

# 15.0 VISUAL RESOURCES, NOISE, AND OTHER AESTHETIC CONSIDERATIONS

## 15.1 BACKGROUND AND SETTING

A significant concern for Humboldt Bay's management is the role that the bay plays in the "quality of life" for residents in and visitors to the region. As the Draft Plan notes (and, in fact, as was noted in the 1975 Master Plan) the bay is an area with high visual and amenity value for the region's residents and its visitors, and for some local residents the existence of the bay is an important, even a dominant factor, in their psychological worldview (in a fashion similar to the importance that some San Francisco Bay area residents place on that bay). The Draft Management Plan can inform current and future decision-makers about the importance of the "aesthetic" implications of the Plan, and the Plan can provide an appropriate policy focus to consider elements that are important in shaping this "aesthetic" function of the bay.

The Draft Management Plan does not explicitly direct any specific developments or implementation projects. In consequence, the sorts of project-specific assessments of possible aesthetic impacts that might be applicable in project-specific environmental reviews are generally inapplicable for this EIR. Nonetheless, a general identification of some of the factors that are important in project-specific reviews helps in the programmatic evaluation of aesthetic concerns in this document.

This EIR identifies "aesthetic" concerns as including two primary modalities: (1) visual resources and visual quality, and (2) noise. It could be argued that other modalities (e.g., air clarity and odor, or perhaps a "slow pace of life") are also important aesthetic factors for people who live in the Humboldt Bay region. This EIR chapter is focused on visual and noise considerations for the basic practical reason that the Draft Management Plan can contemplate that these concerns will arise with respect to the Plan's implementation, and the District can identify necessary actions when projects are subject to the District's purview, whereas many other aspects of the region's aesthetic environment are not.

### 15.1.1 Visual Resources, Scenic Views, and Aesthetics

#### 15.1.1.1 The Humboldt Bay Visual Environment is a Significant Regional Resource

Visual resources and scenic views occur in a diverse array of environments in the Humboldt Bay area, ranging in character from views of all-natural aesthetic features to views that mainly consist of the built environment. Views of the natural aquatic environment provide much of the visual quality in Humboldt Bay, including areas such as the National Wildlife Refuge Complex, the City of Arcata's Marsh and Wildlife Sanctuary, the PALCO Marsh, and the Department of Fish and Game's Wildlife Areas. Many views that combine natural and built components also have scenic appeal, such as the marina views of Woodley Island, and views of the Bay environment from locations such as the City of Eureka's Old Town Boardwalk and Waterfront Trail. The Evergreen Pulp Mill is a conspicuous industrial element on the North Spit.

Public access around the bay affords mid-range and long-range views in virtually all directions across the open waters of the Bay, unless there are intervening structures,

such as along commercial waterfront areas. Opportunities to view the Bay from Highways 101 and 255 are significant because of the numbers of people who see the bay as an element in their everyday experiences. The Table Bluff area and the Highway 255 bridges provide relatively rare elevated-view public perspectives of the Bay. Various views from and toward Woodley Island and from and toward the Eureka waterfront are examples of generally attractive scenic views combining natural and human-made features. There are no designated State Scenic Highways in Humboldt County, although both Highway 101 and State Route 255 are listed as “eligible.”<sup>1</sup>

#### 15.1.1.2 Elements of Visual Quality and Viewshed Assessments

Local, state, and federal agencies may promulgate guidelines for the preservation and enhancement of visual resources within their jurisdictions. Local agencies are not required to address visual quality as a required element in their general plans, although some local agencies may include the topic as an optional element, or may include aesthetic design considerations under other planning policies. Policies and related zoning ordinance provisions may be focused on specific aspects of the visual environment. Humboldt County’s General Plan (Framework Plan, Section 3540), for example, includes a number of goals, policies, and standards applicable to the development of a County scenic route system. Under its zoning ordinance, the County allows billboards in certain highway, industrial, commercial, and unclassified zones.

The Coastal Act includes a policy focus that protects “highly scenic areas” as one of the designated “sensitive coastal resource areas.” Section 30251 of the Coastal Act states that:

The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.

Assessing these conditions involves specialized concepts and definitions. The term “visual quality” refers to the character, condition, and quality of a scenic landscape, vista point, natural or built environment, scenic roadway, or other significant or unique visual feature within a viewshed, as well as how such “visual resources” are perceived and valued by the public. A “viewshed” is the area within the field of view of an observer, and this term is used to describe the extent of a scenic resource; the extent of a viewshed can be limited by a number of intervening elements, including structures, topography, and vegetation.

Various methodologies are used in visual quality assessment to overcome the subjective nature of aesthetics and the inherent variability among individual human perceptions. As with noise assessment (see below), the responses of a community or group of users tend to be (compared with individual responses) a useful guide to identifying significant scenic features and preferred landscape types. Visual

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<sup>1</sup> <http://www.dot.ca.gov/hq/LandArch/scenic/schwy5.html> (viewed January 2006).

“sensitivity” reflects the relative degree of public interest in a given visual resource, as well as concern over changes or potential changes in the quality of that resource.

