4.8 Noise

4.8.1 Abstract

Existing sources of noise in Monterey County include highways, airports, railroads, industrial areas, agricultural areas and recreational venues. The predominant source of noise in the county is vehicular traffic on roads and highways. Aviation noise is emitted from the four general aviation airports, two military airstrips, and numerous private airstrips and helipads in the county. Motor sports events at Laguna Seca Raceway also produce substantial noise.

Development and land use activities associated with the 2007 General Plan would expose noise-sensitive land uses to noise from the following sources:

- **Mobile source noise**—Noise from mobile sources (traffic) would potentially exceed established noise thresholds. Implementation of 2007 General Plan policies would reduce this impact to a less than significant level.
- **Vibration**—Ground-borne vibration created by construction activities associated with the 2007 General Plan would potentially adversely affect nearby land uses. Implementation of 2007 General Plan policies would reduce this impact to a less than significant level.
- **Construction-related noise**—Noise emitted during construction activities associated with the 2007 General Plan would potentially exceed established noise thresholds. Implementation of 2007 General Plan policies would reduce this impact to a less than significant level.
- **Aviation noise**—Noise from aviation activities would potentially exceed established noise thresholds. Implementation of 2007 General Plan policies, as well as state and federal regulations, would reduce this impact to a less than significant level.
- **Stationary Source Noise**—Noise from stationary sources (e.g., industrial, agricultural, and recreational) would potentially exceed established noise thresholds. Implementation of 2007 General Plan policies would reduce this impact to a less than significant level.

All impacts would be less than significant with implementation of the 2007 General Plan, Area Plan, and Community Area policies and would not require mitigation.

4.8.2 Introduction

This section identifies and evaluates issues related to noise in the 2007 General Plan action area. The "Environmental Setting" discussion below describes the current setting of the 2007 General Plan action area. The purpose of this

information is to establish the existing environmental context by which the reader can then understand the environmental changes caused by the proposed action. The environmental setting information is intended to be relevant to the subsequent discussion of impacts.

The environmental changes associated with the implementation of the 2007 General Plan are discussed under "Impact Analysis." This section identifies impacts, describes how they would occur, and prescribes mitigation measures to reduce significant impacts, if necessary.

4.8.3 Concepts and Terminology

4.8.3.1 Noise Defined

"Sound" is mechanical energy transmitted by pressure waves in a compressible medium such as air. "Noise" is generally defined as unwanted sound. Sound is characterized by various parameters that describe the rate of oscillation of sound waves, the distance between successive troughs or crests, the speed of propagation, and the pressure level or energy content of a given sound wave. The rate of oscillation of sound waves is the frequency of the wave. High pitched sounds are high frequency and low pitched sounds are low in frequency. In particular, the sound pressure level has become the most common descriptor used to characterize the loudness of an ambient sound level. The unit of sound pressure measured to the faintest sound detectable by a keen human ear is called a "decibel" (dB).

Because sound or noise levels can vary in intensity by over one million times in the range of human hearing, a logarithmic loudness scale, similar to the Richter scale used for earthquake magnitude, is used to keep sound intensity numbers at a convenient and manageable level. Because human hearing is less sensitive to low frequency sound energy than to high frequency sound energy sound levels used in environmental noise analysis are typically measured using the A-weighted scale. The A-weighted scale de-emphasizes low frequency sound energy in the overall sound level measurement. A-weighted sound levels are written as "dBA." Any further reference to decibels in this report written as "dB" should be understood to be A-weighted values.

Time variations in noise exposure are typically expressed in terms of a steady-state energy level equal to the energy content of the time varying period (called L_{eq}), or, alternately, as a statistical description of the sound pressure level that is exceeded over some fraction of a given observation period. Finally, because community receptors are more sensitive to unwanted noise intrusion during the evening and at night, state law requires that, for planning purposes, an artificial dB increment be added to quiet time noise levels in a 24-hour noise descriptor called the Community Noise Equivalent Level (CNEL).

4.8.3.2 Measuring Noise

Many methods have been developed for evaluating community noise to account for, among other things:

- Variation in noise levels over time;
- Influence of periodic individual loud events; and
- Community response to changes in the community noise environment.

Numerous methods have been developed to measure sound over a specified period of time. These methods include:

- Equivalent Sound Level (L_{eq});
- Community Noise Equivalent Level (CNEL);
- Day/Night Average Sound Level (L_{dn})

These methods are described and defined below.

Equivalent Noise Level

L_{eq} is the measurement of sound energy over a specified time (usually 1 hour) and represents the amount of variable sound energy received by a receptor over a timed interval in a single numerical value. For example, a 1-hour L_{eq} noise level measurement represents the average amount of acoustical energy that occurred in 1 hour. In addition, variations in sound levels may be addressed by statistical methods. The simplest of these are the maximum (L_{max}) and minimum (L_{min}) noise levels, which are the highest and lowest levels observed. Other variations include L_{50}, which identifies the percentage of time that the noise level standard is exceeded during 50% of 1 hour (i.e., 30 minutes) or $L_{25,}$ identifies the percentage of time that the noise level standard is exceeded during 25% of 1 hour (i.e., 15 minutes), etc.

Community Noise Equivalent Level

The CNEL noise metric is based on 24 hours of measurement. It applies a time-weighted factor designed to emphasize noise events that occur during evening

hours (7 p.m. to 10 p.m.) and nighttime hours (10 p.m. to 7 a.m.). Noise produced during evening hours is penalized by 5 dBA while noise that occurs during nighttime hours is penalized by 10 dBA.

Day Night Average

L_{dn} is a measure of the 24-hour average noise level at a given location. It was adopted by the U.S. Environmental Protection Agency (EPA) for developing criteria for the evaluation of community noise exposure. It is based on a measure of L_{eq}. L_{dn} is calculated by averaging L_{eq} for each hour of the day at a given location after penalizing noise occurring during nighttime hours by 10 dBA to account for the increased sensitivity of people to noises that occur at night.

People tend to respond to changes in sound pressure in a logarithmic manner. In general, a 3 dB change in sound pressure level is considered a "just detectable" difference in most situations. A 5 dB change is readily noticeable and a 10 dB change is considered a doubling (or halving) of the subjective loudness. A 3 dB increase or decrease in the average traffic noise level is realized by a doubling or halving of the traffic volume, or by about a 7 mile per hour increase or decrease in speed.

With each doubling of distance from a point source of noise (i.e., a stationary compressor, a stationary loudspeaker, etc.), the sound level will decrease by 6 dB. In other words, if a person is 100 feet from a machine and moves 200 feet from that source, sound levels will drop by approximately 6 dB. Moving 400 feet away, sound levels will drop approximately another 6 dB. For each doubling of distance from a linear source, such as a roadway, noise levels are reduced 3 to 5 dB depending on the ground cover between the source and the receiver.

4.8.3.3 Noise Exposure

An interior CNEL of 45 dB is mandated by the State of California Noise Insulation Standards (California Code of Regulations, Title 24, Part 6, Section T25 28) for multiple-family dwellings and hotel and motel rooms. In 1988, the State Building Standards Commission expanded that standard to include all habitable rooms in residential use, including single-family dwelling units. Since normal noise attenuation within residential structures with closed windows is about 20 dB, an exterior noise exposure of 65 dB CNEL allows the interior standard to be met without any specialized structural attenuation (e.g., dual paned windows). A noise level of 65 dB is also the level at which ambient noise begins to interfere with one's ability to carry on a normal conversation at reasonable separation without raising one's voice. Table 4.8-1 summarizes typical noise sources and noise levels.

