2.12 Noise

This section describes 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 CAP Update. Potential noise impacts are analyzed, and mitigation measures are provided for those impacts determined to be significant. Because this analysis is subsequent to the adopted 2011 GPU PEIR, the evaluation of impacts focuses on the potential for implementation of the CAP Update to result in new or substantially more severe impacts than presented in the 2011 GPU PEIR, given the changes to the General Plan proposed by the CAP Update and changes in environmental and regulatory conditions that have occurred since the certification of the 2011 GPU PEIR.

This section incorporates by reference the noise setting and impact analysis from the 2011 GPU PEIR as it applies to the CAP Update and supplements with updates to setting conditions since certification of the 2011 GPU PEIR.

Table 2.12-1 summarizes the impact conclusions reached in the 2011 GPU PEIR and identifies if a new or more severe significant impact would occur with implementation of the CAP Update. As indicated, implementation of the proposed project would not result in new or more severe significant impacts related to noise.

Table 2.12-1 Summary of Noise-Related Impacts

Issue Number	Issue Topic	Determination from 2011 GPU PEIR	CAP Update SEIR Determination	
			New or More Severe Significant Impact Prior to Mitigation	New or More Severe Significant Impact After Mitigation
1 ¹	Excessive Noise Levels (Temporary Construction Noise)	General Plan Only: Less-Than- Significant Impact after Mitigation	CAP Update Only: No	CAP Update Only: No
		General Plan Cumulative Contribution: Less- Than-Significant Impact after Mitigation	CAP Update Cumulative Contribution: No	CAP Update Cumulative Contribution: No
	Excessive Noise Levels (Permanent Operational Noise)	General Plan Only: Significant and Unavoidable Impact	CAP Update Only: No	CAP Update Only: No
		General Plan Cumulative Contribution: Significant and Unavoidable Cumulative Impact	CAP Update Cumulative Contribution: No	CAP Update Cumulative Contribution: No

Issue Number	Issue Topic	Determination from 2011 GPU PEIR	CAP Update SEIR Determination		
			New or More Severe Significant Impact Prior to Mitigation	New or More Severe Significant Impact After Mitigation	
2	Excessive Groundborne Vibration	General Plan Only: Less-Than- Significant Impact after Mitigation	CAP Update Only: No	CAP Update Only: No	
		General Plan Cumulative Contribution: Less- Than-Significant Impact after Mitigation	CAP Update Cumulative Contribution: No	CAP Update Cumulative Contribution: No	
3	Excessive Noise from a Public or Private Airport	General Plan Only: Less-Than- Significant Impact after Mitigation	CAP Update Only: No	CAP Update Only: No	
		General Plan Cumulative Contribution: Less- Than-Significant Impact after Mitigation	CAP Update Cumulative Contribution: No	CAP Update Cumulative Contribution: No	

Since the certification of the 2011 GPU PEIR, the California Natural Resources Agency revised the State CEQA Guidelines in 2018. This draft-SEIR uses the updated State CEQA Guidelines, which combine temporary and permanent noise impact thresholds under one impact question.

GPU = General Plan Update; PEIR = Programmatic Environmental Impact Report; SEIR = Supplemental Environmental Impact Report; CAP = Climate Action Plan.

Source: Compiled by Ascent Environmental in 2023.

No comments related to noise and vibration were received during the Notice of Preparation (NOP) scoping process. A copy of the NOP and comment letters received in response to the NOP are included in Appendix A of this draft-SEIR.

2.12.1 Existing Conditions

The 2011 GPU PEIR included a discussion of existing noise conditions within the unincorporated county in Section 2.11.1, "Noise," pages 2.11-1 through 2.11-9. Some development has occurred in the unincorporated county since the adoption of the 2011 GPU PEIR leading to a potential increase in ambient noise levels. Therefore, the 2011 GPU PEIR conditions represent a conservative baseline for comparison of potential future noise levels. Therefore, the existing conditions in the 2011 GPU PEIR would be applied to the project and are herein incorporated by reference.

2.12.1.1 Noise Measurements

No new ambient noise measurements were obtained as part of this analysis. Measured ambient noise levels, as wells as baseline traffic noise levels in the unincorporated county, are provided as part of the 2011 GPU PEIR. Specifically, the 2011 GPU PEIR

provided a summary of community noise levels (Equivalent Energy Level $[L_{eq}]$)¹ measured for the various land uses within the unincorporated county, including:

- Freeways and Highways 70 A-weighted decibels (dBA)
- Major Arterials 66–71 dBA
- Passenger Rail 70 dBA
- Airports 56 dBA
- Commercial 65–69 dBA
- Industrial 61–62 dBA
- Agricultural 44–68 dBA
- Other Uses 59–74 dBA
- Noise-Sensitive Uses 43–65 dBA

2.12.1.2 Transportation Noise Generators

Roadways

The most substantial and common source of noise on roadways is traffic in the unincorporated county. The roadway network in the unincorporated county consists of state highways, interstate highways, regional arterials, local public roads, and private roads. Noise would vary by time of day depending on traffic volumes, the speed of the traffic, the type of vehicles using a particular roadway, and pavement conditions. Highways and arterials generally accommodate high-speed, high-volume traffic, and are designed to provide for the movement of people and goods between and within communities in the county. The interstate highways in the unincorporated county include Interstate (I-) 15, I-5, and I-8. Major state highways include State Route (SR) 94, SR 78, SR 79, and SR 76. Examples of major arterials include Jamacha Road in Valle de Oro Community Planning Area, Sweetwater Road in Spring Valley Community Planning Area, and Tecate Road in Mountain Empire Subregion. Local roads serve lower speed, lower volume traffic and provide access to local residential neighborhoods and commercial and industrial areas in each of the communities throughout the unincorporated county.

Airports

Noise generated from aviation operations is concentrated around airport buildings, runways, and along approach and departure routes. There are seven public airport operations in the unincorporated county (Table 2.11-2 of the 2011 GPU PEIR). Additionally, 29 smaller private-use airports are scattered throughout the unincorporated county.

_

¹ All noise levels were short-term (15-minute) measurements.

Railroads

There are two railroad corridors within the San Diego region, which are operated by five railroad providers. The railroad corridors are primarily located within incorporated cities. The San Diego & Arizona Eastern Railway's Desert Line is the primary freight rail line that traverses the unincorporated county. However, this line is not currently operating (Smith 2022). The extent of the noise generated from passenger and freight trains depends on many factors, including the frequency of train operations, the number of railway cars, the type of engine, and the number of grade crossings that require warning bells or horns. In addition, train pass-by events would cause adjacent land use to be affected by groundborne vibration.

2.12.1.3 Non-Transportation Noise Generators

Industrial, Commercial, Extractive, and Agricultural Sources

Non-transportation related noise generators are commonly called "stationary," "fixed," "area," or "point" sources of noise. Industrial processing; mechanical equipment; pump stations; and heating, ventilating, and air conditioning equipment are examples of fixed location, non-transportation noise sources within the unincorporated county.

Noise generated by industrial and commercial operations, maintenance, manufacturing, truck traffic (loading docks), and warehousing noise can affect surrounding noise-sensitive land uses. Noise perceived as disruptive by residents in proximity to existing agricultural operations has the potential to result from the operation of agricultural machinery in the evening or early morning hours when many residents desire a quiet environment. In addition, operation of exterior exhaust and cooling system equipment typically used in greenhouse operations can be a source of noise that has the potential to affect surrounding land uses.

Temporary and/or Nuisance Noise

Intermittent or temporary neighborhood noise from amplified music, public address systems, barking dogs, landscape maintenance, stand-by power generators, motorized recreation, and construction activities are disturbing to residents but are difficult to attenuate and control. The 2011 GPU PEIR identified that 74 percent of the noise complaints received by the County's Office of Noise Control in the unincorporated county are associated with barking dogs. Roosters and machinery are also common sources of noise complaints, each accounting for approximately 7 percent of complaints. The least common source of noise complaints are birds, accounting for approximately 2 percent of noise complaints.