In general, most forms of visual quality assessments consider such attributes as unity or cohesion, intactness, context, variety, uniqueness, and vividness (the overall qualities of the view); and texture, color, contrast, line, mass, and scale (descriptive elements). Variables associated with the users or observers are also considered, including the distance from the observer to the visual features, the observer’s position or angle of view, the duration of the view, the time of season, whether it is day or night, and the observer’s expectations and background.

#### 15.1.1.3 Visual Quality in the Humboldt Bay Region

The methodologies summarized above have been applied for few “projects” in the Humboldt Bay region. More significantly, projections of future land uses that would allow projections of future visual quality cannot be specified for the County or the cities of Arcata and Eureka, and this EIR avoids speculating about such future conditions.

In a broad sense, the viewshed within the Humboldt Bay region is unlikely to change significantly. The majority of the regional landscape matrix adjoining Arcata Bay and South Bay are designated in adopted planning documents for uses that are incompatible with significant development. The “bayscape” region that might be expected to experience additional development that could alter the regional viewshed is the area along the eastern and western shores of Entrance Bay between the bay entrance and the Highway 255 bridge. This area is designated in adopted City of Eureka and County of Humboldt planning documents for coastal-dependent industrial uses (see Chapter 12.0).

Some land uses that would be compatible with that designation could affect the visual environment in the middle part of the bay, and these possible developments would be visible from virtually the entire region between McKinleyville and Table Bluff. The potential visual effects of these uses might include large structures, with much the same “visual mass” as the existing Evergreen pulp mill. These uses could be associated with taller structures, not unlike the existing pulp mill smokestack. There could be shorter, but more intricate, structures, such as cranes associated with shipping terminals. It is not inconceivable that there could be a general increase in exterior lighting in the vicinities of these operations, with a general increase in the degree of nighttime illumination in the Entrance Bay region. Finally, it is not inconceivable that the scale of industrial use would intensify throughout the region, with industrially related structures on the Samoa Peninsula from the vicinity of the bay entrance all the way to Samoa, as well as a similar set of developments along the bay margin on the east side; these uses likely would vary in visual mass and appearance, but the overall area could change in appearance from a region that is currently sparsely developed to one that is fully developed. It is possible that some residents and visitors might find this change to be aesthetically significant. The change, and the potential effects on the visual environment, would not be an effect of the Draft Humboldt Bay Management Plan, which does not regulate upland land uses.

This EIR also notes that aesthetic judgements remain subjective, notwithstanding the applications of study methodologies intended to remove some of the subjectivity. Historical photos (and indeed the living memories of many residents) of the Humboldt Bay area demonstrate Entrance Bay shorelines on both sides of the bay that were virtually lined with active coastal-dependent industrial operations, many with smokestacks as massive as the existing Evergreen mill stack. Until the 1970s the standard practice of disposing of wood wastes by burning often gave the atmosphere in the Humboldt Bay region a dense brownish-gray cast. This EIR cannot presume to judge whether the changes that have occurred during the past 50 years have been aesthetically beneficial. Attempts in this EIR to guess at what future residents and visitors in the region may judge to be aesthetically negative or positive would be sheer speculation, and would not be material to the scope of the document.

### **15.1.2 The Humboldt Bay Sound Environment, Noise, and Aesthetic Effects**

#### 15.1.2.1 Noise in a Regulatory Context

Federal, state, and local governments have established noise guidelines and regulations to regulate unwanted sound. The federal Noise Control Act of 1972 (Public Law 92-574), while recognizing that the primary responsibility for noise control lies with local governments, established a requirement that federal agencies administer programs “to promote an environment for all Americans free from noise that jeopardizes their health or welfare.” The act assigned oversight responsibilities to EPA, including the authority to disseminate noise information and guidance; however, each federal agency has authority to promulgate its own regulations.<sup>2</sup>

