# 2.11 Noise

This section evaluates existing conditions for noise within the unincorporated County. It includes definitions of common noise descriptors; summaries of applicable noise regulations, acoustic fundamentals, and existing ambient noise conditions; and an analysis of potential short- and long-term noise impacts associated with implementation of the project. Potential impacts of the project are analyzed, and mitigation measures are provided for those impacts determined to be significant.

One comment was received during the Notice of Preparation (NOP) scoping process that included concerns regarding low frequency noise. A copy of the NOP and comment letters received in response to the NOP are included in Appendix A of this Draft Supplement to the 2011 General Plan Update (GPU) Program Environmental Impact Report (2011 GPU PEIR) (Draft SEIR).

## 2.11.1 Existing Conditions

The 2011 GPU PEIR included a discussion of existing noise conditions within the County in Section 2.11.1, pages 2.11-1 through 2.11-9. No substantial changes to the existing noise environment and major sources of noise within the County has occurred since approval of the 2011 GPU; therefore, the existing conditions in the 2011 GPU PEIR apply to the project and are hereby incorporated by reference.

## 2.11.2 Regulatory Framework

The 2011 GPU PEIR included a summary of the Regulatory Framework related to noise in Chapter 2.11, pages 2.11-9 through 2.11-14, and it is hereby incorporated by reference. Specific regulations discussed in the 2011 GPU PEIR and applicable to the project include the following:

Federal

- Federal Aviation Administration (FAA) Standards
- Federal Highway Administration (FHWA) Standards
- Federal Railroad Administration (FRA) Standards
- Federal Transit Administration (FTA) Standards
- U.S. Office of Surface Mining Reclamation and Enforcement

State

- California Noise Control Act of 1973
- California Noise Insulation Standards (CCR Title 24)
- California Airport Noise Standards (CCR, Title 21, Section 5000 et. Seq.)
- Streets and Highways Code; California Vehicle Code (Sections 27200-27207)
- California Harbors and Navigation Code
- California Streets and Highway Code (Sections 215.5-216-5)

Local

- Airport Land Use Compatibility Plans (ALUCPs)
- Proposed County of San Diego General Plan Update, Noise Element
- San Diego County Code of Regulatory Ordinances, Title 3, Division 6, Chapter 4, Sections 36.401-36.435, Noise Ordinance
- San Diego County Code of Regulatory Ordinances, Title 6, Division 3, Chapter 4, Sections 63.401-63.402, Agricultural Enterprise and Consumer Information Ordinance

### *Adopted 2011 GPU Policies*

The policies addressing noise that were adopted as part of the 2011 GPU and are applicable to the project include the following:

LU-2.8: Mitigation of Development Impacts. Require measures that minimize significant impacts to surrounding areas from uses or operations that cause excessive noise, vibrations, dust, odor, aesthetic impairment and/or are detrimental to human health and safety.

M-2.4: Roadway Noise Buffers. Incorporate buffers or other noise reduction measures consistent with standards established in the Noise Element into the siting and design of roads located next to sensitive noise-receptors to minimize adverse impacts from traffic noise. Consider reduction measures such as alternative road design, reduced speeds, alternative paving, and setbacks or buffers, prior to berms and walls.

N-1.4: Adjacent Jurisdiction Noise Standards. Incorporate the noise standards of an adjacent jurisdiction into the evaluation of a project when it has the potential to impact the noise environment of that jurisdiction.

N-1.5: Regional Noise Impacts. Work with local and regional transit agencies and/or other jurisdictions, as appropriate, to provide services or facilities to minimize regional traffic noise and other sources of noise in the County.

N-2.1: Development Impacts to Noise Sensitive Land Uses. Require an acoustical study to identify inappropriate noise levels where development may directly result in any existing or future noise sensitive land uses being subject to noise levels equal to or greater than 60 Community Noise Equivalent Level (CNEL) and require mitigation for sensitive uses in compliance with the noise standards listed in Table N-2 in the Noise Element.

N-2.2: Balconies and Patios. Assure that in developments where the exterior noise level on patios or balconies for multi-family residences or mixed-use developments exceed 65 CNEL, a solid noise barrier is incorporated into the building design of the balconies and patios while still maintaining the openness of the patio or balcony.

N-3.1: Groundborne Vibration. Use the Federal Transit Administration and Federal Railroad Administration guidelines, where appropriate, to limit the extent of exposure that sensitive uses may have to groundborne vibration from trains, construction equipment, and other sources.

N-4.1: Traffic Noise. Require that projects proposing General Plan amendments that increase the average daily traffic beyond what is anticipated in this General Plan do not increase cumulative traffic noise to off-site noise sensitive land uses beyond acceptable levels.

N-4.2: Traffic Calming. Include traffic calming design, traffic control measures, and low-noise pavement surfaces that minimize motor vehicle traffic noise in development that may impact noise sensitive land uses.

N-4.3: Jurisdictional Coordination. Coordinate with California Department of Transportation (Caltrans), the City of San Diego, and other adjacent jurisdictions, as appropriate, for early review of proposed new and expanded State freeways, highways, and road improvement projects within or affecting the unincorporated County to: 1) locate facilities where the impacts to noise sensitive land uses would be minimized, and 2) develop and include noise abatement measures in the projects to minimize and/or avoid the impacts to noise sensitive land uses.

N-4.5: Roadway Location. Locate new or expanded roads designated in the Mobility Element in areas where the impact to noise sensitive land uses would be minimized.

N-6.1: Noise Regulations. Develop and regularly update codes and ordinances as necessary to regulate impacts from point, intermittent, and other disruptive noise sources.

N-6.2: Recurring Intermittent Noise. Minimize impacts from noise in areas where recurring intermittent noise may not exceed the noise standards listed in Table N-2, but can have other adverse effects.

N-6.3: High-Noise Equipment. Require development to limit the frequency of use of motorized landscaping equipment, parking lot sweepers, and other high-noise equipment if their activity will result in noise that affects residential zones.

N-6.4: Hours of Construction. Require development to limit the hours of operation as appropriate for non-emergency construction and maintenance, trash collection, and parking lot sweeper activity near noise sensitive land uses.

N-6.5: Special Events. Schedule special events sponsored by the County that may generate excessive noise levels to daytime hours when feasible.

N-6.6: Code Enforcement. Provide sufficient resources within the County for effective enforcement of County codes and ordinances.

S-15.1: Land Use Compatibility. Require land uses surrounding airports to be compatible with the operation of each airport.

### *Adopted 2011 GPU PEIR Mitigation Measures*

The mitigation measures addressing noise that were adopted as part of the 2011 GPU PEIR and are applicable to the project include the following:

Noi-1.1 Require an acoustical analysis whenever a new development may result in any existing or future noise sensitive land uses being subject to on-site noise levels of 60 dBA (CNEL) or greater, or other land uses that may result in noise levels exceeding the "Acceptable" standard in the Noise Compatibility Guidelines (Table N-1 in the Noise Element).

Noi-1.2 Revise the Guidelines for Determining Significance for new developments where the exterior noise level on patios or balconies for multi-family residences or mixed-use development exceeds 65 dBA (CNEL), a solid noise barrier is incorporated into the building design of balconies and patios for units that exceed 65 dBA (CNEL) while still maintaining the openness of the patio or balcony.

Noi-1.3 Require an acoustical study for projects proposing amendments to the County General Plan Land Use Element and/or Mobility Element that propose a significant increase to the average daily traffic due to trips associated with the project beyond those anticipated in the General Plan.

Noi-1.4 Edit the Guidelines for Determining Significance standard mitigation and project design considerations to promote traffic calming design, traffic control measures, and low-noise pavement surfaces that minimize motor vehicle traffic noise.

Noi-1.5 Coordinate with Caltrans and SANDAG as appropriate to identify and analyze appropriate route alternatives that may minimize noise impacts to noise sensitive land uses within the unincorporated areas of San Diego County.

Noi-1.7 Work with project applicants during the scoping phase of projects to take into consideration impacts resulting from on-site noise generation to noise sensitive land uses located outside the County's jurisdictional authority. The County will notify and coordinate with the appropriate jurisdiction(s) to determine appropriate project design techniques and/or mitigation.

Noi-1.8 Implement and/or establish procedures (or cooperative agreements) with Caltrans, the City of San Diego, and other jurisdictions as appropriate to ensure that a public participation process or forum is available for the affected community to participate and discuss issues regarding transportation generated noise impacts for new or expanded roadway projects that may affect noise sensitive land uses within the unincorporated areas of San Diego County.

Noi-1.9 Coordinate with Caltrans and the Department of Planning and Land Use Landscape Architect, and receive input from community representatives as appropriate (e.g., Planning or Sponsor Group) to determine the appropriate noise mitigation measure (planted berms, noise attenuation barriers or a combination of the two) to be required as a part of the proposals for roadway improvement projects and ensure that the County's

Five Year Capital Improvement Program and Preliminary Engineering Reports address noise impacts and appropriate mitigation measures for road improvement projects within or affecting the unincorporated area of the County.

Noi-2.1 For Land Use Designations defined in Table 2.11-14, a groundborne vibration technical study shall be required for proposed land uses within the following distances from the Sprinter Rail Line right-of-way and the property line: 600 feet of a Category 1 Land Use, 200 feet of a Category 2 Land Use, and 120 feet of a Category 3 Land Use. If necessary, mitigation shall be required for land uses in compliance with the standards listed in Tables 2 and 3 of the County of San Diego Guidelines for Determining Significance - Noise.

Noi-2.2 Revise the County CEQA determinations of significance to reflect limits in the Noise Compatibility Guidelines and Noise Standards [Policy N-3.1]. Periodically review the Guidelines for Determining Significance to incorporate standards for minimizing effects of groundborne vibration during project operation or construction.

