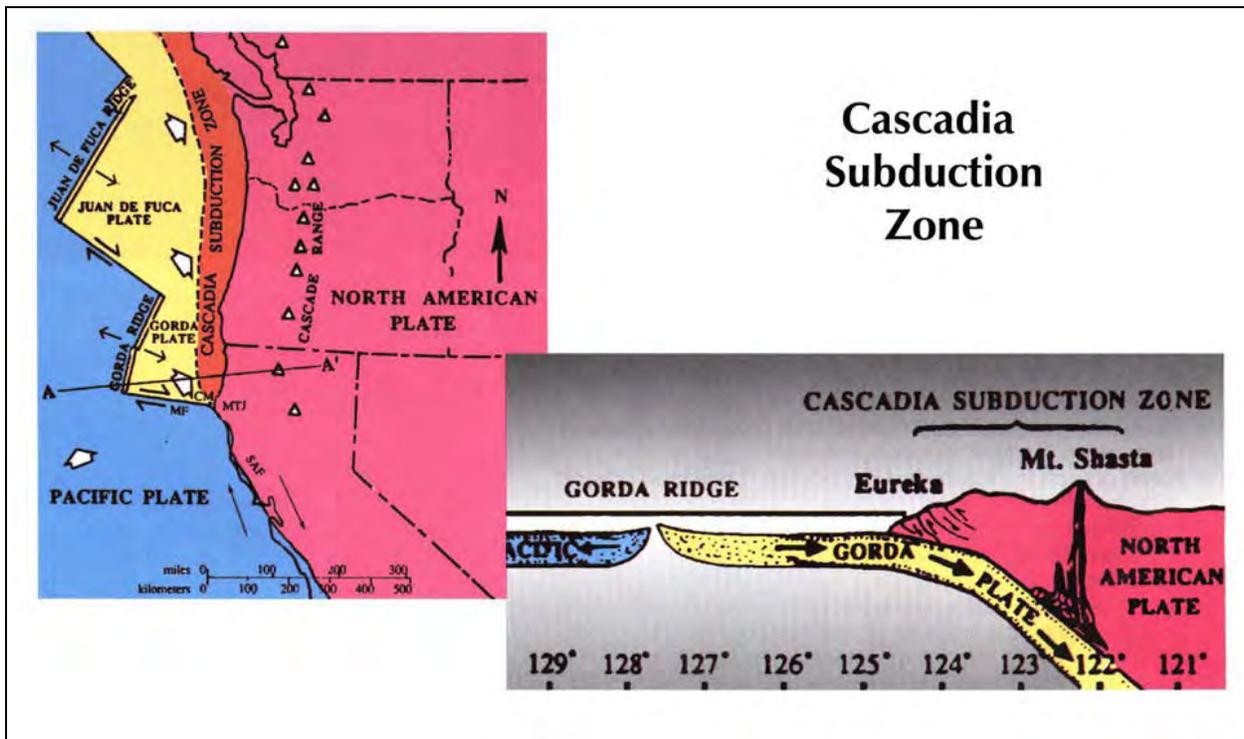


# Chapter 6

## Coastal Health and Safety

### Coastal Public Safety Element

### ~~Noise Element~~



# COASTAL PUBLIC SAFETY ELEMENT

## 6.1 INTRODUCTION

**Overview of Emergency Preparedness and Police and Fire Services.** Preparation for, and timely and adequate response to emergencies are essential community services that require planning and community-wide coordination. Emergency preparedness is the combined responsibility of the City, emergency response organizations, and community residents. Arcata's Volunteer Fire Department and City Police Department provide critical emergency response services and leadership, and serve as the community's primary response agencies in emergency situations. These agencies are most efficient when they can rely on emergency response organizations, such as the State of California's Office of Emergency Services, community groups, and individuals to provide organized support when needed. The Neighborhood Emergency Services Teams (NEST) that exist in several of Arcata's neighborhoods are good examples of local organizations with the resources and training to respond to emergencies.



**Overview of Arcata's Potential Seismic and Geologic Hazards.** The northern coast is one of California's most seismically active regions, and special precautions must be taken to protect residents from the effects of seismic events and hazards. Faults in and around the community, and the offshore Cascadia subduction zone (a 750-mile long major thrust fault) are considered active. Recent geotechnical studies identify fault zones, as well as areas susceptible to ground shaking, liquefaction, and tsunami run-up that represent safety hazards to the community. The potential for a major seismic event has prompted emergency response organizations, such as the Humboldt Earthquake Education Center at Humboldt State University, to provide information promoting earthquake and tsunami awareness and emergency preparedness. Geologic safety hazards also include potential slope instability on Arcata's hillsides and soil erosion. Mapped hazard areas are shown on Figure PS-a, located in a map pocket at the end of this Element.

### **The Cascadia Subduction Zone**

North of the Mendocino Triple Junction, the Gorda Plate and its northern extension, the Juan de Fuca Plate, move eastward on a collision course with the North American Plate. The Gorda Plate slowly descends beneath the North American Plate along the Cascadia Subduction Zone. Most scientists believe that the upper 50 miles or so of the contact between the Gorda Plate and the North American Plate is locked. This boundary is called the megathrust. Source: Living on Shaky Ground Humboldt State University

**Potential Flooding Hazards Overview.** Arcata is bordered by the Mad River to the north, and bisected by several streams. These watercourses and their associated floodplains have been altered over time and are subject to future change. They have the potential, during peak flows, to overtop their banks with sufficient volume and velocity to damage adjacent structures, facilities, and natural areas. A number of Arcata's creeks have been modified with culverts, channels, and coverings. These structures inhibit natural infiltration and flood protection, resulting in increased flood volumes and velocities downstream. There is strong community interest in returning local creeks to more natural conditions, and incorporating measures, such as detention basins and natural infiltration, that will reduce flood velocities and volumes.



