

Summary of Key Issues and Review of Alternatives

Chapter 13 Noise Element

This Element covers managing noise levels to minimize the exposure of community residents to excessive noise.

Chapter 13 Noise Element				
Key Topics and Issues	Plan Update Approach (Alternative B)	Existing Framework Plan (Alternative D)	Alternative A	Alternative C
<p>Inventory of Noise Sources and Constructive Notice. General Plan guidelines require an inventory so noise sources can be considered during planning processes.</p> <p>Should significant noise sources and surrounding properties also be identified by zoning overlay?</p>	<p>Noise characteristics and sources are generally described. The most significant sources are specifically listed in tables within the Element. The Element includes the use of noise impact combining zones to identify areas where noise mitigation and recorded notice and acknowledgement is required (N-S2, N-IM1).</p>	<p>Includes an inventory of sources but does not include the use of noise impact combining zones.</p>	<p>Adds quarries and industrial operations to the inventory.</p>	<p>Does not use zone overlay or recorded notices for inventoried sources and surrounding properties beyond those already in place (McKCP).</p>
<p>Noise Compatibility. This is an issue for general plan and zone mapping and project application review to avoid noise conflicts.</p> <p>Are the maximum noise levels appropriate?</p> <p>Should the County regulate</p>	<p>Acceptable short-term noise levels are defined by zone for day and night time (N-S9). Acceptable exterior and interior average noise levels for residential areas are specified (N-S6,7,8). The Element includes approaches to avoid conflicts through zoning overlays, project review and</p>	<p>Noise limits were not described by zone type and did not include limits on short-term noise. Less attention given to steps that should be taken to avoid conflicts.</p>	<p>Has lower maximum sound level limits.</p>	<p>Increased maximum limits and does not regulate short-term noise levels.</p>



Chapter 13 Noise Element				
Key Topics and Issues	Plan Update Approach (Alternative B)	Existing Framework Plan (Alternative D)	Alternative A	Alternative C
short-term noise levels?	compliance measures(NP-1,2 and NS-2, 3,4,5)			
<p>Nuisance Abatement. Abatement issues include resolving noise complaints and reducing noise along Highway 101 and 299.</p> <p>Should nuisance be judged on sound levels alone or should allowances be made for mitigating factors?</p>	The Element approaches noise complaints with precise allowable noise levels and a compliance program (N-IM3). Highway noise reduction is included as an implementation measure (NM-IM4).	A general reference is made on the need for code enforcement and interagency attention to noise reduction.	Judges nuisance on sound levels alone with no allowance for mitigating circumstances.	Allows nuisance complaints to be resolved through civil channels with minimum county enforcement. Does not pursue noise reductions on Highway 101 and 299.

Plan Alternatives Comparison Chart

Chapter 13 Noise Element **updated 9-20-11**

NOTE: changes from draft document are highlighted in yellow with corresponding staff comments.

Plan Alternative				Chapter 13. Noise Element	Staff Remarks/ Implementation	Position R,M,D
				13.4 Goals		
A	B	C		N-G1. Excessive Noise. A quiet and healthful environment with limited disagreeable noise.	No specific goals in existing plan.	
				COMMENTS:		
A	B			N-G2. Incompatible Land Uses. Land uses arranged and managed to reduce annoyance and complaints and minimize the exposure of community residents to excessive noise.	See alternative wording	
				COMMENTS:		
		C		N-G2. Incompatible Land Uses. Land uses arranged to reduce annoyance and complaints and minimize the exposure of community residents to excessive noise.	Alt. C wording	
				COMMENTS:		

Plan Alternative				Chapter 13. Noise Element	Staff Remarks/ Implementation	Position R,M,D
				13.4 Policies		
A	B			N-P1. Minimize Noise from Stationary and Mobile Sources. Minimize stationary noise sources and noise emanating from temporary activities by applying appropriate standards for average and short-term noise levels during permit review and subsequent monitoring.	QJ, IM1,IM3, S3-9 	
				COMMENTS:		
		C		N-P1. Minimize Noise from Stationary and Mobile Sources. Minimize stationary noise sources and noise emanating from temporary activities by applying appropriate standards for average noise levels during permit review and subsequent monitoring.	No standards for short-term noise.	
				COMMENTS:		
			D	3291(5)(B) Existing and potential incompatible noise levels in problem areas should be reduced through land use planning, subdivision review, building code enforcement, and other administrative means.	Closest related policy.	
A	B			N-P2. Guide to Land Use Planning. Evaluate current noise levels and mitigate projected noise levels when making community planning and zoning decisions to minimize the exposure of community residents to nuisance noise levels. Minimize vehicular noise exposure by planning land uses compatible with transportation corridors and applying noise attenuation designs and construction standards. Avoid zoning patterns that permit people to "move to the nuisance" unless mitigated through project conditions or recorded notice.	Leg, IM1,IM2 S1-2, S8 	
				COMMENTS:		