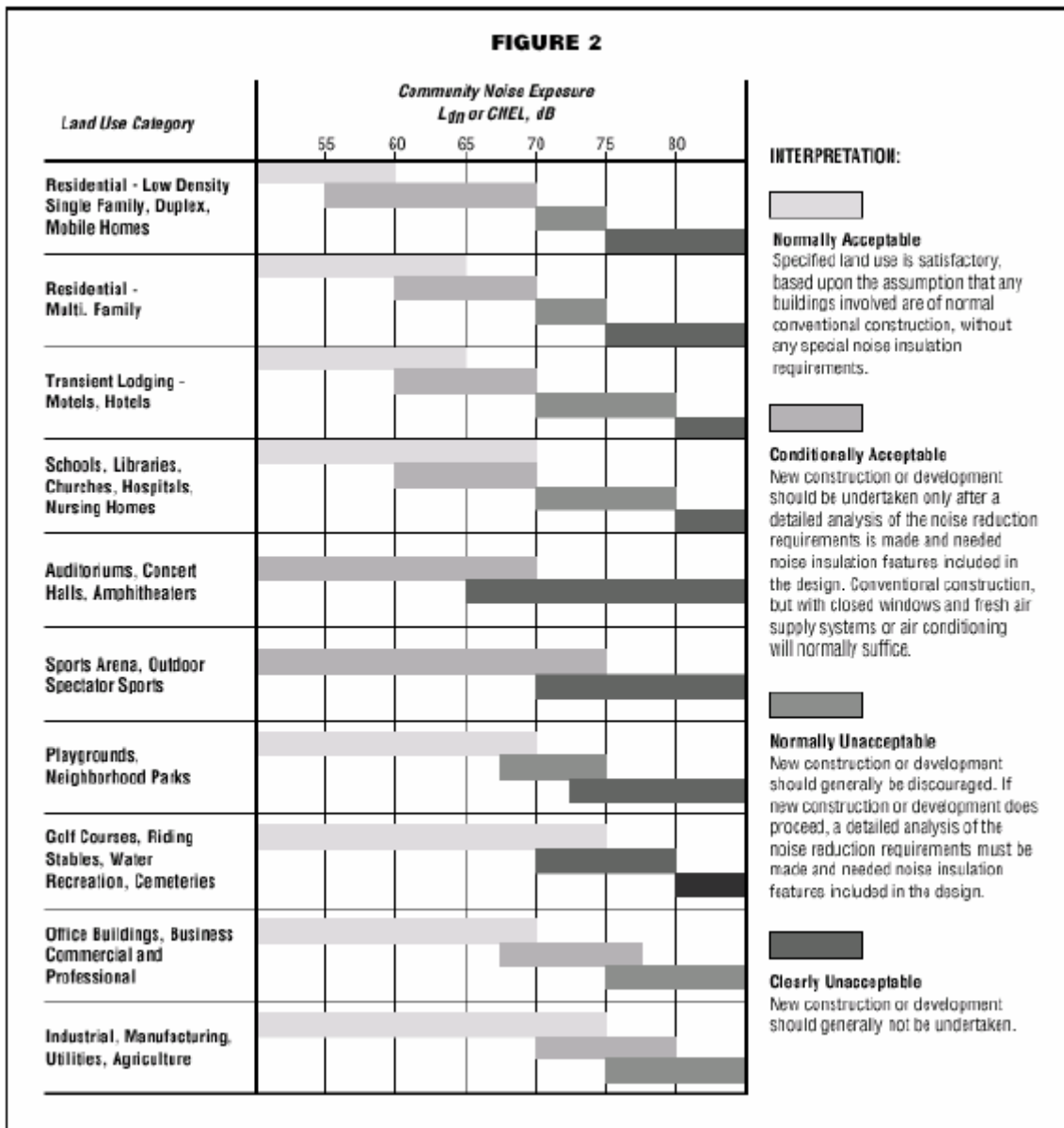
The State of California General Plan Guidelines (Office of Planning and Research 2003) identify guidelines for the noise elements of City and County General Plan documents, such as the General Plans for the County of Humboldt, the City of Arcata, and the City of Eureka. The state guidelines include a land use compatibility chart, which is reproduced in this document as Figure 15-1. The chart shows overlapping  $L_{dn}$  (see below) ranges in many land use categories; local governments may further refine and adopt more specific community guidelines in their general plans.

Some land uses, communities, or activities are considered likely to be more sensitive to ambient noise and changes in noise levels than others, due to the types of use or activity and the degree of exposure and duration of the noise. Hospitals, schools, commercial lodging, nursing homes, residences, and cultural or recreation areas are typically more sensitive to noise than commercial or industrial land uses. Additional sensitive receptors in the Humboldt Bay area include special public outdoor events along the bay waterfront and Native American activities that are anticipated to be held on Indian Island in the future.

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<sup>2</sup> See, for example, various FHWA publications and regulations available online at <http://www.fhwa.dot.gov/> (viewed January 2006) and HUD’s “Noise Guidebook,” available online at <http://www.hud.gov/> (viewed January 2006).

**EIR Figure 15-1. Recommended Community Noise Standards for General Plan Documents.**



Source: State of California, Governor's Office of Planning and Research, General Plan Guidelines, 2003.

15.1.2.2 Noise Descriptors and Human Response

Noise is commonly defined as unwanted sound, including sound that has the potential to annoy or disturb people or non-human animals, disrupt normal activities, cause an adverse psychological or physiological effect, or diminish the quality of the environment. Sound is generally described as the energy of a vibrating or moving object (a "source") transmitted by pressure waves through a medium (such as air) to a receptor or hearing organ, such as a human ear. While the loudness (or amplitude), pitch (frequency), and timing of sounds can be measured and precisely described, the

degree of “noisiness” is highly subjective (as a consequence, the “aesthetic” perception of noise is also subjective, and sound pressures that are not perceived to constitute unwanted noise by some listeners are commonly perceived as significantly adverse by others).

Physically, sound pressure levels are measures in “decibels” (dB), using a nonlinear measurement scale that is not easily interpreted by non-specialists. Because the human ear is not equally sensitive to all frequencies, however, sound is often measured using an electronic filter that de-emphasizes very loud and very soft sounds to better correspond with normal human hearing. This produces the “A-weighted scale,” which is expressed as “dBA,” with zero dBA approximately corresponding to the threshold of hearing and 135 or 140 dBA approximately corresponding to the threshold of pain.

