, office, and industrial properties equivalent to that of new developments. The City would work with local water purveyors to achieve consistent standards, and to develop, approve, and review procedures for implementation.

Increased Recycled Water Use

Promote the use of municipal wastewater and graywater for agricultural, industrial and irrigation purposes. This measure would be subject to approval of the state Health Department and compliance with Title 22 provisions. This measure would facilitate the following:

- Inventory of non-potable water uses that could be substituted with recycled or graywater
- Determination of the feasibility of producing and distributing recycled water for groundwater replenishment
- Determine the associated energy/GHG tradeoffs for treatment/use vs. out of basin water supply usage
- Cooperation and coordination with responsible agencies to encourage the use of recycled water where energy tradeoffs are favorable

R3 Water Reduction Measure

The following R3 measure enhances and/or ensures the reductions accounted for within the R2 measure identified above.

R3-W1: Water Efficiency Training and Education

Under this measure the City, in coordination with local water purveyors would implement a public information and education program that promotes water conservation. The program could include certification programs for irrigation designers, installers, and managers, as well as classes to promote the use of drought tolerant, native species and xeriscaping. This measure supports measure R2-W1 discussed above.

Solid Waste

R1 Solid Waste Measure

The following R1 solid waste related measure is a measure that California has identified in the AB 32 Scoping Plan that will result in emission reductions within the City.

R1-S1: Waste Measures

The California ARB AB 32 Scoping Plan recommends three measures for reducing emissions from Municipal Solid Waste at the state level, including (1) landfill methane control, (2) increase the efficiency of landfill methane capture, and (3) high recycling/zero waste. California ARB approved a regulation implementing the discrete early action program for methane recovery (1), which became effective June

17, 2010. This measure is expected to result in a 1.0 MMT CO_2e reduction by 2020 (California ARB 2008). Other measures proposed by California ARB include increasing efficiency of landfill methane capture (2) and instituting high recycling/zero waste policies (3). Potential reductions associated with these measures are still to be determined.

R2: Solid Waste Measures

The following R2 measure reduces emissions related to solid waste and helps Corona to achieve an AB 32 compliant reduction target.

R2-S1: City Diversion Program

This measure would implement a City wide waste diversion goal of diverting 75 percent (current diversion rate is 58 percent) of all waste from landfills by 2020. The following is a potential list of waste reduction measures that will further strengthen existing waste reduction/diversion programs along with coordination with Waste Management and El Sobrante Landfill.

- Provide outreach and education programs for residential, commercial, and industrial land uses in order to further promote existing City diversion programs.
- Increase disposal fees and/or reduce residential pick-up frequency.
- Encourage businesses to adopt a voluntary procurement standard and prioritize those products that have less packaging, are reusable, recyclable, or compostable.
- Support state level policies that provide incentives for efficient and reduced packaging waste for commercial products.
- Provide waste audits.
- Make recycling and composting mandatory at all public events.
- Establish an appliance end-of-life requirement.
- For new developments, require the use of recycled-content materials, or recycled materials.
- Require a minimum of 15 percent of materials used in construction be sourced locally, as feasible.
- Encourage the use of recycled building materials and cement substitutes for new developments.
- Reuse and recycle construction and demolition waste (including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard).
- Provide interior and exterior storage areas for recyclables and green waste at all buildings.
- Provide adequate recycling containers in public areas, including parks, school grounds, golf courses, and pedestrian zones in areas of mixed-use development.
- Provide education and publicity about reducing waste and available recycling services.

R3 Solid Waste Measures

The following R3 measures enhance and/or ensure the reductions accounted for within the R2 measure identified above.

R3-S1: Encourage Increased Efficiency of the Gas to Energy System at Landfills.

In 2004, the El Sobrante Landfill installed 3 gas-to-energy systems which convert 66 percent of the methane captured to energy. This measure would encourage El Sobrante to keep current with upgrades

in efficiencies to waste to energy systems and to upgrade as feasible when significant increases in conversion efficiencies are available. Corona's waste is deposited in the El Sobrante Landfill, so the emissions from Corona's solid waste are dependent on the waste management and methane capture systems in place at El Sobrante. Any reductions in emissions from the landfill will, in turn, reduce Corona's emissions from solid waste generation.

R3-S2: Waste Education Program

This measure would build on Corona's existing waste education program to provide public education and increased publicity about commercial and residential recycling. This measure would educate the public about waste reduction options available at both residential and commercial levels, including composting, grass recycling, and waste prevention, and available recycling services.

Agriculture

R2 Agriculture Reduction Measure

The following R2 measure is a candidate measure related to agriculture the City can incorporate into the City CAP to achieve an AB 32 compliant reduction target.

R2-A1: Agricultural Water Management

Encourage the agricultural community to be cognizant of the necessity of water conservation and to provide access to information on technologies to reduce potable water usage where feasible. This would encourage the City in conjunction with the local water purveyors to explore the feasibility of and promote using recycled water while maintaining water quality and quantity necessary for agriculture purposes. Further, this would encourage the City to explore the feasibility of and promote water management.

2020 Reduced Inventory

Table 4.3-5 (2020 Reduced Emissions Inventory) summarizes the 2020 emissions inventory for the City of Corona after the implementation of the reduction measures listed above. The 2020 reduced inventory is a reduction of 481,266 MT CO_2e (or 24.5 percent) from the 2020 BAU inventory. Following California ARB's recommendation in the AB 32 Scoping Plan, the City of Corona set the target to reduce emissions 15 percent below existing emissions by the year 2020; this amounts to 1,483,963 MT CO_2e. As shown in Table 4.3-5, with the implementation of the C-CAP reduction measures, the City of Corona will reduce its emissions to a level that is below the AB 32 reduction target.

Table 4.3-5 2020 Reduced Emissions Inventory	
Emission Source	***Metric Tons CO_2e***
Transportation	705,765
Energy	649,761
Area Sources	74,309
Water and Wastewater	18,659
Solid Waste	34,217
Agriculture	236
Total	*1,482,947*
AB 32 Reduction Target	1,483,963
Target Achieved?	*Yes*

SOURCE: Atkins, *Draft Corona Climate Action Plan* (2011).

Table 4.3-6 (2020 Reduced Passenger Vehicle Emissions) summarizes the passenger vehicle emissions after the incorporation of the reduction strategies described above. Senate Bill 375 (SB 375) of 2008 set targets for regional planning agencies to reduce emissions from passenger vehicles. The 2020 reduction target for the SCAG region is 8 percent decrease from 2005 levels, which is equivalent to 3.07 MT CO_2e per capita. As shown in Table 4.3-6, after the implementation of the C-CAP Corona's per capita passenger vehicle emissions will be reduced to 3.05 MT CO_2e per capita, which is below the target for the SCAG region established by SB 375.

Table 4.3-6 2020 Reduced Passenger Vehicle Emissions	
Passenger Vehicle Emissions (MT CO_2e)	475,648
2020 Corona Population	155,819
MT CO_2e per capita	*3.05*
2020 Reduction Target (8 percent below 2005)	3.07
Target Achieved?	*Yes*

SOURCE: Atkins, *Draft Corona Climate Action Plan* (2011).

The C-CAP includes measures designed to reduce GHG emissions in the City of Corona. The analysis provided in the C-CAP demonstrates how the implementation of the reduction measures will reduce emissions to a level that is more than 15 percent below existing emissions, facilitating the implementation of AB 32. Additionally, the implementation of the C-CAP reduction policies will reduce emissions from passenger vehicles to a level that is below the established target for the SCAG region. Therefore, this impact is considered ***less than significant***, and no mitigation is required.

Cumulative Impacts

The analysis of GHG emissions is cumulative in nature, and no separate analysis is required.

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4.4 HAZARDS/HAZARDOUS MATERIALS

This section of the EIR analyzes the potential environmental effects on airport and aviation hazards from implementation of the proposed project. This section assesses the potential for adverse impacts on human health and the environment from exposure to airport and aviation hazards resulting from project implementation. Environmental effects related to the following issues were determined in the Initial Study (IS) to have no impact or to be less than significant: (1) routine transport, use, or disposal of hazardous materials; (2) foreseeable upset and accident conditions involving the release of hazardous materials into the environment; (3) emit hazardous emissions or handle hazardous materials within 0.25 mile of a school; (4) on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5; (5) within the vicinity of a private airstrip resulting in a safety hazard for people; (6) interfere with an adopted emergency response or evacuation plan; (7) exposure of people or structures to a significant risk of loss, injury, or death involving wildland fires. These issues are not analyzed in this section and further discussion concerning these thresholds can be found in Section 4.4.3 (Impacts and Mitigation Measures, Effects Not Found to Be Significant).

No comment letters addressing hazards were received in response to the notice of preparation (NOP) circulated for the proposed project. Data for this section were taken from the City of Corona General Plan (2004), City of Corona General Plan Environmental Impact Report (March 2004). Full reference-list entries for all cited materials are provided in Section 4.4.5 (References).

4.4.1 Environmental Setting

The Corona Municipal Airport (CMA) is located approximately 2.22 miles northwest of Downtown Corona, and is sited on approximately 100 acres under a long-term lease agreement with the U.S. Army Corps of Engineers. The Airport is non-towered and serves general aviation aircraft for recreational use, and has no commercial flights. Because the airport is located on Army Corps of Engineers land and is used for recreational flying only, it is under the jurisdiction of the City's Parks and Community Services Department. The airport has over 60,000 annual operations that include aviation aircrafts and helicopters. The flight path for aircraft and helicopter arrivals to the Corona Municipal Airport is from the northeast and towards the southwest for departures.

The current Corona Municipal Airport Comprehensive Land Use Plan (CLUP) was adopted by the Riverside County Airport Land Use Commission (Riverside County ALUC) in 1993. The Corona Municipal Airport Comprehensive Land Use Plan contains policies to maintain flight paths and minimize impacts to residents and employees of the area for this general aviation facility. The CLUP implements relevant policies and guidelines for land use compatibility and specific findings of compatibility or incompatibility of land uses within the Airport Influence Area (AIA) and airport safety zones. Figure 4.4-1 (Corona Municipal Airport Area Land Use Area) shows the AIA, airport safety zone, FAR zone, and the flight patterns for the airport.

Land uses within the airport influence area (AIA) at CMA are required to be compatible with standards that are based on three separate considerations: airport noise, safety, and height. This plan addresses airport land use compatibility concerns regarding exposure to aircraft noise, land use safety with respect

both to people and property on the ground and the occupants of the aircraft; protection of airport airspace; and general concerns related to aircraft over flights. The implementation of airport safety zone and height restrictions are intended to protect the safety of the people that work or reside within an airport zoned area. Concentration of people and facilities in the vicinity of airports raises concerns about aircraft hazards. To ensure that no structures or activities adversely affect navigable airspace, state and federal regulations impose land use and height restrictions in the vicinity of airports.

4.4.2 Regulatory Framework

Federal

Federal Regulation 49, CFR Title 14, Part 77

Federal Regulation 49, Code of Federal Regulation (CFR) Title 14, Part 77 establishes standards and notification requirements for objects affecting navigable airspace. In particular, CFR Title 14 Part 77.13 requires that any developer who intends to perform any construction or alterations to structures that exceed 200 feet in height above ground level must obtain project approval from the Federal Aviation Administration (FAA). Height restrictions set forth by the FAA Federal Aviation Regulation (FAR) Part 77 requires all development exceeding 200 feet in height to submit Form 7460-1 (Notice of Proposed Construction or Alteration) to the FAA. In addition, all projects that exceed the FAR Part 77, Objects Affecting Navigable Airspace, 100:1 slope (100 feet in distance to 1 foot in height) are also required to submit a Notice of Proposed Construction or Alteration to the FAA.

State

California Public Utilities Code Section 21659

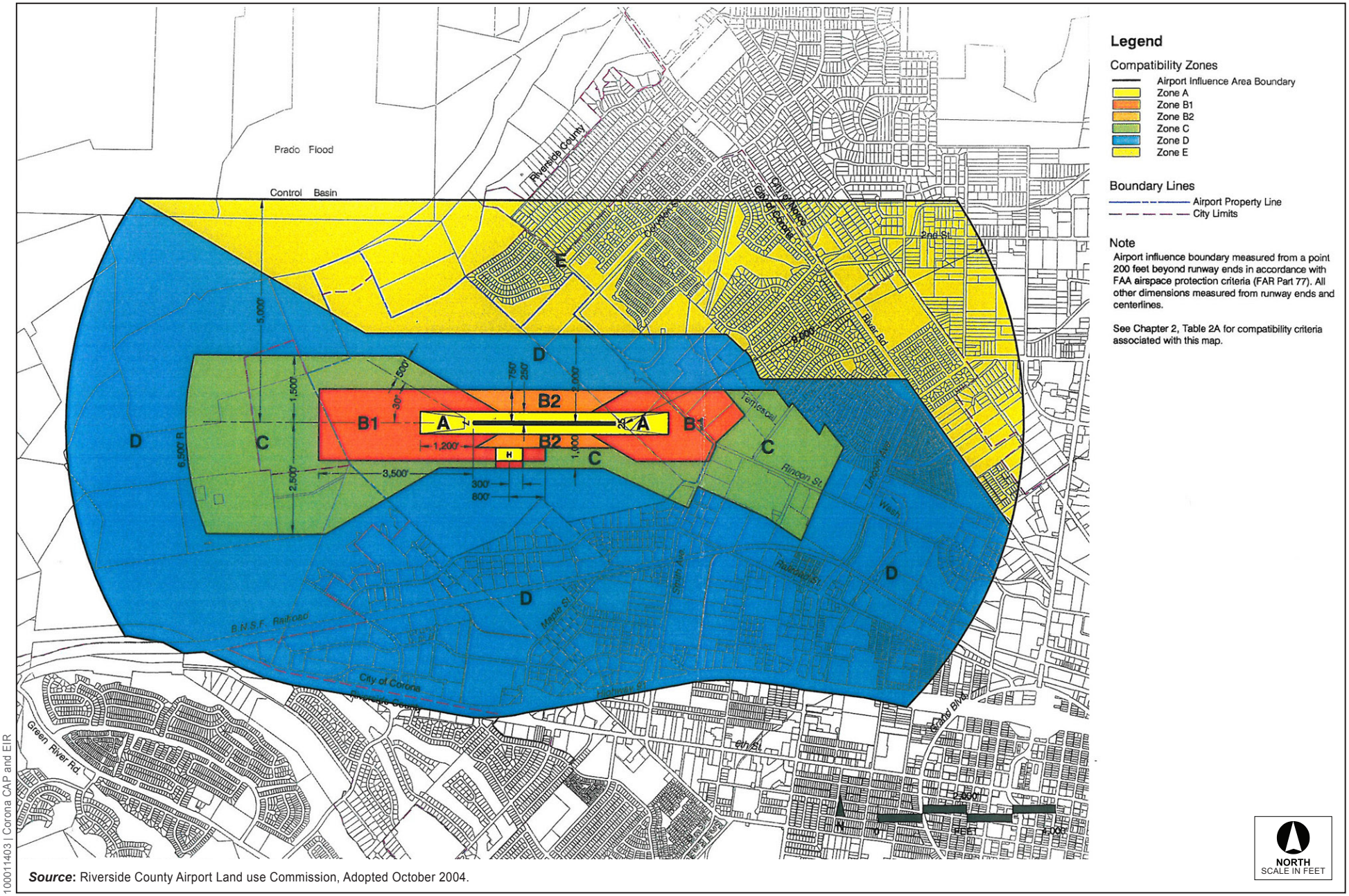
The California Public Utilities Code Section 21659 does not permit construction or alternation of any structure at a height which exceeds the obstruction standards set forth in the regulations of the Federal Aviation Administration relating to objects affecting navigable airspace contained in Title 14 of the Code of Federal Regulations, Part 77, Subpart C, unless a permit allowing the construction, alteration, or growth is issued by the department.

California Public Utilities Code Section 21676

California Public Utilities Code Section 21676 requires the local general plans must be consistent with the adopted airport land use compatibility plans developed by airport land use commissions.

State Aeronautics Act

The State Aeronautics Act is contained in the California Public Resources Code Sections 21001 et seq. and is established for several purposes, including encouraging development of private flying and general use of air transportation, fostering and promoting safety in aeronautics, protecting residents in the vicinity of an airport from unreasonable intrusions from airport noise, and establishing regulations for allowing the conduct of aviation activities in a manner not inconsistent with the rights of others.



***Source*:** Riverside County Airport Land use Commission, Adopted October 2004.

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Figure 4.4-1

Corona Municipal Airport Land Use Area

ATKINS

Regional

Corona Municipal Airport Comprehensive Land Use Plan

The Comprehensive Land Use Plan for (CLUP) Corona Municipal Airport, adopted in 1993 by the Riverside County ALUC, is intended to protect and promote the safety and welfare of residents of the airport vicinity and users of the airport while ensuring the continued operation of airport. Specifically, the plan seeks to protect the general public from adverse effects of aircraft noise, to ensure that people and facilities are not concentrated in areas susceptible to aircraft accidents, and to ensure that no structures or activities encroach upon or adversely affect the use of navigable airspace. The CLUP sets guidelines related to land use compatibility, aircraft noise impacts, height protection, and airport safety to ensure land use compatibility.

Local

No local policies related to airport and aviation hazards would apply to the proposed project.

4.4.3 Impacts and Mitigation Measures

Analytic Method

The analysis in this section focuses on the potential airport and aviation hazards resulting from the implementation of the proposed project. The potential risks were qualitatively evaluated by evaluating the project's location relative to hazard areas established in the CLUPs for the airports within 2 miles of the proposed project and applicable FAA regulations. In determining the level of significance, the analysis assumes that construction and operation of future development under the proposed project would comply with all applicable federal, state, and local laws and regulations.

Thresholds of Significance

The following thresholds of significance are based on the 2012 CEQA Guidelines Appendix G. For purposes of this EIR, implementation of the proposed project may have a significant adverse impact on hazards/hazardous materials if it would do any of the following:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school
- Be located on a site that 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
- If located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, result in a safety hazard for people residing or working in the project area

- If within the vicinity of a private airstrip, result in a safety hazard for people residing or working in the project area
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan
- 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 where residences are intermixed with wildlands

Effects Not Found to Be Significant

Threshold	Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
Threshold	Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?
Threshold	Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?

Implementation of the C-CAP would not result in increased handling of hazardous materials. All businesses that handle or transport hazardous materials in the City are required to comply with the provisions of the Hazardous Materials Ordinance in the City's Municipal Code.

There would be no increased safety risks associated with the use of photovoltaic (PV)/ solar panel arrays. PV modules, depending on the type, can contain any number of chemicals, such as arsine, arsenic compounds, cadmium compounds, carbon tetrachloride, chloro-silanes, copper, diborane, germane, hydrogen, hydrogen fluoride, hydrogen selenide, hydrogen sulfide, indium compounds, lead, nitric acid, phosphine, phosphorous oxychloride, selenium compounds, sodium hydroxide, silane, silicon tetrafluoride, and tellurium compounds, with associated health risks ranging from skin or mucous membrane irritants to fire hazard to organ damage. However, health-related environmental issues are related to the generation of liquid and solid wastes during manufacturing, processing, and assembling of solar cells. The operation of PV systems does not produce any emissions of toxic or hazardous materials. Although tiny amounts of semiconductor materials (e.g., 5 g per m^2) are imbedded in the module, toxic compounds cannot cause any adverse health effects unless they enter the human body in harmful doses. The only pathways by which people might be exposed to PV compounds from a finished module are by accidentally ingesting flakes or dust particles, or inhaling dust and fumes. The thin layers of a PV module are stable and solid and are encapsulated between thick layers of glass. Unless the module is purposely ground to a fine dust, dust particles cannot be generated. The vapor pressure of PV components at ambient conditions is zero. Therefore, it is impossible for any vapors or dust to be generated when using PV modules. The flame temperatures in typical U.S. residential fires are not high enough to vaporize the chemical components inside PV modules, which would be encapsulated within the molten glass. Preliminary studies at Brookhaven National Laboratory and at the GSF Institute of Chemical Ecology in Germany (Fthenakis and Zweibel n.d.) showed that chemical releases are unlikely to occur during residential fires or during accidental breakage. In any case, the fire itself and other sources of emissions

within the burning structure are expected to pose an incomparably greater hazard than any potential chemical emissions from PV systems. The content of lead in solder in many of today's modules creates concerns about the disposal of modules at the end of their useful life. However, federal, state, and local regulations pertaining to the disposal of hazardous materials would ensure that no increased risk to the public or the environment would result from disposal of PV modules (Fthenakis n.d.).

Energy-efficient retrofits could result in some exposure risk from hazardous materials such as lead-based paint or asbestos. However, various regulations and guidelines pertaining to abatement of, and protection from, exposure to asbestos and lead have been adopted for demolition activities. These requirements include: SCAQMD Rules and Regulations pertaining to asbestos abatement (including Rule 1403), Construction Safety Orders 1529 (pertaining to asbestos) and 1532.1 (pertaining to lead) from Title 8 of the California Code of Regulations, Part 61, Subpart M of the Code of Federal Regulations (pertaining to asbestos), and lead exposure guidelines provided by the U.S. Department of Housing and Urban Development (HUD). In California, asbestos and lead abatement must be performed and monitored by contractors with appropriate certifications from the state Department of Health Services. In addition, the California Occupational Safety and Health Administration (Cal/OSHA) has regulations concerning the use of hazardous materials, including requirements for safety training, availability of safety equipment, hazardous materials exposure warnings, and emergency action and fire prevention plan preparation. Cal/OSHA enforces the hazard communication program regulations, which include provisions for identifying and labeling hazardous materials, describing the hazards of chemicals, and documenting employee-training programs. All demolition that could result in the release of lead and/or asbestos must be conducted according to Cal/OSHA standards. Compliance with these regulations would ensure that construction workers and the general public would not be exposed to any unusual or excessive risks related to hazardous materials during construction activities. The proposed project would not result in exposure to risks from oil and gas wells greater than that previously identified in the General Plan Final EIR (Impact 4.11-4, pages 4.11-5 through 4.11-6). Compliance with the City's Hazardous Materials Ordinance, Hazardous Material Area Plan, Uniform Fire Code, and implementation of General Plan Policies 11.3.1 through 11.3.5 would minimize the risk of hazardous materials exposure to the public. As the impacts associated with hazards and hazardous waste would be reduced to a less-than-significant level from compliance with existing federal, state, and local regulations, and implementation of General Plan policies, the impact would be less than significant. No further analysis is required.

