

3.12.1 INTRODUCTION

This section presents existing noise levels at and surrounding the project site, summarizes relevant regulations and policies, and analyzes the anticipated noise effects from the implementation of the Proposed Action and its alternatives.

Sources of information used in this analysis include:

- Placer Vineyards Specific Plan EIR prepared by Placer County, and
- Placer County General Plan Noise Element.

3.12.2 AFFECTED ENVIRONMENT

3.12.2.1 Characteristics of Environmental Noise

Noise may be defined as unwanted sound. Noise is usually objectionable because it is disturbing or annoying. The objectionable nature of sound could be caused by its pitch or its loudness. Pitch is the height or depth of a tone or sound, depending on the relative rapidity (frequency) of the vibrations by which it is produced. Higher pitched signals sound louder to humans than sounds with a lower pitch. Loudness is amplitude of sound waves combined with the reception characteristics of the ear. Noise is measured on a logarithmic scale of sound pressure level known as a decibel (dB). The human ear does not respond uniformly to sounds at all frequencies, being less sensitive to very low and high frequencies than to medium frequencies that correspond with human speech. The A-weighted noise level (or scale) better corresponds to the human ear's subjective perception of sound levels. This A-weighted sound level is called the "noise level" and is measured in units of dB(A). Changes in noise levels of less than 3 dB(A) are not typically noticed by the human ear (U.S. Department of Transportation 1980). Individuals extremely sensitive to changes in noise may notice changes in noise levels from 3 to 5 dB(A). A 5 dB(A) increase is readily noticeable, while the human ear perceives a 7 dB(A) increase in sound level to be a doubling of sound.

Noise sources are classified into two types: (1) point sources, such as pieces of stationary equipment; and (2) line sources, such as roadways with large numbers of point sources (motor vehicles). Sound generated by a point source typically diminishes (attenuates) at a rate of 6.0 dB(A) for each doubling of distance from the source to the receptor at an acoustically "hard" site (such as paved roads) and 7.5 dB(A) at an acoustically "soft" site (such as grass-covered soil or soft sand) (U.S. Department of Transportation 1980). For example, a 60 dB(A) noise level measured at 50 feet (15.2 meters) from a point source at an acoustically hard site would be 54 dB(A) at 100 feet (30.5 meters) from the source and 48 dB(A) at 200 feet (61 meters) from the source. Sound generated by a line source typically attenuates at a rate of 3.0 dB(A) and 4.5 dB(A) per doubling of distance from the source to the receptor for a hard and soft site, respectively (U.S. Department of Transportation 1980). Sound levels can also be attenuated by man-made or natural barriers. Solid walls, berms, or elevation differences typically reduce noise levels by 5 to 10 dB(A) (U.S. Department of Transportation 1980).

The Equivalent Noise Level (Leq), the day-night sound level (Ldn), and the Community Noise Equivalent Level (CNEL) average varying noise exposures over time and quantify the results in terms of a single number descriptor. Leq is the average A-weighted sound level measured over a given time interval. Leq can be measured over any period, but is typically measured for 1-minute, 15-minute, 1-hour, or 24-hour periods.

Ldn is the energy average of the A-weighted sound levels occurring during a 24-hour period, with 10 dB added to the A-weighted sound levels occurring during the period from 10:00 PM to 7:00 AM. CNEL is the average A-weighted sound level measured over a 24-hour period and is adjusted to account for increased sensitivity of some individuals to noise levels during the evening and nighttime hours. A CNEL noise measurement is obtained by adding 5 dB(A) to sound levels occurring during the evening from 7:00 PM to 10:00 PM, and 10 dB to sound levels occurring during the nighttime from 10:00 PM to 7:00 AM. The 5 and 10 dB “penalties” are applied to account for peoples’ increased sensitivity during the evening and nighttime hours. The logarithmic effect of these additions is that, for example, a 60 dB(A) 24-hour Leq would result in a CNEL of 66.7 dB(A).

In addition to the energy-average level, it is often desirable to know the acoustic range of the noise source being measured. This is accomplished through the maximum Leq (Lmax) and minimum Leq (Lmin) indicators that represent the root-mean-square maximum and minimum noise levels measured during the monitoring interval.

3.12.2.2 Existing Noise Conditions in Project Area

Transportation

Noise levels along all project area roadways, with the exception of 16th Street north of Elverta Road, exceed the Placer County General Plan residential noise standard of 60 dB CNEL in the vicinity of the project area (**Table 3.12-1, Traffic Noise Levels [2005]**). These levels were estimated by Placer County in 2006 based on traffic counts conducted in 2005. A comparison of traffic counts conducted in 2004 and 2009 at several study area intersections was performed by DKS Associates to determine whether the study area traffic had increased since 2005 and therefore the noise levels reported in the table below are no longer representative of existing conditions in the project area. The comparison of the traffic counts showed that overall the traffic decreased in the study area by about 4 percent and with the exception of four locations, traffic volumes in 2009 were lower at all the study area intersections (DKS 2011). Because the decline in traffic ranged between -1 to -20 percent, the decline was not sufficient to appreciably change the noise levels reported in the table below. At the four locations where the traffic was found to have increased between 2004 and 2009, the increase (+2 to +17 percent) was not sufficient to appreciably change the noise levels reported below.