Table 4.8-1. Typical Noise Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	— 110 —	Rock band
Jet fly-over at 300 meters (1000 feet)		
	— 100 —	
Gas lawn mower at 1 meter (3 feet)		
	— 90 —	
Diesel truck at 15 meters (50 feet) at 80 kph (50 mph)		Food blender at 1 meter (3 feet)
	— 80 —	Garbage disposal at 1 meter (3 feet)
Noisy urban area, daytime		
Gas lawn mower, 30 meters (100 feet)	**— 70 —**	Vacuum cleaner at 3 meters (10 feet)
Commercial area		Normal speech at 1 meter (3 feet)
Heavy traffic at 90 meters (300 feet)	**— 60 —**	
		Large business office
Quiet urban daytime	**— 50 —**	Dishwasher next room
Quiet urban nighttime	**— 40 —**	Theater, large conference room (background)
Quiet suburban nighttime		
	— 30 —	Library
Quiet rural nighttime		Bedroom at night
	— 20 —	
		Broadcast/recording studio
	— 10 —	
Lowest threshold of human hearing	**— 0 —**	Lowest threshold of human hearing

Source: California Department of Transportation 1998.

4.8.3.4 Noise Attenuation

A solid barrier, such as a concrete masonry wall, located between a noise source and a receiver will typically provide about 5 dB of noise reduction; additional reduction may be achieved by increasing the length and/or height of the barrier. A row of buildings located between a source and a receiver may provide up to 5 dB of noise reduction with up to a 1.5-dB reduction for each additional row up to a maximum reduction of approximately 10 dB. The exact degree of noise

attenuation depends on the nature and orientation of the structure and intervening barriers.

4.8.3.5 Changes in Noise

In community noise assessments, changes in noise levels greater than 3 dB are typically treated as the threshold of a perceptible change, while changes less than 1 dB will typically not be discernible to most people. In the range of 1 to 3 dB, residents who are very sensitive to noise may perceive a slight change. In laboratory testing situations, humans are able to detect noise level changes of slightly less than 1 dB. In a community noise situation, however, noise exposures are over a long period and changes in noise levels occur over years. The level at which changes in community noise levels become discernible is likely to be some value greater than 1 dB; 3 dB appears to be appropriate for most people.

4.8.4 Environmental Setting

4.8.4.1 Existing Noise Sources and Conditions

Major sources of noise in the county include roadways, aviation facilities, railroads, industrial/agricultural land uses, and recreational venues, such as the Laguna Seca Raceway. Noise from each of the sources is discussed below.

Roadways

The predominant source of noise in the county is vehicular traffic on roads and highways. Roadway noise is a function of traffic levels, vehicle mix, and traffic speeds. High traffic volumes generate more noise than low volumes. A vehicle mix with a high percentage of trucks is noisier than a mix composed of mostly passenger automobiles. Higher traffic speeds generate more noise that lower speeds. These variables indicate that roads with high volumes of mixed traffic traveling at high speeds are prime sources of roadway noise.

The roadways with the highest noise levels in the county include:

- U.S. 101
- Highway 1
- Highway 68
- Highway 156
- Blanco Road
- Davis Road

Noise contours greater than 60 dB CNEL extend beyond these roadways onto adjacent land uses. Residential land uses adversely affected by roadway noise of 60 dB CNEL or greater are located along:

- U.S. 101
- Highway 68
- Highway 156
- Laureles Grade Road

Other sensitive land uses exposed to roadway noise in excess of 60 dB CNEL include Toro Regional Park and open space areas along U.S. 101 and Highway 68.

The following exhibits represent existing traffic noise contours in the County. These contours are from the 2006 GP EIR (Monterey County 2006) and are representative of 2008 conditions:

- Exhibit 4.8.3a, Existing Noise Contours Roadways, South County
- Exhibit 4.8.3b, Existing Noise Contours Roadways, North County
- Exhibit 4.8.3c, Existing Noise Contours Roadways, Greater Salinas
- Exhibit 4.8.3d, Existing Noise Contours Roadways, Greater Monterey Peninsula, Carmel Valley and Toro
- Exhibit 4.8.3e, Existing Noise Contours Roadways, Central Salinas Valley

In additional traffic noise modeling along selected roadway segments in the County has been conducted based on updated existing (2008) traffic data. Refer to Table 4.8-3 and the related discussion for a summary of the modeling results.

Aviation Facilities

Four general aviation and commercial airports, two military airstrips, and numerous private airstrips and helipads are located in the county. Below is a description of these facilities.

Monterey Peninsula Airport, located in Monterey, is the largest and busiest commercial airport in the county. The most recent information from the Federal Aviation Administration (FAA) indicates that 91,911 aircraft operations occur annually at the airport. The 65 CNEL runway contour extends into residential areas in Monterey and Del Rey Oaks on the west sides of the airport and commercial areas of Del Rey Oaks on the east side of the airport. These impacts do not extend to unincorporated residential areas.

Salinas Municipal Airport is the second busiest airport in the county and serves commercial and general aviation aircraft. The most recent information from the FAA indicates that 86,657 aircraft operations occur annually at the airport. The

60 CNEL runway contours extend into two residential areas in Salinas on the north and west sides of the airport. These impacts do not extend to unincorporated residential areas.

Marina Municipal Airport is a former Army airfield located near Fort Ord that primarily serves general aviation aircraft. The most recent information from the FAA indicates that 40,000 aircraft operations occur annually at the airport. The 60 CNEL runway contour is mostly contained within the airport's boundaries and does not affect any nearby residential areas.

Mesa del Rey Airport, located near King City, primarily serves general aviation aircraft. The most recent information from the FAA indicates that 3,500 aircraft operations occur annually at the airport. The 60 CNEL runway contour is mostly contained within the airport's boundaries and does not affect any nearby residential areas.

The Schoonver Tactical Air Strip at Fort Hunter Liggett is capable of supporting C-130 Hercules and C-12 Huron operations. Fort Hunter Liggett also contains the Tusi Helipad and the Doolittle Aircraft Training Area, which is used for Close Air Support training by Navy aircraft from Naval Air Station Lemoore in Kings County.

McMillan Airfield at Camp Roberts is capable of supporting C-130 operations. McMillan Airfield is currently used for Unmanned Aerial Vehicle operations and testing.

There are also more than 30 private airstrips, agricultural landing fields, and helipads in the county. Locations of these aviation facilities include Salinas Valley State Prison; the San Ardo oil fields; and hospitals in Monterey, Salinas, and King City.

Exhibit 4.8.1 represents existing aircraft noise contours in the County for Monterey Municipal Airport, Mesa Del Rey Airport, Marina Municipal Airport, Salinas Municipal Airport. These contours are from the 2006 GP EIR (Monterey County 2006) and remain representative of 2008 conditions.