**ARCATA'S DRAINAGE MASTER PLAN GOALS INCLUDE:**

- Minimize increases in the volume and the flow of stormwater runoff associated with new development, so as to minimize increases in the hazards and the costs associated with flooding.
- Minimize the erosion potential from a development or construction site so as to prevent deposition of sediment into streams and other receiving water bodies.
- Maintain the integrity of stream hydrology by preventing stream channel erosion so as to sustain the hydrologic functions of streams.
- Reduce the pollutant load in stormwater runoff from developing and urbanizing areas so as to preserve the natural biological functions of streams and other receiving water bodies (and flood management and stream habitat quality).
- To the extent practical, acquire easements and properties necessary for effective drainage management.

**Hazardous Materials Overview.** Human exposure to hazardous materials and conditions must be minimized to ensure the well being of the community. Reducing this exposure must include cleaning up contamination from the past and avoiding use of hazardous materials in the future. Hazardous materials used primarily in wood products processing and auto-related operations have resulted in site and groundwater contamination that remain today. Minimizing future health hazards can be accomplished by:

1. Elimination of many toxic substances.
2. Substitution of environmentally safe alternatives.
3. Safer handling and disposal procedures of those materials still available.

There is community interest in replacing harmful substances and materials with biodegradable and less damaging substitutes, and cleaning up existing contaminated sites.

**Human Health Hazards Overview.** Sound physical and mental health are important factors when considering the well being of the community. Access to health care providers, social services, counseling, and facilities such as hospitals, clinics, temporary shelters and food distribution sites, should be taken into consideration when planning the community's future. These services and facilities are typically provided by agencies and organizations other than the City; however, the City can play an important role in minimizing health hazards by identifying locations where treatment and assistance are available, and by promoting accessibility to these services.

**Guiding Principles and Goals.**

- A. Establish and maintain emergency response capabilities and services at both the City and neighborhood levels.
- B. Promote seismic safety by restricting development in high risk areas, and strengthening buildings and infrastructure to withstand seismic events.
- C. Recognize that certain slopes and soils lack stability and are best left undisturbed.
- D. Establish and maintain sufficiently sized flood areas along Arcata's watercourses, to accommodate flood flows without damaging property or injuring residents.
- E. Reduce fire hazards through prevention and suppression.
- F. Protect residents and the natural environment from exposure to hazardous materials and substances.
- G. Promote a sense of security and safety by maintaining and supporting police services.
- H. Promote social services and programs that improve the physical and mental well being of community residents.
- I. Continue participating in the Humboldt joint powers authority, and promote hazardous materials reductions and safe handling.

**NEST GOALS ARE TO:**

- Organize the neighborhood.
- Evaluate your risk at home.
- Practice your skills as a group.
- Learn about disaster-preparedness.
- Prepare your family for any event.
- Train in survival & life saving skills.
- Obtain the necessary equipment & supplies.
- Get the neighborhood ready to support itself.
- Provide accurate information to emergency services.
- Provide skilled volunteer services to the community.
- Recover quickly from any disaster.
- Get positive results in disaster efforts (PRIDE).

## 6.2 POLICIES

The Coastal Public Safety Element contains the following ~~policies~~ policy groups:

~~C-PS-1 Emergency Preparedness~~

~~C-PS-2 Seismic Hazards~~

~~C-PS-3 Other Geologic Hazards~~

~~C-PS-4 Flood Hazards~~

~~C-PS-5 Fire Hazards~~

~~C-PS-6 Hazardous Materials~~

~~PS-7 Crime Prevention and Response~~

~~PS-8 Human Health Hazards~~

### POLICY GROUP C-PS-1 EMERGENCY PREPAREDNESS

**Objective:** Ensure that the City, its residents, businesses, agencies, and organizations are prepared for emergencies or disasters and have effective response and recovery plans in place.

~~PS-1a City Emergency Response Plan. The City shall maintain a comprehensive response plan for emergencies, including seismic events, tsunamis, slope failures, floods, storms, fires, and materials spills or contamination. The plan will provide for timely and coordinated response to emergencies that threaten community residents, property, and vital services. The plan will identify City and other emergency response agencies that should be contacted, and also identify neighborhood resources available for more localized assistance and relief. [Move to Other Initiatives]~~

~~PS-1b Evacuation routes/transportation facilities. Emergencies such as floods, storms, fires, distantly generated tsunamis, and hazardous materials spills may necessitate immediate evacuation of affected areas. A map of evacuation routes shall be included in City and neighborhood emergency response plans. These plans will also include evacuation methods for residents who are without, or unable to operate, vehicles. An emergency access plan shall be developed for access to the east side of town (east of State Route 101) after a major seismic event. [Move to Other Initiatives]~~