Threshold	Would the project 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

There are several sites identified within the City of Corona and its SOI that are on hazardous materials lists, as identified in Section 4.11 (Hazards and Hazardous Materials) of the General Plan Final EIR. These sites represent potential health hazards and have experienced contamination from the release of hazardous substances into the soil. If any development is proposed on these sites, remediation and clean-up to the appropriate standard would be required under the supervision of the Division of Toxic Substances Control. It is also possible that underground storage tanks (USTs) exist in various areas of the City, where construction activities could disturb contaminated soil or groundwater. Potential risks from USTs would be minimized by compliance with Riverside County Standards as enforced and monitored

by the Department of Environmental Health, as noted on page 4.11-5 of the General Plan Final EIR. If any groundwater contamination is encountered, remediation activities would be required by the Santa Ana Regional Water Quality Control Board prior to commencement of any new construction activities. Compliance with applicable federal, state, and local regulations for the handling of hazardous materials would apply and reduce the impacts associated with exposure to hazardous materials on these sites to less than significant. No further analysis is required.

Threshold	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?

There are no private airstrips in the City of Corona or SOI. There would be no impact. No further evaluation is required.

Threshold	Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The Corona Fire Department and Office of Emergency Services published the City of Corona Emergency Operations Plan (EOP) in 1999. This plan addresses the planned response to various emergency situations, including natural or human-caused disasters and technological incidents in the City. This plan is reviewed annually by the Corona Fire Department's Office of Disaster Preparedness to coordinate and update necessary revisions (General Plan Final EIR, 2004, p. 4.11-7). General Plan Policies 11.10.3 and 11.10.4 ensure that the EOP is constantly updated. General Plan Policy 11.10.5 ensures mitigation of traffic congestion at key streets and intersections in the City that would impede emergency response times. Energy retrofits and passive energy facilities such as photovoltaic arrays would not affect street congestion or interfere with the adopted emergency response plan. There would be no impact. No further analysis is required.

Threshold	Would the project 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 where residences are intermixed with wildlands?

There are identified Moderate to Very High Fire Hazard Zones as defined by the California State Fire Marshal that occur within the City of Corona and the SOI, primarily in the foothills and mountains along the western boundary of the City. California Code of Regulations (CCR), Title 24, Part 2, known as the 2010 California Building Code (CBC), regulates development in these mapped areas. The proposed project could result in energy retrofits or passive energy-generating structures within the City limits in areas that would not be exposed to increased risk from wildland fires. Compliance with the regulations of Title 24, Part 2 of the CBC would ensure that any risk from development adjacent to wildland areas would be minimized and within acceptable parameters. The impact would not be significant and no further analysis is required.

Project Impacts and Mitigation

Threshold	Would the project, if located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, result in a safety hazard for people residing or working in the project area?

Impact 4.4-1 **Implementation of the proposed project would not, if located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, result in a safety hazard for people residing or working in the project area. This would be a *less-than-significant* impact.**

Implementation of the C-CAP could result in construction of energy-generating facilities such as wind turbines and photovoltaic/solar arrays that would primarily be installed on rooftops of new or existing buildings. These energy-efficient or energy-generating rooftop structures could introduce substantial new sources of glare and could also increase overall height of buildings.

The Corona Municipal Airport is located approximately 2.22 miles northwest of Downtown Corona. Building heights could be increased in the flight paths of the Corona Municipal Airport. The Riverside County ALUC has adopted a CLUP that implements the FAA Federal Aviation Regulation (FAR) Part 77 criteria as the basis for height limitations (Riverside County ALUC 1993, 3-11). In addition, CFR Title 14 Part 77.13 requires that any applicant who intends to perform any construction or alterations to structures that exceed 200 feet in height above ground level must obtain project approval from the FAA. Height restrictions set forth by the FAA FAR Part 77 requires all development exceeding 200 feet in height to submit Form 7460-1 (Notice of Proposed Construction or Alteration) to the FAA for approval. Structures that exceed the 100:1 slope (100 feet in distance from the runway to 1 foot in height) is also required to submit a Form 7460-1 to obtain project approval from the FAA. Therefore, since height would be restricted according to these regulations, implementation of the proposed project would not increase safety hazards for aircraft on approach or take-off from the airport, or for people residing or working in the project area.

Implementation of the proposed project could pose an aviation safety hazard from the glare that could result from the energy-efficient or energy-generating rooftop structures, particularly if large solar arrays are installed. The flight path for aircraft and helicopter arrivals to the Corona Municipal Airport is from the northeast and towards the southwest for departures. The CLUP designates safety zones around the airport prohibiting certain types of land uses within the airport safety areas. These safety zones define the areas within which the Riverside County ALUC guidelines are applied and address safety compatibility planning issues and alternatives. Any projects to be constructed within the ALUP area would be required to be reviewed and approved by the Riverside County ALUC. If any project under the C-CAP is determined to present a safety hazard from increased glare, appropriate mitigation measures would be required to reduce this impact to less than significant on a project level and reduce or avoid the safety hazard to the satisfaction of the Riverside County ALUC. Therefore, there would be no increases safety risk to aircraft or to persons residing or working in the project area as a result of implementation of the C-CAP.

Adherence to all local, regional, state, and federal regulations and compliance with the guidelines of the ALUP would ensure that impacts associated with potential aviation hazards remain ***less than significant***.

4.4.4 Cumulative Impacts

Threshold	Would the project, if located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, result in a safety hazard for people residing or working in the project area?

Corona Municipal Airport is located approximately 2.22 miles northwest of Downtown Corona. Future development in the City of Corona could be located within the ALUP area. Development pursuant to the C-CAP and any other related projects within the ALUP area would be required to submit Form 7460-1 if buildings or appurtenant structures that exceed 200 feet in height and/or exceed the 100:1 slope (100 feet in distance to 1 foot in height) from the runways at Corona Municipal Airport are proposed to be constructed. In addition, each project pursuant to the C-CAP and future projects, whether within the ALUP area or not, would be required to undergo individual design and environmental review to develop appropriate mitigation measures particular to each project site to reduce glare. The Riverside County ALUC would review all projects proposed within the ALUP area. Adherence to all local, state, and federal regulations would ensure that the proposed project and other related projects do not result in a significant public aviation hazard. Therefore, the contribution of the proposed project and other area projects to aviation safety hazards would not be cumulatively considerable, and would, therefore, be ***less than significant***.

4.4.5 References

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Fthenakis, Vasilis. n.d. Cadmium Facts. National PV EHS Assistance Program, Brookhaven National Laboratory, Building 830, Upton, 11973 and Ken Zweibel, National Renewable Energy Laboratory, 1617 Cole Boulevard, Golden, CO 80401, http://www.nrel.gov/pv/cdte/cadmium_facts.html (accessed 2/18/2011).

Fthenakis, V., and K. Zweibel. n.d. *CdTc PV: Real and Perceived EHS Risks*.

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4.5 LAND USE/PLANNING

This section of the EIR analyzes the potential environmental effects on land use/planning from implementation of the C-CAP. No comment letters addressing land use/planning were received in response to the notice of preparation (NOP) circulated for the C-CAP.

Data for this section were taken from the City of Corona General Plan and associated Final Environmental Impact Report, the North Main Street District and Downtown Revitalization Specific Plans, the County of Riverside General Plan, and the Riverside County Multi-Species Habitat Conservation Plan. Full reference-list entries for all cited materials are provided in Section 4.5.5 (References).

4.5.1 Environmental Setting

The City of Corona is located in the northwestern portion of Riverside County, near the convergence of Los Angeles, Orange, and Riverside Counties, approximately 45 miles southeast of the City of Los Angeles as shown in Figure 3-1 (City of Corona Regional Location) in Chapter 3, Project Description. Two geographical areas are considered to be within the boundaries of the City of Corona General Plan Planning Area: the City's corporate limits, and its Sphere of Influence (SOI), depicted in Figure 3-2 (City of Corona Sphere of Influence). The SOI was defined by the City and the Riverside County Local Agency Formation Commission (LAFCO), and represents those areas likely to be served by and potentially annexed to the City. SCAG has projected an approximate population of 155,819 in 2020 for the City only. The City currently includes 39.36 square miles, plus 34.3 square miles in Riverside County designated as being within the City's SOI. The SOI includes three geographically distinct areas including the West, East, and South Spheres. The West Sphere encompasses two geographic areas: Coronita and the Foothill area. The East Sphere includes the areas of Home Gardens, Eagle Valley East, and El Cerrito. Temescal Canyon makes up the South Sphere.

The City of Corona is built around a historic core defined by a 1-mile-diameter circular street, Grand Boulevard. The area is bisected by primary arterials, Main Street and Sixth Street, and overlain by a north/south–east/west grid street system. The core and arterials form the spine along which land uses have developed over the years. Commercial uses are concentrated in the core and along these arterial corridors, with a mix of low and higher density housing. Industrial uses are developed north of the core and perpendicular to the Main Street spine paralleling SR-91 and Temescal Creek, with mining activities located in the southeast foothills. Extending outward from these uses is a diversity of residential neighborhoods that contain a mix of housing types, schools, parks, and local-serving commercial uses. Highway and community oriented commercial centers are developed at major interchanges of the SR-91 and I-15 freeway corridors including Sixth Street, Lincoln Avenue, McKinley Street, Magnolia Avenue, Cajalco Road, and Ontario Avenue.

The City of Corona's recent history has been as one of the fastest growing cities in the United States during the 1980s and 1990s. Currently, most of the land most suitable for development has been exhausted. Additional growth will occur as re-use of existing underutilized parcels and obsolete developments. The trend in this direction has been initiated through the City's efforts to foster

revitalization of its Downtown and North Main Street. In addition, increasing use of Metrolink for regional transportation has provided opportunities for higher densities of development in proximity to its stations.

Corona's main contribution to GHGs is carbon dioxide. The City will directly generate emissions of CO_2 primarily in the form of vehicle exhaust and consumption of natural gas for heating. Corona will also generate methane (CH_4) and nitrous oxide (N_2O) emissions. Methane is directly generated from natural gas and petroleum systems and wastewater treatment while nitrous oxide results predominantly from motor vehicle use.

4.5.2 Regulatory Framework

Federal

There are no federal regulations pertaining to land use.

State

California Air Resources Board

The California Air Resources Board, a part of the California EPA (Cal/EPA) is responsible for the coordination and administration of both federal and state air pollution control programs within California. In this capacity, California ARB conducts research, sets state ambient air quality standards (California Ambient Air Quality Standards [CAAQS]), compiles emission inventories, develops suggested control measures, and provides oversight of local programs. California ARB establishes emissions standards for motor vehicles sold in California, consumer products (such as hairspray, aerosol paints, and barbecue lighter fluid), and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions. California ARB has primary responsibility for the development of California's State Implementation Plan (SIP), for which it works closely with the federal government and the local air districts.

Executive Order S-3-05

California Governor Arnold Schwarzenegger announced on June 1, 2005, through Executive Order S-3-05, the following GHG emission reduction targets:

- By 2010, California shall reduce GHG emissions to 2000 levels
- By 2020, California shall reduce GHG emissions to 1990 levels
- By 2050, California shall reduce GHG emissions to 80 percent below 1990 levels

The first California Climate Action Team (CCAT) Report to the Governor in 2006 contained recommendations and strategies to help meet the targets in Executive Order S-3-05. In April 2010, the Draft California Action Team (CAT) Biennial Report expanded on the policy oriented 2006 assessment. The new information detailed in the CAT Assessment Report includes development of revised climate and sea-level projections using new information and tools that have become available in the last two years; and an evaluation of climate change within the context of broader social changes, such as land-use

changes and demographic shifts (Cal/EPA 2006). The action items in the report focus on the preparation of the Climate Change Adaptation Strategy, required by Executive Order S-13-08, described below.

Assembly Bill 32, the California Global Warming Solutions Act of 2006

In 2006, the California State Legislature adopted AB 32, the California Global Warming Solutions Act of 2006. AB 32 focuses on reducing GHG in California. GHGs as defined under AB 32 include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. AB 32 required California ARB to adopt rules and regulations that would achieve greenhouse gas emissions equivalent to 1990 statewide levels by 2020. On or before June 30, 2007, California ARB was required to publish a list of discrete early action GHG emission reduction measures that would be implemented by 2010. The law further required that such measures achieve the maximum technologically feasible and cost effective reductions in GHGs from sources or categories of sources to achieve the statewide greenhouse gas emissions limit for 2020.

California ARB published its final report for Proposed Early Actions to Mitigate Climate Change in California in October 2007. This report described recommendations for discrete early action measures to reduce GHG emissions. The measures included are part of California's strategy for achieving GHG reductions under AB 32. Three new regulations are proposed to meet the definition of "discrete early action greenhouse gas reduction measures," which include the following: a low carbon fuel standard; reduction of HFC-134a emissions from non-professional servicing of motor vehicle air conditioning systems; and improved landfill methane capture (California ARB 2007b). California ARB estimates that by 2020, the reductions from those three measures would be approximately 13-26 million metric tons (MMT) CO2e.

Under AB 32, California ARB has the primary responsibility for reducing GHG emissions. California ARB has published a staff report titled California 1990 GHG Emissions Level and 2020 Emissions Limit (California ARB 2007a) that determined the statewide levels of GHG emissions in 1990 to be 427 MMT CO_2e. Additionally, in December 2008, California ARB adopted the Climate Change Scoping Plan, which outlines the state's strategy to achieve the 2020 GHG limit. This Scoping Plan proposes a comprehensive set of actions designed to reduce overall greenhouse gas emissions in California, improve the environment, reduce dependence on oil, diversify energy sources, save energy, create new jobs, and enhance public health. The plan emphasizes a cap-and-trade program, but also includes the discrete early actions.

Senate Bill 97 (SB 97)

SB 97, enacted in 2007, amends the CEQA statute to clearly establish that GHG emissions and the effects of GHG emissions are appropriate subjects for CEQA analysis. It directed the California Office of Planning and Research (OPR) to develop draft CEQA Guidelines "for the mitigation of GHG emissions or the effects of GHG emissions" and directed the Resources Agency to certify and adopt the CEQA Guidelines.

On April 13, 2009, OPR submitted the proposed amendments to the Secretary for Natural Resources. The Natural Resources Agency conducted formal rulemaking in 2009, certified, and adopted the

amendments in December 2009. The California Office of Administrative Law codified into law the amendments in March 2010. The amendments became effective in June 2010 and provide regulatory guidance with respect to the analysis and mitigation of the potential effects of GHG emissions.

CEQA Guidelines Section 15183.5, Tiering and Streamlining the Analysis of GHG Emissions, was added as part of the CEQA Guideline amendments and describes the criteria needed in a Climate Action Plan that would allow for the tiering and streamlining of CEQA analysis for subsequent development projects. The following quote is from the CEQA Guideline amendments:

> Section 15183.5. Tiering and Streamlining the Analysis of Greenhouse Gas Emissions.
>
> (a) Lead agencies may analyze and mitigate the significant effects of greenhouse gas emissions at a programmatic level, such as in a general plan, a long range development plan, or a separate plan to reduce greenhouse gas emissions. Later project-specific environmental documents may tier from and/or incorporate by reference that existing programmatic review. Project-specific environmental documents may rely on an EIR containing a programmatic analysis of greenhouse gas emissions as provided in section 15152 (tiering), 15167 (staged EIRs) 15168 (program EIRs), 15175–15179.5 (Master EIRs), 15182 (EIRs Prepared for Specific Plans), and 15183 (EIRs Prepared for General Plans, Community Plans, or Zoning).
>
> (b) Plans for the Reduction of Greenhouse Gas Emissions. Public agencies may choose to analyze and mitigate significant greenhouse gas emissions in a plan for the reduction of greenhouse gas emissions or similar document. A plan to reduce greenhouse gas emissions may be used in a cumulative impacts analysis as set forth below. Pursuant to sections 15064(h)(3) and 15130(d), a lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project complies with the requirements in a previously adopted plan or mitigation program under specified circumstances.
>
> (1) Plan Elements. A plan for the reduction of greenhouse gas emissions should:
>
> (A) Quantify greenhouse gas emissions, both existing and projected over a specified time period, resulting from activities within a defined geographic area;
>
> (B) Establish a level, based on substantial evidence, below which the contribution to greenhouse gas emissions from activities covered by the plan would not be cumulatively considerable;
>
> (C) Identify and analyze the greenhouse gas emissions resulting from specific actions or categories of actions anticipated within the geographic area;
>
> (D) Specify measures or a group of measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level;
>
> (E) Establish a mechanism to monitor the plan's progress toward achieving the level and to require amendment if the plan is not achieving specified levels;
>
> (F) Be adopted in a public process following environmental review.
>
> (2) Use with Later Activities. A plan for the reduction of greenhouse gas emissions, once adopted following certification of an EIR or adoption of an environmental document, may be used in the cumulative impacts analysis of later projects. An environmental document that relies on a greenhouse gas reduction plan for a cumulative impacts analysis must identify those requirements specified in the plan that apply to the project, and, if those requirements are not otherwise binding and enforceable, incorporate those requirements as mitigation measures applicable to the project. If there is substantial evidence that the effects of a particular project may be cumulatively considerable notwithstanding the project's compliance with the specified requirements in the plan for the reduction of greenhouse gas emissions, an EIR must be prepared for the project.

One of the goals of the C-CAP is to allow programmatic level review and mitigation of GHG emissions that allows streamlining of CEQA review for subsequent development projects. To accomplish this, the C-CAP framework is designed to fulfill the requirements identified in CEQA Guidelines Section 15183.5, above.

Executive Order S-13-08

On November 14, 2008, Governor Schwarzenegger issued Executive Order S-13-08, the Climate Adaptation and Sea Level Rise Planning Directive, which provides clear direction for how the State should plan for future climate impacts. Executive Order S-13-08 calls for the implementation of four key actions to reduce the vulnerability of California to climate change:

- Initiate California's first statewide Climate Change Adaptation Strategy (CAS) that will assess the state's expected climate change impacts, identify where California is most vulnerable, and recommend climate adaptation policies
- Request that the National Academy of Sciences establish an expert panel to report on sea level rise impacts in California in order to inform state planning and development efforts
- Issue interim guidance to state agencies for how to plan for sea level rise in designated coastal and floodplain areas for new and existing projects
- Initiate studies on critical infrastructure and land-use policies vulnerable to sea level rise

The 2009 CAS report summarizes the best known science on climate change impacts in the state to assess vulnerability, and outlines possible solutions that can be implemented within and across state agencies to promote resiliency. This is the first step in an ongoing, evolving process to reduce California's vulnerability to climate impacts (CNRA 2009).

California Code of Regulations (CCR) Title 24, Part 6

CCR Title 24, Part 6 (California's Energy Efficiency Standards for Residential and Nonresidential Buildings) (Title 24) were first established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. Although it was not originally intended to reduce GHG emissions, electricity production by fossil fuels results in GHG emissions and energy efficient buildings require less electricity. Therefore, increased energy efficiency results in decreased GHG emissions.

The Energy Commission adopted 2008 Standards on April 23, 2008, and the Building Standards Commission approved them for publication on September 11, 2008. These updates became effective on August 1, 2009. The Energy Commission adopted the 2008 changes to the Building Energy Efficiency Standards for several reasons:

- To provide California with an adequate, reasonably priced, and environmentally sound supply of energy
- To respond to AB 32, the Global Warming Solutions Act of 2006, which mandates that California must reduce its GHG emissions to 1990 levels by 2020
- To pursue California energy policy, which states that energy efficiency is the resource of first choice for meeting California's energy needs

- To act on the findings of California's Integrated Energy Policy Report (IEPR) that concludes that the Standards are the most cost effective means to achieve energy efficiency, expects the Building Energy Efficiency Standards to continue to be upgraded over time to reduce electricity and peak demand, and recognizes the role of the Standards in reducing energy related to meeting California's water needs and in reducing GHG emissions
- To meet the West Coast Governors' Global Warming Initiative commitment to include aggressive energy efficiency measures into updates of state building codes
- To meet the Executive Order in the Green Building Initiative to improve the energy efficiency of nonresidential buildings through aggressive standards

Senate Bill 375

Senate Bill 375 (SB 375), which establishes mechanisms for the development of regional targets for reducing passenger vehicle greenhouse gas emissions, was adopted by the State on September 30, 2008. On September 23, 2010, California ARB adopted the vehicular greenhouse gas emissions reduction targets that had been developed in consultation with the metropolitan planning organizations (MPOs); the targets require a 7 to 8 percent reduction by 2020 and between 13 to 16 percent reduction by 2035 for each MPO. SB 375 recognizes the importance of achieving significant greenhouse gas reductions by working with cities and counties to change land use patterns and improve transportation alternatives. Through the SB 375 process, MPOs will work with local jurisdictions in the development of sustainable communities strategies (SCS) designed to integrate development patterns and the transportation network in a way that reduces greenhouse gas emissions while meeting housing needs and other regional planning objectives. MPOs will prepare their first SCS according to their respective regional transportation plan (RTP) update schedule; to date, no region has adopted an SCS. The first of the RTP updates with SCS strategies are expected in 2012.

Regional

Southern California Association of Governments (SCAG)

SCAG is the designated Metropolitan Planning Organization for six Southern California counties (Los Angeles, Ventura, Orange, San Bernardino, Riverside, and Imperial), and is federally mandated to develop plans for transportation, growth management, hazardous waste management, and air quality. The Southern California Association of Governments (SCAG) regional plans cover Riverside County, which includes the City and SOI, and five other counties within Southern California.

Regional Comprehensive Plan

The Regional Comprehensive Plan (RCP) is a problem-solving guidance document that responds to SCAG's Regional Council directive in the 2002 Strategic Plan to develop a holistic, strategic plan for defining and solving the region's interrelated housing, traffic, water, air quality, and other regional challenges. The RCP is a voluntary framework that links broad principles to an action plan that moves the region towards balanced goals. The RCP's guiding principles include:

- Improve mobility for all residents. Improve the efficiency of the transportation system by strategically adding new travel choices to enhance system connectivity in concert with land use decisions and environmental objectives.