Railroads

The Union Pacific Railroad's Coast Line spans the length of the county, north to south. The Coast Line traverses the unincorporated communities of Aromas, Pajaro, Castroville, Chualar, San Lucas, San Ardo, and Bradley and the cities of Salinas, Gonzales, Soledad, Greenfield, and King City. This line is used primarily for freight traffic, though Amtrak operates a daily train in each direction.

The 14-mile Monterey Branch Line diverges from the Coast Line in Castroville and serves the Monterey Peninsula. This line is currently inactive. A branch line

also diverges off the Coast Line north of Castroville to serve the industrial uses in the Moss Landing area.

Industrial/Agricultural Land Uses

Industrial and/or agricultural processing areas in the unincorporated county include Castroville, Moss Landing, and Pajaro; incorporated cities with industrial areas include Marina, Salinas, Seaside, Soledad, and King City. These areas include a mix of industrial uses and agricultural processing plants. Nearby residential areas and other noise-sensitive uses in these communities may currently experience noise impacts from industrial activities including associated truck traffic. Isolated agricultural processing plants also exist in the Salinas Valley. The San Ardo oil field is also a source of noise. Other potential noise sources include the four landfills in the county, which are located near Marina, Prunedale, Soledad, and King City. The relatively isolated locations of the oil field and the landfills currently limit their impacts on surrounding land uses.

Exhibits 4.8.2a and 4.8.2b provide noise contours for several major stationary noise sources in the County (Monterey County 2006). These contours remain representative of existing 2008 conditions.

Recreational Venues

Laguna Seca Raceway, located near Fort Ord on Highway 68, is an internationally renowned motor sports venue that hosts a number of major racing events on an annual basis. Racing events involve competition between high performance vehicles that emit substantial noise. In addition, these events can attract more than 150,000 spectators and participants over the course of a typical 3-day event, with a corresponding level of spectator and vehicular noise. Exhibit 4.8.2a provides noise contours for Laguna Seca Raceway (Monterey County 2006). These contours are representative of existing 2008 conditions.

The Pebble Beach Resorts, located in the Del Monte Forest, is a world-renowned golf venue that hosts a number of major golf tournaments annually. The Pebble Beach Resorts consist of four 18-hole golf courses: Pebble Beach, Spanish Bay, Spyglass Hill, and Del Monte. Major golf events at Pebble Beach can attract more than 100,000 spectators and participants over a 4-day tournament, with a corresponding level of spectator and vehicular noise.

Regulatory Framework

Monterey County Noise Standards

The County requires that all residential dwelling units, as well as hotels and motels, be designed to meet 45 dB CNEL interior noise standards, as specified in the California Noise Insulation standards.

The existing 1982 General Plan established exterior noise standards for land use compatibility. These standards are summarized in Table 4.8-2.

Table 4.8-2. Existing 1982 General Plan Land Use Compatibility for Exterior Community Noise

	Noise Ranges (Ldn or CNEL), dB			
Land Use Category	I	II	III	IV
Passively used open spaces	50	50-55	55-70	70+
Auditoriums, concert halls	45-50	50-65	65-70	70+
Residential: low-density single family	50-55	55-70	70-75	75+
Residential: multi-family	50-60	60-70	70-75	75+
Transient lodging	50-60	60-70	70-80	80+
Schools, libraries, churches, hospitals	50-60	60-70	70-80	80+
Actively used open spaces: playgrounds, parks	50-67	—	67-73	73+
Golf courses, riding stables, water recreation	50-70	—	70-80	80+
Office buildings, business commercial, professional	50-67	67-75	75+	—
Industrial, manufacturing, utilities, agriculture	50-70	70-75	75+	—

Noise Range I: Normally Acceptable—Specified land use is satisfactory, based on the assumption that any buildings are of normal conventional construction.

Noise Range II: Conditionally Acceptable—New construction or development should be undertaken only after a detailed analysis of noise reduction is made and noise insulation features are included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.

Noise Range III: Normally Unacceptable—New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of noise reduction must be made and noise insulation features must be included in the design

Noise Range IV: Clearly Unacceptable—New construction or development should generally not be undertaken.

Source: County of Monterey 1982.

Section 10.60.030 of the Monterey County Municipal Code relates to the operation of noise-producing devices. This codes section limits noise from any machine, mechanism, device, or contrivance to 85 dBA as measured at a distance of 50 feet. This limit does apply to aircraft or to equipment that is operated in excess of 2,500 feet from any occupied dwelling unit.

4.8.5 Project Impacts

This section describes the CEQA impact analysis relating to noise for the 2007 General Plan. It describes the methods used to determine project impacts and lists the thresholds used to conclude whether an impact would be significant. Measures to mitigate (i.e., avoid, minimize, rectify, reduce, eliminate, or compensate for) significant impacts accompany each impact discussion. The analysis will address implementation of the 2007 General Plan to the 2030 planning horizon, as well as build out in 2092. Development under these two scenarios is described in the Project Description.

4.8.5.1 Thresholds of Significance

The State CEQA Guidelines provide guidance that can be used in determining the significant of noise impacts. The guidelines state that a project would result in a significant noise impact is it would result in:

- Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels;
- A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project;
- A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project;
- Exposure of persons living or working the project area to excessive noise levels (for a project located within an airport land use plan, or where such a plan has not been adopted, within 2 miles of a public airport); or
- Exposure of persons living or working in the project area to excessive noise levels for a project within the vicinity of a private airstrip.

For this impact assessment the following specific thresholds of significance were used.

- Noise from construction activity is considered significant if it would:
  - exceed 85 dBA as measured at 50 feet where the activity is located within 2,500 feet of an occupied dwelling unit.
  - Result in a 10 dB increase at an occupied dwelling unit during daytime hours (7:00 a.m. to 10:00 p.m.)
  - Result in any increase at an occupied dwelling unit during nighttime hours (10:00 p.m. to 7:00 a.m.)
- Where new sources of noise (i.e., new freeway or new industrial facility) are proposed or where new noise sensitive uses (i.e., new residential subdivision)

are proposed , noise from permanent sources of noise such as transportation and industrial sources is considered significant if it would exceeds the "normally acceptable" land use compatibility noise standards in Table 4.8-2.

- A project-related increase in noise are considered significant if project-related increase in noise greater than 3 dB where the with-project noise level is in excess of a "normally acceptable" land use compatibility noise standards in Table 4.8-2. Project-related increases in noise are determined by comparing project conditions to no-project conditions in the same time frame.

4.8.5.2 Impact Analysis

Implementation of the 2007 General Plan to the 2030 and 2092 planning horizons would result in the exposure of noise-sensitive land uses (i.e., noise-sensitive receptors) to new sources of noise from mobile, aviation, construction, and stationary sources. Sensitive receptors would also be exposed to ground-borne vibration from construction activities.

New development associated with the 2007 General Plan would also place noise-sensitive receptors in new locations where noise from the sources listed above would exceed County compatibility standards for noise. New development associated with the 2007 General Plan would also generate increased automobile and truck traffic that would result in substantial increases in noise at noise-sensitive locations.

Mobile Source Noise

Impact N-1: Future development activities associated with the 2007 General Plan would result in exposure of noise sensitive land uses (persons) to traffic noise in excess of County noise standards, or substantial increases in traffic noise. (Less-than-Significant Impact.)