Plan Alternative			Chapter 13. Noise Element	Staff Remarks/ Implementation	Position R, M, D
		C	N-P2. Guide to Land Use Planning. Evaluate current noise levels and mitigate projected noise levels when making community planning and zoning decisions to minimize the exposure of community residents to nuisance noise levels. Minimize vehicular noise exposure by planning land uses compatible with transportation corridors and applying noise attenuation designs and construction standards.		
			COMMENTS:		
A	B		N-P3. Noise from U.S. 101 and 299. The County shall support efforts to reduce noise levels on Highway 101 and 299 along sections in proximity to concentrated residential development through prioritized roadway surface maintenance, use of noise-reducing surface treatments, traffic safe tree or shrub plantings or, in cases of significant noise exposure; use of lower speed limits and construction of sound walls.	Pol, IM4	
			COMMENTS:		
		D	3291(5)(D) Provide for periodic review and revision of the Noise Element.		
		D	3291(5)(E) A local interagency program should be developed for the general public in the nature, extent, and solutions to noise problems in Humboldt County.		
		D	3291(5)(F) Coordinate noise control activities with those of other responsible jurisdictions.		
		D	3291(5)(G) Identify and evaluate potential noise problem areas on a continuing basis.		

Plan Alternative				Chapter 13. Noise Element	Staff Remarks/ Implementation	Position R,M,D
				13.5 Standards		
A	B			N-S1. Land Use/Noise Compatibility Matrix. The Land Use/Noise Compatibility Standards(Table 13-D) shall be used as a guide to ensure compatibility of land uses. Development may occur in areas identified as “normally unacceptable” if mitigation measures can reduce indoor noise levels to “Maximum Interior Noise Levels” and outdoor noise levels to the maximum “Normally Acceptable” value for the given Land Use Category.		
				COMMENTS:		
		C		N- Sx. Modification or Waiver of Noise Insulation Requirements. Where full mitigation in accordance with the policies and standards of this Noise Element is not feasible, the Planning Commission may modify or waive such policies or standards to enable reasonable use of the property, provided that noise levels are mitigated to the maximum extent feasible.		
				COMMENTS:		
A	B			N-S2. Noise Impact Combining Zones. The 20-year projected noise contours in the Map Book Appendix and the most current Airport Land Use Compatibility Plans shall be used to identify noise impact combining zone areas to indicate where special sound insulation measures may apply.		
				COMMENTS:		
A	B	C		N-S3. Environmental Review Process. For noise sensitive locations where noise contours do not exist, the environmental review process required by the California Environmental Quality Act shall be utilized to generate the required analysis and determine the		

Plan Alternative				Chapter 13. Noise Element	Staff Remarks/ Implementation	Position R,M,D
				appropriate mitigation per Plan and state standards. Future noise levels shall be predicted for a period of at least 10 years from the time of permit application.		
				COMMENTS:		
A	B			N-S4. Noise Study Requirements. When a discretionary project has the potential to generate noise levels in excess of Plan standards, a noise study together with acceptable plans to assure compliance with the standards shall be required. The noise study shall measure or model as appropriate, CNEL and Maximum Noise Level (Lmax) levels at property lines and if feasible, receptor locations. Noise studies shall be prepared by qualified individuals using calibrated equipment under currently accepted professional standards and include an analysis of the characteristics of the project in relation to noise levels, all feasible mitigations and projected noise impacts. <i>The Noise Guidebook</i> published by the U.S. Department of Housing and Urban Development, or its equivalent, shall be used to guide analysis and mitigation recommendations.		
				COMMENTS:		
			D	3291(5)(A) Existing and potential incompatible noise levels in problem areas should be reduced through operational or source controls where the County has responsibility for such controls.		
A	B	C		N-S5. Uniform Building Code. Use the Uniform Building Code as adopted for California (California Code of Regulations, Title 24, Appendix Chapter 12) for determining required noise separation requirements for buildings.		
				COMMENTS:		