2.12.2 Regulatory Framework

The 2011 GPU PEIR included a summary of the regulatory framework related to noise in Chapter 2.11, "Noise" (pages 2.11-9 through 2.11-14), and it is herein incorporated by reference. Specific regulations discussed in the 2011 GPU PEIR and applicable to the project include the following:

2.12.2.1 Federal

- Federal Aviation Administration (FAA) Standards
- Federal Highway Administration Standards
- Federal Railroad Administration Standards
- Federal Transit Administration (FTA) Standards
- US Office of Surface Mining Reclamation and Enforcement

2.12.2.2 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)

2.12.2.3 Local

- Airport Land Use Compatibility Plans (ALUCPs)
- The Adopted County of San Diego General Plan 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

2011 San Diego County General Plan

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

Policy 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.

<u>Policy M-2.4: Roadway Noise Buffers.</u> 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.

<u>Policy N-1.4: Adjacent Jurisdiction Noise Standards.</u> 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.

<u>Policy N-1.5: Regional Noise Impacts.</u> 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.

Policy 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.

<u>Policy N-2.2: Balconies and Patios.</u> 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.

<u>Policy N-3.1: Groundborne Vibration.</u> 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.

<u>Policy N-4.1: Traffic Noise.</u> 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.

<u>Policy N-4.2: Traffic Calming.</u> 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.

<u>Policy N-4.3: Jurisdictional Coordination.</u> 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.

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

<u>Policy N-4.9: Airport Compatibility.</u> Assure the noise compatibility of any development projects that may be affected by noise from public or private airports and helipads during project review by coordinating, as appropriate, with appropriate agencies such as the San Diego County Regional Airport Authority (SDCRAA) and the Federal Aviation Administration (FAA).

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

<u>Policy N-6.2: Recurring Intermittent Noise.</u> 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.

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

<u>Policy N-6.4: Hours of Construction.</u> 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.

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

<u>Policy S-15.117.2: Land Use Compatibility.</u> Require land uses surrounding airports to be compatible with the operation of each airport.

Policy S-17.3: Airport Operational Plans. Require operational plans for new public/private airports and heliports, as well as future operational changes to existing airports, to be compatible with existing and planned land uses that surround the airport facility.

Policy S-17.5: Private Airstrip and Heliport Location. Locate private airstrips and heliports outside of safety zones and flight paths for existing airports where they are compatible with surrounding established and planned land use, and in a manner to avoid impacting public roadways and facilities.

2011 San Diego County GPU PEIR

The following mitigation measures from the 2011 GPU PEIR are applicable to the CAP Update:

Adopted Mitigation Measure 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).

Adopted Mitigation Measure 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.

Adopted Mitigation Measure 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.

Adopted Mitigation Measure 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.

Adopted Mitigation Measure 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.

Adopted Mitigation Measure 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.

2.12.3 Analysis of Effects and Significance Determinations

2.12.3.1 Significance Criteria

Based on guidance provided in Appendix G of the State CEQA Guidelines and the *County of San Diego Guidelines for Determining Significance: Noise* (County of San Diego 2009), except as provided in Public Resources Code Section 21099, the proposed project would result in a significant noise impact if it would:

- result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- result in generation of excessive groundborne vibration or groundborne noise levels;
- for a project located within the vicinity of a private airstrip or an airport land use plan
 or, where such a plan has not been adopted, within two miles of a public airport or
 public use airport, expose people residing or working in the project area to excessive
 noise levels.

2.12.3.2 Approach to Analysis

Impacts related to noise are analyzed based on a review of the CAP Update measures and actions and their potential to result in physical changes to the environment if the CAP Update is approved and implemented. Each issue area is analyzed in the context of existing laws and regulations as well as policies adopted in the General Plan, and the extent to which these existing regulations and policies adequately address and minimize the potential for impacts associated with implementation of the CAP Update. Because this SEIR tiers from the 2011 GPU PEIR, all relevant 2011 GPU PEIR mitigation measures are already applicable to the proposed project as needed to avoid or minimize project impacts and are considered part of the proposed CAP Update.

Scope of SEIR Impact Analysis

The impact analysis contained within this draft-SEIR focuses on whether implementation of the CAP Update would result in new or more severe impacts than were disclosed in the 2011 GPU PEIR, which is herein incorporated by reference. The CAP Update identifies strategies, measures, and supporting actions (referred to herein as measures and actions) to demonstrate progress toward established GHG reduction targets. Because these measures and actions represent the components of the CAP Update that could result in physical environmental effects within the unincorporated county, this analysis focuses on the impacts of their implementation. Given the broad scope of the CAP Update (i.e., covering the entire unincorporated county) and its role as a programmatic planning document designed to guide future decision-making related to the reduction of GHGs within the unincorporated county, the study area for noise is the unincorporated area of the county within the County's jurisdiction (i.e., all unincorporated lands excluding tribal lands, state and federally owned lands, and military installations).

The analysis in this draft SEIR is programmatic. Implementation of all CAP Update measures and actions were considered during preparation of this draft SEIR, to the degree specific information about their implementation is known. Because future projects associated with the CAP Update have yet to be specifically defined, this SEIR considers the types of impacts that could occur with implementation of the proposed GHG reduction measures and actions. Future discretionary projects would be required to be evaluated to determine if they are within the scope of this SEIR or if they result in project-specific impacts additional to what is concluded in this analysis. If additional impacts would result, additional CEQA documentation would be required to evaluate impacts, determine mitigation, and conclude whether impacts are reduced to below a significant impact.

Proposed CAP Update Strategies

As described in Chapter 1, "Project Description," the overarching strategies and associated measures and actions proposed in the CAP Update (see Table 1-2) have been grouped into categories for the purpose of analysis, based on the sector they target (e.g., solid waste, water/wastewater). CAP Update measures and actions that would have the potential to affect noise are summarized below.

CAP Update actions and measures that would involve development of policies and programs that would not result in direct physical effects or those that would result in limited physical improvements to existing development are not discussed further because these actions and measures would not have potential to result in new or more severe impacts related to noise.

Solid Waste Measures and Actions. This category includes strategies, measures, and implementing actions aimed at achieving zero solid waste in County operations and within the unincorporated county. Key measures and actions with the potential to result in new or more severe impacts related to noise include Measures SW-1 through SW-4, which have the potential to result in the construction of new or expanded solid waste facilities to meet waste diversion targets, and increase the prevalence of composting, anaerobic digestion, recycling throughout the unincorporated county.

Water and Wastewater Measures and Actions. This category includes strategies to decrease water consumption and increase wastewater and stormwater treatments. Key measures and actions with the potential to result in new or more severe impacts related to noise include Measures W-1 through W-3, which would involve development of policies and programs to encourage water conservation and increase water and wastewater efficiency.

Agriculture and Conservation Measures and Actions. This category includes strategies to preserve natural land and agricultural land. Key measures and actions with the potential to result in new or more severe impacts related to noise include Measures A-1 through A-2. Implementation of Action A-4.1.b would have the potential to result in new farmworker housing in unincorporated county, if opportunities to increase farmworker housing in the unincorporated area are identified.

Energy Measures and Actions. This category includes a strategy to develop policies and programs to increase energy efficiency and renewable energy use. Key actions with the potential to result in new or more severe impacts related to noise are included to support Measure E-3. For example, Action E-3.2 could result in energy efficiency retrofits on existing residential and non-residential structures and County facilities. Through Action E-3.2.b, the County would work with partners to promote and support on-site renewable (wind and solar) energy generation and storage (microgrids, site-specific and/or community scale) to increase renewable energy generation and use in the unincorporated area, which would be regulated by existing County ordinances and policies. Action E-3.3 would require the County to develop a program to provide the unincorporated area with 100 percent renewable energy from San Diego Community Power by 2030. This action may indirectly result in the construction of large-scale renewable energy infrastructure.

Built Environment and Transportation Measures and Actions. This category includes strategies to decarbonize the vehicle fleet, install electric vehicle charging stations, incentivize the use of alternative fuels and landscaping practices, and promote and support transit and ridesharing to reduce single-occupancy vehicle use. Generally, a shift from gas powered cars to electric engines and alternative modes of transportation would not result in increased noise. However, actions with the potential to result in construction of new or improved facilities (e.g., Actions T-5.1 and T-6.2) may generate new or more severe impacts related to noise.