2030 Planning Horizon

Impact of Development with Policies

Implementation of the 2007 General Plan to the 2030 planning horizon would result in new urban development in some undeveloped areas. The areas that would be affected include the Community Areas and Rural Centers due to the anticipated intensification of land uses in these areas. The increased traffic associated with this new development would increase traffic noise along roadways with adjacent noise-sensitive land uses.

Traffic noise has been evaluated using the FHWA Highway Traffic Noise Prediction Model, (Federal Highway Administration FHWA-RD-77-108, 1978) and traffic data provided by the project traffic consultant. The model

uses the number of daily vehicles, vehicle speed, the percentage of traffic that is medium truck and heavy, and the day, evening, night distribution for the calculation of predicted traffic noise levels. Highway 101 and SR1 were assumed to have 5% trucks. All other roadways were assumed to have 2.5% trucks.

Although the date of origin of the FHWA Highway Traffic Noise Prediction Model is 1978, the model is still valid. The more recent FHWA Traffic Noise Model (2002) is only mandated for use on federally funded highway projects. Many in the professional community, including ICF Jones & Stokes' acoustical engineer, consider the older model to be more appropriate for this type of analysis. In addition, the older model was used in the 2006 EIR upon which the existing contours are based.

Table 4.8-3 provides a summary of traffic noise modeling results for a representative set of roadway segments in the county under existing (2008) conditions and 2030 conditions with and without implementation of the 2007 General Plan. Table 4.8-3 compares 2030 no-project conditions and 2030 with-project to existing conditions. It also compares 2030 with-project conditions to 2030 no-project conditions. As can be seen in the comparison of 2030 no-project conditions to 2030 with-project conditions traffic noise is predicted to increase from up to 4 dB without implementation of the project. These increases are the result of background growth that is unrelated to implementation of the project. The comparison of 2030 with-project conditions to existing conditions is a measure of this background growth in combination with the proposed project. The comparison of 2030 with-project conditions to 2030 no-project is the true measure of how implementation of the proposed project will change noise conditions.

The comparison of 2030 with-project conditions to 2030 no-project conditions indicates that implementation of the 2007 General Plan would not increase traffic noise by more than 3 dB along any of the roadway segments evaluated. Accordingly, implementation of the 2007 General Plan is not predicted to result in the exposure of noise sensitive land uses(persons) to substantial increases in noise. Note that traffic noise analysis is different than the typical analysis applied to on-the-ground resources. The direct effect of the project can only be measured by comparing conditions in the same time frame. This is the same approach taken in the 2006 EIR. Existing conditions are illustrated in Exhibits 4.8.1, 4.8.2a and 4.8.2b, and Table 4.8-3 below, allowing the reader to make a comparison, but the significance conclusion is be based on a comparison of project vs. no-project in the same time frame.

The results in Table 4.8-3 also indicate that under the 2007 General Plan new noise-sensitive land uses (persons) would be exposed to traffic noise that exceeds the County's "normally acceptable" land use compatibility standards for noise specified in Table 4.8-2.

Table 4.8-3. Traffic Noise Modeling Results

Segment	Existing L_{dn}	2030 No Project L_{dn}	2030 Cumulative (with Project) L_{dn}	2030 No Project minus Existing	2030 Cumulative with Project minus Existing	2030 Cumulative with Project minus No Project	Buildout L_{dn}	Buildout minus Existing	Buildout Minus 2030 Cumulative with Project
Espinosa Rd to E Boronda Rd	74	75	76	1	2	1	76	2	0
Chualar Rd to Old Stage Rd	72	75	75	3	3	0	77	5	2
SR-183 to SR-156	69	69	71	0	2	2	71	2	0
Del Monte Blvd to Imjin Pkwy	75	75	75	0	0	0	77	2	2
17 Mile Dr to Skyline Forest Dr	67	67	67	0	0	0	68	1	1
Canyon del Rey Blvd to Bit Rd	63	64	64	1	1	0	65	2	1
Spreckels Blvd to E Blanco Rd	67	69	68	2	1	-1	71	4	3
County Road G-15 to Stonewall Canyon Rd	53	54	54	1	1	0	57	4	3
Castroville Blvd to US-101	70	70	70	0	0	0	71	1	1
Cooper Rd to S Davis Rd	67	70	70	3	3	0	71	4	1
US-101 to Cattlemen Rd	45	49	48	4	3	-1	50	5	2
Carlton Dr to SR-68	61	62	62	1	1	0	63	2	1
Salinas Rd to San Miguel Canyon Rd	54	58	58	4	4	0	59	5	1
Strawberry Rd to Castroville Blvd	63	65	67	2	4	2	67	4	0
US-101 to San Lucas Rd	52	55	55	3	3	0	57	5	2
Carmel Rancho Blvd to Rio Rd	64	65	65	1	1	0	66	2	1
Robinson Canyon Rd to Miramonte Rd	61	62	62	1	1	0	64	3	2
Las Palmas Rd to Las Palmas Pkwy	60	60	61	0	1	1	64	4	3
Drake Ave to Lighthouse Ave	62	65	65	3	3	0	67	5	2
Pacific Ave to Forest Ave	56	57	57	1	1	0	59	3	2
Forest Ave to David Ave	56	54	54	-2	-2	0	55	-1	1
Washington St to Camino Aguajito	66	67	67	1	1	0	69	3	2
Abrego St to Camino Aguajito	64	65	65	1	1	0	66	2	1
Soledad Dr to Via Zaragoza	64	64	65	0	1	1	67	3	2
Playa Ave to Fremont Blvd	61	63	62	2	1	-1	65	4	3

Segment	Existing L_{dn}	2030 No Project L_{dn}	2030 Cumulative (with Project) L_{dn}	2030 No Project minus Existing	2030 Cumulative with Project minus Existing	2030 Cumulative with Project minus No Project	Buildout L_{dn}	Buildout minus Existing	Buildout Minus 2030 Cumulative with Project
N Del Monte Blvd to SR-1	59	60	59	1	0	-1	62	3	3
Reindollar Ave to Reservation Rd	67	68	68	1	1	0	70	3	2
Casa Verde Wy to SR-218	65	66	66	1	1	0	69	4	3
US-101 to Abbott St	65	65	65	0	0	0	67	2	2
San Juan Grade Rd to W Laurel Dr	65	66	66	1	1	0	68	3	2
US-101 to N Main St	60	63	63	3	3	0	65	5	2
Romie Ln to E Blanco Rd	62	62	62	0	0	0	64	2	2
Abbott St to US-101	65	66	65	1	0	-1	67	2	2
Davis Rd to N Main St	62	62	62	0	0	0	64	2	2
W Laurel Dr to SR-183	62	62	62	0	0	0	63	1	1
W Alisal St to SR-68	57	57	57	0	0	0	60	3	3
SH 101 to Salinas City Line	67	68	68	1	1	0	70	3	2
SR-183 to Commercial Pkwy E	60	61	61	1	1	0	61	1	0
Reservation Rd to Cooper Rd	68	69	69	1	1	0	70	2	1
Carmel Rancho Ln to Rio Rd	53	54	53	1	0	-1	55	2	2
Serra Ave to SR-1	58	58	58	0	0	0	61	3	3
Blanco Rd to Reservation Rd	65	69	68	4	3	-1	68	3	0
Spreckels Blvd to Abbott St	61	63	63	2	2	0	65	4	2
Carmel City Line to SR-1	57	57	57	0	0	0	59	2	2
San Juan Rd to Santa Cruz County Line	65	67	67	2	2	0	68	3	1
Carmel City Line to SR-1	57	58	58	1	1	0	60	3	2
SR-1 to Fruitland Ave	60	62	63	2	3	1	64	4	1
Salinas City Line to Russell Rd	57	62	62	5	5	0	65	8	3
SR-68 to Harkins Rd	57	60	60	3	3	0	61	4	1

The 2007 General Plan, Area Plan, and Community Area policies summarized below set forth comprehensive measures to avoid and minimize adverse impacts from traffic noise.