#### APPLICATIONS FOR THE INCIDENT COMMAND SYSTEM:

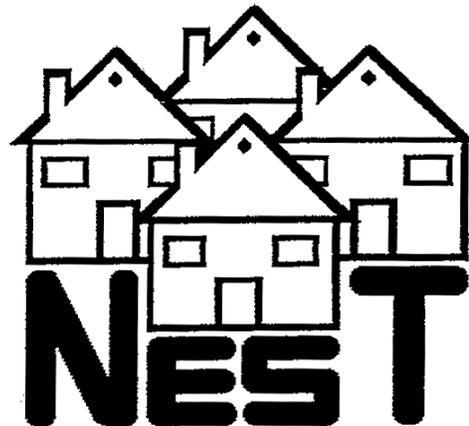
- Fires, hazardous materials (HAZMAT), and multicasualty incidents.
- Multijurisdiction and multi-agency disasters.
- Wide area search and rescue missions.
- Pest eradication programs.
- Oil spill response and recovery incidents.
- Single and multi-agency law enforcement actions.
- Air, rail, water, and ground transportation accidents.
- Planned events (celebrations, parades, concerts).
- Private sector emergency management programs.
- State or local major natural hazards management.

~~PS-1c Disaster preparedness coordination using the Standardized Emergency Management System. City staff responsible for emergency response shall be trained in Standardized Emergency Management System (SEMS) implementation, which is necessary to receive reimbursement from the State of California for disaster response related costs. This training includes instruction about the Incident Command System (ICS) which is used to manage emergency incidents or non-emergency events. [Move to Other Initiatives]~~

~~PS-1d~~ **C-PS-1a** *Siting and design of critical facilities.* Adequate shelter and continued operation of essential services, including communications, medical treatment, water delivery, fire and police services, and key transportation facilities are vital for responding to emergencies. These facilities and services shall be located and designed to withstand disaster impacts and have backup systems, such as emergency generators and water storage (including private and open water sources), that allow for their continuous operation during **and after** emergencies. New critical facilities shall not be located in areas with high physical hazards, including high liquefaction potential, **100- and 500-year** flood zones, and tsunami hazards. **Critical New critical** facilities shall be designed ~~to be functional at peak capacity, following a magnitude 7.7~~ **consistent with the standards of the California Building Code with respect to** earthquake ~~in the Mad River fault zone~~ **resiliency.**

~~PS-1e~~ **C-PS-1b** **Development & design standards for emergency response.** New and renovated structures, as well as streets, driveways, and alleyways, shall be designed to provide adequate entry and exit by emergency vehicles and personnel. This includes visible street numbering, emergency vehicle turn-arounds, accessible building entry points and stairways, lighting, and interior evacuation routes.

~~PS-1f Citizen training/Neighborhood and Business Emergency Services Teams. The City of Arcata Police Department coordinates the organization and training of Neighborhood Emergency Services Teams and Business Emergency Services Teams (NEST and BEST). The NEST program is essential for mobilizing neighborhood response to emergencies. The NEST program shall be expanded to all neighborhoods. [Move to Other Initiatives]~~



## **POLICY GROUP C-PS-2 SEISMIC HAZARDS**

**Objective:** Protect existing and new structures from seismic hazards. Identify and map seismic hazards and assure that any development within such hazard areas does not proceed until geologic and soils conditions are adequately investigated and appropriate mitigation measures, if any, are incorporated into development plans.

**C-PS-2a** New development shall minimize risks to life and property in areas of high geologic hazard, assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area, or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.

**C-PS-2b** Proposed development shall be evaluated based on site-specific hazard information and the environmental hazards identified in this element and in other current information sources, including but not limited to, California Geological Survey Geohazard Maps. Low intensity/occupancy uses (such as open space, easy to evacuate recreational facilities including campgrounds and recreational vehicle parks) shall be preferred in hazard areas when feasible.

**C-PS-2c** Applications for development located in or near an area subject to geologic hazards, shall be required to submit a geologic/soils/geotechnical study that identifies all potential geologic hazards affecting the proposed project site, all necessary mitigation measures and demonstrates that the project site is suitable for the proposed development and that the development will be safe from geologic hazards. Such study shall be prepared consistent with the requirements of Land Use Code.

**C-PS-2d** Setbacks for seismic faults shall be established as part of the development review process. Where severe safety considerations exist (e.g., within the Alquist-Priolo Zone), open space easements shall be granted to the City to protect people and property from health and safety hazards.

~~**PS-2a**~~ **C-PS-1e** *Development within fault zone/surface rupture areas.* ~~The City shall maintain current seismic information that identifies fault zones and probable surface rupture areas.~~ Development in these **identified fault zones and probable surface rupture** areas shall be avoided, unless it can be demonstrated that structures and facilities can be designed to withstand effects of faulting and surface rupture. Building setbacks from faults, surface ruptures, and other seismic hazards, as specified in the most current **Uniform California** Building Code or **Alquist-Priolo Act**, shall be maintained. [Move advisory/declarative language to *Other Initiatives*.]

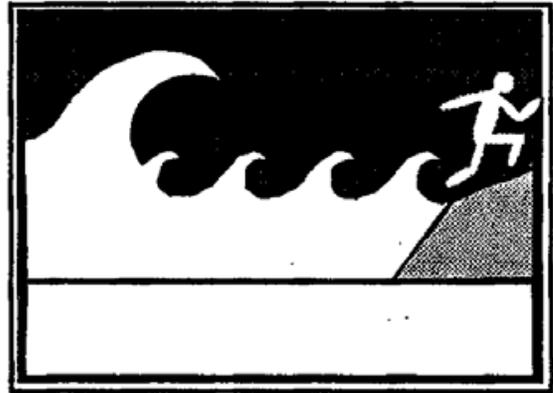
~~**PS-2b**~~ **C-PS-2f** *Mitigation of ground-shaking hazards.* ~~Arcata will experience ground-shaking during an earthquake. The City maintains seismic data files that identify areas where ground-shaking will most likely damage buildings and infrastructure.~~ New construction and renovation shall incorporate the most current and effective seismic engineering measures to strengthen building foundations and infrastructure in these areas. [Move advisory/declarative language to *Other Initiatives*.]