**Table 3.12-1
Traffic Noise Levels (2005)**

| Roadway | Segment | Traffic Noise Level (CNEL dB(A) at 75 feet from road center) |
|-------------------------|---------------------------------|-------------------------------------------------------------------------|
| Baseline Road | East of County Line | 66 |
| Baseline Road | East of Locust Road | 66 |
| Baseline Road | East of Brewer Road | 66 |
| Baseline Road | East of Palladay Road | 66 |
| Baseline Road | East of 16 th Street | 67 |
| Baseline Road | East of Tanwood Avenue | 67 |
| Baseline Road | East of Watt Avenue | 67 |
| Baseline Road | East of Dyer Lane | 67 |
| Baseline Road | East of Walerga Road | 66 |
| Fiddymment Road | North of Baseline Road | 62 |
| Walerga Road | South of Baseline Road | 62 |
| Watt Avenue | South of Baseline Road | 63 |
| Watt Avenue | South of Dyer Lane | 63 |
| PFE Road | East of Watt Avenue | 61 |
| PFE Road | East of Walerga Road | 63 |
| Elverta Road | East of SR 70/99 | 63 |
| Elverta Road | East of Rio Linda Boulevard | 65 |
| Elverta Road | East of 16 th Street | 67 |
| Elverta Road | West of Watt Avenue | 69 |
| Watt Avenue | North of Elverta Road | 67 |
| Watt Avenue | North of Antelope Road | 64 |
| Watt Avenue | North of Elkhorn Boulevard | 65 |
| Walerga Road | North of Elverta Road | 63 |
| Walerga Road | North of Antelope Road | 65 |
| Walerga Road | North of Elkhorn Boulevard | 69 |
| 16 th Street | North of Elverta Road | 49 |
| Walerga Road | North of PFE Road | 65 |
| SR 70/99* | North of Riego Road | 70 |
| SR 70/99* | North of Riego Road | 71 |
| Riego Road | East of SR 70/99 | 63 |

Source: Placer County, 2006.

* Calculated at 150 feet from road center.

Aircraft

McClellan Airfield is located approximately 2.5 miles (4 kilometers) south of the project site. The County of Sacramento Department of Economic Developments owns and oversees McClellan Airfield. The airfield is available for both daytime and nighttime use. The airfield could experience 70,000 or more flight operations, defined as a take-off or landing, per year. While McClellan is no longer a military facility, military air traffic, including helicopters and U.S. Coast Guard cargo planes, continue to use the airfield. The other types of flights that may use McClellan are small jets and other general aviation planes. Aviation activity associated with McClellan Airfield has the potential to occur over the project site.

Project Site Ambient Noise Levels

Placer County conducted continuous background noise level measurements on October 12 and 13, 2005, at two locations on the project site to characterize existing ambient noise levels. Site #1 was at 4998 Wallbrook Place, near Baseline and Walerga Roads. Site #2 was at 8382 Locust Road. Noise levels from Site #1 were primarily from Baseline Road traffic. At Site #2, the major source of noise was local traffic. The CNEL at Site #1 was 69.5 dB, and at Site #2 was 60.1 dB.

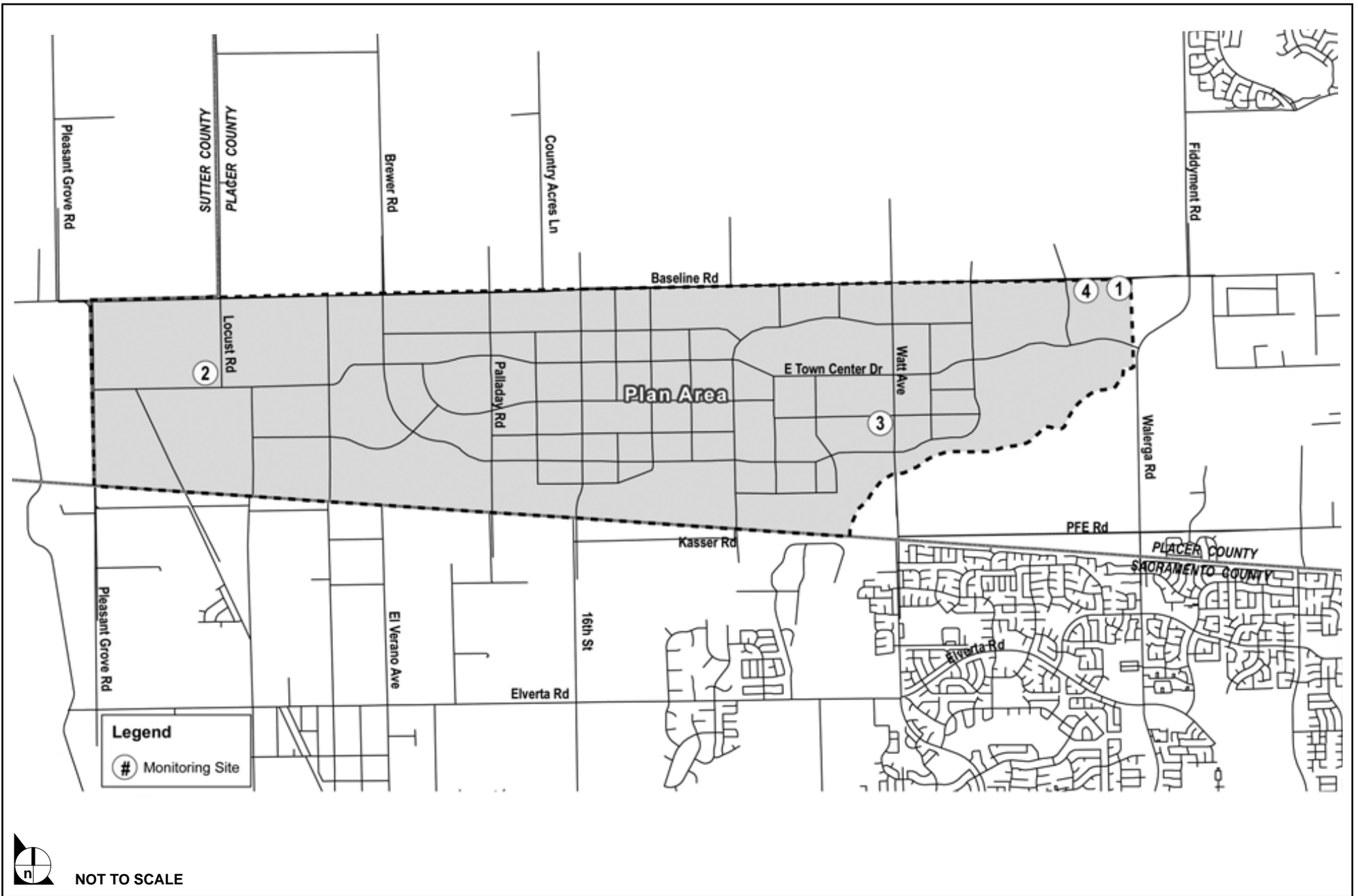
In addition, the County conducted spot checks of measured traffic noise levels versus noise levels predicted by the Federal Highway Administration (FHWA) Model at two locations. Site #3 was adjacent to Watt Avenue near Dyer Lane and Site #4 was adjacent to Baseline Road near Walerga Road. **Figure 3.12-1, Noise Monitoring Sites**, shows the locations of Sites #1 through #4. **Table 3.12-2, Comparison of Measured and Modeled Noise Levels**, compares measured and modeled noise levels at Sites #3 and #4.