2007 General Plan Policies

Safety Element

Safety Element Policy S-7.1 (new noise-sensitive land uses) limits new noise-sensitive land uses to areas where existing and projected noise levels are "acceptable" as defined by the County. A graphic interpretation of acceptable noise levels is presented in S-7.1, Table S-2 (labeled Figure 2). It also states that a Community Noise Ordinance will be established consistent with the associated table that addresses capacity related roadway improvement projects, construction-related noise impacts, site planning, and design elements to control traffic noise.

Policy S-7.2 that proposed development shall incorporate design elements necessary to minimize noise impacts on surrounding land uses and to reduce noise in indoor spaces to an acceptable level.

Safety Element Policy S-7.3 (noise reduction measures) states that development may occur in areas identified as "normally unacceptable" provided that effective measures are taken to reduce both indoor and outdoor noise levels to acceptable levels.

Safety Element Policy S-7.6 (acoustical analysis) states that an acoustical analysis shall be part of the environmental review process for projects when noise-sensitive receptors are proposed in areas exposed to existing or projected noise levels that are "normally unacceptable" as defined by the County.

Safety Element Policy S-7.7 (noise analysis) states that all proposed discretionary residential projects that are within roadway noise contours of 60 dB CNEL or greater will include a finding of consistency with the provisions of the Noise Hazards section of the Safety Element. If roadway noise exceeds the 60 dB CNEL within the project site, a project-specific noise impact analysis will be required and mitigation identified.

Implementation of the Safety Element policies summarized above would limit the exposure of noise-sensitive land uses to traffic noise associated with the implementation of the 2007 General Plan.

Area Plan Policies

There are no policies related to traffic noise in the area plans.

Community Area Policies

Fort Ord Master Plan

The Fort Ord Master Plan Noise Element contains objectives and policies for controlling noise in the Fort Ord Planning Area. Objective A of the Noise Element ensures that the application of land use compatibility criteria for noise, and enforcement of noise regulations are consistent throughout the Fort Ord Planning Area. Objective B of the Noise Element ensures that noise environments are appropriate for and compatible with existing and proposed land uses based on noise guidelines provided in the Noise Element.

Noise Program A-1.1 of Noise Policy A-1 (compatibility criteria) establishes land use compatibility criteria for exterior community noise. Program B-1.1 of Noise Policy B-1 (noise mitigation) states that the County will develop a program to identify developed areas that are adversely affected by noise impacts and implement measures to reduce these impacts by constructing noise barriers and limiting hours of operation of noise sources. Noise Policy B-3 (acoustic studies) requires that acoustical studies be conducted for all new development that could be exposed to noise above the normally acceptable range as defined by the County to ensure that existing and proposed land uses will not be adversely affected. Noise Policy B-4 (noise insulation) requires enforcement of state noise insulation standards and requires that interior sound levels of 45 dB Ldn be achieved for all new multi-family dwellings, condominiums, hotels, and motels. Noise Policy B-5 (noise barriers) states that noise barriers be provided for new development to ensure that noise guidelines are met and that interior noise levels be reduced to 45 dB Ldn if site planning or architectural layout of buildings is not feasible for compliance with noise guidelines. Noise Policies B-6 (ambient noise/single-family), B-7 (ambient noise/industrial), and B-8 (ambient noise/institutional) place limits on increases in noise allowed by new development.

Implementation of the policies summarized above would limit the exposure of noise-sensitive land uses to traffic noise associated with the 2007 General Plan.

Significance Determination

As indicated in Table 4.8-3 implementation of the 2007 General Plan through the 2030 planning horizon would result in exposure of persons to traffic noise in excess of County noise standards. However, the 2007 General Plan and the Fort Ord Master Plan policies, summarized above, set forth comprehensive measures to avoid and minimize these impacts. Therefore, traffic noise resulting from implementation of the 2007 General Plan through

the 2030 planning horizon would have a less-than-significant impact on existing and planned noise-sensitive land uses.

Mitigation Measures

No mitigation required

Significance Conclusion

Traffic noise resulting from implementation of the 2007 General Plan through the 2030 planning horizon would have a less-than-significant impact on existing and planned noise-sensitive land uses.

Buildout

Impact of Development with Policies

Buildout of the 2007 General Plan through 2092 would result in new urban development in undeveloped areas of the county beyond 2030 levels. Table 4.8-3 summarizes traffic noise modeling results for buildout conditions and compares buildout conditions to existing conditions and 2030 cumulative conditions. Overall traffic volumes across the county are forecast to be about 45% greater than volumes under 2030 conditions. This generally corresponds to a 1 to 2 dB increase in traffic noise. The areas that would be affected by new development include the Community Areas and Rural Centers due to the anticipated intensification of land uses in these areas. Therefore, new development would result in the exposure of noise-sensitive land uses (persons) to traffic noise exceeding County land use compatibility guidelines for noise.

The 2007 General Plan and Fort Ord Master Plan policies summarized above would limit the exposure of existing and planned noise-sensitive land uses to traffic noise and comply with County land use compatibility guidelines for traffic noise.

Significance Determination

Buildout of the 2007 General Plan through 2092 would potentially result in adverse impacts from traffic noise. However, the 2007 General Plan and Fort Ord Master Plan policies set forth comprehensive measures to avoid and minimize these impacts. Therefore, traffic noise resulting from buildout of the 2007 General Plan through the 2092 planning horizon would have a less-than-significant impact on existing and planned noise-sensitive land uses (persons).

Mitigation Measures

No mitigation is required.

Significance Conclusion

Traffic noise resulting from buildout of the 2007 General Plan through the 2092 would have less-than-significant impacts on existing and planned noise-sensitive land uses.

Ground-borne Vibration

Impact N-2: Development activities associated with implementation of the 2007 General Plan would result in exposure of persons to excessive ground-borne vibration. (Less-than-Significant Impact.)

2030 Planning Horizon

Impact of Development with Policies

Implementation of the 2007 General Plan to the 2030 planning horizon would result in new urban development in undeveloped areas of the county. New development would result in additional construction activities in some areas of the county. Operation of heavy equipment during construction would result in minor amounts of ground-borne vibration. Typical ground-borne vibration levels and their effects at 50 feet from the source are summarized in Exhibit 4.8.4.