- Foster livability in all communities.
- Foster safe, healthy, walkable communities with diverse services, strong civic participation, affordable housing, and equal distribution of environmental benefits.
- Enable prosperity for all people. Promote economic vitality and new economies by providing housing, education, and job training opportunities for all people.
- Promote sustainability for future generations.
- Promote a region where quality of life and economic prosperity for future generations are supported by the sustainable use of natural resources.

Further, the RCP seeks to successfully integrate land and transportation planning and achieve land use and housing sustainability by implementing Compass Blueprint and 2 percent Strategy:

- Focusing growth in existing and emerging centers and along major transportation corridors
- Creating significant areas of mixed-use development and walkable, "people-scaled" communities
- Providing new housing opportunities, with building types and locations that respond to the region's changing demographics
- Targeting growth in housing, employment, and commercial development within walking distance of existing and planned transit stations
- Injecting new life into under-used areas by creating vibrant new business districts, redeveloping old buildings and building new businesses and housing on vacant lots
- Preserving existing, stable, single-family neighborhoods
- Protecting important open space, environmentally sensitive areas and agricultural lands from development
- Reducing emissions of criteria pollutants to attain federal air quality standards by prescribed dates and state ambient air quality standards as soon as practicable
- Reversing current trends in greenhouse gas emissions to support sustainability goals for energy, water supply, agriculture, and other resource areas
- Minimizing land uses that increase the risk of adverse air pollution-related health impacts from exposure to toxic air contaminants, particulates (PM_{10}, $PM_{2.5}$, ultrafine), and carbon monoxide

Regional Transportation Plan

On May 8, 2008, the Regional Council of SCAG adopted the 2008 Regional Transportation Plan (RTP): Making the Connections. The 2008 RTP strives to provide a regional investment framework to address the region's transportation and related challenges, and looks to strategies that preserve and enhance the existing transportation system and integrate land use into transportation planning. The RTP also provides the framework for aggregating sub-regional and local efforts to institute measures aimed at mitigating the adverse air pollution impacts from increased transportation activities. These measures are known as transportation control measures (TCMs). The RTP links the goal of sustaining mobility with the goals of fostering economic development, enhancing the environment, reducing energy consumption, promoting transportation-friendly development patterns, and encouraging fair and equitable access to residents affected by socio-economic, geographic, and commercial limitations. The Regional Transportation Implementation Plan (RTIP) is the vehicle used to implement the RTP. The RTIP also provides the schedule and framework for the timely implementation of the Region's TCM strategies.

SCAG is currently in the process of developing the 2012 RTP and SCS for their jurisdiction aimed at attaining the reduction targets of an 8 percent per capita reduction in GHG emissions from passenger vehicles by the year 2020 and a 13 percent reduction by 2035. SCAG is currently developing the SCS and expecting to adopt the SCS, RTP, and the associated programmatic EIR in April 2012. Many of the transportation-related reduction measures included in this CAP will coordinate with efforts in SCAG's SCS.

SCAG Compass Growth Visioning

The Compass Blueprint Growth Vision effort by SCAG is a response, supported by a regional consensus, to the land use and transportation challenges facing Southern California now and in the coming years. The Growth Vision is driven by four key principles:

- Mobility—Getting where we want to go
- Livability—Creating positive communities
- Prosperity—Long-term health for the region
- Sustainability—Preserving natural surroundings

The fundamental goal of the Compass Growth Visioning effort is to make the SCAG region a better place to live, work, and play for all residents regardless of race, ethnicity, or income class. Thus, decisions regarding growth, transportation, land use and economic development should be made to promote and sustain for future generations the region's mobility, livability and prosperity.

South Coast Air Quality Management District (SCAQMD)

The City of Corona is also located within the South Coast Air Basin (Basin) and is, therefore, within the jurisdiction of the SCAQMD. The 2007 Air Quality Management Plan (AQMP) is a regional and multi-agency effort between the SCAQMD Governing Board, California ARB, Southern California Association of Governments, and the USEPA, and includes control strategies, attainment demonstration, reasonable further progress, and maintenance plans. The AQMP is periodically updated to incorporate more recent scientific data, primarily in the form of updated emissions inventories, ambient measurements, new meteorological episodes, and new air quality modeling tools. The AQMP provides guidance to local government about how to incorporate these strategies into land use plans and decisions about development.

SCAG is responsible for generating the socio-economic profiles and growth forecasts on which land use, transportation, air quality management and implementation plans are based. The growth forecasts provide the socioeconomic data used to estimate vehicle trips and vehicle miles traveled (VMT). Emission estimates can then be forecast by SCAQMD based on these projected estimates. Reductions in emissions due to changes in the socio-economic profile of the region are an important way of taking account of changes in land use patterns. For example, changes in jobs/housing balance induced by changes in urban form and transit-oriented development induce changes in VMT by more closely linking housing to jobs. Thus, socio-economic growth forecasts are a key component to guide the Basin toward attainment of the National Ambient Air Quality Standards (NAAQS).

The current AQMP establishes a comprehensive regional air pollution control program leading to the attainment of state and federal air quality standards in the Basin. In addition to setting minimum acceptable exposure standards for specified pollutants, the AQMP incorporates SCAG's growth management strategies that can be used to reduce vehicle trips and VMT, and hence air pollution. These include, for example, co-location of employment and housing, and mixed-use land patterns that allow the integration of residential and non-residential uses. The TCMs in the 2007 AQMP are derived from the first two years of the 2006 RTIP.

Local

Riverside County Integrated Project (RCIP)

The RCIP is comprised of the Community Environmental Transportation Corridor Acceptability Process (CETAP), a Multiple Species Habitat Conservation Plan (MSHCP) and the Riverside County General Plan update. While actions of the City of Corona are governed by the City of Corona General Plan, and not the Riverside County General Plan, policies from the County General Plan are relevant to the extent that implementation of the C-CAP has regional implications for improving air quality and reducing GHG emissions.

The CETAP incorporates three levels of effort: identification of transportation corridors, development of the General Plan Circulation Element (Chapter 4), and exploration of options for transit system development in the County. Further, guidance for the implementation of the four CETAP corridors and the transit system concepts identified, is incorporated into the General Plan's polices and Implementation Plan. As stated in the Riverside County Vision and Land Use Element, the County is moving away from a growth pattern of random sprawl toward a pattern of concentrated growth and increased job creation. Linking areas of concentrated growth is an integrated system of mobility that includes vehicular, pedestrian, transit, equestrian, bicycle, and air transportation options. The intent of new growth patterns and the new mobility systems is to accommodate the transportation demands created by future growth and to provide mobility options that help reduce the need to utilize the automobile. The circulation system is designed to fit into the fabric of the land use patterns, including the open space systems.

The Riverside County General Plan maps the County's land use designations for the unincorporated areas; develops a streamlined, consistent set of land use categories for the County; and updates and restructures the existing Community Plans and translates them into a new set of 19 Area Plans covering most of the western County area, the Coachella Valley, Desert Center, and the Palo Verde Valley. The General Plan outlines policies, standards, and programs to guide day-to-day decisions concerning Riverside County's future. Updating and revising the County's General Plan also serves several other important purposes, providing clarity and stability in community development policy; establishing a comprehensive and sound database for further implementation, project evaluation, administration, and monitoring; and providing a basis for collaborative planning initiatives by cities, councils of government, the County and other governmental agencies. The General Plan is grounded in the RCIP Vision, sets the direction for the County's land use and development in strategic locations, as well as the development of its economic base, the framework of its transportation system, and the preservation of the extremely

valuable natural and cultural resources it contains. The Riverside County General Plan serves as a "guidebook" containing direction that will enable achievement of its vision statement.

Relevant policies in the County General Plan include the following. As the C-CAP does not provide for specific development, and simply establishes programs and measures to reduce GHGs, only those policies that relate to such a program are included.

Policy AQ 1.5 Establish and implement air quality, land use and circulation measures that improve not only the County's environment but the entire region's.

Policy AQ 1.7 Support legislation which promotes cleaner industry, clean fuel vehicles and more efficient burning engines and fuels.

Policy AQ 3.1 Allow the market place, as much as possible, to determine the most economical approach to relieve congestion and cut emissions.

Policy AQ 3.2 Seek new cooperative relationships between employers and employees to reduce vehicle miles traveled.

Policy AQ 3.3 Encourage large employers and commercial/industrial complexes to create Transportation Management Associations.

Policy AQ 3.4 Encourage employee rideshare and transit incentives for employers with more than 25 employees at a single location.

Policy AQ 4.1 Encourage the use of building materials/methods which reduce emissions.

Policy AQ 4.2 Encourage the use of efficient heating equipment and other appliances, such as water heaters, swimming pool heaters, cooking equipment, refrigerators, furnaces and boiler units.

Policy AQ 4.3 Encourage centrally heated facilities to utilize automated time clocks or occupant sensors to control heating.

Policy AQ 4.4 Require residential building construction to comply with energy use guidelines detailed in Title 24 of the California Administrative Code.

Policy AQ 4.5 Require stationary pollution sources to minimize the release of toxic pollutants through:

- Design features;
- Operating procedures;
- Preventive maintenance;
- Operator training; and
- Emergency response planning

Policy AQ 5.2 Adopt incentives and/or regulations to enact energy conservation requirements for private and public developments.

Policy AQ 5.4 Encourage the incorporation of energy-efficient design elements, including appropriate site orientation and the use of shade and windbreak trees to reduce fuel consumption for heating and cooling.

Policy AQ 8.4 Support new mixed-use land use patterns and community centers which encourage community self-sufficiency and containment, and discourage automobile dependency.

Policy AQ 8.6 Encourage employment centers in close proximity to residential uses.

Policy AQ 8.7 Implement zoning code provisions which encourage community centers, telecommuting and home-based businesses.

Policy AQ 8.8 Promote land use patterns which reduce the number and length of motor vehicle trips.

Policy AQ 8.9 Promote land use patterns that promote alternative modes of travel.

Policy AQ 9.2 Attain performance goals and/or VMT reductions which are consistent with SCAG's Growth Management Plan.

Policy C 1.1 Design the transportation system to respond to concentrations of population and employment activities, as designated by the Land Use Element and in accordance with the Circulation Plan, Figure C-1.

Policy C 1.2 Support development of a variety of transportation options for major employment and activity centers including direct access to transit routes, primary highways, bikeways, park-n-ride facilities, and pedestrian facilities.

Policy C 1.3 Support the development of transit connections that link the community centers located throughout the County and as identified in the Land Use Element and in the individual area plans.

Policy C 1.4 Utilize existing infrastructure and utilities to the maximum extent practicable and provide for the logical, timely, and economically efficient extension of infrastructure and services.

Policy C 1.5 Evaluate the planned circulation system as needed to enhance the highway network to respond to anticipated growth and mobility needs.

Policy C 1.6 Cooperate with local, regional, state, and federal agencies to establish an efficient circulation system.

Policy C 1.7 Encourage and support the development of projects that facilitate and enhance the use of alternative modes of transportation, including pedestrian-oriented retail and activity centers, dedicated bicycle lanes and paths, and mixed-use community centers.

Multi-Species Habitat Conservation Plan (MSHCP)

The MSHCP for Western Riverside County was adopted in July 2003 and is implemented through integration into the Riverside County General Plan Multipurpose Open Space element, and at the Area Plan level. The overall goal of the MSHCP is based on the RCIP vision statement and supporting policy directives. The MSHCP enhances and maintains biological diversity and ecosystem processes while allowing future economic growth. Preserving a quality of life characterized by well-managed and well-planned growth integrated with an associated open-space system is a component of the RCIP vision. The MSHCP Conservation Area is in excess of 500,000 acres and focuses on conservation of 146 species.

The MSHCP Conservation Area includes approximately 347,000 acres on existing Public/Quasi-Public Lands and approximately 153,000 acres of Additional Reserve Land.

City of Corona General Plan

The Corona General Plan provides a framework for the City's physical, economic, social, and environmental development and addressing all geographic areas in the City, as well as those areas that surround the City that may be served by the City in the future. California law requires that other local government programs be consistent with the general plan. The City's zoning and subdivision regulations, capital improvement programs, specific plans, development agreements, housing programs, redevelopment programs, and economic development activities further the achievement of general plan goals. The General Plan provides guidance on how other City programs and activities should be changed or strengthened to best implement its policies. Relevant General Plan policies include the following. As the C-CAP does not provide for specific development, and simply establishes programs and measures to reduce GHGs, the presented policies are not a complete listing of all policies contained in the General Plan; only those policies that relate to such a program are included. Specific development projects would be required to be consistent with all applicable policies and implementation programs of the General Plan on a project level.

Policy 1.1.2 Emphasize the development of uses that sustain Corona as a cohesive, distinct, and self-sustaining community and minimize the need for Corona's residents to travel to surrounding communities for retail goods, services, and employment.

Policy 1.2.5 Prioritize and reinforce the revitalization of Downtown and North Main Street as major activity centers of Corona. Locate the highest densities of uses adjacent to these areas to maximize their customer base and access to transportation and public services.

Policy 1.2.7 Promote the re-use of economically obsolete and inefficient strip commercial corridors by consolidating retail and supporting uses into distinct activity nodes and redeveloping intervening areas for mixed use projects that integrate commercial and residential uses or single use residential projects.

Policy 1.2.11 Locate moderate and high-density housing at strategic locations that maximize access to transportation and services.

Policy 1.4.1 Accommodate future growth and development in accordance with Figures 4 and 5. These depicts vacant lands on the City's periphery and within the exiting urbanized area for which development may be considered and opportunities for re-use and intensified development in the Downtown, North Main Street, the Sixth Street corridor, and older industrial areas along the Magnolia Avenue corridor.

Policy 1.4.4 Pro-actively promote the adaptive re-use and infill of economically underutilized, obsolete, and dilapidated commercial and industrial sites within existing urbanized areas, in consideration of the uses, scale, and character of adjoining uses.

Policy 1.5.5 Require adherence to the design and development guidelines as subsequently stipulated by this Plan's policies for each land use district, as well as implementing ordinances and Specific Plans.

Policy 1.5.17 Require that new residential, commercial, office, and industrial development be designed to minimize consumption of and sustain scarce environmental resources through such methods as the following, as applicable to the type and scale of development:

- **Site design**—concentration and intermixing of development to minimize vehicular trips and promote walking, building orientation in consideration of solar access and heat gain and loss, and other
- **Landscaping**—drought-tolerant species, use of recycled water for irrigation, and other purposes
- **Capture of rainwater** and re-use on site
- **Building design and construction materials**—energy-and water efficient fixtures, recycled building materials, insulation and wall thickness, permeable paving surfaces, and comparable techniques

Policy 1.11.9 Require that transit supporting facilities, such as bus turnouts, passenger drop-offs, and shelters, be incorporated in new commercial centers or when subject to major renovation and improvement, where appropriate to support local, citywide, and regional transportation systems. The location and type of facility should be coordinated with local transit agencies.

Policy 1.11.15 Require that commercial projects abutting residential neighborhoods be designed and buildings located to prevent conflicts and assure an appropriate interface with adjoining housing in consideration of the following principles:

- Reduction of building heights and modulation of mass and volume in proximity to the housing
- Inclusion of landscape and attractively designed walls as buffers to mitigate noise impacts, provide privacy, and serve as a visual amenity between the commercial and residential uses
- Design of building elevations facing residential properties to assure privacy of adjoining housing
- Control of the location of commercial truck access, loading, parking, and comparable functions in proximity to adjoining housing
- Design of on-site and building lighting to prevent spillover and adverse illumination of adjoining residential properties
- Requirements for ongoing property maintenance and trash pick-up

Policy 4.1.1 Continue to implement the following historic resources management strategies:

- A local Corona Historic Register that includes significant "Landmark" properties, "Historic Districts," and "Historical Markers"
- A Corona Heritage Inventory that includes surveyed properties meeting all the criteria to be considered a local historic resource
- Procedures and criteria for determining the eligibility for listing properties on the Historic Register and Heritage Inventory
- Standards and regulations governing the identification, protection, restoration, maintenance, alteration, relocation, or removal of historic resources.

Policy 4.1.2 Expand existing surveys of historic resources to include areas of potential historic importance not previously surveyed, and develop an ongoing program for updating the surveys on a regular basis.

Policy 4.1.3 Continue to implement criteria and guidelines for the inclusion of historic resources, in addition to historic structures, for the Historic Register and Heritage Inventory, including but not limited to: sites, parks, landscape elements, streets, streetlights, signs, monuments, murals, and public art.

Policy 4.2.2 Continue to implement design guidelines for restoring historic and architecturally significant structures, including but not limited to, the Secretary of the Interior's Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic buildings.

Policy 4.2.4 Administer the state Historic Building Code to facilitate the restoration and rehabilitation of historic structures in a manner that is more appropriated to older structures than the standard building codes.

Policy 4.2.5 All modifications to historic properties shall be conducted in a manner that is consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings or the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings, and local guidelines and programs.

Policy 4.3.1 Compile and maintain an inventory of all known archeological and paleontological resources within the City and the Sphere of Influence, and identify areas of cultural and resource sensitivity for future study in conjunction with development proposals.

Policy 4.3.2 Incorporate specific measures to identify, protect, and preserve cultural resources in the planning, environmental review, and development process.

Policy 4.3.3 Archaeological resources found prior to or during construction shall be evaluated by a qualified archaeologist, and appropriate mitigation measures applied, pursuant to Section 21083.2 of CEQA, before the resumption of development activities. Any measures applied shall include the preparation of a report meeting professional standards, which shall be submitted to the appropriate CHRIS information center.

Policy 4.3.4 Any project that involves earth-disturbing activities within previously undisturbed soils in an area determined to be archaeologically or culturally sensitive, shall require evaluation of the site by a qualified archaeologist retained by the project applicant. The applicant shall implement the recommendations of the archaeologist, subject to the approval of the City Planning Department.

Policy 4.3.5 Any project that involves earth-disturbing activities in previously undisturbed soils that have been determined to be archaeologically or culturally sensitive shall require consultation by the applicant with interested federally recognized American Indian Tribe(s) that have a traditional cultural affiliation with the project area and/or the resources affected by the project, for the purposes of determining archaeological and cultural resources impacts and creating appropriate mitigation to address such impacts. The applicant shall also arrange

for monitoring of earth-disturbing activities by interested federally recognized American Indian Tribe(s) that have a traditional cultural affiliation with the project area and/or the resources affected by the project, if requested.

Policy 4.3.6 Any project that involves earth-disturbing activities in soil or rock units known or reasonably suspected to be fossil-bearing shall require monitoring by a qualified paleontologist retained by the project applicant for the duration of excavation or trenching.

Policy 4.3.7 Paleontological resources found prior to or during construction shall be evaluated by a qualified paleontologist, and appropriate mitigation measures applied, pursuant to Section 21083.2 of CEQA, before the resumption of development activities. Any measures applied shall include the preparation of a report meeting professional standards, which shall be submitted to the Riverside County Museum of Natural History.

Policy 4.3.8 In the event of the discovery of a burial, human bone, or suspected human bone, all excavation or grading in the vicinity of the find shall halt immediately and the area of the find shall be protected and the project applicant immediately shall notify the Riverside County Coroner of the find and comply with the provisions of the California Health and Safety Code Section 7050.5, including P.R.C. Section 5097.98, if applicable. In the event that human remains are determined to be Native American human remains the applicant shall consult with the Most Likely Descendent (MLD) to determine the appropriate treatment for the Native American human remains.

Policy 4.4.1 Develop and inventory and map concentration of Heritage Street Trees, which are representative of the City's character and history, for consideration and official inclusion on the Corona Historic Register or the Heritage Inventory.

Policy 4.4.3 Consider listing Victoria City Park, and the pocket parks within Grand Boulevard, as resources on the Corona Historic Register, in order to preserve their historic identity and become eligible for funding opportunities required for future restoration and maintenance.

Policy 4.6.2 Encourage the involvement of the Corona-Norco Unified School District in preservation activities, local history programs, and the potential listing of identified historic school sites on the Corona Historic Register.

Policy 4.6.5 Continue to consider and assist in the nomination of Corona's historic resources to the National Register of Historic Places, the California Historic Landmarks program, and the California Points of Historical Interest program.

Policy 4.6.6 Cooperate with the Corona Historic Preservation Society, and other community organizations, in the placement of appropriate Historical Markers, monuments, or plaques to memorialize historic sites.

Policy 6.2.6 Support regional air quality objectives though effective management of the City's transportation system.

Policy 10.18.1 Promote and encourage alternate employment work schedules for public and private sector businesses to achieve a reduction of employee-related motor

vehicle emissions in accordance with South Coast Air Quality Management District Rule 2202.

Policy 10.18.2 Continue to cooperate with the South Coast Air Quality Management District, and other local authorities in the Basin, in implementing air emission reduction programs and techniques.

Policy 10.18.5 Support tax incentive legislation for the use and ownership of alternative-fuel vehicles.

Policy 10.18.6 Convert the City-owned fleet of vehicles to alternative fuels such as methanol or other clean-burning energy sources as such technology becomes feasible and cost-effective.

Policy 10.19.1 Increase public transit ridership, as encouraged by the South Coast Air Quality Management District.

Policy 10.19.2 Require developers of major commercial centers and employment center projects, having 100 or greater employees to include transit amenities, access points, and availability of designated parking spaces for van and carpools, as part of the design of the development.

Policy 10.19.3 Increase the number of Park and Ride locations within Planning Area to encourage carpooling and vanpooling.

Policy 10.19.4 Require new commercial and industrial development and redevelopment projects of sufficient scale and number of employees to provide adequate facilities for bicycles, employees, such as bicycle racks located close to front entranceways of buildings, and shower facilities with lockers.

Policy 10.19.5 Continue to incorporate bicycle lanes in all new and upgrade roadway projects, in order to encourage commuter bicycle trips. Also, improve existing bicycle laneways for greater user safety.

Policy 10.20.1 Support mixed-use commercial-residential development in accordance with the Land Use Element, and as an opportunity to improve the City of Corona's current jobs/housing ratio and work-live balance.

Policy 10.20.5 Continue to target residential development within, and proximate to, existing, and planned activity centers and transportation corridors in accordance with the Land Use Element.

Policy 10.21.1 Reduce the amount of energy consumed by commercial and residential uses, as recommended by the Southern California Air Quality Management District.

Policy 10.21.2 Continue to require the use and installation of energy conservation features in all new construction projects and wherever feasible, retrofitting in existing and re-development projects.