~~**PS-2c**~~ **C-PS-2g** *Mitigation of surface rupture and groundshaking hazards.* The City's Alquist-Priolo Special Studies Zone map (Figure PS-a) and Geologic Hazard Land Use Matrix (Table PS-1) identify areas highly susceptible to surface rupture and groundshaking. Construction in these areas shall be restricted, unless it can be demonstrated, in **site-specific** geotechnical reports prepared by qualified personnel, that structures and facilities can be designed to withstand liquefaction hazards induced

by seismic events.

~~PS-2d~~ **C-PS-2h** *Requirement for and review of "Geotechnical Reports."* New building and infrastructure construction, and substantial renovations in areas with seismic hazards, shall incorporate geotechnical report specified measures into project design. Geotechnical reports shall be required for structures or infrastructure in seismic hazard areas. Required reports, prepared by ~~a registered geologist, certified engineering geologist, or registered engineer with expertise in seismic engineering~~ one or more qualified Certified Engineering Geologists (CEG), Registered Civil Engineers (RCE), Geotechnical Engineers (GE) or group of aforementioned disciplines approved by the City, with expertise appropriate to the site and anticipated hazard conditions, shall recommend mitigation for seismic impacts and identify alternative solutions. The City ~~may~~ shall require independent review of the geotechnical reports.

~~PS-2e~~ **C-PS-2i** Shoreline hazards (tsunami, tidal flooding). ~~A State of California study~~ Various studies and models (Planning Scenario in Humboldt and Del Norte Counties, California, for a Great Earthquake on the Cascadia Subduction Zone, Special Publication 115, California Department of Conservation, Division of Mines & Geology, 1995, California Geological Survey/USC Tsunami Research Center/CalEMA, 2010) indicates indicate that the Arcata Bay shoreline and adjacent areas, between McDaniel Slough and Mad River Slough, could be inundated by tsunami run-up. The City shall prohibit the location of critical facilities in the tsunami run-up area, and use available emergency broadcasting systems to communicate tsunami warnings. Should coastal access within the tsunami run-up zone be provided in the future, appropriate evacuation route signage shall be posted.



~~PS-2f~~ **C-PS-2j** **Failure of Matthews Dam.** All new buildings designed for human occupancy or use that are located in the area of potential inundation resulting from a catastrophic failure of Matthews Dam shall have an early-warning system and evacuation plan in place for those persons living and working there.

~~PS-2g~~ **C-PS-2k** *Earthquake-resistant building and infrastructure standards.* The current ~~Uniform~~ California Building Code standards for strengthening buildings and infrastructure to withstand earthquakes shall be enforced. The competency of existing road and utility networks shall be evaluated and, where necessary, upgraded to withstand the most current ground acceleration standards.

~~PS-2h~~ **Public information and disclosure.** ~~The Humboldt Earthquake Education Information Center, at Humboldt State University, and the City of Arcata have earthquake/tsunami awareness information that is available to the public. The Center and the City will continue to make the most current~~

~~information available to help the community prepare for and respond to seismic events.~~ [Move to *Other Initiatives.*]

**THE HUMBOLDT EARTHQUAKE EDUCATION INFORMATION CENTER:**

- Prepares and distributes earthquake education materials.
- Provides information when significant earthquakes occur.
- Conducts workshops for emergency planners, teachers and others.
- Has speakers for community group conferences and meetings.
- Operates the Humboldt earthquake hotline.
- Maintains a website.
- Conducts intensity studies of regional earthquakes.

**GEOLOGIC HAZARD LAND USE MATRIX – KEY TERMS AND ABBREVIATIONS**

| <b>Term</b> | <b>Explanation</b>  |
|-------------|---|
| P           | Development prohibited  |
| R1          | Engineering geologic report and soils engineering report required. Engineering geologic report must be prepared by a Certified Engineering Geologist®. Soils engineering report may be prepared by a Registered Civil Engineer® with appropriate geotechnical knowledge and experience or by a Certified Engineering Geologist® with appropriate geotechnical knowledge and experience. |
| R2          | Engineering geologic report required. Engineering geologic report may be prepared by a Registered Geologist® with appropriate geotechnical knowledge and experience.  |
| ®           | All registrations and certifications must be licensed by the State of California.   |
| D           | Report requirement is left to the discretion of the City Building Inspector.  |
| *           | Fault Rupture Hazard.<br>“SSZ” refers to Alquist-Priolo Special Studies Zone.<br>“PAF” refers to Potentially Active Fault.<br>See Hazards Map (Figure PS-a) and Seismic Safety Policies   |
| **          | See Slope Stability Hazard Map (Figure PS-b)  |
| ***         | High Liquefaction indicates soil saturation and instability in moderate seismic events. Medium Liquefaction indicates soil saturation and instability in major seismic events. Low Liquefaction indicates soil saturation and instability in major seismic events. See Hazards Map (Figure PS-a)  |

**POLICY GROUP C-PS-3 OTHER GEOLOGIC HAZARDS**

**Objective.** Protect existing and new structures from non-seismic geologic hazards such as unstable slopes and soils. Require that all non-seismic geologic hazards be adequately addressed and mitigated.