Individual reactions to sound vary widely; a community’s reaction is more predictable in a statistical sense. Noise also fluctuates over time; some sounds may be constant and long-term within an environment, while others occur as one-time events or in random, short-term patterns. Agencies that regulate noise use descriptors that characterize the varying noise environment over time, such as the “equivalent” (or “steady state”) sound level ( $L_{eq}$ ) averaged over a set period (e.g., an hour), or a 24-hour noise exposure level (the “day-night” noise level,  $L_{dn}$ ), which is weighted to “penalize” nighttime and, in some cases, evening and nighttime noise (the “community noise equivalent level,” or CNEL). Other measures used to characterize outdoor noise environments are “maximum” instantaneous sound levels ( $L_{max}$ ), or measures that are based on how often a reference level of sound is exceeded.

Analytically, the sum of two equally loud noises is not twice as loud, but rather is approximately 3 dBA more than one source alone. For example, the noise from two identical pieces of heavy equipment would increase the noise level by approximately 3 dBA over the noise produced by one piece of equipment. This level of noise change is not easily perceived by most people; however, a change of 5 dBA is generally perceived, and increases of 7 to 10 dBA typically result in annoyance and calls to local government offices.

Noise can be generated from mobile or stationary sources. Automobile and truck traffic is a major source of noise in most developed areas in California; sound walls to reduce traffic noise in residential areas are typically implemented when noise levels exceed 67 dBA. Aircraft noise is a major consideration near airports and military bases. Stationary sources can be permanent or temporary; a major source of temporary noise is from construction activity. EIR Table 15-1 provides examples of the average noise levels associated with various types of construction equipment. The noise from stationary sources is attenuated at the rate of approximately 6 dBA to 7.5 dBA with every doubling of distance from the source. Atmospheric conditions (particularly wind, which moves the medium through which sound is transmitted) play a substantial role in noise attenuation, and can either increase sound levels or decrease them depending on wind direction.

**EIR Table 15-1. Noise levels of Selected Construction Equipment.**

<b>Equipment Type</b>	<b>Average Noise Level Range (dBA) at 50 feet</b>
Air compressor	80 to 85
Backhoe	80 to 84
Bore/drill rig	81 to 98
Chainsaw	85to 95
Compactor	80 to 82
Concrete truck	81 to 85
Crane, derrick	85 to 88
Crane, mobile	83 to 87
Dozer	84 to 88
Drill rig	85 to 88
Excavator	75 to 95
Generator	78 to 84
Grader	85 to 86
Jackhammer	85 to 89
Loader	85 to 89
Pile driver, impact	95 to 101
Truck	84 to 89

Source: Schexnayder and Ernzen (FHWA) 2004; EPA 1971.

#### 15.1.2.3 Noise in the Humboldt Bay Region

The existing acoustical environment of the Humboldt Bay area has been well described; no comprehensive, authoritative source is known that characterizes the Humboldt Bay area as a whole. Although local conditions vary widely, the Humboldt Bay area is generally a relatively quiet setting, where sound created by human activities is added to a largely natural ambient acoustic setting, which varies according to location, topographic features, local meteorological conditions, and the proximity to sound sources.

Representative noise sources in the Humboldt Bay area include both stationary and mobile sources: (a) traffic noise from highways (i.e., Highway 101 and State Route 255, including the bridges over Humboldt Bay) and other traffic corridors; (b) activities associated with commercial, industrial, and recreational uses (including those associated with the Eureka waterfront, Woodley Island, on the Samoa Peninsula and North Spit); and (c) motorized watercraft, boats, ships, navigation aids, and marine-related equipment; and (d) aircraft, including small planes and helicopters. However, the overall, time-averaged noise levels appear to be relatively low throughout the area.

The recent Humboldt Bay Bridges Seismic Retrofit project (Caltrans 2001) provided a sample of the existing sound environment in the central part of the Bay, and an example of how noise from a construction project may affect various human and wildlife uses on Humboldt Bay. That project involved major construction activity

(including pile-driving) on the three bridge spans that carry State Route 255 from Eureka to the Samoa Peninsula – essentially a transect across the central part of Humboldt Bay. The noise assessment included measuring ambient conditions in the areas of potential effect, noise modeling to predict the noise levels likely to be associated with construction activities, and identifying mitigation measures to reduce identified adverse effects.

Existing sound levels were measured at a number of representative locations, including near sensitive receptor locations. Daytime measurements of ambient sound conditions within the project area were within expected ranges, with traffic on Route 255 being the main source of daytime noise:

- in Eureka on 2nd Street near Route 255, sound levels ( $L_{eq}$ ) were measured at 65.2 dBA;
- at the egret rookery on Indian Island (about 1,300 feet from the highway), sound levels were in the range of 43.2 to 48.5 dBA;
- near a dock on Woodley Island, sound levels were measured at 50.6 dBA; and
- at the Peninsula Union Elementary School on the Samoa Peninsula, sound levels were measured at 51.7 dBA.

In general, this EIR would expect that projects that may be associated with the implementation of the Draft Management Plan may have similar noise-generating effects. For the Highway 255 bridges retrofit project Caltrans identified project construction as the most likely cause of noise impacts, particularly the noise resulting from driving temporary trestle piles, sheet piles, and footing piles at the three bridges. Most projects that involve construction near Humboldt Bay likely would involve similar actions. Pile-driving work was anticipated to occur intermittently, with work occurring simultaneously at one or more locations. Noise and vibration associated with heavy truck traffic were also identified as potential impacts.