Policy 10.21.3 Encourage energy audits including installation of energy conservation measures for all commercial, industrial, and institutional projects.

Specific Plans

The City of Corona has numerous Specific Plans that are established to implement and regulate land use and development within a specific project boundary. In most instances specific plans supersede the original zoning of the land unless otherwise specified. Specific plans are created to achieve the following purposes:

- Comprehensively master plan a project area
- Minimize the intrusion of new development in environmentally sensitive areas
- Ensure the timely provision of essential public services and facilities consistent with the demand for such services
- Promote a harmonious variety of housing choices and commercial and industrial land uses, to attain a desirable balance of residential and employment opportunities, a high level of urban amenities, and to preserve natural and scenic open qualities of open space
- Facilitate quality development within the city by permitting greater flexibility and encouraging more creative and aesthetically pleasing designs for major urban development projects subject to large-scale community planning

Specific plans are adopted by the City Council. Once adopted, all subdivisions, land use, precise plans, granting permits, local public works projects must be consistent with the adopted specific plan. Specific plans contain their own procedures and requirements by which the plans are regulatory documents adopted by ordinance; therefore, all development standards contained therein are enforceable by law in accordance with Section 17.108.130 of the Corona Municipal Code.

The following Specific Plans have been adopted in the City of Corona:

- Lincoln Business Center Specific Plan SP81-1
- Northeast Corona Specific Plan SP81-2
- Township In Corona Specific Plan SP82-1
- Birtcher Business Center Specific Plan SP82-2
- Crown Properties Specific Plan SP83-1
- Concordia Specific Plan SP84-1
- Parkview Specific Plan SP84-2
- Prado Point Specific Plan SP85-1
- Sierra Del Oro Specific Plan SP85-2
- Corona Ranch Specific Plan SP85-3
- Westgate Specific Plan SP87-1
- Chase Ranch Specific Plan SP89-2
- Plaza on Sixth Street Specific Plan SP90-1
- Todd Ranch Specific Plan SP90-2
- Cherokee Ranch Specific Plan SP90-3
- Empire Homes Specific Plan SP90-4
- Corona Vista Specific Plan SP90-5
- Eagle Glen Specific Plan 90-6
- Main Street South Plaza Specific Plan SP91-01
- El Cerrito Specific Plan SP91-2

- The Cimarron Specific Plan SP95-01
- Downtown Corona Revitalization Specific Plan SP98-01
- North Main Street Specific Plan SP99-01
- Dos Lagos Specific Plan SP99-03
- Green River Ranch Specific Plan SP00-001
- Crown Ranch Estates Specific Plan SP01-001
- Corona Magnolia Specific Plan SP01-002
- Sierra Bella Specific Plan SP04-001

Although implementation of the C-CAP may result in retrofit and energy-generating projects throughout the City of Corona and its SOI that would be subject to the guidelines and policies of the applicable Specific Plan(s), most redevelopment would occur in the Downtown and North Main Street areas, which represent targeted areas for redevelopment under the General Plan. Opportunities for infill development and redevelopment under the C-CAP include a 0.5-mile radius around the Metrolink Station, mixed-use development within the growth areas of the City, and infill development within downtown Corona. In addition, any development within the Corona Municipal Airport Comprehensive Land Use Plan (CLUP) area would be subject to requirements in that CLUP. The Specific Plans that govern development in these areas are described in greater detail, below.

Downtown Corona Revitalization Specific Plan (SP-98-01)

The Downtown Revitalization Specific Plan refines the concepts provided in the "Vision Plan for Downtown Corona" and designates land uses, formulates policies and design guidelines, determines an urban design framework/streetscape, and develops implementation programs and strategies to accomplish revitalization of the area. The Specific Plan provides a clear vision for future development within Downtown Corona. The City of Corona Downtown Revitalization Specific Plan area includes approximately 395 acres and generally consists of the commercial corridor along Sixth Street, from Lincoln Avenue on the west and the Temescal Creek Channel on the east, and the area within the Grand Boulevard Circle. The Riverside Freeway (91 Freeway, or SR-91) bisects a small portion of the plan area in the north. The Specific plan area includes commercial, industrial, residential, and public property in the original City center, or "Circle area," and the adjacent commercial areas along Sixth and Main Streets.

North Main Street District Specific Plan (SP-99-01)

The North Main Street Specific Plan implements City of Corona General Plan objectives and policies by presenting more detailed direction for future development and establishes development regulations and implementation mechanisms applicable solely to the various properties located within the North Main Street District Specific Plan area. This Specific Plan provides for orderly and efficient development/redevelopment in accordance with the provisions of the General Plan to enhance the visual quality and economic vitality of the Specific Plan area. The North Main Street District project area is located in the north central portion of the City. The project area is bisected in a north-south direction by North Main Street, which serves as the transportation spine for the plan area. The Street District Specific Plan area is located just north of SR-91, and west of the Interstate 15 (I-15) corridor. Just south of SR-91, on Main Street, is the area generally referred to as Downtown Corona. A creative, yet flexible, set of guidelines and design criteria for landscaping, architecture, and signage has been incorporated into the Specific Plan, providing direction for gateway concepts, streetscape improvements, project

identification, theming, landmark elements, hardscape elements, and architectural guidelines, etc. The design concept creates an identifiable positive image for the overall Specific Plan area, while also recognizing and embracing the North Main Street District Specific Plan area as an integral part of the City of Corona. In 2008, the Specific Plan was amended to reflect innovative development opportunities in the North Main Street District.

Corona Municipal Airport Comprehensive Land Use Plan (CLUP)

The Corona Municipal Airport CLUP contains policies governing the land uses surrounding the airport. Specifically, these policies establish development criteria that protect sensitive receptors from airport noise, persons from risk of operations, and height guidelines to ensure aircraft safety.

Corona Municipal Code

Title 15 of the Corona Municipal Code (CMC) governs building and construction, and adopts the provisions of the California Building Code. Section 15.10.010, the Green Buildings Code, incorporates the 2010 California Green Building Standards Code. The zoning ordinance (CMC, Title 17) and the zoning map are adopted and codified by the City Council and are used by the public and other agencies to determine the allowable use of specific parcels within city limits.

4.5.3 Impacts and Mitigation Measures

Analytic Method

The programs and measures contained in the C-CAP were compared to applicable land use plan policies to determine if any inconsistency exists. These land use plans include the SCAQMD 1997 Air Quality Management Plan, 1999 Amendment for Ozone, Western Riverside County Multi-Species Habitat Conservation Plan (MSHCP), SCAG's Regional Comprehensive Plan and Guide (RTP and Compass Growth Visioning), Riverside County General Plan, City of Corona General Plan, City of Corona Zoning Code, specific plans adopted by the City, and the Corona Municipal Airport CLUP.

Thresholds of Significance

The following thresholds of significance are based on the 2012 CEQA Guidelines Appendix G. For purposes of this EIR, implementation of the C-CAP may have a significant adverse impact on land use/planning if it would:

- Physically divide an established community
- Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, 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
- Conflict with any applicable habitat conservation plan or natural community conservation plan

Effects Not Found to Be Significant

Threshold	Would the project physically divide an established community?

As identified in Chapter 6 of the General Plan Final EIR, the City of Corona is an urbanized area and implementation of the General Plan would not physically divide an established community. The facilities proposed under the C-CAP would similarly not include any physical barriers that could divide an established community. There would be no impact and further analysis is not required.

Threshold	Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?

See discussion under Biological Resources in Chapter 5 (Other CEQA Considerations, Effects Not Found to Be Significant). City ordinance ensures compliance with the provisions of the Western Riverside County MSHCP. Implementation of the C-CAP would be required to be consistent with these policies, and no further analysis is required.

Project Impacts and Mitigation

Threshold	Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, 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?

Impact 4.5-1 **Implementation of the C-CAP would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect. This would be a *less-than-significant* impact.**

Several regionally and locally adopted land use plans, policies, and regulations would be applicable to development under the proposed General Plan. These include the 1997 Air Quality Management Plan, 1999 Amendment for Ozone, Western Riverside County Multi-Species Habitat Conservation Plan (MSHCP), SCAG's Regional Comprehensive Plan and Guide, City of Corona Zoning Code, specific plans adopted by the City, and the Corona Municipal Airport Comprehensive Land Use Plan (CLUP).

To fulfill the purposes of the C-CAP, the City identified the following goals:

- Provide a list of specific actions that will reduce GHG emissions, with the highest priority given to actions that provide the greatest reduction in GHG emissions and benefits to the community at the least cost.
- Reduce emissions attributable to Corona to levels at or below 1990 GHG emissions by year 2020 consistent with the target reductions of AB 32.
- Establish a qualified reduction plan for which future development within the City can tier and thereby streamline the environmental analysis necessary under the California Environmental Quality Act (CEQA).

In its AB 32 Scoping Plan, the California Air Resources Board identified measures that will result in emission reductions within the City. These are identified as R1 measures and cover transportation, energy reduction, area source reduction, and agriculture reduction. The R1 measures are not administered or enforced by the City, but the City substantiates the reductions associated with these state measures.

R2 and R3 reduction measures are measures that will be incorporated at the City level to provide additional reductions in greenhouse gas emissions. R2 measures are those measures that can be quantified to show the value of the reduction from the incorporation of those measures. The full text of the reduction measures can be found in the C-CAP, which is attached as Appendix B to this EIR.

R3 measures are those measures that, although they provide a vehicle through which reductions in emissions will occur, cannot be quantified at this time. The R3 measures are supportive measures or methods of implementation for the R2 measures. For example, R3-E2: Energy Efficiency Training and Public education, is a measure that provides education to inform people of the programs, technology, and potential funding available to them to be more energy efficient, and provides the incentives to participate in the voluntary programs shown in R2-E1 through R2-E7. R3-E2 is supportive of measures R2-E1 through R2-E7 because it will provide more publicity, reduce the perceived challenge of being energy efficient, and provide information on potential rebates and other funding programs which will make retrofits more accessible to everyone. Therefore, although by itself R3-E2 cannot be quantified, its implementation provides a level of assurance that the reduction goals specified in the R2 measures will be achieved.

Also included in the R3 measures are reduction measures that reduce Corona's government operation emissions. Government operations make up less than 5 percent of the City's total emissions, but the City can set an example for residents by implementing reduction measures at the municipal level.

Mixed land use (i.e., residential developments near work places, restaurants, and shopping centers) with access to public transportation has been shown to save consumers up to 512 gallons of gasoline per year. It is estimated that households in transit-oriented developments drive 45 percent less than residents in auto-dependent neighborhoods. With this reduction, there is less overall energy consumption and fewer greenhouse gas emissions from personal vehicles. Going hand-in-hand with mixed-use development is the development of pedestrian corridors and bike trails that connect residents to work sites, shops, and recreational opportunities, which can also realize a reduction of personal vehicle use and fuel consumption.

Green buildings can significantly reduce local environmental impacts, regional air pollutant emissions, and global greenhouse gas emissions. Green building standards involve everything from energy efficiency and use of renewable resources to reduced waste generation and water usage. For example, water-related energy use consumes 19 percent of the state's electricity, and the residential sector accounts for 48 percent of both the electricity and natural gas consumption associated with urban water use. Thus, energy-efficiency and green building practices can result in a substantial reduction in the use of energy and associated greenhouse gas emissions.

Policies in the applicable land use plans identified above are designed to promote sustainability in land use planning. For example, SCAG's RTP provides the framework for aggregating sub-regional and local efforts to institute measures aimed at mitigating the adverse air pollution impacts from increased

transportation activities. These measures are known as transportation control measures (TCMs). The RTP links the goal of sustaining mobility with the goals of fostering economic development, enhancing the environment, reducing energy consumption, promoting transportation-friendly development patterns, and encouraging fair and equitable access to residents affected by socio-economic, geographic, and commercial limitations. The current AQMP establishes a comprehensive regional air pollution control program leading to the attainment of state and federal air quality standards in the Basin. In addition to setting minimum acceptable exposure standards for specified pollutants, the AQMP incorporates SCAG's growth management strategies that can be used to reduce vehicle trips and VMT, and hence air pollution. These include, for example, co-location of employment and housing, and mixed-use land patterns that allow the integration of residential and non-residential uses. The goals of the Riverside County General Plan promote sustainability. The goals of the MSHCP are to conserve biological resources in land use planning, which can be achieved, in part, by locating development outside of sensitive biological areas.

The proposed project furthers the goals and policies in the identified land use plans by providing specific measures and programs that reduce greenhouse gas emissions, improve air quality, and facilitate transit-oriented development, thus reducing vehicle miles traveled. The C-CAP facilitates mixed-use development in identified corridors near transit, as identified in the General Plan, and does not provide for development in sensitive biological areas, consistent with the policies of these plans.

While a separate document, the C-CAP will be utilized as a companion document to the General Plan to provide a more comprehensive and detailed framework for land-based policy decisions to reduce greenhouse gas emissions from existing and future development. The C-CAP will further the goals and policies of the General Plan with regard to energy conservation and sustainable development by implementing, in addition to City programs already in place, measures and programs to reduce greenhouse gas emissions and facilitate transit-oriented development. Policy 1.2.3 of the Corona General Plan provides for concentration of land uses to minimize impacts on natural environmental resources and maximize the efficiency of supporting infrastructure, transit use, and the vitality of Corona's activity and business centers. Policies 1.2.4 and 1.2.5 reinforce the City's existing urban form and pattern of viable commercial and business centers and residential neighborhoods and prioritize and reinforce the revitalization of Downtown and North Main Street as major activity centers of Corona and maximize access to transportation and public services. Policy 1.2.7 promotes the re-use of economically obsolete and inefficient strip commercial corridors by consolidating retail and supporting uses into distinct activity nodes and redeveloping intervening areas for mixed-use projects that integrate commercial and residential uses or single use residential projects. Policy 1.2.11 calls for location of moderate and high-density housing at strategic locations that maximize access to transportation and services. All of the policies in the City's General Plan are written to maximize efficient use of resources, maintain a high quality of life, enhance job opportunities, promote sustainability, and facilitate access to transportation facilities. Policies related to historic resources are designed to protect and preserve recognized historic resources, and any facilities constructed or energy retrofits performed pursuant to the C-CAP would be required to be consistent with those policies.

Although implementation of the C-CAP may result in retrofit and energy-generating projects throughout the City of Corona and its SOI that would be subject to the guidelines and policies of the applicable

Specific Plan(s), most redevelopment would occur in the Downtown and North Main Street areas, which represent targeted areas for redevelopment under the General Plan. Opportunities for infill development and redevelopment under the C-CAP include a 0.5-mile radius around the Metrolink Station, mixed-use development within the growth areas of the City, and infill development within Downtown Corona. The two Specific Plans that guide development in these areas identify permitted uses and provide development and architectural guidelines, including setbacks and height limits, that would be applicable to any development under the C-CAP in these Specific Plan areas. Both Specific Plans promote mixed uses and pedestrian-oriented and accessible development. The C-CAP does not propose any specific development. Any energy-efficiency retrofits or energy-generating facilities that would be constructed in the Specific Plan areas would require consistency with the applicable Specific Plans. Thus, there would be no inconsistency with implementation of the C-CAP.

Any facilities developed pursuant to the C-CAP would be required to be consistent with General Plan policies to obtain approval. In addition, because the proposed C-CAP furthers the goals of the identified land use plans, including the Corona General Plan, it is consistent with these plans. This impact is considered *less than significant*, and no mitigation is required. Implementation of the proposed project would ensure compliance with AB 32, which is a beneficial impact of the project.

4.5.4 Cumulative Impacts

Threshold	Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, 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?

The geographic context for land use impacts with respect to consistency with applicable land use plans is Riverside County, which assumes full build-out of the County General Plan and implementation of the RCIP. While Riverside County is part of the larger SCAG region, compliance with SCAG policies is voluntary, and individual municipalities are not required, although they aim to, conform to SCAG policies. In addition, land use decisions are subject to the jurisdiction of the SCAQMD, which implements the AQMP for the South Coast Air Basin, of which Riverside County is a part. All development in this geographic context is required to be consistent with the applicable General Plan, and any inconsistencies with the AQMP must be identified as impacts in the environmental analysis.

It is anticipated that development of the RCIP and regional growth in general will be reviewed for consistency with adopted land use plans and policies by the County, City of Corona, and other incorporated cities, in accordance with the requirements of CEQA, the state Zoning and Planning Law, and the state Subdivision Map Act, all of which require findings of plan and policy consistency prior to approval of entitlements for development. For this reason, cumulative impacts associated with inconsistency of future development with adopted plans and policies would not be significant. Because the C-CAP is consistent with the policies of the City of Corona General Plan and the Riverside County General Plan, the cumulative impact of the C-CAP with respect to consistency with land use plans would be *less than significant*.

4.5.5 References

California Environmental Protection Agency (Cal/EPA). 2006. Climate Action Team Report to Governor Schwarzenegger and the Legislature, March.

California Air Resources Board (California ARB). 2007a. *California 1990 GHG Emissions Level and 2020 Emissions Limit*, November.

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California Natural Resources Agency (CNRA). 2009. 2009 California Climate Adaption Strategy: A Report to the Governor in Response to Executive Order S-13-2008, December 2. http://www.energy.ca.gov/2009publications/CNRA-1000-2009-027/CNRA-1000-2009-027-F.pdf.

Corona, City of. 1998. *Downtown Revitalization Specific Plan*, June.

_____. 2000. *North Main Street District Specific Plan*, January 5.

_____. 2004a. *City of Corona General Plan*, March 17.

_____. 2004b. *City of Corona General Plan Final Environmental Impact Report*, March.

Riverside, County of. 2003. *Riverside County General Plan*, October 7.

_____. 2003. *Multi-Species Habitat Conservation Plan*, June 17.

4.6 AGRICULTURE/FORESTRY RESOURCES

This section of the EIR analyzes the potential environmental effects on agricultural and forest resources as a result of implementation of the C-CAP. Information used for this section was obtained from various sources, including the Farmland Mapping and Monitoring Program (FMMP), the City of Corona General Plan (2004), Technical Background Report (2004) and associated EIR (2004), the Riverside County General Plan (2008), as well as previous environmental documentation. Bibliographic entries for reference materials are provided in Section 4.6.5 (References).

4.6.1 Environmental Setting

Agricultural Land Uses

The total acreage of agricultural land in the City of Corona has declined over the past few decades, with some agricultural land is being converted to urban uses. The FMMP rating of some agricultural land is being downgraded; that is, prime farmland is being converted to farmland of statewide or local importance, or to unique farmland. Such downgrading does not result in a net loss of agricultural land, but it represents degradation in the quality of the remaining agricultural land. As shown in Figure 4.6-1 (Farmland Resources), much of the City of Corona has been converted to Developed Land. The primary areas of farmland resources exist in the Sphere of Influence (SOI) areas, particularly in the southeast and northwest, with three or four small pockets of classified soils within the City limits.

Farmland Classification

Farmland is classified according to its ability to support crops or livestock. The most commonly used system for classifying agriculture in California is the FMMP. The FMMP standards rely upon information from Natural Resources Conservation Service (NRCS) soil surveys, NRCS land inventory and monitoring criteria, and land use and water availability information mapped by the California Department of Water Resources (DWR). Soil quality, topography, climate, and availability of irrigation water all factor into farmland classifications.

The FMMP categorizes farmland into five types. These are described in order of productivity, from the most productive to the least productive farmland.

- *Prime Farmlands* are lands with an ability to produce agricultural crops over a long period of time. Not only must the site have a dependable water supply of adequate quality during the growing season, it must have fertile, well-drained soils. Furthermore, the site must have been used for the production of irrigated crops within four years of FMMP mapping.
- *Farmlands of Statewide Importance* are similar to Prime Farmlands, but with minor deficiencies (i.e., steeper slopes, slightly poorer soils, etc.).
- *Unique Farmlands* are lands that are used to produce California cash crops, but which have poorer soils than both Prime Farmlands and Farmlands of Statewide Importance. These lands may include non-irrigated orchards or vineyards.
- *Farmlands of Local Importance* have importance to local agricultural economies, but generally have poorer soils and a less reliable water supply.

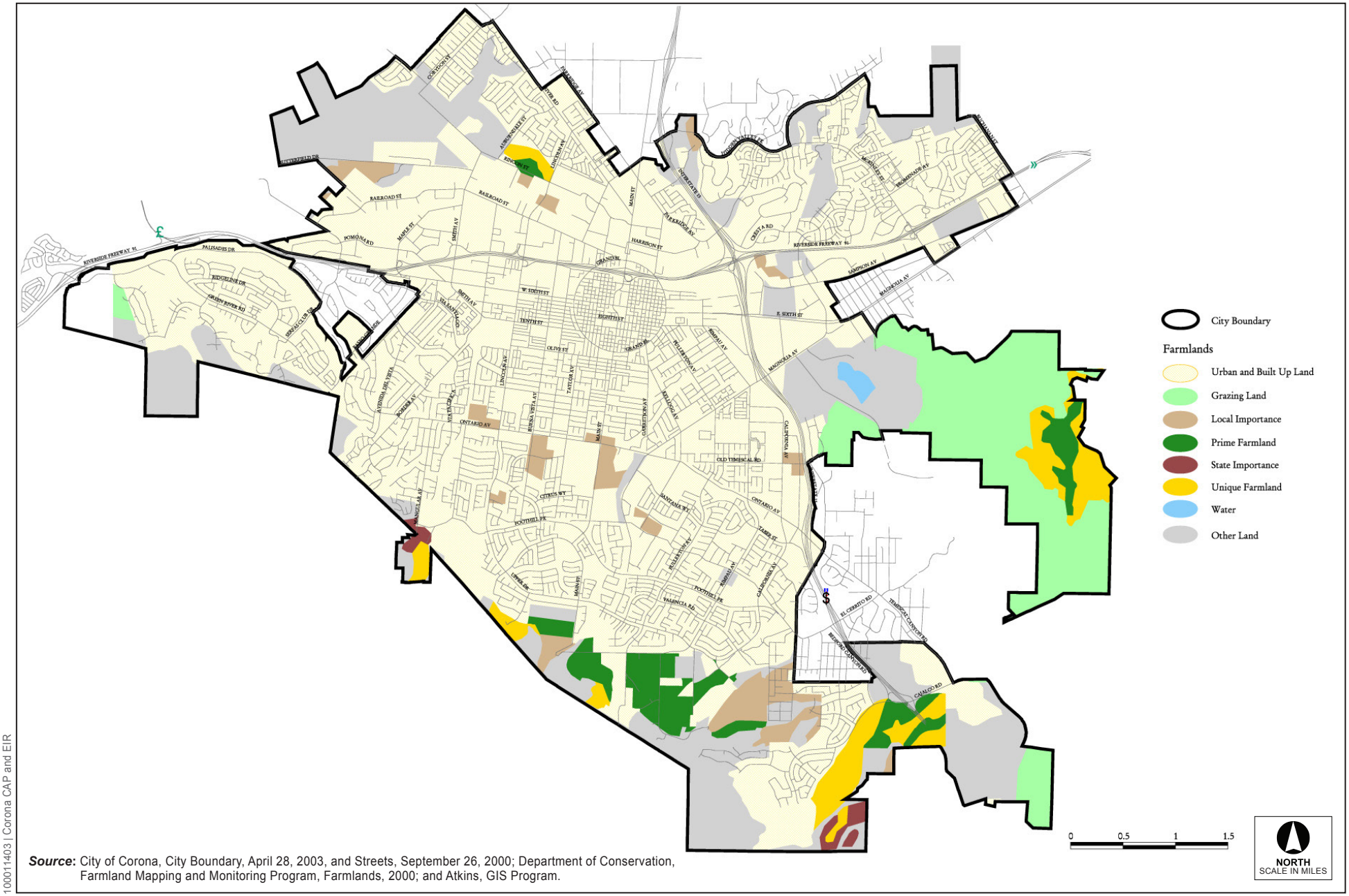
- *Grazing Land* is land with natural vegetation that is well-suited for grazing.