Table 3.12-2
Comparison of Measured and Modeled Noise Levels

| Location | Date/Time | Measured Leq, dB(A) | Modeled Leq, dB(A) |
|-------------------------------------------|--------------------|---------------------|--------------------|
| Site #3 – Watt Avenue near Dyer Lane | 10/12/05 – 4:28 PM | 65.9 | 66.1 |
| Site #4 – Baseline Road near Walerga Road | 10/13/05 – 4:10 PM | 73.7 | 73.2 |

Source: Placer County, 2007.

Although the measured and modeled data reported above are from 2005, these noise levels are still generally representative of current noise levels at these locations because as reported earlier, traffic volumes have decreased in the project area in recent years, including Sites #1 through 4. The decrease in traffic volumes has been on the order of -1 to -8 percent at these sites and this decrease in traffic is not substantial enough to appreciably change the measured or modeled noise levels reported above for the project site.



SOURCE: Quad Knopf – 2005

FIGURE 3.12-1

Noise Monitoring Sites

3.12.3 REGULATORY FRAMEWORK – APPLICABLE LAWS, REGULATIONS, PLANS, AND POLICIES

3.12.3.1 Federal Laws and Regulations

There are no federal laws and regulations related to noise that apply to the Proposed Action.

3.12.3.2 State Laws and Regulations

The State Building Code, Title 24, Part 2 of the State of California Code of Regulations establishes uniform minimum noise insulation performance standards to protect persons within new buildings which house people, including hotels, motels, dormitories, apartment houses, and dwellings other than single-family dwellings. Title 24 mandates that interior noise levels attributable to exterior sources shall not exceed 45 dB Ldn or CNEL in any habitable room. Title 24 also mandates that for structures containing noise-sensitive uses to be located where the Ldn or CNEL exceeds 60 dB, an acoustical analysis must be prepared to identify mechanisms for limiting exterior noise to the prescribed allowable interior levels. If the interior allowable noise levels are met by requiring that windows be kept close, the design for the structure must also specify a ventilation or air conditioning system to provide a habitable interior environment.

3.12.3.3 Local Plans, Policies, and Ordinances

Placer County General Plan

According to the Placer County General Plan, for transportation-related noise sources (e.g., traffic), the acceptable noise level in outdoor activity areas of residences, transient lodging, hospitals, theaters, and churches is 60 dB CNEL or less. The interior noise level standard is 45 dB CNEL. For non-transportation-related noise sources, the exterior noise level standard for residences and office/professional uses is 60 dB CNEL. For transient lodging and neighborhood/general commercial uses, the exterior noise level standards are 65 and 70 dB CNEL, respectively. The interior noise level standard for most land uses is 45 dB CNEL. (Note, all table references that follow in this section refer to tables in the Noise Element of the Placer County General Plan.)

The Placer County General Plan Noise Element includes the following goals and policies related to noise:

Goal 9.A. To protect County residents from the harmful and annoying effects of exposure to excessive noise.

Policy 9.A.1. The County shall not allow development of new noise-sensitive uses where the noise level due to non-transportation noise sources will exceed the noise level standards of Table 9-1 as measured immediately within the property line of the new development, unless effective noise mitigation measures have been incorporated into the development design to achieve the standards specified in Table 9-1.

- Policy 9.A.2.** The County shall require that noise created by new non-transportation noise sources be mitigated so as not to exceed the noise level standards of Table 9-1 as measured immediately within the property line of lands designated for noise-sensitive uses.
- Policy 9.A.3.** The County shall continue to enforce the State Noise Insulation Standards (California Code of Regulations, Title 24) and Chapter 35 of the Uniform Building Code (UBC).
- Policy 9.A.5.** Where proposed non-residential land uses are likely to produce noise levels exceeding the performance standards of Table 9-1 at existing or planned noise-sensitive uses, the County shall require submission of an acoustical analysis as part of the environmental review process so that noise mitigation may be included in the project design. The requirements for the content of an acoustical analysis are listed in Table 9-2.
- Policy 9.A.6.** The feasibility of proposed projects with respect to existing and future transportation noise levels shall be evaluated by comparison to Figure 9-1.
- Policy 9.A.8.** New development of noise-sensitive land uses shall not be permitted in areas exposed to existing or projected levels of noise from transportation noise sources, including airports, which exceed the levels specified in Table 9-3, unless the project design includes effective mitigation measures to reduce noise in outdoor activity areas and interior spaces to the levels specified in Table 9-3.
- Policy 9.A.9.** Noise created by new transportation noise sources, including roadway improvement projects, shall be mitigated so as not to exceed the levels specified in Table 9-3 at outdoor activity areas or interior spaces of existing noise-sensitive land uses.
- Policy 9.A.10.** Where noise-sensitive land uses are proposed in areas exposed to existing or projected exterior noise levels exceeding the levels specified in Table 9-3 or the performance standards of Table 9-1, the County shall require submission of an acoustical analysis as part of the environmental review process so that noise mitigation may be included in the project design. At the discretion of the County, the requirement for an acoustical analysis may be waived provided that all of the following conditions are satisfied:
- a. The development is for less than five single-family dwellings or less than 10,000 square feet (929 square meters) of total gross floor area for office buildings, churches, or meeting halls;

