

CHAPTER 5.10

NOISE

The Initial Study did not identify any impacts that may be associated with expanding the Sphere of Influence and noise. Comments received during circulation of the Notice of Preparation did not identify noise as a potentially significant impact that might be caused from expanding the Sphere of Influence.

The following discussion of noise issues is based upon several previously certified Final Environmental Impacts Reports completed for major projects in the Nipomo area and are incorporated by reference into this document. Those EIRs include:

- South County Area Plan, Environmental Impact Report, May 1991
- Woodlands Specific Plan, Environmental Impact Report, December, 1998
- Willow Road/Highway 101 Interchange, Environmental Impact Report, April, 1999
- Lucia Mar Unified School District High School #2, Environmental Impact Report, November, 1998

Also incorporated by reference is the County's Noise Element of the General Plan and the associated Technical Reference Document. The Noise Element provides regulatory guidance and authority regarding noise impacts from development projects.

A. Existing Conditions

The following is a summary of the County's **Noise Elements Technical Reference Document**. This discussion provides background information about noise, how it is measured and some of the technical issues involved in determining noise impacts.

Noise is often defined simply as unwanted sound, and thus is a subjective reaction to characteristics of a physical phenomenon. The descriptors of community noise in current use are the results of many years of effort to translate objective measurements of sound into measures of subjective reaction to noise. Before elaborating on these descriptors, it is useful to discuss some fundamental concepts of sound.

Sound is defined as any pressure variation in air that the human ear can detect. If the pressure variations occur frequently enough (at least 20 times per second), they can be heard and hence are called sound. The number of pressure variations per second is called the frequency of sound, and is expressed as cycles per second, now called Hertz (Hz) by international agreement.

The speed of sound in air is approximately 770 miles per hour, or 1,130 feet/second. Knowing the speed and frequency of a sound, one may calculate its wavelength, the physical distance in air from one compression of the atmosphere to the next. An understanding of wavelength is useful in evaluating the effectiveness of physical noise control devices such as mufflers or barriers, which depend upon either absorbing or blocking sound waves to reduce sound levels.