Noi-2.4 Require an acoustical study whenever a proposed extractive land use facility may result in a significant noise impact to existing noise sensitive land uses, or when a proposed noise sensitive land use may be significantly affected by an existing extractive land use facility. The results of the acoustical study may require a “buffer zone” to be identified on all Major Use Permit applications for extractive facilities whenever a potential for a noise impact to noise sensitive land uses may occur.

Noi-3.1 Ensure that for new County road improvement projects either the County’s Noise Standards are used to evaluate noise impacts or the project does not exceed 3 decibels over existing noise levels

Noi-3.2 Work with the project applicant during the review of either the building permit or discretionary action (whichever is applicable) to determine appropriate noise reduction site design techniques that include:

- Orientation of loading/unloading docks away from noise sensitive land uses,
- Setbacks or buffers to separate noise generating activities from noise sensitive land uses, and
- Design on-site ingress and egress access away from noise sensitive land uses [Policy N-5.1].

Noi-4.1 Periodically review and revise the Noise Ordinance and Section 6300 of the Zoning Ordinance as necessary to ensure appropriate restrictions for intermittent, short-term, or other nuisance noise sources.

Noi-4.2 Augment staff and equipment as appropriate to facilitate enforcement of the Noise Ordinance.

Noi-5.1 Use the applicable Airport Land Use Compatibility Plan's (ALUCP) as guidance/reference during development review of projects that are planned within an Airport Influence Area (AIA). Any projects that are within the AIA shall be submitted to the SDCRAA for review.

Noi-5.2 Evaluate noise exposure impacts related to a private airport or heliport use or consistency with the FAA standards.

Noi-5.3 Consult with the FAA standards and the County Noise Ordinance as a guide for assessing noise impacts from private airports and helipads.

## 2.11.3 Issues Not Discussed Further

As described in Chapter 1.0, Project Description, in response to litigation and considering legislative changes that have occurred since preparation of the 2012 Climate Action Plan (CAP), the County prepared a new CAP (subject of this Draft SEIR). The CAP and the targets and strategies identified therein necessitate changes to Goal COS-20 and Policy COS-20.1 of the County's General Plan (2011 GPU) and mitigation adopted in the 2011 GPU PEIR, Mitigation Measures CC-1.2, CC-1.7, and CC-1.8 to attain consistency with current legislative requirements. These changes require a General Plan Amendment to the County's General Plan and revision to the associated mitigation monitoring and reporting program (hereafter these two actions collectively refer to as (GPA)) as part of the administrative approval process. The Draft SEIR evaluates the GPA as part of the actions associated with the CAP because the changes reflected in the GPA support and are consistent with implementation of the CAP and its GHG targets and GHG reduction measures. Therefore, the GPA is not addressed as a separate impact discussion below, but its impacts are included within the overall impact analysis of the CAP.

The Draft SEIR also evaluates the impacts associated with the implementation of proposed GHG Threshold, Guidelines for Determining Significance for Climate Change (Guidelines), and the Report Format and Content Requirements. The proposed GHG Threshold requires consistency with the CAP, and is the level below which a project would be determined to result in less-than-significant GHG impacts. To achieve consistency, a project will be required to implement the applicable GHG reduction measures outlined in the CAP. All measures have been evaluated throughout the Draft SEIR. Therefore, adoption of a GHG Threshold that establishes a requirement to be consistent with the CAP, the individual measures of which have been evaluated throughout this Draft SEIR, would not require a separate impact analysis because the impacts of establishing that threshold and what it would take to meet the threshold have been fully evaluated.

The Guidelines would provide direction to project applicants on how a project could achieve consistency with the CAP. The Guidelines are proposed to include a checklist that would require applicants to demonstrate how a project would be consistent with the CAP including through implementation of GHG reduction measures. The specific actions that would result from the Guidelines would be project-specific implementation of approved GHG reduction measures, the environmental impacts of which have been

evaluated throughout this Draft SEIR. Therefore, evaluation of the Guidelines as a separate impact discussion is not provided below.

Finally, the Report Format and Content Requirements document would not result in any physical impact on the environment as it simply details the format for how reports should be written. As a result, this document is also not separately discussed below.

In summary, the GPA, GHG Threshold, Guidelines, and Report Format and Content Requirements are not addressed as a separate impact discussion below. The GPA, GHG Threshold, and Guidelines are combined in the overall impact analysis of the CAP, while the Report Format and Content Requirement document provides technical direction to future project applicants and will not result in any physical impacts.

## 2.11.4 Analysis of Project and Cumulative Impacts

The project and cumulative impact analysis study area for noise in the 2011 GPU PEIR identified land uses that are sources of noise and the relation to noise-sensitive land uses. Implementation of the CAP and associated GHG reduction measures and supporting efforts would not re-designate or intensify any of the land use types adopted in the 2011 GPU and evaluated in the 2011 GPU PEIR; therefore, the conclusions in the 2011 GPU PEIR are valid and are incorporated by reference.

**Proposed GHG Reduction Measures**

**Table 1-1** of this Draft SEIR, provides a list of all the proposed GHG reduction measures and supporting efforts that would be implemented by the CAP. However, only those measures that are relevant to noise resources and could potentially result in a significant impact within the County are described and evaluated below. None of the proposed measures indicate where specific improvements would be constructed, their size, or specific characteristics. As a program EIR, the Draft SEIR does not, and cannot, speculate on the individual environmental impacts of specific future projects/improvements. However, implementation of all GHG reduction measures and supporting efforts were considered during preparation of the Draft SEIR, to the degree information about the measures are known. Consistent with the requirements of CEQA Guidelines Section 15168, this Draft SEIR provides a programmatic discussion of the potential general impacts of implementing these measures, rather than project-level or site-specific physical impacts of such actions. This is consistent with the scope of analysis in the 2011 GPU PEIR.

**Strategy T-2: Shift Towards Alternative Modes of Transportation**

> **Measure T-2.1: Improve Roadway Segments as Multi-Modal. Improve roadway segments, intersections, and bikeways to implement multi-modal enhancements for pedestrian and cyclist comfort and safety along County-maintained public roads by improving 700 centerline miles of roadway segments, including 250 intersections and 210 lane miles of bikeway improvements by 2030 and an additional 500 centerline miles of roadway**

**segments, including 250 intersections and 210 lane miles of bikeway improvements by 2050.** This measure would implement roadway improvements to reduce Vehicle Miles Traveled (VMT) by calming traffic and improving the bicyclist and pedestrian infrastructure and would occur as part of resurfacing projects within existing paved areas. Implementation of this measure could result in improvements to existing traffic infrastructure, which may result in noise impacts to nearby sensitive receptors.

**Strategy T-4: Invest in Local Projects to Offset Carbon Emissions**

**Measure T-4.1: Establish a Direct Investment Program. Close the 2030 GHG emissions target gap of 195,514 $MTCO_2e$ through direct investments in local projects that would offset carbon emissions within the unincorporated county by 2030.** This measure would result in direct investments for local projects. The specific protocols that would be utilized are not known and evaluation of such actions would be speculative. However, this Draft SEIR conservatively assumes that some construction-related activities may occur with individual project implementation. Please see Chapter 2.7 and Appendix B of this SEIR for additional information on direct investment projects and protocols. Protocols could include the following types of projects:

- Biomass Conversion
- Boiler Efficiency Retrofits
- Wetland Creation
- Forest Restoration
- Compost Additions to Rangeland
- Organic Waste Digestion Capture
- Manure Management
- Building Weatherization Programs
- Urban Forest Management

**Supporting Efforts for the Built Environment and Transportation Category**

- Collaborate with incorporated cities, California Department of Transportation (Caltrans) and SANDAG, to consider additional park-and-ride facilities.

- Collaborate with SANDAG to encourage installation of EV charging stations in new residential and non-residential developments.

**Strategy E-2 Increase Renewable Energy Use**

**Measure E-2.1: Increase Renewable Electricity. Achieve 90% renewable electricity for the unincorporated county by 2030.** This measure would result in the construction of distributed generation (small-scale renewables) on new and existing buildings, including solar photovoltaics, small wind-turbines, and energy storage solutions. This may also directly or indirectly require the construction of large-scale renewable energy generation systems to satisfy increased demand.

This could include the construction of large-scale photovoltaic solar fields, photovoltaic concentrator technology, geothermal and/or wind turbines. This may result in physical changes resulting from construction, operation, and maintenance of infrastructure. Implementation of this measure could result in construction noise impacts (including vibration) and operational noise of new and expanded composting facilities throughout the unincorporated County.

**Strategy SW-1: Increase Solid Waste Diversion in the Unincorporated County**

**Measure SW-1.1: Increase Solid Waste Diversion. Achieve 75% solid waste diversion by 2030.** This measure would result in new/expanded composting projects and facilities throughout the unincorporated County. Implementation of this measure could result in construction noise impacts (including vibration) and operational noise of new and expanded composting facilities throughout the unincorporated County.

**Supporting Effort for the Water and Wastewater Category**

Work with the Padre Dam Municipal Water District (MWD) to advance the Advanced Water Purification (AWP) Program.

### *2.11.4.1 Issue 1: Excessive Noise Levels*

This section describes potential project and cumulative impacts on excessive noise levels which would expose noise sensitive land uses to an excessive amount of noise related to roadways and railroad corridors which would interfere with normal operations or activities.