- b. The noise source in question consists of a single roadway or railroad for which up-to-date noise exposure information is available. An acoustical analysis will be required when the noise source in question is a stationary noise source or airport, or when the noise source consists of multiple transportation noise sources;
- c. The existing or projected future noise exposure at the exterior of buildings which will contain noise-sensitive uses or within proposed outdoor activity areas (other than outdoor sports and recreation areas) does not exceed 65 dB DNL prior to mitigation. For outdoor sports and recreation areas, the existing or projected future noise exposure may not exceed 75 dB DNL prior to mitigation;
- d. The topography in the project area is essentially flat; that is, noise source and receiving land use are at the same grade; and
- e. Effective noise mitigation, as determined by the County, is incorporated into the project design to reduce noise exposure to the levels specified in Table 9-1 or 9-3.

Such measures may include the use of building setbacks, building orientation, noise barriers, and the standard noise mitigations contained in the Placer County Acoustical Design Manual. If closed windows are required for compliance with interior noise level standards, air conditioning or a mechanical ventilation system will be required.

Policy 9.A.11.

The County shall implement one or more of the following mitigation measures where existing noise levels significantly impact existing noise-sensitive land uses, or where the cumulative increase in noise levels resulting from new development significantly impacts noise-sensitive land uses:

- a. Rerouting traffic onto streets that have available traffic capacity and that do not adjoin noise-sensitive land uses;
- b. Lowering speed limits, if feasible and practical;
- c. Programs to pay for noise mitigation such as low cost loans to owners of noise-impacted property or establishment of developer fees;
- d. Acoustical treatment of buildings; or
- e. Construction of noise barriers.

Policy 9.A.12.

Where noise mitigation measures are required to achieve the standards of Tables 9-1 and 9-3, the emphasis of such measures shall be placed upon site planning and project design.

The use of noise barriers shall be considered as a means of achieving the noise standards only after all other practical design-related noise mitigation measures have been integrated into the project.

- Goal 9.B.** To ensure that areas designated for industrial uses pursuant to Goal 1.E. and Policy 1.E.1. are protected from encroachment by noise-sensitive land uses.
- Policy 9.B.1.** The County shall require that new noise-sensitive land uses established next to existing industrial areas be responsible for self-mitigating noise impacts from industrial activities.
- Policy 9.B.2.** The County shall apply noise standards in a manner consistent with encouraging the retention, expansion, and development of new businesses pursuant to Goal 1.N. and Policy 1.N.2.
- Policy 9.B.3.** Because many industrial activities and processes necessarily produce noise which will likely be objectionable to nearby non-industrial land uses, existing and potential future industrial noise emissions shall be accommodated in all land use decisions.
- Policy 9.B.4.** Whenever noise exposure standards herein fall subject to interpretation relative to industrial activities, the benefit of the doubt shall be afforded to the industrial use.

3.12.4 SIGNIFICANCE THRESHOLDS AND ANALYSIS METHODOLOGY

3.12.4.1 Significance Thresholds

The National Environmental Policy Act (NEPA) does not specify significance thresholds that may be used to evaluate the effects of a proposed action on the noise environment. However, Council on Environmental Quality (CEQ) guidance requires an evaluation of a proposed action's effect on the human environment. The U.S. Army Corps of Engineers (USACE) has determined that the Proposed Action or its alternatives would result in significant adverse effects related to noise if the Proposed Action or an alternative would:

- Expose persons to or generate noise levels in excess of standards established in the Placer County Noise Ordinance or the Noise Element of the Placer County General Plan.
- Expose persons to or generate excessive ground-borne vibration or ground-borne noise levels.
- Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project. (Because a noise increase of 3 decibels is generally regarded as the minimum perceptible increase, a substantial increase is defined by the USACE in this EIS as an increase of 3 decibels or more.)
- Be located in the vicinity of a public airport or private airstrip and expose people residing or working in the project area to excessive noise levels.

3.12.4.2 Analysis Methodology

The construction noise analysis uses data compiled for various pieces of construction equipment at a representative distance of 50 feet (15.2 meters), which is representative of the minimum likely distance from a residential receptor. **Table 3.12-3 Typical Construction Equipment Noise** presents maximum noise levels produced by commonly used construction equipment at 50 feet (15.2 meters) from source.

**Table 3.12-3
Typical Construction Equipment Noise**

| Type of Equipment | Maximum Level (dB at 50 feet) |
|-------------------|-------------------------------|
| Backhoe | 78 |
| Compactor | 83 |
| Compressor (air) | 78 |
| Concrete Saw | 90 |
| Dozer | 82 |
| Dump Truck | 76 |
| Excavator | 81 |
| Generator | 81 |
| Jackhammer | 89 |
| Pneumatic Tools | 85 |

Source: Federal Highway Administration, FHWA-HEP-05-054, January 2006.

The Federal Highway Administration (FHWA) Highway Traffic Noise Prediction Model (FHWA RD-77-108) was used to estimate projected noise levels due to project-related traffic. The model is based on the Calveno reference noise factors for automobiles, medium trucks and heavy trucks, with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and the acoustical characteristics of the site. The FHWA model predicts hourly Leq values for free-flowing traffic conditions. To predict traffic noise levels in terms of CNEL, it is necessary to adjust the input volume to account for the day/night distribution of traffic. Inputs to the FHWA model included average daily traffic volumes and truck usage, and vehicle speeds on the local area roadways. The predicted increases in traffic noise levels on the local roadway network for baseline and future with project conditions are presented in terms of CNEL at a standard distance of 100 feet (30.5 meters) from the centerline of the roadway.