**C-PS-3a New development shall minimize risks to life and property in areas of highly unstable soils and slope hazard, assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction**

of protective devices that would substantially alter natural landforms along bluffs and cliffs.

C-PS-3b Proposed development shall be evaluated based on site-specific hazard information and the environmental hazards identified in this element and in other current information sources, including but not limited to California Geological Survey Geohazard Maps, U.S. Geological Survey (USGS) Assessment of Sandy Beaches, USGS Assessment of Rocky Shorelines, U.S. Army Corps of Engineers, California Emergency Management Agency Tsunami Run-up maps, and the Pacific Institute's Coastal Erosion and Flooding Maps. Low intensity/occupancy uses (such as open space, easy to evacuate recreational facilities including campgrounds and recreational vehicle parks) shall be preferred in hazard areas when feasible.

C-PS-3c Setbacks for liquefaction zones, unstable soils or steep slopes shall be established as part of the development review process. Where severe safety considerations exist (e.g., within zones of extreme and high instability), open space easements shall be granted to the City to protect people and property from health and safety hazards.

C-PS-3d Blufftop and cliff face setbacks. All development located on a blufftop or in proximity to a cliff face, shall be setback from the bluff edge a sufficient distance to ensure that it will be stable for a projected 100-year economic life. Stability shall be defined as maintaining a minimum factor of safety against sliding of 1.5 (static) or 1.1 (pseudostatic). This requirement shall apply to the principal structure and accessory or ancillary structures. Slope stability analyses and erosion rate estimates shall be performed by a qualified Certified Engineering Geologist (CEG), Registered Civil Engineers (RCE), Geotechnical Engineer (GE) or a group of the aforementioned specialists approved by the City, with expertise appropriate to the site and anticipated hazard conditions.

C-PS-3e Siting and design of new shoreline development and protective devices shall take into account anticipated future changes in sea level. In particular, an acceleration of the historic rate of sea level rise shall be considered. Development shall be set back a sufficient distance landward and elevated to a sufficient foundation height to eliminate or minimize to the maximum extent feasible hazards associated with anticipated sea level rise over the expected 100-year economic life of the structure, taking into consideration the 100-year storm event and storm surge.

C-PS-3f New development on bay fronting parcels shall only be approved with conditions requiring that no shoreline protective structure be allowed to be constructed in the future to protect the development from bluff erosion. Prior to the issuance of a coastal development permit for the development, a deed restriction acceptable to the Director of Community Development shall be recorded memorializing the prohibition on future shoreline protective structures.

**C-PS-3g** Land divisions, including subdivisions, lot splits, lot line adjustments, and conditional certificates of compliance that create new shoreline or blufftop lots, shall not be permitted unless the land division can be shown to create lots which can be developed safe from geologic hazard and without requiring a current or future bluff or shoreline protection structure. No new lots shall be created that could require shoreline protection or bluff stabilization structures at any time.

**PS-3a C-PS-3h** *Slope stability hazards.* Slope areas greater than 15%, shown on Figure PS-a, and certain less steep slopes with erosive soils may become unstable if disturbed. The City shall restrict grading, vegetation removal, and new construction in areas with unstable soils unless it can be demonstrated that these activities can occur without impacts. All grading of slope areas shall follow natural contours to maximize stability.



~~PS-3b~~ **C-PS-3i**      **Grading standards for erosion and sedimentation control.** The design, extent, and location of grading shall minimize disturbance of the natural terrain and land features and shall not impact offsite areas. Trees and native vegetation shall be retained around graded areas to stabilize hillsides; retain moisture; reduce erosion, siltation and nutrient runoff; and retain the natural beauty of the area. Cleared areas susceptible to erosion shall be stabilized so that no materials are transported offsite.

~~PS-3c~~ **C-PS-3j**      **Hillside development standards.** The land areas subject to hillside development standards are shown in Figure PS-a. Development on lands within these areas shall be subject to the following standards:

1. Each new lot created in areas subject to hillside development standards shall be required to contain a contiguous buildable area of at least 4,000 square feet. All parts of the building area shall have a natural slope of less than 15%. No more than 4,000 square feet of any existing lot which was legally created prior to adoption of this plan, and does not meet the preceding 15% standard, may be disturbed for development.
2. At least 50% of the area of any lot undeveloped as of the date of this plan shall be included in a "natural area" which shall remain in a natural, ungraded, undeveloped state. All slopes in excess of 25% shall be included in the natural area.
3. Vegetation removal in the natural area of each lot shall be subject to review and approval by the City.
4. All access roads and driveways shall be kept to the minimum feasible width and shall be designed to minimize grading and disruption of vegetation.
5. Access roads shall not exceed 15% slope for any distance. Individual driveways shall not exceed 17% slope.
6. Access roads or driveways shall be designed to avoid steep slopes and shall not have cuts exceeding fifty feet (50') nor fills exceeding twenty-five feet (25') in height.
7. The design, scope and location of grading for development should cause the minimum disturbance of the terrain and natural features of the land. Unavoidable grading should complement natural land forms. Mass grading of large pads and terraces shall not be permitted.
8. All manufactured slopes shall be planted or otherwise protected from the effects of storm run-off and erosion.
9. Time limits to avoid extensive grading during the wet season shall be imposed on new developments.
10. Any necessary conditions to control erosion and assure site restoration shall be required by the City. Measures shall include short-term controls to minimize erosion at construction sites and long-term controls for minimizing sedimentation and maintaining water quality.
11. Development in areas subject to development standards should demonstrate a concern for the view of the hills as well as the view from the hill.