**Guidelines for Determination of Significance**

Based on Appendix G of the CEQA Guidelines and County of San Diego Guidelines for Determining Significance, Noise, the CAP and associated GHG reduction measures and supporting efforts would result in a significant impact if it would expose persons to or would generate noise levels in excess of standards established by the County's General Plan, County's Noise Ordinance, County's Noise Compatibility Guidelines, or County's Zoning Ordinance. The following noise thresholds must not be exceeded:

**Exterior Locations:**

- Roadways and all other noise sources: 60 or 65 A-weighted decibel scale (dBA) (Community Noise Equivalent Level [CNEL]) in the Noise Compatibility Guidelines or an increase of 10 dBA (CNEL) over pre-existing noise in areas where the ambient noise level is 49 dBA (CNEL) or less.

- Railroads: 60 dBA (CNEL) or an increase of 10 dBA (CNEL) over pre-existing noise in areas where the ambient noise level is 49 dBA (CNEL) or less.

**Interior Locations:**

- 45 dBA (CNEL)

## Impact Analysis

### 2011 GPU PEIR Determination

The 2011 GPU PEIR evaluated excessive noise levels (i.e., roadways and railroads) at noise-sensitive uses. It was determined that future development under the 2011 GPU would have the potential to expose noise-sensitive land uses to excessive noise levels. The 2011 GPU PEIR concluded that these impacts would be reduced to below a level of significance through the implementation of a combination of federal, state, and local regulations; existing County regulatory processes; the adopted 2011 GPU goals and policies; and, specific mitigation measures/implementation programs identified in the 2011 GPU PEIR. Specific policies and mitigation measures related to noise are listed above under Section 2.11.2, Regulatory Framework. With implementation of mitigation, the 2011 GPU PEIR concluded that this impact would be reduced to a less-than-significant level. The discussion of this impact can be found in Chapter 2.11, Noise, on pages 2.11-14 to 2.11-19; and 2.11-35, and it is hereby incorporated by reference.

### CAP Impact Analysis

Implementation of the CAP has the potential to result in significant impacts related to excessive noise from implementation of GHG reduction measures and supporting efforts that would result in bicycle, pedestrian, and park-and-ride improvements, large-scale renewable energy systems, solid waste diversion facilities, and direct investment projects that were not explicitly evaluated within the 2011 GPU PEIR. The 2012 Wind Energy Ordinance EIR (2012 Wind Energy EIR) evaluated impacts related to the development of small and large-scale wind turbines and that analysis is summarized below and is hereby incorporated by reference (County of San Diego 2012). Additionally, the Padre Dam MWD's Comprehensive Facilities Master Plan PEIR (Padre Dam PEIR) evaluated impacts related to the development/expansion of water purification infrastructure and impacts that are associated with the Supporting Effort for the Water and Wastewater Category. The analysis from that document is summarized below and hereby incorporated by reference (Padre Dam MWD 2017).

The following section describes the potentially significant excessive noise level impacts that could result from the implementation of the project.

Bicycle, Pedestrian, and Park-and-Ride Improvements

Implementation of GHG Reduction Measures T-2.1 and supporting efforts, could result in new or expanded park-and-ride facilities and new or expanded pedestrian and bicycle improvements. Specific locations for such improvements have not been identified. However, it is likely that the construction of these facilities and operations depending on their location could result in excessive noise impacts at sensitive receptors. Future discretionary projects would be required to be evaluated for project-specific impacts under

CEQA at the time of application and project-specific mitigation would minimize or eliminate excessive noise impacts to the extent feasible in compliance with CEQA Guidelines Section 15126.4. As explained in the 2011 GPU PEIR, implementation of the 2011 GPU policies and 2011 GPU PEIR mitigation measures would reduce excessive noise impacts. Because of the scale and nature of proposed improvements, which are generally small, localized, and would require little use of heavy-duty construction equipment, construction-related noise is not anticipated to be excessive. Additionally, all projects would be required to comply with Section 36.408 of the County's Noise Ordinance which sets limits on hours of operation for construction equipment, and Section 36.409 of the County's Noise Ordinance sets sound level limits on construction equipment.

The operation of pedestrian and bicycle improvements would result in the reduction of traffic on local roadways and; consequently, reduce traffic-generated noise levels and associated exposure to nearby sensitive receptors. Also, park-and-ride facilities are not considered to be major noise generators and would be expected to be located near major noise-generating sources such as freeways and commercial areas; thus, not resulting in excessive noise levels over the existing environment. Therefore, implementation of pedestrian and bicycle improvements and park-and-ride facilities would result in **less-than-significant** impacts related to excessive noise**.**

**Cumulative Impacts**

Impacts would be cumulative in nature if operational noise associated with cumulative regional land use projects combined with projects related to the CAP would have the potential to expose noise sensitive land uses to excessive noise levels. CEQA Guidelines Section 15130 describes two methods for establishing the cumulative environment in which the project is to be considered: the use of a list of past, present, and probable future projects; or the use of adopted projections from a general plan, other regional planning document, or a certified EIR for such a planning document. This analysis uses a combination of the list and planning document approach, as described in Chapter 1, Project Description. Physical improvements resulting from implementation of the CAP have the potential to combine with the physical impacts of other past, present, or probable future projects in the County and could result in a cumulative impact based upon proximity and construction schedule. **Table 1-3** in the Project Description contains a list of past, present, and probable future projects that when combined with the project, could result in a cumulatively considerable effect. Cumulative impacts could also result when the physical improvements resulting from implementation of the CAP interact with development associated with build-out of the County's General Plan and potentially increase those impacts resulting in a cumulatively considerable effect.

The 2011 GPU PEIR concluded noise impacts would be potentially significant because the 2011 GPU would result in the exposure of sensitive receptors to major noise sources (i.e., roadways and railways). With implementation of mitigation from the 2011 GPU PEIR, these impacts would be reduced to less than significant. However, as discussed above, operational sources of noise associated with GHG reduction measures and supporting efforts are considered minor (e.g., not increasing roadway- or railway-generated levels) and would be expected to occur nearby, or within, similar existing source types of noise (e.g.,

parking lots) or nearby to major sources (e.g., roadways, commercial areas). Thus, implementation of measures and efforts listed above that would result in bicycle and pedestrian infrastructure, and park-and-ride facilities would not result in the exposure of sensitive receptors to excessive noise levels over the existing environment and they **would not result in a considerable contribution** such that a new significant cumulative noise impact would occur**.**

Large-Scale Renewable Energy Infrastructure

Implementation of GHG Reduction Measure E-2.1 would result in the construction and operation of new large-scale renewable energy systems including large-scale photovoltaic solar, concentrator solar, geothermal systems, and/or wind turbines. Because the amount of demand generated by such a program and the mix of renewable energy types that would be constructed to satisfy demand is unknown, this Draft SEIR evaluates the potential for impacts at the program level. The potential for the operation of large-scale renewable energy infrastructure was not evaluated in the 2011 GPU PEIR but potential wind energy impacts were evaluated in the 2012 Wind Energy EIR and that analysis is summarized below.

Large-scale renewable energy infrastructure requires large, undeveloped land that are productive for generating the renewable energy source. Specific locations that may be chosen for these facilities are unknown; however, it is likely that suitable locations would be in areas that are not highly developed with residential and commercial uses because of the size, massing, coverage, and scale of this type of infrastructure which typically results in the need for large amounts of land unencumbered by buildings or shadowed by buildings or trees.

As described in Section 2.1, Aesthetic and Visual Resources, of this Draft SEIR, the large-scale production of energy from solar photovoltaic and solar concentrator systems generally include a variety of infrastructure components such as arrays, substation site, battery storage, collection system, and overhead and underground transmission facilities. The large-scale wind turbines infrastructure generally includes wind turbines (300-500 feet to the topmost blade tip), substation site, meteorological towers, overhead and underground collector cable system, and overhead transmission lines.

Excessive noise could result from construction and operational noise associated with projects that would result from implementation of GHG Reduction Measure E-2.1. Construction activities including, but not limited to, site grading, truck/construction equipment movement, and engine noise would have the potential to result in the exposure of on- or off-site areas to noise in excess of the standards listed in the County Zoning Code Sections 36.408 and 36.409.

Operational noise from solar photovoltaic projects include equipment noise from pad-mounted inverters, battery storage HVAC systems, and transformers and substation transformers. The typical noise levels are less than 60 dBA for a 1.3 mega volt ampere rated transformer (IFC 2012). Emergency generators may be used in the event of power loss from the electricity distribution grid and, therefore, would be limited. Maintenance

activities would also occur for short durations at one location at a time. Therefore, solar photovoltaic facilities are not expected to result in significant operational noise impacts.

Operational noise from wind turbines include noise from the motors of the wind turbines, substations, maintenance activities, and worker vehicle trips to and from the site. Electric collection systems are generally placed underground; therefore, eliminating any noise generation. The typical noise levels from equipment are approximately 107 dBA (GE 2017 and Siemens 2015). Substations usually generate steady noise from the process of power conversion and operation of auxiliary equipment. Regular maintenance activities include periodic visits to the wind turbines and substations from light- or medium-duty vehicles, but would be minor in comparison to surrounding roadway volumes (e.g., not resulting in a substantial increase in traffic noise along local roadways).

