CHAPTER 4 ALTERNATIVES

This chapter of the Draft SEIR identifies and evaluates alternatives to the project. Alternatives are developed to avoid or substantially lessen significant or potentially significant adverse environmental effects identified because of the implementation of the project, while still attaining most of the basic project objectives.

4.1 Rationale for Alternatives Selection

In accordance with Section 15126.6(a) of the CEQA Guidelines, an EIR must describe a range of reasonable alternatives to 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. Section 15126.6(a) also provides that an EIR need not consider every conceivable alternative to a project. Instead, the EIR must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation, but is not required to consider alternatives that are infeasible. There is no ironclad rule governing the nature or scope of the alternatives to be discussed in an EIR, other than the "rule of reason." CEQA Guidelines Section 15126.6(f) states that "the range of alternatives required in an EIR is governed by a 'rule of reason' that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice." "The range of feasible alternatives shall be selected and discussed in a manner to foster meaningful public participation and informed decision making."

The following discussion covers a reasonable range of feasible alternatives that focuses on avoiding or substantially lessening the significant effects of the project, even if these alternatives would not attain all the project objectives or would be costlier. According to the CEQA Guidelines, there are many factors that may be considered when addressing the feasibility of alternatives, such as environmental impacts, site suitability as it pertains to various land use designations, economic viability, availability of infrastructure, regulatory limitations, and jurisdictional boundaries. An EIR need not consider an alternative whose effects cannot be reasonably identified, whose implementation is remote or speculative, or one that would not achieve most of the basic project objectives. However, CEQA requires that a No Project Alternative be included in the range of alternatives and the Environmentally Superior Alternative be identified.

The purpose of project alternatives is to foster meaningful public participation and informed decision-making. According to the CEQA Guidelines Section 15126.6(d), discussion of each alternative should be sufficient "to allow meaningful evaluation, analysis, and comparison with the proposed project," but need not be as detailed as that conducted for the project. Therefore, the significant effects of each alternative are discussed in less detail than those of the project, but in enough detail to provide decision-makers perspective and a reasoned choice among alternatives to the project.

The selection of alternatives considers the Project Objectives provided in Chapter 1, Project Description.

The fundamental purpose of the project is to reduce unincorporated County GHG emissions consistent with state legislative requirements through implementation of a CAP, which includes strategies and measures to reduce community and County local government operations (County operations) GHG emissions. Community emissions refer to those GHG emissions generated by activities within the unincorporated County. County operations GHG emissions refer to those GHG emissions generated by County facilities and operational activities throughout the County, including facilities and operations located within incorporated cities, as described in the CAP. The GPA would implement the necessary changes to the County's General Plan to incorporate the CAP and the state GHG legislative requirements. The Guidelines and the GHG Threshold contained therein provide guidance on determining a project's significance as it relates to GHG emissions and determining whether a project would be consistent with the County's CAP.

The CAP, GPA, GHG Threshold, and Guidelines (project) intend to achieve the following objectives:

- Reduce community and County operations GHG emissions to meet the County's GHG reduction targets for 2020 and 2030, and provide a mechanism to meet the County's projected 2050 goal;

- Identify GHG reduction strategies and measures that reduce GHG emissions from activities in the unincorporated areas and address the challenges of a changing climate and improve resilience over the long term;

- Update the County's General Plan and General Plan Update PEIR to incorporate and reflect the GHG reduction targets, strategies, and measures of the CAP for the reduction of GHG emissions because of buildout of the General Plan;

- Provide Guidelines for determining significance that include a GHG threshold of significance related to GHG emissions and provide guidance to the community on how to achieve consistency with the CAP and utilize CEQA streamlining tools for analysis of GHG emission pursuant to the requirements of CEQA Guidelines Section 15183.5 (b)(2) or as subsequently amended;

- Prepare a County GHG emissions inventory, which includes community and County operations emissions, and analyze the potential growth of these emissions over time; and,

- Establish a comprehensive approach to reduce County GHG emissions by incorporating feasible and effective GHG emission reduction measures.

Three components of the project—GPA, GHG Threshold, and Guidelines—are policy actions and would not directly or indirectly result in physical environmental changes. These actions require preparation of a CAP and the evaluation of consistency with the CAP. The driver for potential environmental impacts would come from the implementation measures and supporting efforts outlined in the CAP. This Draft SEIR programmatically evaluates the environmental impacts of implementation of GHG reduction measures and

supporting efforts outlined in the CAP. As described in Chapter 3.0, Effects Found Not to be Significant, impacts to the following issues were determined to be less than significant: Geology and Soils, Mineral Resources, Population and Housing, Public Services, Recreation, and Utilities and Service Systems.

The Draft SEIR determined that implementation of the CAP would result in the following significant impacts:

- Aesthetics and Visual Resources: The CAP would result in increased significant direct and cumulative impacts beyond what was analyzed in the 2011 GPU PEIR related to scenic vistas, scenic resources, visual character, and light and glare because of direct investment projects, traffic calming improvements; bicycle, pedestrian, and alternative transportation improvements, ground or roof-mounted renewable energy systems including small wind turbines; and large-scale photovoltaic solar, concentrated solar, wind turbines, and geothermal energy systems.

- Agricultural Resources: The CAP would result in increased significant direct and cumulative impacts beyond what was analyzed in the 2011 GPU PEIR related to direct or indirect conversion of agricultural resources, conflicts with Williamson Act contracts and agricultural zoning, and forest land conversion because of implementation of direct investment projects, and large-scale photovoltaic solar, concentrated solar, wind turbines, and geothermal energy systems.

- Air Quality: The CAP would result in increased significant direct and cumulative impacts beyond what was analyzed in the 2011 GPU PEIR related to exceedance of federal and state ambient air quality standards, criteria pollutants, odors, and impacts to sensitive receptors because of traffic calming, bicycle, pedestrian, park-and-ride, solid waste expansion, agricultural projects, direct investment projects, and large-scale photovoltaic solar, concentrated solar, wind turbines, and geothermal energy systems. The CAP would result in new significant impacts related to odors because of the potential for new or expanded organics processing facilities.

- Biological Resources: The CAP would result in increased significant direct and cumulative impacts beyond what was analyzed in the 2011 GPU PEIR related to special-status species, riparian resources, and wildlife movement corridors because of GHG reduction measures and supporting efforts that would include construction of traffic calming, bicycle, pedestrian, park-and-ride, water infrastructure improvements, solid waste expansion, agricultural projects, direct investment projects, and large-scale photovoltaic solar, concentrated solar, wind turbines, and geothermal energy systems.

- Cultural Resources: The CAP would result in increased significant direct and cumulative impacts beyond what was analyzed in the 2011 GPU PEIR related to historical resources because of energy efficiency improvements and the construction of small-scale solar photovoltaic and small wind turbines, and

upgrading mechanical systems. The CAP would result in significant project and cumulative impacts related to archaeological, paleontological resources, and inadvertent discovery of human remains because of construction of traffic calming, bicycle, pedestrian, park-and-ride, solid waste expansion, agricultural projects, direct investment projects, and large-scale photovoltaic solar, concentrated solar, wind turbines, and geothermal energy systems.

- Greenhouse Gases: While the individual measures and strategies within the CAP would lead to overall GHG reductions sufficient to meet the 2020 and 2030 targets, because future implementation actions (both state and local) are needed to achieve the emission reductions goal for 2050. Thus, achievement of the 2050 goal cannot be certain. Therefore, a significant and unavoidable GHG impact related to attainment of 2050 GHG reduction goal would occur.

- Hazards and Hazardous Materials: The CAP would result in increased significant direct and cumulative impacts beyond what was analyzed in the 2011 GPU PEIR related to wildfire from small- and large-scale renewable energy systems because of the introduction of mechanical and electric components, as well as construction activities in areas of the County that are susceptible to wildfire.

- Hydrology and Water Quality: The CAP would result in increased significant direct and cumulative impacts beyond what was analyzed in the 2011 GPU PEIR related to groundwater supplies and recharge from large-scale geothermal systems (i.e., open-loop), large-scale renewable projects, and direct investment projects because these projects could result in substantial groundwater demands in groundwater basins that are in stressed or overdraft conditions.

- Land Use: The CAP would result in increased significant direct and cumulative impacts beyond what was analyzed in the 2011 GPU PEIR related to the division of an established community because of GHG Reduction Measure E-2.1, which would result in new utility-scale solar and wind renewable energy systems which could result in road improvements that could physically divide an established community.

- Noise: The CAP would result in increased significant direct and cumulative impacts beyond what was analyzed in the 2011 GPU PEIR related to excessive noise and permanent and temporary increases in ambient noise levels because of GHG Reduction Measure E-2.1, which would result in new utility-scale wind renewable energy systems which could produce significant noise during operation. No other GHG reduction measures would result in significant impacts.

- Transportation and Traffic: The CAP would result in increased significant direct and cumulative impacts beyond what was analyzed in the 2011 GPU PEIR related to conflicts with a plan, policy, or ordinance establishing measures of effectiveness for a circulation system, conflicts with a congestion management program, and increases in hazardous design features because of implementation of new traffic calming measures, new or expanded park-and-ride facilities, new or expanded

pedestrian and bicycle improvements, new large-scale renewable energy systems including solar photovoltaic, solar concentrator, wind turbines, or geothermal, and new or expanded solid waste facilities.

- Tribal Cultural Resources: The CAP would result in significant project and cumulative impacts to unknown tribal cultural resources (TCRs) because of construction of traffic calming, bicycle, pedestrian, park-and-ride, solid waste expansion, agricultural projects, direct investment projects, and large-scale photovoltaic solar, concentrated solar, wind turbines, and geothermal energy systems.

The alternatives evaluated in this chapter include the following:

- No Project Alternative: The No Project Alternative assumes the CAP, GPA, GHG Thresholds, and Guidelines would not be adopted and implemented. As a result, the County would not adopt strategies, measures, and supporting efforts to reduce GHG emissions in accordance with state-mandated reduction targets.

- Enhanced Direct Investment Program Alternative: This alternative would implement the CAP without the renewable energy program (GHG Reduction Measure E-2.1). In lieu of the renewable energy program, the County would pursue the Direct Investment Program (GHG Reduction Measure T-4.1) to a greater degree than currently proposed in the CAP.

- 100 percent Renewable Energy Alternative: This alternative would evaluate the increase in renewable energy production from 90 percent proposed in the CAP to 100 percent.

- Increased Solid Waste Diversion Alternative: This alternative would increase the solid waste diversion rate from 75 percent to 80 percent by 2030.

Each of the alternatives addressed in this chapter were examined to determine the extent to which they would avoid or minimize the significant impacts associated with the project.

4.2 Alternatives Considered but Rejected

Consistent with CEQA Guidelines Section 15126.6(c), a brief discussion of those alternatives considered but rejected as infeasible follows.

4.2.1 Alternative Locations

The County's CAP is a programmatic approach to reduce GHG emissions within the unincorporated County in accordance with state GHG emissions reduction targets. The CAP accomplishes this by adopting strategies, measures, and supporting efforts that reduce GHG emissions. These strategies, measures, and supporting efforts would apply to all areas of the unincorporated County and would not be limited to one area or property. Therefore, an alternative site where the project could be implemented would not be

feasible or appropriate because the County only has jurisdiction over lands within its legal boundaries. As such, consideration of an alternative location has been eliminated from further analysis in this Draft SEIR.

4.2.2 Reduced Solid Waste Alternative

This alternative would eliminate GHG Reduction Measure~~s~~ SW-1.1 that establish county-wide diversion targets and increase the facilities that would provide organics processing services. As described in the CAP, this measure would account for reductions of a total of 57,103 $MTCO_2e$ by 2030 and 62,159 $MTCO_2e$ by 2050. These reductions would be achieved through 75 percent solid waste diversion by 2025 for the unincorporated county through implementation of the Strategic Plan to Reduce Waste. As described in the Draft SEIR, this GHG reduction measure would expand solid waste diversion and organics processing services and the necessary facilities to meet these demands could result in significant odor and other construction-related impacts (e.g., air quality and noise). The County Board of Supervisors has recently adopted the County's Strategic Plan to Reduce Waste. Within that plan, the County has set targets for increases in waste diversion and organics processing county-wide that are at the levels contemplated in the CAP. An alternative that considers elimination of increased solid waste diversion and organics processing, would be in direct conflict with the adopted Strategic Plan to Reduce Waste because it would reduce the percentage of waste diversion already approved by the Board of Supervisors (i.e., 75 percent). For this reason, this alternative has been eliminated from further consideration.

4.2.3 80 percent Below 1990 Levels by 2030 (Climate Stabilization Alternative)

Comments were received during the NOP scoping process that the County should consider an alternative that results in the reduction of GHG emissions to levels that would lead to global climate stabilization. The Intergovernmental Panel on Climate Change (IPCC) defines climate stabilization as limiting global average temperature increase to 2 degrees Celsius above pre-industrial levels. The target reduction of 80 percent below 1990 levels by 2050 under Executive Order S-3-05 is intended to achieve this stabilization goal. To reach climate stabilization levels, more significant reductions in GHG emissions must occur statewide and globally.

This alternative considers reducing GHG emissions county-wide to achieve the climate stabilization goal, which is 80 percent below 1990 GHG emissions levels by 2030 instead of 2050 which is equivalent to a reduction of 2,472,859 MT CO_2e below 2014 levels. To achieve this goal, more advanced GHG reduction measures focusing on larger emission sectors, such as transportation and the existing environment would need to be implemented, with a smaller proportion of reductions coming from new development. These measures would include, but not be limited to: net zero energy requirements for both existing and new buildings; combination of distributed and consolidated renewable generation systems; major improvements in and expansion of transit infrastructure to increase ridership countywide to offset single-occupancy vehicles; large scale decarbonization of transportation fleet; phase-out of fossil fuels in vehicles, equipment,

and buildings; increased use of alternative fuels, such as biogas; significant reductions in imported water use through increased desalination and other local water sources; replacement of existing anaerobic septic systems with aerobic systems; achievement of zero waste; and adoption of an urban growth boundary that restricts development to the western portion of the county.

While some of the above reduction measures may be possible from a technological standpoint (such as achievement of zero net energy in existing buildings), there are currently no legal mechanisms that require many of these improvements, especially improvements to existing homes and businesses which may account for a majority of emissions in the future as new construction becomes increasingly more efficient. Certain measures, such as adopting an urban growth boundary and constructing new transit infrastructure in remote areas of the County, may have economic and technological constraints, would not be consistent with the rural character of the County, and may not be able to be implemented at the scale that would be required to implement these programs throughout the unincorporated areas. Further, to achieve GHG emissions reductions that would meet climate stabilization targets, a significant combination or all of the above measures would need to be implemented, the economic feasibility of which is not known because the cost of those measures is not currently known. Achievement of an accelerated climate stabilization goal would require substantial behavioral changes and paradigm shift in policy and technology. Implementation of most of these measures, such as decarbonization of the transportation fleet, would be outside the County's direct jurisdiction. Finally, a climate stabilization target as a mandatory requirement for implementation goes beyond currently adopted state targets and federal legislative requirements.

While implementation of additional GHG reduction measures would result in an overall reduction in GHG emissions in the unincorporated County, no significant unmitigated GHG emissions impacts related to the legislatively required 2020 and 2030 reduction targets were identified for the project. If all of the measures listed could somehow result in achieving emission reduction goals linked to climate stabilization, it would result in reduced GHG emissions and could potentially close the gap of emission reductions required to meet the state 2050 goal and eliminate the project's significant and unavoidable GHG impacts. However, many of the actions that would realistically lead to meeting the 80 percent goal (such as transit enhancements) are outside of the jurisdiction and land use authority of the County.

Further, many of the additional reduction measures that would be required for this alternative would result in substantial infrastructure investment and construction, the impacts of which would increase the overall levels of construction-related impacts county-wide. While this alternative would meet some of the project objectives to identify reduction targets that meet current legislative requirements and would establish a plan to reduce community and County operations GHG emissions, this alternative would not meet the fundamental purpose of a CEQA alternative, which is to reduce or avoid the significant environmental impacts of the project. For these reasons, this alternative was rejected from further consideration.

4.2.4 Carbon Neutral Alternative

Comments were received during the NOP scoping process that the County should consider an alternative that results in the reduction of GHG emissions to levels that would result in carbon neutrality in the County as a whole. This alternative considers reducing GHG emissions county-wide to achieve zero emissions in the County by 2050 Achieving carbon neutrality county-wide would require implementation of measures well above and beyond state legislation and regulations, and well beyond the jurisdiction and land use authority of the County. The California Air Resources Board (CARB) has prepared a draft plan for achieving emissions 40 percent below 1990 levels by 2030 and has not considered adoption of a carbon neutrality goal by that target year. To reach carbon neutrality, more significant reductions in GHG emissions must occur statewide and globally. The County would not have the authority to require emission reductions at this scale, as further discussed below.

This alternative would require additional GHG emissions reductions in all CAP categories through measures listed above in Section 4.2.3, 80 percent below 1990 Levels by 2050 (Climate Stabilization Alternative), as well as implementation of the additional advanced GHG reduction measures including: reforming the systems that deliver utility-scale power, implementing aggressive mode-shifts from automobile to non-automobile trips, mandating 100 percent waste diversion by 2030, mandating renewable energy positive standards for new construction (i.e., buildings that export energy to the grid), limiting consumption of goods produced outside of the region, and retiring fossil-fuel based utility plants.

As described above for the Climate Stabilization Alternative, many of the additional GHG reduction measures for all CAP categories may be technologically and economically infeasible, and most would result in greater and more significant environmental impacts than the project because of the substantial physical changes that would be required (e.g., construction). In addition, the measures that would be required to reach carbon neutrality, would require not only significant actions by the County and state, but significant shifts in the daily behavior and activities of residents. The success of these types of measures are unknown and may not be achievable. While achievement of carbon neutrality would result in reduced GHG emissions and could close the gap of emission reductions required to meet the 2050 goal and eliminate the project's significant and unavoidable GHG impact, many of the actions required would not be subject to the control of the County. Further, many of the additional reduction measures would result in substantial infrastructure investment and construction, the impacts of which would increase the overall levels of construction-related impacts county-wide. While this alternative would meet some of the project objectives to identify reduction targets that meet current legislative requirements and would establish a plan to reduce county-wide GHG emissions, as described above this alternative relies upon measures that may be technologically and economically infeasible, would result in less GHG reductions than the project, and would not would not meet the fundamental purpose of a CEQA alternative, which is to reduce or avoid the significant environmental impacts of the project. For these reasons, this alternative was rejected from further consideration.

4.2.5 Distributed Generation Alternative

Comments were received during the NOP scoping process that the County should consider an alternative or should only adopt GHG reduction measures that would limit renewable energy generation to distributed generation systems (i.e., a variety of small, grid-connected systems) and that large, utility-scale energy systems should not be considered. As described in this Draft SEIR, many of the project's significant impacts are associated with the large, utility-scale components that would be induced through implementation of a renewable energy program outlined in GHG Reduction Measure E-2.1. A renewable energy program induces demand for renewable energy by giving ratepayers an option of having their energy generated by renewable energy sources at competitive market rates. By establishing such a program, additional demand for larger-scale renewable energy systems is created.

The County currently allows construction of large-scale renewable energy systems (e.g., solar, wind, geothermal) subject to its ordinances, policies, and standards. This would not change under this alternative. However, this alternative would remove the renewable energy program component of GHG Reduction Measure E-2.1 and would instead promote the construction of distributed generation systems. By eliminating the renewable energy program component, this alternative would eliminate the induced demand for potentially larger and a greater number of large-scale renewable energy systems. Large-scale renewable energy systems could still be developed and their associated impacts could occur. However, this alternative would eliminate the induced demand for these systems, thereby reducing the total numbers of systems that would occur within the County. Therefore, overall impacts (e.g., construction, biological resources, air quality) would be reduced compared to the project. Distributed generation systems are currently allowed within the County and would be further enhanced through GHG Reduction Measure E-2.1.

If large, utility-scale components were eliminated from this measure, then additional distributed generation sites and infrastructure (e.g., rooftops, individual lots) would be required to make up the gap and still achieve 90 percent renewable energy by 2030 – enough to offset 230,365 $MTCO_2e$. This is equivalent to installing 971 GW of solar projects in addition to the solar installations that would occur under GHG Reduction Measure E-2.2 and E-2.3 (see Attachment 1 of Appendix C). If limited to residential installations, this would require the participation of over 245,000 homes, which is greater than the County's anticipated 192,925 households by 2030. Even if 100 percent of all homes have installed solar by 2030, making up the gap would entail additional installation of 265 MW of solar projects, requiring 16.7 million square feet of roof space. A 2009 solar feasibility study for San Diego County estimated that the entire County has 235 million square feet of commercial and industrial roof space (Anders and Bailek 2009). With unincorporated County jobs accounting for approximately 10 percent of Countywide jobs, this leads to an estimated ~~2.3~~ 18.7 million square feet of available non-residential roof space in the unincorporated County – less than what would be required to install 265 MW of solar. Thus, it would be unlikely that there would be sufficient sites and infrastructure that could support distributed generation facilities to provide the amount of GHG reductions to make up for those allocated from large, utility-scale renewable energy facilities in Measure E-2.1.