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A	B	C	<p>N-S6. Noise Standards for Habitable Rooms. Noise reduction shall be required as necessary to achieve a maximum of 45 CNEL (Community Noise Equivalent Level) interior noise levels in all habitable rooms per California building standards.</p>																	
			<p>COMMENTS:</p>																	
A	B		<p>N-S7. Noise Reduction Requirements for Exterior Areas in Residential Zones. On new single family residential lots of 5,000 square feet or more, a usable outdoor living area at least 200 square feet in size per dwelling unit that meets the 60 CNEL (Community Noise Equivalent Level) standard shall be maintained somewhere on the property.</p>																	
			<p>COMMENTS:</p>																	
	B		<p>N-S8. Short-term Noise Performance Standards (Lmax). The following noise standards, unless otherwise specifically indicated, shall apply to all property within their assigned noise zones and such standards shall constitute the maximum permissible noise level within the respective zones.</p> <p style="text-align: center;">SHORT-TERM NOISE STANDARDS (Lmax)</p> <table border="0" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;"><u>Zoning Designation</u></th> <th style="text-align: center;">Day (maximum) 6:00 a.m. to 10:00 p.m. <u>dBA</u></th> <th style="text-align: center;">Night (maximum) 10:00 p.m. to 6:00 a.m. <u>dBA</u></th> </tr> </thead> <tbody> <tr> <td>CG, MG, MC, AE, TPZ,TC</td> <td style="text-align: center;">85</td> <td style="text-align: center;">75</td> </tr> <tr> <td>CN, MB, ML</td> <td style="text-align: center;">80</td> <td style="text-align: center;">70</td> </tr> <tr> <td>RM</td> <td style="text-align: center;">70</td> <td style="text-align: center;">60</td> </tr> <tr> <td>RS, R1, R2, RA</td> <td style="text-align: center;">65</td> <td style="text-align: center;">60</td> </tr> </tbody> </table> <p>Decibel measurement made shall be based on a reference sound pressure of 0.0002</p>	<u>Zoning Designation</u>	Day (maximum) 6:00 a.m. to 10:00 p.m. <u>dBA</u>	Night (maximum) 10:00 p.m. to 6:00 a.m. <u>dBA</u>	CG, MG, MC, AE, TPZ,TC	85	75	CN, MB, ML	80	70	RM	70	60	RS, R1 , R2, RA	65	60	<p>Inadvertent omission.</p>	
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	<p>microbars as measured with a sound level meter using the "A" weighted network. Ambient noise without the noise source in operation shall be observed at 15 second intervals for a period of 15 minutes. The lowest reading is interpreted as the ambient noise level of that sampling point. If this reading is above the standard set for the noise zone, steps must be taken to determine the source or sources of the intruding high-level noise followed by appropriate control action before continuing the survey. If the reading is equal to or below the standard, the survey can proceed. With the noise source in operation, record the instantaneous response at 15 second intervals for a 15 minute period. Or, for a noise source of less than 15 minutes, record the instantaneous response at 15 second intervals for the time the noise source is in operation. The lowest response level recorded while the noise source is in operation is interpreted as the intruding noise level. Compare the intruding noise levels with the standard. If the noise level generated from the noise source exceeds the standard, the noise source is generating noise levels in excess of the allowable standards set for the noise zone.</p>																					
	<p>COMMENTS:</p>																					
<p>A</p>	<p>N-S9 Short-term Noise Performance Standards (Lmax).</p> <table border="0" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 30%;"></th> <th style="width: 35%; text-align: center;">Day (maximum) 6:00 a.m. to 10:00 p.m.</th> <th style="width: 35%; text-align: center;">Night (maximum) 10:00 p.m. to 6:00 a.m.</th> </tr> <tr> <th style="text-align: left;"><u>Zoning Designation</u></th> <th style="text-align: center;"><u>dBA</u></th> <th style="text-align: center;"><u>dBA</u></th> </tr> </thead> <tbody> <tr> <td>CG, MG, MC, AE, TPZ, TC</td> <td style="text-align: center;">80</td> <td style="text-align: center;">70</td> </tr> <tr> <td>CN, MB, ML</td> <td style="text-align: center;">75</td> <td style="text-align: center;">65</td> </tr> <tr> <td>RM</td> <td style="text-align: center;">65</td> <td style="text-align: center;">60</td> </tr> <tr> <td>RS, R1, R2, RA</td> <td style="text-align: center;">65</td> <td style="text-align: center;">60</td> </tr> </tbody> </table>			Day (maximum) 6:00 a.m. to 10:00 p.m.	Night (maximum) 10:00 p.m. to 6:00 a.m.	<u>Zoning Designation</u>	<u>dBA</u>	<u>dBA</u>	CG, MG, MC, AE, TPZ, TC	80	70	CN, MB, ML	75	65	RM	65	60	RS, R1, R2, RA	65	60		
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				Decibel measurement set for the noise zone. (Note: Includes same text as Alt. B)		
				COMMENTS:		
		C		N- S10. Modification or Waiver of Noise Insulation Requirements. Where full mitigation in accordance with the policies and standards of this Noise Element is not feasible, the Planning Commission may modify or waive such policies or standards to enable reasonable use of the property, provided that noise levels are mitigated to the maximum extent feasible.		
				COMMENTS:		
A				N-S11. Industrial Performance Standards. Add the Industrial Performance Standards currently contained in the County Coastal Zoning Code to the Inland Zoning Code as well.		
				COMMENTS:		
A				N-S12. Helicopter Logging. For timber operations conducted under a Timber Harvest Plan, request that Cal Fire restrict helicopter logging to the hours from 8 A.M. to 5 P.M. on weekdays only, with no helicopter logging permitted at any time on weekends, within 500 feet of a paved roadway, or within 1,000 feet of a residence. Additionally, request Cal Fire to require special advance notice to any and all neighbors within a half-mile radius of any helicopter logging, stating the specific days that the logging will occur.		
				COMMENTS:		