~~PS-3d~~ **C-PS-3k** **Slope-density land use restrictions.** Slopes greater than 25% are to be designated as natural areas and shall not be included in density calculations. Minimum parcel sizes on slopes shall be contingent on the site's ability to accommodate a building site with adequate access and utilities.

**C-PS-3l All development that requires a coastal grading/development permit shall submit a plan to control post-construction runoff, and maintain or improve water quality ("Post-Construction Runoff Mitigation Plan"). This plan shall specify Site Design, Source Control, and if necessary, Treatment Control BMPs that will be implemented to minimize stormwater and other urban runoff pollution, and minimize or eliminate increases in runoff volume and rate from the development after construction.**

~~PS-3e~~ **C-PS-3m** *Geotechnical reports.* Geotechnical reports shall be prepared for development of areas with unstable slopes and/or erosive soils. These reports will be prepared by ~~qualified professionals~~ **one or more qualified Certified Engineering Geologists (CEG), Registered Civil Engineers (RCE), Geotechnical Engineers (GE) or group of aforementioned disciplines approved by the City, with expertise appropriate to the site and anticipated hazard conditions,** consistent with Policy ~~PS-2d~~ **C-PS-2h**. Measures to ensure slope and soil stability shall be incorporated into the project design.

~~PS-3f Provide available information, including potential for site slippage, effects of groundwater on slopes and soils, erosion potential, and other hazards, to homebuilders prior to the start of construction.~~ [Move to *Other Initiatives*.]

## **POLICY GROUP C-PS-4 FLOOD HAZARDS**

**Objective.** Protect current and future populations and property from flood hazards. Assure that new development within floodplains does not proceed until appropriate mitigation measures are incorporated into development plans.

**C-PS-4a New development shall minimize risks to life and property in areas of high flood hazard.**

**C-PS-4b Proposed development shall be evaluated based on site-specific hazard information and the environmental hazards identified in this element and in other current information sources, including but not limited to, FEMA Flood Insurance Rate Maps and coastal storm surge maps, and the tsunami inundation/runup maps and models prepared by CalEMA/USC Tsunami Research Center/CGS. Low intensity/occupancy uses (such as open space, easy to evacuate recreational facilities including campgrounds and recreational vehicle parks) shall be preferred in hazard areas when feasible.**

**C-PS-4c Setbacks for mapped Flood Hazard Zone A areas shall be established as part of the development review process. Where severe safety considerations exist (e.g., within floodways), open space easements shall be granted to the City to protect people and property from health and safety hazards.**

C-PS-4d The best available and most recent scientific information with respect to the effects of long-range sea level rise shall be considered in the preparation of findings and recommendations for all requisite geologic, geo-technical, hydrologic, and engineering investigations. Residential and commercial development at nearshore sites shall analyze potential coastal hazards from erosion, flooding, wave attack, scour and other conditions, for a range of potential sea level rise scenarios, identified in the current guidance from the Ocean Protection Council, or equivalent state guidance. The analysis shall also consider localized uplift or subsidence, local topography, bathymetry, and geologic conditions. A similar sensitivity analysis shall be performed for critical facilities, energy production and distribution infrastructure, and other development projects of major community significance using a minimum rise rate of 4.5 feet per century. These hazards analyses shall be used to identify current and future site hazards, to help guide site design and hazard mitigation and identify sea level rise thresholds after which limitations in the development's design and siting would cause the improvements to become significantly less stable. For design purposes within the tsunami inundation zone, projects shall assume the inundation plus an assumed rise in sea level — a minimum sea level rise rate of 3 feet per century and critical infrastructure shall assume the inundation plus an assumed rise of 4.5 feet per century; greater sea level rise rates shall be used if development is expected to have an economic life greater than 100 years, if development has few options for adaptation to sea level higher than the design minimum, or if the best available and most recent scientific information supports a higher design level.

C-PS-4e All bay front and blufftop development shall be sized, sited and designed to minimize risk from wave run-up, flooding, and beach and bluff erosion hazards, and avoid the need for a shoreline or bluff face protective structure at any time during the life of the development.

C-PS-4f All new development entailing the construction of structures intended for human occupancy, situated within historic, modeled, or mapped tsunami inundation hazard areas, shall be required to prepare and secure approval of a tsunami safety plan. The safety plan shall be prepared in coordination with the Humboldt County Office of Emergency Services, Sheriff's Office, and City or Tribal public safety agencies, and shall contain information relaying the existence of the threat of tsunamis from both distant- and local-source seismic events, the need for prompt evacuation upon the receipt of a tsunami warning or upon experience seismic shaking for a local earthquake, and the evacuation route to take from the development site to areas beyond potential inundation. The safety plan information shall be conspicuously posted or copies of the information provided to all occupants. No new residential land divisions shall be approved unless it be demonstrated that either: (a) timely evacuation to safe higher ground, as depicted on adopted tsunami hazard maps, can feasibly be achieved before the predicted time of arrival of tsunami inundation at the project site; or (b) the development is designed to incorporate structural resiliency and modeled

inundation freeboard features to allow for occupants to vertically evacuate and “shelter-in-place” on upper floors or roof areas.