As described on pages 2.8-15 to 2.8-16 of the 2012 Wind Energy EIR, all large wind turbine projects would be required to obtain a Major Use Permit (MUP) and be evaluated under CEQA, including the implementation of mitigation if significant impacts are identified (County of San Diego, 2012). This is the same process that would be required for other large-scale renewable energy projects. As part of the MUP process, large-scale renewable energy projects would be required to perform an acoustical analysis as required by 2011 GPU PEIR mitigation measures Noi-1.1, Noi-1.3, and Noi-2.4 and be would be required to be determined consistent with land use compatibility guidelines as described in Zoning Ordinance Section 6952(f) to proceed with development. However, while large-scale wind energy projects would be required to meet the low frequency (C-weighted) sound limit established in the County's Wind Energy Ordinance, it is possible for a noise waiver to be granted that could result in a higher C-weighted sound limit being approved. In some cases, a higher C-weighted sound level may potentially create an annoyance though there is no published scientific evidence to conclude wind turbine noise could cause adverse health effects (page 2.8-16 of the 2012 Wind Energy EIR). The 2012 Wind Energy EIR considered mitigation to eliminate the noise waiver; however, this was rejected as infeasible because it would reduce the amount of viable wind projects within the County. Therefore, consistent with the conclusions of the 2012 Wind Energy EIR, implementation of large-scale renewable wind energy projects could result in **potentially significant** impacts related to annoyance from low-frequency noise from large wind turbines **(Impact NOI-1).**

Implementation of large-scale solar and geothermal projects would result in **less-than-significant** excessive noise impacts because they be would be required to be determined consistent with land use compatibility guidelines as described in Zoning Ordinance Section 6952(f) to proceed with development**.**

### Cumulative Impacts

Impacts would be cumulative in nature if operation associated with cumulative regional land use projects combined would have the potential to expose noise sensitive land uses to excessive noise levels. The methodology for determining the cumulative environment described in Chapter 1, Project Description, and summarized above in Section 2.11.4.1 above applies for this cumulative discussion.

The 2011 GPU PEIR concluded noise impacts would be potentially significant because the 2011 GPU would result in the exposure of sensitive receptors to major noise sources (i.e., roadways and railways). With implementation of mitigation from the 2011 GPU PEIR, these impacts would be reduced to less than significant. Implementation of large-scale solar and geothermal projects would result in less-than-significant excessive noise impacts because they be would be required to be determined consistent with land use compatibility guidelines as described in Zoning Ordinance Section 6952(f) to proceed with development. Therefore, these projects **would not result in a considerable contribution** such that a new significant cumulative excessive noise impact would occur**.**

However, as discussed above, operational sources of noise associated with GHG Reduction Measure E-2.1 would be potentially significant because it is possible for a noise waiver to be granted to large wind turbines subject to specific conditions. Thus, this measure could result in excessive noise levels over the existing environment. Therefore, implementation of this measure **would result in a considerable contribution** such that a new significant cumulative impact would occur **(Impact NOI-2).**

Diversion of Solid Waste

Implementation of GHG Reduction Measure SW-1.1could increase solid waste diversion to achieve 75% diversion by 2030. To achieve these measures, the County would modify its current zoning ordinance and permitting, operating, and reporting requirements to support the start-up of on-site community, commercial, farm composting projects, and large-scale composting facilities. These measures could result in the operation of new and expansion of existing composting facilities throughout the unincorporated County.

Excessive noise could result from construction and operational noise associated with the new or expanded solid waste facilities. However, these projects would be required to perform an acoustical analysis as required by 2011 GPU PEIR mitigation measures Noi-1.1, Noi-1.3, and Noi-2.4 and would be required to be determined consistent with land use compatibility guidelines as described in Zoning Ordinance Section 6952(f) to proceed with development. All projects would be required to comply with Section 36.408 of the County's Noise Ordinance which sets limits on hours of operation for construction equipment, and Section 36.409 of the County's Noise Ordinance sets sound level limits on construction equipment.

Operation of new or expanded solid waste facilities would result in increased haul truck trips to and from the facility; however, it is anticipated that the haul truck trips to the facility would be displaced by the haul trucks trips that would be diverted from the landfill and a no net increase in the number of haul truck trips and associated traffic-related noise within the County would occur. The loudest equipment that would be in operation at a composting facility would be the grinder and front-end loader. Equipment would operate continuously, but would be dependent on the volume of materials received and the need to move materials. In the case of the aerated static pile composting (ASP), large blowers would push and pull air through the piles. These blowers have the potential to operate 24 hours per day. Composting methods use electric motors to power pumps, impellers, or

compressors, and when properly installed, operated, and maintained generally produce noise levels less than 54 dBA at 30 feet (SWRCB 2015).

Because these 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, excessive noise operation would be minimized. Therefore, implementation of measures that would result in new or expanded organic waste processing facilities would result in **less-than-significant** operational noise impacts**.**

**Cumulative Impacts**

Impacts would be cumulative in nature if operation of the facility associated with cumulative regional land use projects combined would have the potential to expose noise sensitive land uses to excessive noise. The methodology for determining the cumulative environment described in Chapter 1, Project Description, and summarized above in Section 2.11.4.1 above applies for this cumulative discussion.

The 2011 GPU PEIR concluded noise impacts would be less than significant with implementation of mitigation from the 2011 GPU PEIR. Additionally, as discussed above, operational sources of noise associated with expanded solid waste facilities would not be significant. Thus, this measure would not result in excessive noise levels over the existing environment and **would not result in a considerable contribution** such that a new significant cumulative excessive noise impact would occur**.**

Direct Investment Program

Implementation of GHG Reduction Measure T-4.1 would result in direct investment of projects to offset carbon emissions. As described in detail in Chapter 2.7 and Appendix B of this Draft SEIR, projects that could result from implementation of this measure could include but are not limited to: biomass conversion to energy or soil application (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 (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 (i.e., increasing soil carbon sequestration and improving quality of soils), organic waste digestion (i.e., diverting organic waste and/or wastewater to a biogas control system), livestock management (i.e., installing biogas control systems for manure management on dairy cattle and swine farms), urban forest and urban tree planting projects (i.e., tree planting, maintenance, and/or improved management activities to increase carbon storage through trees), and winterization (i.e., energy efficiency upgrades to buildings). This list is not intended to be exhaustive, but represents a range of the types of projects that could be considered in the future. Appendix B of this Draft SEIR contains information on the range of available protocols. See also Chapter 2.7 for additional information.

Most direct investment projects would involve some level of construction and physical disturbance of the land. This analysis assumes that implementation of direct investment projects under GHG Reduction Measure T-4.1 would result in construction activities that could include: the use of heavy equipment for earthmoving, materials processing, or compost spreading; vehicle trips during construction/equipment replacement/monitoring activities; possible changes in land form and views; and installation or upgrades of mechanical equipment or facilities. Construction activities and project operations associated with these measures could result in excessive noise impacts at nearby sensitive receptors.

Because the variety of projects that may be approved and ultimately undertaken by the County under the Direct Investment Program is not known, it is too speculative to determine the types of impacts that could occur and whether regulations or mitigation measures would be available to minimize potential environmental impacts. However, all direct investment projects would be required to comply with applicable existing federal, state, and local regulations. Specifically, projects would be evaluated for their consistency with 2011 GPU policies, 2011 GPU PEIR mitigation measures, and the County Noise Ordinance. Future discretionary projects may also be required to undergo additional CEQA analysis to evaluate their project-specific impacts. If a determination is made that potentially significant impacts would result from implementation of offset projects, then all feasible mitigation would be required to be implemented in accordance with CEQA Guidelines Section 15126.4.

While all feasible mitigation would be applied at the project level as part of the County's discretionary review process, construction of projects associated with GHG Reduction Measure T-4.1 could result in excessive noise impacts that may not be mitigated to a less-than-significant level. At the programmatic level, it is not possible to determine with certainty that impacts resulting from construction activities would be reduced to a level below significance. Therefore, the project could result in **potentially significant** excessive noise impacts **(Impact NOI-3)**.

**Cumulative Impacts**

Impacts would be cumulative in nature if the project, in combination with cumulative development, would have the potential to expose noise sensitive land uses to excessive noise. The methodology for determining the cumulative environment described in Chapter 1, Project Description, and summarized above in Section 2.11.4.1 above applies for this cumulative discussion.

Implementation of GHG Reduction Measure T-4.1, would result in direct investment projects as described above. The 2011 GPU PEIR concluded noise impacts would be less than significant with implementation of mitigation from the 2011 GPU PEIR. As described above, because the exact location and nature of direct investment projects is not known, projects could result in potentially significant excessive noise impacts. Therefore, implementation of GHG Reduction Measure T-4.1 **could result in a considerable contribution** such that a new significant cumulative noise impact would occur **(Impact NOI-4)**.

Padre Dam Water and Wastewater Supporting Effort

As described in Chapter 1, Project Description, the CAP includes a Water and Wastewater Supporting Effort, that would support participation in the Padre Dam AWP project. The Padre Dam MWD the Padre Dam PEIR and that analysis is hereby incorporated by reference. As described on pages 4.11-12 through 4.11-15 of the Padre Dam PEIR, potentially significant direct and indirect noise impacts were identified. However, all impacts were reduced to a level below significance with implementation of mitigation measures NOI-1 and NOI-2 as described in the Padre Dam PEIR. Therefore, the Padre Dam AWP excessive noise impacts would be **less than significant.**

**Cumulative Impacts**

The Padre Dam PEIR evaluated the cumulative noise impacts of the project on page 6-26. As described therein, the AWP project would result in less-than-significant noise impacts with implementation of mitigation measures NOI-1 and NOI-2 and it **would not have a considerable contribution** such that a significant cumulative impact would occur**.**

**Impact Summary**

Implementation of the 2011 GPU polices and 2011 GPU PEIR mitigation measures listed above would ensure that the project and cumulative excessive noise impacts associated with alternative transportation infrastructure, agricultural improvements, Padre Dam improvements, and new or expanded solid waste facilities would not have the potential to expose noise sensitive land uses to excessive noise levels. Project impacts would be **less than significant** and the project **would not have a considerable contribution** such that a new significant cumulative noise impacts would occur.