It is also not known whether the Distributed Generation Alternative would meet most of the project objectives, specifically to reduce community and County operations GHG emissions to meet the 2020 and 2030 targets, because of its highly speculative nature. The amount of rooftop space for solar and additional land required to implement it may not be within the control of the County. For example, CAP Measure E-2.2 requires amendment of County code and zoning ordinance to require installation of solar energy systems on new non-residential development. The reductions from this measure are quantified separately from the reductions taken by Measure E-2.1 (90 percent renewable energy by 2030). Measure E-2.3 requires installation of photovoltaic (PV) electrical systems in existing residential development to offset 32 percent of electricity use in existing homes by 2020 and 80 percent by 2030. The reductions from this measure are also quantified separately from the reductions taken by Measure E-2.1. Elimination of the large-scale renewable systems from Measure E-2.1 would require Measures E-2.2 and E-2.3 to require a larger percentage of PV electrical systems on new non-residential and on existing residential, which may not be achievable within the County's jurisdiction, as noted previously. In addition, under Measure E-2.4, a Distributed Generation Alternative could ~~also~~ require additional renewable energy generation from County facilities, ~~the feasibility of which is not known and~~ which would require an amendment to the County's 2015 – 2020 Strategic Energy Plan. The County's 2015-2020 Strategic Energy Plan identifies the feasible actions the County can take to increase renewable energy facilities on its buildings. Currently, 2.8% of the County's operational electricity is provided by onsite renewable sources. As defined in the County's 2015-2020 Strategic Energy Plan, increasing onsite renewable generation is one of the County's top sustainability priorities and efforts are already underway to increase onsite generation to meet both the goals of the 2015-2020 Strategic Energy Plan and the targets in the CAP. Expansion of renewable energy generation at County facilities beyond what is currently identified may not be feasible due to the limited suitability and availability of eligible County sites. The balance of available sites include older facilities that would require significant upgrades to roofing or electrical systems, facilities that are not properly oriented to accommodate solar, buildings that are in locations planned to be redeveloped, or buildings that are in locations where the County cannot confirm its presence onsite for the next 25 years. Therefore, an alternative that would require expansion of renewable energy generation at County facilities may not be feasible without further study.

To achieve 90 percent renewable energy for the unincorporated County by 2030 both distributed generation and small- and large-scale renewable energy systems would be required. Furthermore, to meet the targets established in the CAP, increased reductions would need to be achieved through increases or enhancements of other reduction measures the implementation of which could result in environmental impacts. The Enhanced Direct Investment Program Alternative analysis below provides the comparative impacts of the elimination of a renewable energy program. For the reasons described above, this alternative has been eliminated from further evaluation.

4.2.6 Other Variations/Combinations of GHG Reduction Measures Alternative

The CAP includes ~~29~~ 30 GHG reduction measures all of which combine to total 897,145 $MTCO_2e$ in GHG reductions by 2030. The two sectors of GHG reductions where most significant impacts would result are the Energy Sector (measures associated with small- and large-scale renewable energy facilities) and the Solid Waste Sector (measures associated with new or expanded solid waste facilities). Alternatives that consider either reductions or enhancements of GHG reductions from these sectors are considered within the Modified Solid Waste Alternative (and rejected for the reasons stated above), Enhanced Direct Investment Program Alternative, and the 100 percent Renewable Energy Alternative, which are evaluated in more detail below.

The County could consider varying degrees of implementation of each GHG reduction measure, to the degree implementation would be feasible to reach its ultimate 2030 target. However, the CAP that is proposed and evaluated throughout this Draft SEIR has recommended the full spectrum of feasible GHG reduction measures at the levels that reductions can be feasibly attained and estimated. This Draft SEIR has programmatically evaluated and disclosed the potential environmental impacts of implementation of the selected set of reduction measures based on the best available information regarding the technical and economic feasibility of those measures. These measures would be implemented in an adaptive management format, where implementation of the measures would be monitored on a yearly basis and adjustments to the CAP would be made as needed to ensure that reduction targets would be met. Therefore, this Draft SEIR appropriately evaluates the landscape of environmental impacts that could potentially occur with all reduction measures considered.

The purpose of an alternatives analysis is to identify alternatives that reduce or avoid the significant impacts of the project. As summarized above and evaluated throughout the Draft SEIR, significant environmental impacts were primarily associated with construction effects from implementation of many of the measures across all sectors, operational impacts to sensitive receptors associated with odors for new or expanded solid waste facilities, and construction and operational impacts associated with implementation of renewable energy facilities through GHG Reduction Measure E-2.1.

Significant construction-related impacts would occur across all sectors. An alternative that would reduce the construction-related impacts in one sector, would require implementation of additional projects in another sector such that the overall magnitude and type of construction-related impacts would not change substantially. Within the context of CEQA, this would not offer an alternative that would reduce or avoid the significant impacts of the project.

While commenters may suggest that certain GHG reduction measures be pursued, funded, or supported to a greater degree than others, as described above, the County has proposed a CAP that based on its assessment of local conditions, regulatory requirements, and feasibility, provides a full spectrum of feasible GHG reduction measures at levels that can be feasibly achieved and estimated. The Draft SEIR provides

potential alternatives that considered the elimination of environmental impacts from each of the sectors where significant impacts would occur, fulfilling its obligations under CEQA. As described in CEQA Guidelines Section 15126.6(a),

> "An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives which are infeasible. The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives."

The Draft SEIR provides a reasonable range of alternatives for consideration by decisionmakers. The County has considered and evaluated the categories of alternatives that reduce or avoid the significant impacts of the project. As such, evaluation of additional combinations or levels of implementation of the GHG reduction measures is not required nor would it be meaningful to the analysis.

4.3 Alternatives Considered in the Draft SEIR

As indicated by the objectives listed above, the project is designed to achieve consistency with state law regarding GHG emissions reduction targets. The CAP is intended to reduce GHGs by improving multimodal transportation and ridesharing options, improving fuel efficiency, increasing building energy efficiency, increasing renewable energy use and access, increasing waste diversion, increasing water conservation, and reducing emissions from agriculture.

A total of four representative alternatives, including the CEQA required No Project Alternative, are evaluated in this Draft SEIR. For each alternative, a brief discussion of its principal characteristics is followed by an analysis of anticipated environmental impacts. The emphasis of the analysis is on the alternative's relative adverse effects compared to the project and a determination of whether the alternative would reduce, eliminate, or create new or greater significant impacts. The analysis also considers each alternative's potential achievement of project objectives. The alternatives are described below.

4.3.1 No Project Alternative

Section 15126.6(e) of the CEQA Guidelines requires that an EIR evaluate and analyze the environmental impacts of the No Project Alternative, to examine and compare the potential environmental consequences associated with not approving the CAP, GPA, GHG Threshold, and Guidelines.

This alternative assumes that development would occur under the existing 2011 GPU as adopted, but without a qualified CAP as a mechanism to mitigate the GHG emissions that are resultant from the build-out of the 2011 GPU.

4.3.1.1 Description and Setting

The No Project Alternative assumes that the CAP, GPA, GHG Threshold, and Guidelines would not be adopted or implemented. As a result, the County would not adopt strategies, measures, and supporting efforts to reduce GHG emissions in accordance with state-legislated reduction targets. Existing conditions for each environmental issue as described in Chapters 2.0 and 3.0 of this Draft SEIR would be unchanged.

Under the No Project Alternative, none of the GHG reduction measures or supporting efforts set forth by this CAP would be implemented to reduce GHG emissions from buildout of the 2011 GPU. While new development in the County would continue to be reviewed for project consistency with screening levels established by the guidance provided by California Air Pollution Control Officers Association (CAPCOA) CEQA and Climate Change White Paper (2008), energy efficiency and GHG reduction measures at the level anticipated under the CAP would likely not be implemented without the CAP requiring them. While individual projects would need to demonstrate compliance with applicable regulations, a mechanism by which the County could enforce reductions (i.e., CAP Consistency Checklist) and ensure communitywide targets could be met, would not be in place. The County also would not have a tracking and monitoring system in place to monitor its progress towards achieving state reduction targets. Without a CAP, individual projects would be responsible for demonstrating GHG reductions on a project-by-project basis through a variety of mechanisms (e.g., design features, offsets, incentives). Also, as stated in the CAP, Chapter 3, the County is projected to meet the 2020 target as required in the 2011 GPU. Under the No Project Alternative, the County would not have a program in place to meet the legislative reduction targets in SB 32 of 40 percent below 1990 levels by 2030. In addition, without a CAP in place, the No Project Alternative would not achieve any of the SEIR's project objectives and would not provide a streamlining mechanism for future development projects to evaluate their GHG impacts.

4.3.1.2 Comparison of the Effects of the No Project Alternative to the Significant Effects Associated with the CAP

As described above, under the No Project Alternative the CAP, GPA, GHG Threshold, and Guidelines would not be implemented. As a result, the County would not have a mechanism by which to meet SB 32 legislative requirements for GHG emissions. Further, the County would still be obligated to ensure that development under the 2011 GPU would comply with legislative requirements for GHG emissions. Compliance with these requirements would be achieved through individual project-level analysis for all development projects subject to discretionary review.

As a result, many of the physical environmental impacts identified in the Draft SEIR could still occur. The No Project Alternative would not satisfy the County's obligation under Mitigation Measure CC-1.2 of the 2011 GPU PEIR, which requires the preparation of a CAP to achieve reduction targets. While the project results in changes to the adopted mitigation of the 2011 GPU PEIR (Mitigation Measure CC-1.2) and concluded that even with implementation of this mitigation significant GHG impacts associated with the 2011 GPU could occur for 2050, this alternative eliminates the mechanism by which the County

could effectively reduce GHG emissions and meet legislative requirements for 2030. While GHG impacts would be assessed on a project-by-project basis, without the project in place, it may be more difficult for the County to achieve compliance and could result in inconsistencies with legislative requirements. Therefore, this alternative could result in greater GHG impacts. As stated above, this alternative would support achievement of 2020 reduction targets because the County is on track to meet those targets; however, this alternative would not advance any of the other project objectives. Further, this alternative would not provide a streamlining mechanism for future development projects to evaluate their GHG impacts.

4.3.2 Enhanced Direct Investment Program Alternative

This alternative would implement GHG Reduction Measure E-2.1 without the renewable energy program option. In lieu of the that program, the County would need to pursue other GHG reduction measures. As described in the CAP, a Direct Investment Program (GHG Reduction Measure T-4.1) could offer significant GHG reduction benefits. Therefore, under this alternative, the County would pursue direct investments in local projects to offset carbon emissions to a greater degree than currently proposed in the CAP.

4.3.2.1 Description and Setting

Under this alternative, the CAP, GPA, GHG Threshold, and Guidelines would be adopted and implemented, similar to the project. However, this alternative would pursue a greater level of direct investment projects in exchange for eliminating the renewable energy program component of GHG Reduction Measure E-2.1. As described above under the Distributed Generation Alternative, by eliminating the renewable energy program component, this alternative would eliminate the induced demand for potentially larger and a greater number of large-scale renewable energy systems. While large-scale renewable energy systems could still be developed and their associated impacts could occur, this alternative would eliminate the induced demand for these systems; thereby reducing the total number of systems that would occur within the County.

All other GHG reduction measures set forth by the CAP would be implemented in the same manner and level as the project, except for Measure T-4.1 (Direct Investment Program). The renewable energy program proposed under the project would result in 90 percent renewable energy resources for the unincorporated County. The large-scale renewable energy component of this measure would account for a reduction of 229,852 ~~227,423~~ $MTCO_2e$ in 2030. Therefore, the Enhanced Direct Investment Alternative would require a total of 405,312 MTCO2e (i.e., 229,852 MTCO2e from removal of the large-scale renewable energy component plus 175,460 MTCO2e from GHG Reduction Measure T-4.1) in GHG reductions from direct investment projects. Under this alternative, the desired GHG emissions reductions targets of the CAP would be achieved by implementing a greater number of direct investment projects. Direct investment projects include projects implemented in compliance with established protocols including but not limited to: biomass conversion to energy or soil application projects (i.e., conversion of biomass waste to fuel for electricity generation, or conversion of forestry and agricultural residues to soil compost), boiler efficiency upgrades (i.e., implementing retrofits to

increase thermal efficiency in natural-gas fired boilers or process heaters), coastal wetlands creation projects (i.e., restoring degraded wetlands to recapture soil carbon stock), reforestation projects (i.e., planting of trees to recapture CO_2 sinks), compost additions to rangeland projects (i.e., increasing soil carbon sequestration and improving quality of soils), organic waste digestion projects (i.e., diverting organic waste and/or wastewater to a biogas control system), livestock management projects (i.e., installing biogas control systems for manure management on dairy cattle and swine farms), and winterization projects (i.e., energy efficiency upgrades to buildings). See Appendix B of the Draft SEIR for a range of the potential protocols that may be used for direct investments in local projects.

These programs would require the County to invest more heavily in direct investment projects than currently proposed under the project to achieve greater emission reductions. The emissions reductions from the enhanced direct investment would replace the emissions reductions that would have been provided by the renewable energy program. Through this investment, the County would need to generate and retire additional carbon offset credits to make up the emissions reductions that would otherwise be achieved through the renewable energy program. For this to occur, the County would need to investigate if sufficient direct investment opportunities are available locally to generate an additional 229,852 ~~227,423~~ $MTCO_2e$ of reductions. Since the release of the Draft EIR, the "Preliminary Assessment of the County of San Diego Local Direct Investment Program" was completed (see the attachment to the Planning Commission Hearing Report). The report estimates that the County could obtain 50,100 to 198,800 $MTCO_2e$ of reductions via a local direct investment program.

Under this alternative, the County would reduce community-wide and County operations GHG emissions in compliance with state-legislated targets. Upon approval, new development in the County would be reviewed for consistency with the CAP, GHG Threshold, and Guidelines and may be eligible for a streamlined environmental review under CEQA Guidelines Section 15183.5. All energy efficiency measures would be implemented as described under the CAP, which would result in a reduction in county-wide energy consumption. The renewable energy program would not be implemented, which would reduce the construction and operational impacts of large-scale renewable energy facilities that were induced by the program. However, some level of construction and operational impacts for large-scale renewable energy facilities would still occur because construction of these facilities would be allowable subject to the County's ordinances, policies, and standards. Finally, the County would be able to meet the targets established under SB 32 legislation provided that sufficient opportunities to generate the requisite amount of local direct investments are available. The Enhanced Direct Investment Program Alternative would achieve all project objectives.

4.3.2.2 Comparison of the Effects of the Enhanced Direct Investment Program Alternative to the Significant Effects Associated with the CAP

The potentially significant environmental effects resulting from the Enhanced Direct Investment Program Alternative are described below, along with comparisons of these impacts to the project.

Aesthetics: Under this alternative, the renewable energy program would not be implemented and the induced demand for large-scale wind, solar photovoltaic, and geothermal renewable energy systems would not occur. As a result, a fewer number of large-scale systems would be developed and the significant scenic vista, scenic resource, and nighttime lighting and glare impacts would be reduced compared to the project. However, a greater number of direct investment projects would be implemented to provide the additional GHG reductions needed to meet 2030 goals. As described in Section 2.1, Aesthetics, implementation of direct investment projects could result in significant visual changes to the environment depending on the specific projects implemented. Under this alternative, a greater number of direct investments would occur in exchange for the reduced number of large-scale renewable energy projects, both types of project resulting in significant visual impacts. Overall, this alternative would result in visual tradeoffs and impacts would be similar to the project.

Agricultural Resources: Under this alternative, the renewable energy program would not be implemented and the induced demand for large-scale wind, solar photovoltaic, and geothermal renewable energy systems would not occur. As a result, a fewer number of large-scale systems would be developed and the significant agricultural and forest land conversion impacts and Williamson Act conflict impacts would be reduced compared to the project. However, a greater number of direct investment projects would be implemented to provide the additional GHG reductions needed to meet 2030 goals. As described in Section 2.2, Agricultural Resources, implementation of direct investment projects could result in significant agricultural resources impacts depending on the specific projects implemented. Under this alternative, a greater number of direct investments would occur in exchange for the reduced number of large-scale renewable energy projects, both types of project resulting in significant agricultural impacts. Overall, this alternative would result in agricultural tradeoffs and impacts would be similar to the project.

Air Quality: Under this alternative, the renewable energy program would not be implemented and the induced demand for large-scale wind, solar photovoltaic, and geothermal renewable energy systems would not occur. As a result, a fewer number of large-scale systems would be developed and the significant and unavoidable project and cumulative construction-related air quality impacts associated with this measure would be reduced. However, the typical construction impacts associated with direct investment involving larger construction projects (e.g., wetlands creation) would occur, and a greater number of these projects may be required to meet the 2030 reduction goals. This could still result in the exceedance of federal and state ambient air quality standards and criteria pollutants. Therefore, while this alternative would result in substantial reductions in construction-related air quality impacts associated with a fewer number of large-scale renewable energy projects, significant and unavoidable project and cumulative air quality impacts would still occur associated with direct investment projects. Overall, this alternative would result in air quality tradeoffs and air quality impacts would be similar to the project.

Biological Resources: Under this alternative, the renewable energy program would not be implemented and the induced demand for large-scale wind, solar photovoltaic, and geothermal renewable energy systems would not occur. As a result, a fewer number of

large-scale systems would be developed and the significant and unavoidable project and cumulative impacts to special-status species, riparian habitat, and conflicts with wildlife movement corridors would be reduced. However, a greater number of direct investment projects would be implemented to provide the additional GHG reductions needed to meet 2030 goals. As described in Section 2.3, Biological Resources, implementation of a greater number of direct investment projects could result in significant biological resources impacts depending on the specific projects implemented. Under this alternative, a greater number of direct investments would occur in exchange for the reduced number of large-scale renewable energy projects, both types of project resulting in significant biological resources impacts. Overall, this alternative would result in biological tradeoffs and impacts would be similar to the project.

Cultural Resources: Under this alternative, the renewable energy program would not be implemented and the induced demand for large-scale wind, solar photovoltaic, and geothermal renewable energy systems would not occur. As a result, a fewer number of large-scale systems would be developed and the significant and unavoidable project and cumulative historic and cultural resources impacts would be reduced. However, a greater number of direct investment projects would be implemented to provide the additional GHG reductions needed to meet 2030 goals. As described in Section 2.4, Cultural Resources, implementation of a greater number of direct investment projects could result in significant cultural resources impacts depending on the specific projects implemented. Under this alternative, a greater number of direct investments would occur in exchange for the reduced number of large-scale renewable energy projects, both types of projects resulting in significant cultural resources impacts. Overall, this alternative would result in cultural tradeoffs and impacts would be similar to the project.

Greenhouse Gases: Under this alternative, the renewable energy program would not be implemented and the induced demand for large-scale wind, solar photovoltaic, and geothermal renewable energy systems would not occur. In exchange, additional direct investment projects would be implemented to replace the GHG reductions that would be achieved through the renewable energy program. Both large-scale renewable energy projects and direct investment projects (see Section 2.7, Greenhouse Gas Emissions) would result in significant construction-related GHG impacts and, therefore, would have overall similar GHG impacts. However, both the project and this alternative would meet 2020 and 2030 reduction targets established in the CAP and because the same total amount of GHG emissions would be achieved, this alternative would result in similar significant impacts related to the 2050 GHG reduction goal in the CAP (i.e., goal would not be achieved).

Hazards and Hazardous Materials: Under this alternative, the renewable energy program would not be implemented and the induced demand for large-scale wind, solar photovoltaic, and geothermal renewable energy systems would not occur. As a result, a fewer number of large-scale systems would be developed and the significant and unavoidable project and cumulative wildfire impacts would be reduced, although not eliminated. While a greater number of direct investment projects would be implemented to provide the additional GHG reductions needed to meet 2030 goals, as described in Section 2.8, Hazards and Hazardous Materials, implementation of direct investment

projects would not result in significant wildfire impacts because many of these projects would be implemented in urbanized areas, or at existing operations such that the potential for wildfire impacts would be minimized. Therefore, this alternative would reduce the project's significant and unavoidable wildfire impacts and overall impacts would be less.

Hydrology and Water Quality: Under this alternative, the renewable energy program would not be implemented and the induced demand for large-scale wind, solar photovoltaic, and geothermal renewable energy systems would not occur. As a result, a fewer number of large-scale systems would be developed and the significant and unavoidable project and cumulative groundwater supply impacts would be reduced. However, a greater number of direct investment projects would be implemented to provide the additional GHG reductions needed to meet 2030 goals. As described in Section 2.9, Hydrology and Water Quality, implementation of a greater number of direct investment projects could result in significant groundwater supply impacts depending on the specific projects implemented (e.g., reforestation, wetlands creation). Under this alternative, a greater number of direct investments would occur in exchange for the reduced number of large-scale renewable energy projects, both types of project resulting in significant hydrology and water quality impacts. Overall, this alternative would result in hydrology and water quality tradeoffs and impacts would be similar to the project.

Land Use: Under this alternative, the renewable energy program would not be implemented and the induced demand for large-scale wind, solar photovoltaic, and geothermal renewable energy systems would not occur. As a result, a fewer number of large-scale systems would be developed and the significant and unavoidable project and cumulative division of an established community impacts would be reduced, although not eliminated. While a greater number of direct investment projects would be implemented to provide the additional GHG reductions needed to meet 2030 goals, as described in Section 2.10, Land Use, implementation of direct investment projects would not result in significant division of an established community impacts because many of these projects would be implemented in urbanized areas, at existing operations, or in open areas such that the potential for division of an established community would be minimized. Therefore, this alternative would reduce the project's significant and unavoidable land use impacts and overall impacts would be less.

Noise: Under this alternative, the renewable energy program would not be implemented and the induced demand for large-scale wind, solar photovoltaic, and geothermal renewable energy systems would not occur. As a result, a fewer number of large-scale systems would be developed and the significant and unavoidable project and cumulative operational noise impacts would be reduced, although not eliminated. While a greater number of direct investment projects would be implemented to provide the additional GHG reductions needed to meet 2030 goals, as described in Section 2.11, Noise, implementation of direct investment projects would result in projects with less operational noise because many of these projects would be energy efficiency improvements to existing facilities where operational noise activities are permissible or would not have an operational noise component (e.g., wetlands creation, compost additions to land, reforestation). Therefore, this alternative would reduce the project's significant and unavoidable operational noise impacts and overall impacts would be less.