Agricultural Conversion

In spite of the value that agricultural products contribute to California's economy and of the many other societal and environmental benefits of agricultural cultivation (open space, habitat, food security, preservation of the rural lifestyle, etc.), several economic pressures may induce agricultural land owners to convert their properties to nonagricultural land uses or to sell their properties to developers. Examples of factors contributing to agricultural conversion include the following:

- Land values in California are higher than in many parts of the county. Relative to nonagricultural developed parcels, agricultural lands are less expensive because agricultural lands have fewer capital improvements (buildings and infrastructure) (Hite et al. n.d.).
- A competitive housing market has increased the demand for new housing throughout California, resulting in new residential developments in formerly rural regions. Madera County is currently undergoing major population growth (see Population and Housing, Section 4.11). Local municipalities, recognizing that they must meet state housing needs allocations and provide local economic opportunities, may rezone or redesignate agricultural lands to allow future nonagricultural uses.
- Difficulties in identifying a reliable water supply may make it difficult to grow certain crops, reducing the viability of an existing agricultural operation.
- Extreme weather events, such as flooding and drought, may harm crops and cause economic losses.
- Farmers often have high debt-to-income ratios due to large investments in land and equipment, reducing their ability to withstand economic hardship. Fluctuations in the price of agricultural crops and in operational costs (such as increased energy or equipment expenditures) increase the risk of return on farmers' investments, making their lands vulnerable to foreclosure or liens (Hite et al. n.d.).
- Agricultural lands are often set in scenic locations or in locations with access to outdoor recreational opportunities. Properties with amenities, such as waterfront access, varied topography, and scenic open space, are seen as valuable locations for development (Hite et al. n.d.).
- When new residences are built in an agricultural area, the occupants may be exposed to dust, odors, and other nuisances. Complaints or lawsuits from new residents may make it more difficult for farmers to sustain standard farming practices.

Given these conditions, agricultural lands are becoming vulnerable to land use conversion pressures in high-growth regions. According to the California Department of Conservation, Farm and Grazing lands in California decreased by more than 1.3 million acres between 1984 and 2008. This is larger than the size of Merced County. This loss averages just under 55,000 acres per year, or about 1 square mile every 4 days (CDOC 2012).



***Source*:** City of Corona, City Boundary, April 28, 2003, and Streets, September 26, 2000; Department of Conservation, Farmland Mapping and Monitoring Program, Farmlands, 2000; and Atkins, GIS Program.

Figure 4.6-1
Farmland Resources

ATKINS

The type of farmland with the largest decrease has been Prime Farmland, the best soils for agricultural production. Prime Farmland losses were just under 560,000 acres between 1984 and 2008, nearly the size of Solano County. Urbanization accounts for the vast majority of this loss, more than 1.04 million acres over the 1984–2008 timeframe. This is nearly the size of Sonoma County. Other major causes for farmland loss include low density rural residences, mining, and ecological restoration projects. These totaled more than 255,000 acres between 1984 and 2008; nearly one quarter of the scale of urbanization.

In Riverside County, the average annual decrease in farmland between 1984 and 2010 totaled 5,098 acres out of a total area of 561,542 acres, representing an average annual decrease of 1 percent (CDOC 2012).

4.6.2 Regulatory Framework

Federal

There are no federal statutes related to agricultural resources that would apply to the proposed project.

State

California Farmland Mapping and Monitoring Program

The FMMP is a state-sponsored research program that provides data to decision makers to help them track land use trends related to agricultural uses. The FMMP prepares a biennial California Farmland Conversion Report, which provides county-level statistics regarding the conversion of agricultural lands to and from other land uses. It also prepares an Important Farmland Map showing the distribution of FMMP classified agricultural lands.

California Land Conservation Act of 1965 (Williamson Act)

The California Land Conservation Act of 1965 (California Government Code 51200–51295), commonly known as the Williamson Act, provides incentives to property owners (property tax reductions) to keep their lands in active agricultural production. Property owners sign contracts, agreeing not to develop their properties for a period of at least ten years. The contract renews automatically unless the property owners file notices of nonrenewal or a petition for cancellation. Prime farmland may be placed under Williamson Act contracts under any conditions, while other farmlands and open space may be placed under Williamson Act contracts if they fall within a locally designated agricultural preserve. Figure 4.2-2 (Rio Mesa Area Plan Important Farmlands and Williamson Act Lands) shows the parcels near the Project Site, which are currently covered by Williamson Act contracts.

The California Right to Farm Act

The purpose of the California Right to Farm Act (California Civil Code Section 3482.5) is to protect farming as an existing land use, even if non-farming uses are established on nearby or adjacent properties. In general, a body of legal statutes called "nuisance law" allow a property owner to sue a neighboring land owner when activities on the latter's property cause odors, noises, dust, smoke, or other disruptive or unpleasant environmental conditions that might lessen the value of the former's property or the enjoyment thereof. Because agriculture may create undesirable ambient conditions, but is considered

to be a beneficial land use, California has granted farms legal protection against challenges under nuisance law. The California Right to Farm Act was put into place to ensure that traditional agricultural uses were not displaced by new housing and commercial developments due to operational conflicts between these uses. Section 3482.5 states that:

> No agricultural activity, operation or facility, or appurtenances thereof, conducted or maintained for commercial purposes, and in a manner consistent with proper and accepted customs and standards, as established and followed by similar agricultural operations in the same locality, shall be or become a nuisance, private or public, due to any changed condition in or about the locality, after the same has been in operation for more than one year if it was not a nuisance at the time it began.

Regional

County of Riverside General Plan

Agriculture production is one of the largest industries in terms of dollar value in the County and competes successfully in the global economy. The General Plan Agriculture Foundation Component and associated policies identify and preserve areas where agricultural uses are the long term desirable use and minimize the conflicts between agricultural and urban/suburban uses. The General Plan includes a range of land use policies that help to conserve agricultural resources. Although these policies do not generally apply to development within the City, development in the SOI areas would occur under the County policy framework; consequently, farmland resources that lie outside of City limits could be affected. Relevant County policies generally emphasize conservation of productive agricultural lands, preservation of prime agricultural lands for high-value crop production, retaining agriculturally designated lands where agricultural activity can be sustained at an operational scale, and encouraging agricultural uses in locations where impacts from potentially incompatible uses are minimized.

Local

City of Corona General Plan

The Corona General Plan includes the following policies related to agriculture resources:

Policy 10.12.1 Allow for and facilitate the continuance of agricultural activities in the City until such time as the land is needed to accommodate population and employment growth.

Policy 10.12.2 Restrict the development of urban uses such as schools, day care and elder care facilities, hospitals and high density residential within areas used for agriculture whose operations, such as crop production, pesticide spraying, and truck access, may be incompatible and conflict with the urban uses.

4.6.3 Project Impacts and Mitigation

Analytic Method

This analysis discusses impacts that would be expected to occur with implementation of the proposed C-CAP. Potential impacts on agriculture are based on the C-CAP's potential to convert existing agricultural resources to other uses.

Thresholds of Significance

The following thresholds of significance are based on the 2012 CEQA Guidelines Appendix G. For the purposes of this EIR, implementation of the proposed project may result in a potentially significant impact on agricultural resources if it would do any of the following:

- Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (farmland), as shown on the maps prepared pursuant to the FMMP, to nonagricultural uses
- Conflict with existing zoning for agricultural use, or a Williamson Act contract
- Involve other changes in the existing environment, which, due to their location or nature, could result in the conversion of farmland to nonagricultural use

Effects Not Found to Be Significant

Threshold	Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

The City currently has two agricultural areas under the Williamson Act: the McMillan property located to the southeast of Eagle Glen and one of the debris basin areas of South Corona. The debris basin area is currently designated as open space, and is expected to remain under a Williamson Act contract throughout and beyond the current planning horizon of the General Plan. No energy-generating facilities would be constructed under the C-CAP in the debris basin, since it is used for flood control purposes and energy-generating facilities would not be compatible with such a use. The Williamson Act contract on the McMillan property is in non-renewal and is to expire in 2013. That property is also subject to an application for development and a Specific Plan is being prepared. Therefore, it will no longer be a Williamson Act property. As no energy-generating facilities under the C-CAP would be constructed on Williamson Act properties, there would be no impact and no further analysis is required.

Threshold	Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?
Threshold	Would the project result in the loss of forest land or conversion of forest land to non-forest use?

There is no forest land within the Corona city limits or SOI. The proposed project would not cause rezoning of any forest land or timberland, convert any forest land to non-forest use, or result in the loss of forest land. Energy-generating facilities developed under the C-CAP would not occur on any forest land. No further evaluation is required.

Impacts and Mitigation Measures

Threshold	Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

Impact 4.6-1 **Implementation of the C-CAP would not convert prime farmland, unique farmland, or farmland of statewide importance to non-agricultural use. Implementation of mitigation measure MM4.6-1 would ensure this impact remains *less than significant*.**

The City contains soils designated by the state Department of Conservation as Prime Farmlands, Unique Farmland, and Farmland of Statewide Importance that are not contiguous. All of these lands are either adjacent to or completely surrounded by urban development. Existing soils designated as Prime Farmland, Unique Farmland, and Farmland of Statewide Importance are primarily located in the extreme southern portion of the City, with scattered, very small pockets in a few other locations within the City. The type of energy-generating facility contemplated under the C-CAP consists of solar arrays and wind turbines that would be primarily sited on roofs of new and existing structures, although some of these facilities could be constructed in open space areas by a Conditional Use Permit (CUP). As the issuance of a CUP is a discretionary approval, a separate environmental evaluation would be performed, including a Land Evaluation and Site Assessment (LESA) analysis to determine whether the soils are of statewide importance. The following mitigation shall be implemented:

MM4.6-1 *Prior to issuance of a Conditional Use Permit for construction of renewable energy-generating facilities in open space areas, the project proponent must submit a Land Evaluation and Site Assessment to determine whether any soils of statewide importance occur on the site.*

Implementation of mitigation measure MM4.6-1 would require submittal of a LESA prior to issuance of the CUP. If the LESA determines the soils to be of statewide importance, the development would be prohibited. Therefore, the impact of implementation of the C-CAP would be *less than significant*.

Threshold	Would the project involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to nonforest use?

Impact 4.6-2 **Implementation of the C-CAP would not involve other changes in the existing environment that could result in conversion of farmland to non-agricultural use or conversion of forest land to nonforest use. Implementation of mitigation measure MM4.6-1 would ensure this impact remains *less than significant*.**

The C-CAP would facilitate densification in transit-oriented areas and the downtown and would not require land use changes, as existing zoning allows this. The proposed project could also include renewable energy-generating structures such as wind turbines and solar arrays that could be constructed on agricultural lands or in forested areas. Implementation of the proposed C-CAP would not convert any farmland or forest land to nonagricultural use, nor would it make it more likely or feasible to convert

additional land to non-agricultural or non-forest uses. Implementation of mitigation measure MM4.6-1 would ensure that this impact remains *less than significant*.

4.6.4 Cumulative Impacts

Threshold	Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?
Threshold	Would the project involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to nonforest use?

The geographic context for an evaluation of cumulative impacts due to conversion of agricultural land is the state of California, since loss of farmland is of statewide concern. As noted, Farm and Grazing lands in California decreased by more than 1.3 million acres between 1984 and 2008. Past development has already resulted in significant loss of farmland, and future projects in this cumulative context could result in conversion of additional farmland due to various development pressures. This is a significant cumulative impact. Implementation of the C-CAP would not convert any farmland of statewide significance to non-agricultural use through application of mitigation measure MM4.6-1, which would ensure that no CUP would be issued for any construction on lands deemed through a LESA to be of statewide significance. No renewable energy facilities would be constructed on forest land. Therefore, the proposed project would not make a cumulatively considerable contribution to the cumulative impact. The impact would be *less than significant*.

4.6.5 References

California Department of Conservation (CDOC). 2012. Farmland Mapping and Monitoring Program. http://www.conservation.ca.gov/dlrp/Pages/Index.aspx (accessed February 1, 2012).

Corona, City of. 2004a. *City of Corona General Plan*, March 17.

———. 2004b. *City of Corona General Plan Final Environmental Impact Report*, March.

Riverside, County of. 2008. *Riverside County General Plan*. http://www.rctlma.org/genplan/ (accessed February 1, 2012).

4.7 MANDATORY FINDINGS OF SIGNIFICANCE

The California Environmental Quality Act of 1970 (CEQA) requires preparation of an environmental impact report (EIR) when certain specified impacts may result from construction or implementation of a project. This EIR fully addresses all of the mandatory findings of significance, as described below.

4.7.1 Degradation of the Environment

CEQA Guidelines Section 15065(a) requires a finding of significance if a project "has the potential to substantially degrade the quality of the environment." In practice, this is the same standard as a significant effect on the environment, which is defined in CEQA Guidelines Section 15382 as "a substantial or potentially substantial adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance."

This EIR, in its entirety, addresses and discloses all potential environmental effects associated with construction and operation of the proposed project, including direct, indirect, and cumulative impacts in the following resource areas:

- Aesthetics
- Cultural Resources
- Greenhouse Gas Emissions
- Hazards/Hazardous Materials
- Land Use/Planning

As summarized in Table 2-1 (Summary of Environmental Effects and Project Requirements/ Mitigation Measures), this EIR discloses all potential environmental impacts, the level of significance prior to mitigation, project requirements that are otherwise required by law or are incorporated as part of the project description, feasible mitigation measures, and the level of significance after the incorporation of mitigation measures.

4.7.2 Long-Term Impacts

CEQA Guidelines Section 15065(a)(2) states that a lead agency shall find that a project may have a significant effect on the environment where there is substantial evidence that the project has the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals. Section 5.3 (Significant Irreversible Environmental Effects) of this document addresses the short-term and irretrievable commitment of natural resources to ensure that the consumption is justified on a long-term basis. In addition, Section 5.2 (Significant Environmental Effects That Cannot Be Avoided if the Proposed Project Is Implemented) and Table 2-1 identify all significant and unavoidable impacts that could occur, thereby creating a long-term impact on the environment. Lastly, Section 5.4 (Growth-Inducing Impacts) identifies any long-term environmental impacts caused by the proposed project with respect to economic or population growth.

4.7.3 Cumulative Impacts

A cumulative impact analysis is only provided for those thresholds that result in a less-than-significant impact, potentially significant impact unless mitigated, or significant and unavoidable impact. A cumulative impact analysis is not provided for No Impact, which does not result in project-related impacts.

CEQA Guidelines Section 15065 states that a lead agency shall find that a project may have a significant effect on the environment where there is substantial evidence that the project has potential environmental effects that are individually limited but cumulatively considerable. As defined in CEQA Guidelines Section 15065(a)(3), cumulatively considerable means "that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." Cumulative impacts are addressed for each of the environmental topics listed above and are provided in Sections 4.1 through 4.5 of this EIR.

4.7.4 Impacts on Species

CEQA Guidelines Section 15065(a)(1) states that a lead agency shall find that a project may have a significant effect on the environment where there is substantial evidence that the project has the potential to (1) substantially reduce the habitat of a fish or wildlife species; (2) cause a fish or wildlife population to drop below self-sustaining levels; or (3) substantially reduce the number or restrict the range of an endangered, rare, or threatened species. The Notice of Preparation for the proposed project determined that there would be no impacts on biological resources. Therefore, the project would have no impact on species.

4.7.5 Impacts on Historical Resources

CEQA Guidelines Section 15065(a)(1) states that a lead agency shall find that a project may have a significant effect on the environment where there is substantial evidence that the project has the potential to eliminate important examples of a major period of California history or prehistory. Section 15065(a)(1) amplifies Public Resources Code Section 21001(c) by requiring preservation of major periods of California history for the benefit of future generations. It also reflects the provisions of Public Resource Code Section 21084.1 in requiring a finding of significance for substantial adverse changes to historical resources. CEQA Guidelines Section 15064.5 establishes standards for determining the significance of impacts to historical resources and archaeological sites that are historical resources. Section 4.2 (Cultural Resources) of this EIR fully addresses impacts related to California history and prehistory, historic resources, archaeological resources, and paleontological resources.

4.7.6 Impacts on Human Beings

As required by CEQA Guidelines Section 15065(a)(4), a lead agency shall find that a project may have a significant effect on the environment where there is substantial evidence that the project has the potential to cause substantial adverse effects on human beings, either directly or indirectly. Under this standard, a change to the physical environment that might otherwise be minor must be treated as significant if

people would be significantly affected. This factor relates to adverse changes to the environment of human beings generally, and not to effects on particular individuals. While changes to the environment that could indirectly affect human beings would be represented by all of the designated CEQA issue areas, those that could directly affect human beings includes greenhouse gas emissions and hazards/hazardous materials, which are addressed in Section 4.3 (Greenhouse Gas Emissions) and Section 4.4 (Hazards/Hazardous Materials).

CHAPTER 5 Other CEQA Considerations

Section 15126 of the California Environmental Quality Act (CEQA) Guidelines requires that all aspects of a project must be considered when evaluating its impact on the environment, including planning, acquisition, development, and operation. As part of this analysis, the Environmental Impact Report (EIR) must also identify (1) significant environmental effects of the proposed project, (2) significant environmental effects that cannot be avoided if the proposed project is implemented, (3) significant irreversible environmental changes that would result from implementation of the proposed project, (4) growth-inducing impacts of the proposed project, (5) mitigation measures proposed to minimize significant effects, and (6) alternatives to the proposed project.

5.1 SIGNIFICANT ENVIRONMENTAL EFFECTS OF THE PROPOSED PROJECT

Table 2-1 (Summary of Environmental Effects and Code Requirements/Mitigation Measures), which is contained in Chapter 2 (Summary) of this EIR, and Sections 4.1 through 4.6 of this EIR provide a comprehensive identification of the proposed project's environmental effects, including the level of significance both before and after mitigation.

5.2 SIGNIFICANT ENVIRONMENTAL EFFECTS THAT CANNOT BE AVOIDED IF THE PROPOSED PROJECT IS IMPLEMENTED

CEQA Guidelines Section 15126.2(b) requires that an EIR describe any significant impacts that cannot be avoided, even with the implementation of feasible mitigation measures. Development of the proposed project would result in the following significant and unavoidable project-related and/or cumulative impacts:

5.3 EFFECTS NOT FOUND TO BE SIGNIFICANT

The following impacts were not found to be significant and are, therefore, not further analyzed in this EIR.

5.3.1 Air Quality

Threshold	Would the project conflict with or obstruct implementation of the applicable air quality plan?

The proposed project would implement measures designed to increase energy efficiency and reduce vehicle miles traveled (VMT). The C-CAP includes R1 measures, which refer to the anticipated reduction strategies identified in the AB 32 Scoping Plan for implementation at the state level that will ultimately result in a reduction of greenhouse gas emissions (and thus improve air quality) at the City level. While these reduction strategies were formulated to reduce greenhouse gases, they also act to improve overall

air quality by reducing emissions of criteria pollutants. R2 and R3 reduction measures will be incorporated at the City level to provide additional reductions in greenhouse gas emissions and improvements in air quality. R2 measures are those measures that can be quantified to show the value of the reduction from the incorporation of those measures. R3 measures are those measures that, although they provide a vehicle through which reductions in emissions will occur, cannot be quantified at this time. The R3 measures are supportive measures or methods of implementation for the R2 measures.

R1 transportation-related measures include the low carbon fuel standard, tire pressure program, low rolling resistance tires, low friction engine oils, goods movement efficiency measures, aerodynamic efficiency measures for heavy-duty vehicles, and hybridization of medium- and heavy-duty vehicles. In addition to these measures, the City will implement R2 transportation measures to improve air quality. These include VMT reduction policies, residential permit parking, and a neighborhood electric vehicle plan. R3 measures include regional land use and transportation coordination, employee rideshare, and municipal fleet alternative vehicles.

The City of Corona, through its Municipal Code (Chapter 11.02) (City of Corona n.d.c), has established a Transportation Demand Management (TDM) program (City of Corona 2002) that requires large employers to offer programs to employees that reduce air pollution and ease traffic congestion. New, large employers are those which could employ one hundred or more employees. The Municipal Code states that new, large employers must incorporate facilities and/or programs in their development plans sufficient to attain a 12 percent work-related trip reduction from the expected number of trips related to the project. These may include, but are not limited to, (1) preferential parking for carpool vehicles; (2) bicycle parking and shower facilities; (3) information center for transportation alternative; (4) rideshare vehicle loading areas; (5) vanpool vehicle accessibility; (6) bus stop improvements; (7) on-site child care facilities; (8) local transportation systems management methods and road improvements; (9) facilities to encourage telecommuting; (10) contributions to support regional facilities designed to reduce vehicle trips and miles traveled; and (11) on-site amenities such as cafeterias and restaurants, automated teller machines, and other services that would eliminate the need for additional trips.