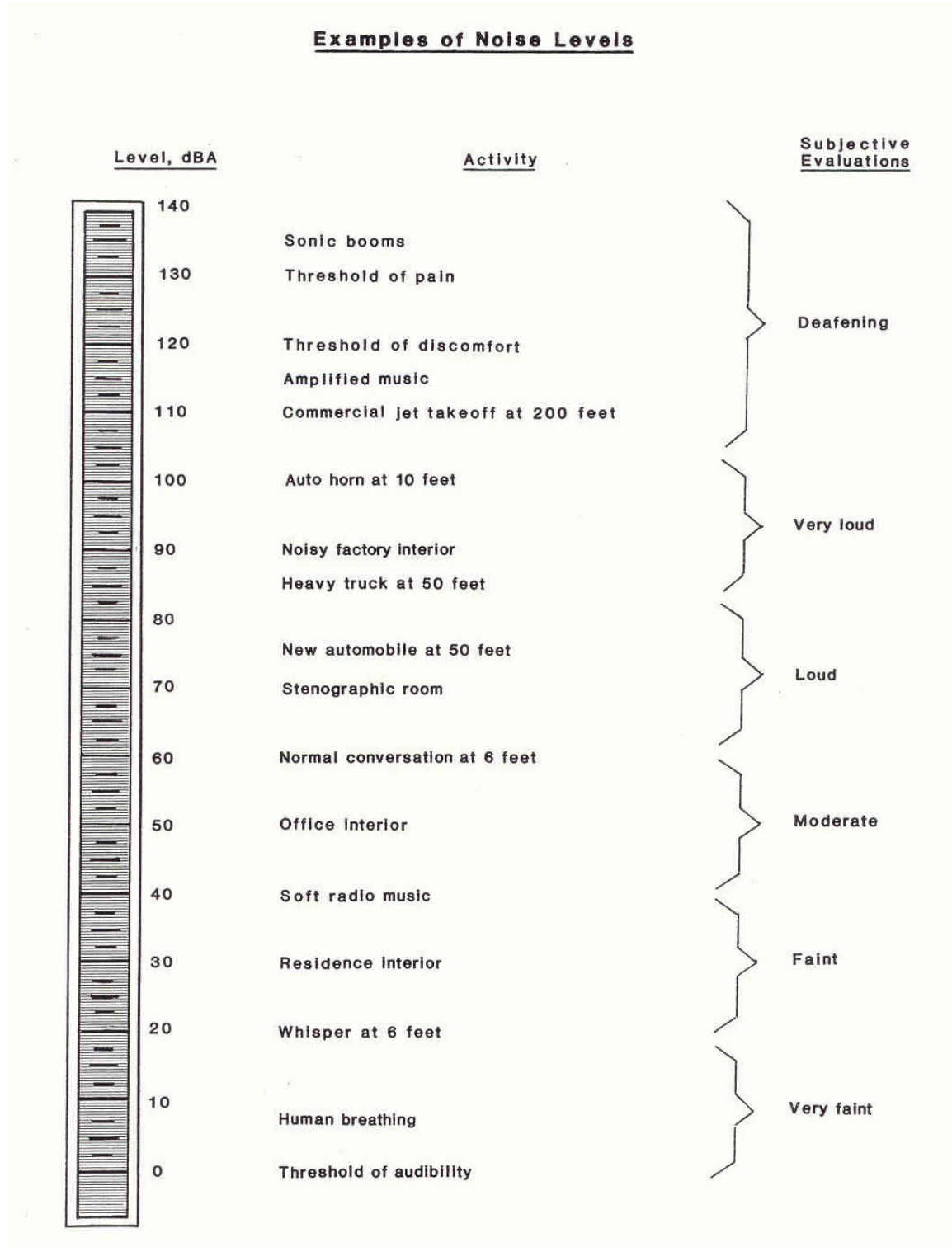
To measure sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel (dB) scale was devised.

The decibel scale uses the hearing threshold as a point of reference, defined as 0 dB. Other sound pressures are then compared to the reference pressure, and the logarithm is taken to keep the numbers in a practical range. Use of the decibel scale allows a million-fold increase in pressure to be expressed as 120

dB. Another useful aspect of the decibel scale is that changes in levels (dB) correspond closely to human perception of relative loudness.

The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. In the range of usual environmental noise levels, perception of loudness is relatively predictable, and can be approximated by weighting the frequency response of a sound level measurement device (called a sound level meter) by means of the standardized A-weighting network. There is a strong correlation between A-weighted sound levels and community response to noise. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment. Figure 5.10-1 illustrates typical A-weighted sound levels due to recognizable sources.

Figure 5.10-1: Examples of Noise Levels



Noise in the community has often been cited as being a health problem, not in terms of actual physiological damage, such as hearing impairment, but in terms of inhibiting general well-being and contributing to undue stress and annoyance. The health effects of noise in the community arise from the interference with human activities such as sleep, speech, recreation, and tasks demanding concentration or coordination. When community noise interferes with human activities or contributes to stress, public annoyance with the noise source increases, and the acceptability of the environment for people decreases. This decrease in acceptability and the threat to public well being is the basis for land use planning policies directed towards the prevention of exposure to excessive community noise levels. There are also economic affects of community noise: reduced property values and reduced productivity in the workplace due to stress.

To control noise from existing fixed sources, many jurisdictions have adopted community noise control ordinances. Such ordinances are intended to abate noise nuisances and to control noise from existing sources. They may also be used as planning tools if applied to the potential creation of a nuisance, or to potential encroachment of sensitive uses upon noise-producing facilities.

Willow Road/Highway 101 Interchange FEIR

The discussion in the Willow Road Highway 101 Interchange Final Environmental Impact Report provides information about the project specific issues that were addressed during the environmental review process. For a project such as the Willow Road/Highway 101 interchange a noise analysis is prepared and used to identify impacts and potential mitigation. This discussion also provides background regarding the implementation of policies and regulations contained in the County's Noise Element.