Transportation and Traffic: Under this alternative, the renewable energy program would not be implemented and the induced demand for large-scale wind, solar photovoltaic, and geothermal renewable energy systems would not occur. As a result, a fewer number of large-scale systems would be developed and the significant and unavoidable project and cumulative operational traffic and hazardous design feature impacts would be reduced, although not eliminated. While a greater number of direct investment projects would be implemented to provide the additional GHG reductions needed to meet 2030 goals, as described in Section 2.12, Transportation and Traffic, implementation of direct investment projects would not result in significant operational traffic impacts or hazardous design feature impacts because many of these projects would be energy efficiency improvements to existing facilities or would not have an operational component (e.g., wetlands creation, compost additions to land, reforestation). Therefore, this alternative would reduce the project's significant and unavoidable transportation impacts and overall impacts would be less.

Tribal Cultural Resources: Under this alternative, the renewable energy program would not be implemented and the induced demand for large-scale wind, solar photovoltaic, and geothermal renewable energy systems would not occur. As a result, a fewer number of large-scale systems would be developed and the significant and unavoidable project and cumulative impacts to undiscovered tribal cultural resources would be reduced, but would not be eliminated. As described in Section 2.13, Tribal Cultural Resources, implementation of a greater number of direct investment projects could result in significant undiscovered tribal cultural resources impacts depending on the specific projects implemented. Under this alternative, a greater number of direct investments would occur in exchange for the reduced number of large-scale renewable energy projects, both types of project resulting in significant tribal cultural resources impacts. Overall, this alternative would result in tribal cultural resources tradeoffs and impacts similar to the project.

4.3.3 100 percent Renewable Energy Alternative

This alternative would implement a CAP reduction measure that would increase renewable energy consumption from 90 percent proposed under the project to 100 percent renewable energy by 2030.

4.3.3.1 Description and Setting

This alternative would result in the implementation of the CAP with increased reliance upon renewable energy to meet the reduction targets in the CAP for 2030. This alternative assumes that 100 percent of the energy consumed in the unincorporated County would be produced from renewable sources. The project in comparison assumes 90 percent renewable energy consumption (GHG Reduction Measure E-2.1). This would be achieved in the same manner as the CAP, with increased reliance on large-scale solar photovoltaic, wind, and geothermal facilities, and small-scale residential wind and solar sources.

Under this alternative, the County would reduce community-wide and County operations GHG emissions in compliance with state-legislated targets. Upon approval, new development in the County would be reviewed for consistency with the CAP, GHG

Threshold, and Guidelines, and may be eligible for a streamlined environmental review under CEQA Guidelines Section 15183.5. All energy efficiency measures would be implemented as described under the CAP, which would result in a reduction of energy consumption and the production of associated GHG emissions. In this scenario, the amount of GHG emissions reductions that would be achieved by the County would meet the targets established under SB 32 legislation. Therefore, the 100 percent Renewable Energy Alternative would achieve all project objectives.

4.3.3.2 Comparison of the Effects of the 100 percent Renewable Energy Alternative to the Significant Effects Associated with the CAP

The anticipated environmental effects resulting from the 100 percent Renewable Energy Alternative are described below, along with comparisons of these impacts to the project.

Aesthetics: Because of the increased reductions that would be required to be provided through renewable energy sources, this alternative could potentially increase the number of and/or size of large-scale renewable energy projects that would be required to meet proposed reduction targets. This could expand the areas of renewable infrastructure that could contribute to impacts on scenic vistas, scenic resources, visual character or quality, and light and glare. Further, if the renewable energy projects required to meet the demand were concentrated in any one area of the County, the impacts could be localized. All other visual impacts would be similar to the project because the same suite of GHG reduction measures and supporting efforts would be implemented. This alternative would have significant and cumulatively considerable scenic vista, scenic resource, visual character and quality, and nighttime lighting and glare impacts, similar to the project; however, this alternative could increase the magnitude of impacts because a greater number of large-scale renewable energy projects would be required.

Agricultural Resources: Because of the increased reductions that would be required to be provided through renewable energy sources, this alternative could potentially increase the number of and/or size of large-scale renewable energy projects that would be required to meet proposed reduction targets. This could expand the areas of renewable infrastructure that could contribute to impacts on agricultural and forestry lands and Williamson Act conflicts. Further, if the renewable energy projects required to meet the demand were concentrated in any one area of the County, the impacts could be localized. All other agricultural resources impacts would be similar to the project because the same suite of GHG reduction measures and supporting efforts would be implemented. This alternative would have significant and cumulatively considerable agricultural resources impacts, similar to the project; however, this alternative could increase the magnitude of impacts because a greater number of large-scale renewable energy projects would be required.

Air Quality: Because of the increased reductions that would be required to be provided through renewable energy sources, this alternative could potentially increase the number of and/or size of large-scale renewable energy projects that would be required to meet proposed reduction targets. This could expand the areas of renewable infrastructure that

would increase the significant and unavoidable construction-related air quality impacts that could occur. Further, if the renewable energy projects required to meet the demand were concentrated in any one area of the County, the impacts could be localized. All other air quality impacts would be similar to the project because the same potential for odor impacts (associated with solid waste reduction measures), which can be reduced to less than significant with mitigation, and impacts to sensitive receptors (construction and operation impacts) would remain because the same suite of GHG reduction measures and supporting efforts would be implemented. This alternative would have greater significant and cumulatively considerable construction-related air quality impacts because a greater number of large-scale renewable energy projects would be required.

Biological Resources: Because of the increased reductions that would be required to be provided through renewable energy sources, this alternative could potentially increase the number of and/or size of large-scale renewable energy projects that would be required to meet proposed reduction targets. This could expand the areas of renewable infrastructure that could contribute to impacts on special-status species. Further, if the renewable energy projects required to meet the demand were concentrated in any one area of the County, the impacts could be localized. All other biological resources impacts would be similar to the project because the same suite of GHG reduction measures and supporting efforts would be implemented. This alternative would have significant and cumulatively considerable biological resources impacts, similar to the project; however, this alternative could increase the magnitude of impacts because a greater number of large-scale renewable energy projects would be required.

Cultural Resources: Because of the increased reductions that would be required to be provided through renewable energy sources, this alternative could potentially increase the number of and/or size of large-scale renewable energy projects that would be required to meet proposed reduction targets. This could expand the areas of renewable infrastructure that could contribute to impacts on archaeological and paleontological resources. Further, if the renewable energy projects required to meet the demand were concentrated in any one area of the County, the impacts could be localized. All other cultural resources impacts (e.g., paleontological resources and human remains) would be similar to the project because the same suite of GHG reduction measures and supporting efforts would be implemented. This alternative would have significant and cumulatively considerable archaeological and paleontological resources impacts, similar to the project; however, this alternative could increase the magnitude of impacts because a greater number of large-scale renewable energy projects would be required.

Greenhouse Gas Emissions: This alternative would increase the amount of renewable energy sources that would be needed to meet the CAP reduction targets; therefore, a greater number or additional acreage of renewable energy projects would be required. As described for the project, no significant GHG impacts would occur related to 2020 and 2030 targets because while individual measures may have GHG emissions associated with construction or operation, the overall purpose of the measures would be to reduce the amount of GHG emissions associated with energy consumption in the County, and achieve the GHG emission reduction targets identified in the CAP. A greater percentage of energy being derived from renewable energy sources would result in a greater amount

of GHG reductions. It is estimated that this alternative could result in approximately 52,655 of additional GHG reductions in 2030. Therefore, this alternative would result in less GHG impacts compared to the project. Further, this alternative would bring the County closer to achieving the 2050 GHG reduction goal; however, while this alternative would reduce the 2050 gap, a significant and unavoidable impact would remain as it is not known with certainty that the goal would be met.

Hazards and Hazardous Materials: Because of the increased reductions that would be required to be provided through renewable energy sources, this alternative could potentially increase the number of and/or size of large-scale renewable energy projects that would be required to meet proposed reduction targets. This could expand the areas of renewable infrastructure that could contribute to wildfire impacts. Further, if the renewable energy projects required to meet the demand were concentrated in any one area of the County, the impacts could be localized. All other hazard and hazardous material impacts would be similar to the project because the same suite of GHG reduction measures and supporting efforts would be implemented. This alternative would have significant and cumulatively considerable wildfire impacts, similar to the project; however, this alternative could increase the magnitude of impacts because a greater number of large-scale renewable energy projects would be required.

Hydrology and Water Quality: Because of the increased reductions that would be required to be provided through renewable energy sources, this alternative could potentially increase the number of and/or size of large-scale renewable energy projects that would be required to meet proposed reduction targets. This could expand the areas of renewable infrastructure that could contribute to impacts on hydrology and water quality (e.g., large-scale geothermal and solar facilities). Further, if the renewable energy projects required to meet the demand were concentrated in any one area of the County, the impacts could be localized. All other hydrology and water quality impacts would be similar to the project because the same suite of GHG reduction measures and supporting efforts would be implemented. This alternative would have significant and cumulatively considerable hydrology and water quality impacts, similar to the project; however, this alternative could increase the magnitude of impacts because a greater number of large-scale renewable energy projects would be required.

Land Use: Because of the increased reductions that would be required to be provided through renewable energy sources, this alternative could potentially increase the number of and/or size of large-scale renewable energy projects that would be required to meet proposed reduction targets. This could expand the areas of renewable infrastructure that could contribute to impacts related to division of an established community. All other land use impacts would be similar to the project because the same suite of GHG reduction measures and supporting efforts would be implemented. This alternative would have significant and cumulatively considerable division of an established community impacts, similar to the project; however, this alternative could increase the magnitude of impacts because a greater number of large-scale renewable energy projects would be required.

Noise: Because of the increased reductions that would be required to be provided through renewable energy sources, this alternative could potentially increase the number of and/or size of large-scale renewable energy projects that would be required to meet proposed reduction targets. This could expand the areas of renewable infrastructure that could contribute to operational noise impacts from large-scale wind projects. Further, if the renewable energy projects required to meet the demand were concentrated in any one area of the County, the impacts could be localized. All other noise impacts would be similar to the project because the same suite of GHG reduction measures and supporting efforts would be implemented. This alternative would have significant and cumulatively considerable operational noise impacts, similar to the project; however, this alternative could increase the magnitude of impacts because a greater number of large-scale wind projects could be required.

Transportation and Traffic: Because of the increased reductions that would be required to be provided through renewable energy sources, this alternative could potentially increase the number of and/or size of large-scale renewable energy projects that would be required to meet proposed reduction targets. This could expand the areas of renewable infrastructure that could contribute to construction and operational traffic impacts from large-scale renewable energy projects. Further, if the renewable energy projects required to meet the demand were concentrated in any one area of the County, the impacts could be localized. All other transportation impacts would be similar to the project because the same suite of GHG reduction measures and supporting efforts would be implemented. This alternative would have significant and cumulatively considerable transportation impacts, similar to the project; however, this alternative could increase the magnitude of impacts because a greater number of large-scale renewable energy projects would be required.

Tribal Cultural Resources: Because of the increased reductions that would be required to be provided through renewable energy sources, this alternative could potentially increase the number of and/or size of large-scale renewable energy projects that would be required to meet proposed reduction targets. This could expand the areas of renewable infrastructure that could result in the disturbance of undiscovered tribal cultural resources. All other tribal cultural resources impacts would be similar to the project because the same suite of GHG reduction measures and supporting efforts would be implemented. This alternative would have significant and cumulatively considerable tribal cultural resources impacts, similar to the project; however, this alternative could increase the magnitude of impacts because a greater number of large-scale renewable energy projects would be required.

4.3.3.3 100 percent Renewable Energy Alternative- Expanded Analysis

The Draft SEIR included a comparative analysis of the project to the 100 percent Renewable Energy Alternative. That analysis is presented above. The analysis included in underline below expands upon the previously prepared comparative analysis. The purpose of this expanded analysis is to provide the appropriate level of analysis, impact conclusions, and identification of mitigation that would be necessary should the County decide to take action and approve this alternative. The analysis that follows expands upon

the conclusions presented in the Draft SEIR for this alternative. No new conclusions are presented and no new significant impacts have been identified. As such, this analysis only clarifies and amplifies the discussion of this alternative and it does not constitute significant new information that would require recirculation (CEQA Guidelines Section 15088.5).

This alternative would increase GHG Reduction Measure E-2.1 from a renewable energy production target of 90 percent by 2030 as proposed under the project, to a target of 100 percent renewable energy production by 2030. This measure would be implemented on the same timeline as proposed for the project, and all other GHG reduction measures would be unchanged.

Description and Setting

This alternative would result in the implementation of the CAP that included an increased reliance upon renewable energy to achieve additional GHG reductions compared to the project. Currently, GHG Reduction Measure E-2.1 would result in 229,852 $MTCO_2e$ in GHG emissions reductions by 2030. This alternative assumes that 100 percent of the energy consumed in the unincorporated County would be produced from renewable sources by 2030. This would be achieved in the same manner as the CAP, with increased reliance on large-scale solar photovoltaic, wind, and geothermal facilities, and small-scale residential wind and solar sources. It is estimated that this alternative could result in approximately 53,216 $MTCO_2E$ of additional GHG reductions in 2030.

Under this alternative, the County would reduce community-wide and County operations GHG emissions in compliance with state-legislated targets. Upon approval, new development in the County would be reviewed for consistency with the CAP, GHG Threshold, and Guidelines, and may be eligible for a streamlined environmental review under CEQA Guidelines Section 15183.5. All energy efficiency measures would be implemented as described under the CAP, which would result in a reduction of energy consumption and the production of associated GHG emissions. In this scenario, the amount of GHG emissions reductions that would be achieved by the County would meet the targets established under SB 32 legislation. Therefore, the 100 percent Renewable Energy Alternative would achieve all project objectives.

Environmental Analysis

Aesthetics: The County is considering the adoption of this alternative in addition to the project. Therefore, all elements of the project would be implemented and GHG Reduction Measure E-2.1 would be revised to reflect the increased renewable energy rate of 100 percent (rather than 90 percent included in the project). This alternative could result in new small- and large-scale renewable energy systems including photovoltaic, solar concentrator, wind and geothermal that would result in impacts to aesthetics resulting from the construction and operation of such systems. The construction of additional infrastructure and systems could, depending on their location lead to an increase in the number of opportunities to result in potential visual resources impacts compared to the project, the specific types of impacts are described below. Further, if the renewable

energy projects required to meet the demand were concentrated in any one area of the County, the impacts could be localized.

Impact AES-1 Scenic Vistas/Scenic Resources

As generally discussed above, this alternative would have a potentially significant effect on scenic vistas and scenic resources due to the need for additional renewable energy systems. The development of small-scale wind turbines and large-scale renewable energy systems could introduce tall vertical elements into the viewshed or allow the construction of large renewable energy facilities near the viewshed of a scenic resource. Like the project, under this alternative all development proposals for large-scale renewable energy systems would be required to undergo review by the County and would be required to comply with adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures that would minimize impacts to scenic vistas or scenic resources. However, also like the project, the location of large-scale renewable energy systems is unknown and small-scale wind turbines could be developed without undergoing discretionary review. Therefore, the project in combination with this alternative would result in **potentially significant** scenic vistas/scenic resources impacts.

The following mitigation, recommended for the project, would also be required if the 100 percent Renewable Energy Alternative is adopted:

> **CAP Mitigation Measure M-AES-1:** Apply County Guidelines for Determining Significance for Visual Resources and Dark Skies and Glare.

Significance after Mitigation

With implementation of 2011 GPU policies and 2011 GPU PEIR mitigation measures and CAP Mitigation Measure M-AES-1, which would require the application of County Guidelines and project-specific mitigation measures to reduce impacts related to scenic vistas/scenic resources, this impact would remain **significant and unavoidable.** Like the project, the locations of large-scale renewable energy systems are unknown and it is not possible to guarantee that all impacts would be reduced. In addition, small wind turbines are permitted without discretionary review and cannot be mitigated (see page 2.1-37 of the SEIR).

Impact AES-2 Visual Character or Quality

As generally discussed above, this alternative would have a potentially significant effect on visual character or quality related to the need for additional renewable energy systems. The development of small-scale wind turbines and large-scale renewable energy systems would potentially result in impacts because of allowable height, increased visual contrasts, view blockage, or skylining from sensitive viewing locations. Like the project, under this alternative all development proposals for large-scale renewable energy systems would be required to undergo review by the County and would be required to comply with adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures that would minimize impacts to visual character or quality. However, also like the project, the location of large-scale renewable energy systems is unknown and small-scale wind

turbines could be developed without undergoing discretionary review. Therefore, the project in combination with this alternative would result in **potentially significant** visual character or quality impacts.

The following mitigation, recommended for the project, would also be required if the 100 percent Renewable Energy Alternative is adopted:

CAP Mitigation Measure M-AES-1: Apply County Guidelines for Determining Significance for Visual Resources and Dark Skies and Glare.

Significance after Mitigation

With implementation of 2011 GPU policies and 2011 GPU PEIR mitigation measures and CAP Mitigation Measure M-AES-1, which would require the application of County Guidelines and project-specific mitigation measures to reduce impacts related to visual character or quality, this impact would remain **significant and unavoidable.** Like the project, the locations of large-scale renewable energy systems are unknown and it is not possible to guarantee that all impacts would be reduced. In addition, small wind turbines are permitted without discretionary review and cannot be mitigated (see page 2.1-38 of the SEIR)

Impact AES-3 Light or Glare

The alternative would have a potentially significant effect on light and glare related to the expansion to 100 percent renewable energy systems because the development of large-scale renewable energy systems would potentially result in impacts because of the need for safety lighting and the introduction of infrastructure that could result in glare. Like the project, under this alternative all development proposals for large-scale renewable energy systems would be required to undergo review by the County and would be required to comply with adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures that would minimize impacts to light and glare. However, it is not feasible to ensure that light and glare impacts would be reduced because it may be infeasible to fully mitigate impacts and maintain adequate safety lighting. Therefore, the project in combination with this alternative would result in **potentially significant** light or glare impacts.

The following mitigation, recommended for the project, would also be required if the 100 percent Renewable Energy Alternative is adopted:

CAP Mitigation Measure M-AES-1: Apply County Guidelines for Determining Significance for Visual Resources and Dark Skies and Glare.

CAP Mitigation Measure M-AES-2: Require a Lighting Mitigation Plan for all Large-Scale Renewable Energy Systems.

CAP Mitigation Measure M-AES-3: Require a Shadow Flicker Plan for Wind Turbines.

Significance after Mitigation

With implementation of 2011 GPU policies and 2011 GPU PEIR mitigation measures and CAP Mitigation Measures M-AES-1, M-AES-2, and M-AES-3 which would require the application of County Guidelines and project-specific mitigation measures including a Light Mitigation Plan and a Shadow Flicker Study to reduce impacts related to light or glare, this impact would remain **significant and unavoidable.** Like the project, the locations of large-scale renewable energy systems are unknown and it is not possible to guarantee that all impacts would be reduced (see page 2.1-41 of the SEIR).

Agriculture and Forestry Resources: The County is considering the adoption of this alternative in addition to the project. Therefore, all elements of the project would be implemented and GHG Reduction Measure E-2.1 would be revised to reflect the increased renewable energy rate of 100 percent (rather than 90 percent included in the project). This alternative could result in new small- and large-scale renewable energy systems including photovoltaic, solar concentrator, wind and geothermal that would result in impacts to agricultural and forestry resources resulting from zoning conflicts or conversion of such resources. The construction of additional infrastructure and systems could, depending on their location lead to an increase in the number of opportunities to result in potential agricultural and forestry impacts compared to the project, the specific types of impacts are described below.

Impact AG-1 Direct or Indirect Conversion of Agricultural Resources

The alternative would have a potentially significant effect on agricultural resources related to the expansion to 100 percent renewable energy systems because the development of large-scale renewable energy systems could result in conversion of agricultural resources because of size and magnitude of projects and unknown locations of future projects. Like the project, under this alternative all development proposals for large-scale renewable energy systems would be required to undergo review by the County and would be required to comply with adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures that would minimize impacts to agricultural resources. However, even with implementation of this mitigation it is not possible to guarantee that impacts would be reduced to level below significance. The project in combination with this alternative would result in **potentially significant** agricultural resources impacts.

The following mitigation, recommended for the project, would also be required if the 100 percent Renewable Energy Alternative is adopted:

> **CAP Mitigation Measure M-AGR-1:** Apply County Guidelines for Determining Significance for Agricultural Resources.

Significance after Mitigation

With implementation of 2011 GPU policies and 2011 GPU PEIR mitigation measures and CAP Mitigation Measure M-AGR-1, which would require the application of County Guidelines and project-specific mitigation measures to reduce impacts related to conversion of agricultural resources, this impact would remain **significant and unavoidable.** Like the

project, the locations of large-scale renewable energy systems are unknown and it is not possible to guarantee that all impacts would be reduced (see page 2.2-22 of the SEIR).

Impact AG-2 Conflict with Agricultural or Forest Zoning

The alternative would have a potentially significant effect related to agricultural or forest zoning because of the expansion to 100 percent renewable energy systems because at a programmatic level it is not possible to ensure that zoning conflicts would not occur. Like the project, under this alternative all development proposals for large-scale renewable energy systems would be required to undergo review by the County and would be required to comply with adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures that would minimize impacts to agricultural and forest zoning. However, even with implementation of this mitigation it is not possible to guarantee that impacts would be reduced to level below significance. The project in combination with this alternative could result in **potentially significant** agricultural or forest zoning impacts and could increase these impacts compared to the project because of the need for additional facilities.

The following mitigation, recommended for the project, would also be required if the 100 percent Renewable Energy Alternative is adopted:

> **CAP Mitigation Measure M-AGR-1:** Apply County Guidelines for Determining Significance for Agricultural Resources.

Significance after Mitigation

With implementation of 2011 GPU policies and 2011 GPU PEIR mitigation measures and CAP Mitigation Measure M-AGR-1, which would require the application of County Guidelines and project-specific mitigation measures to reduce impacts related to conflicts with agricultural and forest zoning, this impact would remain **significant and unavoidable** because like the project, the locations of large-scale renewable energy systems are unknown and it is not possible to guarantee that all impacts would be reduced (see page 2.2-23 of the SEIR).