However, implementation of large-scale renewable energy projects and direct investment projects would result in **potentially significant** impacts related to excessive noise and **could result in a considerable contribution** such that a new significant cumulative impact would occur.

## *2.11.4.2 Excessive Groundborne Vibration*

This section describes potential project and cumulative impacts on excessive groundborne vibration with implementation of the project.

**Guidelines for Determination of Significance**

Based on Appendix G of the CEQA Guidelines and County of San Diego Guidelines for Determining Significance, Noise, the project would have a significant impact if it would result in the exposure of vibration sensitive uses to groundborne vibration and noise equal to or in excess of the levels shown in Table 4 of the Guidelines, Groundborne Vibration and Noise Standards, or if new sensitive land uses would be located in the vicinity of groundborne vibration inducing land uses such as railroads or mining operations. The groundborne vibration and noise standards identify the following three land use categories with increasing sensitivity to groundborne vibration and noise impacts:

- Category 1: Buildings where low-ambient vibration is essential for interior operations (research & manufacturing facilities with special vibration constraints)

- Category 2: Residences and buildings where people normally sleep (hotels, hospitals, residences, & other sleeping facilities)

- Category 3: Institutional land uses with primarily daytime use (schools, churches, libraries, other institutions, & quiet offices)

The project would result in a significant impact if frequent events would exceed 0.0018 inches per second (in/sec) root mean square (RMS) for Category 1 land uses, 0.004 in/sec RMS for Category 2, and 0.0056 in/sec RMS for Category 3. Occasional or infrequent events (fewer than 70 vibration events per day) would be considered a significant impact if they would exceed 0.0018 in/sec RMS for Category 1 land uses, 0.010 in/sec RMS for Category 2, and 0.014 in/sec RMS for Category 3.

## Impact Analysis

### 2011 GPU PEIR Determination

The 2011 GPU PEIR evaluated groundborne vibration at noise-sensitive uses. It was determined that future development under the 2011 GPU would have the potential to expose sensitive land uses to excessive groundborne vibration. The 2011 GPU PEIR concluded that these impacts would be reduced to below a level of significance through the implementation of a combination of federal, state and local regulations; existing County regulatory processes; the adopted 2011 GPU goals and policies; and, specific mitigation measures/implementation programs identified in the 2011 GPU PEIR. Specific policies and mitigation measures related to Noise are listed above under Section 2.11.2, Regulatory Framework above. With implementation of mitigation, the 2011 GPU PEIR concluded that this impact would be reduced to a less-than-significant level. The discussion of this impact can be found in Section 2.11.3.2 on pages 2.11-19 to 2.11-23; and 2.11-36 to 2.11-36, and it is hereby incorporated by reference.

### CAP Impact Analysis

Bicycle, Pedestrian, Park-and-Ride, Solid Waste Expansion, Large-Scale Renewable Energy Infrastructure, Direct Investment Program

Implementation of the GHG reduction measures and supporting efforts described above, could result in a variety of projects including bicycle and pedestrian facilities, park-and-ride infrastructure, expanded or new solid waste facilities, direct investment projects, or large-scale renewable energy projects. Specific locations for such improvements have not been identified. All projects have the potential to result in excessive vibration levels associated with construction activities. These activities may result in varying degrees of temporary groundborne vibration, depending on the specific construction equipment used and activities involved. Groundborne vibration levels caused by various types of construction equipment and activities (e.g., bulldozers, blasting) range from 58 – 109

vibration decibels (VdB) and from 0.003 – 0.089 inch per second (in/sec) peak particle velocity (PPV) at 25 feet. While a detailed construction equipment list is not available, based on the types of construction activities that would be expected with implementation of the project, it would be expected that a variety of heavy-duty construction equipment including bulldozers and trucks, would be used. Blasting or pile driving would not be anticipated to be needed. Per the Federal Transit Administration (FTA), levels associated with the use of a large bulldozer and trucks are 0.089 and 0.076 in/sec PPV (87 and 86 VdB) at 25 feet, respectively. As discussed above under Issue 1, the location of such construction activities would likely be within existing developed footprints, nearby to roadways or commercial areas, or in remote areas. All development projects would be required to perform an acoustical analysis as required by 2011 GPU mitigation measures Noi-1.1, Noi-1.3, and Noi-2.4 and be would be required to be determined consistent with land use compatibility guidelines to proceed with development. Further, these projects would be regulated by the County Noise Ordinance and would be required to comply with all applicable Noise Guidelines. In the case of large-scale renewable projects, all projects would be subject to discretionary review and required to obtain a MUP. As part of the County's discretionary review process, all projects would be evaluated under CEQA and would be required to implement measures to minimize impacts to groundborne vibration and groundborne noise levels. Therefore, implementation of bicycle and pedestrian improvements, park-and-ride facilities, solid waste facilities, direct investment projects, and large-scale renewable energy projects would result in **less-than-significant** vibrational noise impacts**.**

**Cumulative Impacts**

Impacts would be cumulative if construction-related vibration from projects associated with cumulative regional land use projects would have the potential to expose noise sensitive land uses to excessive vibration levels. The methodology for determining the cumulative environment described in Chapter 1, Project Description, and summarized above in Section 2.11.4.1 above applies for this cumulative discussion.

The 2011 GPU PEIR concluded vibration impacts would be potentially significant because the 2011 GPU would result in the exposure of sensitive receptors to major vibrational sources (i.e., roadways and railways). With implementation of mitigation from the 2011 GPU PEIR, these impacts would be reduced to less than significant. However, as discussed above, vibrational noise associated with implementation of the project would not be significant. Thus, bicycle and pedestrian improvements, park-and-ride facilities, solid waste facilities, direct investment projects, and large-scale renewable energy projects would not result in excessive vibration levels and **would not result in a considerable contribution** such that a new significant cumulative impact would occur**.**

<u>Padre Dam Water and Wastewater Supporting Effort</u>

As described in Chapter 1, Project Description, the CAP includes a Water and Wastewater Supporting Effort, that would support participation in the Padre Dam AWP project. The Padre Dam MWD prepared the Padre Dam PEIR and that analysis is hereby incorporated by reference. As described on pages 4.11-15 through 4.11-18 of the Padre

Dam PEIR, potentially significant direct and indirect noise impacts, including vibration, were identified. However, all impacts were reduced to a level below significance with implementation of mitigation measure NOI-3 as described in the Padre Dam PEIR. Therefore, the Padre Dam AWP vibration noise impacts would be **less than significant.**

**Cumulative Impacts**

The Padre Dam PEIR evaluated the cumulative noise impacts of the project on page 6-27. As described therein, the AWP project would result in less-than-significant vibration noise impacts with implementation of mitigation measure NOI-3, and it **would not have a considerable contribution** such that a new significant cumulative impact would occur**.**

**Impact Summary**

Implementation of bicycle and pedestrian improvements, park-and-ride facilities, solid waste facilities, direct investment projects, Padre Dam improvements, and large-scale renewable energy projects would not result in excessive vibration levels. Therefore, project vibration impacts would be **less than significant** and the project **would not have a considerable contribution** such that a new significant cumulative impact would occur.

### *2.11.4.3 Issue 3: Permanent Increase in Ambient Noise Levels*

This section describes potential project and cumulative impacts related to the potential for permanent increases in ambient noise levels with implementation of the project.

**Guidelines for Determination of Significance**

Based on Appendix G of the CEQA Guidelines and the County of San Diego Guidelines for Determining Significance, Noise, the project would have a significant impact if it would result in a substantial permanent increase in ambient noise which would exceed the sound level limits specified in San Diego County Code Section 36.404, Sound Level Limits, at the property line of the property on which the noise is produced or at any location on a property that is receiving the noise.

If the measured ambient level exceeds the applicable limit due to a specific noise violation source, the allowable one-hour average sound level would be the one-hour average ambient sound level, plus 3 dBA. The ambient noise level shall be measured when the alleged noise violation source is not operating. The sound level limit at a location on a boundary between two zoning districts is the arithmetic mean of the respective limits for the two districts.

Generally, fixed-location public utility distribution or transmission facilities located on or adjacent to a property line shall be subject to the sound level limits identified in the County's Noise Ordinance, measured at or beyond 6 feet from the boundary of the easement upon which the equipment is located; however, some uses are exempt from the Noise Ordinance. Exemptions are listed in Section 36.417 and apply to certain instances of emergency work, school activities, public events, emergency generators, agricultural operations, and property maintenance.

Permanent traffic noise impacts would be significant if the project would raise the noise levels above the County of San Diego Guidelines for Determining Significance of 60 dBA (CNEL). In areas where the existing noise level without the project is above 60 dBA but below 65 dBA, the project would result in a significant impact if it would result in an increase of more than 3 dBA, in accordance with the FTA noise impact criteria. Where the existing noise exposure is between 65 dBA and 70 dBA, a significant impact would occur if the project would exceed the existing noise level by more than one dBA. Where the existing noise exposure exceeds 70 dBA, any increase in the noise level would be considered significant.

## Impact Analysis

### 2011 GPU PEIR Determination

In the 2011 GPU PEIR, traffic on new roadways or roadway improvements, as well as operation of new industrial facilities and other noise-generating uses, was determined to result in potentially significant permanent noise impacts. All other noise sources were determined to be less than significant. The discussion of impacts can be found in 2011 GPU PEIR Chapter 2.11 Noise on pages 2.11-23 through 2.11-28 and 2.11-36 and is hereby incorporated by reference. The 2011 GPU PEIR concluded that these impacts would be reduced through the implementation of a combination of federal, state and local regulations; existing County regulatory processes; the adopted 2011 GPU goals and policies; and, specific mitigation measures/implementation programs identified in the 2011 GPU PEIR. However, even with these programs, implementation measures, and mitigation measures, the impacts would not be reduced to below a level of significance because the full suite of these and other mitigation measures considered and addressed in the 2011 GPU PEIR were found to be infeasible by the County as described in Section 2.11.6.3. Specifically, the mitigation would require the restriction of future development in areas identified for increased growth under the 2011 GPU. Specific policies and mitigation measures related to Noise are listed above under Section 2.11.2, Regulatory Framework above. Specific policies and mitigation measures related to noise are listed above under Section 2.11.2, Regulatory Framework.