Caltrans identified mitigation measures to restrict the level of noise from pile driving, and to prohibit pile-driving on the bridge spans closest to the rookery during the egret nesting season. An additional measure was prescribed to avoid adverse noise effects on special events on the Eureka waterfront by temporarily suspending disruptive construction work during those times by agreement between the City of Eureka and Caltrans.

This EIR presumes that projects that may occur as a result of implementing the Management Plan would involve the identification and application of appropriately similar noise-mitigation measures for future projects. The agencies that would be responsible for requiring these mitigation measures generally would be the County and/or the cities (particularly the City of Eureka), all of which have general plan and zoning requirements for noise mitigation. However, it is also reasonable to expect that the District could anticipate noise generation associated with projects that the District might approve. The Draft Management Plan currently lacks a policy focus addressing noise concerns; Section 15.4 identifies an appropriate policy addition that corrects this potential Plan defect.

## 15.2 ISSUES TO BE ADDRESSED AND THRESHOLDS OF SIGNIFICANCE

Aesthetic issues include the potential that implementation of the Draft Plan would be likely to have a substantial adverse effect on a scenic vista, substantially damage scenic resources. The items identified in the CEQA Guidelines Environmental Checklist include several items intended to guide the identification of potential effects on “aesthetic resources” as those are considered herein. Implementation of the Management Plan would have an environmentally significant effect if it would:

- Have a substantial adverse effect on a scenic vista (Item I.a);
- Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings with a state scenic highway (Item I.b);
- Substantially degrade the existing visual character or quality of the site and surroundings (item I.c);
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area (Item I.d);
- 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 (Item XI.a);
- exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels (Item XI.b);
- a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project (Item XI.c); or
- a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project (Item XI.d).

Based on standard generally recognized by the State of California, the following items are also thresholds of potential significance related to noise impacts:

- substantially interfere with existing and planned noise-sensitive land uses, particularly uses and activities where quiet sound levels are essential, of extraordinary significance, or and/or serve a public purpose uses;
- cause a substantial, long-term increase in noise levels above the ambient sound levels, particularly at night; or
- Substantially affect sensitive wildlife species, particularly during nesting periods.

The Initial Study (Appendix A) found that the implementation of the Draft Plan could have potentially significant effects in the contexts of both visual quality and noise. As the Initial Study observed, it is possible that the Plan’s implementation could be associated with significant effects on the visual character or the visual quality of a variety of sites addressed indirectly by the Plan. Potential effects on scenic resources would need to be considered on a project-specific basis. The Initial Study also considered it possible that, in carrying out the Draft Management Plan’s policies, there could be substantial temporary or periodic noise effects, noting that some activities (e.g., pile-driving) that could reasonably be expected to result from carrying out policies in the Draft Plan may be associated with temporary or intermittent increases in noise levels near Humboldt Bay. The Initial Study also considered it possible, although unlikely, that some actions identified in the Draft Plan could result in or be associated with long-term increases in ambient noise levels, primarily as a possible indirect effect of assisting in the siting of some kinds of coastal-dependent industrial activities in the Bay.

A relatively small number of comment concerning aesthetic topics were returned during public scoping for the EIR, comments on the Notice of Preparation, and in public comments on the Draft Management Plan. One commenter considered it likely that scenic viewsheds were likely to be affected by many projects, giving as examples container yards and liquid natural gas (LNG) tanks. The commenter noted that large ships entering and leaving the harbor may be “picturesque” for some but “ugly” for others. The commenter also raised the issue of billboards as a source of visual impacts. Public comments on the Notice of Preparation and received during scoping sessions provided few substantive issues related to noise beyond those already identified in the Initial Study, as addressed above. Several comments were made that recommended that the EIR address the high level of noise associated with container shipping.

## **15.3 ENVIRONMENTAL EFFECTS OF PROPOSED PLAN AND ALTERNATIVES**

### **15.3.1 “No Project” (Existing Master Plan)**

#### 15.3.1.1 Visual Resources and Aesthetic Considerations

The 1975 Master Plan included considerations of selected scenic views around the Bay and generally promoted their protection and enhancement, particularly in connection with public access and recreation activities. Scenic attributes were noted in all three areas of the Bay, but emphasized in the North Bay and South Bay through the greater application of the “Conservation” designation.

The Master Plan did, however, promote a fairly wide range of future water and land uses and activities, many of which are associated with potential visual effects, including land use recommendations for upland areas. The uses designated by the Master Plan included the development of additional port-related or water-related industrial uses, service-commercial areas, small craft facilities, public recreation improvements, and upland non-water-dependent industrial uses. The Master Plan recommended several commercial and visitor-serving development projects that would offer scenic views to the public from built environments, including: restaurants, shops, and waterfront commercial areas adjacent to the Bay in Eureka; a high-rise motel in the King Salmon area; and campgrounds and observation platforms on the North Bay. The plan recommended the development of a scenic vista on Table Bluff.