Aviation noise is addressed through a review of adopted airport land use compatibility policies and noise contours.

3.12.5 ENVIRONMENTAL CONSEQUENCES AND MITIGATION MEASURES

Impact NOISE-1 Construction Noise and Vibration

No Action Construction activities would generate noise levels that would result in a **significant** effect on existing residences adjacent to and on the project site as well as potential future residents

Alt. of other developments that may be implemented before construction commences on the project site. With mitigation, the potential significant effect would be **less than significant**.

Construction activities associated with the No Action Alternative would occur over a number of years, with portions of the area being developed in phases. The exact timing and duration of these phases would be determined by market conditions and other factors that are unpredictable over the course of development. The estimated period in which buildout of the No Action Alternative, if approved by Placer County, would occur is from 2013 through 2030 or 2040. Depending on conditions, construction may be delayed or reduced so that the year of full buildout could be well past that year.

On-site construction activities could expose existing residences to the southeast of the project site, as well as existing residences south of Baseline Road to construction noise. If the proposed Sierra Vista Specific Plan is approved and developed prior to the commencement of construction on the project site, the construction of the No Action Alternative adjacent to Baseline Road would expose those residents to construction noise. In addition, because construction would occur in phases, some on-site residential uses built during the early phases of the development would be exposed to noise generated during the construction of latter phases of development. Improvements to existing roadways such as Baseline Road and Watt Avenue would also expose residents in those areas to construction noise.

Maximum noise levels typical of construction equipment, as indicated in **Table 3.12-6**, range from 84 to 89 dB at a distance of 50 feet (15.2 meters) from the noise source. No pile driving or other unusual construction practices are proposed. Noise would also be generated during the construction phase by increased truck traffic on area roadways, particularly trucks transporting heavy materials and equipment to and from construction sites. Construction activities would be temporary in nature and are anticipated to occur during normal daytime working hours. However, should construction be undertaken during nighttime hours, construction noise could result in annoyance or sleep disruption for nearby residents, or if equipment is not properly muffled or maintained, the noise levels could affect nearby residents. This would be a **potentially significant** effect.

PVSP EIR Mitigation Measure 4.9-3 would address this significant effect. This mitigation measure requires that the hours of operation of noise-producing equipment comply with Placer County's Standard Construction Noise Condition of Approval. The Placer County Environmental Health Services "Standard Construction Noise Conditions of Approval" (EH-15) restricts construction activities to the hours of 6:00 AM to 8:00 PM Monday through Friday during daylight savings time, 7:00 AM to 8:00 PM Monday through Friday during standard time, and 8:00 AM to 6:00 PM Saturdays, with construction prohibited on Sundays and federal holidays. The mitigation measure also requires that effective mufflers are fitted to gas- and diesel- powered equipment to reduce noise levels as much as possible. The USACE assumes that Placer County would impose this mitigation measure on the No Action Alternative to address this effect. The County concluded that **PVSP EIR Mitigation**

Measure 4.9-3 would fully mitigate construction noise and vibration impacts of the Proposed Action to **less than significant**. The USACE finds that the effect of the No Action Alternative would be **less than significant** with mitigation.

Proposed Action (Base Plan and Blueprint Scenarios) The Proposed Action under both scenarios would construct a project with similar land use mixes as the No Action Alternative. The distance to sensitive receptors would be similar and significant noise effects would result from project construction. The effect would be minimized by implementation of **PVSP EIR Mitigation Measure 4.9-3**, which was adopted by Placer County at the time of the approval of the PVSP (Base Plan). The USACE assumes that Placer County would impose the same mitigation measure on the Proposed Action Blueprint scenario (or any level of development under the Proposed Action) to address this effect. Placer County concluded that with this mitigation measure, the effects will be reduced to a less than significant level. The USACE also finds that the construction noise effect would be reduced to **less than significant** with mitigation.

Alts. 1 through 5 All of the alternatives would construct a project with similar land use mixes as the Proposed Action. The distance to sensitive receptors would be similar and significant noise effects would result from construction activities. **PVSP EIR Mitigation Measure 4.9-3** would address this effect. The USACE assumes that Placer County would impose the same mitigation measure on Alternatives 1 through 5 (individually or combined) to address this effect. The mitigation measure described above would fully mitigate the effect to a **less than significant** level.

PVSP EIR Mitigation Measure 4.9-3: Construction Noise Reduction

(Applicability – No Action, Proposed Action and All Alternatives)

PVSP EIR Mitigation Measure 4.9-3 requires that the hours of operation of noise-producing equipment comply with Placer County's Standard Construction Noise Condition of Approval and that effective mufflers be fitted to gas- and diesel-powered equipment to reduce noise levels as much as possible. The full text of the mitigation measure is presented in Appendix 3.0.

Impact NOISE-2 Noise from Project Operations

No Action Alt. The occupancy and operation of the No Action Alternative would generate noise levels that could adversely affect existing residences adjacent to and on the project site, potential future residents of other developments that may be implemented adjacent to the site, as well as future residents of the project site. However, the effect would be **less than significant** with mitigation.

Within the project site, commercial uses would be located adjacent to residential uses. Noise sources commonly associated with commercial/business park property and other stationary or area activity include air conditioning units, trash compactors, fans, compressors, heavy equipment operation, and truck deliveries. In addition, schools and public parks can cause excessive noise generated by the presence of playgrounds, public gatherings, alarms, and bells. These sources could generate noise levels that may exceed noise standards in the Placer County Noise Ordinance or the Noise Element at nearby residences. No specific site designs are proposed for commercial uses at this time; therefore, noise levels cannot be estimated with any specificity. Depending on the specific noise sources associated with the use and their proximity to noise-sensitive uses, the effect could be **potentially significant**.