### CAP Impact Analysis

Bicycle, Pedestrian, Park-and-Ride, Solid Waste Expansion, and Large-Scale Renewable Energy Infrastructure

Implementation of the CAP would result in bicycle and pedestrian infrastructure, park-and-ride facilities, new or expanded solid waste facilities, and large-scale renewable energy systems could result in significant impacts related to a permanent increase in ambient noise. Specific locations for such improvements have not been identified. Future discretionary projects would be required to be evaluated for project-specific impacts under CEQA at the time of application. As described above, all projects have the potential to result in a temporary increase in noise related to construction activities, however, it would not result in a permanent increase in ambient noise, so permanent increases in ambient noise from construction activities will not be further evaluated in this section.

Similarly, as described above in Impacts NOI-1, NOI-4, and NOI-7 excessive noise levels associated with bicycle and pedestrian infrastructure, park-and-ride facilities, large-scale solar and geothermal facilities, and solid waste facilities would not produce significant operational noise and would result in **less-than-significant** impacts related to permanent increases in ambient noise**.**

In general, large-scale wind energy systems would have the potential to produce significant operational noise depending on their design and location. Like small infrastructure improvement projects discussed above, some construction noise would be associated with the development of projects. All large-scale wind turbine projects would be required to obtain a MUP and be evaluated under CEQA, including the implementation of mitigation if significant impacts are identified (County of San Diego, 2012). As part of the MUP process, projects would be required to perform an acoustical analysis as required by 2011 GPU PEIR mitigation measures Noi-1.1, Noi-1.3, and Noi-2.4 and be would be required to be determined consistent with land use compatibility guidelines as described in Zoning Ordinance Section 6952(f) to proceed with development. However, while large-scale wind energy projects would be required to meet the low frequency (C-weighted) sound limit established in the County's Wind Energy Ordinance, it is possible for a noise waiver to be granted that could result in a higher C-weighted sound limit being approved. In some cases, a higher C-weighted sound level may potentially create an annoyance though there is no published scientific evidence to conclude wind turbine noise could cause adverse health effects (page 2.8-16 of the 2012 Wind Energy EIR). The 2012 Wind Energy EIR considered mitigation to eliminate the noise waiver, however this was rejected as infeasible because it would reduce the amount of viable wind projects within the County. Therefore, consistent with the conclusions of the 2012 Wind Energy EIR, implementation of large-scale wind energy projects could result in **potentially significant** permanent increases in ambient noise **(Impact NOI-5).**

### Cumulative Impacts

Impacts would be cumulative in nature if operational noise associated with cumulative regional land use projects would have the potential to expose noise sensitive land uses to excessive noise levels and result in a significant permanent increase in ambient noise levels. The methodology for determining the cumulative environment described in Chapter 1, Project Description, and summarized above in Section 2.11.4.1 above applies for this cumulative discussion.

As described above, the 2011 GPU PEIR concluded ambient noise impacts would be potentially significant because the 2011 GPU would result in the exposure of sensitive receptors to major noise sources (i.e., roadways, railways, and industrial facilities). With implementation of mitigation from the 2011 GPU PEIR, these impacts would be reduced, but would not be reduced to below a level of significance. As discussed above, bicycle and pedestrian infrastructure, park-and-ride facilities, large-scale solar and geothermal facilities, and solid waste facilities would not produce significant operational noise and would result in less-than-significant impacts related to permanent increases in ambient noise. Therefore, these projects **would not have a considerable contribution** to a significant cumulative impact**.** Implementation of large-scale wind energy projects could

result in potentially significant permanent increases in ambient noise. Therefore, large-scale wind energy projects **could result in a considerable contribution** to a significant cumulative impact **(Impact NOI-6).**

Direct Investment Program

Implementation of GHG Reduction Measure T-4.1 would result in direct investment of projects to offset carbon emissions. As described in detail in Chapter 2.7 and Appendix B of this Draft SEIR and Impact NOI-3 above there are a variety of projects that could result from implementation of this measure. See above for a detailed list. This list is not intended to be exhaustive, but represents some of the types of projects that could be considered in the future. Chapter 2.7 and Appendix B of this Draft SEIR contains information on available protocols.

Most direct investment projects would involve some level of construction and physical disturbance of the land. This analysis assumes that implementation of direct investment projects under GHG Reduction Measure T-4.1 would result in construction activities.

Because the variety of projects that may be approved and ultimately undertaken by the County under the Direct Investment Program is not known, it is too speculative to determine the types of impacts that could occur and whether regulations or mitigation measures would be available to minimize potential environmental impacts. However, all projects would be required to comply with applicable existing federal, state, and local regulations. Specifically, projects would be evaluated for their consistency with 2011 GPU policies, 2011 GPU PEIR mitigation measures, and the County Noise Ordinance. Future discretionary projects may also be required to undergo additional CEQA analysis to evaluate their project-specific impacts. If a determination is made that potentially significant impacts would result from implementation of direct investment projects, then all feasible mitigation would be required to be implemented in accordance with CEQA Guidelines Section 15126.4.

While all feasible mitigation would be applied at the project level as part of the County's discretionary review process, direct investment projects associated with GHG Reduction Measure T-4.1 could result in permanent increases in ambient noise levels that may not be mitigated to a less-than-significant level. At the programmatic level, it is not possible to determine with certainty that impacts resulting from construction activities would be reduced to a level below significance. Therefore, the project could result in **potentially significant** permanent increases in ambient noise level impacts **(Impact NOI-7)**.

### Cumulative Impacts

Impacts would be cumulative in nature if the project, in combination with cumulative development, would have the potential to expose noise sensitive land uses to excessive noise. The methodology for determining the cumulative environment described in Chapter 1, Project Description, and summarized above in Section 2.11.4.1 above applies for this cumulative discussion.

Implementation of GHG Reduction Measure T-4.1, would result in direct investment projects as described above. The 2011 GPU PEIR concluded permanent increases in ambient noise levels would be less-than-significant with implementation of mitigation from the 2011 GPU PEIR. As described above, because the exact location and nature of direct investment projects is not known, projects could result in potentially significant permanent increases in ambient noise levels. Therefore, implementation of GHG Reduction Measure T-4.1 **could result in a considerable contribution** such that a new significant cumulative noise impact would occur **(Impact NOI-8)**.

Padre Dam Water and Wastewater Supporting Effort

As described in Chapter 1, Project Description, the CAP includes a Water and Wastewater Supporting Effort, that would support participation in the Padre Dam AWP project. The Padre Dam MWD prepared the Padre Dam PEIR and that analysis is hereby incorporated by reference. As described on pages 4.11-18 through 4.11-19 of the Padre Dam PEIR, less-than-significant direct and indirect noise impacts, including permanent increases in ambient noise levels, were identified. Therefore, the Padre Dam AWP noise impacts would be **less than significant.**

**Cumulative Impacts**

The Padre Dam PEIR evaluated the cumulative noise impacts of the project on page 6-27. As described therein, the AWP project would result in less-than-significant permanent increases in ambient noise impacts and it **would not have a considerable contribution** to a significant cumulative impact**.**

**Impact Summary**

Implementation of the 2011 GPU polices and 2011 GPU PEIR mitigation measures listed above would ensure that the project and cumulative excessive noise impacts associated with bicycle and pedestrian infrastructure, park-and-ride facilities, Padre Dam improvements, and new or expanded solid waste facilities would not result in significant permanent increases in ambient noise levels. Project impacts would be **less than significant** and the project **would not have a considerable contribution** such that a new significant cumulative noise impact would occur.

However, implementation of large-scale wind energy projects and direct investment projects would result in **potentially significant** impacts related to permanent increases in ambient noise level and **could result in a considerable contribution** such that a new significant cumulative impact would occur.

### *2.11.4.4 Issue 4: Temporary or Periodic Increase in Ambient Noise Levels*

This section describes potential project and cumulative impacts related to temporary or periodic increases in ambient noise levels with implementation of the project.

## Guidelines for Determination of Significance

Based on Appendix G of the CEQA Guidelines and the County of San Diego Guidelines for Determining Significance, Noise, the project would have a significant impact if it would result in a substantial temporary or periodic increase in ambient noise levels during construction which, together with noise from all sources, would exceed the standards listed in San Diego County Code Sections 36.408 and 36.409, Construction Equipment. Sections 36.408 and 36.409 state that, except for emergency work, it shall be unlawful for any person to operate or cause to be operated, construction equipment:

- Between the hours of 7:00 p.m. and 7:00 a.m.

- On a Sunday or a holiday. For the purposes of this section a holiday means January 1st, the last Monday in May, July 4th, the first Monday in September, December 25th and any day appointed by the President as a special national holiday or the Governor of the State as a special state holiday. A person may, however, operate construction equipment on a Sunday or holiday between the hours of 10:00 a.m. and 5:00 p.m. at the person's residence or for the purpose of constructing a residence for himself or herself, provided that the operation of construction equipment is not carried out for financial consideration or other consideration of any kind and does not violate the limitations in Sections 36.409 and 36.410.

- That exceeds an average sound level of 75 decibels for an 8-hour period, between 7:00 a.m. and 7:00 p.m., when measured at the boundary line of the property where the noise source is located or on any occupied property where the noise is being received.