Roadway operations, particularly for well-maintained roads, have minimal impact potential. Any possible vibration impacts would normally only occur during construction. Nonetheless, there is still the potential for ground-borne vibration levels to exceed typical levels as noted in Exhibit 4.8.4.

The 2007 General Plan, policies summarized below set forth comprehensive measures to avoid and minimize adverse ground-borne vibration impacts.

2007 General Plan Policies

Safety Element

Safety Element Policy S-7.8 (vibration studies) states that all discretionary projects proposing to use heavy construction equipment that has the potential to create vibrations that could cause structural damage to adjacent structures within 100 feet would be required to submit a pre-construction vibration study prior to the approval of a building permit. Specified measures and monitoring identified to reduce impacts would be incorporated into construction contracts. Implementation of this policy would limit ground-borne vibration to acceptable levels for all new discretionary projects.

Area Plan Policies

There are no policies related to ground-borne vibration in the area plans.

Community Area Policies

Fort Ord Master Plan

The Fort Ord Master Plan contains no policies related to ground-borne vibration.

Significance Determination

Implementation of the 2007 General Plan within the 2030 planning horizon would potentially result in adverse ground-borne vibration impacts associated with new construction and development. However, 2007 General Plan Safety Element Policy S-7.8 would avoid and minimize adverse ground-borne vibration impacts from proposed discretionary projects. Therefore, ground-borne vibration resulting from implementation of the 2007 General Plan through the 2030 planning horizon would have a less-than-significant impact on existing and planned vibration-sensitive land uses.

Mitigation Measures

No mitigation required.

Significance Conclusion

Ground-borne vibration resulting from implementation of the 2007 General Plan through the 2030 planning horizon would have a less-than-significant impact on existing and planned vibration-sensitive land uses.

Buildout

Impact of Development with Policies

Buildout of the 2007 General Plan through 2092 would result in new urban development in undeveloped areas beyond 2030 levels. New development would result in the exposure of vibration-sensitive land uses (persons)to excessive ground-borne vibration from construction activities.

2007 General Plan Policies

Safety Element Policy S-7.8, summarized above, would limit the exposure of existing and planned vibration-sensitive land uses to excessive ground-borne vibration.

Significance Determination

Buildout of the 2007 General Plan through 2092 would result in adverse ground-borne vibration impacts associated with new development and construction. However, Safety Element Policy S-7.8 would avoid and minimize adverse ground-borne vibration impacts from new development and construction to acceptable levels. Therefore, ground-borne vibration resulting from buildout of the 2007 General Plan through the 2092 planning horizon would have a less-than-significant impact on existing and planned vibration-sensitive land uses.

Mitigation Measures

No mitigation required.

Significance Conclusion

Ground-borne vibration resulting from buildout of the 2007 General Plan through 2092 would have a less-than-significant impact on existing and planned vibration-sensitive land uses.

Short-Term Construction Noise

Impact N-3: Implementation of the 2007 General Plan would create temporary, short-term noise impacts during associated construction activities. (Less-than-Significant Impact.)

2030 Planning Horizon

Impact of Development with Policies

Implementation of the 2007 General Plan to the 2030 planning horizon would result in new development and construction in undeveloped areas of the county. This construction wouldgenerate new sources of short-term construction noise.

Table 4.8-4 shows typically maximum noise levels for various types of construction equipment that are typically used during construction (FTA 2006). This table indicates that noise from construction equipment has the potential to exceed that County's noise standard of 85 dBA as measured at 50 feet. Construction noise typically attenuates at a rate of about 6 dB per doubling of distance. Given this, the table also indicates that construction noise could increase the existing noise by at least 10 dBA within several hundred feet of an active construction site. Accordingly, there is potential for construction noise to result in significant temporary noise impacts.

Table 4.8-4. Noise Emission Levels Typical for Construction Equipment

Equipment	Typical Noise Level (dBA) 50 Feet from Source
Backhoe	80
Bulldozer	85
Grader	85
Loader	85
Roller	74
Scraper	89
Truck	88

Source: Federal Transit Administration 2006.

2007 General Plan Policies

The 2007 General Plan policies summarized below establish comprehensive measures to avoid and minimize adverse impacts from construction noise.

Safety Element

Safety Element Policy S-7.9 (construction noise) limits construction noise levels and the hours that construction can occur within 500 feet of noise-sensitive land uses. It also identifies specific measures than can be used to reduce construction noise, such as constructing temporary noise barriers and using quieter construction equipment.

Safety Element Policy S-7.10 (noise protection measures) identifies standard noise protection measures that must be incorporated into all construction contracts. These measures include the following: 1) allowing construction only during times allowed by ordinance/code unless such limits are waived for public convenience 2) requiring all construction equipment to have mufflers and 3) requiring lay-down yards and semi-stationary equipment such as pumps or generators to be located as far from noise-sensitive land uses as practicable.

Implementation of these Safety Element policies would reduce temporary construction noise to a less-than-significant level.

Area Plan Policies

There are no policies related to construction noise in the area plans.

Community Area Policies

Fort Ord Master Plan

There are no policies related to construction noise in this plan.

Significance Determination

Implementation of the 2007 General Plan within the 2030 planning horizon would result in adverse impacts from construction noise. However, the 2007 General Plan Safety Element policies establish comprehensive measures to avoid and minimize adverse construction noise impacts. Therefore, construction noise resulting from implementation of the 2007 General Plan over the 2030 planning horizon would have a less-than-significant impact on existing and planned noise-sensitive receptors.

Mitigation Measures

No mitigation required.

Significance Conclusion

Therefore, construction noise resulting from implementation of the 2007 General Plan over the 2030 planning horizon would have a less-than-significant impact on existing and planned noise-sensitive receptors.

Buildout

Impact of Development with Policies

Buildout of the 2007 General Plan through 2092 would result in new urban development in undeveloped areas beyond 2030 levels. New development would result in the exposure of noise-sensitive receptors to construction noise.

The 2007 General Plan Safety Element policies, summarized above, identify measures that would limit the exposure of existing and planned noise-sensitive receptors to construction noise.

Significance Determination

Buildout of the 2007 General Plan through 2092 would result in adverse impacts from construction noise. However, 2007 General Plan Safety Element policies establish comprehensive measures to avoid and minimize adverse construction noise impacts. Therefore, construction noise resulting from buildout of the 2007 General Plan through the 2092 planning horizon would have a less-than-significant impact on existing and planned noise-sensitive land uses.

Mitigation Measures

No mitigation required.

Significance Conclusion

Construction noise resulting from buildout of the 2007 General Plan through the 2092 planning horizon would have a less-than-significant impact on existing and planned noise-sensitive land uses.

Aviation Noise

Impact N-4: Implementation of the 2007 General Plan would potentially expose people residing or working near an airport to excessive noise levels. (Less-than-Significant Impact.)

2030 Planning Horizon

Impact of Development with Policies

Implementation of the2007 General Plan would result in new urban development in some areas of the county, including new development in the vicinity of airports, private airstrips, and helipads. New development near aviation facilities would expose residents and workers to noise from aviation facilities that exceeds County noise standards. This is of most concern in the unincorporated areas near Monterey Peninsula Airport, Salinas Municipal Airport, Marina Airport, and Mesa del Rey (King City) Airport.