2.12.3.3 Issue 1: Excessive Noise Levels

This section describes the potential for implementation of the CAP Update to result in excessive noise levels.

Guidelines for Determination of Significance

Appendix G of the State CEQA Guidelines establishes the following guideline for determining significance of effects related to excessive noise levels:

 result in generation of substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

The CEQA thresholds provided by the *County of San Diego Guidelines for Determining Significance: Noise* (County of San Diego 2009) state that a significant impact would occur if project implementation would result in the exposure of any on- or off-site existing or reasonably foreseeable future noise-sensitive land use to exterior or interior noise in excess of any of the following:

- 1. Construction (temporary or periodic) noise levels that exceed
 - a. 75 dBA for an 8-hour period, between 7 a.m. and 7 p.m., if impulsive noise exceeds 82 dBA maximum sound level (L_{max}) at an occupied residential, village zoning, or civic use or 85 dBA L_{max} at an occupied agricultural, commercial, or

industrial use; or if noise is generated between the hours of 7:00 p.m. and 7:00 a.m. on weekdays, or any time on Sundays or holidays, or

2. Operational (permanent) noise levels that exceed

- a. Exterior Locations:
 - Roadways and all other noise sources: 60 or 65 dBA (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 preexisting noise in areas where the ambient noise level is 49 dBA (CNEL) or less.
- b. Interior Locations:
 - i. 45 dBA (CNEL)

The above guidelines are based on the updated State CEQA Guidelines for noise impact analysis (California Natural Resources Agency 2018) and the *County of San Diego Guidelines for Determining Significance: Noise* (County of San Diego 2009). Since the certification of the 2011 GPU PEIR, the Natural Resources Agency finalized the State CEQA Guidelines in 2018. The above updated State CEQA Guidelines for noise reflect the guidelines for determination of significance for Issues 1 (Excessive Noise Levels), 3 (Permanent Increase in Ambient Noise Levels), and 4 (Temporary or Periodic Increase in Ambient Noise Levels) applied in the 2011 GPU PEIR.

Impact Analysis

2011 GPU PEIR Determination

The 2011 GPU PEIR evaluated excessive noise levels (i.e., roadways and railroads) at noise-sensitive uses; temporary increases in ambient noise levels resulting from construction of new land uses and infrastructure; and permanent increase in ambient noise levels resulting from operation of traffic on new roadways or roadway improvements and new industrial facilities and other noise-generating uses.

It was determined that future development under the General Plan 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 General Plan goals and policies; and specific mitigation measures/implementation programs identified in the 2011 GPU PEIR. Specific policies related to noise are listed above under Section 2.12.2, "Regulatory Framework." Mitigation measures identified in the 2011 GPU PEIR include Noi-1.1 to Noi-1.9, which would require an acoustical analysis for new development that may result in

noise levels exceeding the "Acceptable" standard listed in the Noise Element, coordination with agencies to identify and analyze appropriate route alternatives, and implementation procedures to ensure that a public participation process is available for affected communities. With implementation of mitigation and compliance with existing regulations and adopted General Plan policies, 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 through 2.11-19 and 2.11-35.

The 2011 GPU PEIR determined that future development under the General Plan 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 General Plan goals and policies; and specific mitigation measures/implementation programs identified in the 2011 GPU PEIR. Specific mitigation measures identified in the 2011 GPU PEIR include Adopted Mitigation Measures Noi-4.1 and Noi-4.2, which require the County to periodically review and revise to the Noise Ordinance and augment staff and equipment as appropriate to facilitate enforcement of Noise Ordinance. Specific policies related to noise are listed above under Section 2.12.2, "Regulatory Framework." The discussion of impacts can be found in Section 2.11.3.4 (pages 2.11-28 through 2.11-32 and 2.11-36 and 2.11-37) of the 2011 GPU PEIR.

The 2011 GPU PEIR determined that implementation of the General Plan would result in significant and unavoidable impacts related to a permanent increase in ambient noise levels. Even with the implementation of a combination of federal, state, and local regulations; existing County regulatory processes; the adopted General Plan goals and policies; and specific mitigation measures/implementation programs identified in the 2011 GPU PEIR, the impacts would not be reduced to below a level of significance. The County determined that the following mitigation measures would be infeasible to reduce impacts associated with permanent increases in ambient noise levels to below a level of significance because the measure would prohibit the construction of many roadway projects proposed in the Circulation Element: Noi-1.3 (requiring an acoustical study for projects proposing amendments to the General Plan), Noi-1.4 (editing the Guidelines for Determining Significance to promote design and measures that minimize motor vehicle traffic noise), Noi-1.5 (coordinating with agencies to identify and analyze appropriate route alternatives that may minimize noise impacts), Noi-1.8 (implement procedures with agencies to ensure that a public participation process is available for the affected communities), Noi-2.3 (reviewing industrial facility applications to ensure they are located in appropriate areas), Noi-2.4 (requiring an acoustical study for a facility that may result in a significant noise impact), Noi-3.1 (ensuring that new County road improvement projects would not exceed the County's Noise Standards or exceed 3 dB over existing conditions), and Noi-3.2 (determining appropriate noise reduction site design techniques). Specific policies related to noise are listed above under Section 2.12.2, "Regulatory Framework." above.

CAP Impact Analysis

The following sections describe the effects related to noise that could result from the implementation of the measures and actions proposed in the CAP Update.

Solid Waste Measures and Actions

Excessive Noise Levels (Temporary Construction Noise)

Implementation of the CAP Update measures and associated implementing actions would have the potential to result in new or expanded solid waste facilities. For example, Actions SW-1.1 and SW-2.1 include development of zero waste policies that may result in new or expanded composting and recycling facilities to divert solid waste from landfills. Specific locations for new and expanded facilities have not been identified. Therefore, these improvements are analyzed at a programmatic level.

Construction noise levels that could result from the implementation of projects associated with the implementation of CAP Update 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 and each phase requires the use of varying equipment types and quantities at varying intensities. 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 communities 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). It is not anticipated that the types of projects that could be implemented under the CAP Update would involve the construction of large structures; however, construction of large structural elements and mechanical systems could require the use of a crane for placement and assembly tasks, which may generate noise. A detailed construction equipment list is not currently available; however, it is expected that the primary sources of noise for this project type 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 L_{eq} at 50 feet and maximum noise levels of 90 dBA L_{max} at 50 feet from the simultaneous operation of heavy-duty equipment.

Future projects associated with implementation of the CAP Update 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 evaluated for consistency with land use compatibility guidelines prior to development. Further, these projects would be regulated by the County Noise Ordinance and would require approval of building permits. 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. With implementation of the identified 2011 GPU PEIR mitigation measures and existing regulations, no substantial increases in periodic noise would occur and the impact would remain less-than-significant.

Excessive Noise Levels (Permanent Operational Noise)

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 landfills. Therefore, 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, 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. When properly installed, operated, and maintained, these motors generally produce noise levels less than 54 dBA at 30 feet (SWRCB 2015). As stated above, all new and existing facilities would be required to demonstrate consistency with land use compatibility guidelines as described in Zoning Ordinance Section 6952(f) as well as perform acoustical analyses as stated in Adopted Mitigation Measures Noi-1.1, Noi-1.3, and Noi-2.4. In addition, adopted General Plan Policy LU-2.8 would require measures to minimize significant impacts to surrounding areas from uses or operations that cause excessive noise.

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 from operations would be minimized. Therefore, implementation of measures would result in less-than-significant operational noise impacts related to new or expanded solid waste facilities.

Water and Wastewater Measures and Actions

Excessive Noise Levels (Temporary Construction Noise)

Implementation of CAP Update Measures W-1 through W-3 and associated implementing actions would involve development of policies and programs to encourage water conservation and increase water and wastewater efficiency. Measures W-1 and W-2 include implementing actions to develop policies and programs to increase water efficiency. Implementation of these measures would generally result in installation of water efficient appliances, smart irrigation systems, and stormwater and grey water capture systems. Implementation of Measure W-3 would have the potential to result in installation of stormwater and wastewater treatment systems on-site, so that the stormwater and greywater would be treated and reused for landscaping.