Additionally, all existing large (one hundred or more employees) employers must submit a trip reduction plan to the Public Works Director that outlines how major employers could reduce work- related vehicle trips by 12 percent. The following trip reduction methods may be utilized to achieve the required vehicle trip reduction: alternative work schedules/flex time, telecommuting, bicycle and shower facilities, preferential parking, public transit incentive, minimizing peak hour truck travel, on-site child care, and any other method that can exhibit a reduction in vehicle trips.

The City of Corona Bicycle Master Plan was adopted in 2001 (City of Corona 2001). The plan describes the construction of 11.5 miles of Class I bike paths and 23 miles of Class II and Class III bikeways to build upon the existing 8 miles of bikeways. Before 2001, the Corona bikeway system had approximately 8 miles of Class I, Class II, or Class III bike paths. A key benefit to the implementation of the Corona Bicycle Master Plan will be a reduction in traffic and improved air quality. Policies and infrastructure that improve bicycling conditions in Corona will result in more favorable traffic conditions and a reduction in greenhouse emissions that originate from cars. The City of Corona has posted bike routes on the City's website (City of Corona n.d.b) and updates when new routes are added.

Implementation of these measures through the C-CAP would improve air quality and reduce greenhouse gas emissions. There would be a beneficial impact on air quality as a result of implementation of the C-CAP. No further evaluation is required.

Threshold	Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

The proposed project would not add any vehicle trips and would decrease VMT and vehicle emissions, thus improving air quality. The C-CAP would increase reliance on alternative forms of energy, which would reduce emissions. The project would include construction of energy-generating structures such as solar arrays and wind turbines, as well as potential energy-efficiency retrofit of existing structures. However, construction activities would not involve large equipment that would contribute substantial air emissions. The impact would be less than significant and no further evaluation is required.

Threshold	Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?

Implementation of the CAP would result in densification in transit corridors and the downtown, but this is allowed by existing zoning and has been approved through the General Plan. The proposed project would not add any vehicle trips and would decrease VMT and vehicle emissions, thus improving air quality. The C-CAP would increase reliance on alternative forms of energy, which would reduce emissions. The project would include construction of energy-generating structures such as solar arrays and wind turbines, as well as potential energy-efficiency retrofit of existing structures. However, construction activities would not involve large equipment that would contribute substantial air emissions or contribute to a cumulatively considerable net increase of any criteria pollutant for which the region is in nonattainment. The impact would be less than significant, and no further analysis is required.

Threshold	Would the project expose sensitive receptors to substantial pollutant concentrations?

The proposed project would not add any vehicle trips and would decrease VMT and vehicle emissions, thus improving air quality. The C-CAP would increase reliance on alternative forms of energy, which would reduce emissions. The project would include construction of energy-generating structures such as solar arrays and wind turbines, as well as potential energy-efficiency retrofit of existing structures. However, construction activities would not involve large equipment that would contribute substantial pollutant concentrations that could affect sensitive receptors. The impact would be less than significant and no further analysis is required.

Threshold	Would the project create objectionable odors affecting a substantial number of people?

The proposed project would not include any facilities that would emit objectionable odors. Energy-efficiency retrofits and photovoltaic arrays would not generate odors. Wind turbines similarly do not emit objectionable odors. The project would include construction of energy-generating structures such as solar arrays and wind turbines, as well as potential energy-efficiency retrofit of existing structures.

However, construction activities would not create objectionable odors. Therefore, there would be no impact and no further analysis is required.

5.3.2 Biological Resources

Threshold	Would the project 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 Game or U.S. Fish and Wildlife Service?

The specific locations of solar arrays and wind turbines that could be constructed under the proposed project are not known at this time. Implementation of energy retrofits or facilities could result in removal of habitat or street trees, which can provide nesting opportunities, or otherwise affect protected candidate, sensitive, or special-status species. General Plan Policies 10.5.1 through 10.5.5 encourage management and maintenance of sensitive habitat through the promotion of environmentally sensitive project siting and design. Policy 10.6.2 preserves the species and habitats listed in Table 4.2-1 and Table 4.2-2 of the Technical Background Report and those that may be considered by the City of Corona in the future. Policy 10.6.3 provides for acquisition and maintenance of the most current technical information available regarding the status, location, and condition of significant and sensitive biological species and habitats as well as assessments of potential for impacts on those resources and how such resources should be appropriately protected, conditions sustained, and impacts mitigated from nearby development. Project approval and entitlement requires findings of consistency with the City of Corona's General Plan's goals, policies, and implementation programs (as stipulated herein), Zoning Ordinance, Building Code, applicable environmental regulations (such as the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP), state and federal Endangered Species Act, and Regional Air Quality Management Plan), and other local, regional, state, and federal regulations. Compliance with General Plan policies is assured through the implementation programs described in Chapter 7 of the General Plan. All development must comply with the MSHCP, which protects candidate, sensitive, and special-status species. Therefore, the impact from implementation of the C-CAP would be less than significant, and no further evaluation is required.

Threshold	Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

While it is possible that energy-generating facilities could be constructed in open space, riparian habitat and sensitive habitat would be avoided pursuant to General Plan policy. General Plan Policy 10.9.2 prohibits development and grading that alters the biological integrity of riparian corridors, unless no feasible alternative exists or the damaged habitat is replaced with habitat of equivalent value. General Plan policies and implementation programs ensure that riparian habitat and sensitive natural communities are protected, and Implementation Program 9 requires that all projects be reviewed for consistency with General Plan policies prior to approval. Therefore, all development pursuant to the C-CAP would be evaluated for conformance to these policies to ensure that riparian habitat or sensitive

natural communities are not adversely affected or that there is replacement of habitat of equivalent value. The impact would be less than significant, and no further evaluation is required.

Threshold	Would the project 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?

General Plan Policies 10.5.1 through 10.5.5 ensure that wetland resources are managed and maintained through the promotion of environmentally sensitive project siting and design, compliance with Section 404 of the Clean Water Act, development of a habitat mitigation plan that achieves no net loss of wetland function and values, and the provision of a buffer zone for new development that occurs near wetland areas. Furthermore, Policies 10.1.1 and 10.1.4 reduce construction- and operation-related water quality impacts to streams and wetlands in the City by requiring the implementation and enforcement of appropriate federal, state, and local water quality regulations, and the prohibition of pollutant discharge into watercourses, drainages, and groundwater basins. Implementation of the C-CAP would not result in development in any wetland areas. It is possible that retrofit or construction activities could occur adjacent to wetlands. However, compliance with Section 404 of the Clean Water Act would assure no net loss of wetlands. There would be no adverse impact on wetlands and no further analysis is required.

Threshold	Would the project interfere substantially with the movement of any native 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?

Lands within the City boundaries are largely urbanized and contain few significant biological resources. Further, existing natural resources are fragmented and surrounded by development. Nonetheless, implementation of applicable General Plan policies ensures that substantial impacts to native, resident, or migratory wildlife species or corridors would not occur with implementation of the C-CAP. Policy 10.7.1 reduces construction impacts to habitat and wildlife species through the use of Best Management Practices as established and updated by the City. Additionally, Policies 10.8.1 and 10.8.2 would reduce impacts from an expanded human-wilderness interface through the establishment of publicly accessible sites that facilitate the observation of natural resources within the Planning Area and the promotion of educational programs to promote the awareness of local resources and inform about protection and enhancement programs and initiatives. Policies 10.11.1, 10.11.9, and 10.11.12 reduce impacts associated with habitat fragmentation by protecting the sensitive biological resources in the Temescal Canyon Area Plan, providing for a contiguous connection of upland habitat blocks from the Lake Matthews/Estelle Mountain Reserve to the Temescal Wash, and providing for a continuous linkage along Temescal Wash to the Santa Ana River. Implementation of General Plan Policies 10.6.1, 10.6.2, 10.6.3, 10.6.5, and 10.6.6 would further reduce impacts to the movement of native resident or migratory wildlife species through supporting further research, pursuit of funding for open space protection, and implementation of conservation programs.

In addition, all projects are subject to the Migratory Bird Treaty Act (MBTA), which prohibits taking, killing, possessing, transporting, and importing of migratory birds, parts of migratory birds, and their eggs and nests, except when specifically authorized by the Department of the Interior. As used in the act,

the term "take" is defined as meaning, "to pursue, hunt, capture, collect, kill or attempt to pursue, hunt, shoot, capture, collect or kill, unless the context otherwise requires." With a few exceptions, most birds are considered migratory under the MBTA. Disturbances that causes nest abandonment and/or loss of reproductive effort or loss of habitat upon which these birds depend would be in violation of the MBTA. It is expected that all projects would comply with these provisions.

As noted, above, General Plan policies and implementation programs ensure that riparian habitat and sensitive natural communities are protected, and Implementation Program 9 requires that all projects be reviewed for consistency with General Plan policies prior to approval. In addition, all development would comply with the provisions of the MSHCP that protect migratory wildlife corridors and nursery sites. Therefore, any development pursuant to the C-CAP would be evaluated for conformance to these policies to ensure that riparian habitat or sensitive natural communities are not adversely affected. The impact would be less than significant, and no further evaluation is required.

Threshold	Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

The City of Corona does not have a tree protection ordinance. Policy 10.10.5 of the General Plan does provide for the conservation of oak tree resources in the City and SOI, which is implemented through Implementation Program 7. Implementation of the proposed project would be subject to all applicable federal, state, and regional policies and regulations related to the protection of important biological resources. Specifically, development under the proposed General Plan would be required to comply with the federal Endangered Species Act, Migratory Bird Treaty Act, Clean Water Act, California Endangered Species Act, California Fish and Game Code, California Wetlands Conservation Policy, California Department of Fish and Game Lake or Streambed Alteration Program, and the MSHCP. The project would be required to comply with the provisions of each of these federal, state, and regional laws, regulations, or plans and this impact would be less than significant. No further evaluation is required.

Threshold	Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

The Western Riverside County MSHCP is the applicable habitat conservation plan for the City of Corona and SOI areas. The MSHCP is divided into area plans, and the City of Corona and SOI areas are entirely within the Temescal Canyon Area Plan. The Temescal Canyon Area Plan is divided into five subunits. For each subunit, acreages targeted for conservation are established along with a description of the planning species, biological issues and considerations, and criteria for each subunit. General Plan policies have been determined to be consistent with the policies in the MSHCP, as noted in Section 4.8 (Biological Resources) of the General Plan Final EIR, and City ordinance requires compliance with the provisions of the MSHCP (RCTLM n.d.). Implementation of the C-CAP would be required to be consistent with these policies, and no further analysis is required.

5.3.3 Geology/Soils

Threshold	Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: ■ Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? ■ Strong seismic ground shaking? ■ Seismic-related ground failure, including liquefaction? ■ Landslides?

All development in the state of California is regulated by the California Building Code, which contains stringent provisions to ensure seismic safety and reduction of risk from seismic-induced geologic hazards such as fault rupture, groundshaking, liquefaction, and landslides. The active Glen Ivy Fault, which is located in the southwestern portion of the City, is an area designated as an Alquist-Priolo Earthquake Fault. However, all development within the Planning Area that is within ¼ mile on either side of an Earthquake Fault Zone would be required by the California Department of Mines and Geology to prepare a site-specific geologic report. In addition, implementation of the proposed General Plan policies related to earthquake hazards or geologic disturbances, compliance with Alquist-Priolo Earthquake criteria, and compliance with updated CBC building standards would reduce any impacts resulting from fault rupture or groundshaking within the City and the SOI to a less-than-significant level. Portions of land within the City occurring in the steep slopes of the Santa Ana Mountains and the steep slopes within the Elsinore Fault zone, which runs along the western border of the City, are subject to the potential for earthquake-induced landsliding. However, implementation of the C-CAP would not result in facilities being constructed in these areas. All specific development projects would be required to perform a site-specific geologic assessment as part of the approval process. Implementation of measures under the C-CAP that are structurally related, such as energy-efficient building retrofits, would be subject to this requirement, and necessary design modifications to ensure minimum risk would be required prior to project approval. Implementation of the C-CAP would not result in a significant impact. No further analysis is required.

Threshold	Would the project result in substantial soil erosion or the loss of topsoil?

The local topography in the City ranges from gently sloping areas in the central portion of the City to steeper topography in the adjacent mountain areas. With approximately 70 percent of the City lying on a slope of 10 percent or less, the potential for soil erosion during rain events is low. In the southwest, southern, and eastern portions of the City where the slopes are more severe due to proximity to the surrounding mountains, the opportunity for soil erosion during rain events increases. All demolition and construction activities within the City would be required to comply with CBC Chapter 70 standards, which would ensure implementation of appropriate measures during grading activities to reduce soil erosion. In addition, all new development would be subject to regional and local regulations pertaining to construction activities. Specifically, development that is greater than one acre in size would be required to comply with the provisions of the General Construction Activity Stormwater Permit adopted by the

State Water Resources Control Board (SWRCB), which would require the employment of Best Management Practices (BMPs) to limit the extent of eroded materials from a construction site. All development greater than one acre would also be required to comply with the provisions of the National Pollution Discharge Elimination System (NPDES) Phase II regulations concerning the discharge of eroded materials and pollutants from construction sites. Furthermore, Title 15 of the Corona Municipal Code would require all developments in the City to obtain a grading permit prior to grading activities. In turn, all work requiring a grading permit would be required to have an approved Erosion Control Plan. Implementation of the C-CAP would result in a less-than-significant impact with regard to this threshold. No further analysis is required.

Threshold	Would the project 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 landslide, lateral spreading, subsidence, liquefaction, or collapse?

There are areas of the City and SOI that have been identified as having unstable soil subject, in particular, to subsidence. These areas were identified in the General Plan Final EIR (Section 4.12 [Geology and Soils]) as the Chino region and the most northerly part of the Corona North USGS 7.5-minute quadrangle, which includes the northern portion of the City. However, there are no indications that the City located south of the Prado Flood Control Basin has experienced significant regional subsidence over time. Within the SOI, none of the areas has been considered to be subject to substantial subsidence The CBC, which is based on the Uniform Building Code (UBC), has been modified for California conditions with numerous more detailed and/or more stringent regulations. The CBC requires that "classification of the soil at each building site shall be determined when required by the building official" and that "the classification shall be based on observation and any necessary test of the materials disclosed by borings or excavations." The CBC provides standards including, but not limited to, excavation, grading, and earthwork construction; fills and embankments; expansive soils; foundation investigations; and liquefaction potential and soils strength loss. Thus, compliance with the provisions of the CBC would minimize the impact related to subsidence in the City, and this impact would be considered less than significant. No further evaluation is required.

Threshold	Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

City soils are predominantly of the Monserrate-Arlington-Exeter associations. These soils tend to have a low to moderate swell (expansion) potential and are well drained. The remaining soils within the City include the Friant-San Miguel-Exchequer, Fallbrook-Vista-Cieneba, and the Cajalco-Temescal-Las Posas associations. These soils generally range from being moderately deep to shallow, and are well drained. Although the variations in soils underlying the City may allow for differential settlement within the City, implementation of Policy 11.1.1 in the Public Health and Safety Element of the proposed General Plan would require site-specific geotechnical studies to be conducted to determine the soil properties and specific potential for hazards associated with expansive soils in a specific area prior to development. In addition, compliance with the design standards as stated in the current CBC would reduce impacts to a less-than-significant level. No further analysis is required.

Threshold	Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

The project would not include septic tanks or alternative wastewater systems. Therefore, there would be no impact from implementation of the C-CAP. No further analysis is required.

5.3.4 Hydrology/Water Quality

Threshold	Would the project violate any water quality standards or waste discharge requirements?
Threshold	Would the project otherwise substantially degrade water quality?

Water quality degradation in the City from erosion impacts would be specific to future project sites that could be developed and/or retrofitted under the C-CAP, and depend largely on the areas affected and the length of time soils are subject to erosion. Although implementation of the C-CAP may result in runoff during construction that could adversely affect water quality beyond standards specified by the SWRCB, all development would be subject to regional and local regulations. In addition, Title 15 of the City of Corona Municipal Code requires the obtainment of a grading permit for all developments that would require grading. In turn, all work requiring a grading permit would be required to have an approved Erosion Control Plan. Furthermore, any new development subject to a grading permit within the City is required to prepare a drainage study that is in compliance with the City of Corona Drainage Master Plan and the Riverside County Flood Control and Water Conservation District requirements. Unless waived by the City's Public Works Director, geotechnical reports would also be prepared and submitted for any grading permit application associated with residential, commercial, industrial, or similar development projects. The recommendations contained in the approved geotechnical reports, which may include measures associated with erosion control, would then be incorporated into the grading plans and would become conditions of the grading permit.

Compliance with SWRCB's General Construction Activity Stormwater Permit, NPDES Phase II regulations and the grading regulations of the City's Municipal Code would reduce the risk of water degradation within the City from soil erosion related to construction activities associated with the C-CAP. The impact would be less than significant, and no further analysis is required.

Threshold	Would the project 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)?

Implementation of the C-CAP would not result in a substantial (if any) increase in impervious surfaces in the City. The proposed project would facilitate development in transit-oriented areas and the downtown as provided for in the General Plan, which are already developed with impervious surfaces. The proposed project would not increase the impermeable surface area such that groundwater recharge would be substantially affected. Energy retrofits, solar arrays, or wind turbines would not increase

impermeable surface area in the City. Therefore, the proposed project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge. The impact would be less than significant, and no further analysis is required.

Threshold	Would the project 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 that would result in substantial erosion or siltation on-or off-site during construction?

Energy retrofits and passive energy-producing components such as photovoltaic arrays would not alter existing drainage patterns in the City, as they would consist of structural alterations, not an increase in overall building footprint. All construction would be subject to regulations identified above related to water quality, erosion, and stormwater runoff. Individual projects would be subject to review by the City prior to issuance of a grading permit, which process requires preparation of a drainage study in compliance with the City's Drainage Master Plan and Riverside County Flood Control and Water Conservation District requirements. Compliance with these requirements would reduce any risk of substantial erosion or siltation to less than significant. No further analysis is required.

Threshold	Would the project substantially alter the existing drainage pattern 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 site or off site?

Energy facilities under the C-CAP could be constructed in a 100-year flood plain. Major historical floods have occurred along the Temescal Wash and in the western portion of the City, where storm sheet flows resulting from overflows of the local channels and drains have produced a variety of damage. The 100-year flood hazard areas within the City are located along Temescal Creek, Mabey Canyon Wash, and the portion of Temescal Wash east of I-15. As described in the General Plan Final EIR, all new development, including facilities constructed pursuant to the C-CAP, would be subject to the provisions of Title 18 (Flood Plain Management) in the City of Corona Municipal Code. Recognizing that the flood hazard areas of the City are subject to periodic inundation that can adversely affect the public health, safety and general welfare, the purpose of Title 18 is to minimize public and private losses due to flood conditions by ensuring proper design of structures to prevent against flood damages. Additionally, Title 18 also includes provisions for preventing or regulating the construction of flood barriers that would unnaturally divert floodwaters or which may increase flood hazards in other areas. As such, the development of energy facilities within the City's 100-year flood areas would not result in the redirection of flood flows in a manner that would subsequently lead to the loss of adequate flood conveyance in the City. Furthermore, any new development or work within the City that involves the Riverside County Flood Control and Water Conservation District's right of way, easements, or facilities would require the obtainment of an encroachment permit from the District. General Plan Policies 11.2.1 through 11.2.12 reduce the risk from flooding throughout the City. Compliance with General Plan policies is assured through the implementation programs described in Chapter 7 of the General Plan. Therefore, this impact would be less than significant and no further analysis is required.

Threshold	Would the project create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of post-construction polluted runoff, such as from areas of material storage, vehicle or equipment fueling, vehicle or equipment maintenance (including washing), waste handling, hazardous materials handling or storage, delivery areas, loading docks, or other outdoor areas?

The development of any new facilities within a road right-of-way that may impact the District's storm drains must also be coordinated with the District prior to the beginning of construction. Compliance with the District's provisions would ensure that people and property are protected from flooding through responsible and efficient stormwater management. See the discussion under (a), above, with regard to minimization of sources of polluted runoff. Compliance with NPDES permit requirements would ensure that the proposed project would not provide substantial additional sources of polluted runoff. Compliance with General Plan Policies 7.7.1 through 7.7.10 would ensure that ensure that urban runoff from existing and new development does not degrade the quality of the City's surface waters, groundwater system, and environmentally sensitive areas. The impact would be less than significant and no further analysis is required.

Threshold	Would the project place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

The proposed project does not include a housing component and there would be no impact. No further evaluation is required.

Threshold	Would the project place within a 100-year flood hazard area structures that would impede or redirect flood flows?

Included among the various General Plan policies are the restriction of development in areas subject to flooding through the use of setbacks and buffer areas, incorporation of design elements into development to mitigate flood hazards, requiring the provision of permeable surfaces to increase water infiltration, maintaining natural channel drainage courses in the City, prohibiting development within 100-year flood zones without adequate mitigation against flood hazards, requiring all new stormwater drainage facilities to be constructed and managed in accordance with City and County of Riverside design specifications, and ensuring that proper drainage facilities and detention basins are maintained. General Plan Policies 11.2.1 through 11.2.12 restrict development in areas subject to flooding through the use of setbacks and buffer areas, incorporation of design elements into development to mitigate flood hazards, requiring the provision of permeable surfaces to increase water infiltration, maintaining natural channel drainage courses in the City, prohibiting development within 100-year flood zones without adequate mitigation against flood hazards, requiring all new stormwater drainage facilities to be constructed and managed in accordance with City and County of Riverside design specifications, and ensuring that proper drainage facilities and detention basins are maintained. These policies identified in the General Plan would minimize the effects of prospective growth from flooding hazards. With regard to development within the 100-year flood zone, Policy 11.2.7 in the Public Health and Safety Element of the General Plan specifically requires the provision of adequate mitigation against flood hazards that would need to

be approved by the Council of the City of Corona prior to development. These policies identified in the General Plan would minimize the effects of prospective growth from flooding hazards. Therefore, the impact involving the placement of structures within a 100-year flood area in the City would be less than significant and no further analysis is required.

Threshold	Would the project 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?