The 1975 Master Plan included the following recommendation for scenic routes and vistas:

#### Scenic Routes and Vistas

The County of Humboldt has the opportunity to legislate scenic corridor controls as well as designate additional well deserving scenic highways, roads or other routes throughout the County.

1. Support the County in establishing scenic routes on the existing road system as suggested in the Master Plan.
2. In conjunction with scenic routes, scenic vistas should be established to promote and permit viewing of the Bay and wildlife. Possible locations are suggested on the Plan [map].

The Master Plan map showed scenic vista sites in eight locations around the Bay, including the channel entrance ends of both the North Spit and South Spit, the southwestern corner of the Bay approaching the South Spit Management Area, two locations between Eureka and Arcata (on the Bay side of Highway 101), the Samoa Peninsula near the end of the State Route 255 bridges, and the vicinity of Humboldt Hill.

The Master Plan also includes the following discussion and recommendations related to aesthetics:

#### Appearance and Design

Too often shoreline developments have not taken advantage of the natural setting provided by their surroundings. In the case of Humboldt Bay this is especially true, as one can see by traveling around the shoreline of the Bay. Industrial, commercial, and residential uses and other developments have been haphazardly constructed with little thought as to appearance or physical relationship to the Bay.

As one travels the shoreline of the Bay, the scenic quality changes from breathtaking views to the clutter of poorly designed buildings, commercial signs and other man-made elements which mar the Bay's appearance.

Humboldt Bay affords a special kind of open space which is not found in other areas. For this reason such a resource should not be overlooked, but enhanced.

1. Require that all Bayfront developments be designed to enhance the area and provide a pleasing view.
2. Endeavor to enhance the visual quality of developments by taking advantage of the natural setting provided and require that all projects be developed in accordance with the Master Plan of the Bay, the County and adjacent cities.
3. Require removal of all commercial signs from the tide and submerged lands, and that the other agencies having jurisdiction be encouraged to require the same.
4. In the future, require all signs proposed for erection in the Bay to have approval of the District.
5. Require removal by the owners of all vacant buildings, unused structures, docks or other man-made elements from the Bay's tide and submerged lands.
6. Require all future projects be designed in a manner compatible to the natural landscape or traditional Humboldt County architectural design.
7. Review the existing application procedures to assure that the necessary District review and controls are compatible with and will support the Master Plan.

Many of the recommendations in the Master Plan exceed the geographical and authoritative jurisdiction of the District. The District cannot designate scenic highways or create scenic vistas on upland areas outside its jurisdiction. Establishing and enforcing design requirements for all developments on the Bay shoreline is not within the District's direct powers, although the District could apply design requirements on proposals subject to its jurisdiction (particularly if those were located on its own properties). Requiring the removal of unused structures from the Bay's tidal and submerged lands is a District function, particularly in respect to safe navigation; some of these remnant structures, however, also provide important habitat for fish and marine organisms. The removal of commercial signs is problematical, and is not clearly within the District's control.

Overall, the uses and recommendations identified in the 1975 Master Plan suggest a variety of attendant effects on visual resources. Some recommendations for scenic vistas, or for locating development (restaurants, shops, and lodging), would afford public views of the Bay. These new structures would also be associated with their own adverse effects in terms of blocking views and producing visual intrusion into an exiting aesthetic setting.

The Master Plan also recommended the implementation of a number of commercial and industrial projects that would have involved intrusions into the visual environment, resulting in significant visual effects. With the further inclusion of recommendations and designated uses for upland areas, the 1975 Master Plan would presumably result in additional visual impacts, assuming that these plan components were implemented by the County and/or the cities.

This EIR finds that the overall visual effects that would result from continued reliance on the 1975 Master Plan would be at least as great as those associated with the Draft Management Plan. Like the proposed Management Plan, the 1975 Master Plan promoted development having potentially significant visual effects. While the Master Plan sought to protect and enhance the aesthetic qualities of the Bay, it is unlikely that the Master Plan's recommendations could be carried out without significant effects to the visual aesthetic environment in the bay region.

#### 15.3.1.2 Noise and Aesthetic Considerations

The 1975 Master Plan did not specifically address noise impacts, but the Plan did generally promote a wide range of water uses, land uses, and activities, many of which would be associated with temporary or permanent noise level increases. The Master Plan also included recommendations for development in many upland areas, including the further development of port-related or water-related industrial uses, service-commercial areas, small craft facilities, public recreation improvements, and upland non-water industrial uses; these recommendations also would have been associated with likely noise impacts. The implementation of these recommended projects would, in most cases, have involved noise effects on both a short-term construction basis and, in many cases, a basis of long-term or permanent increases in the ambient noise environment; the specific effects would have depended on the specific project.

This EIR finds that the overall noise effects implicit in the 1975 Master Plan, and therefore the noise-related aesthetic impacts of the Master Plan, would have been more significant than the noise-related aesthetic effects potentially associated with the Draft Management Plan.

### **15.3.2 Proposed Management Plan**

#### 15.3.2.1 Visual Quality and Aesthetic Considerations

Implementing the Management Plan can reasonably be expected to lead to the development of structures, lighting, and other project elements that could be associated with effects on the visual environment. The following policies in the Draft Management Plan have a significant potential to be associated with effects on visual resources and aesthetics.