PVSP EIR Mitigation Measure 4.9-2 would address this effect. The USACE assumes that Placer County would impose the same mitigation measure on the No Action Alternative. The mitigation measure requires that proposed specific uses shall be reviewed for their potential to produce significant noise impacts. Noise control measures shall be applied to assure that new stationary sources shall not exceed adopted noise standards. The County determined that **PVSP EIR Mitigation Measure 4.9-2** would fully mitigate noise from project operations to **less than significant**. The USACE also finds that the impact would be **less than significant** after mitigation.

Fire stations typically generate loud, intermittent noise from sirens and public address systems. These types of noise would be limited to emergency response and possible training and maintenance activities. Section 9.36.030 (6) of the Placer County Code states that “emergencies, involving the execution of the duties...providing emergency response to the general public, including but not limited to...emergency personnel...and the operation of emergency response vehicles and equipment” are exempt. Because these noise effects are generally infrequent and are exempt from the County Code, effects from fire station noise would be minor. Wastewater treatment plants and sewer lift stations generate some noise during operations, typically from fans, pumps, and odor scrubbers. Although the location of equipment to be added to the Dry Creek Wastewater Treatment Plant (DCWWTP) site is unknown, the Roseville Regional Wastewater Treatment Service Area Master Plan EIR (1996) determined that the nearest sensitive receptor to noise generating equipment was approximately 500 feet (152.4 meters). With the type of equipment used at the DCWWTP, noise would be about 44 dB CNEL at the nearest sensitive receptor with a threshold of 60 dB

CNEL (Placer County 2006). Therefore, the effect of noise from the operation of the DCWWTP on nearby sensitive receptors would be **less than significant**.

**Proposed
Action (Base
Plan and
Blueprint
Scenarios)**

The Proposed Action under both scenarios would construct a larger mixed use residential community project compared to the No Action Alternative and would include more noise sources (more areas with commercial uses, one high school, two middle schools, and six elementary schools adjacent to residential uses, more community and neighborhood parks, and two fire stations) than described above for the No Action Alternative. No specific site designs are proposed for on-site activities at this time; therefore, noise levels cannot be estimated with any specificity and the effectiveness of specific mitigation cannot be determined at this time.

However, the Proposed Action would be required to implement **PVSP EIR Mitigation Measure 4.9-2**, which was adopted by Placer County at the time of the approval of the Placer Vineyards Specific Plan (PVSP) (Base Plan). The USACE assumes that Placer County would impose the same mitigation measure on the Proposed Action Blueprint scenario (or any level of development under the Proposed Action) to address this effect. Placer County concluded that with this mitigation measure, the effects will be reduced to a less than significant level. The USACE also finds that the operational noise effect would be reduced to **less than significant** with mitigation.

**Alts. 1
through 5**

Alternatives 1 through 5 (individually or combined) would construct a project broadly similar to the Proposed Action and would include all of the noise sources described above for the Proposed Action (commercial uses, one high school, two middle schools, and six elementary schools adjacent to residential uses, community and neighborhood parks, and two fire stations). As with the Proposed Action, no specific site designs are proposed for on-site activities at this time; therefore, noise levels cannot be estimated with any specificity and the effectiveness of specific mitigation cannot be determined at this time.

However, **PVSP EIR Mitigation Measure 4.9-2** would address this effect. The USACE assumes that Placer County would impose the same mitigation measure on Alternatives 1 through 5 (individually or combined) to address this effect. The mitigation measure would fully mitigate the effect to a **less than significant** level.

PVSP EIR Mitigation Measure 4.9-2: Commercial Noise Controls

(Applicability – No Action, Proposed Action and All Alternatives)

*PVSP EIR Mitigation Measure 4.9-2 requires that proposed specific uses shall be reviewed for their potential to produce significant noise impacts. Noise control measures shall be applied to assure that new stationary sources shall not exceed adopted noise standards. The full text of the mitigation measure text is presented in **Appendix 3.0**.*

Impact NOISE-3 Increase in Traffic Noise at Buildout (Year 2025)

No Action Alt. The No Action Alternative would result in **less than significant** effect related to traffic noise.

Exterior Noise Levels with Project Traffic

The No Action Alternative would be built out over time and 2025 is the earliest year by which build out could occur and produce the highest traffic levels. Traffic noise was not separately modeled for the No Action Alternative. However, as shown in **Table 3.12-4, Year 2025 Traffic Noise Levels**, traffic noise levels in 2025 under the Proposed Action are projected to result in a significant impact at only one location. The No Action Alternative would produce substantially less traffic than the Proposed Project which would result in a traffic noise increase less than 3 decibels. The effect would be **less than significant**.

Interior Noise Levels with Project Traffic

Traffic from the No Action Alternative would have a **less than significant** effect on interior noise levels under 2025 conditions. The Placer County interior noise level standard is 45 dB CNEL. It is generally understood that new construction practices consistent with the California Building Code (CBC) would result in an exterior to interior noise reduction of 25 to 30 dB CNEL. If this reduction is applied, traffic noise from the No Action Alternative would not exceed 45 dB CNEL in interior spaces either on- or off-site.

Proposed Action (Base Plan and Blueprint Scenarios) The Proposed Action under both scenarios would result in a **significant** effect from traffic-related noise at off-site sensitive receptors. With mitigation, this effect would be reduced to a **less than significant** effect.