South County Area Plan EIR

The discussion in the Environmental Impact Report prepared for the South County Area Plan, which was adopted in 1994, provides background on potential

community noise sources: Highway 101, roads and streets. It also provides for mitigation measures such as increased setbacks, walls or sound conditioning.

Potential impacts to existing residents can be identified and mitigated at such time as traffic improvements are implemented. The County Engineering Department has conducted investigations of increased noise for road improvement projects in Los Osos and on Pomeroy Road, and measures to mitigate increased noise levels have been identified and implemented or are proposed to be implemented at the time of project construction.

B. Thresholds of Significance

The proposed project would represent a significant impact if it were to cause an increase in existing noise levels or expose people to severe noise levels.

C. Project Impacts

Expanding the District's Sphere of Influence would not expose people to adverse noise conditions. Although the proposed Sphere of Influence Update and Municipal Service Review does not expose people to noise related impacts, the proposed project could represent the first step in the development of the areas within the SOI.

It should be noted that the SOI would not cause a change in zoning or an increase in density. An increase in density in the SOI Study Areas would first require review and evaluation through one, or more of the following processes:

- A zoning change in the form of a General Plan Amendment;
- Approval of a Specific Plan;
- Conditional Use Permit (Minor Use Permit/Development Plan approvals);
- Tract/Parcel Map approvals; or
- an Annexation into the District.

The above-listed processes are subject to the California Environmental Quality Act. Inclusion in the SOI does not guarantee service or development of an area, but allows for the jurisdiction to plan serving that area. A General Plan Amendment, Specific Plan, Tract/Parcel Map or Conditional Use Permit would study a variety of land use and environmental issues before being approved or denied including community character and compatibility, existing Land Use policies, traffic and circulation impacts, the provision of public services, etc.

The proposed project would not directly result in any changes in land use for the involved properties. The precise nature and extent of future development within the proposed SOI is subject to speculation and cannot be determined at this time. Any future development of the areas within the SOI would require a number of land use planning steps as listed above.

The Program EIR represents the first-tier environmental document for these related actions. Once the Program EIR is prepared, subsequent activities within this program must be evaluated in order to determine the extent of the required additional CEQA documentation.

The expansion of the Sphere of Influence will not increase noise or expose people to severe noise levels. This is a class IV impact or no impact. The Sphere of influence for the Nipomo Community Services District is a plan for services and does not allow the development of a property or the provision of services without further discretionary actions such as permits needed from the County or an annexation required prior to the District providing service.

The County's Noise Element provides for mitigation of severe noises or increases in noise levels caused by development projects. These mitigation measures are implemented at the time of project development and are established through the project review and CEQA evaluation stages of the permitting process.

D. Cumulative Impacts

The CEQA Deskbook defines Cumulative impacts as “two or more individual impacts that, when considered together are considerable or that compound or increase other environmental impacts.” The District’s SOI is a contributing factor to continued growth and development in the Nipomo area. However, it should be noted that Nipomo has grown significantly over the last two decades without the prior expansion of the District’s Sphere of Influence. Typically, development projects were approved by the County for development and then approved by LAFCO and the District for inclusion into the District’s SOI and service area. The growth in the area has been driven by approvals at the County level.

The expansion of the District’s Sphere of Influence may represent a contributing step in the development of the cumulative projects listed in the Land Use Section of this document. Development of these cumulative projects listed in that section would impact noise conditions in the project area on both a short-term and long-term basis. The long-term cumulative noise impact in the area would result largely from increased traffic volumes in the project area.

E. Mitigation Measures

The Sphere of Influence will not cause significant adverse impacts related to noise, therefore no mitigation measures are required.

F. Residual Impacts

Reductions in the Sphere of Influence Study Areas as recommended in the Land Use Section (5.1) of this EIR will decrease any residual noise impacts associated with the Sphere of Influence. Impacts related to noise are less than significant, Class III.