Impact AG-3 Direct and Indirect Conversion or Loss of Forest Land

The alternative would have a potentially significant effect on forest land related to the expansion to 100 percent renewable energy systems because at a programmatic level it is not possible to ensure that no impacts would occur to forest resources. Like the project, under this alternative all development proposals for large-scale renewable energy systems would be required to undergo review by the County and would be required to comply with adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures that would minimize impacts to forest land. However, even with implementation of this mitigation it is not possible to guarantee that impacts would be reduced to la level below significance. The project in combination with this alternative would result in **potentially significant** forest land impacts.

The following mitigation, recommended for the project, would also be required if the 100 percent Renewable Energy Alternative was adopted:

CAP Mitigation Measure M-AGR-1: Apply County Guidelines for Determining Significance for Agricultural Resources.

CAP Mitigation Measure M-AGR-2: Apply County Guidelines for Determining Significance for Agricultural and Biological Resources.

Significance after Mitigation

With implementation of 2011 GPU policies and 2011 GPU PEIR mitigation measures and CAP Mitigation Measure M-AGR-1 and M-AGR-2, which would require the application of County Guidelines and project-specific mitigation measures to reduce impacts related to conversion or loss of forest land, this impact would remain **significant and unavoidable** because like the project, the locations of large-scale renewable energy systems are unknown and it is not possible to guarantee that all impacts would be reduced (see page 2.2-24 of the SEIR).

Air Quality: The County is considering the adoption of this alternative in addition to the project. Therefore, all elements of the project would be implemented and GHG Reduction Measure E-2.1 would be revised to reflect the increased renewable energy rate of 100 percent (rather than 90 percent included in the project). This alternative could result in additional new small- and large-scale renewable energy systems including photovoltaic, solar concentrator, wind and geothermal that would result in impacts to air quality resulting from the construction of such systems. The construction of additional infrastructure and systems could, depending on their location lead to an increase in the number of opportunities to result in potential air quality impacts compared to the project, the specific types of impacts are described below.

Impact AQ-1 Conformance to Regional Air Quality Strategy

The alternative would have a **less-than-significant** effect on conformance to regional air quality strategies related to the expansion to 100 percent renewable energy systems strategy because it would not result in an increase of residents or employees beyond the projected 2011 GPU buildout. Like the project, this alternative would not impede or obstruct the attainment of the air quality strategy otherwise.

Impact AQ-2 Conformance to Federal and State Air Quality Standards

The alternative would have a potentially significant effect on conformance to federal and state air quality standards related to the expansion to 100 percent renewable energy systems because it could result in increased construction emissions that may lead to the exceedance of short-term air quality standards. Like the project, under this alternative all development proposals for large-scale renewable energy systems would be required to undergo review by the County and would be required to comply with adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures that would minimize impacts to federal and state air quality standard conformance. However, even with implementation of this

mitigation it is not possible to guarantee that impacts would be reduced to level below significance. The project in combination with this alternative would result in **potentially significant** air resources impacts.

The following mitigation, recommended for the project, would also be required if the 100 percent Renewable Energy Alternative was adopted:

> **CAP Mitigation Measure M-AQ-1:** Apply County Guidelines for Determining Significance for Air Quality.

Significance after Mitigation

With implementation of 2011 GPU policies and 2011 GPU PEIR mitigation measures and CAP Mitigation Measure M-AQ-1, which would require the application of County Guidelines and project-specific mitigation measures to reduce impacts related to federal and state air quality standards, this impact would remain **significant and unavoidable** because like the project, no other feasible mitigation beyond compliance with federal and state permitting requirements is available and it is not possible to guarantee that all impacts would be reduced (see page 2.3-61 of the SEIR).

Impact AQ-3 Non-Attainment of Criteria Pollutants

The alternative would have a potentially significant effect on non-attainment of criteria pollutants related to the expansion to 100 percent renewable energy systems because it could result in increased construction emissions that may lead to the exceedance of criteria air pollutants. Like the project, under this alternative all development proposals for large-scale renewable energy systems would be required to undergo review by the County and would be required to comply with adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures that would minimize impacts from non-attainment of criteria pollutants. However, even with implementation of this mitigation it is not possible to guarantee that impacts would be reduced to level below significance. The project in combination with this alternative would result in **potentially significant** non-attainment of criteria pollutants impacts.

The following mitigation, recommended for the project, would also be required if the 100 percent Renewable Energy Alternative was adopted:

> **CAP Mitigation Measure M-AQ-1:** Apply County Guidelines for Determining Significance for Air Quality.
>
> **CAP Mitigation Measure M-AQ-2:** Implement Rule 67.25.

Significance after Mitigation

With implementation of 2011 GPU policies and 2011 GPU PEIR mitigation measures and CAP Mitigation Measures M-AQ-1 and M-AQ-2, which would require the application of County Guidelines and project-specific mitigation measures, and reduce emissions and odors from composting to reduce impacts related to criteria air pollutants, this impact

would remain **significant and unavoidable** because like the project, no other feasible mitigation beyond compliance with federal and state permitting requirements is available and it is not possible to guarantee that all impacts would be reduced (see page 2.3-62 of the SEIR).

Impact AQ-4 Sensitive Receptors

The alternative would have a potentially significant effect on sensitive receptors related to the expansion to 100 percent renewable energy systems because the construction of large-scale renewable energy systems would potentially lead to short-term air emissions such that standards are exceeded. Like the project, under this alternative all development proposals for large-scale renewable energy systems would be required to undergo review by the County and would be required to comply with adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures that would minimize impacts to sensitive receptors. However, even with implementation of this mitigation it is not possible to guarantee that impacts would be reduced to level below significance. The project in combination with this alternative would result in **potentially significant** sensitive receptors impacts.

The following mitigation, recommended for the project, would also be required if the 100 percent Renewable Energy Alternative was adopted:

No feasible mitigation.

Significance after Mitigation

No feasible mitigation is available. With implementation of 2011 GPU policies and 2011 GPU PEIR mitigation measures, this impact would remain **significant and unavoidable** because like the project, no other feasible mitigation beyond compliance with federal and state permitting requirements is available and it is not possible to guarantee that all impacts would be reduced (see page 2.3-62 of the SEIR).

Impact AQ-5 Odors

The alternative would not increase odor impacts related to the expansion to 100 percent renewable energy systems because the development of small-scale wind turbines and large-scale renewable energy systems are not expected to result in odors. Like the project, under this alternative all development proposals for large-scale renewable energy systems would be required to undergo review by the County and would be required to comply with adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures that would minimize impacts from odors. However, even with implementation of this mitigation it is not possible to guarantee that impacts would be reduced to level below significance. Because expanded solid waste facilities would continue to be implemented under the project, the operation of which could result in significant odor impacts, the project in combination with this alternative would result in **potentially significant** sensitive receptors impacts.

The following mitigation, recommended for the project, would also be required if the 100 percent Renewable Energy Alternative was adopted:

CAP Mitigation Measure M-AQ-1: Apply County Guidelines for Determining Significance for Air Quality.

CAP Mitigation Measure M-AQ-2: Implement Rule 67.25.

CAP Mitigation Measure M-AQ-3: Implement the policies in CARB's Land Use and Air Quality Handbook.

CAP Mitigation Measure M-AQ-4: Conduct Odor Impact Analysis and Implement Control Measures.

Significance after Mitigation

With implementation of 2011 GPU policies and 2011 GPU PEIR mitigation measures, and CAP Mitigation Measures M-AQ-1 through M-AQ-4 which would result in the application of County Guidelines and project-specific mitigation, implementation of Rule 67.25, use of CARB's Land Use and Air Quality Handbook policies, and odor impact analyses, this impact would remain **significant and unavoidable** because like the project, the number and location of solid waste facilities that would be required to meet the reduction goals of the CAP is unknown (see page 2.3-63 of the SEIR).

Biological Resources: The County is considering the adoption of this alternative in addition to the project. Therefore, all elements of the project would be implemented and GHG Reduction Measure E-2.1 would be revised to reflect the increased renewable energy rate of 100 percent (rather than 90 percent included in the project). This alternative could result in new small- and large-scale renewable energy systems including photovoltaic, solar concentrator, wind and geothermal that would result in impacts to biological resources resulting from the construction and operation of such systems. The construction of additional infrastructure and systems could, depending on their location lead to an increase in the number of opportunities to result in potential biological resources impacts compared to the project, the specific types of impacts are described below.

Impact BIO-1 Candidate, Sensitive, or Special-Status Species

The alternative would have a potentially significant effect on candidate, sensitive, or special-status species related to the expansion to 100 percent renewable energy systems because the development of small-scale wind turbines and large-scale renewable energy systems could impact habitats because of construction activities and infrastructure operation. Like the project, under this alternative all development proposals for large-scale renewable energy systems would be required to undergo review by the County and would be required to comply with adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures that would minimize impacts to candidate, sensitive, or special-status species. However, also like the project, small-scale wind turbine could be developed without undergoing discretionary review. In addition, because of the scale and nature of the renewable energy projects, even with implementation of GPU policies and mitigation measures, it is not possible to guarantee that impacts would be reduced to level below significance. The project in combination with this alternative could increase and

could result in **potentially significant** candidate, sensitive, or special-status species impacts.

The following mitigation, recommended for the project, would also be required if the 100 percent Renewable Energy Alternative was adopted:

CAP Mitigation Measure M-BIO-1: Apply County Guidelines for Determining Significance for Biological Resources.

CAP Mitigation Measure M-BIO-2: Update County Guidelines for Determining Significance for Biological.

Significance after Mitigation

With implementation of 2011 GPU policies and 2011 GPU PEIR mitigation measures and CAP Mitigation Measure M-BIO-1 and M-BIO-2, which would require the update and application of County Guidelines and project-specific mitigation measures to reduce impacts related to special-status species, this impact would remain **significant and unavoidable.** Like the project, no other feasible mitigation beyond existing federal and state permitting requirements is available and could be applied to individual projects and could guarantee impacts would be reduced below the level of significance (see page 2.4-41 of the SEIR).

Impact BIO-2 Riparian Habitat or Sensitive Natural Communities

The alternative would have a potentially significant effect on riparian habitat or sensitive natural communities related to the expansion to 100 percent renewable energy systems because the development of ground-mounted solar arrays, small-scale wind turbines, and large-scale renewable energy systems could impact riparian habitat or sensitive natural communities during construction of energy systems. Like the project, under this alternative all development proposals for large-scale renewable energy systems would be required to undergo review by the County and would be required to comply with adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures that would minimize impacts to riparian habitat or sensitive natural communities. However, also like the project, small-scale wind turbine could be developed without undergoing discretionary review. In addition, because of the scale and nature of the renewable energy projects, even with implementation of GPU policies and mitigation measures, it is not possible to guarantee that impacts would be reduced to level below significance. The project in combination with this alternative would result in **potentially significant** riparian habitat or sensitive natural communities impacts.

The following mitigation, recommended for the project, would also be required if the 100 percent Renewable Energy Alternative was adopted:

CAP Mitigation Measure M-BIO-1: Apply County Guidelines for Determining Significance for Biological Resources.

CAP Mitigation Measure M-BIO-2: Update County Guidelines for Determining Significance for Biological Resources.

Significance after Mitigation

With implementation of 2011 GPU policies and 2011 GPU PEIR mitigation measures and CAP Mitigation Measure M-BIO-1 and M-BIO-2, which would require the update and application of County Guidelines and project-specific mitigation measures to reduce impacts related to riparian habitat or natural communities, this impact would remain **significant and unavoidable.** Like the project, no other feasible mitigation beyond existing federal and state permitting requirements is available and could be applied to individual projects and could guarantee impacts would be reduced below the level of significance (see page 2.4-42 of the SEIR).

Impact BIO-3 Federally Protected Wetlands

The alternative would have a **less-than-significant** effect related to protected wetlands with increased construction of facilities because like the project, projects resulting from this project would be required to comply with County development requirements, including compliance with local policies, ordinances, and applicable permitting procedures related to protection of protected wetlands and mitigate accordingly.

Impact BIO-4 Wildlife Movement Corridors and Nursery Sites

This alternative could result in significant impacts related to the expansion to 100 percent renewable energy systems because the development of ground-mounted solar arrays, small-scale wind turbines, and large-scale renewable energy systems could impact wildlife movement corridors and nursery sites because of the ability to develop energy infrastructure outside of the regional conservation plans. Like the project, under this alternative all development proposals for large-scale renewable energy systems would be required to undergo review by the County and would be required to comply with adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures that would minimize impacts to wildlife corridors and nursery sites. However, also like the project, small-scale wind turbine could be developed without undergoing discretionary review. In addition, because of the scale and nature of the renewable energy projects, even with implementation of GPU policies and mitigation measures, it is not possible to guarantee that impacts would be reduced to level below significance. The project in combination with this alternative would result in **potentially significant** riparian habitat or sensitive natural communities impacts.

The following mitigation, recommended for the project, would also be required if the 100 percent Renewable Energy Alternative was adopted:

CAP Mitigation Measure M-BIO-1: Apply County Guidelines for Determining Significance for Biological Resources.

CAP Mitigation Measure M-BIO-2: Update County Guidelines for Determining Significance for Biological Resources.

Significance after Mitigation

With implementation of 2011 GPU policies and 2011 GPU PEIR mitigation measures and CAP Mitigation Measures M-BIO-1 and M-BIO-2 which would require the application of County Guidelines for Determining Significance for Biological Resources and project-specific mitigation measures that would reduce impacts to bats and birds, which would reduce impacts to wildlife corridors and nursery sites, this impact would remain **significant and unavoidable.** Like the project, no other feasible mitigation beyond existing federal and state permitting requirements is available and could be applied to individual projects and could guarantee impacts would be reduced below the level of significance (see page 2.4-43 of the SEIR).

Impact BIO-5 Local Policies, Ordinances, Adopted Plans

This alternative would have **no impact** related to compliance with policies, ordinances, and plans because like the project, new renewable energy projects would be required to comply with the County's development regulations regarding the protection of biological resources.

Impact BIO-6 Habitat Conservation Plans and NCCPs

This alternative would have **no impact** related to compliance with Habitat Conservation Plans and Natural Community Conservation Plans because like the project, new renewable energy projects would be required to comply with the County's development regulations regarding the protection of biological resources.

Cultural and Historical Resources: The County is considering the adoption of this alternative in addition to the project. Therefore, all elements of the project would be implemented and GHG Reduction Measure E-2.1 would be revised to reflect the increased renewable energy rate of 100 percent (rather than 90 percent included in the project). This alternative could result in new small- and large-scale renewable energy systems including photovoltaic, solar concentrator, wind and geothermal that would result in impacts to cultural and historical resources resulting from ground disturbance or retrofits of historic structures. The construction of additional infrastructure and systems could, depending on their location lead to an increase in the number of opportunities to result in potential cultural and historical resources impacts compared to the project, the specific types of impacts are described below.

Impact CULT-1 Historical Resources

The alternative would have a potentially significant effect on historical resources related to the expansion to 100 percent renewable energy systems because the development of small-scale wind turbines and large-scale renewable energy systems has the possibility of disturbing historic structures or changing the setting within which a historic structure is located. Like the project, under this alternative all development proposals for large-scale renewable energy systems would be required to undergo review by the County and would be required to comply with adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures that would minimize impacts to historical resources. However, also like the project, small-scale wind turbine could be developed without undergoing discretionary

review. The project in combination with this alternative would result in **potentially significant** historical resources impacts.

The following mitigation, recommended for the project, would also be required if the 100 percent Renewable Energy Alternative was adopted:

> **CAP Mitigation Measure M-CUL-1:** Incentivize Property Owners to Restore, Renovate, or Reuse Historic Resources.

Significance after Mitigation

With implementation of 2011 GPU policies and 2011 GPU PEIR mitigation measures and CAP Mitigation Measure M-CUL-1, which incentivize the protection and preservation of historical resources, this impact would remain **significant and unavoidable** like the project, because small-scale wind and solar projects could continue to be developed without discretionary review and would not be required to implement mitigation as a condition of permit (see page 2.5-32 of the SEIR).

Impact CULT-2 Archaeological Resources

The alternative would have a potentially significant effect on archaeological resources related to the expansion to 100 percent renewable energy systems because the development of new small-scale wind turbines could result in ground disturbance as they are permitted as an accessory use if zoning criteria is met. Like the project, small-scale wind turbines could be developed without undergoing discretionary review. The project in combination with this alternative would result in **potentially significant** archaeological resources impacts.

The following mitigation, recommended for the project, would also be required if the 100 percent Renewable Energy Alternative was adopted:

No feasible mitigation

Significance after Mitigation

No feasible mitigation is available. With implementation of 2011 GPU policies and 2011 GPU PEIR mitigation measures impacts to archaeological resources would remain **significant and unavoidable** like the project, because small-scale wind and solar project could continue to be developed without discretionary review and would not be required to implement mitigation as a condition of permit (see page 2.5-33 of the SEIR).

Impact CULT-3 Paleontological Resources

The alternative would have a potentially significant effect on paleontological resources related to the expansion to 100 percent renewable energy systems because the development of new small-scale wind turbines could result in ground disturbance as they are permitted as an accessory use if zoning criteria is met. Like the project, small-scale wind turbine could be developed without undergoing discretionary review. The project in

combination with this alternative would result in **potentially significant** paleontological resources impacts.

The following mitigation, recommended for the project, would also be required if the 100 percent Renewable Energy Alternative was adopted:

No feasible mitigation

Significance after Mitigation

No feasible mitigation is available. With implementation of 2011 GPU policies and 2011 GPU PEIR mitigation measures impacts to paleontological resources would remain **significant and unavoidable** like the project, because small-scale wind and solar projects could continue to be developed without discretionary review and would not be required to implement mitigation as a condition of permit (see page 2.5-33 of the SEIR).

Impact CULT-4 Human Remains

The alternative would have a potentially significant effect on human remains related to the expansion to 100 percent renewable energy systems because the development of new small-scale wind turbines could result in ground disturbance as they are permitted as an accessory use if zoning criteria is met. Like the project, small-scale wind turbine could be developed without undergoing discretionary. The project in combination with this alternative would result in **potentially significant** human remains impacts.

The following mitigation, recommended for the project, would also be required if the 100 percent Renewable Energy Alternative was adopted:

No feasible mitigation

Significance after Mitigation

No feasible mitigation is available. With implementation of 2011 GPU policies and 2011 GPU PEIR mitigation measures impacts to human remains would remain **significant and unavoidable** like the project, because small-scale wind and solar projects could continue to be developed without discretionary review and would not be required to implement mitigation as a condition of permit (see page 2.5-34 of the SEIR).

Energy: The County is considering the adoption of this alternative in addition to the project. Therefore, all elements of the project would be implemented and GHG Reduction Measure E-2.1 would be revised to reflect the increased renewable energy rate of 100 percent (rather than 90 percent included in the project). This alternative could result in new small- and large-scale renewable energy systems including photovoltaic, solar concentrator, wind and geothermal that would provide increased renewable energy sources. As a result, no significant impacts related to energy consumption would occur.

Impact Energy-1: Energy Requirements and Local Energy Systems

The alternative would have **less-than-significant** effects related to energy because like the project, the development of ground-mounted solar arrays, small-scale wind turbines, and large-scale renewable energy systems would be required to comply with standard construction practices, and County development requirements, including compliance with local policies, ordinances, and applicable permitting procedures related to conservation of energy. Additionally, adoption of this alternative would result in a net increased production of energy resources.

Greenhouse Gas Emissions: The County is considering the adoption of this alternative in addition to the project. Therefore, all elements of the project would be implemented and GHG Reduction Measure E-2.1 would be revised to reflect the increased renewable energy rate of 100 percent (rather than 90 percent included in the project). This alternative could result in additional new small- and large-scale renewable energy systems including photovoltaic, solar concentrator, wind and geothermal that could result in approximately 53,216 of additional GHG reductions in 2030. Therefore, this alternative would result in less GHG impacts compared to the project. Further, this alternative would bring the County closer to achieving the 2050 GHG reduction goal; however, while this alternative would reduce the 2050 gap, a significant impact would remain.

Impact GHG-1 Generate Significant GHG Emissions

The alternative would have a potentially significant effect on greenhouse gas emissions related to the expansion to 100 percent renewable energy systems because although the increase in renewable energy systems that would occur under this alternative would result in additional GHG reductions compared to the project, adoption of this alternative with the CAP would still not result in GHG emissions reductions that are sufficient to meet the long-term 2050 goal. It is estimated that this alternative could result in approximately 53,216 of additional GHG reductions in 2030. While this alternative would bring the County closer to achieving the 2050 GHG reduction goal, a **significant** impact would remain as it is not known with certainty that the goal would be met. Further, this alternative would continue to allow the processing of GPAs that are not included in adopted growth projections and could increase GHG emissions from that identified in the CAP. If adopted, this could result in a substantial increase in county-wide GHG emissions and **would have a considerable contribution** such that a significant cumulative 2030 GHG impact would occur.

The following mitigation, recommended for the project, would also be required if the 100 percent Renewable Energy Alternative was adopted:

> **CAP Mitigation Measure M-GHG-1:** Require In-Process and Future GPAs to Reduce Their Emissions to Ensure That CAP Emission Forecasts are Not Substantially Altered Such That Attainment of GHG Reduction Targets Could Not Be Achieved.

Significance after Mitigation

With implementation of 2011 GPU policies and 2011 GPU PEIR mitigation measures and CAP Mitigation Measure M-GHG-1, which would require GPAs to mitigate GHG emissions, the cumulative 2030 GHG impact associated with GPAs would be reduced to **less than significant**. However, there are no additional feasible mitigation available to demonstrate that additional GHG reductions are available to meet the 2050 goal. Therefore, this alternative would have a **significant and unavoidable** impact related to achievement of the 2050 reduction goal. While the impact conclusion would be same as the project, this alternative would result in less impacts (see page 2.7-39 and 40 of the SEIR).