Corona is the nearest city to four of Riverside County's dams. Three of these four dams have a high hazard potential, while the fourth is characterized by significant hazard potential (National Inventory of Dams and RCIP Existing Setting Report). The primary inundation threat to the City of Corona is from Lake Mathews, which impounds 182,000 acre-feet (ac-ft). Lake Matthews is approximately 7 miles southeast of Corona. Two dams contain Lake Mathews, one on its north side and the other one on the south side. Failure of either dam would cause flooding along the Temescal Wash in the eastern and northeastern portions of the City. Should either of the two Lake Matthews dams fail, inundation is 40 minutes to Corona city limits and about 65 minutes to the Prado Basin. The water flow would generally follow the Temescal Channel from southeast to northwest of the intersection of I-15 and SR-91 (City of Corona Emergency Operations Plan, 1999). Prado Basin and Dam are located about 5 miles west of the City of Corona. Spillway sill capacity is 196,235 acre-feet. The flow pattern is westward away from Corona. Since the flow pattern is away from the City, Prado Dam does not pose as severe of a threat of inundation as do the Lake Matthews Dams. In addition, the U.S. Army Corps of Engineers has begun construction to increase the capacity of the reservoir behind Prado Dam. The first phase was completed in early 2009, and consisted of raising the height of the dam more than 28 feet, a new control tower and outlet works, and a new outlet channel (USACE 2009). When combined with the remaining two phases, the finished project will increase Prado basin's storage capacity by 140,000 acre-feet and triple its ability to discharge water to 30,000 feet per second. The improvements will make Prado Dam capable of preventing up to $15 billion in flood-related damages along the Santa Ana River. The modifications will increase Prado Dam's current 70-year level of protection to 190-year protection. The Santa Ana River no longer poses a major flooding hazard to the City of Corona due to several upstream flood control projects, including the Seven Oaks Dam (USACE 2009).

The proposed project could lead to intensified development in identified opportunity sites around transit corridors and in downtown Corona. The impacts of flooding on this development have been comprehensively analyzed in the General Plan Final EIR. Energy retrofits and passive energy solar arrays would result in an increased risk of flooding from dam inundation. If wind farms or other energy-producing facilities are built in open space areas, they could be subject to increased risk from dam inundation depending on their location. However, all new development would be subject to the provisions of Title 18 (Flood Plain Management) of the City's Municipal Code, designed to minimize public and private losses due to flood conditions by ensuring proper design of structures to prevent against flood damages. General Plan Policies 11.2.1 through 11.2.12 restrict development in areas subject to flooding, as noted, above. These policies identified in the General Plan would minimize the effects of prospective growth from flooding hazards. The impact would be less than significant and no further analysis is required.

Threshold	Would the project be subject to inundation by seiche, tsunami, or mudflow?

As noted in Chapter 6 (Issues Found not to be Significant) of the General Plan Final EIR, the City of Corona is not located within the immediate area of the Pacific Ocean; thus, there would be no impacts associated with inundation by tsunamis. Lake Matthews is at risk for inundation by a seiche, which is a wave that oscillates in lakes, bays, or gulfs from a few minutes to a few hours as a result of seismic activity. Debris and mud flows are rivers of rock, earth, and other debris saturated with water. They develop when water rapidly accumulates in the ground, during heavy rainfall or rapid snowmelt, changing the earth into a flowing river of mud or "slurry." They can flow rapidly, striking with little or no warning at avalanche speeds. They also can travel several miles from their source, growing in size as they pick up trees, boulders, cars, and other materials. As there are hillside areas in the City, these areas would be prone to mudflows during periods of heavy rain, when the ground is over-saturated, or after fires that denude the hills of vegetation. The City's 1999 Emergency Operations Plan (EOP) identifies the likelihood of occurrence of landslide/slope failure as infrequent and low. The EOP outlines departmental responsibilities and response procedures for all hazards facing the City, including landslides/mudflows. The proposed project could construct energy-generating facilities in open space areas, but site-specific geotechnical studies would be required for each development project, including energy facilities, that would ensure that soils are stable and proper engineering techniques are implemented. Energy retrofits and installation of solar arrays and wind turbines on rooftops would not increase the risk from mudflow or expose substantial numbers of persons or property to increased risk from mudflow. This impact would be less than significant and no further analysis is required.

5.3.5 Mineral Resources

Threshold	Would the project:
	■ 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?
	■ Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

Active mines or quarries producing clay and construction aggregates within the City are currently located predominantly east of the I-15. All of these existing active mines within the City would continue to operate upon implementation of the proposed C-CAP. These facilities could be subject to energy-efficient retrofits recommended by the C-CAP. However, retrofits would likely consist of window replacement in buildings, increased use of energy-efficient heavy- and medium-duty vehicles, additional insulation in structures, installation of photovoltaic and solar arrays, and implementation of other programs outlined in the C-CAP, which would not affect their ability to extract mineral resources. Historic oil or gas wells, resulting from petroleum exploration within the City, are generally concentrated in the west and northwest portions of the City. Under the General Plan, no future growth or development would occur in the areas containing these existing oil and gas well sites, and there would be no energy retrofit required at these locations. The City is only required to analyze mineral resource recovery areas that have been designated by the State as MRZ-2 (significant existing or likely mineral deposits). The MRZ-2 land located within the City begins approximately northwest of the I-15 and

SR-91 intersection, and extends in a northwest to southeast direction through the intersection before running south along the I-15 through the eastern portion of the City. This classified MRZ-2 area within the City generally consists of clay and construction aggregates including crushed rock, sand, and gravel. The General Plan retains the existing MRZ-2 area within the City. The eastern portion of the City, directly south of Sixth Street, is designated as mixed industrial and commercial, while the currently vacant land in the southern portion of the City along the I-15 is designated for light industrial and general commercial use. These land use designations still allow for mining operations to extract minerals in the MRZ-2 area. The proposed C-CAP would not change the land use designations or affect the ability of mining operations to extract minerals in the MRZ-2 area. Therefore, there would be a less-than-significant impact from implementation of the proposed project on mineral resources, and no further analysis is required.

5.3.6 Noise

Threshold	Would the project result in the 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?
Threshold	Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?
Threshold	Would the project cause a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?
Threshold	For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 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?
Threshold	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?

Implementation of the C-CAP would reduce VMT, thus reducing total vehicular noise in the City. The C-CAP would not add vehicle trips. Implementation of the policies and programs of the C-CAP would augment existing City programs and policies with regard to transit-oriented development. Energy retrofits would likely reduce impacts from vehicular noise to occupants of the particular buildings, since increased insulation and double- or triple-paned windows would also act to buffer exterior noise levels. The location or extent of new energy-generating structures such as solar arrays and wind turbines are not specifically identified in the C-CAP. Solar arrays would not generate noise. The state of the technology for wind turbine assemblies is rapidly evolving. Small, typical residential turbines designed to conserve energy through reduction of retained heat are nearly silent, even at high wind speeds. Commercially based wind turbines range in size, from small single assemblies to the large turbines seen on vast wind farms. The range of noise generated by commercial wind turbines varies dramatically and can be as high as 105.4 dBA based on wind speed and blade pitch (Alberts 2006). The Public Health and Safety Element of the General Plan provides land use noise compatibility information and specifies maximum interior and exterior noise standards for various land use types (City of Corona 2004). All development, including energy-generating facilities, would be required to be designed in such a way, e.g., through

setbacks or shielding, that future noise levels do not exceed these standards. Therefore, installation of these energy-generating structures would not result in any adverse noise impacts. Energy-generating facilities that could be installed in the Airport Land Use Plan area would not expose people residing or working in the airport land use area to excessive noise levels. There are no private airstrips in the City of Corona. In addition, General Plan Policies 11.4.1 through 11.4.9, 11.5.1 through 11.5.6, 11.6.1 through 11.6.3, 11.7.1 through 11.7.7, 11.8.1 through 11.8.3, and 11.9.1 through 11.9.3 would ensure that noise impacts to sensitive uses would be avoided or minimized. Each specific development project would undergo evaluation prior to project approval for consistency with General Plan policies and standards. There would be no significant noise impacts from implementation of the C-CAP, and no further analysis is required.

Threshold	Would the project result in the exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

The C-CAP would not result in vibration-generation facilities. Construction vibration that could occur during energy-efficiency retrofit or installation of photovoltaic arrays or wind turbines would not be substantial, and if these activities were to occur on or near fragile buildings, all appropriate measures would be required per the Corona Municipal Code to reduce the effect of any groundborne vibration at the sensitive receptor. The Municipal Code further restricts construction activities that occur in close proximity to noise- or vibration-sensitive uses to specific days of the week and hours of the day. Specific limits on the noise levels associated with construction and mechanical equipment that can be measured at sensitive uses are identified and subject to enforcement. Energy-generating structures such as solar arrays and wind turbines do not produce substantial vibration and would be located on rooftops of existing or new structures. If such facilities were to be proposed for fragile buildings or areas of sensitive receptors, appropriate mitigation or design revision would be required either through the City's design review or plan check process to ensure that the structures would not generate excessive groundborne vibration or noise during operation. As all projects under the C-CAP would comply with Chapter 9.24 of the Municipal Code that regulates excessive noise and vibration, the impact would be less than significant. No further analysis is required.

5.3.7 Population/Housing

Threshold	Would the project 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)?

Implementation of the C-CAP would not induce substantial population growth that could exceed local and regional growth projections either directly or indirectly. The project would not result in an increased demand for housing and contains no housing component. Therefore, there would be no impact on population and housing, and no further analysis is required.

Threshold	Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?
Threshold	Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

The proposed project would not displace substantial numbers of people or existing housing. There would be no impact. No further evaluation is required.

5.3.8 Public Services

Threshold	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: ■ Fire protection? ■ Police protection? ■ Schools? ■ Parks? ■ Other public facilities?

The proposed project would not increase resident population in the City. Demand for public services is based on population. The nature of the project would not affect the demand for public services. Therefore, there would be no impact and no further analysis is required.

5.3.9 Recreation

Threshold	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?
Threshold	Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

The proposed project would not increase resident population in the City. Demand for parks and recreational facilities is based on population. The nature of the project would not affect the demand for recreational facilities. The proposed project does not include the development of recreational facilities. As there would be no population increase as a result of implementation of the C-CAP, there would be no need for the construction or expansion of recreational facilities that might have an adverse physical effect on the environment because of the C-CAP. No further evaluation is required.

5.3.10 Transportation/Traffic

Threshold	Would the project 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?

The City of Corona utilizes an Advanced Traffic Management System (ATMS) to monitor street congestion and adjust traffic signals accordingly. ATMS is housed in the "Traffic Management Center" (TMC), which was designed and built with Corona City Hall in 2005. This system includes advanced traffic controllers, closed-circuit television (CCTV) surveillance cameras, video detection systems, and system detectors to support ATMS. The system also includes a center to center interface between the City of Corona and Caltrans. Phase 2 of the ATMS will expand the jurisdictional boundaries to integrate additional synchronized intersections owned and operated by Caltrans, implementation of Dynamic Message Signs (DMS) at key locations and a regional (multijurisdictional) incident management plan that will include traffic-responsive signal timing plans to encompass phase 1 and phase 2 signalized intersections (City of Corona n.d.a).

As noted, above, under III. Air Quality, in addition to the R1 transportation-related measures identified, the City will implement transportation measures that would include VMT reduction policies, regional land use and transportation coordination, and employee rideshare, which would reduce traffic congestion. Continued implementation of the City's Bicycle Master Plan will further alleviate traffic congestion, as it encourages alternative modes of transportation by facilitating bicycle travel throughout the City. The C-CAP would facilitate intensification of development along transit corridors and in the downtown that has been provided for in the General Plan. Future development would result in an increase in vehicular trips compared to existing conditions, but implementation of the C-CAP would not result in increase in trips, because any densification in transit corridors or the downtown has already been approved through the General Plan and the relevant Specific Plans. As the C-CAP includes measures that would reduce traffic congestion, it would have a beneficial impact on transportation in the City compared to conditions without the project. No further analysis is required.

Threshold	Would the project conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

The proposed project would have a beneficial effect in that it would facilitate the congestion management program by reducing VMT and facilitating alternative modes of transportation. The impact would be less than significant, and no further analysis is required.

Threshold	Would the project 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?

The proposed project would not result in changes in air traffic patterns through an increase in traffic levels or a change in location. As such, no safety risks would occur and there is no further analysis required.

Threshold	Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The proposed project does not include facilities that would substantially increase hazards, nor would it construct incompatible uses. Energy-producing facilities would consist of solar arrays or wind turbines on rooftops of new or renovated buildings, adjacent to structures, or in open spaces. Appropriate setbacks would be required as specified in the Municipal Code to ensure there would be no increase in hazards to vehicles as a result of implementation of the proposed project. The impact would be less than significant and no further analysis is required.

Threshold	Would the project result in inadequate emergency access?

See discussion under Hazards and Hazardous Materials, above. There would be a less-than-significant impact from implementation of the C-CAP, and no further analysis is required.

Threshold	Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

The proposed project would facilitate implementation of the Bicycle Master Plan and would encourage the development of pedestrian-friendly mixed uses and transit-oriented development. As the project would facilitate alternative methods of transportation, such as public transit and bicycle facilities, it would be consistent with the intent of regional plans that seek to improve subregional and regional transportation. The impact would be less than significant and no further analysis is required.

5.3.11 Utilities/Service Systems

Threshold	Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

A significant impact would occur if a project exceeds wastewater treatment requirements of the applicable Regional Water Quality Control Board. The Santa Ana Regional Water Quality Control Board (SARWQCB) regulates surface water quality in the Planning Area. The RWQCB prepares Basin Plans (water quality objectives for major drainage areas containing numerous local watersheds) that establishes implementation programs to protect beneficial uses of water, and does not permit wastewater discharges to degrade water quality to the point where beneficial uses would be adversely affected.

As noted in Section 4.7 (Hydrology/Water Quality, pages 4.7-3 through 4.7-4), under the Water Quality Control Plan for the Santa Ana Region, which establishes water quality objectives and standards for both

surface and groundwater of the region, water quality discharge requirements meeting area-wide surface water use objectives are established as permit requirements by the SARWQCB during permitting for operations of proposed developments. Under the SARWQCB's NPDES permit system, all existing and future municipal and industrial discharges to surface waters within the City would be subject to regulations. NPDES permits are required for operators of municipal separate storm sewer systems (MS4s), construction projects, and industrial facilities. These permits contain limits on the amount of pollutants that could be contained in each facility's discharge. Specifically, all development within the City would be subject to the provisions of the Santa Ana NPDES Storm Water Permit. The Santa Ana NPDES storm water permit was issued by the SARWQCB to the municipalities in the Santa Ana drainage area of Riverside County, which includes the City of Corona. The Santa Ana River Basin Regional Drainage Area Master Plan (SAR-DAMP) was subsequently prepared to meet the requirements of the storm water permit by describing the overall storm water management strategies planned by Riverside County to protect the beneficial uses of the receiving waters in the Santa Ana drainage area. Thus, developments within the City resulting from implementation of the proposed C-CAP would also be subject to the provisions of the SAR-DAMP.

In addition, development within the City would also be subject to the provisions in Chapter 13.27 (Storm Water Management and Discharge Controls) of the Corona Municipal Code. Under the provisions of this chapter, any discharge that would result in or contribute to a violation of the City's NPDES permit, either separately considered or when combined with other discharges, is prohibited. Contractors constructing new development or redevelopment projects are required to implement appropriate BMPs to control stormwater runoff so as to prevent any deterioration of water quality that would impair subsequent or competing uses of the water. Furthermore, City officers are given the authority to inspect facilities and perform sampling in areas with evidence of storm water contamination, illicit discharges of non-storm water to the storm water system, or similar factors. Compliance with SWRCB's NPDES Storm Water Permit, the regulations of the City's Municipal Code associated with storm water management and discharge controls, and implementation of General Plan Policies 7.7.1 through 7.7.11, designed to prevent surface water and groundwater degradation, would reduce the risk of water degradation within the City from the operation of new development. The impact would be less than significant and no further analysis is required.

Threshold	Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?
Threshold	Would the project result in a determination by the wastewater treatment provider that 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?

The existing wastewater collection system for the City of Corona includes approximately 276 miles of gravity sewer and force mains varying in size from 6 to 42 inches in diameter and manholes throughout the area. There are currently twelve sewer lift stations operated by the City, most of which are small stations lifting only local flows. There are currently few City-maintained sewer lines located outside the City limits. All of the sewer flows generated within the City are conveyed by City's collection facilities to one of three wastewater treatment plants. The City of Corona Department of Water and Power was

required to develop a Sanitary Sewer Management Plan (SSMP) per the SWRCB Order No. 2006-0003, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (Order No. 06-03). The City of Corona's SSMP was adopted by Resolution No. 2009-018 of the Corona City Council on February 18, 2009.

The City of Corona owns and operates three state-of-the-art water reclamation facilities with a combined treatment capacity of 15 million gallons per day. In addition to the water reclamation facilities, the City maintains 332 miles of underground collection pipes and eleven pump stations. Treated water is discharged to local percolation ponds, the Temescal Creek, and the reclaimed water system for beneficial reuse. Biosolids that are produced are processed with a new biosolids dryer and then disposed offsite at a composting facility. Plants are operated 24-hours a day, 365 days a year. The United States Environmental Protection Agency, or EPA, and the California Regional Water Quality Control Board for the Santa Ana Region regulate the City of Corona's water reclamation operations. For discharges that cannot be handled by the City's wastewater system, connection to the Santa Ana Regional Interceptor, or SARI line, may be necessary. The SARI line was built specifically to handle high-saline waste stream and is a pipeline that was constructed to protect the Santa Ana Watershed from desalter concentrate and various saline wastes (WMWD n.d.). Organizations whose processes create high-saline waste that does not qualify for use, reclamation, and return to the region through the municipal sewer system domestic treatment plants, but does qualify for ocean discharge, can use the SARI line to transport the waste. The SARI pipeline carries the waste directly to specially equipped treatment plants operated by the Orange County Sanitation District. After treatment, the waste is discharged to the Pacific Ocean.

With regard to water treatment, the City's quality drinking water is tested on a regular basis at each water source and at numerous points throughout the water distribution system (City of Corona n.d.d). Water samples are collected by laboratory technicians and analyzed by an independent state certified water quality laboratory on a weekly basis to guarantee public safety.

The City's potable water supply comes from a combination of 25 groundwater wells owned and operated by the City of Corona and the Colorado River from Northern California by way of the State Water Project. The groundwater wells receive water from Bedford Basin, Coldwater Basin, and Temescal Basin. The City also operates and maintains a connection for State Water Project on the Mills Pipeline from the Metropolitan Water District's Henry J. Mills filtration plant. One or all three sources can be delivered to any part of the City's service area, depending on the demands and the season. There are two treatment plants in the City that are used to treat water from the Colorado River, the Lester Water Treatment Plant, and the Sierra Del Oro Treatment Plant. The total capacity of these two plants is 26.5 million gallons per day (mgd).

The Temescal Desalter is a state-of-the-art facility that provides high quality drinking water to the Corona community and also helps to clean up the local groundwater basin. The desalter was designed to reduce Corona's demand on our imported water supply from Northern California and the River. Using local water resources help to stabilize future water rates and provide an emergency water supply. The desalter produces 10 million gallons of drinking water daily, or approximately 10,000 acre-feet of water per year. The facility was designed to readily expand to produce 15 million gallons of drinking water per day. The desalter utilizes approximately 6 miles of pipelines, 5 new wells, a blending station and 945 reverse osmosis membranes.

On January 7, 2009, in response to drought conditions in the state of California, the Corona City Council adopted Ordinance No. 2962. This ordinance establishes five stages of water conservation and drought response measures to be implemented by the city, with increasing restrictions on water use in response to decreasing water supplies and worsening drought conditions. In addition, on July 5, 2001, the City of Corona adopted the Recycled Water Master Plan to reduce dependency on local groundwater and imported water. The plan determined that the recycled water from Corona's three wastewater reclamation plants can cost-effectively be used for irrigation and groundwater recharge. The City has begun the implementation process and customers began receiving recycled water during the summer of 2006. The system produces approximately 6 million gallons of water per day, significantly reducing the city's dependence on potable water. Implementation of the C-CAP would not result in an increase in wastewater discharge to the treatment system or the SARI line. In fact, energy-saving measures included in the C-CAP, including water conservation and green building measures, as well as mandatory compliance with the provisions of the Cal-Green code, will act to further reduce the use of potable water and, therefore, the generation of wastewater (which is a direct function of the amount of fresh water used). Therefore, implementation of the project would result in a beneficial impact on wastewater generation. No further analysis is required.

Threshold	Would the project require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

As noted on pages 4.7-10 to 4.7-11 of the General Plan Final EIR, a Drainage Master Plan for the City of Corona was developed in 1999, and identifies the major drainage system deficiencies and proposes corrective improvements that incorporate the future land development within the City. Implementation of the Drainage Master Plan would provide additional control over drainage concerns, and may reduce the dangers associated with flooding during storm events in the City.

Furthermore, any new development or work within the City that involves the Riverside County Flood Control and Water Conservation District's right-of-way, easements, or facilities would require the obtainment of an encroachment permit from the District. The development of any new facilities within a road right-of-way that may impact the District's storm drains must also be coordinated with the District prior to the beginning of construction. Adherence by the City with the District's provisions would ensure that people and property are protected from flooding through responsible and efficient stormwater management.

General Plan Policies 11.2.2. 11.2.3, 11.2.8, and 11.2.11 require the provision of permeable surfaces to increase water infiltration, require maintenance of natural channel drainage courses in the City, require all new stormwater drainage facilities to be constructed and managed in accordance with City and County of Riverside design specifications, and require proper maintenance of drainage facilities and detention basins. These policies identified in the General Plan would minimize the effects of development on storm drain capacity. Continued compliance with the provisions of the Master Drainage Plan and the Riverside County Flood Control and Water Conservation District, and implementation of the identified proposed General Plan policies related to flooding, would ensure that the impacts to storm drains would be less than significant. No further analysis is required.