C-PS-4g New residential subdivisions situated within historic and modeled tsunami inundation hazard areas, such as depicted on the tsunami hazard maps described in Policy C-PS-4b above, shall be designed and sited such that the finished floor elevation of all new permanent residential units are constructed with one foot of freeboard above the maximum credible runup elevation as depicted on the most recent government prepared tsunami hazards maps, or as developed by local agency modeling, whichever elevation is greater, taking into account sea level rise rates of 3 to 6 feet per century. For tsunami resilient design purposes, a minimum sea level rise rate of 3 feet per century shall be used when combined with a maximum credible tsunami condition. Additionally, all such structures containing permanent residential units shall be designed to withstand the hydrostatic and hydrodynamic loads and effects of buoyancy associated with inundation by storm surge and tsunami waves up to and including the tsunami runup depicted on the tsunami hazard maps, without experiencing a catastrophic structural failure. For purposes of administering this policy, “permanent residential units” comprise residential units intended for occupancy as the principal domicile of their owners, and do not include timeshare condominiums, visitor-serving overnight facilities, or other transient accommodations.

~~PS-4a Floodplain Mapping. The City shall continue participating in the National Flood Insurance Program and maintain the most current Flood Insurance Rate Maps (FIRM) on file. The City shall also continue requesting that the Federal Emergency Management Agency provide hydrographic modeling (using the 1964 flood levels as a benchmark) and an update of flood mapping for the Mad River.~~ [Move to *Other Initiatives*.]

The Federal Emergency Management Agency (FEMA) manages the National Flood Insurance Program providing insurance to the public in participating communities. FEMA is the main federal government agency contact during natural disasters and publishes Flood Insurance Rate Maps, which identify flood potential based on a 100-year flood.

~~PS-4b~~ C-PS-4h *Limitations to development adjacent to Arcata Bay and along Bay shoreline (tidal flooding, tsunami, failure of dikes or tidegates).* The Arcata Bottom and other low lying areas adjacent to Arcata Bay, McDaniel, Butcher’s and Gannon Sloughs, and Arcata Marsh are susceptible to flooding from extreme Bay tidal action, tsunami run-up, seiche, dike or tidegate failure, heavy rainfall that can’t drain, and Mad River flood events. Accordingly, in conformity with Open Space Policy C-OS-5a, land uses in these areas shall be limited to those where exposure of persons and property to such risks would be minimized, such as prohibiting residential development. Where not otherwise restricted, habitable structures and related improvements shall be appropriately elevated above flood levels, designed so as not to restrict flood flows, and shall comply with applicable provisions of Resource Conservation and Management Policy Group RC-2: Streams Conservation and Management, pertaining to Streamside Protection Areas (~~RC-2b~~ C-RC-2c and ~~RC-2e~~

**C-RC-2d).** Land alterations for recreation and natural resource uses shall also not restrict or increase or channelize flood flows in a way that could cause inundation to adjacent areas.

**PS-4e C-PS-4i** **Limitations on development within Flood Zone.** The mapped Floodzone A as determined by FEMA should be kept free of structures and other obstructions that would restrict flood flows. New construction in Flood Zone A shall be elevated, flood-proofed, designed to not constrict flood flows or drainage, and/or include other features, such as access for evacuation and emergency response, to protect human safety and minimize property damage. Landform alterations shall not impede flood flows in adjacent upstream or downstream areas. Any development in the floodplain must be consistent with City floodplain zoning regulations.

**PS-4d C-PS-4j** **Limitations to development within flood hazard zones.** Arcata's creeks and sloughs have the potential to cause localized flooding and shall be maintained to allow the flow of floodwaters. Structures and other land form alterations in areas susceptible to localized flooding, outside areas defined in policies RC-2b and RC-3c, should be setback from the watercourse. Elevated and flood-proofed structures, and/or floodwater detention basins shall be provided to minimize flood damage and prevent any net increase in floodflows upstream or downstream. The City shall promote flood management practices for entire watercourses, to minimize the need for sandbagging and other temporary flood control measures that can have detrimental impacts to adjacent areas.



~~**PS-4e Flood Insurance.** Flood insurance is available from private insurers to compensate home and business owners for flood related losses. Flood insurance rates are set by a site's proximity to mapped flood-prone areas. The City shall make information about flood-prone areas available to the public, to aid community residents and business owners in determining whether flood insurance should be purchased. [Move to *Other Initiatives*.]~~

**PS-4f C-PS-4k** **Development standards in floodplains (surface drainageways and detention areas).** All plans for new construction that could potentially encroach into a floodplain must incorporate measures for flood protection and show that there will be no adverse impact to the carrying capacity of the floodway. Setbacks, easements covering Floodzone A, and minimal use of impervious surfaces are measures strongly encouraged. Elevation of structures, anchoring, flood-proofing, and construction of detention basins are considered secondary and less desirable measures. The City's floodplain administrator shall verify this information and require appropriate certification before any development permits are granted.

**PS-4g C-PS-4l** **Preventive maintenance of streams and drainageways.** Local streams carry the majority of Arcata's floodwaters and shall be maintained for flood

protection as well as natural biological functions. All improvements and maintenance shall be done in accordance with the City's Drainage Master Plan.