Installation of water efficient appliances, irrigation systems, and stormwater and grey water capture systems would generally not require the use of heavy equipment that would result in excessive noise impacts. Construction of stormwater and wastewater treatment systems associated with the CAP Update would be regulated by the County Noise Ordinance and require approval of a building permit. In addition, these projects would be required to comply with San Diego County Code Sections 36.408 and 36.409, Construction Equipment, which regulates construction-related noise. Similar to construction of new or expanded solid waste facilities, development of stormwater and wastewater treatment systems 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 to proceed with development. With implementation of the identified 2011 GPU PEIR mitigation measures and existing regulations, temporary and periodic noise impacts would be less than significant.

Excessive Noise Levels (Permanent Operational Noise)

Operations of water and wastewater projects associated with the CAP Update would result in the generation of noise from the usage of equipment typical of this land use type, such as pumps, generators, and utility trucks. These projects would also be subject to Zoning Ordinance Section 6952(f) and Adopted Mitigation Measures Noi-1.1, Noi-1.3, and Noi-2.4, which are intended to reduce any potential exposure of sensitive receptors to excessive levels of noise. Water and wastewater measures and actions would result in less-than-significant permanent noise impacts.

Agriculture and Conservation Measures and Actions

Excessive Noise Levels (Temporary Construction Noise)

Implementation of Measures A-1 through A-2 and associated implementing actions would involve acquiring and managing conservation lands, preserving natural and agricultural lands, planting and protecting trees, and providing incentive to encourage carbon farming. These projects would result in preservation of existing natural, conservation, and agricultural lands and would not require construction activities.

Implementation of Action A-4.1.b would have the potential to result in new farmworker housing in the unincorporated county, if opportunities to increase farmworker housing in the unincorporated area are identified. Development of farmworker housing could involve the use of heavy equipment for earthmoving, materials processing, vehicle trips during construction/equipment replacement/monitoring activities, possible changes in landform and views, and construction of housing. These activities could result in the exposure of nearby sensitive receptors to noise generated from the use of construction equipment for the construction of farmer housing and the planting of trees. However, because of the scale and nature of the possible projects, which are generally small, localized, and would require relatively little use of heavy-duty construction equipment for short periods of time. construction-related noise is not anticipated to be excessive to the point that it would significantly impact sensitive receptors. 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. Therefore, temporary construction noise impacts would be less than significant.

Excessive Noise Levels (Permanent Operational Noise)

Under Section 36.417 of the Noise Ordinance, agricultural operations are generally exempt from the noise standards, provided that each piece of equipment and machinery powered by an internal-combustion engine is equipped with an appropriate muffler and air intake silencer in good working order and one of the following applies: operations do not take place between 7:00 p.m. and 7:00 a.m.; the operations and equipment are utilized for the preparation, planting, harvesting, protection, or salvage of agricultural crops during adverse weather conditions; or the operations and equipment are used for agricultural pest control in accordance with regulations and procedures administered by the County Department of Agriculture. Therefore, agricultural operations would not result in a potentially significant impact to noise-sensitive land uses, specifically residential and commercial land uses. Operations associated with tree planting are not likely to cause noise related impacts to sensitive receptors because trees do not typically require prolonged maintenance that would generate excessive noise.

Projects associated with the implementation of the CAP Update would be required to conform with applicable adopted General Plan policies and the 2011 GPU PEIR mitigation measures. Additionally, as stated above, agricultural operations are typically considered exempt from noise standards and operations associated with tree planting are not

expected to generate excessive noise levels for prolonged periods of time such that sensitive receptors would be significantly impacted. Thus, implementation of the agriculture and conservation measures and actions would result in less-than-significant impacts related to the exposure of sensitive receptors to excessive permanent noise levels over the existing environment.

Energy Measures and Actions

Excessive Noise Levels (Temporary Construction Noise)

Implementation of CAP Update energy measures and associated implementing actions would involve implementation of policies, programs, and other mechanisms to increase building energy efficiency, increase the use of renewable energy, and increase electrification in the unincorporated county and County operations. These policies and programs could have the potential to result in the development of various renewable energy projects.

Implementation of CAP Update Measure E-3, Action E-3.2, and Action E-3.3 could result in energy efficiency retrofits on existing residential and non-residential structures and County facilities. These retrofits could include rooftop or ground-mounted photovoltaic (PV) solar arrays or small wind turbines, upgraded mechanical systems, energy storage, and other similar improvements. While the location of improvements associated with potential future projects is unknown it is likely that retrofits would occur in areas of existing development. Renewable energy projects, including on-site renewable energy generation supported through proposed CAP Update Action E-3.2.b, would be regulated by existing County ordinances and policies. The placement of small-scale PV solar renewable energy equipment on new and existing buildings is regulated by the existing County Renewable Energy Zoning Ordinance Section 6954(a). Small-scale wind turbines would be regulated by the County's Wind Energy Ordinance Sections 6950 through 6952.

Implementation of CAP Update Action E-3.3 could result in large-scale wind turbines and solar energy generation systems such as PV and concentrator solar. Large-scale renewable energy infrastructure requires large, undeveloped land that is 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 undeveloped areas due to the scale of the potential renewable energy systems. The large-scale production of energy from PV solar systems generally include a variety of infrastructure components such as arrays, substation sites, battery storage, collection systems, and overhead and underground transmission facilities. Large-scale wind turbine infrastructure generally includes wind turbines (300–500 feet to the topmost blade tip), a substation site, meteorological towers, overhead and underground collector cable systems, and overhead transmission lines. All future large-scale renewable energy projects would be subject to discretionary review and would be evaluated under CEQA, and would be required to mitigate significant impacts as needed.

Excessive noise could result from construction of projects associated with implementation of CAP Update energy measures. Activities such as 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. However, construction activities 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, which sets sound level limits on construction equipment. Adopted General Plan Policy N-6.4 would require non-emergency construction to be limited near noise-sensitive land uses. In addition, 2011 GPU PEIR Mitigation Measures Noi-1.1, Noi-1.3, and Noi-2.4 would require an acoustical study for projects that may result in excessive noise.

With implementation of adopted 2011 GPU PEIR mitigation measures and compliance with adopted General Plan policies and existing regulations, temporary construction noise impacts would remain less than significant.

Excessive Noise Levels (Permanent Operational Noise)

Operation of upgraded mechanical systems, small-scale solar arrays, and small wind turbine systems do not typically generate significant levels of noise during regular operation. Noise would be generated during maintenance activities for these systems but these activities would likely involve small crews (one to two light-duty trucks) and any noise generated would likely be less than the ambient noise of the surrounding developed area. Operational noise from large-scale solar and wind turbine projects include equipment noise from the motors of the wind turbines, substations, maintenance activities, worker vehicle trips to and from the sites, battery storage HVAC systems, and transformers and substation transformers. 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 intermittently for short durations at one location at a time. However, as described above, large-scale renewable systems are typically located in undeveloped areas and therefore are not likely to expose sensitive receptors to significant levels of noise.

In addition to the requirements described above, the County's Wind Energy Ordinance also establishes low-frequency (C-weighted) sound limits for large wind turbine projects. In some cases, a higher C-weighted sound level may potentially create an annoyance; however, there is no published scientific evidence to conclude wind turbine noise could cause adverse health effects (page 2.8-19 of the 2012 Wind Energy Ordinance EIR). All large wind turbine projects would be required to obtain a Major Use Permit (MUP) and be evaluated under CEQA, and the implementation of mitigation would be required 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 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 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. The 2012 Wind Energy Ordinance 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 significant impacts related to annoyance from low-frequency noise from large wind turbines operation.

Built Environment and Transportation Measures and Actions

Excessive Noise Levels (Temporary Construction Noise)

Built environment and transportation measures and actions would implement existing County programs, such as the County's 2019 Electric Vehicle Roadmap and 2023 Green Fleet Action Plan (Action T-1.1) and Active Transportation Program (Action T-5.1). Measure T-6.2 would implement transit-supportive roadway treatments, such as signal communication and curb extensions along County-maintained roadways to optimize traffic flow for transit and pedestrians. Action T-3.1 would result in the installation of publicly available electric vehicle charging stations. Action T-3.1.a would support the transition to clean hydrogen fuel for medium- and heavy-duty vehicles by increasing access to hydrogen fueling infrastructure through streamlined permitting processes and other efforts that could facilitate future infrastructure construction.