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			D	3292(4)(A) Noise Compatibility Matrix General Plan Figure 3.2	Figure 3.2 is attached at the end of this chart.	
				13.6 Implementation Measures		
A	B			N-IM1 Noise Impact Combining Zone. Utilize Noise Impact Combining Zone designations to identify areas where noise impact mitigations are required.		
				COMMENTS:		
A	B			N-IM2 Periodic Review of Combining Zones. Periodically identify and evaluate potential noise problem areas for mitigation or as candidates for noise impact combining zones, particularly during Airport Land Use Compatibility Plan updates.		
				COMMENTS:		
A	B			N-IM3 Compliance Program. The County shall investigate complaints of excessive noise and control noise sources consistent with the standards established by the Plan. Nuisance determinations shall be based on noise levels, duration and number of noise events.		
				COMMENTS:		
A	B			N-IM4 Noise from U.S. Highway 101 (U.S. 101) and State Highway 299. Working through its representation on Humboldt County Association of Governments (HCAOG), the County shall work with other affected jurisdictions and request California Department of Transportation (Caltrans) to consider implementing noise reduction measures on U.S. 101 and State Highway 299 along sections in proximity to concentrated residential development.		

Plan Alternative				Chapter 13. Noise Element	Staff Remarks/ Implementation	Position R,M,D
				COMMENTS:		
A				N-IM5 Adoption of Performance Standards. Adopt Industrial Performance Standards Countywide.		
				COMMENTS:		
A				N-IM6 Noise Ordinance. Adopt a noise ordinance based on current zoning districts, tailored to community noise standards that address construction noise and other non-transportation noise sources.		
				COMMENTS:		
A				N-IM7 Exterior Noise Reduction Standards. Adopt standards specifying appropriate measures to reduce exterior noise levels in noise impact areas. Standards shall consider the portion of a lot where noise level reduction measures would apply, acceptable sound wall designs, and standards for achieving noise level reductions through effective site planning techniques.		
				COMMENTS:		
			D	5-3200(4)(A) Request CalTrans to update current and projected noise contours for highways.		
			D	5-3200(4)(B) Incorporate new noise contour data for airports from Airport Master Plan.		

Plan Alternative				Chapter 13. Noise Element	Staff Remarks/ Implementation	Position R,M,D
			D	5-3200(4)(C) Revise CEQA and subdivision review processes as necessary.		

Figure 3-2 (Noise Compatibility Matrix From Existing General Plan)

CLEARLY ACCEPTABLE		NORMALLY ACCEPTABLE		NORMALLY UNACCEPTABLE			CLEARLY UNACCEPTABLE					
				LAND USE INTERPRETATION FOR Ldn VALUE								
LAND USE CATEGORY		Maximum interior exposure, Ldn*	55	65	75	85						
Residential-Single Family, Duplex, Mobile Homes		45										
Residential-Multiple Family, Dormitories, etc.		45										
Transient Lodging		45										
School Classrooms, Libraries, Churches		45										
Hospitals, Nursing Homes		45										

Auditoriums, Concert Halls, Music Shells	35											
Sports Arenas, Outdoor Spectator Sports												
Playgrounds, Neighborhood Parks												
Golf Courses, Riding Stables, Water Rec., Cemeteries												
Office Buildings, Personal, Business and Professional	50											
Commercial-Retail, Movie Theaters, Restaurants	50											
Commercial-Wholesale, Some Retail, Ind., Mfg., Util.												
Manufacturing, Communications (Noise Sensitive)												
Livestock Farming, Animal Breeding												
Agriculture (except Livestock), Mining, Fishing												
Public Right-of-Way												
Extensive Natural Recreation Areas												

*Due to exterior sources (Source: Bolt, Beranek, and Newman, Inc., 1974)