The County Noise Ordinance also includes standards for other sources of temporary and nuisance noise. Section 36.410, Sound Level Limitations on Impulsive Noise, states that except for emergency work, no person shall produce or cause to be produced an impulsive noise that exceeds the following standards when measured at the boundary line of or on any occupied property for 25% of the minutes in the measurement period:

- 82 dBA at an occupied residential, village zoning, or civic use, or 85 dBA at an occupied agricultural, commercial, or industrial use; or

- 85 dBA at an occupied residential, village zoning, or civic use, or 90 dBA at an occupied agricultural, commercial, or industrial use for a public road project.

The minimum measurement period for any measurements conducted under this section shall be one hour. During the measurement period, a measurement shall be conducted every minute from a fixed location on an occupied property. The measurements shall measure the maximum sound level during each minute of the measurement period. If the sound level caused by construction equipment or the producer of the impulsive noise exceeds the maximum sound level for any portion of any minute it will deemed that the maximum sound level was exceeded during that minute.

Section 36.413, Multiple Family Dwelling Units, states that, notwithstanding any other provisions of the Noise Ordinance, it shall be unlawful for any person to create, maintain or cause to be maintained any sound within the interior of any multiple family dwelling unit which causes the noises level to exceed 45 dBA between 10:00 p.m. and 7:00 a.m. and 55 dBA between 7:00 a.m. and 10:00 p.m. Additionally, it shall be unlawful for any person to generate an interior noise level to exceed 40 dBA for 1 minute in 1 hour or 35 dBA for 5 minutes in 1 hour between the hours of 10:00 p.m. and 7:00 a.m., or to exceed 50 dBA for 1 minute in 1 hour or 35 dBA for 5 minutes in 1 hour between the hours of 7:00 a.m. and 10:00 p.m.

Section 36.414, General Noise Regulations of the County of San Diego Noise Ordinance includes additional noise standards for disturbing, excessive or offensive noise. Generally, this section states that it shall be unlawful for any person to make, continue, or cause to be made or continued, any disturbing, excessive or offensive noise which causes discomfort or annoyance to reasonable persons of normal sensitivity residing in the area.

Section 36.416, Noise from Off-Road Recreational Vehicles, states that no person shall operate or allow the operation of an off-road recreational vehicle on private property that produces a noise when measured at the boundary line of or on any occupied property that at any time exceeds the following maximum sound levels: 82 decibels between the hours of 7:00 a.m. and 7:00 p.m., 77 decibels between the hours of 7:00 p.m. and 10:00 p.m., and 55 decibels between the hours of 10:00 p.m. and 7:00 a.m.

## Impact Analysis

### 2011 GPU PEIR Determination

The 2011 GPU PEIR evaluated temporary increases in ambient noise levels because of construction of new land uses and infrastructure. It was determined that future development under the 2011 GPU would have the potential to expose sensitive land uses to excessive temporary noise from construction and nuisance noise from development intensification and concluded that these impacts would be reduced to below a level of significance through the implementation of a combination of federal, state and local regulations; existing County regulatory processes; the adopted 2011 GPU goals and policies; and, specific mitigation measures/implementation programs identified in the 2011 GPU PEIR. Specific policies and mitigation measures related to noise are listed above under Section 2.11.2, Regulatory Framework. The discussion of impacts can be found in Section 2.11.3.4 on pages 2.11-28 to 2.11-32; 2.11-36 of the 2011 GPU PEIR, and is hereby incorporated by reference.

### CAP Impact Analysis

Bicycle, Pedestrian, Park-and-Ride; Solid Waste Expansion; and Large-Scale Renewable Energy Infrastructure

Implementation of bicycle and pedestrian infrastructure, park-and-ride facilities, new or expanded solid waste facilities, and large-scale renewable energy projects could result in substantial increases in temporary or periodic ambient noise levels in the project vicinity

above levels existing without the project. Construction noise levels that could result from the implementation of projects resulting from GHG reduction measures would fluctuate depending on the type, number, size, and duration of usage for the varying equipment. The effects of construction noise largely depend on the type of construction activities occurring on any given day, noise levels generated by those activities, distances to noise sensitive receptors, and the existing ambient noise environment in the receptor's vicinity. Construction generally occurs in several discrete stages, each phase requiring a specific complement of equipment with varying equipment type, quantity, and intensity. These variations in the operational characteristics of the equipment change the effect they have on the noise environment of the project site and in the surrounding community for the duration of the construction process.

To assess noise levels associated with the various equipment types and operations, construction equipment can be considered to operate in two modes: mobile and stationary. Mobile equipment sources move around a construction site performing tasks in a recurring manner (e.g., loaders, graders, dozers). Stationary equipment operates in a location for an extended period to perform continuous or periodic operations. Operational characteristics of heavy construction equipment are additionally typified by short periods of full-power operation followed by extended periods of operation at lower power, idling, or powered-off conditions.

Additionally, when construction-related noise levels are being evaluated, activities that occur during the more noise-sensitive evening and nighttime hours are of increased concern. Because exterior ambient noise levels typically decrease during the late evening and nighttime hours as traffic volumes and commercial activities decrease, construction activities performed during these more noise-sensitive periods of the day can result in increased annoyance and potential sleep disruption for occupants of nearby residential uses.

The site preparation phase typically generates the most substantial noise levels because of the on-site equipment associated with grading, compacting, and excavation, which uses the noisiest types of construction equipment. Site preparation equipment and activities include backhoes, bulldozers, loaders, and excavation equipment (e.g., graders and scrapers). Construction of large structural elements and mechanical systems could require the use of a crane for placement and assembly tasks, which may also generate noise levels. Although a detailed construction equipment list is not currently available, based on this project type it is expected that the primary sources of noise would include backhoes, bulldozers, and excavators. Noise levels from typical types of construction equipment can range from approximately 74 to 94 dBA at 50 feet.

Based on this information and accounting for typical usage factors of individual pieces of equipment and activity types, on-site construction could result in hourly average noise levels of 87 dBA equivalent level measurements ($L_{eq}$) at 50 feet and maximum noise levels of 90 dBA maximum sound level ($L_{max}$) at 50 feet from the simultaneous operation of heavy-duty equipment.

All development projects would be required to perform an acoustical analysis as required by 2011 GPU PEIR mitigation measures Noi-1.1, Noi-1.3, and Noi-2.4 and be would be

required to be determined consistent with land use compatibility guidelines to proceed with development. Further, these projects would be regulated by the County Noise Ordinance and require approval of a building permit. Finally, all development projects would be required to comply with San Diego County Code Sections 36.408 and 36.409, Construction Equipment, which regulates construction-related noise.

Regarding ambient noise, as described above in Section 2.11.4.1, implementation of bicycle and pedestrian infrastructure, park-and-ride facilities, large-scale solar and geothermal facilities, and solid waste facilities would not produce significant operational noise (temporary and periodic) and would result in **less-than-significant** impacts**.**

However, large-scale wind energy impacts could result in an increase in noise above ambient levels. Even though future development of large wind turbines would be required to comply with the County's Noise Compatibility Guidelines, General Plan Noise Element Noise Standards, and Noise Ordinance, it would still be possible for a noise waiver to be granted which could result in potentially significant temporary or periodic ambient increases in noise. The 2012 Wind Energy EIR considered mitigation to eliminate the noise waiver, however this was rejected as infeasible because it would reduce the amount of viable wind projects within the County. Therefore, large-scale wind energy projects could result in **potentially significant** impacts related to ambient noise **(Impact NOI-9).**

**Cumulative Impacts**

Impacts would be cumulative in nature if operation associated with cumulative regional land use projects combined would have the potential to expose noise sensitive land uses to significant temporary or permanent increases in ambient noise levels. The methodology for determining the cumulative environment described in Chapter 1, Project Description, and summarized above in Section 2.11.4.1 above applies for this cumulative discussion.

The 2011 GPU PEIR concluded noise impacts would be potentially significant because the 2011 GPU would result in the exposure of sensitive receptors to major noise sources (i.e., roadways and railways). With implementation of mitigation from the 2011 GPU PEIR, these impacts would be reduced to less than significant. Implementation of bicycle and pedestrian infrastructure, park-and-ride facilities, large-scale solar and geothermal facilities, and solid waste facilities would result in less-than-significant temporary or permanent ambient noise impacts because they be would be required to be determined consistent with land use compatibility guidelines as described in Zoning Ordinance Section 6952(f) to proceed with development. Therefore, these projects **would not result in a considerable contribution** such that a new significant cumulative ambient noise impact would occur**.**

However, as discussed above, operational sources of noise associated with GHG Reduction Measure E-2.1 would be potentially significant because it is possible for a noise waiver to be granted to large wind turbines subject to specific conditions. Thus, this measure could result in significant temporary or permanent increases in ambient noise levels. Therefore, implementation of this measure **would result in a considerable contribution** such that a new significant cumulative impact would occur **(Impact NOI-10).**

Direct Investment Program

Implementation of GHG Reduction Measure T-4.1 would result in direct investment projects to offset carbon emissions. As described in detail in Chapter 2.7 and Appendix B of this Draft SEIR and Section 2.11.4.1 above there are a variety of projects that could result from implementation of this measure. See above for a detailed list. This list is not intended to be exhaustive, but represents some of the types of projects that could be considered in the future. Chapter 2.7 and Appendix B contains information on available protocols.