2007 General Plan Policies

The Safety Element policies of the 2007 General Plan summarized below establish comprehensive measures to avoid and minimize adverse aviation noise impacts.

Safety Element Policy S-7.1 (new noise-sensitive land uses) limits new noise-sensitive land uses to areas where existing and projected noise level are “acceptable” as defined by the County. It also states that a Community Noise Ordinance will be established consistent with the table that addresses new residential land uses exposed to aircraft operations at any airport or airbase.

Safety Element Policy S-7.3 (noise reduction measures) states that development may occur in areas identified as “normally unacceptable” provided that effective measures are taken to reduce both the indoor and outdoor noise levels to acceptable levels.

Policy S-7.6 (acoustical analysis) states that an acoustical analysis will be part of the environmental review process for projects when noise-

sensitive receptors are proposed in areas exposed to existing or projected noise levels that are "normally unacceptable" as defined by the County.

Implementation of these policies would limit the exposure of noise-sensitive land uses to aviation noise.

Area Plan Policies

The North County Area Plan

There are no policies related to aviation noise in this area plan.

Greater Salinas Area Plan

There are no policies related to aviation noise in this area plan.

Central Salinas Valley Area Plan

There are no policies related to aviation noise in this area plan.

Greater Monterey Peninsula Area Plan

Greater Monterey Peninsula Area Plan GMP-4.2 (Airports) states that development in the vicinity of the Monterey Peninsula Airport and the Marina Municipal Airport should be sited, designed, and/or constructed to minimize noise hazards from aircraft and other sources and that the County should adopt the Airport Noise Control and Land Use Compatibility (ANCLUC) standards for the areas in the vicinity of the Monterey Peninsula Airport. Implementation of these policies would limit the exposure of new noise-sensitive land uses to aircraft noise within the Greater Monterey Peninsula Area.

Carmel Valley Master Plan

There are no policies related to aviation noise in this area plan.

Toro Area Plan

There are no policies related to aviation noise in this area plan.

Cachagua Area Plan

There are no policies related to aviation noise in this area plan.

South County Area Plan

There are no policies related to aviation noise in this area plan.

Agricultural Winery Corridor Plan

There are no policies related to aviation noise in this area plan.

Community Area Policies

Fort Ord Master Plan

The Monterey County Fort Ord Master Plan Noise Element contains objectives and policies for controlling noise in the plan area.

Noise Program A-1.1 of Noise Policy A-1 (compatibility criteria) establishes land use compatibility criteria for exterior community noise. Program B-1.1 of Noise Policy B-1(noise mitigation) states that the County will develop a program to identify developed areas that experience adverse impacts from excessive noise levels and implement measures to reduce these impacts by constructing barriers and limiting hours of operation of noise sources. Noise Policy B-3 (acoustic studies) requires that acoustical studies be conducted for all new development that could be exposed to noise above the "normally acceptable" range as defined by the County to ensure that existing and proposed use will not be adversely affected. Noise Policy B-4 (noise insulation) requires enforcement of state noise insulation standards and requires that interior sound levels of 45 dB L_{dn} be achieved for new multi-family dwellings, condominium, hotel, and motel uses. Noise Policy B-5 (noise barriers) states that noise barriers will be provided for new development to ensure that noise guidelines are met and that interior noise levels will be reduced to 45 dB L_{dn} if site planning or architectural layout of buildings is not feasible for compliance with noise guidelines. Noise Policies B-6 (ambient noise/single-family), B-7 (ambient noise/industrial), and B-8 (ambient noise/institutional) place limits on increases in noise allowed by new development. Implementation of these policies will limit exposure of noise-sensitive land uses to noise.

Implementation of the Fort Ord Noise Element policies summarized above would limit the exposure of noise-sensitive land uses to traffic noise associated with the 2007 General Plan.

State and Federal Aviation Safety Regulations

State Airport Land Use Commission law and Federal Aviation Administration Part 77 regulations place additional restrictions on developments in the vicinity of airports that limit placement of noise-sensitive land uses in the vicinity of airports.

Significance Determination

Implementation of the 2007 General Plan through the 2030 planning horizon would result in adverse impacts from aviation noise. However, the 2007 General Plan, Area Plan, and Community Area policies, and state and federal aviation regulations, listed above, establish comprehensive measures to avoid and minimize adverse impacts from aviation noise. Therefore, aviation noise resulting from implementation of the 2007 General Plan through the 2030 planning horizon would have a less-than-significant impact on existing and planned noise-sensitive receptors.

Mitigation Measures

No mitigation required.

Significance Conclusion

Aviation noise resulting from implementation of the 2007 General Plan through the 2030 planning horizon would have a less-than-significant impact on existing and planned noise-sensitive receptors.

Buildout

Impact of Development with Policies

Buildout of the 2007 General Plan through 2092 would result in new urban development in undeveloped areas of the County beyond 2030 levels. New development would potentially be exposed to aviation noise exceeding County noise standards.

The 2007 General Plan, Area Plan, and Community Area policies, as well as and state and federal aviation regulations, summarized above, identify measures that limit the exposure of existing and planned noise-sensitive receptors to aviation noise.

Significance Determination

Buildout of the 2007 General Plan through the 2092 planning horizon would potentially result in adverse impacts from aviation noise, especially near existing municipal and general aviation airports. However, the 2007 General Plan, Area Plan, and Community Area policies establish comprehensive measures to avoid and minimize adverse impacts from aviation noise. Therefore, aviation noise resulting from buildout of the 2007 General Plan through 2092 would have a less-than-significant impact on existing and planned noise-sensitive receptors.

Mitigation Measures

No mitigation required.

Significance Conclusion

Aviation noise resulting from buildout of the 2007 General Plan through the 2092 planning horizon would have a less-than-significant impact on existing and planned noise-sensitive receptors.

Stationary Source Noise

Impact N-5: Implementation of the 2007 General Plan would expose people residing or working near industrial/agricultural land uses and recreational venues to excessive noise levels. (Less-than-Significant Impact)

2030 Planning Horizon

Impact of Development with Policies

Implementation of the 2007 General Plan would result in new urban development in the vicinity of industrial/agricultural land uses and recreation venues in the county.

Industrial and/or agricultural processing areas in the unincorporated county area include Castroville, Moss Landing, and Pajaro; incorporated cities with industrial areas include Marina, Salinas, Seaside, Soledad, and King City. These areas include a mix of industrial uses and agricultural processing plants. Isolated agricultural processing plants also exist in the Salinas Valley. The San Ardo oil field is also a source of noise. Other potential noise sources include the four landfills in the County, which are located near Marina, Prunedale, Soledad, and King City. Laguna Seca Raceway is located near Fort Ord on Highway 68. Racing events involve competition between high performance vehicles that emit substantial levels of noise.

New development near these facilities would expose residents and workers to noise levels that exceed County noise standards.

The 2007 General Plan, Area Plan, and Community Area policies summarized below establish comprehensive measures to avoid and minimize adverse noise impacts from industrial, agricultural, and recreational sources.

2007 General Plan Policies

Safety Element Policy S-7.1 (new noise-sensitive land uses) limits new noise-sensitive land uses to areas where existing and projected noise level are “acceptable” as defined by the County.