### Harbor Policies:

- HLU-1: Harbor-related uses shall have priority under this Plan within the portions of Humboldt Bay designated for port-related or harbor-related uses
- HLU-3: Assist in removing potential constraints for marine-dependent or coastal-dependent land uses along the Samoa Peninsula, Fields Landing Channel, Eureka shorelines, and other harbor-related areas (from Harbor Revitalization Plan)
- HLU-4: Assist in removing potential constraints for marine-dependent or coastal-dependent land uses on harbor-related parcels in the South Bay (from Harbor Revitalization Plan)
- HFA-2: Protect appropriately designated shoreside areas for the development, maintenance, or expansion of commercial fish processing and aquaculture facilities or activities
- HFA-4: Identify additional aquaculture opportunities in Humboldt Bay
- HFA-5: Designate a Preferred Aquaculture Use Area in Arcata Bay, and require Best Management Practices to meet environmental constraints

### Recreation Policies:

- ROP-3: Identification of designated recreational use areas
- ROP-4: Future recreation areas to be reserved as needed
- RFA-2: Project approvals shall incorporate public access and associated services and amenities where appropriate
- RFA-3: Water-oriented recreation facilities; access for fishing and shellfish harvesting
- RFA-4: Coastal-dependent industrial and commercial uses may take priority in designated Harbor areas
- RFA-7: Protection of recreational areas
- RFA-10: Signage and parking for public recreation areas, access points, and trails
- RFA-11: Signage for boating safety
- RSA-1: Improvement and provision of boat launch sites
- RSA-2: Assistance to, maintenance of, and consideration of marinas
- RVR-2: Coastal-dependent uses shall facilitate public viewing, if feasible

### Conservation Policies:

- CEP-1: Impacts to streams, wetlands, estuaries, and coastal waters may be authorized for specific purposes or project types
- CEP-3: Revetments, breakwaters, and other shoreline structures may be approved under specified conditions

Determining the potential visual effects of future projects proposed to implement the Management Plan requires assessment of project-specific factors that are currently unknown. New structures or project components intrude into the visual setting for the bay. They could be compatible with maintaining the visual quality of the current aesthetic environment. New elements in the visual environment could block or reduce visual access to the Bay.

The Draft Management Plan recognizes the importance of the bay viewshed, and the Plan includes a policy section (Section 4.7 in Section 4.0, Volume III) explicitly directing the District's staff and decision-makers to consider viewshed effects in reviewing future implementation projects. Policies RVR-1 and RVR-2, in particular, provide direction to protect and enhance views of the bay, to the extent feasible.

The proposed Draft management Plan incorporated an additional policy, in response to public comments, which provides policy guidance with respect to billboards. Policy RVR-7 directs the District to further evaluate opportunities with respect to billboard management issues affecting the Humboldt Bay area, including regulatory and legal issues related to possible control measures. Depending on the results of the evaluation, the District may develop policy alternatives with respect to the future siting or construction of billboards in areas subject to the District's jurisdiction.

Based upon the exiting policy focus in the Draft Plan, this EIR finds that the Plan is not deficient in addressing visual quality and the visually aesthetic conditions subject to the District's jurisdiction. Additional policy measures are unnecessary.

#### 15.3.2.2 Noise and Aesthetic Considerations

The adoption of the Draft Management Plan and the subsequent implementation of the many "management" type activities identified in the plan – e.g., working collaboratively with other public agencies, convening a technical advisory committee, conducting scientific studies, and developing shoreline management standards and guidelines – have no evident effect in terms of noise. Nonetheless, the Management Plan does include policy directions for the bay's future uses that will likely be associated with noise and ground vibration effects.

For example, the portion of Humboldt Bay within which "Harbor" uses would be considered to have priority (Plan section 2.2.1) includes 16 types of possible coastal-dependent uses, including:

- dredging and other work within the Bay's navigation channels and berthing and mooring areas;
- incidental public works projects;
- piers, docks, wharves;
- shoreline protection projects;
- port, energy, and coastal dependant industrial facilities;
- boating and marina facilities;
- commercial fishing facilities;
- marine oil and fuel terminals; and
- other port-related facilities.

Almost every one of these uses is likely to be associated with activities that produce noise (sometimes very loud noise) and ground-borne vibration.

The following Draft Management Plan policies appear to have a significant potential to be associated with activities that produce noise and vibrations; these effects could result from construction activities or from operations.