Impact GHG-2 Conflict with a Plan, Policy, or Regulation Adopted for Reducing GHG Emissions

Implementation of GHG reduction measures and supporting efforts under this alternative would not conflict with an applicable plan, policy, or regulation adopted to reduce the emissions of GHGs. Therefore, this impact would be **less than significant** (like the project). However, this alternative could result in significant cumulative impacts related to conflicts with plans, policies, or regulations because it of future GPAs that are not included in adopted growth projections that could increase GHG emissions from that identified in the CAP. This could result in potential conflicts or obstruction of a plan or policy adopted to reduce the emissions of GHGs. This alternative **would have a considerable contribution** such that a significant cumulative policy conflict would occur.

The following mitigation, recommended for the project, would also be required if the 100 percent Renewable Energy Alternative was adopted:

> **CAP Mitigation Measure M-GHG-1:** Require In-Process and Future GPAS to Reduce Their Emissions to Ensure That CAP Emission Forecasts are Not Substantially Altered Such That Attainment of GHG Reduction Targets Could Not Be Achieved.

Significance after Mitigation

With implementation of 2011 GPU policies and 2011 GPU PEIR mitigation measures and CAP Mitigation Measure M-GHG-1, which would require GPAs to mitigate GHG emissions, this impact would be reduced to **less than significant** and like the project, no policy conflicts would remain (see page 2.7-40 and 41 of the SEIR).

Hazards and Hazardous Materials: The County is considering the adoption of this alternative in addition to the project. Therefore, all elements of the project would be implemented and GHG Reduction Measure E-2.1 would be revised to reflect the increased renewable energy rate of 100 percent (rather than 90 percent included in the project). This alternative could result in new small- and large-scale renewable energy systems including photovoltaic, solar concentrator, wind and geothermal that would result in impacts to hazards and hazardous materials because of increased construction activities. The construction of additional infrastructure and systems could, depending on

their location lead to an increase in the number of opportunities to result in potential hazard and hazardous material impacts compared to the project, the specific types of impacts are described below.

Impact HAZ-1 Hazardous Substance Handling

The alternative would have **less-than-significant** impacts related to hazardous materials because projects would be required to comply with County development requirements, including compliance with local policies, ordinances, and applicable permitting procedures related to safe transportation and handling of hazardous materials and mitigate accordingly. Like the project, this alternative would not increase impacts related to hazardous materials.

Impact HAZ-2 Public and Private Airport Hazards

The alternative would have **less-than-significant** impacts related to hazardous materials because projects would be required to comply with County development requirements, including compliance with local policies, ordinances, and applicable permitting procedures related to siting of land uses near airports and mitigate accordingly. Like the project, this alternative would not increase impacts related to airport hazards.

Impact HAZ-3 Emergency Response and Evacuation Plans

The alternative would have **less-than-significant** impacts related to hazardous materials because projects would be required to comply with County development requirements, including compliance with local policies, ordinances, and applicable permitting procedures related to obstruction of emergency response and evacuation plans and mitigate accordingly. Like the project, this alternative would not increase impacts related to conflicts with emergency response and evacuation plans.

Impact HAZ-4 Wildland Fires

The alternative would have a potentially significant effect on wildland fires related to the expansion to 100 percent renewable energy systems because the development of small-scale wind turbines and large-scale renewable energy systems would introduce construction and operational components which include mechanical equipment and electrical components adjacent to vegetation. Like the project, under this alternative all development proposals for large-scale renewable energy systems would be required to undergo review by the County and would be required to comply with adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures that would minimize impacts to wildland fires. However, like the project, small-scale wind turbine could be developed without undergoing discretionary review and the number and location of large-scale renewable energy projects is unknown and could occur near wildland areas. The project in combination with this alternative would result in **potentially significant** wildland fire impacts.

The following mitigation, recommended for the project, would also be required if the 100 percent Renewable Energy Alternative was adopted:

CAP Mitigation Measure M-HAZ-1: Apply the County Guidelines for Determining Significance for Wildland Fire & Fire Protection.

Significance after Mitigation

With implementation of 2011 GPU policies and 2011 GPU PEIR mitigation measures and CAP Mitigation Measure M-HAZ-1, which would require the application of County Guidelines and project-specific mitigation measures to reduce impacts related to wildland fire, this impact would remain **significant and unavoidable** like the project, because construction small- and large-scale renewable energy systems could introduce electrical and mechanical components in areas susceptible to wildfire and the number and location of large-scale renewable energy projects is unknown and could occur near wildland areas (see page 2.8-33 of the SEIR).

Hydrology and Water Quality: The County is considering the adoption of this alternative in addition to the project. Therefore, all elements of the project would be implemented and GHG Reduction Measure E-2.1 would be revised to reflect the increased renewable energy rate of 100 percent (rather than 90 percent included in the project). This alternative d could result in new small- and large-scale renewable energy systems including photovoltaic, solar concentrator, wind and geothermal that would result in impacts to hydrology and water quality resulting from the construction and operation of such systems and the potential need for additional groundwater resources. The construction of additional infrastructure and systems could, depending on their location lead to an increase in the number of opportunities to result in potential hydrology and water quality impacts compared to the project, the specific types of impacts are described below.

Impact HYD-1 Water Quality Standards

The alternative would not result in significant impacts related to water quality standards like the project where large-scale renewable energy projects would be required to obtain a Major Use Permit and would be required to comply with County development requirements, ordinances, and permitting procedures in addition to compliance with federal, state, and local regulations and policies (e.g., CWA, NPDES permits, WPO). However, direct investment projects would continue to be implemented and could result in impacts to water quality because of construction or specific location of certain facilities. Therefore, the project in combination with this alternative would result in **potentially significant** impacts associated with water quality standards.

The following mitigation, recommended for the project, would also be required if the 100 percent Renewable Energy Alternative was adopted:

No feasible mitigation.

Significance after Mitigation

No feasible mitigation is available. With implementation of 2011 GPU policies and 2011 GPU PEIR mitigation measures, this impact would remain **significant and unavoidable** like the project, because the number, types, and locations of direct investment projects is

not known and it cannot be guaranteed that impacts would be reduced below a level of significance (see page 2.9-32 of the SEIR).

Impact HYD-2 Groundwater Systems

The alternative would have a potentially significant effect on groundwater systems related to the expansion to 100 percent renewable energy systems because the development of large-scale renewable energy systems could potentially result in an increased demand for groundwater resources. Similarly, this alternative would also continue to implement direct investment projects that depending on their location could result in significant impacts to groundwater resources. Like the project, under this alternative all development proposals for large-scale renewable energy systems would be required to undergo review by the County and would be required to comply with adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures that would minimize impacts to groundwater systems. However, because of the uncertainty of the types, locations, and scale of future renewable energy projects and direct investment projects, it is not possible to guarantee no significant impacts would occur. The project in combination with this alternative would result in **potentially significant** groundwater impacts.

The following mitigation, recommended for the project, would also be required if the 100 percent Renewable Energy Alternative was adopted:

No feasible mitigation.

Significance after Mitigation

No feasible mitigation is available. With implementation of 2011 GPU policies and 2011 GPU PEIR mitigation measures, this impact would remain **significant and unavoidable** like the project because the number, types, and locations of renewable energy and direct investment projects is not known and it cannot be guaranteed that impacts would be reduced below a level of significance (see page 2.9-33 of the SEIR).

Impact HYD-3 Alter Existing Drainage Patterns

The alternative would not result in an increase in impacts related to drainage patterns because like the project, large-scale renewable energy projects would be required to obtain a Major Use Permit and would be required to comply with County development requirements, ordinances, and permitting procedures in addition to compliance with federal, state, and local regulations and policies (e.g., CWA, NPDES permits, WPO). However, because all other elements of the project would continue to be implemented and could result in impacts to drainage patterns because of construction or specific location of certain facilities, the project in combination with this alternative would result in **potentially significant** drainage impacts.

The following mitigation, recommended for the project, would also be required if the project and the 100 percent Renewable Energy Alternative were adopted:

No feasible mitigation.

Significance after Mitigation

No feasible mitigation available. With implementation of 2011 GPU policies and 2011 GPU PEIR mitigation measures, this impact would remain **significant and unavoidable** like the project, because the number, types, and locations of direct investment projects is not known and it cannot be guaranteed that impacts would be reduced below a level of significance (see page 2.9-34 of the SEIR).

Impact HYD-4 Flood Hazards

The alternative would have **less-than-significant** impacts related to flood hazards because the alternative would not result in the construction of housing in flood prone areas. Like the project, this alternative would not increase impacts related to flood hazards.

Land Use Planning: The County is considering the adoption of this alternative in addition to the project. Therefore, all elements of the project would be implemented and GHG Reduction Measure E-2.1 would be revised to reflect the increased renewable energy rate of 100 percent (rather than 90 percent included in the project). This alternative could result in new small- and large-scale renewable energy systems including photovoltaic, solar concentrator, wind and geothermal that could result in land use impacts. The construction of additional infrastructure and systems could, depending on their location lead to an increase in the number of opportunities to result in community division impacts compared to the project, the specific types of impacts are described below.

Impact LU-1 Physically Divide Established Community

The alternative would have a potentially significant effect related to the physical division of established communities resulting from the expansion to 100 percent renewable energy systems because the increased development of large-scale renewable energy systems could increase the potential demand for road improvements. Like the project, under this alternative all development proposals for large-scale renewable energy systems would be required to undergo review by the County and would be required to comply with adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures that would minimize impacts to established communities. Nonetheless, it cannot be guaranteed that all land use impacts would be reduced to a level below significance. The project in combination with this alternative would result in **potentially significant** impacts to the physical division of established communities.

The following mitigation, recommended for the project, would also be required if the 100 percent Renewable Energy Alternative was adopted:

No feasible mitigation.

Significance after Mitigation

No feasible mitigation is available. With implementation of 2011 GPU policies and 2011 GPU PEIR mitigation measures, this impact would remain **significant and unavoidable** like the project, because the number, types, and locations of renewable energy projects

are not known and it cannot be guaranteed that impacts would be reduced below a level of significance (see page 2.10-22 and 23 of the SEIR).

Impact LU-2 Conflict with Plans, Policies, and Regulations

The alternative would have a **less-than-significant** impact regarding conflicts with plans, policies, and regulations related to the expansion to 100 percent renewable energy systems. Like the project, under this alternative all development proposals for large-scale renewable energy systems would be required to undergo review by the County and would be required to comply with adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures that would minimize impacts to established communities. Like the project, this alternative would not increase conflicts related to existing plans, policies, and regulations.

Noise: The County is considering the adoption of this alternative in addition to the project. Therefore, all elements of the project would be implemented and GHG Reduction Measure E-2.1 would be revised to reflect the increased renewable energy rate of 100 percent (rather than 90 percent included in the project). This alternative could result in new small- and large-scale renewable energy systems including photovoltaic, solar concentrator, wind and geothermal that would result in noise impacts resulting from the construction and operation of such systems. The construction of additional infrastructure and systems could, depending on their location lead to an increase in the number of opportunities to result in noise impacts compared to the project, the specific types of impacts are described below.

Impact NOI-1 Excessive Noise Levels

The alternative would have a potentially significant effect on excessive noise levels related to the expansion to 100 percent renewable energy systems because of possible low-frequency noise associated with large wind turbines. This alternative could increase the number of large wind turbines constructed in the County. Like the project, under this alternative all development proposals for large-scale renewable energy systems would be required to undergo review by the County and would be required to comply with adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures that would minimize impacts to noise impacts. However, also like the project, the County could issue noise waivers for large wind turbine projects and could ultimately result in significant noise impacts. The project in combination with this alternative would result in **potentially significant** noise impacts.

The following mitigation, recommended for the project, would also be required if the 100 percent Renewable Energy Alternative was adopted:

No feasible mitigation.

Significance after Mitigation

No feasible mitigation is available. With implementation of 2011 GPU policies and 2011 GPU PEIR mitigation measures, this impact would remain **significant and unavoidable** like the project, because the number, types, and locations of renewable energy projects

is not known, noise wavers for wind turbines could be issues, and it cannot be guaranteed that impacts would be reduced below a level of significance (see page 2.11-31 of the SEIR).

Impact NOI-2 Excessive Groundborne Vibration

The alternative would have **less-than-significant** impacts related to excessive groundborne vibration because the location of most construction activities would likely be within existing developed footprints, nearby to roadways or commercial areas, or in remote areas occur. Projects would be required to comply with County development requirements, including compliance with local policies, ordinances, and applicable permitting procedures and mitigate accordingly, including performing an acoustical analysis. Like the project, this alternative would not increase conflicts related to excessive groundborne vibration.

Impact NOI-3 Permanent Increase in Ambient Noise Levels

The alternative would have a potentially significant impact related to a permanent increase in ambient noise levels related to the expansion to 100 percent renewable energy systems because of possible low-frequency noise associated with large wind turbines as a result of expanding large-scale renewable energy systems. This alternative could increase the number of large wind turbines constructed in the County. Like the project, under this alternative all development proposals for large-scale renewable energy systems would be required to undergo review by the County and would be required to comply with adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures that would minimize impacts to ambient noise levels. However, also like the project, the County could issue noise waivers for large wind turbine projects and could ultimately result in significant noise impacts. The project in combination with this alternative would result in **potentially significant** ambient noise levels impacts.

The following mitigation, recommended for the project, would also be required if the 100 percent Renewable Energy Alternative was adopted:

No feasible mitigation.

Significance after Mitigation

No feasible mitigation is available. With implementation of 2011 GPU policies and 2011 GPU PEIR mitigation measures, this impact would remain **significant and unavoidable** like the project, because the number, types, and locations of renewable energy projects is not known, noise wavers for wind turbines could be issues, and it cannot be guaranteed that impacts would be reduced below a level of significance (see page 2.11-32 of the SEIR).

Impact NOI-4 Temporary or Periodic Increase in Ambient Noise Levels

The alternative would have a potentially significant impact relating to a temporary or periodic increase in ambient noise levels related to the expansion to 100 percent

renewable energy systems because of possible low-frequency noise associated with large wind turbines because of expanding large-scale renewable energy systems. This alternative could increase the number of large wind turbines constructed in the County Like the project, under this alternative all development proposals for large-scale renewable energy systems would be required to undergo review by the County and would be required to comply with adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures that would minimize impacts to temporary or periodic ambient noise levels. However, also like the project, the County could issue noise waivers for large wind turbine projects and could ultimately result in significant noise impacts. The project in combination with this alternative would result in **potentially significant** ambient noise levels impacts.

The following mitigation, recommended for the project, would also be required if the 100 percent Renewable Energy Alternative was adopted:

No feasible mitigation.

Significance after Mitigation

No feasible mitigation is available. With implementation of 2011 GPU policies and 2011 GPU PEIR mitigation measures, this impact would remain **significant and unavoidable** like the project, because the number, types, and locations of renewable energy projects is not known, noise wavers for wind turbines could be issues, and it cannot be guaranteed that impacts would be reduced below a level of significance (see page 2.11-32 and 33 of the SEIR).

Transportation and Traffic: The County is considering the adoption of this alternative in addition to the project. Therefore, all elements of the project would be implemented and GHG Reduction Measure E-2.1 would be revised to reflect the increased renewable energy rate of 100 percent (rather than 90 percent included in the project). This alternative could result in new small- and large-scale renewable energy systems including photovoltaic, solar concentrator, wind and geothermal that would result in impacts to transportation and traffic resulting from the construction of such systems, the specific types of impacts are described below.

Impact TRA-1 LOS and Conflicts with Plans, Policies, or Ordinances

The alternative would have a potentially significant effect on LOS and conflicts with plans, policies, or ordinances related to the expansion to 100 percent renewable energy systems because the development of large-scale renewable energy systems could potentially result in conflicts with circulation management because of temporary construction activities. Like the project, under this alternative all development proposals for large-scale renewable energy systems would be required to undergo review by the County and would be required to comply with adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures that would minimize impacts to LOS and circulation management. However, because the number, types, and locations of renewable energy projects is not known, it cannot be guaranteed that impacts would be reduced below a level of significance. The project in

combination with this alternative would result in **potentially significant i**mpacts to LOS and conflicts with plans, policies, or ordinances.

The following mitigation, recommended for the project, would also be required if the 100 percent Renewable Energy Alternative was adopted:

> **CAP Mitigation Measure M-TRAF-1:** Apply County Guidelines for Determining Significance for Transportation and Traffic.

Significance after Mitigation

With implementation of 2011 GPU policies and 2011 GPU PEIR mitigation measures and CAP Mitigation Measure M-TRAF-1, which would require the application of County Guidelines and project-specific mitigation measures to reduce impacts related to LOS and conflicts with plans, policies, or ordinances, this impact would remain **significant and unavoidable** like the project, because the number, types, and locations of renewable energy projects is not known, and it cannot be guaranteed that impacts would be reduced below a level of significance.

Impact TRA-2 Emergency Access

The alternative would have **less-than-significant** impacts related to conflicts with emergency access. Projects would be required to comply with County development requirements, including compliance with local policies, ordinances, and applicable permitting procedures and mitigate impacts that could result in conflicts with emergency access. Like the project, this alternative would not increase conflicts related to emergency access.

Impact TRA-3 Substantially Increase Design Hazards

The alternative would have **less-than-significant** impacts related to substantially increasing design hazards. Projects would be required to comply with County development requirements, including compliance with local policies, ordinances, and applicable permitting procedures and mitigate accordingly. Like the project, this alternative would not increase hazards because of a design feature.

Tribal Cultural Resources: The County is considering the adoption of this alternative in addition to the project. Therefore, all elements of the project would be implemented and GHG Reduction Measure E-2.1 would be revised to reflect the increased renewable energy rate of 100 percent (rather than 90 percent included in the project). This alternative could result in new small- and large-scale renewable energy systems including photovoltaic, solar concentrator, wind and geothermal that would result in impacts to tribal cultural resources resulting from the construction, and operation of such systems, the specific types of impacts are described below.

Impact TCR-1 Tribal Cultural Resources

The alternative would have a potentially significant effect on tribal cultural resources related to implementation of GHG reduction measures because at a programmatic level it is not possible to ensure that significant impacts can be fully mitigated because of speculation regarding location, size, and magnitude of future projects. Like the project, under this alternative all development proposals for large-scale renewable energy systems would be required to undergo review by the County and would be required to comply with adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures that would minimize impacts to tribal cultural resources. However, because the number, types, and locations of renewable energy projects is not known, it cannot be guaranteed that impacts would be reduced below a level of significance. The project in combination with this alternative would result in **potentially significant** tribal cultural resources impacts.

The following mitigation, recommended for the project, would also be required if the 100 percent Renewable Energy Alternative was adopted:

CAP Mitigation Measure M-TCR-1: Identify Tribal Cultural Resources Through Field Studies.

CAP Mitigation Measure M-TCR-2: Require Development to Avoid Tribal Cultural Resources.

CAP Mitigation Measure M-TCR-3: Support Protection of Tribal Cultural Resources Through Easements.

CAP Mitigation Measure M-TCR-4: Coordinate with Native American Heritage Commission, Local Tribal Governments, and Consult with SB18 And AB52 to Protect Significant Tribal Cultural Resources.

Significance after Mitigation

With implementation of 2011 GPU policies and 2011 GPU PEIR mitigation measures and CAP Mitigation Measure M-TRC-1, M-TRC-2, M-TRC-3, and M-TRC-4 which would identify and protect tribal cultural resources, this impact would remain **significant and unavoidable** like the project, because it is not possible to ensure that significant impacts can be fully mitigated because of speculation regarding location, size, and magnitude of future projects (see page 2.13-10 of the SEIR).

4.3.4 Increased Solid Waste Diversion Alternative

This alternative would implement a CAP reduction measure that would increase solid waste diversion from 75 percent in 2030 proposed under the project to 80 percent by 2030.

4.3.4.1 Description and Setting

This alternative would result in the implementation of the CAP with increased reliance upon solid waste diversion to achieve additional GHG reductions. Currently, GHG

Reduction Measure SW-1.1 would result in 57,103 $MTCO_2e$ in GHG reductions by 2030. This alternative assumes that the County would achieve a 5 percent increase in the diversion rate of solid waste county-wide by 2030. This would further accelerate the reduction that would occur over the life of the project and would provide approximately 79,052 ~~74,572~~ $MTCO_2e$ in ~~additional~~ GHG reductions by 2030. To achieve this increased diversion rate, the County would devote additional resources to expanding the capacity of its solid waste diversion facilities. This could require the expansion of existing facilities or the construction of new facilities to handle the solid waste to meet the increased diversion rate.

Upon approval, new development in the County would be reviewed for consistency with the CAP, GHG Threshold, and Guidelines and may be eligible for a streamlined environmental review under CEQA Guidelines Section 15183.5. All energy efficiency measures would be implemented as described under the CAP, which would result in a reduction of energy consumption and the production of associated GHG emissions. Under this alternative, the County would reduce community-wide and County operations GHG emissions in compliance with state-legislated targets, would meet the 2020 and 2030 reduction goals of the CAP, and would achieve additional GHG reductions compared to the project. These additional GHG reductions would reduce the gap of emission reductions needed to meet the 2050 reduction goal. Therefore, the Increase Solid Waste Diversion Alternative would achieve all project objectives and would further reduce GHG emissions in the County. With additional GHG reductions, this alternative would reduce the gap to the 2050 GHG reduction goal compared to the project.

4.3.4.2 Comparison of the Effects of the Increased Solid Waste Diversion Alternative to the Significant Effects Associated with the CAP

Aesthetics: Because of the increased diversion that would be required, this alternative could potentially increase the number of and/or size of new or expanded solid waste facilities. This could expand the areas of solid waste recovery, composting, and recycling of materials. As described for the project, solid waste expansion projects would have less-than-significant scenic vista, scenic resource, and nighttime lighting and glare impacts because most infrastructure improvements would occur within existing developed facilities or in areas designated for such uses. Further, all development proposals would be required to undergo review by the County and would be required to comply with adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures that would minimize visual resources impacts. All other visual impacts would be similar to the project because the same suite of GHG reduction measures and supporting efforts would be implemented. The expanded solid waste facilities would have less-than-significant scenic vista, scenic resource, and nighttime lighting and glare impacts and would not have a considerable contribution to significant impacts, similar to the project.