Exterior Noise Levels with Project Traffic

The analysis of traffic noise from the Proposed Action under both the Base Plan and Blueprint assumes a build out year of 2025. As shown in **Table 3.12-4, Year 2025 Traffic Noise Levels**, traffic noise levels in 2025 are projected to exceed the County's General Plan noise standard of 60 dB CNEL on 14 roadway segments in the vicinity, with or without the traffic added by the Proposed Action. Along one roadway segment, traffic noise would decrease by 1 dB CNEL with the implementation of the Proposed Action, but the change would not be perceptible. The traffic added by the Proposed Action would increase noise levels by 1 to 3 dB CNEL along three roadway segments under 2025 conditions. The 3 dB CNEL increase along 16th Street north of Elverta Road would represent a **significant** effect.

PVSP EIR Mitigation Measure 4.9-4 would address this effect. This measure was adopted by Placer County at the time of the approval of the PVSP (Base Plan). The USACE assumes that Placer County would impose the same mitigation measure on the Proposed Action Blueprint scenario (or any level of development under the Proposed Action) to address this effect. Placer County concluded that with this mitigation measure, the effect will be reduced

to a less than significant level. The USACE also finds that the traffic noise effect would be reduced to **less than significant** with mitigation.

**Table 3.12-4
Year 2025 Traffic Noise Levels**

| Roadway | Segment | Traffic Noise Levels (CNEL dB(A) at 75 feet from road center) | | |
|-------------------------|---------------------------------|------------------------------------------------------------------|---------------------------------|--------|
| | | 2025 Background | 2025 Background + Project | Change |
| Baseline Road | East of County Line | 72 | 73 | 1 |
| Fiddymont Road | North of Baseline Road | 67 | 67 | 0 |
| PFE Road | East of Walerga Road | 67 | 67 | 0 |
| Elverta Road | East of SR 70/99 | 70 | 71 | 1 |
| Elverta Road | East of Rio Linda Boulevard | 72 | 71 | -1 |
| Elverta Road | East of 16 th Street | 70 | 70 | 0 |
| Watt Avenue | North of Elverta Road | 72 | 72 | 0 |
| Watt Avenue | North of Antelope Road | 67 | 67 | 0 |
| Watt Avenue | North of Elkhorn Boulevard | 68 | 68 | 0 |
| Walerga Road | North of Elverta Road | 66 | 66 | 0 |
| Walerga Road | North of Antelope Road | 66 | 66 | 0 |
| Walerga Road | North of Elkhorn Boulevard | 70 | 70 | 0 |
| 16 th Street | North of Elverta Road | 64 | 67 | 3 |
| Walerga Road | North of PFE Road | 70 | 70 | 0 |

Source: Placer County, 2006.

Interior Noise Levels with Project Traffic

Traffic from the Proposed Action would have a **less than significant** effect on interior noise levels under 2025 conditions. The Placer County interior noise level standard is 45 dB CNEL. Generally, new construction practices consistent with the CBC would result in an exterior to interior noise reduction of 25 to 30 dB CNEL. If this reduction is applied, then traffic noise from the Proposed Action would not exceed 45 dB CNEL in interior spaces either on- or off-site.

Alts. 1 through 5 All of the alternatives (individually or combined) would construct a project broadly similar to the Proposed Action. As discussed in **Section 3.14, Transportation and Traffic**, Alternatives 1 through 5 would result in a similar trip generation as the Proposed Action. The trip distribution on project area roadways would be similar to the Proposed Action and therefore, the traffic would result in a **significant** noise effect.

PVSP EIR Mitigation Measure 4.9-4 would address this effect. The USACE assumes that Placer County would impose the same mitigation measure on Alternatives 1 through 5 (individually or combined) to address this effect. As described above, the mitigation measure would fully mitigate the effect to **less than significant**.

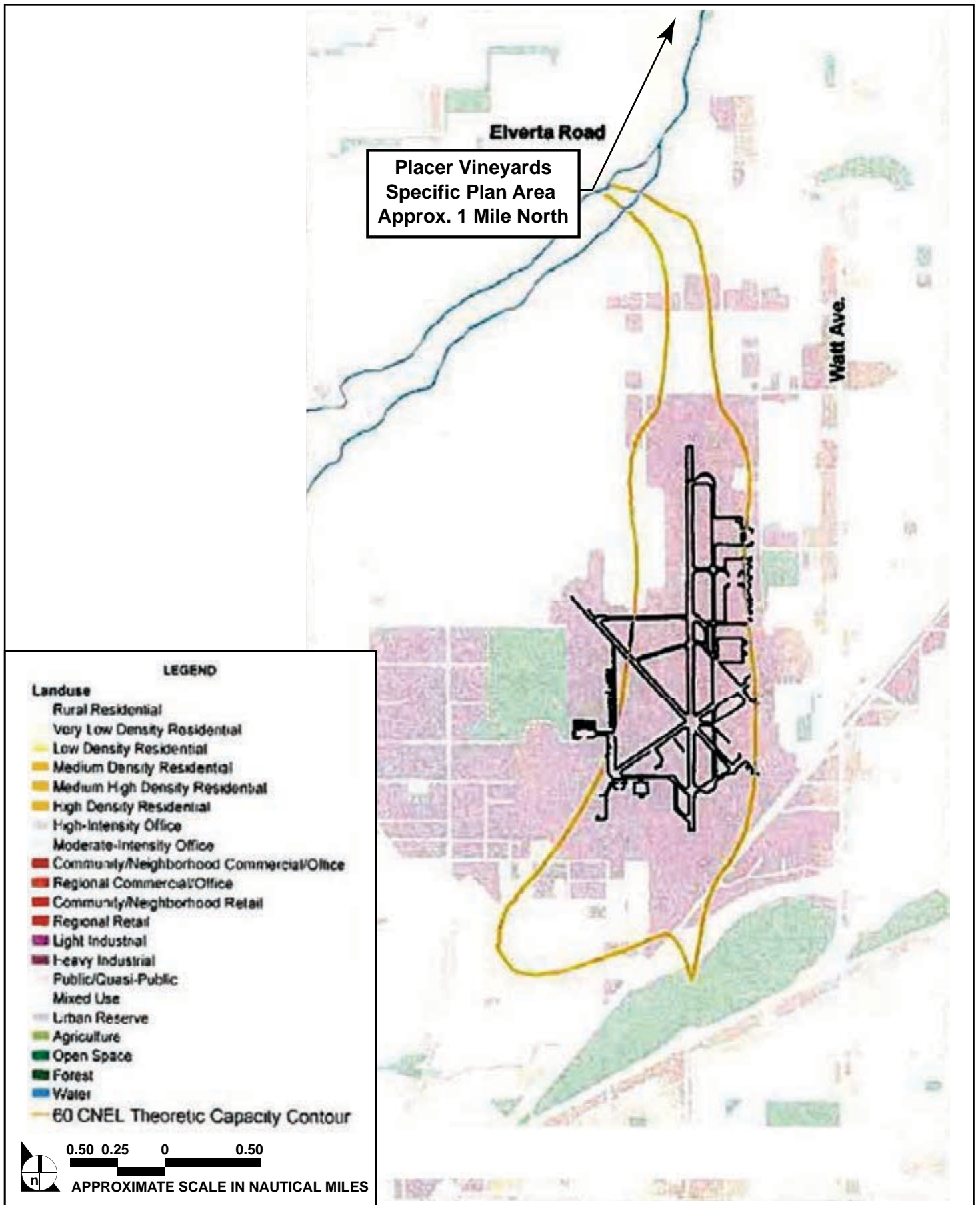
PVSP EIR Mitigation Measure 4.9-4: Traffic Noise Attenuation