Construction activities associated with the implementation of these measures would be similar to those analyzed in the 2011 GPU PEIR and discussed in "Solid Waste Measures and Actions" above. As explained in the 2011 GPU PEIR, implementation of the General Plan policies listed in Section 2.12.2, "Regulatory Framework," and 2011 GPU PEIR Mitigation Measures Noi-1.1, Noi-1.3, and Noi-2.4, which require acoustical analysis for projects may result in excessive noise, would reduce noise levels from these activities. 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. With implementation of adopted 2011 GPU PEIR mitigation measures and compliance with adopted General Plan policies and existing regulations, impacts related to temporary construction noise would be less than significant.

Excessive Noise Levels (Permanent Operational Noise)

The operation of transportation infrastructure improvements (e.g., pedestrian and bicycle paths) would have the potential to result in the reduction of traffic on local roadways. Consequently, these improvements would reduce traffic-generated noise levels and associated exposure to nearby sensitive receptors. The operation of transit-supportive roadway treatments would not be likely to generate excessive levels of noise because the improvements would only act to improve traffic efficiency on existing roadways and would

not result in new sources of noise. Measures and actions such as promoting the use of alternative fuels, increasing the County's Green Fleet, and implementation of anti-idling policies, would not increase noise during operation. As stated above, construction activities associated with the implementation of these measures would be similar to those analyzed in the 2011 GPU PEIR and would therefore be subject to the adopted General Plan policies and 2011 GPU PEIR mitigation measures that would further reduce noise levels from these activities. Therefore, implementation of built environment and transportation actions and measures would not result in significant impacts related to excessive noise.

Summary

The CAP Update would further existing programs and provide new and modified infrastructure in new and established communities to reduce GHG emissions. Implementation of adopted General Plan policies and 2011 GPU PEIR mitigation measures would reduce the project impacts associated with excessive noise. Consistent with the 2011 GPU PEIR, impacts related to excessive noise from construction associated with implementation of the solid waste, water and wastewater, agriculture and conservation, energy, and built environment and transportation measures and actions in the CAP Update would be less than significant with mitigation. Impacts related to excessive noise from operation of projects associated with implementation of the solid waste, water and wastewater, agriculture and conservation, energy, and built environment and transportation measures and actions in the CAP Update would remain significant and unavoidable, consistent with the conclusions in the 2011 GPU PEIR. Implementation of the CAP Update would not result in new or more severe impacts than disclosed in the 2011 GPU PEIR.

2.12.3.4 Issue 2: Excessive Groundborne Vibration

This section describes potential project impacts on excessive groundborne vibration with implementation of the proposed CAP Update measures and actions.

Guidelines for Determination of Significance

Appendix G of the State CEQA Guidelines established the following guideline for determining significance of effects related to excessive groundborne vibration:

result in generation of excessive groundborne vibration or groundborne noise levels.

The CEQA thresholds provided by the *County of San Diego Guidelines for Determining Significance: Noise* (County of San Diego 2009) state that a significant impact would occur if the project 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).

A 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.

These thresholds are consistent with the guidelines for determination of significance for Issue 2 applied in the 2011 GPU PEIR.

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 General Plan 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 General Plan goals and policies; and specific mitigation measures/implementation programs identified in the 2011 GPU PEIR. Specific policies related to vibration and noise are listed above under Section 2.12.2, "Regulatory Framework." Specific mitigation measures identified in the 2011 GPU PEIR include Mitigation Measure Noi-2.1 (requiring groundborne vibration study for applicable land use designations), Mitigation Measure Noi-2.2 (reviewing the Guidelines for Determining Significance to incorporate standards to minimize groundborne vibration), Mitigation Measure Noi-2.3 (ensuing industrial facilities are located in areas that would minimize impacts to noise-sensitive land uses), and Mitigation Measure Noi-2.4 (requiring an acoustical study for projects that may result in a significant noise impact). With implementation of mitigation measures and compliance with adopted General Plan policies and existing regulations, 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 (pages 2.11-19 through 2.11-23 and 2.11-35 to 2.11-36) and it is herein incorporated by reference.

CAP Impact Analysis

Solid Waste Measures and Actions

Implementation of CAP Update Measures SW-1 through SW-4 and associated implementing actions have the potential to result in the construction of new or expanded solid waste facilities. Construction of new or expanded solid waste facilities would have the potential to result in excessive vibration levels. 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 to 109 vibration decibels (VdB) and from 0.003 to 0.089 in/sec peak particle velocity (PPV) at 25 feet. While large-scale construction is not expected, it is possible 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 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. These facilities could be located in rural areas or in proximity to developed communities, near roadways or commercial areas, or in remote areas. All development projects would be required to perform an acoustical analysis as required by 2011 GPU PEIR Mitigation Measures Noi-2.1 and Noi-2.4 and would be required to be determined consistent with land use compatibility guidelines to proceed with development and conduct acoustical studies for projects that may result in significant noise impact. Adopted General Plan Policy N-3.1 would require the use of appropriate guidelines to limit the extent of exposure that sensitive uses may have to groundborne vibration from construction equipment and other sources. Further, these projects would be regulated by the County Noise Ordinance and would be required to comply with all applicable noise guidelines.

With implementation of adopted 2011 GPU PEIR mitigation measures and compliance with adopted General Plan policies and existing regulations, implementation of the CAP Update measures and actions would result in less-than-significant vibrational noise impacts.

Water and Wastewater Measures and Actions

Implementation of CAP Update Measures W-1 through W-3 and associated implementing actions would involve development of policies and programs to encourage water conservation and increase water and wastewater efficiency. Implementation of CAP Update Measures W-1 and W-2 would have the potential to result in installation of water efficient appliances, smart irrigation systems, and stormwater and greywater capture systems. Implementation of CAP Update Measure W-3 would have the potential to result in installation of stormwater and wastewater treatment systems on site, so that the stormwater and greywater would be treated and reused for landscaping.

Installation of water efficient appliances, irrigation systems, and stormwater and greywater capture systems would result in no or minimal ground disturbance and would generally not require the use of heavy equipment that would result in vibration impacts.

Construction of stormwater and wastewater treatment systems on-site may require the use of heavy-duty construction equipment including bulldozers and trucks. Blasting or pile driving would not be anticipated to be needed. Per the 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. The stormwater and wastewater treatment systems would likely be located within developed communities or within proposed development. All development projects would be required to perform an acoustical analysis as required by 2011 GPU PEIR Mitigation Measures Noi-2.1 and Noi-2.4 would be required to be determined consistent with land use compatibility guidelines to proceed with development and conduct acoustical studies for projects that may result in significant noise impact. Adopted General Plan Policy N-3.1 would require the use of appropriate guidelines to limit the extent of exposure that sensitive uses may have to groundborne vibration from construction equipment and other sources. In addition, these projects would be regulated by the County Noise Ordinance and would be required to comply with all applicable noise guidelines.

With implementation of 2011 GPU PEIR mitigation measures and compliance with adopted General Plan policies and existing regulations, implementation of the water and wastewater projects associated with the CAP Update would result in less-than-significant vibrational noise impacts.

Agriculture and Conservation Measures and Actions

Implementation of CAP Update Measures A-1 through A-2 and associated implementing actions would involve acquiring and managing conservation lands, planting and protecting trees, providing incentive to encourage carbon farming, and developing a program to incentivize transition to cleaner fuels. These measures would result in new conservation lands, preservation of existing natural and agricultural lands, new trees, and the use of cleaner fuels in the unincorporated county. These projects would not require the use of heavy equipment that would result in vibration impacts.

Implementation of Action A-4.1.b would result in evaluation of opportunities to increase affordable farmworker housing in the unincorporated county. If development of new farmworker housing results from opportunities identified through implementation of this action, such development would require construction and the use of heavy-duty construction equipment that may result in vibration impacts. Similar to development of new or expanded solid waste facilities, development of farmworker housing would be required to perform an acoustical analysis as required by 2011 GPU PEIR Mitigation Measures Noi-2.1 and Noi-2.4 would be required to be determined consistent with land use compatibility guidelines to proceed with development and conduct acoustical studies for projects that may result in significant noise impact. The adopted General Plan Policy N-3.1 would require the use of appropriate guidelines to limit the extent of exposure that sensitive uses may have to groundborne vibration from construction equipment and other sources. In addition, these projects would be regulated by the County Noise Ordinance and would be required to comply with all applicable noise guidelines. 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.