Harbor Policies:

- HLU-1: Harbor-related uses shall have priority under this Plan within the portions of Humboldt Bay designated for port-related or harbor-related uses
- HLU-3: Assist in removing potential constraints for marine-dependent or coastal-dependent land uses along the Samoa Peninsula, Fields Landing Channel, Eureka shorelines, and other harbor-related areas (from Harbor Revitalization Plan)
- HLU-4: Assist in removing potential constraints for marine-dependent or coastal-dependent land uses on harbor-related parcels in the South Bay (from Harbor Revitalization Plan)
- HSM-4: Require maintenance according to the District's adopted shoreline protection standards
- HWM-2: Dredging may be authorized to meet Plan purposes
- HFA-1: Support the improvement of existing fish landing, buying, and processing facilities in the Humboldt Bay area
- HFA-2: Protect appropriately designated shoreside areas for the development, maintenance, or expansion of commercial fish processing and aquaculture facilities or activities
- HFA-4: Identify additional aquaculture opportunities in Humboldt Bay

Recreation Policies:

- RFA-2: Project approvals shall incorporate public access and associated services and amenities where appropriate
- RFA-3: Water-oriented recreation facilities; access for fishing and shellfish harvesting
- RFA-4: Coastal-dependent industrial and commercial uses may take priority in designated Harbor areas
- RFA-9: Support public transportation
- RSA-1: Improvement and provision of boat launch sites
- RSA-2: Assistance to, maintenance of, and consideration of marinas
- RIO-2: Public interpretive center

Conservation Policies:

- CEP-2: Dredging may be approved under specified conditions
- CEP-3: Revetments, breakwaters, and other shoreline structures may be approved under specified conditions

Potential noise effects associated with the Draft Plan would arise primarily from likely implementation activities involving construction activities or from future operations. The most significant category of potential noise impacts would likely result from major development projects in the areas of Humboldt Bay designated for "Harbor" uses by the Draft Plan and/or designated by the County or the cities for coastal-dependent

industrial uses. However, it is also possible that coastal-dependent uses could be developed in carrying out the Plan that would be associated with significant levels of sound or vibrations as an element in their normal operation. In addition to being environmentally significant on a project basis, it is certainly possible that implementing the Draft Plan could lead to two or more industrial uses, which could contribute to a significant overall cumulative noise effect.

The identification of potential noise impacts from individual implementation projects will fall to the District and to the CEQA lead agencies for those projects (primarily, presumably, the city of Eureka and the County of Humboldt). Both of these local regulatory agencies have noise standards associated with the general plan and zoning codes. This EIR concludes that potential noise impacts that might be associated with future projects will be identified in the project-specific reviews. However, this EIR concludes that it is not reasonable to expect the potential noise impacts will definitely be reduced to less-than-significant levels; that is, it's considered possible that implementing the Draft Management Plan could be associated with a net increase in noise or vibration, and thus with an effect on the aesthetic setting of the bay as it currently exists.

Some activities that are carried out near Humboldt Bay are considered to be particularly sensitive to interference from noise. These uses include public or commercial events (such as "Blues by the Bay") that would be significantly affected by a major increase in either construction-related noise or in ambient (operations-related) noise. In addition, cultural events of Native Americans that occurred on Indian Island likely would be affected by construction noise as well as by ongoing operations-related noise.

[Note: At the present time it is not possible to predict whether an increase in construction-related noise and vibration might adversely affect fish and wildlife resources in the bay, or whether in overall increase in ambient noise would have such an effect. This EIR anticipates that this question, which is not an aesthetic consideration, would be a matter of discussion, involving the District and fish and wildlife regulatory and trustee agencies, for any project that might produce such effects. To the extent that the District were responsible for determining construction and operations criteria for implementation projects, existing policies in Chapter 5.0 of the Plan (particularly Policies CAS-1 and CAS-3) would require that the District include feasible mitigation measures to address the effects. Additional policies are not needed in this context.]

## **15.4 POLICY CONSIDERATIONS FOR MITIGATING POTENTIALLY SIGNIFICANT EFFECTS**

### **15.4.1 Noise and Noise-Related Aesthetic Concerns**

The Draft Management Plan does not currently include any policies that address noise. While noise related to implementation projects located in upland areas largely would be within the purview of local lead agencies for land use and development reviews, the absence of an explicit policy focus on noise is a deficiency in the Draft management Plan. To the extent possible, the Management Plan is intended to provide a "self-mitigating" programmatic management program for Humboldt Bay.

Accordingly, an additional Plan policy is necessary to address possible noise effects that could arise from projects within the Plan's scope.

#### 15.4.2.2 Noise Effects on Activities Near the Bay

The following new policy will establish a District procedure for identifying potential sensitivity to noise for events conducted near the bay, allowing the District to address the need for noise control measures that can be incorporated into projects that the District approves. The policy will be added to Plan Section 3.2, and is intended to avoid or minimize significant adverse noise effects to Native American ceremonies, outdoor concerts, festivals, services, and other cultural event sensitive to noise or vibration impacts (added text in underline):

**HLU-7: Proposals for bay-related activities approved by the District shall incorporate appropriate noise control measures to avoid or reduce noise effects on events and activities carried out near the bay, to the extent feasible**

Policy: The District shall consider the potential noise and vibration effects of proposals that are subject to the District's jurisdiction. Should evidence indicate that the proposed actions may be associated with significant noise- or vibration-related effects on important cultural or social activities that occur near the bay (including Native American activities as well as cultural and economic events sponsored by other governments or by independent groups of bay users), the District shall require that mitigation measures be incorporated into the activities covered by the proposals in order to avoid or reduce potentially significant noise and vibration effects to the greatest extent feasible.

The incorporation of this policy measure into the Draft Plan addresses the potential policy-related effects of the Plan on noise and vibration. The identification and incorporation of feasible mitigation measures for specific projects that may follow from the Plan remain tasks to be accomplished in the considerations of those projects.

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