Agricultural Resources: Because of the increased diversion that would be required, this alternative could potentially increase the number of and/or size of new or expanded solid waste facilities. This could expand the areas of solid waste recovery, composting, and

recycling of materials. As described for the project, solid waste expansion projects would have less-than-significant agricultural and forestry resources impacts and Williamson Act conflict impacts because most infrastructure improvements would occur within existing developed facilities or in areas designated for such uses. Further, all development proposals would be required to undergo review by the County and would be required to comply with adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures that would minimize agricultural resources impacts. All other agricultural and forestry resource impacts would be similar to the project because the same suite of GHG reduction measures and supporting efforts would be implemented. The expanded solid waste facilities would have less-than-significant agricultural resources impacts and would not have a considerable contribution to significant cumulative impacts, similar to the project.

Air Quality: Because of the increased diversion that would be required, this alternative could potentially increase the number of and/or size of new or expanded solid waste facilities. This could expand the areas of solid waste recovery, composting, and recycling of materials. As described for the project, solid waste expansion projects would have significant air quality construction, criteria air pollutant, odor, and sensitive receptor impacts, odor impacts, and would result in potentially significant conflicts with regional air quality standards. Construction of new or expanded facilities under this alternative would likely increase these impacts. While all development proposals would be required to undergo review by the County and would be required to comply with adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures that would minimize air quality impacts, depending on the size of the facilities, these measures may not be able to fully mitigate the impacts to a less-than-significant level. All other air quality impacts would be similar to the project because the same suite of GHG reduction measures and supporting efforts would be implemented. Because this alternative would increase the size or number of facilities that would be required to meet the increased diversion rate, this alternative would result in greater air quality impacts compared to the project.

Biological Resources: Because of the increased diversion that would be required, this alternative could potentially increase the number of and/or size of new or expanded solid waste facilities. This could expand the areas of solid waste recovery, composting, and recycling of materials. As described for the project, solid waste expansion projects would have significant wildlife movement corridor and nursery site impacts. Construction of new or expanded facilities under this alternative would likely increase these impacts. While all development proposals would be required to undergo review by the County and would be required to comply with adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures that would minimize biological impacts, depending on the size of the facilities, these measures may not be able to fully mitigate the impacts to a less-than-significant level. All other biological impacts would be similar to the project because the same suite of GHG reduction measures and supporting efforts would be implemented. Because this alternative would increase the size or number of facilities that would be required to meet the increased diversion rate, this alternative would result in greater biological resources impacts compared to the project.

Cultural Resources: Because of the increased diversion that would be required, this alternative could potentially increase the number of and/or size of new or expanded solid

waste facilities. This could expand the areas of solid waste recovery, composting, and recycling of materials. As described for the project, solid waste expansion projects would have less-than-significant historic, archaeological, paleontological, and human remains impacts because individual projects would be required to undergo the County's discretionary review process which includes CEQA, and would be required to mitigate all resultant significant impacts to the extent feasible. All other cultural resources impacts would be similar to the project because the same suite of GHG reduction measures and supporting efforts would be implemented. The expanded solid waste facilities would have less-than-significant cultural resources impacts and would not have a considerable contribution to significant cumulative impacts, similar to the project.

Greenhouse Gas Emissions: The increase in solid waste diversion that would occur under this alternative would result in additional GHG reductions compared to the project. As described for the project, no significant GHG impacts would occur related to 2020 and 2030 targets because while individual measures may have GHG emissions associated with construction or operation, the overall purpose of the measures would be to reduce the amount of GHG emissions countywide, and achieve the GHG emission reduction targets identified in the CAP. It is estimated that this alternative could result in approximately 79,052 ~~74,572~~ $MTCO_2e$ of ~~additional~~ GHG reductions. Therefore, this alternative would result in less GHG impacts compared to the project. Further, this alternative would bring the County closer to achieving the 2050 GHG reduction goal. Nonetheless, a significant and unavoidable impact regarding the 2050 GHG reduction goal would remain because the additional GHG reductions would not be enough to reach the 2050 goal.

Hazards and Hazardous Materials: Because of the increased diversion that would be required, this alternative could potentially increase the number of and/or size of new or expanded solid waste facilities. This could expand the areas of solid waste recovery, composting, and recycling of materials. As described for the project, solid waste expansion projects would have less-than-significant wildfire impacts because most infrastructure improvements would occur within existing developed facilities or in areas designated for such uses. Further, all development proposals would be required to undergo review by the County and would be required to comply with adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures that would minimize wildfire impacts. All other hazard and hazardous materials resources impacts would be similar to the project because the same suite of GHG reduction measures and supporting efforts would be implemented. The expanded solid waste facilities would have less-than-significant wildfire impacts and would not have a considerable contribution to significant cumulative impacts, similar to the project.

Hydrology and Water Quality: Because of the increased diversion that would be required, this alternative could potentially increase the number of and/or size of new or expanded solid waste facilities. This could expand the areas of solid waste recovery, composting, and recycling of materials. As described for the project, solid waste expansion projects would result in less-than-significant hydrology and water quality impacts because most infrastructure improvements would occur within existing developed facilities and would be served by municipal water supplies. Further, all development proposals would be required

to undergo review by the County and would be required to comply with adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures that would minimize hydrology and water quality impacts. All other hydrology and water quality impacts would be similar to the project because the same suite of GHG reduction measures and supporting efforts would be implemented. The expanded solid waste facilities would have less-than-significant hydrology and water quality impacts and would not have a considerable contribution to significant cumulative impacts, similar to the project.

Land Use: Because of the increased diversion that would be required, this alternative could potentially increase the number of and/or size of new or expanded solid waste facilities. This could expand the areas of solid waste recovery, composting, and recycling of materials. As described for the project, solid waste expansion projects would result in less-than-significant division of an established community and conflicts with policy impacts because most infrastructure improvements would occur within existing developed facilities. Further, all development proposals would be required to undergo review by the County and would be required to comply with adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures that would minimize land use impacts. All other land use impacts would be similar to the project because the same suite of GHG reduction measures and supporting efforts would be implemented. The expanded solid waste facilities would have less-than-significant land use impacts and would not have a considerable contribution to significant cumulative impacts, similar to the project.

Noise: Because of the increased diversion that would be required, this alternative could potentially increase the number of and/or size of new or expanded solid waste facilities. This could expand the areas of solid waste recovery, composting, and recycling of materials. As described for the project, solid waste expansion projects would have significant construction-related noise impacts. Construction of new or expanded facilities under this alternative would likely increase these impacts. While all development proposals would be required to undergo review by the County and would be required to comply with adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures that would minimize construction-related noise impacts, depending on the size of the facilities, these measures may not be able to fully mitigate the noise impacts to a less-than-significant level. All other noise impacts would be similar to the project because the same suite of GHG reduction measures and supporting efforts would be implemented. Because this alternative would increase the size or number of facilities that would be required to meet the increased diversion rate, this alternative would result in greater noise impacts compared to the project.

Transportation: Because of the increased diversion that would be required, this alternative could potentially increase the number of and/or size of new or expanded solid waste facilities. This could expand the areas of solid waste recovery, composting, and recycling of materials. As described for the project, solid waste expansion projects would have significant construction and operational traffic impacts. While all development proposals would be required to undergo review by the County and would be required to comply with adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures that would minimize traffic impacts, depending on the size of the facilities, these measures may not be able to fully mitigate the traffic impacts to a less-than-significant level. All other

traffic impacts would be similar to the project because the same suite of GHG reduction measures and supporting efforts would be implemented. Because this alternative would increase the size or number of facilities that would be required to meet the increased diversion rate, this alternative would result in greater transportation impacts compared to the project.

Tribal Cultural Resources: Because of the increased diversion that would be required, this alternative could potentially increase the number of and/or size of new or expanded solid waste facilities. This could expand the areas of solid waste recovery, composting, and recycling of materials. As described for the project, solid waste expansion projects would have significant impacts related to the disturbance of undiscovered resources. Construction of new or expanded facilities under this alternative would likely increase these impacts. While all development proposals would be required to undergo review by the County and would be required to comply with adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures that would minimize construction-related impacts related to the disturbance of undiscovered resources, depending on the size of the facilities, these measures may not be able to fully mitigate the tribal cultural resources impacts to a less-than-significant level. All other tribal cultural resources impacts would be similar to the project because the same suite of GHG reduction measures and supporting efforts would be implemented. Because this alternative would increase the size or number of facilities that would be required to meet the increased diversion rate, this alternative would result in greater tribal cultural resources impacts compared to the project.

4.3.4.3 Expanded Analysis of the Increased Solid Waste Diversion Alternative

The Draft SEIR included a comparative analysis of the project to the Increased Solid Waste Diversion Alternative. That analysis is presented above. The analysis included in underline below expands upon the previously prepared comparative analysis. The purpose of this expanded analysis is to provide the appropriate level of analysis, impact conclusions, and mitigation that would be necessary should the County decide to take action and approve this alternative. The analysis that follows expands upon the conclusions presented in the Draft SEIR for this alternative. No new conclusions are presented and no new significant impacts have been identified. As such, this analysis only clarifies and amplifies the discussion of this alternative and it does not constitute significant new information that would require recirculation (CEQA Guidelines Section 15162).

This alternative would increase GHG Reduction Measure SW 1.1 from 75 percent by 2030 as proposed under the project, to a waste diversion target of 80 percent by 2030. This measure would be implemented on the same timeline as proposed for the project, and all other GHG reductions measures would be unchanged.

Description and Setting

This alternative would result in implementation of a CAP that included increased reliance upon solid waste diversion to achieve additional GHG reductions compared to the project.

Currently, GHG Reduction Measure SW-1.1 would result in 57,103 $MTCO_2e$ in GHG reductions by 2030. This alternative assumes that the County would achieve a 5 percent increase in the diversion rate of solid waste county-wide by 2030. This would further accelerate the reduction that would occur over the life of the project and would provide approximately 79,052 ~~74,572~~ $MTCO_2e$ in additional GHG reductions by 2030. To achieve this increased diversion rate, the County would devote additional resources to expanding the capacity of its solid waste diversion facilities. This could require the expansion of existing facilities or the construction of new facilities to handle the solid waste to meet the increased diversion rate. This could expand the areas of solid waste recovery, composting, and recycling of materials.

Environmental Analysis

Aesthetics: The County is considering the adoption of this alternative in addition to the project. Therefore, all elements of the project would be implemented and GHG Reduction Measure SW-1.1 would be revised to reflect the increased waste diversion target to 80 percent (rather than 75 percent included in the project). This alternative could result in larger or a greater number of new or expanded solid waste facilities that could result in impacts to surrounding aesthetics and scenic resources. The construction of additional infrastructure and systems could, depending on their location, lead to an increase in the number of opportunities to result in potential visual resources impacts compared to the project, the specific types of impacts are described below. Further, if the solid waste projects required to meet demand were concentrated in any one area of the county, the impacts could be localized.

Impact AES-1 Scenic Vistas/Scenic Resources

The alternative would have a **less-than-significant** effect on scenic vistas and scenic resources related to the expansion of waste facilities because most infrastructure improvements would occur within existing developed facilities or in areas designated for such uses. Like the project, under this alternative all development proposals for expanded waste facilities would be required to undergo review by the County and would be required to comply with adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures that would minimize impacts to scenic vistas or scenic resources.

All other GHG reduction measures in the CAP would be implemented as proposed. As described for the project, the CAP would result in the development of small-scale wind turbines and large-scale renewable energy systems that could introduce tall vertical elements into the viewshed or allow the construction of large renewable energy facilities near the viewshed of a scenic resource. Therefore, implementation of this alternative (like the project) would result in a **potentially significant** scenic vistas/scenic resources impact. Overall, impacts to scenic vistas/scenic resources would be the same as the project, because this alternative would not change or increase implementation of small-scale wind turbines and large-scale renewable energy systems.

The following mitigation, recommended for the project, would also be required if the Increased Solid Waste Diversion Alternative was adopted:

CAP Mitigation Measure M-AES-1: Apply County Guidelines for Determining Significance for Visual Resources and Dark Skies and Glare.

Significance after Mitigation

With implementation of 2011 GPU policies and 2011 GPU PEIR mitigation measures and CAP Mitigation Measure M-AES-1, which would require the application of County Guidelines and project-specific mitigation measures to reduce impacts related to scenic vistas/scenic resources, this impact would remain **significant and unavoidable** because like the project, the locations of small-scale wind turbines and large-scale renewable energy systems are unknown and it is not possible to guarantee that all impacts would be reduced (See page 2.1-36 of the SEIR).

Impact AES-2 Visual Character or Quality

The alternative would have a **less-than-significant** effect on visual character and quality related to the expansion of waste facilities because infrastructure improvements would occur within existing developed facilities or in areas designated for such uses. Like the project, under this alternative all development proposals for expanded waste facilities would be required to comply with adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures that would minimize visual character or quality impacts.

All other GHG reduction measures in the CAP would be implemented as proposed. As described for the project, the CAP would result in the development of small-scale wind turbines and large-scale renewable energy systems that could introduce tall vertical elements into the viewshed or allow the construction of large renewable energy facilities that could result in increased visual contrasts, view blockage, or skylining from sensitive viewing locations. Therefore, implementation of this alternative (like the project) would result in a **potentially significant** visual character/quality impact. Overall, impacts to visual character/quality would be the same as the project, because this alternative would not change or increase implementation of small-scale wind turbines and large-scale renewable energy systems.

The following mitigation, recommended for the project, would also be required if the Increased Solid Waste Diversion Alternative was adopted:

CAP Mitigation Measure M-AES-1: Apply County Guidelines for Determining Significance for Visual Resources and Dark Skies and Glare.

Significance after Mitigation

With implementation of 2011 GPU policies and 2011 GPU PEIR mitigation measures and CAP Mitigation Measure M-AES-1, which would require the application of County Guidelines and project-specific mitigation measures to reduce impacts related to scenic vistas/scenic resources, this impact would remain **significant and unavoidable** because like the project, the locations of small-scale wind turbines and large-scale renewable energy systems are unknown and it is not possible to guarantee that all impacts would be reduced (see page 2.1-38 of the SEIR).

Impact AES-3 Light or Glare

The alternative would have a **less-than-significant** effect related to light or glare because infrastructure improvements would occur within existing developed facilities or in areas designated for such uses. Like the project, under this alternative all development proposals for expanded waste facilities would be required to comply with adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures that would minimize impacts related to light or glare.

As described for the project, the CAP would result in infrastructure that could cause glare. Therefore, implementation of this alternative (like the project) would result in a **potentially significant** light and glare impact. Overall, light and glare impacts would be the same as the project, because this alternative would not change or increase implementation of other infrastructure proposed under the CAP.

The following mitigation, recommended for the project, would also be required if the Increased Solid Waste Diversion Alternative was adopted:

CAP Mitigation Measure M-AES-1: Apply County Guidelines for Determining Significance for Visual Resources and Dark Skies and Glare.

CAP Mitigation Measure M-AES-2: Require a Lighting Mitigation Plan for all Large-Scale Renewable Energy Systems.

CAP Mitigation Measure M-AES-3: Require a Shadow Flicker Plan for Wind Turbines.

Significance after Mitigation

With implementation of 2011 GPU policies and 2011 GPU PEIR mitigation measures and CAP Mitigation Measures M-AES-1, M-AES-2, and M-AES-3 which would require the application of County Guidelines and project-specific mitigation measures, preparation of a Lighting Mitigation Plan, and Shadow Flicker Study to reduce impacts related to light and glare, this impact would remain **significant and unavoidable** because like the project, the locations of renewable energy infrastructure are unknown and it is not possible to guarantee that all impacts would be reduced (see page 2.1-39 of the SEIR).

Agriculture and Forestry Resources: The County is considering the adoption of this alternative in addition to the project. Therefore, all elements of the project would be implemented and GHG Reduction Measure SW-1.1 would be revised to reflect the increased waste diversion target to 80 percent (rather than 75 percent included in the project). This alternative could result in new or expanded solid waste facilities that would result in impacts to agricultural and forestry resources through conversion or direct impacts to existing resources. The construction of additional infrastructure systems could, depending on their location lead to an increase in the number of opportunities to result in potential agricultural and forestry impacts compared to the project, the specific types of impacts are described below.

Impact AG-1 Direct or Indirect Conversion of Agricultural Resources

The alternative would have a **less-than-significant** effect related to potential conversion of agricultural resources because most infrastructure improvements would occur within existing developed facilities or in areas designated for such uses. Like the project, under this alternative all development proposals for expanded waste facilities would be required to comply with adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures that would minimize impacts related to the direct or indirect conversion of agricultural resources.

As described for the project, the CAP would result in direct or indirect conversion of agricultural resources because the size, magnitude, and locations of large-scale renewable energy projects is unknown. Therefore, implementation of this alternative (like the project) would result in a **potentially significant** direct or indirect conversion of agricultural resources. Overall, agricultural conversion impacts would be the same as the project, because this alternative would not change or increase implementation of renewable energy infrastructure proposed under the CAP.

The following mitigation, recommended for the project, would also be required if the Increased Solid Waste Diversion Alternative was adopted:

> **CAP Mitigation Measure M-AGR-1:** Apply County Guidelines for Determining Significance for Agricultural Resources.

Significance after Mitigation

With implementation of 2011 GPU policies and 2011 GPU PEIR mitigation measures and CAP Mitigation Measure M-AGR-1 which would require the application of County Guidelines and project-specific mitigation measures, this impact would remain **significant and unavoidable because like** the project, the locations of large-scale renewable energy projects are unknown and it is not possible to guarantee that all impacts would be reduced (see page 2.2-22 of the SEIR).

Impact AG-2 Conflict with Agricultural or Forest Zoning

The alternative would have a **less-than-significant** effect related to conflicts with agricultural or forest zoning as the project because most infrastructure improvements would occur within existing developed facilities or in areas designated for such uses. Like the project, under this alternative all development proposals for expanded waste facilities would be required to comply with adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures that would minimize impacts related to agricultural or forest zoning. However, even with implementation of this mitigation it is not possible to guarantee that impacts would be reduced to a level below significance.

As described for the project, the CAP would result in potential conflicts with agricultural or forest zoning because the size, magnitude, and locations of large-scale renewable energy projects is unknown. Therefore, implementation of this alternative (like the project) would result in a **potentially significant** agricultural and forestry resources conflicts and

could increase these impacts compared to the project because of the need for additional or expanded facilities.

The following mitigation, recommended for the project, would also be required if the Increased Solid Waste Diversion Alternative was adopted:

> **CAP Mitigation Measure M-AGR-1:** Apply County Guidelines for Determining Significance for Agricultural Resources.

Significance after Mitigation

With implementation of 2011 GPU policies and 2011 GPU PEIR mitigation measures and CAP Mitigation Measure M-AGR-1 which would require the application of County Guidelines and project-specific mitigation measures, this impact would remain **significant and unavoidable** because like the project, the locations of large-scale renewable energy projects are unknown and it is not possible to guarantee that all impacts would be reduced (see page 2.2-23 of the SEIR).

Impact AG-3 Direct and Indirect Conversion of Loss of Forest Land

The alternative would have a **less-than-significant** effect related to potential conversion of loss of forest land because most infrastructure improvements would occur within existing developed facilities or in areas designated for such uses. Like the project, under this alternative all development proposals for expanded waste facilities would be required to comply with adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures that would minimize impacts related to direct or indirect conversion of forest land. However, even with implementation of this mitigation it is not possible to guarantee that impacts would be reduced to la level below significance.

As described for the project, the CAP could result in direct or indirect conversion or loss of forest land because the size, magnitude, and locations of large-scale renewable energy projects is unknown. Therefore, implementation of this alternative (like the project) would result in a **potentially significant** forest land conversion impacts. Overall, impacts would be the same as the project, because this alternative would not change or increase implementation of renewable energy infrastructure proposed under the CAP.

The following mitigation, recommended for the project, would also be required if the Increased Solid Waste Diversion Alternative was adopted:

> **CAP Mitigation Measure M-AGR-1:** Apply County Guidelines for Determining Significance for Agricultural Resources.
>
> **CAP Mitigation Measure M-AGR-2:** Apply County Guidelines for Determining Significance for Biological Resources.

Significance after Mitigation

With implementation of 2011 GPU policies and 2011 GPU PEIR mitigation measures and CAP Mitigation Measures M-AGR-1 and M-AGR-2 which would require the application of County Guidelines for Determining Significance for Agriculture and Biological Resources and project-specific mitigation measures, this impact would remain **significant and unavoidable** because like the project, the locations of large-scale renewable energy projects are unknown and it is not possible to guarantee that all impacts would be reduced (see page 2.2-23 of the SEIR).

Air Quality: The County is considering the adoption of this alternative in addition to the project. Therefore, all elements of the project would be implemented and GHG Reduction Measure SW-1.1 would be revised to reflect the increased waste diversion target to 80 percent (rather than 75 percent included in the project). This alternative could result in new or expanded solid waste facilities that would result in impacts to air quality due to the use of heavy equipment during construction and operational activities. The construction of additional infrastructure systems could, depending on their location lead to an increase in the number of opportunities to result in potential air quality impacts compared to the project, the specific types of impacts are described below.

Impact AQ-1 Conformance to Regional Air Quality Strategy

The alternative would have a **less-than-significant** effect related to conformance with the regional air quality strategy because it would not result in an increase of residents or employees beyond the projected 2011 GPU buildout. Like the project, this alternative would not impede or obstruct the attainment of the air quality strategy otherwise.