(Applicability – No Action, Proposed Action and All Alternatives)

PVSP EIR Mitigation Measure 4.9-4 requires site-specific acoustical analyses to determine setbacks and traffic noise abatement measures to reduce traffic noise. The full mitigation measure text is presented in Appendix 3.0.

Impact NOISE-4 Aviation Noise

No Action Alt., Proposed Action, and Alts. 1 through 5 The impact from aircraft noise on future residents would be **less than significant**. McClellan Airport's most recent Airport Land Use Compatibility Plan (formerly known as Comprehensive Land Use Plans) was updated in 1987 when McClellan was still operated as an Air Force Base. The manner in which the airport is now operated is significantly different than when it was operated as an Air Force Base and the fleet utilizing the facility is also significantly different. These changes have resulted in a smaller area exposed to high levels of aircraft noise and a smaller area required for aircraft safety zones. As shown on **Figure 3.12-2, Full Capacity Noise Contour for McClellan Airport**, the 60 dB CNEL noise contour at full capacity is located south of Elverta Road. Therefore, exterior noise levels from aircraft operations are not predicted to exceed the Placer County 60 dB CNEL exterior noise level standard on the project site. Additionally, noise levels from aircraft operations are not predicted to exceed the City's interior standard of 45 dB CNEL on the project site. The No Action Alternative, Proposed Action, and Alternatives 1 through 5, would not expose future residents to excessive aircraft noise. This would be a **less than significant** effect.



SOURCE: City of Roseville – November 2009

FIGURE 3.12-2

Full Capacity Noise Contour for McClellan Airport

Impact NOISE-5 Indirect Effects on Noise from Off-Site Infrastructure Not Constructed as Part of the Project

| | |
|--------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>No Action Alt., Proposed Action (Base Plan and Blueprint Scenarios), and Alts. 1 through 5</p> | <p>The construction of off-site water pipeline infrastructure by the Placer County Water Agency (PCWA) which would be used by the No Action Alternative, Proposed Action, and Alternatives 1 through 5, would result in less than significant effects to noise with mitigation. The water infrastructure would be primarily underground pipelines which would not disturb nearby noise sensitive land uses. Therefore, operational impacts would not be significant.</p> <p>Construction of the proposed water pipelines would no use pile driving or other unusual construction practices which would result in higher noise levels. Increased truck traffic along area roadways would generate noise during construction. As analyzed in the PVSP Second Partially Recirculated RDEIR dated March 2007, construction activities would be temporary and generally occur during normal daytime working hours. However, should construction be undertaken during nighttime hours, construction noise could result in annoyance or sleep disruption for nearby residents, or if equipment is not properly muffled or maintained, the noise levels could affect nearby residents. This would be a potentially significant effect.</p> <p>As stated in the PVSP EIR, the infrastructure project would comply with the Placer County Noise Element standards and the Placer County Noise Ordinance. Placer County also identified PVSP EIR Mitigation Measure 4.9-3 to reduce the effect to less than significant. However, in the California Environmental Quality Act (CEQA) Findings of Fact and Statement of Overriding Considerations for the PVSP EIR, the County acknowledged that it did not have the authority to impose these mitigation measures on Placer County Water Agency's (PCWA's) project and the impact would remain significant. USACE concurs with the County that if the PCWA imposes these or similar mitigation measures on the infrastructure project, the noise effects would be less than significant. However, USACE also does not have the authority to impose mitigation measures on a project that would be built by the PCWA and finds that the effects would remain significant.</p> |
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3.12.6 RESIDUAL SIGNIFICANT IMPACTS

All effects associated with noise would be mitigated to less than significant. Therefore, there would be no residual significant impacts for the Proposed Action and any of the alternatives.

3.12.7 REFERENCES

DKS Associates. 2011. Memorandum: Placer Vineyards EIS Traffic Counts.

Placer County. 2006. "Placer Vineyards Specific Plan Final Environmental Impact Report" (State Clearinghouse No. 1999062020).

Federal Highway Administration (FHWA). 2006. "FHWA Roadway Construction Noise Model User's Guide."

Placer County. 1994. "Placer County General Plan Update, Noise Element."