With implementation of 2011 GPU PEIR mitigation measures and compliance with adopted General Plan policies and existing regulations, implementation of the water and wastewater projects associated with the CAP Update would result in less-than-significant vibrational noise impacts.

Energy Measures and Actions

Implementation of the CAP Update would generally result in energy efficiency retrofits on existing residential and non-residential structures and County facilities. Through Action E-3.2.b, the County would work with partners to promote and support renewable energy generation and storage (microgrids, site-specific and/or community scale, and large-scale) to increase renewable energy generation and use in the unincorporated area.

Implementation of renewable energy projects associated with the CAP Update may require the use of heavy-duty construction equipment including drills, bulldozers and trucks, which would have the potential to result in temporary groundborne vibration. Future development associated with the CAP Update would be required to perform an acoustical analysis as required by 2011 GPU PEIR Mitigation Measures Noi-2.1 and Noi-2.4 would be required to be determined consistent with land use compatibility guidelines to proceed with development and conduct acoustical studies for projects that may result in significant noise impact. The adopted General Plan Policy N-3.1 would require the use of appropriate guidelines to limit the extent of exposure that sensitive uses may have to groundborne vibration from construction equipment and other sources. In addition, these projects would be regulated by the County Noise Ordinance and would be required to comply with all applicable noise guidelines. With implementation of the identified 2011 GPU PEIR mitigation measures and compliance with existing regulations.

With implementation of 2011 GPU PEIR mitigation measures and compliance with adopted General Plan policies and existing regulations, implementation of the energy projects associated with the CAP Update would result in less-than-significant vibrational noise impacts.

Built Environment and Transportation Measures and Actions

The built environment and transportation measures and actions would implement existing County programs, such as the County's 2019 Electric Vehicle Roadmap and 2023 Green Fleet Action Plan (Action T-1.1) and Active Transportation Program (Action T-5.1). Other measures and actions would affect the design of existing and planned roadways. Action T-6.2 would implement transit-supportive roadway treatments such as signal communication and curb extensions along County-maintained roadways to optimize traffic flow for transit and pedestrians. Action T-3.1 would result in the installation of publicly available electric vehicle charging stations. Action T-3.1.a would support the transition to <u>clean</u> hydrogen fuel for medium- and heavy-duty vehicles by increasing

access to hydrogen fueling infrastructure through streamlined permitting processes and other efforts that could facilitate future infrastructure construction.

Installation of signal communication, curb extension, and electric vehicle charging stations would not require blasting or pile driving. However, other types of construction equipment that would result in groundborne vibration may be required to install signals and curb extensions, such as loaded trucks, drills, or bulldozers. All development projects would be required to perform an acoustical analysis as required by 2011 GPU PEIR Mitigation Measures Noi-2.1 and Noi-2.4 would be required to be determined consistent with land use compatibility guidelines to proceed with development and conduct acoustical studies for projects that may result in significant noise impact. The adopted General Plan Policy N-3.1 would require the use of appropriate guidelines to limit the extent of exposure that sensitive uses may have to groundborne vibration from construction equipment and other sources. Further, these projects would be regulated by the County Noise Ordinance and would be required to comply with all applicable noise guidelines. 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.

With implementation of 2011 GPU PEIR mitigation measures and compliance with adopted General Plan policies and existing regulations, implementation of the built environment and transportation projects associated with the CAP Update would result in less-than-significant vibrational noise impacts.

Summary

Implementation of the CAP Update would result in development of new or modified facilities and structures (e.g., new or expanded solid waste facilities, water and wastewater infrastructure and efficiency improvements, and small-scale renewable energy infrastructure). Development of new or modified facilities and structures could involve the use of limited heavy-duty equipment that would result in groundborne vibration. However, the 2011 GPU PEIR Mitigation Measures Noi-2.1 and Noi-2.4 would be required to be determined consistent with land use compatibility guidelines to proceed with development and conduct acoustical studies for projects that may result in significant noise impacts. Adopted General Plan Policy N-3.1 would limit the extent of exposure that sensitive uses may have to groundborne vibration from construction equipment and other sources. Therefore, consistent with the 2011 GPU PEIR, impacts related to excessive groundborne vibration associated with implementation of the solid waste, water and wastewater, agriculture and conservation, energy, and built environment and transportation measures and actions in the CAP Update would remain less than significant with mitigation, consistent with the conclusions in the 2011 GPU PEIR. Implementation of the CAP Update would not result in new or more severe impacts than disclosed in the 2011 GPU PEIR.

2.12.3.5 Issue 3: Excessive Noise Exposure from a Public or Private Airport

This section describes potential project impacts related to exposing people to excessive noise levels from a public or private airport.

Guidelines for Determination of Significance

Appendix G of the State CEQA Guidelines establishes the following guideline for determining significance of effects related to excessive noise exposure from a public or private airport:

 For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, the project would expose people residing or working in the project area to excessive noise level.

The County does not have specific guidelines for determining the significance of impacts related to aircraft noise; therefore, the above threshold from Appendix G of the State CEQA Guidelines is applied for the following analysis. Based on Appendix G of the State CEQA Guidelines and the California Airport Land Use Planning Handbook, the CAP Update would have a significant impact if it would expose people residing or working in the project area to excessive noise levels from a public airport. The level of noise acceptable to new development in the vicinity of proposed new airports, active military airports being converted to civilian use, and existing civilian airports is established as an annual CNEL of 60 dBA.

Impact Analysis

2011 GPU PEIR Determination

The 2011 GPU PEIR evaluated excessive noise exposure from a public or private airport associated with the implementation of the General Plan. The 2011 GPU PEIR concluded that the General Plan includes land use designations that would potentially result in the development of noise-sensitive land uses near a public or private airstrip, which would result in the exposure of persons to excessive noise levels. However, the impacts would be reduced to less than significant with implementation of adopted General Plan Policies N-4.9 (Airport Compatibility), S-15.1 (Land Use Compatibility), S-15.2 (Airport Operation Plans), and S-15.4 (Private Airstrip and Heliport Location) and implementation of Adopted Mitigation Measure Noi-5.1 (submitting projects that are within the AIA to the SDCRAA for review) and Adopted Mitigation Measure Noi-5.3 (assessing noise impacts from private airports and helipads).

CAP Impact Analysis

As discussed in Section 2.12.1.2, "Transportation Noise Generators," there are seven public airports and 29 small private airstrips scattered throughout the unincorporated

county. Public airports and private airstrips have the potential to result in excessive noise impacts to people residing or working in the project area from activities such as aircraft takeoffs and landings. The CAP Update does not propose any new public airports or private airstrips. However, projects associated with the CAP Update would have the potential to expose people residing or working in the project area to excessive noise impacts from an existing public airport or private airstrip. Specific locations for potential projects have not been identified. Therefore, the following sections provide a programmatic level analysis for potential impacts resulting from implementation of various types of the CAP Update measures and associated implementing actions.

Solid Waste Measures and Actions

The CAP Update includes zero waste policies that exceed the state's diversion targets (Actions SW-1.1 and SW-2.1) and implementation of landfill gas capture systems that exceed State requirements (Actions SW-3.1 and SW-4.1). In addition, Action SW-4.1.a would incentivize the development of new composting/anaerobic digestion facilities and on-farm digesters. Implementation of the measures and actions in this group may result in the need for new or expanded facilities to process the waste and result in the development of new or expanded solid waste facilities.