Impact AQ-2 Conformance to Federal and State Air Quality Standards

This alternative could increase air emissions from solid waste facilities and from construction activities relative to the project including operation of heavy-duty equipment and vehicle travel by worker commute trips, material delivery, and haul trips. This alternative could also induce new hauling trips related to the increase in the collection of organic material and construction & demolition (C & D) waste, but similar to the project, these trips would be displacing trips to the landfill, so no new net trips are expected. Like the project, under this alternative all development proposals for expanded waste facilities would be required to comply with adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures that would minimize impacts related to conformance with air quality standards, but these measures may not be able to fully mitigate the impacts to a less-than-significant level. This alternative would not change implementation of other GHG reduction measures of the CAP however, similar to the project, adoption of this alternative would have a **potentially significant** impact related to air quality standards.

The following mitigation, recommended for the project, would also be required if the Increased Solid Waste Diversion Alternative was adopted:

> **CAP Mitigation Measure M-AQ-1:** Apply County Guidelines for Determining Significance for Air Quality.

Significance after Mitigation

With implementation of 2011 GPU policies and 2011 GPU PEIR mitigation measures and CAP Mitigation Measure M-AQ-1 which would require the application of County Guidelines for Determining Significance for Air Quality and project-specific mitigation measures, this impact would remain **significant and unavoidable** because like the project, the locations of solid waste facilities are unknown and it is not possible to guarantee that all impacts would be reduced (see page 2.3-61 of the SEIR).

Impact AQ-3 Non-Attainment of Criteria Pollutants

This alternative could increase air emissions from solid waste facilities and from construction activities relative to the project including operation of heavy-duty equipment and vehicle travel by worker commute trips, material delivery, and haul trips. This alternative could also induce new hauling trips related to the increase in the collection of organic material and construction & demolition (C & D) waste, but similar to the project, these trips would be displacing trips to the landfill, so no new net trips are expected. Like the project, under this alternative all development proposals for expanded waste facilities would be required to comply with adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures that would minimize impacts related to criteria air pollutants, but these measures may not be able to fully mitigate the impacts to a less-than-significant level. This alternative would not change implementation of other GHG reduction measures of the CAP however, similar to the project, adoption of this alternative would have a **potentially significant** impact related to criteria air pollutants.

The following mitigation, recommended for the project, would also be required if the Increased Solid Waste Diversion Alternative was adopted:

> **CAP Mitigation Measure M-AQ-1:** Apply County Guidelines for Determining Significance for Air Quality.
>
> **CAP Mitigation Measure M-AQ-2:** Implement Rule 67.25.

Significance after Mitigation

With implementation of 2011 GPU policies and 2011 GPU PEIR mitigation measures and CAP Mitigation Measures M-AQ-1 and M-AQ-2 which would require the application of County Guidelines for Determining Significance for Air Quality and project-specific mitigation measures, and implement Rule 67.25 which would reduce odors and emissions from composting operations, this impact would remain **significant and unavoidable** because like the project, the locations of solid waste facilities are unknown and it is not possible to guarantee that all impacts would be reduced (see page 2.3-62 of the SEIR).

Impact AQ-4 Sensitive Receptors

This alternative could result in the increased construction of new, and expansion of existing facilities relative to the project which would result in increased presence of diesel particulate matter from construction equipment and heavy-duty truck trips. Operational

emissions could result from the processing of an increased volume of organic materials. Like the project, under this alternative all development proposals for expanded waste facilities would be required to comply with adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures that would minimize impacts related to sensitive receptors, but these measures may not be able to fully mitigate the impacts to a less-than-significant level. This alternative would not change implementation of other GHG reduction measures of the CAP and there is no feasible mitigation. Therefore, similar to the project, adoption of this alternative would have a **significant and unavoidable** impact related to sensitive receptors.

The following mitigation, recommended for the project, would also be required if the Increased Solid Waste Diversion Alternative was adopted:

No feasible mitigation.

Significance after Mitigation

No feasible mitigation is available. With implementation of 2011 GPU policies and 2011 GPU PEIR mitigation measures, this impact would remain **significant and unavoidable** because like the project, no other feasible mitigation beyond compliance with federal and state permitting requirements is available and it is not possible to guarantee that all impacts would be reduced (see page 2.3-62 of the SEIR).

Impact AQ-5 Odors

This alternative could result in the increased odors relative to the project because of increased construction activities and increased volume of organic materials being processed. Like the project, under this alternative all development proposals for expanded waste facilities would be required to comply with adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures that would minimize impacts related to odors, but these measures may not be able to fully mitigate the impacts to a less-than-significant level. This alternative would not change implementation of other GHG reduction measures of the CAP however, similar to the project, adoption of this alternative would have a **potentially significant** impact related to odors.

The following mitigation, recommended for the project, would be required for the if the Increased Solid Waste Diversion Alternative was adopted:

CAP Mitigation Measure M-AQ-1: Apply County Guidelines for Determining Significance for Air Quality.

CAP Mitigation Measure M-AQ-2: Implement Rule 67.25.

CAP Mitigation Measure M-AQ-3: Use CARB's Land Use and Air Quality Handbook.

CAP Mitigation Measure M-AQ-4: Require Odor Impact Analysis and Control Measures.

Significance after Mitigation

Implementation of 2011 GPU policies and 2011 GPU PEIR mitigation measures and CAP Mitigation Measures M-AQ-1, M-AQ-2, M-AQ-3, and M-AQ-4 would require the application of County Guidelines for Determining Significance for Air Quality and project-specific mitigation measures, implement Rule 67.25, require the use of CARB's land use and air quality handbook, and require an odor impact analysis and control measures. These measures would reduce odors and emissions from composting operations, however, this impact would remain **significant and unavoidable** because like the project, the locations of solid waste facilities are unknown and it is not possible to guarantee that all impacts would be reduced (see page 2.3-63 of the SEIR).

Biological Resources: The County is considering the adoption of this alternative in addition to the project. Therefore, all elements of the project would be implemented and GHG Reduction Measure SW-1.1 would be revised to reflect the increased waste diversion target to 80 percent (rather than 75 percent included in the project). This alternative could result in new or expanded solid waste facilities that would result in impacts to biological resources because of construction activities. The construction of additional infrastructure systems could, depending on their location lead to an increase in the number of opportunities to result in potential biological impacts compared to the project, the specific types of impacts are described below.

Impact BIO-1 Candidate, Sensitive, or Special-Status Species

This alternative could increase impacts to candidate, sensitive, or special-status species with increased construction of facilities because projects could contribute to the disturbance or loss of special-status species or their habitats. Like the project, under this alternative all development proposals for expanded waste facilities would be required to comply with adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures that would minimize impacts related to candidate, sensitive, or special-status species, but these measures may not be able to fully mitigate cumulative impacts to a less-than-significant level due to the scale and nature of the future unknown solid waste facilities.

As described for the project, the CAP could result in direct or indirect impacts to candidate, sensitive, or special-status species. Therefore, implementation of this alternative (like the project) would result in a **potentially significant** impact.

The following mitigation, recommended for the project, would also be required if the Increased Solid Waste Diversion Alternative was adopted:

CAP Mitigation Measure M-BIO-1: Apply County Guidelines for Determining Significance for Biological Resources.

CAP Mitigation Measure M-BIO-2: Update County Guidelines for Determining Significance for Biological Resources.

Significance after Mitigation

With implementation of 2011 GPU policies and 2011 GPU PEIR mitigation measures and CAP Mitigation Measures M-BIO-1 and M-BIO-2 which would require the application of County Guidelines for Determining Significance for Biological Resources and project-specific mitigation measures that would reduce impacts to bats and birds, which would reduce impacts to candidate, sensitive, or special-status species, this impact would remain **significant and unavoidable** because like the project, the any new development of solid waste facilities would contribute to the existing significant cumulative condition and without known locations it is not possible to guarantee that all impacts would be reduced (see page 2.4-41 of the SEIR).

Impact BIO-2 Riparian Habitat or Sensitive Natural Communities

This alternative could increase impacts to riparian habitat or sensitive natural communities with increased construction of facilities because projects could contribute to the disturbance or loss of riparian or sensitive habitat. Like the project, under this alternative all development proposals for expanded waste facilities would be required to comply with adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures that would minimize impacts related to riparian habitat or sensitive natural communities. However, impacts related to the development of renewable energy systems and direct investment projects may not be able to be fully mitigated to a less-than-significant level. All other GHG reduction measures in the CAP would be implemented as proposed. As described for the project, the CAP could result in direct or indirect impacts to riparian habitat or sensitive natural communities. Therefore, implementation of this alternative (like the project) would result in a **potentially significant** impact.

The following mitigation, recommended for the project, would also be required if the Increased Solid Waste Diversion Alternative was adopted:

> **CAP Mitigation Measure M-BIO-1:** Apply County Guidelines for Determining Significance for Biological Resources.
>
> **CAP Mitigation Measure M-BIO-2:** Update County Guidelines for Determining Significance for Biological Resources.

Significance after Mitigation

With implementation of 2011 GPU policies and 2011 GPU PEIR mitigation measures and CAP Mitigation Measures M-BIO-1 and M-BIO-2 which would require the application of County Guidelines for Determining Significance for Biological Resources and project-specific mitigation measures that would reduce impacts to bats and birds, which would reduce impacts to riparian habitat or sensitive natural communities, this impact would remain **significant and unavoidable** because like the project, the locations of new renewable energy facilities and direct investment projects are unknown and it is not possible to guarantee that all impacts would be reduced (see page 2.4-42 of the SEIR).

Impact BIO-3 Federally Protected Wetlands

The alternative would have a **less-than-significant** effect related to protected wetlands with increased construction of facilities because like the project, projects resulting from this project would be required to comply with County development requirements, including compliance with local policies, ordinances, and applicable permitting procedures related to protection of protected wetlands and mitigate accordingly.

Impact BIO-4 Wildlife Movement Corridors and Nursery Sites

This alternative could result in significant impacts to wildlife corridors and nursery sites because new or expanded waste facilities could be located in areas that are not within habitat conservation plan areas. Demand for increased waste processing capacity could exacerbate these impacts. Like the project, under this alternative all development proposals for expanded waste facilities would be required to comply with adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures that would minimize impacts related to corridors and nursery sites, but these measures may not be able to fully mitigate the impacts to a less-than-significant level. Additionally the alternative would be adopted with the CAP which could result in significant impacts because of the scale and nature of renewable energy systems and the ability to construct small-scale renewable energy systems without a discretionary permit.

As described for the project, the CAP could result in direct or indirect impacts to wildlife corridors and nursery sites. Therefore, implementation of this alternative (like the project) would result in a **potentially significant** impact.

The following mitigation, recommended for the project, would also be required if the Increased Solid Waste Diversion Alternative was adopted:

> **CAP Mitigation Measure M-BIO-1:** Apply County Guidelines for Determining Significance for Biological Resources.
>
> **CAP Mitigation Measure M-BIO-2:** Update County Guidelines for Determining Significance for Biological Resources.

Significance after Mitigation

With implementation of 2011 GPU policies and 2011 GPU PEIR mitigation measures and CAP Mitigation Measures M-BIO-1 and M-BIO-2 which would require the application of County Guidelines for Determining Significance for Biological Resources and project-specific mitigation measures that would reduce impacts to bats and birds, which would reduce impacts to wildlife corridors and nursery sites, this impact would remain **significant and unavoidable** because like the project, the locations of solid waste facilities are unknown and it is not possible to guarantee that all impacts would be reduced (see page 2.4-43 of the SEIR).

Impact BIO-5 Local Policies, Ordinances, Adopted Plans

This alternative would have **no impact** related to compliance with policies, ordinances, and plans because like the project, new and expanded facilities would be required to comply with the County's development regulations regarding the protection of biological resources.

Impact BIO-6 Habitat Conservation Plans and NCCPs

This alternative would have **no impact** related to compliance with Habitat Conservation Plans and Natural Community Conservation Plans because like the project, new and expanded facilities would be required to comply with the County's development regulations regarding the protection of biological resources.

Cultural and Historical Resources: The County is considering the adoption of this alternative in addition to the project. Therefore, all elements of the project would be implemented and GHG Reduction Measure SW-1.1 would be revised to reflect the increased waste diversion target to 80 percent (rather than 75 percent included in the project). This alternative could result in new or expanded solid waste facilities that would result in impacts to cultural and historical resources through ground disturbance during construction activities. The construction of additional infrastructure systems could, depending on their location lead to an increase in the number of opportunities to result in potential cultural and historical resources impacts compared to the project, the specific types of impacts are described below.

Impact CULT-1 Historical Resources

This alternative could result in significant impacts to historical resources because of the construction of new or expanded waste facilities that could potentially alter historic structures, or change the setting within which an historic structure is located. Demand for increased waste processing capacity could exacerbate these impacts. Like the project, under this alternative all development proposals for expanded waste facilities would be required to comply with adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures that would minimize impacts related to historical resources, but these measures may not be able to fully mitigate the impacts to a less-than-significant level. All other GHG reduction measures in the CAP would be implemented as proposed. As described for the project, the CAP could result in impacts to historical resources. Therefore, implementation of this alternative (like the project) would result in a **potentially significant** impact.

The following mitigation, recommended for the project, would also be required if the Increased Solid Waste Diversion Alternative was adopted:

> **CAP Mitigation Measure M-CUL-1:** Incentivize Property Owners to Restore, Renovate, or Reuse Historical Resources.

Significance after Mitigation

With implementation of 2011 GPU policies and 2011 GPU PEIR mitigation measures and CAP Mitigation Measure M-CUL-1, which would incentivize the protection and preservation of historical resources, this impact would remain **significant and unavoidable** because like the project, the locations of solid waste facilities are unknown and it is not possible to guarantee that all impacts would be reduced (see page 2.5-32 of the SEIR).

Impact CULT-2 Archaeological Resources

The alternative would have a **less-than-significant** effect on archaeological resources related to the expansion of waste facilities because projects would be required to comply with County development requirements, including compliance with local policies, ordinances, and applicable permitting procedures related to the protection of archaeological resources and mitigate accordingly. Like the project, under this alternative all development proposals for expanded waste facilities would be required to undergo review by the County and would be required to comply with adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures that would minimize impacts to archaeological resources.

However, as described for the project, other aspects of this alternative could result in archaeological impacts. Therefore, implementation of this alternative (like the project) would result in a **potentially significant** impact.

The following mitigation, recommended for the project, would also be required if the Increased Solid Waste Diversion Alternative was adopted:

No feasible mitigation.

Significance after Mitigation

No feasible mitigation is available. With implementation of 2011 GPU policies and 2011 GPU PEIR mitigation measures this impact would remain **significant and unavoidable** because like the project, the locations of renewable energy systems are unknown and it is not possible to guarantee that all impacts would be reduced (see page 2.5-33 of the SEIR).

Impact CULT-3 Paleontological Resources

The alternative would have a **less-than-significant** effect on paleontological resources related to the expansion of waste facilities because projects would be required to comply with County development requirements, including compliance with local policies, ordinances, and applicable permitting procedures related to the protection of archaeological resources and mitigate accordingly. Like the project, under this alternative all development proposals for expanded waste facilities would be required to undergo review by the County and would be required to comply with adopted 2011

GPU policies and 2011 GPU PEIR mitigation measures that would minimize impacts to paleontological resources.

However, as described for the project, other aspects of this alternative could result in paleontological impacts. Therefore, implementation of this alternative (like the project) would result in a **potentially significant** impact. Overall, impacts would be the same as the project, because this alternative would not change or increase implementation of new small-scale wind turbines because they are permitted as an accessory use (if zoning criteria met) and could result in impacts because of ground disturbance.

The following mitigation, recommended for the project, would also be required if the Increased Solid Waste Diversion Alternative was adopted:

No feasible mitigation.

Significance after Mitigation

No feasible mitigation is available. With implementation of 2011 GPU policies and 2011 GPU PEIR mitigation measures this impact would remain **significant and unavoidable** because like the project, the locations of renewable energy systems are unknown and it is not possible to guarantee that all impacts would be reduced (see page 2.5-33 of the SEIR).

Impact CULT-4 Human Remains

The alternative would have a **less-than-significant** effect on impacts to human remains related to the expansion of waste facilities because projects would be required to comply with County development requirements, including compliance with local policies, ordinances, and applicable permitting procedures related to the protection of human remains and mitigate accordingly. Like the project, under this alternative all development proposals for expanded waste facilities would be required to undergo review by the County and would be required to comply with adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures that would minimize impacts to human remains.

However, as described for the project, other aspects of this alternative could result in impacts to human remains. Therefore, implementation of this alternative (like the project) would result in a **potentially significant** impact. Overall, impacts would be the same as the project, because this alternative would not change or increase implementation of new small-scale wind turbines because they are permitted as an accessory use (if zoning criteria met) and could result in impacts because of ground disturbance.

The following mitigation, recommended for the project, would also be required if the Increased Solid Waste Diversion Alternative was adopted:

No feasible mitigation.

Significance after Mitigation

With implementation of 2011 GPU policies and 2011 GPU PEIR mitigation measures this impact would remain **significant and unavoidable** because like the project, the locations of renewable energy systems are unknown and it is not possible to guarantee that all impacts would be reduced (see page 2.5-34 of the SEIR).

Energy: The County is considering the adoption of this alternative in addition to the project. Therefore, all elements of the project would be implemented and GHG Reduction Measure SW-1.1 would be revised to reflect the increased waste diversion target to 80 percent (rather than 75 percent included in the project). This alternative could result in new or expanded solid waste facilities that would result in impacts to energy conservation through the new demand for materials collection and processing. conversion or direct impacts to existing resources. The specific types of impacts are described below.

Impact Energy-1: Energy Requirements and Local Energy Supplies

The alternative would have **less-than-significant** effects related to energy because like the project, new or expanded waste facilities and waste hauling would be required to comply with standard construction practices, and County development requirements, including compliance with local policies, ordinances, and applicable permitting procedures related to conservation of energy.

Greenhouse Gas Emissions: The County is considering the adoption of this alternative in addition to the project. Therefore, all elements of the project would be implemented and GHG Reduction Measure SW-1.1 would be revised to reflect the increased waste diversion target to 80 percent (rather than 75 percent included in the project). This alternative could result in new or expanded solid waste facilities that would result in impacts to greenhouse gas emissions through construction activities and increased vehicle trips. The specific types of impacts are described below.

Impact GHG-1 Generate Significant GHG Emissions

The alternative would have a potentially significant effect on greenhouse gas emissions related to the expansion to solid waste facilities because although the increase in waste diversion that would occur under this alternative would result in additional GHG reductions compared to the project, adoption of this alternative with the CAP would still not result in GHG emissions reductions that are sufficient to meet the long-term 2050 goal. It is estimated that this alternative could result in approximately 79, 052 ~~74,572~~ $MTCO_2e$ of additional GHG reductions in 2030. While this alternative would bring the County closer to achieving the 2050 GHG reduction goal, a **significant** impact would remain as it is not known with certainty that the goal would be met. Further, this alternative would continue to allow the processing of GPAs that are not included in adopted growth projections and could increase GHG emissions from that identified in the CAP. If adopted, this could result in a substantial increase in county-wide GHG emissions and **would have a considerable contribution** such that a significant cumulative 2030 GHG impact would occur.

The following mitigation, recommended for the project, would also be required if the Increased Solid Waste Diversion Alternative was adopted:

> **CAP Mitigation Measure M-GHG-1:** Require In-Process and Future GPAs to Reduce Their Emissions to Ensure That CAP Emission Forecasts are Not Substantially Altered Such That Attainment of GHG Reduction Targets Could Not Be Achieved.

Significance after Mitigation

With implementation of 2011 GPU policies and 2011 GPU PEIR mitigation measures and CAP Mitigation Measure M-GHG-1, which would require GPAs to mitigate GHG emissions, this impact would be reduced to **less than significant.** However, there are no additional feasible mitigation available to demonstrate that additional GHG reductions are available to meet the 2050 goal. Therefore, this alternative would have a **significant and unavoidable** impact related to achievement of the 2050 reduction goal. While the impact conclusion would be same as the project, this alternative would result in less impact (see page 2.7-39 and 40 of the SEIR).

Impact GHG-2 Conflict with a Plan, Policy, or Regulation Adopted for Reducing GHG Emissions

Implementation of GHG reduction measures and supporting efforts under this alternative would not conflict with an applicable plan, policy, or regulation adopted to reduce the emissions of GHGs. Therefore, this impact would be **less than significant** (like the project). However, this alternative could result in significant cumulative impacts related to conflicts with plans, policies, or regulations because of future GPAs that are not included in adopted growth projections that could increase GHG emissions from that identified in the CAP. This could result in potential conflicts or obstruction of a plan or policy adopted to reduce the emissions of GHGs. This alternative **would have a considerable contribution** such that a significant cumulative policy conflict would occur.

The following mitigation, recommended for the project, would also be required if the Increased Solid Waste Diversion Alternative was adopted:

> **CAP Mitigation Measure M-GHG-1:** Require In-Process and Future GPAs to Reduce Their Emissions to Ensure That CAP Emission Forecasts Are Not Substantially Altered Such That Attainment of GHG Reduction Targets Could Not Be Achieved.

Significance after Mitigation

With implementation of 2011 GPU policies and 2011 GPU PEIR mitigation measures and CAP Mitigation Measure M-GHG-1, which would require GPAs to mitigate GHG emissions, this impact would be reduced to **less than significant** and like the project, no policy conflicts would remain (see page 2.7-40 and 41 of the SEIR).

Hazards and Hazardous Materials: The County is considering the adoption of this alternative in addition to the project. Therefore, all elements of the project would be implemented and GHG Reduction Measure SW-1.1 would be revised to reflect the

increased waste diversion target to 80 percent (rather than 75 percent included in the project). This alternative could result in new or expanded solid waste facilities that would result in impacts to hazards because of increased construction activities and new or expanded solid waste facilities. The specific types of impacts are described below.

Impact HAZ-1 Hazardous Substance Handling

The alternative would have a **less-than-significant** impact related to hazardous materials because projects would be required to comply with County development requirements, including compliance with local policies, ordinances, and applicable permitting procedures related to safe transportation and handling of hazardous materials and mitigate accordingly. Like the project, this alternative would not increase impacts related to hazardous materials.