Safety Element Policy S-7.2 (new development) states that proposed development shall incorporate design elements necessary to minimize

noise impacts on surrounding land uses and reduce noise in indoor spaces to an acceptable level.

Safety Element Policy S-7.3 (noise reduction measures) states that development may occur in areas identified as "normally unacceptable" provided that effective measures to reduce both the indoor and outdoor noise levels to acceptable levels are taken.

Safety Element Policy S-7.4 (new noise generators) states that new noise generators may be allowed in areas where projected noise levels are "conditionally acceptable" only after a detailed analysis of the noise reduction requirements is made, and necessary noise mitigation features are included in project design.

Safety Element Policy S-7.5 (new noise generators, cntd.) states that new noise generators should generally be discouraged in areas identified as "normally acceptable." Where such new noise generators are permitted, mitigation to reduce both the indoor and outdoor noise levels would be required.

Policy S-7.6 (acoustical analysis) states that an acoustical analysis shall be part of the environmental review process for projects when noise-sensitive receptors are proposed in areas exposed to existing or projected noise levels that are "normally unacceptable" as defined by the County.

Implementation of these policies would limit the exposure of noise-sensitive land uses to noise from industrial, agricultural, and recreational sources.

Area Plan Policies

The North County Area Plan

North County Area Plan Policy NC-1.1 (noise minimization) states that proposed commercial development shall be designed to minimize noise impacts on the surrounding area to the greatest extent feasible. Policy NC-1.2 (industrial/commercial noise) states that potential noise impacts from industrial and commercial facilities shall be minimized to the maximum extent feasible and that installation of environmental control methods for noise impact brought by regulatory agencies will require review and approval by the Director of Planning and Building Inspection. Implementation of these policies would limit noise produced by new commercial and industrial noise sources. Implementation of these policies would also limit the exposure of noise-sensitive land uses to noise from industrial and commercial facilities within this planning area.

Greater Salinas Area Plan

There are no policies related to stationary noise sources in this area plan.

Central Salinas Valley Area Plan

There are no policies related to stationary noise sources in this area plan.

Greater Monterey Peninsula Area Plan

There are no policies related to stationary noise sources in this area plan.

Carmel Valley Master Plan

Carmel Valley Master Plan Policy CV-1.14 (service centers) limits service centers in Carmel Valley to urbanized areas such as the mouth of the Valley, Carmel Valley Village or mid-Valley area and states that these sites shall be designed to result in low noise impact on surrounding uses. Implementation of this policy would limit the exposure of noise-sensitive land uses to noise from these facilities within this planning area.

Toro Area Plan

There are no policies related to stationary source noise in this area plan.

Cachagua Area Plan

Cachagua Area Plan Policy CACH-1.1 (service centers) states that provision should be made for service centers in Cachagua to result in low noise impact on surrounding uses. Policy CACH-3.2 (ambient noise abatement) states that stronger ambient noise abatement requirements should be considered in this planning area. Policy CACH-3.5 (resource production operation) states that mining or commercial timber or other resource production operations that include methods to control noise impacts may be considered in the planning area. Implementation of these policies would limit exposure of noise-sensitive land use to noise from these facilities and operations within this planning area.

South County Area Plan

There are no policies related to stationary source noise in this area plan.

Agricultural Winery Corridor Plan

AWCP Development Standard 3.5F (noise standards) states that all winery structures and outdoor uses will comply with the County's adopted Noise Codes. Development Standard 3.6 E (development conditions) states that agencies are authorized to attach such conditions as deemed necessary to protect the health, safety, and general welfare of the community and the persons attending special winery related events. These conditions include specific limits on outdoor amplified music. Implementation of these development standards would limit the exposure of noise-sensitive land uses to noise from wineries within the AWCP corridor.

Community Area Policies

Fort Ord Master Plan

Noise Program A-1.1 of Noise Policy A-1 (compatibility criteria) establishes land use compatibility criteria for exterior community noise. Program A-1.2 of Policy A-1 states that the County will adopt a noise ordinance to control noise from non-transportation sources and construction. Program B-1.1 of Noise Policy B-1 (noise mitigation) states that the County will develop a program to identify developed areas that are adversely affected by excessive noise levels, and implement measures to reduce these impacts by constructing noise barriers and limiting hours of operation of noise sources. Noise Policy B-3 (acoustic studies) requires that acoustical studies be conducted for all new development that could be exposed to noise above the "normally acceptable" range as defined by the County to ensure that existing and proposed use will not be adversely affected. Noise Policy B-4 (noise insulation) requires enforcement of state noise insulation standards and requires that interior sound levels of 45 dB L_{dn} be achieved for new multi-family dwellings, condominium, hotel, and motel uses. Noise Policy B-5 (noise barriers) states that noise barriers be provided for new development to ensure that noise guidelines are met and that interior noise level be reduced to 45 dB L_{dn} if site planning or architectural layout of buildings is not feasible for compliance with noise guidelines. Noise Policies B-6 (ambient/single-family), B-7 (ambient noise/industrial), and B-8 (ambient noise/institutional) place limits on increases in noise allowed by new development. Implementation of these policies would limit exposure of noise-sensitive receptors within the Fort Ord Master Plan area.

Significance Determination

Implementation of the 2007 General Plan through the 2030 planning horizon would result in adverse noise impacts from stationary sources. However, the 2007 General Plan, Area Plan, and Community Area policies summarized

above establish comprehensive measures to avoid and minimize adverse noise impacts from stationary sources. Therefore, noise from stationary sources resulting from implementation of the 2007 General Plan through the 2030 planning horizon would have a less-than-significant impact on existing and planned noise-sensitive land uses.

Mitigation Measures

No mitigation is required.

Significance Conclusion

Noise from stationary sources resulting from implementation of the 2007 General Plan through the 2030 planning horizon would have a less-than-significant impact on existing and planned noise-sensitive land uses.

Buildout

Impact of Development with Policies

Buildout of the 2007 General Plan through 2092 would result in new urban development in undeveloped areas of the county beyond 2030 levels. New development would result in the exposure of noise-sensitive land uses to excessive noise levels from stationary sources.

The 2007 General Plan, Area Plan, and Community Area policies summarized above identify policies that limit the exposure of existing and planned noise-sensitive land uses to excessive noise levels from stationary sources.

Significance Determination

Buildout of the 2007 General Plan through the 2092 planning horizon would potentially result in adverse impacts from stationary noise sources. However, the 2007 General Plan, Area Plan, and Community Area policies summarized above establish comprehensive measures to avoid and minimize adverse noise impacts from stationary sources. Therefore, noise from stationary sources resulting from implementation of the 2007 General Plan through the 2030 planning horizon would have a less-than-significant impact on existing and planned noise-sensitive land uses.

Mitigation Measures

No mitigation required.

Significance Conclusion

Noise from stationary sources resulting from implementation of the 2007 General Plan through the 2030 planning horizon would have a less-than-significant impact on.

4.8.6 Level of Significance after Mitigation

Development of new noise-sensitive land uses and noise sources associated with implementation of the 2007 General Plan would result in significant noise impacts. However, all noise impacts would be less than significant with implementation of General Plan, Area Plan, and Community Area policies described herein and would not require mitigation.