The specific locations for the new or expanded solid waste facilities have not been determined. If the new or expanded solid waste facilities are located within the vicinity of a private airstrip or an airport land use plan, 2 miles of a public airport, or the 60 dBA annual CNEL noise contour of a public airport, impacts to people at these facilities could occur. Future projects associated with implementation of the CAP Update would be required to comply with adopted General Plan Policy N-4.9, which requires noise compatibility of any projects that may be affected by noise from public or private airports, and Policy S-15.117.2, which requires land uses surrounding airports to be compatible with the operation of each airport. In addition, future development associated with CAP Update would be required to implement 2011 GPU PEIR Mitigation Measure Noi-5.1. which requires any projects within the AIA be submitted to the SDCRAA for review, and Mitigation Measure Noi-5.3, which requires consultation with the FAA standards and the County Noise Ordinance for assessing noise impacts. Compliance with the adopted General Plan policies and implementing 2011 GPU PEIR mitigation measures would ensure that future development would not result in excessive noise exposure from a public or private airport. Impacts would be less than significant.

Water and Wastewater Measures and Actions

Implementation of CAP Update Measures W-1 through W-3 would involve development of policies and programs to encourage water conservation and increase water and wastewater efficiency. Implementation of Measures W-1 and W-2 would generally result in installation of water efficient appliance, smart irrigation systems, and stormwater and grey water capture systems. Implementation of Measure W-3 would have the potential to result in installation of stormwater and wastewater treatment systems on-site, so that the stormwater and greywater would be treated and reused for landscaping.

Installation of water efficient appliances, irrigation systems, stormwater and grey water capture systems, and on-site stormwater and wastewater treatment systems would require additional employees to be present temporarily to install related improvements. However, such facilities likely would not require additional short- or long-term employees that could be exposed to airport noise. Further, existing and proposed development would be covered by ALUCPs which are intended to minimize the public's exposure to excessive noise within areas around public airports and designate compatible and incompatible land uses surrounding the airport. As such, potential water and wastewater projects would result in less-than-significant impacts related to exposing people to excessive noise levels from a public or private airport.

Agriculture and Conservation Measures and Actions

Implementation of CAP Update Measures A-1 through A-2 would involve acquiring and managing conservation lands, preserving natural and agricultural lands, planting and protecting trees, and incentivizing carbon farming. Implementation of Action A-4.1.b would have the potential to identify opportunities for increased farmworker housing in the unincorporated county. Acquiring and preserving conservation, natural, and agricultural lands, protecting and planting trees, and incentivizing carbon farming would not result in people residing or working in the area on a long-term basis. Therefore, no impact related to excessive noise levels from a public or private airport would occur.

Development of farmworker housing (if opportunities to increase farmworker housing in the unincorporated area are identified) would have the potential to expose people residing or working in the area to excessive noise from a public or private airport if the housing is located within the vicinity of a private airstrip or an airport land use plan, 2 miles of a public airport, or the 60 dBA annual CNEL noise contour of a public airport. Development of new farmworker housing associated with CAP Update would be required to comply with adopted General Plan Policy N-4.9, which reduces potential noise impacts to noise-sensitive land uses, and Policies S-15.1, S-15.2, and S-15.4S-17.2, S-17.3 and S-17.5, which require land uses surrounding airports to be compatible with airport operations. In addition, new farmworker housing projects that result from implementation of CAP Update Action 4.1.b would be required to implement 2011 GPU PEIR Mitigation Measure Noi-5.1, which requires any projects that are within an AIA to be submitted to the SDCRAA for review. Compliance with the adopted General Plan policies and implementing 2011 GPU PEIR mitigation measures would result in less-than-significant noise exposure from a public or private airport.

Energy Measures and Actions

Implementation of CAP Update Measure E-2 could result in energy efficiency retrofits on existing residential and non-residential structures and County facilities. These retrofits could include rooftop or ground-mounted PV solar arrays or small wind turbines, upgraded mechanical systems, large-scale renewable energy projects (e.g., solar and wind energy systems), and other similar improvements.

Implementation of the energy measures and actions does not include the development of noise-sensitive land uses and would not expose people to excessive noise levels due to the proximity of a public or private airport. Therefore, no impacts related to exposing people to excessive noise levels from a public or private airport would occur.

Built Environment and Transportation Measures and Actions

Built environment and transportation measures and actions would implement existing County programs, such as the County's 2019 Electric Vehicle Roadmap and 2023 Green Fleet Action Plan (Action T-1.1) and Active Transportation Program (Action T-5.1). Other measures and actions would affect the design of existing and planned roadways. Measure T-6.2 would implement transit-supportive roadway treatments, such as signal communication and curb extensions along County-maintained roadways to optimize traffic flow for transit and pedestrians. Action T-3.1 would result in the installation of publicly available electric vehicle charging stations. Action T-3.1.a would support the transition to clean hydrogen fuel for medium- and heavy-duty vehicles by increasing access to hydrogen fueling infrastructure through streamlined permitting processes and other efforts that could facilitate future infrastructure construction.

Because of the nature of proposed transportation infrastructure improvements (i.e., limited size, along existing roadways, and within existing parking structures), it is likely that most infrastructure improvements would occur within existing developed residential and commercial centers throughout the county or as part of new development as it is approved. Residential and commercial centers have the low potential for noise impacts from airports because these land uses have been developed or would be developed to comply with noise standards from applicable ALUCPs to minimize the public's exposure to excessive noise within areas around public airports. In addition, as explained in the 2011 GPU PEIR, implementation of the General Plan policies listed above in Section 2.12.2, "Regulatory Framework," and implementation of 2011 GPU PEIR Mitigation Measure Noi-5.1 (using applicable ALUCP as guidance for project located in an AIA) and Mitigation Measure Noi-5.3 (assessing noise impacts from private airports and helipads) would ensure that new development would not expose people to excessive noise levels from a public or private airport. This impact would be less than significant with mitigation.

Summary

The CAP Update would further existing programs and provide new and modified infrastructure in new and established communities to reduce GHG emissions. Implementation of 2011 GPU PEIR mitigation measures and adopted General Plan policies would reduce the potential impacts associated with excessive noise levels from a public and private airport. Although the locations of most projects that would be constructed to achieve the targets of the CAP Update are unknown, it is reasonable to assume that development would be consistent with applicable ALUCPs, would be subject to compliance with adopted General Plan Policies N-4.9, S-15.1, S-15.2, and S-15.4S-17.2, S-17.3, and S-17.5, and would be required to implement 2011 GPU PEIR Mitigation Measures Noi-5.1 through Noi-5.3. Consistent with the 2011 GPU PEIR, impacts related to excessive noise levels from a public or private airport associated with implementation

of the solid waste, water and wastewater, agriculture and conservation, energy, and built environment and transportation measures and actions in the CAP Update would be less than significant with mitigation. Implementation of the CAP Update would not result in new or more severe impacts than disclosed in the 2011 GPU PEIR.

2.12.3.6 Cumulative Impact Analysis

The cumulative impact analysis study area for noise in the 2011 GPU PEIR was identified as the areas surrounding noise-generating sources, such as roadways and agricultural or industrial uses (as described on page 2.11-34 of the 2011 GPU PEIR). This analysis uses the same scope identified in the 2011 GPU PEIR. The scope and approach to the cumulative impact analysis are described in the "Cumulative Impact Assessment Overview" section in the introduction to this chapter.

Issue 1: Excessive Noise Levels

Cumulative impacts could result if the physical improvements that result from implementation of the CAP Update interact with development associated with buildout of the County's General Plan or other regional development, as anticipated in the 2021 Regional Plan, and increase those impacts.

The 2011 GPU PEIR concludes that buildout of the General Plan would result in significant cumulative impacts associated with excessive noise levels and permanent increases in ambient noise levels and would not result in significant cumulative impacts related to temporary increases in ambient noise levels. With implementation of mitigation from the 2011 GPU PEIR and compliance with the adopted General Plan policies, the buildout of the General Plan would result in less-than-significant cumulative impacts related to excessive construction noise levels and significant and unavoidable cumulative impacts related to permanent increases in ambient noise levels.

Implementation of the CAP Update would have the potential to result in construction of new or expanded solid waste facilities, renewable energy infrastructure, and transportation facilities in the unincorporated county. As discussed in Section 2.12.3.3, "Issue 1: Excessive Noise Levels," all new development would be required to implement 2011 GPU PEIR Mitigation Measures Noi-1.1, Noi-1.3, and Noi-2.4, which would ensure that new development would be consistent with land use compatibility guidelines. With implementation of the identified 2011 GPU PEIR mitigation measures, the project would result in less-than-significant impacts related to noise resulting from operation of the potential new development.