Impact HAZ-2 Public and Private Airport Hazards

The alternative would have a **less-than-significant** impact related to hazardous materials because projects would be required to comply with County development requirements, including compliance with local policies, ordinances, and applicable permitting procedures related to siting of land uses near airports and mitigate accordingly. Like the project, this alternative would not increase impacts related to airport hazards.

Impact HAZ-3 Emergency Response and Evacuation Plans

The alternative would have a **less-than-significant** impacts related to hazardous materials because projects would be required to comply with County development requirements, including compliance with local policies, ordinances, and applicable permitting procedures related to obstruction of emergency response and evacuation plans and mitigate accordingly. Like the project, this alternative would not increase impacts related to conflicts with emergency response and evacuation plans.

Impact HAZ-4 Wildland Fires

The alternative would have similar impacts as the project related to wildland fires because while expanded waste facilities would not contribute to wildland fires, all other measures of the CAP would be implemented including the expansion of renewable energy facilities that could result in the potential for increased wildland fire hazards. Projects would be required to comply with County development requirements, including compliance with local policies, ordinances, and applicable permitting procedures related to wildland fires and mitigate accordingly, however the potential for increased risk related to wildfire would not be reduced to a level below significance. Nonetheless, the alternative would result in **significant and unavoidable** impacts.

The following mitigation, recommended for the project, would also be required if the Increased Solid Waste Diversion Alternative was adopted:

> **CAP Mitigation Measure M-HAZ-1:** Apply the County Guidelines for Determining Significance for Wildland Fire & Fire Protection.

Significance after Mitigation

With implementation of 2011 GPU policies and 2011 GPU PEIR mitigation measures and CAP Mitigation Measure M-HAZ-1, which would require the application of County Guidelines and project-specific mitigation measures to reduce impacts related to wildland fire, this impact would remain **significant and unavoidable** because like the project, the locations of solid waste facilities are unknown and it is not possible to guarantee that all impacts would be reduced (see page 2.8-33 of the SEIR).

Impact HAZ-5 Vectors

The alternative would have **less-than-significant** impacts related to vectors. Like the project, new or expanded waste facilities would be required to undergo a discretionary review process which would alleviate the potential for the creation of new vector breeding sources associated with new or expanded solid waste facilities. This alternative would not change implementation of other GHG reduction measures of the CAP and, as a result, would not increase the severity of vector impacts compared to the project.

Hydrology and Water Quality: The County is considering the adoption of this alternative in addition to the project. Therefore, all elements of the project would be implemented and GHG Reduction Measure SW-1.1 would be revised to reflect the increased waste diversion target to 80 percent (rather than 75 percent included in the project). This alternative could result in new or expanded solid waste facilities that would result in impacts to hydrology and water quality due to increased construction activity. The construction of additional infrastructure systems could, depending on their location lead to an increase in the number of opportunities to result in potential hydrology and water quality impacts compared to the project, the specific types of impacts are described below.

Impact HYD-1 Water Quality Standards

The alternative would have similar **less-than-significant** effects related to water quality standards because most infrastructure improvements would occur within existing developed facilities or in areas designated for such uses. Like the project, under this alternative all development proposals for expanded waste facilities would be required to undergo review by the County and would be required to comply with adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures that would minimize impacts related to water quality.

However, all other elements of the project including direct investment project would continue to be implemented and could result in impacts to water quality because of construction or specific location of certain facilities. Therefore, the project in combination with this alternative would result in **potentially significant** impacts associated with water quality standards.

The following mitigation, recommended for the project, would also be required if the project and the Increased Solid Waste Diversion Alternative were adopted:

No feasible mitigation.

Significance after Mitigation

With implementation of 2011 GPU policies and 2011 GPU PEIR mitigation measures this impact would remain **significant and unavoidable** because like the project, the locations of direct investment projects are unknown and it is not possible to guarantee that all impacts would be reduced (see page 2.9-32 of the SEIR).

Impact HYD-2 Groundwater Supplies

The alternative would have similar **less-than-significant** effects related to groundwater supplies because most infrastructure improvements would occur within existing developed facilities or in areas designated for such uses and would be served by municipal water sources. Like the project, under this alternative all development proposals for expanded waste facilities would be required to undergo review by the County and would be required to comply with adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures that would minimize impacts related to groundwater supplies.

However, all other GHG reduction measures in the CAP would be implemented as proposed. As described for the project, the CAP could result in impacts to groundwater supplies. Therefore, implementation of this alternative (like the project) would result in a **potentially significant** impact. Overall, impacts would be the same as the project, because this alternative would not change or increase implementation of local carbon offset projects or large-scale renewable energy project that could result in substantial groundwater demands.

The following mitigation, recommended for the project, would also be required if the Increased Solid Waste Diversion Alternative was adopted:

No feasible mitigation.

Significance after Mitigation

With implementation of 2011 GPU policies and 2011 GPU PEIR mitigation measures this impact would remain **significant and unavoidable** because like the project, the locations of large-scale renewable energy projects are unknown and it is not possible to guarantee that all impacts would be reduced (see page 2.9-33 of the SEIR).

Impact HYD-3 Alter Existing Drainage Patterns

The alternative would have **less-than-significant** effects related to drainage patterns because most infrastructure improvements would occur within existing developed facilities or in areas designated for such uses. Like the project, under this alternative all development proposals for expanded waste facilities would be required to undergo review by the County and would be required to comply with adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures that would minimize impacts related to drainage patterns.

Because all other elements of the project would continue to be implemented and could result in impacts to drainage patterns because of construction or specific location of certain facilities the project in combination with this alternative would result in **potentially significant** drainage impacts. Overall, impacts would be the same as the project, because this alternative would not change or increase implementation of the types of GHG reduction measures and projects that would be implemented under CAP which could have significant drainage impacts.

The following mitigation, recommended for the project, would also be required if the Increased Solid Waste Diversion Alternative was adopted:

No feasible mitigation.

Significance after Mitigation

With implementation of 2011 GPU policies and 2011 GPU PEIR mitigation measures this impact would remain **significant and unavoidable** because like the project, the locations of local direct investment projects are unknown and it is not possible to guarantee that all impacts would be reduced (see page 2.9-34 of the SEIR).

Impact HYD-4 Flood Hazards

The alternative would have **less-than-significant** impacts related to flood hazards because most infrastructure improvements would occur within existing developed facilities or in areas designated for such uses. Projects would be required to comply with County development requirements, including compliance with local policies, ordinances, and applicable permitting procedures related to flood hazards and mitigate accordingly. Like the project, this alternative would not increase impacts related to flood hazards.

Land Use Planning: The County is considering the adoption of this alternative in addition to the project. Therefore, all elements of the project would be implemented and GHG Reduction Measure SW-1.1 would be revised to reflect the increased waste diversion target to 80 percent (rather than 75 percent included in the project). This alternative could result in new or expanded solid waste facilities that would result in impacts to land use planning because of new facilities. The construction of additional infrastructure systems could, depending on their location, lead to an increase in the number of opportunities to result in potential community division impacts compared to the project, the specific types of impacts are described below.

Impact LU-1 Physically Divide Established Community

The alternative would have **less-than-significant** effects related to the physical division of a community because most infrastructure improvements would occur within existing developed facilities or in areas designated for such uses. Like the project, under this alternative all development proposals for expanded waste facilities would be required to undergo review by the County and would be required to comply with adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures that would minimize impacts related to division of a community. However, all other GHG reduction measures in the CAP would

be implemented as proposed. As described for the project, the CAP could result in community impacts. Therefore, implementation of this alternative (like the project) would result in a **potentially significant** impact. Overall, impacts would be the same as the project, because this alternative would not change or increase implementation of the types of GHG reduction measures and projects (e.g., new roads) that would be implemented under CAP which could community impacts.

The following mitigation, recommended for the project, would also be required if the project and the Increased Solid Waste Diversion Alternative were adopted:

No feasible mitigation.

Significance after Mitigation

With implementation of 2011 GPU policies and 2011 GPU PEIR mitigation measures this impact would remain **significant and unavoidable** because like the project, the locations of large-scale renewable energy systems are unknown and it is not possible to guarantee that all impacts would be reduced (see page 2.10-22 of the SEIR).

Impact LU-2 Conflict with Plans, Policies, and Regulations

The alternative would have **less-than-significant** impacts related to conflicts with plans, policies, and regulations because most infrastructure improvements would occur within existing developed facilities or in areas designated for such uses. Projects would be required to comply with County development requirements, including compliance with local policies, ordinances, and applicable permitting procedures and mitigate accordingly. Like the project, this alternative would not increase conflicts related to existing plans, policies, and regulations.

Noise: The County is considering the adoption of this alternative in addition to the project. Therefore, all elements of the project would be implemented and GHG Reduction Measure SW-1.1 would be revised to reflect the increased waste diversion target to 80 percent (rather than 75 percent included in the project). This alternative could result in new or expanded solid waste facilities that would result in noise impacts through increased construction and operation activities. The construction of additional infrastructure systems could, depending on their location lead to an increase in the number of opportunities to result in noise impacts compared to the project, the specific types of impacts are described below.

Impact NOI-1 Excessive Noise Levels

The alternative would have **less-than-significant** effects related to the excessive noise because like the project, all development proposals for new or expanded waste facilities would be required to undergo review by the County and would be required to comply with adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures. Additionally, projects would be required to perform an acoustical analysis, be determined consistent with land use compatibility guidelines, and would be regulated by the County Noise Ordinance which would minimize excessive noise. However, all other GHG reduction measures in the

CAP would be implemented as proposed. As described for the project, the CAP could result in excessive noise impacts. Therefore, implementation of this alternative (like the project) would result in a **potentially significant** impact. Overall, impacts would be the same as the project, because this alternative would not change or increase implementation of the types of GHG reduction measures and projects that would be implemented under CAP which could have significant construction and operational noise impacts (e.g., large-scale wind turbines).

The following mitigation, recommended for the project, would also be required if the Increased Solid Waste Diversion Alternative as adopted:

No feasible mitigation.

Significance after Mitigation

No feasible mitigation available. With implementation of 2011 GPU policies and 2011 GPU PEIR mitigation measures this impact would remain **significant and unavoidable** because like the project, the locations of large-scale renewable energy systems are unknown and it is not possible to guarantee that all impacts would be reduced (see page 2.11-30 of the SEIR).

Impact NOI-2 Excessive Groundborne Vibration

The alternative would have **less-than-significant** impacts related to excessive groundborne vibration because the location of most construction activities would likely be within existing developed footprints, nearby to roadways or commercial areas, or in remote areas occur. Projects would be required to comply with County development requirements, including compliance with local policies, ordinances, and applicable permitting procedures and mitigate accordingly, including performing an acoustical analysis. Like the project, this alternative would not increase conflicts related to excessive groundborne vibration.

Impact NOI-3 Permanent Increase in Ambient Noise Levels

The alternative would have **less-than-significant** effects related to the ambient noise because like the project, under this alternative all development proposals for new or expanded waste facilities would be required to undergo review by the County and would be required to comply with adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures. Additionally, projects would be required to perform an acoustical analysis, be determined consistent with land use compatibility guidelines, and would be regulated by the County Noise Ordinance which would minimize ambient noise.

However, all other GHG reduction measures in the CAP would be implemented as proposed. As described for the project, the CAP could result in significant permanent increases in ambient noise. Therefore, implementation of this alternative (like the project) would result in a **potentially significant** impact. Overall, impacts would be the same as the project, because this alternative would not change or increase implementation of the types of GHG reduction measures and projects that would be implemented under CAP

which could have significant construction and operational noise impact (e.g., large-scale wind turbines).

The following mitigation, recommended for the project, would also be required if the project and the Increased Solid Waste Diversion Alternative were adopted:

No feasible mitigation.

Significance after Mitigation

No feasible mitigation available. With implementation of 2011 GPU policies and 2011 GPU PEIR mitigation measures this impact would remain **significant and unavoidable** because like the project the locations of large-scale wind turbines and direct investments project are unknown and it is not possible to guarantee that all impacts would be reduced (see page 2.11-31 of the SEIR).

Impact NOI-4 Temporary or Periodic Increase in Ambient Noise Levels

The alternative would have **less-than-significant** effects related to the temporary ambient noise because like the project, under this alternative all development proposals for new or expanded waste facilities would be required to undergo review by the County and would be required to comply with adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures. Additionally, projects would be required to perform an acoustical analysis, be determined consistent with land use compatibility guidelines, and would be regulated by the County Noise Ordinance which would minimize ambient noise.

However, all other GHG reduction measures in the CAP would be implemented as proposed. As described for the project, the CAP could result in significant temporary or periodic increases in ambient noise. Therefore, implementation of this alternative (like the project) would result in a **potentially significant** impact. Overall, impacts would be the same as the project, because this alternative would not change or increase implementation of the types of GHG reduction measures and projects that would be implemented under CAP which could have significant construction and operational noise impacts (e.g., large-scale wind turbines).

The following mitigation, recommended for the project, would also be required if the Increased Solid Waste Diversion Alternative was adopted:

No feasible mitigation.

Significance after Mitigation

No feasible mitigation available. With implementation of 2011 GPU policies and 2011 GPU PEIR mitigation measures this impact would remain significant and unavoidable because like the project the locations of large-scale wind turbines and direct investment projects are unknown and it is not possible to guarantee that all impacts would be reduced (see page 2.11-32 of the SEIR).

Transportation and Traffic: The County is considering the adoption of this alternative in addition to the project. Therefore, all elements of the project would be implemented and GHG Reduction Measure SW-1.1 would be revised to reflect the increased waste diversion target to 80 percent (rather than 75 percent included in the project). This alternative could result in new or expanded solid waste facilities that would result in transportation and traffic impacts through increased construction and operation activities. The construction of additional infrastructure systems could, depending on their location lead to an increase in the number of opportunities to result in transportation and traffic impacts compared to the project, the specific types of impacts are described below.

Impact TRA-1 LOS and Conflicts with Plans, Policies, or Ordinances

The alternative would have a **less-than-significant** effect related to conflicts with plans, policies or ordinances because of new or expanded waste facilities because most infrastructure improvements would occur within existing developed facilities or in areas designated for such uses. Like the project, under this alternative all development proposals for expanded waste facilities would be required to undergo review by the County and would be required to comply with adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures that would minimize impacts related to division of a community. Construction activities may temporarily affect traffic but this would be periodic and would not result in significant impacts. Like the project, under this alternative all development proposals for expanded waste facilities would be required to undergo review by the County and would be required to comply with adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures that would minimize impacts to scenic vistas or scenic resources.

However, all other GHG reduction measures in the CAP would be implemented as proposed. As described for the project, the CAP could result in significant conflicts with traffic plans and policies. Therefore, implementation of this alternative (like the project) would result in a **potentially significant** impact. Overall, impacts would be the same as the project, because this alternative would not change or increase implementation of the types of GHG reduction measures and projects that would be implemented under CAP which could have significant construction traffic impacts (e.g., large-scale renewable energy systems).

The following mitigation, recommended for the project, would also be required if the project and the Increased Solid Waste Diversion Alternative were adopted:

> **CAP Mitigation Measure M-TRAF-1:** Apply County Guidelines for Determining Significance for Transportation and Traffic.

Significance after Mitigation

With implementation of 2011 GPU policies and 2011 GPU PEIR mitigation measures and CAP Mitigation Measure M-TRAF-1, which would require the application of County Guidelines and project-specific mitigation measures to reduce impacts related to conflicts with plans, policies, or ordinances, this impact would remain **significant and unavoidable** because like the project the locations of large-scale renewable energy

systems is unknown and it is not possible to guarantee that all impacts would be reduced (see page 2.12-27 of the SEIR).

Impact TRA-2 Emergency Access

The alternative would have **less-than-significant** impacts related to emergency access because the location of most construction activities would likely be within existing developed footprints, nearby to roadways or commercial areas, or in remote areas. Projects would be required to comply with County development requirements, including compliance with local policies, ordinances, and applicable permitting procedures and mitigate and possible conflicts with emergency access routes accordingly.

Impact TRA-3 Substantially Increase Design Hazards

The alternative would have **less-than-significant** impacts related to emergency access because the location of most construction activities would likely be within existing developed footprints, nearby to roadways or commercial areas, or in remote areas and would not result in new roads or design hazards. Projects would be required to comply with County development requirements, including compliance with local policies, ordinances, and applicable permitting procedures and mitigate and possible conflicts with design hazards accordingly.

Tribal Cultural Resources: The County is considering the adoption of this alternative in addition to the project. Therefore, all elements of the project would be implemented and GHG Reduction Measure SW-1.1 would be revised to reflect the increased waste diversion target to 80 percent (rather than 75 percent included in the project). This alternative could result in new or expanded solid waste facilities that would result in impacts to tribal cultural resources through increased construction and operation activities. The construction of additional infrastructure systems could, depending on their location lead to an increase in the number of opportunities to result in tribal cultural resource impacts compared to the project, the specific types of impacts are described below.

Impact TCR-1 Tribal Cultural Resources

This alternative could increase impacts to tribal cultural resources from new or expanded solid waste facilities because it may be infeasible to fully mitigate impacts because of the location, size, and magnitude of the new development. Like the project, under this alternative all development proposals for expanded waste facilities would be required to comply with adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures that would minimize impacts related to protection and preservation of tribal cultural resources, but these measures may not be able to fully mitigate the impacts to a less-than-significant level. This alternative would not change implementation of other GHG reduction measures of the CAP; however, similar to the project, adoption of this alternative would have a **potentially significant** impact related to tribal cultural resources.

The following mitigation, recommended for the project, would also be required if the Increased Solid Waste Diversion Alternative was adopted:

CAP Mitigation Measure M-TCR-1: Facilitate the Identification of Tribal Cultural Resources.

CAP Mitigation Measure M-TCR-2: Require Development to Avoid or Mitigate Tribal Cultural Resources.

CAP Mitigation Measure M-TCR-3: Dedicate Easements to Protect Tribal Cultural Resources.

CAP Mitigation Measure M-TCR-4: Protect Significant Tribal Cultural Resources.

Significance after Mitigation

With implementation of 2011 GPU policies and 2011 GPU PEIR mitigation measures and CAP Mitigation Measures M-TCR-1, M-TCR-2, M-TCR-3, and M-TCR-4 which would require the identification, avoidance, and protection of tribal cultural resources through the implementation of project-specific mitigation measures, this impact would remain **significant and unavoidable** because like the project the locations where measures and strategies of the project would be implemented is unknown and it is not possible to guarantee that all impacts would be reduced (see page 2.13-10 of the SEIR).

4.3.5 Environmentally Superior Alternative

CEQA Guidelines Section 15126.6(e)(2) requires that if an EIR determines that the No Project Alternative is environmentally superior to the project, the EIR must identify an environmentally superior alternative among the other alternatives considered. **Table 4-1** provides a summary comparison of the impacts of the project and alternatives. As described above, the No Project Alternative would not be environmentally superior to the project because it would not meet SB 32 reduction targets and would not reduce any of the projects significant environmental impacts. Therefore, this alternative would result in a new significant GHG impact that was not previously identified for the project.

Based on review of the other alternatives considered, the County has determined that the Enhanced Direct Investment Program Alternative would be environmentally superior to the project because it would reduce significant and unavoidable impacts related to the induced demand for large-scale renewable energy systems while still achieving both the primary objective of GHG emissions reductions consistent with SB 32 and all other supporting project objectives.

The 100 percent Renewable Energy Alternative would result in greater GHG reductions, and, therefore, lesser GHG impacts, compared to the project because this alternative would have a greater amount of county-wide energy demands generated from renewable energy resources. This alternative would also help close the gap to the 2050 reduction goal because of the additional GHG reductions; however, this impact would remain significant and unavoidable. While GHG impacts would be less, overall impact conclusions for all other resource categories would be the same as the project and this

alternative could increase the magnitude of these impacts because a greater number of large-scale renewable energy projects would be required.

The Increased Solid Waste Diversion Alternative would result in greater GHG reductions, and, therefore, lesser GHG impacts, compared to the project because this alternative would have a greater amount of waste diversion within the county. This alternative would also help close the gap to the 2050 reduction goal because of the additional GHG reductions; however, this impact would remain significant and unavoidable. While GHG impacts would be less, overall impact conclusions for other resource categories would be the same as the project for aesthetics, agricultural resources, cultural resources, hazards and hazardous materials, hydrology and water quality, and noise. In addition, this alternative would result in greater impacts to air quality, biological resources, transportation, and tribal cultural resources. Overall, this alternative would result in environmental tradeoffs compared to the project.

Table 4-1 CAP Alternatives Comparison of Impacts

Issue Areas of Significance	CAP	Alternatives to the Proposed Project			
		1	*2*	*3*	*4*
		No Project	Enhanced Direct Investment	100 Percent Renewable Energy	Increased Solid Waste Diversion
2.1 Aesthetics	SU	▼	—	▲	—
2.2 Agricultural Resources	SU	▼	—	▲	—
2.3 Air Quality	SU	▼	—	▲	▲
2.4 Biological Resources	SU	▼	—	▲	▲
2.5 Cultural Resources	SU	▼	—	▲	—
2.6 Energy	LTS	▲	—	▼	▲
2.7 Greenhouse Gas Emissions	SU	▲	—	▼	▼
2.8 Hazards and Hazardous Materials	SU	▼	▼	▲	—
2.9 Hydrology and Water Quality	SU	▼	—	▲	—
2.10 Land Use	SU	▼	▼	▲	—
2.11 Noise	SU	▼	▼	▲	▲
2.12 Transportation	SU	▼	▼	▲	▲
2.13 Tribal Cultural Resources	SU	▼	—	▲	▲

▲ Alternative is likely to result in greater impacts to issue when compared to proposed project.
— Alternative is likely to result in similar impacts to issue when compared to proposed project.
▼ Alternative is likely to result in reduced impacts to issue when compared to proposed project.

LTS Less than Significant with mitigation measures
SU Potentially significant and unavoidable impact

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