Threshold	Would the water provider have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

The City of Corona General Plan has identified the minimization of water consumption as one of its goals in the Infrastructure and Public Services Element. Among the policies to achieve this goal include implementation of water conservation and wastewater reuse efforts within the City, including the water-conservation ordinance cited, above, incorporation of water conservations features in the design of new development, expansion of the City's existing water remediation program, and encouraging the use of recycled water. Implementation of these policies would help conserve water and reduce potential impacts from development to groundwater supply. The City has adopted water-conservation and landscape irrigation ordinances to reduce demand for water, has implemented an Evapotranspiration (ET) Based Controller System for right-of-way landscaping that has a central irrigation system that is city-wide, and adopted a Recycled Water Master Plan to reduce dependency on local groundwater and imported water. Installation of energy-generating structures, such as solar arrays and wind turbines, and energy retrofits to existing structures would not require new or expanded water entitlements. Therefore, implementation of the proposed project would result in a less-than-significant impact on water supply. No further analysis is required.

Threshold	Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

Waste Management, Inc. (WMI) is contracted by the City and Riverside County as the sole hauler of solid waste and operation of recycling services for the City. WMI offers refuse collection to residential, commercial, and industrial customers. WMI transports all solid waste from the City to the El Sobrante Landfill, a self-owned and County-operated facility. In August 2001, the El Sobrante Landfill received a major expansion and now has 495 acres of permitted disposal activities with more than 165 million cubic yards of remaining capacity. The El Sobrante Landfill can accept up to 10,000 tons per day of waste from the California Counties of Riverside, Los Angeles, Orange, San Diego, and San Bernardino, but currently accepts an average of approximately 8,000 tons/day (Defrantes 2003). The El Sobrante landfill currently serves the City and SOI areas, and has a lifespan of 36 years. With the remaining capacity more than 165 million cubic yards, as well as a 36-year lifespan at El Sobrante Landfill, the increase in solid waste generated by the development under the General Plan would not exceed capacity of the landfill. At General Plan build-out, the El Sobrante Landfill would still be able to accept approximately 464,723 tons/year of solid waste from other jurisdictions (General Plan Final EIR, Section 4.5, page 4.5-21). Implementation of the C-CAP would not result in generation of substantial amounts of solid waste. The impact would be less than significant, and no further analysis is required.

Threshold	Would the project comply with federal, state, and local statutes and regulations related to solid waste?

AB 939 mandates the reduction of solid waste disposal in landfills. The Bill mandated a minimum 50 percent diversion goal by the year 2000, and also requires cities and counties to prepare Source Reduction Recycling Elements (SRRE) in their General Plans. Further, General Plan policies require continued compliance with existing solid waste regulations, require adequate solid waste collection for

new development, and encourage efforts to reduce the solid waste stream by supporting a variety of recycling programs as discussed within the policies under Goals 7.8 and 7.9. The impact would be less than significant, and no further analysis is required.

5.3.12 Energy

Threshold	Would the project result in an inefficient, unnecessary, or wasteful use of energy?

R1 measures in the AB 32 Scoping Plan at the state level include a renewable portfolio standard for building energy use; energy-efficient standards for residential and commercial indoor and outdoor lighting; electricity and natural gas energy efficiency; combined heat and power activities; and industrial efficiency measures. R2 energy standards included in the C-CAP include, but are not limited to, new construction energy-efficiency requirements, residential renewable energy measures, residential energy-efficiency and renewable energy retrofits, induction streetlight retrofits, and solar power for water reclamation facility #1. R3 measures are also included for education programs and financing opportunities for energy efficiency. CCR Title 24, Part 11 (California's Green Building Standard Code) (CALGreen) was adopted in 2010 and went into effect January 1, 2011. CALGreen is the first statewide mandatory green building code and significantly raises the minimum environmental standards for construction of new buildings in California. The mandatory provisions in CALGreen will reduce the use of VOC-emitting materials, strengthen water conservation, and require construction waste recycling.

These measures reduce the City's consumption of electricity and natural gas and would result in a beneficial effect on energy. No further analysis is required.

5.3.13 Mandatory Findings of Significance

Threshold	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?

Please see previous discussions, above. Implementation of the C-CAP would not result in development in areas of sensitive biological habitat, wetlands, or riparian areas, nor would it interfere with wildlife movement. The impact would be less than significant. No further evaluation is required. General Plan policies related to preservation of historic and cultural resources would ensure that important examples of major periods of California history or prehistory would be retained and not eliminated by new development or redevelopment. Energy-efficiency retrofits of historic buildings would be required to comply with the Secretary of Interior standards, as noted, above. However, the impacts of retrofit activities on historic structures are analyzed in Section 4.2 (Cultural Resources) of this EIR.

Threshold	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)?

The C-CAP would reduce VMT and air emissions. Installation of energy-generating structures would not contribute to any significant cumulative impact. For those thresholds that are analyzed in this EIR, a cumulative analysis is provided to determine if the project has impacts that are cumulatively considerable. For those thresholds identified in the Initial Study to result in impacts that are less than significant or there would be no impact, the C-CAP would not result in any cumulatively considerable contributions to cumulative impacts.

Threshold	Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?

Implementation of the C-CAP would not result in substantial adverse effects on human beings, either directly or indirectly, for those thresholds identified in the Initial Study for which the impacts are less than significant or there would be no impact. All other thresholds are analyzed in this EIR.

5.4 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL EFFECTS

CEQA Guidelines Section 15126.2(c) requires a discussion of any significant irreversible environmental changes that the proposed project would cause. Specifically, Section 15126.2(c) states:

> Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts, and particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified. Section 15126.2(c)

The proposed project does not propose new development; the C-CAP facilitates intensification of development in transit-oriented areas and the Downtown in accordance with the adopted General Plan and applicable Downtown Revitalization Specific Plan. Construction of energy-generating facilities and energy retrofits on existing structures would entail a small commitment of energy, human resources, and building materials. This commitment of energy, personnel, and building materials would be commensurate with that of other projects of similar magnitude, and none of these commodities is in short supply.

Maintenance of new energy-generating facilities would entail a further commitment of energy resources in the form of natural gas, electricity, and water resources. However, this commitment would be minimal, consisting of routine maintenance of solar panels and wind turbines. The C-CAP does not propose any development that would otherwise entail commitment of energy resources. In fact, the proposed project would reduce in a long-term reduction in energy demand and reduction of vehicular air and noise pollution, a beneficial impact.

5.5 GROWTH-INDUCING IMPACTS

CEQA Guidelines Section 15126.2(d) requires that this section discuss the ways in which the proposed project could foster economic, population, or housing growth, either directly or indirectly, in the surrounding environment. Growth-inducing impacts are caused by those characteristics of a project that tend to foster or encourage population and/or economic growth. Inducements to growth include the generation of construction and permanent employment opportunities in the service sector of the economy. A project could also induce growth by lowering or removing barriers to growth or by creating an amenity that attracts new population or economic activity.

Climate Action Plans are not, by their nature, growth inducing. The C-CAP provides a framework for reducing greenhouse gas emissions from existing and future development that has previously been planned for in the City's General Plan. While the C-CAP recommends intensification of land uses around the transit station and in the Downtown, this growth has already been accounted for in the General Plan and the Downtown Revitalization Specific Plan, and the C-CAP, on its own, does not induce growth. The C-CAP objectives promote the internal relationship of mutually supportive uses in transit-oriented areas so as to decrease dependency on the automobile, encourage alternative transportation modes, make efficient use of land and infrastructure, reduce energy consumption, and promote sustainability.

In addition, because the project does not propose development other than as already identified in the General Plan, it would not induce growth in an area that is not already developed with infrastructure to accommodate such growth. The proposed project site is located within a highly developed urban setting, and as discussed in Section 4.14 (Public Services) and Section 4.17 (Utilities/Service Systems), does not include the construction of new infrastructure that would promote growth in an inappropriate location. Thus, the necessary infrastructure that normally triggers growth when introduced is already in place within the City with respect to the proposed project.

A project's growth-inducing potential does not automatically result in growth, whether it is a portion of growth or actually exceeds projected levels of growth. Growth at the local level is fundamentally controlled by the land use policies of local municipalities or counties, which are determined by the local politics in each jurisdiction.

5.5.1 Extension of Public Facilities

Future development would require expansion of and/or upgrades to sewer, water, and gas lines in the City. This development has been accounted for in the City's General Plan, and the C-CAP does not propose and would not require any extension of public facilities. Future development projects under the General Plan and applicable Specific Plans would be required to analyze needed facility extension on a project level.

5.5.2 Employment Generation

Overall, implementation of the C-CAP would provide a small number of temporary construction jobs to retrofit existing development or construct new energy-generating structures. However, this employment would be considered on a project-by-project basis, and the C-CAP, in and of itself, is not employment-

generating. The C-CAP facilitates development in transit-oriented areas of the City and in the Downtown that have already been planned for. In many cases, existing structures would be replaced or redeveloped with the new uses. This takes into account that many of the existing buildings would remain on redeveloped parcels (i.e., only part of a parcel would be redeveloped).

5.6 MITIGATION MEASURES PROPOSED TO MINIMIZE SIGNIFICANT EFFECTS OF THE PROPOSED PROJECT

Table 2-1, which is contained in Chapter 2 of this EIR, provides a comprehensive identification of the proposed project's environmental effects and proposed mitigation measures.

5.7 ALTERNATIVES TO THE PROPOSED PROJECT

Alternatives to the proposed project are presented in Chapter 6 (Alternatives to the Proposed Project) of this EIR.

5.8 REFERENCES

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CHAPTER 6 Alternatives to the Proposed Project

6.1 INTRODUCTION

In accordance with CEQA Guidelines Section 15126.6, EIRs are required to include a discussion of alternatives to a proposed project. As Per CEQA Guidelines Section 15126.6(a) an EIR must describe a range of reasonable alternatives to a project that would attain most of the basic objectives of a project while reducing one or more of the significant impacts of the project, and should evaluate the comparative merits of those alternatives.

Public Resources Code Section 21002 states, in pertinent part:

> In determining the nature and scope of alternatives to be examined in an EIR, the Legislature has decreed that local agencies shall be guided by the doctrine of "feasibility." It is the policy of the state that public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects. In the event specific economic, social, or other conditions make infeasible such project alternatives or such mitigation measures, individual projects may be approved in spite of one or more significant effects thereof.

CEQA Guidelines Section 15364 defines feasible, for purposes of CEQA review, as "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, legal, and technological factors."

CEQA establishes no categorical legal imperative as to the scope of alternatives to be analyzed in an EIR. Both the California and the federal courts have declared that the statutory requirements for consideration of alternatives must be judged against a rule of reason. CEQA Guidelines Section 15126.6(f) defines the "Rule of Reason," which requires that an EIR set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to those that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only the ones that the lead agency determines could feasibly attain most of the basic objectives of the project. Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR is *(i)* failure to meet most of the basic project objectives, *(ii)* infeasibility, or *(iii)* inability to offer substantial environmental advantages over the project proposal (CEQA Guidelines Section 15126.6(c)). Factors relevant to the feasibility or infeasibility of a project alternative can include excessive cost and lack of control of an alternative site by the lead agency or project sponsor.

Key provisions of the CEQA Guidelines relating to the Alternatives analysis (Sections 15126.6 et seq.) are summarized below:

- The discussion of Alternatives shall focus on Alternatives to the project or its location that are capable of avoiding or substantially lessening any significant effects of the project, even if these Alternatives would impede to some degree the attainment of the project objectives, or would be more costly.

- The "no project" Alternative shall be evaluated along with its impact. The "no project" analysis shall discuss the existing conditions, as well as what would be reasonably expected to occur in the foreseeable future if the project is not approved.
- The range of Alternatives required in an EIR is governed by a "rule of reason"; therefore, the EIR must evaluate only those Alternatives necessary to permit a reasoned choice. The Alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project.
- For Alternative locations, only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR.
- An EIR need not consider an Alternative whose effects cannot be reasonably ascertained and whose implementation is remote and speculative.

6.2 SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS IDENTIFIED FOR THE PROPOSED PROJECT

No significant unavoidable adverse impacts were identified for the proposed C-CAP.

6.3 ALTERNATIVES ANALYZED IN THE EIR

As no significant adverse impacts were identified for the proposed project, the alternative analyzed in this chapter includes the No Project/Reasonably Foreseeable Development Alternative. CEQA Guidelines Section 15126.6(e)(3)(A) states that when the project is the revision of an existing land use or regulatory plan, policy, or ongoing operation, the "no project" alternative will be the continuation of the existing plan, policy, or operation into the future. While the C-CAP does not revise the General Plan, it is intended to be utilized as a companion document and an integral part of future land use decisions.

The City of Corona is committed to providing a more livable, equitable and economically vibrant community through the reduction of greenhouse gas (GHG) emissions. By using energy more efficiently, harnessing renewable energy to power our buildings, recycling our waste, and enhancing access to sustainable transportation modes, the City can keep dollars in our local economy, create new green jobs, and improve community quality of life. These efforts toward reducing GHG emission must be done in coordination with the City's land use decisions. The foundation of planning land use decisions is found in the General Plan policies and programs.

The 2004 General Plan Update implemented significant land uses changes to facilitate mixed uses and urban density designations in identified corridors, key to reducing vehicle miles traveled (VMT) and promoting energy conservation. The C-CAP does not include further land use changes, but, rather, supports the land uses described in the General Plan The C-CAP achieves the purpose and goals described above by providing: an analysis of GHG emissions and sources attributable to the City of Corona; estimates on how those emissions are expected to increase; recommended policies and actions that can reduce GHG emissions to meet state, federal, and international targets; a timeline of implementation; and a defined tracking and reporting mechanism that will measure progress toward General Plan and C-CAP goals.

The C-CAP will ensure that land use decisions made by the City and all internal operations within the City are consistent with adopted state legislation, minimizes air quality impacts, and maximizes energy conservation. Because the C-CAP does not propose development, but, rather, includes policies to facilitate sustainable development and guide land use decisions together with and as part of the General Plan, there are no other project alternatives appropriate for analysis under CEQA.

6.3.1 Alternative 1: No Project/Reasonably Foreseeable Development

Description of Alternative

The C-CAP will be used together with and as part of the City's General Plan to guide land use decisions into the future. Therefore, this alternative analyzes the environmental effects that could occur if the C-CAP were not implemented and development proceeded under the existing General Plan. Only those issue areas that are discussed in the EIR technical sections are analyzed below.

Potential Impacts

Aesthetics

Development that could occur under the existing General Plan, without implementation of the C-CAP, would include intensification of uses in the identified opportunity corridors, particularly in the Downtown, on North Main Street, and near the Metrolink station, as well as infill development elsewhere in the City and SOI. Future development would not result in degradation of visual character or quality of the City or the SOI, as all development would be required to comply with design guidelines in the General Plan, Municipal Code, and applicable Specific Plans. These design guidelines govern required setbacks, densities, building heights, massing, appropriate step-downs, and other architectural requirements to ensure a high quality of development. Specifically, General Plan Policy 1.4.4 requires that the City proactively promote the adaptive re-use and infill of economically underutilized, obsolete, and dilapidated commercial and industrial sites within existing urbanized areas, in consideration of the uses, scale, and character of adjoining uses. Policy 1.5.5 requires all development to adhere to the design and development guidelines as subsequently stipulated by this Plan's policies for each land use district, as well as implementing ordinances and Specific Plans. The C-CAP does not provide for further intensification of uses or specific development. Thus, the impact from future development on visual character and quality would be less than significant, similar to the proposed project.

Cultural Resources

With regard to historic resources, future development or redevelopment of the General Plan could adversely affect historic resources. Several structures within the City and within the SOI are eligible or potentially eligible for listing on the NRHP, CRHR, the Corona Register of Historic Resources, or the Corona Heritage Inventory and, therefore, meet the definition of historical resources under Section 15064.5(a) of the CEQA Guidelines. While it is possible that fewer energy-efficiency retrofit activities as recommended under the C-CAP would occur, other development activities could result in damage to or alteration of historic or potentially historic structures. Policy 4.2.5 of the General Plan

requires, for any modification to a historic structure, compliance with *The Secretary of the Interior's Standards for Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* (Weeks and Grimmer 1995), and according to CEQA Guidelines Section 15064.5(b)(3), a project that follows these standards and guidelines shall generally be considered to have mitigated to a less-than-significant level the impact on a historic structure. Similar to the proposed project, all development would be required to comply with these guidelines, as well with General Plan and Specific Plan policies that protect historic resources. The City of Corona Municipal Code Chapter 17.63 (Historic Resources) establishes the Corona Heritage Inventory and the Corona Register of Historic Resources. The Corona Heritage Inventory includes only heritage properties listed by the Planning Commission in accordance with the Municipal Code. Heritage properties listed on the Corona Heritage Inventory may or may not be eligible for listing on the Corona Register of Historic Resources. The Corona Register of Historic Resources is a local register comparable with the CRHR and the NRHP, with similar criteria, definitions, and considerations. The Corona Register of Historic Resources includes landmarks, historic districts, and historic markers, and the contributing historic resources within historic districts, as listed by the City Council in accordance with the Municipal Code. All sites, improvements, and natural features within the City boundaries that are listed on the CRHR or the NRHP are automatically listed on the Corona Register of Historic Resources. To be eligible for consideration in the Corona Register of Historic Resources, a resource must be nominated through a City application and meet identified criteria. Thus, all structures included in the Corona Register would be protected, and all modifications would be subject to the City's historic review process. Therefore, the impact would be less than significant, the same as for the proposed project.

Greenhouse Gas Emissions

The C-CAP is intended to reduce greenhouse gas emissions in compliance with AB 32 and the California Air Resources Board's Climate Change Scoping Plan. Specific measures would be implemented that are in addition to the policies in the General Plan that would facilitate achievement of this goal. Without implementation of the C-CAP, there would be less formalized Citywide guidance to reduce greenhouse gas emissions. The C-CAP not only provides an emissions inventory and reduction measures, it provides a vehicle through the use of screening tables for determining the success of these measures and demonstrating compliance with the applicable state regulations. Without the C-CAP, there is no formal vehicle for demonstrating compliance with state law, even though existing City policies promote sustainability and would have the effect of reducing greenhouse gas emissions. Thus, this alternative would have less of a beneficial effect, and could have an adverse effect, on greenhouse gas emissions compliance compared to the proposed project.

Hazards/Hazardous Materials

Development under the General Plan could still include structures in the ALUP area of the Corona Municipal Airport. Similar to the proposed project, all proposed development projects would require review by the Riverside County Airport Land Use Commission to ensure continuing aircraft safety. Therefore, while development of the General Plan could place structures that could cause glare in the ALUP area, compliance with these procedures and regulations would reduce the impact on aircraft safety to less than significant, the same as for the proposed project.

Land Use/Planning

The City of Corona General Plan was adopted and the Environmental Impact Report was certified in March 2004. The Final EIR determined that the General Plan was both internally consistent and consistent with applicable land use plans such as the AQMP and SCAG's RTP and Compass Growth Visioning. Therefore, continuation of the existing General Plan without implementation of the C-CAP would remain consistent with these land use plans. However, without adoption of the aggressive reduction policies in the C-CAP, the City may not be in compliance with state regulations to reduce greenhouse gas emissions, or may not be able to demonstrate to the satisfaction of the California Air Resources Board that it has done so. The C-CAP provides assurance that the City is in compliance with AB 32. Thus, continuation of the existing General Plan without implementation of the C-CAP would not result in the same beneficial effects of plan compliance, although it would result in a similar less-than-significant impact with respect to consistency with other identified land use plans.

Agriculture/Forestry Resources

There is no forest land within the Corona city limits or SOI. The proposed project would not cause rezoning of any forest land or timberland, convert any forest land to non-forest use, or result in the loss of forest land. There are no Williamson Act properties within the City. Public utility development could be constructed in open space areas subject to a Conditional Use Permit and LESA requirements, the same as under the proposed project. Therefore, the risk of conversion of agricultural land to non-agricultural use is the same as for the proposed project, and is less than significant.

Attainment of Project Objectives

The City developed the Corona Climate Action Plan (C-CAP) to:

- Create a GHG baseline from which to benchmark GHG reductions.
- Provide a plan that is consistent with and complementary to the GHG emissions reduction efforts being conducted by the State of California through the Global Warming Solutions Act (AB 32); the federal government through the actions of the Environmental Protection Agency; and the global community through the Kyoto Protocol.
- Guide the development, enhancement, and implementation of actions that aggressively reduce GHG emissions.
- Provide a policy document with specific implementation measures meant to be considered as part of the planning process for future development projects.
- Provide a list of specific actions that will reduce GHG emissions, with the highest priority given to actions that provide the greatest reduction in GHG emissions and benefits to the community at the least cost.
- Reduce emissions attributable to Corona to levels at or below 1990 GHG emissions by year 2020 consistent with the target reductions of AB 32.
- Establish a qualified reduction plan for which future development within the City can tier and thereby streamline the environmental analysis necessary under the California Environmental Quality Act (CEQA).

Without adoption and implementation of the C-CAP, there would be no method to benchmark GHG emissions, provide a plan consistent with reduction efforts being conducted state- and worldwide, would not guide the development, enhancement and implementation of actions that aggressively reduce GHG emissions, provide a policy document to be considered as part of the planning process for future development projects, provide a list of specific actions to reduce GHG emissions, or establish a qualified reduction plan for which future development within the City can tier. Continuation of the General Plan *may* reduce GHG emissions consistent with the target reductions of AB 32, but it is unlikely the City will be able to reduce emissions to levels at or below 1990 GHG emissions by the year 2020 without the aggressive measures contained in the C-CAP. Therefore, this alternative would not meet the objectives of the proposed project.

6.4 COMPARISON OF ALTERNATIVES

Table 6-1 Comparison of Alternatives and Proposed Project Impacts

Environmental Issue Area	*No Project/Reasonably Foreseeable Development*
Aesthetics	=
Cultural Resources	=
Greenhouse Gas Emissions	+
Hazards and Hazardous Materials	=
Land Use	=
Agricultural and Forest Resources	=

(–) = Impacts considered to be less when compared with the proposed project.
(+) = Impacts considered to be greater when compared with the proposed project.
(=) = Impacts considered to be equal or similar to the proposed project.

6.5 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The No Project/Reasonably Foreseeable Development Alternative would not be environmentally superior to the proposed project on the basis of the minimization or avoidance of physical environmental impacts. With respect to GHG emissions, the No Project Alternative would have potentially greater, and possibly significant, impacts. Therefore, according to the above analysis and as summarized in Table 6-1 (Comparison of Alternatives and Proposed Project Impacts), the proposed project would be the preferred, environmentally superior alternative.

6.6 REFERENCES

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