Some direct investment projects would involve some level of construction and physical disturbance of the land and operation of new facilities. Because the variety of projects that may be approved and ultimately undertaken by the County under the Direct Investment Program is not known, it is too speculative to determine the types of impacts that could occur and whether regulations or mitigation measures would be available to minimize potential environmental impacts. However, all projects would be required to comply with applicable existing federal, state, and local regulations. Specifically, projects would be evaluated for their consistency with 2011 GPU policies, 2011 GPU PEIR mitigation measures, and the County Noise Ordinance. Future discretionary projects may also be required to undergo additional CEQA analysis to evaluate their project-specific impacts. If a determination is made that potentially significant impacts would result from implementation of direct investment projects, then all feasible mitigation would be required to be implemented in accordance with CEQA Guidelines Section 15126.4.

While all feasible mitigation would be applied at the project level as part of the County's discretionary review process, it is possible that some direct investment projects would result in temporary or periodic increases in ambient noise levels that may not be mitigated to a less-than-significant level. At the programmatic level, it is not possible to determine with certainty that impacts resulting from construction activities would be reduced to a level below significance. Therefore, the project could result in **potentially significant** ambient noise level impacts **(Impact NOI-11)**.

**Cumulative Impacts**

Impacts would be cumulative in nature if the project, in combination with cumulative development, would have the potential to expose noise sensitive land uses to significant temporary or periodic increases in ambient noise levels. The methodology for determining the cumulative environment described in Chapter 1, Project Description, and summarized above in Section 2.11.4.1 above applies for this cumulative discussion.

Implementation of GHG Reduction Measure T-4.1, would result in direct investment projects as described above. The 2011 GPU PEIR concluded permanent increases in ambient noise levels would be less than significant with implementation of mitigation from the 2011 GPU PEIR. As described above, because the exact location and nature of direct investment projects is not known, projects could result in potentially significant temporary or periodic increases in ambient noise levels. Therefore, implementation of GHG

Reduction Measure T-4.1 **could result in a considerable contribution** such that a new significant cumulative noise impact would occur **(Impact NOI-12)**.

Padre Dam Water and Wastewater Supporting Effort

As described in Chapter 1, Project Description, the CAP includes a Water and Wastewater Supporting Effort, that would support participation in the Padre Dam AWP project. The Padre Dam MWD prepared the Padre Dam PEIR and that analysis is hereby incorporated by reference. As described on pages 4.11-19 through 4.11-23 of the Padre Dam PEIR, potentially significant direct and indirect noise impacts, including temporary or periodic, were identified. However, all impacts were reduced to a level below significance with implementation of mitigation measures NOI-4, NOI-5, and BIO-1I as described in the Padre Dam PEIR. Therefore, the Padre Dam AWP noise impacts would be **less than significant.**

**Cumulative Impacts**

The Padre Dam PEIR evaluated the cumulative noise impacts of the project on page 6-27 through 6-28. As described therein, the AWP project would result in less-than-significant operational noise impacts with implementation of mitigation measures NOI-4, NOI-5, BIO-1I, and TRA-1 and it **would not have a considerable contribution** such that a new significant cumulative impact would occur**.**

**Impact Summary**

Implementation of the 2011 GPU polices and 2011 GPU PEIR mitigation measures listed above would ensure that the project and cumulative impacts associated with bicycle and pedestrian infrastructure, park-and-ride facilities, large-scale solar and geothermal facilities, Padre Dam improvements, and solid waste facilities waste facilities would not have the potential to expose noise sensitive land uses to significant increases in ambient noise levels. Project impacts would be **less than significant** and the project **would not have a considerable contribution** such that a new significant noise impact would occur.

However, implementation of large-scale wind energy projects, and direct investment projects would result in **potentially significant** impacts related to temporary but significant increases in ambient noise levels and **could result in a considerable contribution** such that a new significant cumulative noise impact could occur.

## 2.11.5 Mitigation

### *2.11.5.1 Issue 1: Excessive Noise Levels*

As described above in Section 2.11.4.1, even with implementation of the adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures, and compliance with County's Noise Compatibility Guidelines, General Plan Noise Element noise standards, and the County's Noise Ordinance, project and cumulative impacts related to excessive noise from large-scale wind turbines could occur because waivers could be provided under

certain circumstances. Project and cumulative impacts associated with direct investment projects could also occur. However, additional mitigation for direct investment projects at the program level is not available and would be highly speculative. As discussed above, each direct investment project would be required to mitigate to reduce significant impacts. Additional mitigation was considered that would eliminate the noise waiver. but it was rejected because it would conflict with the County's goal to expand renewable energy.

Additional mitigation was considered as part of this Draft SEIR that would implement a development cap upon large-scale renewable energy projects. However, this mitigation was rejected as infeasible because it may reduce the effectiveness of GHG Reduction Measure E-2.1 and achievement of the County's 2030 GHG emissions reduction target. It is unknown how many numbers and types of renewable large-scale renewable energy facilities would be required to meet the GHG reduction goals of the CAP because the design, siting, and economic feasibility characteristics of the options under consideration vary widely. No other additional feasible mitigation beyond compliance with the County's adopted 2011 GPU policies, 2011 GPU PEIR mitigation measures, Noise Compatibility Guidelines, General Plan Noise Element noise standards, and the Noise Ordinance is available and could be applied to the individual actions that would occur under the CAP. Where an individual action under the CAP would comply with existing regulations pertaining to noise thresholds, it would reduce its project-specific impacts to a less-than-significant level and would reduce its contribution to cumulative impacts such that it would not be considerable. However, because the location, size, scale, and individual development characteristics of future wind energy projects that could occur with implementation of the CAP are not known, some projects may result in noise impacts that cannot be reduced through mitigation, which would result in a **significant and unavoidable** excessive noise impact. Further, individual project contributions to a cumulative impact could also result in new **significant and unavoidable** cumulative impacts related to excessive noise.

### *2.11.5.2 Issue 2: Excessive Groundborne Vibration*

Project level impacts and contributions to cumulative impacts were determined to be less than significant; therefore, no mitigation measures in addition those identified in the 2011 GPU PEIR are required.

### *2.11.5.3 Issue 3: Permanent Increase in Ambient Noise Levels*

As described above in Section 2.11.4.3, even with implementation of the adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures, and compliance with County's Noise Compatibility Guidelines, General Plan Noise Element noise standards, and the County's Noise Ordinance that establish thresholds for noise, project and cumulative impacts related to permanent increases in ambient noise from large-scale wind turbines and direct investment projects could occur because waivers could be provided under certain circumstances.

Mitigation to eliminate the noise waiver was considered in the 2012 Wind Energy EIR but determined to be infeasible for the reasons described above. Additional mitigation that

would implement a development cap upon large-scale renewable energy projects was considered but rejected as infeasible because it may reduce the effectiveness of GHG Reduction Measure E-2.1 and achievement of the County's 2030 GHG emissions reduction target. It is unknown how many numbers and types of renewable large-scale renewable energy facilities would be required to meet the GHG reduction goals of the CAP because the design, siting, and economic feasibility characteristics of the options under consideration vary widely. No other additional feasible mitigation beyond compliance with the County's adopted 2011 GPU policies, 2011 GPU PEIR mitigation measures, Noise Compatibility Guidelines, General Plan Noise Element noise standards, and the Noise Ordinance is available and could be applied to the individual actions that would occur under the CAP. Where an individual action under the CAP would comply with existing regulations pertaining to noise thresholds, it would reduce its project-specific impacts to a less-than-significant level and would reduce its contribution to significant cumulative impacts such that it would not be considerable. However, because the location, size, scale, and individual development characteristics of future wind energy projects that could occur with implementation of the CAP are not known, some projects may result in noise impacts that cannot be reduced through mitigation, which would result in a **significant and unavoidable** permanent increases in ambient noise levels. Further, individual project contributions to a cumulative impact **could result in a considerable contribution** to a significant and unavoidable cumulative impact related to permanent increases in ambient noise levels.

### *2.11.5.4 Issue 4: Temporary Increase in Ambient Noise Levels*

As described above in Section 2.11.4.4, even with implementation of the adopted 2011 GPU policies and 2011 GPU PEIR mitigation measures, and compliance with County's Noise Compatibility Guidelines, General Plan Noise Element noise standards, and the County's Noise Ordinance that establish thresholds for noise, project and cumulative impacts related to temporary or periodic increases in ambient noise from large-scale wind turbines and direct investments could occur because waivers could be provided under certain circumstances.

Mitigation to eliminate the noise waiver was considered in the 2012 Wind Energy EIR, but determined to be infeasible for the reasons described above. Additional mitigation that would implement a development cap upon large-scale renewable energy projects was considered but rejected as infeasible because it may reduce the effectiveness of GHG Reduction Measure E-2.1 and achievement of the County's 2030 GHG emissions reduction target. It is unknown how many numbers and types of renewable large-scale renewable energy facilities would be required to meet the GHG reduction goals of the CAP because the design, siting, and economic feasibility characteristics of the options under consideration vary widely. No other additional feasible mitigation beyond compliance with the County's adopted 2011 GPU policies, 2011 GPU PEIR mitigation measures, Noise Compatibility Guidelines, General Plan Noise Element noise standards, and the Noise Ordinance is available and could be applied to the individual actions that would occur under the CAP. Where an individual action under the CAP would comply with existing regulations pertaining to noise thresholds, it would reduce its project-specific impacts to a less-than-significant level and would reduce its contribution to significant

cumulative impacts such that it would not be considerable. However, because the location, size, scale, and individual development characteristics of future wind energy projects that could occur with implementation of the CAP are not known, some projects may result in noise impacts that cannot be reduced through mitigation, which would result in a **significant and unavoidable** temporary or periodic increase in ambient noise levels. Further, individual project contributions to a cumulative impact **could also result in a considerable contribution** to a significant and unavoidable cumulative impact related to temporary or periodic increases in ambient noise levels.

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