However, as discussed above, operational sources of low-frequency noise associated with CAP Update Action E-3.3 would be potentially significant because it is possible for a noise waiver to be granted for large wind turbines subject to specific conditions. The noise associated with operation of large wind turbines could combine with other low-frequency noise in the environment to result in cumulative increases above ambient noise levels. Thus, this action could result in excessive noise levels over the existing condition.

The CAP Update would result in a considerable contribution to an existing cumulative effect related to permanent increase in ambient noise levels. The cumulative impact would be significant, consistent with the conclusion in the 2011 GPU PEIR. This **would not be a new or more severe impact** than disclosed in the 2011 GPU PEIR.

Issue 2: Excessive Groundborne Vibration

The 2011 GPU PEIR concluded cumulative impacts associated with groundborne vibration would be potentially significant because the General Plan 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, the buildout of the General Plan would result in less-than-significant cumulative impacts related to excessive groundborne vibration.

As discussed in Section 2.12.3.4, "Issue 2: Excessive Groundborne Vibration," above, vibrational noise associated with implementation of the project would not be significant with implementation of 2011 GPU PEIR Mitigation Measures Noi-2.1 and Noi-2.4 and compliance with adopted General Plan Policy N-3.1 and existing regulations. Given the nature of the improvements that would occur with implementation of the CAP Update (e.g., new or expanded solid waste facilities, water and wastewater infrastructure and efficiency improvements, renewable energy infrastructure, and transportation infrastructure improvements), implementation of the CAP Update measures and actions would not result in significant impacts related to excessive groundborne vibration. Similar to the conclusions of the 2011 GPU PEIR, the project would not result in an incremental effect that would result in a significant cumulative impact. The impact would be less than significant. This would not be a new or more severe impact than disclosed in the 2011 GPU PEIR.

Issue 3: Excessive Noise from a Public or Private Airport

The 2011 GPU PEIR concludes that development associated with buildout of the General Plan would result in a potentially significant cumulative impact related to aircraft noise. However, with implementation of mitigation from the 2011 GPU PEIR and adopted General Plan policies, buildout of the General Plan would result in a less-than-significant cumulative impact related to excessive noise exposure from airports.

As discussed in Section 2.12.3.5, "Issue 3: Excessive Noise Exposure from a Public or Private Airport," above, excessive noise from a public or a private airport associated with implementation of the project would not be significant with implementation of 2011 GPU PEIR Mitigation Measure Noi-5.1 and compliance with adopted General Plan Policies N-4.9, S-15.1, S-15.2, and S-15.4S-17.2, S-17.3, and S-17.5. In addition, future development that has the potential to be exposed to excessive noise from airports (i.e., farmworker housing) would be required to be consistent with applicable ALUCPs, which minimize the public's exposure to excessive noise within areas around public airports. Given the nature of the projects that would be implemented as part of the CAP Update and the fact that impacts resulting from the proposed CAP Update measures and actions would not result in significant impacts related to excessive noise from a public or private

airport, the project would not result in a substantial incremental effect that would result in a significant cumulative impact. The impact would be less than significant. This **would not be a new or more severe impact** than disclosed in the 2011 GPU PEIR.

2.12.4 Summary of New or More Severe Significant Impacts

Implementation of the CAP Update would not result in new or more severe significant impacts related to construction and operational noise, groundborne vibration, or airport noise exposure.

2.12.5 Mitigation Measures

The following section lists the mitigation measures from the 2011 GPU PEIR that are applicable to the proposed project. No new mitigation measures have been proposed to avoid or minimize noise impacts resulting from the proposed project.

2.12.5.1 Issue 1: Excessive Noise Levels

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

Adopted Mitigation Measure 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).

Adopted Mitigation Measure 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.

Adopted Mitigation Measure 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.

As described above in Section 2.12.3.3, even with implementation of the General Plan 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-level and cumulative impacts related to excessive noise from large-scale wind turbines could occur because noise waivers could be provided under certain circumstances. 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 on large-scale wind turbine projects. However, this mitigation was rejected as infeasible because it may reduce the effectiveness of CAP Update Action E-3.3 and achievement of the County's 2030 GHG emissions reduction target. The number and types of renewable large-scale wind energy facilities that would be required to meet the GHG reduction goals of the CAP is unknown 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 General Plan policies, 2011 GPU PEIR mitigation measures, Noise Compatibility Guidelines, General Plan Noise Element noise standards, and the Noise Ordinance is available.

2.12.5.2 Issue 2: Excessive Groundborne Vibration

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

Adopted Mitigation Measure 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.

Adopted Mitigation Measure 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.

2.12.5.3 Issue 3: Excessive Noise from a Public or Private Airport

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

Adopted Mitigation Measure 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.

Adopted Mitigation Measure 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.

2.12.6 Significance Conclusions

2.12.6.1 Issue 1: Excessive Noise Levels

The CAP Update would further existing programs and provide new and modified infrastructure in new and established communities to reduce GHG emissions. Implementation of adopted General Plan policies and 2011 GPU PEIR mitigation measures would reduce the project impacts associated with the excessive noise levels. However, it is possible for a noise waiver to be granted for a large-scale wind turbine project within the designated Noise Waiver Area on the Wind Resources Map, subject to specific conditions. Consistent with the Wind Energy EIR, the development of large wind turbines under the proposed project would result in a significant and unavoidable impact related to low-frequency noise. Therefore, the development of large wind turbines associated with the CAP Update could combine with existing low-frequency noise in the environment to result cumulative increases above ambient for low-frequency noise levels. As such, the project would contribute to a cumulatively considerable impact. The project's impact related to excessive noise levels would be **significant and unavoidable** and the project **would result in a considerable contribution** to a significant cumulative impact. This **would not be a new or more severe impact** compared to the 2011 GPU PEIR.

2.12.6.2 Issue 2: Excessive Groundborne Vibration

Implementation of the CAP Update may result in development with the potential to generate groundborne vibration during construction. Implementation of these projects would be within the scope of proposed development und the build out of the General Plan evaluated in the 2011 GPU PEIR. Based on the type of subsequent projects anticipated, implementation of the CAP Update is not expected to generate excessive groundborne vibration. Implementation of adopted General Plan policies and 2011 GPU PEIR mitigation measures would reduce the project impacts associated with excessive groundborne vibration. The project's impacts related to excessive groundborne vibration from development would remain less than significant with mitigation and the project would not result in a considerable contribution to a significant cumulative impact. Implementation of the CAP Update would not result in a new significant impact not discussed in the 2011 GPU PEIR or a substantial increase in the severity of the previously identified significant effect. This would not be a new or more severe impact compared to the 2011 GPU PEIR.

2.12.6.3 Issue 3: Excessive Noise from a Public or Private Airport

The CAP Update would further existing programs and provide new and modified infrastructure in new and established communities to reduce GHG emissions. Implementation of adopted General Plan policies and 2011 GPU PEIR mitigation measures would reduce the project impacts associated with excessive noise from a public or private airport. The project's impacts related to excessive noise from a public or private airport would remain less than significant with mitigation and the project would not result in a considerable contribution to a significant and unavoidable cumulative impact. Implementation of the CAP Update would not result in a new significant impact not discussed in the 2011 GPU PEIR or a substantial increase in the severity of the previously identified significant effect. This would not be a new or more severe impact compared to the 2011 GPU PEIR.

For Document Production use. Please do not remove File Contents

2.12	Noise	2.12-1
	2.12.1 Existing Conditions	2.12-2
	2.12.2 Regulatory Framework	
	2.12.3 Analysis of Effects and Significance Determinations.	
	2.12.4 Summary of New or More Severe Significant Impacts	
	2.12.5 Mitigation Measures	. 2.12-33
	2.12.6 Significance Conclusions	

Appendices

Exhibits

No table of contents entries found.

Tables

TABLE 2.12-1 SUMMARY OF NOISE-RELATED IMPACTS2.12-1

Acronyms/Abbreviations

Moved to TOC 10/13 mm

California Natural Resources Agency 2018
County of San Diego 2009
County of San Diego 2012
Smith 2022
SWRCB 2015