~~PS-4h C-PS-4m~~ **Development review: drainage standards and drainage fees.** All new development shall meet current City drainage standards and pay all applicable drainage fees. The City shall provide incentives to reduce the amount of impervious surface associated with new and renovated uses by reducing drainage fees.

## **POLICY PS-5 GROUP C-FIRE HAZARDS**

**Objective.** Minimize risk of personal injury and property damage resulting from structural (urban) and wildland fires.

**C-PS-5a** **New development shall minimize risks to life and property in areas of high fire hazard.**

**C-PS-5b** **Proposed development shall be evaluated based on site-specific hazard information and the environmental hazards identified in this element and in other current information sources, including but not limited to California Department of Forestry and Fire Protection Fire Hazard Severity Zone Maps.**

**C-PS-5c** **Setbacks for areas susceptible to wildland fire shall be established as part of the development review process. Where severe safety considerations exist (e.g., within extreme or high fire risk zones), open space easements shall be granted to the City to protect people and property from health and safety hazards.**

~~PS-5a Management of urban fire hazards (development/design standards).~~  
~~Structural fires demand immediate response from a combination of onsite and Fire Department resources in order to minimize injury and damage. Fire suppression devices such as extinguishers and sprinklers are important for initial response, reduce fire insurance premiums, and satisfy operations requirements for certain types of businesses. These devices are encouraged in new and renovated non-residential buildings and in all residential structures with more than four units, even when not required by fire and building code.~~

~~All buildings should have adequate lighting, street numbering, and access to ensure rapid response by fire-fighting vehicles. To ensure urban fire safety, the City shall enforce the Uniform Building and Uniform Fire Codes (UBC & UFC) currently in effect, and the Universal Building Code when it is adopted.~~

~~[Move to Other Initiatives.]~~



~~PS-5b C-PS-5d~~ *Review of development for fire safety.* ~~The Arcata Volunteer Fire Department takes an active role in reviewing new development for compliance with fire safety standards. The City shall continue to incorporate Fire Department~~

~~review to ensure that driveways, turns around, and other access ways have sufficient width, vertical clearance, and turn-around space for fire fighting vehicles.~~ Roadways shall have an all-weather surface and grades shall not exceed the Fire Department's maximum slope standards for emergency access. [Move advisory/declarative language to *Other Initiatives*]

~~**PS-5c Water supply (fire flow).** The City's fire hydrant system provides the primary source of water for fighting urban fires. The City shall maintain fire hydrant spacing so that no residential structure is more than 500 feet from a hydrant and no commercial or industrial structure is more than 300 feet from a hydrant. Each hydrant shall have adequate fittings and be capable of providing adequate water flows to meet Fire Department standards.~~

~~The City shall maintain adequate fire flows in its water system. Open water sources such as ponds, swimming pools, private storage tanks, and reservoirs may be used as a secondary water source by fire fighting apparatus. These sources shall be equipped with appropriate filtering devices or strainers to prevent clogging of water pumps. [Move to *Other Initiatives*.]~~

~~**PS-5d C-PS-5g** Management of wildland fire hazards. Wildland fires in forested areas of the City can cause property damage and threaten nearby structures. Buildings in forested areas shall use materials such as non-flammable perimeter vegetation and roofing material to prevent exposure to wildland fires. The City shall encourage the Arcata Fire Department to maintain its mutual aid agreement with the California Department of Forestry and Fire Prevention (CDF) to insure rapid response to wildland fires. [Move advisory/declarative language to *Other Initiatives*]~~

~~**PS-5e Fire suppression services.** The Arcata Volunteer Fire Department's (AVFD) jurisdiction (shown as District #1 on the AVFD service area map) includes the City's incorporated, sphere of influence, and planning areas, except for an outlying area along Jacoby Creek Road. The AVFD maintains two fire stations to provide rapid response to all fire calls within its service area. They also maintain mutual aid agreements with the CDF and the Eureka Fire Department for rapid response to fires in outlying areas. [Move to *Other Initiatives*.]~~

## **POLICY GROUP C-PS-6 HAZARDOUS MATERIALS**

**Objective.** Minimize the personal injury, property damage, and public health risks associated with the production, use, storage, disposal, and transporting of toxic substances or hazardous materials.

~~**PS-6a Reduction of hazardous waste (source reduction).** There are increasing numbers of environmentally safe materials and substances available that offer alternatives to hazardous materials. Improved water-based paints that replace oil and lead based paints,~~



~~cellulose insulation materials that replace asbestos, and biodegradable antifreezes that replace glycol based coolants, are all examples of safer materials and substances currently in use. The City shall request information from County, State, and Federal agencies, as well as manufacturers and suppliers, regarding environmentally safe products and shall have a list of these products available to the public. [Move to *Other Initiatives*.]~~

~~**PS-6b Contaminated sites.** There are sites in and around the City where wood product milling and production, vehicle and equipment storage and repair, agricultural production, and other uses may have resulted in site contamination. Materials such as lead based paints may also contribute to contamination. Many of these sites are inactive and may be appropriate for alternative uses. Environmental Site Assessments shall be required prior to development review and approval of potentially contaminated sites, and cleanup is required prior to rouse. The City shall record and map sites with known contamination. [Move to *Other Initiatives*.]~~

~~**PS-6c Use of potentially harmful materials on public lands and rights-of-way.** The City of Arcata does not use toxic sprays or substances on vegetation in public lands or rights-of-way, and has been persuasive in stopping State agencies, such as Cal Trans, from using toxic sprays along State rights-of-way within the City limits. The City shall continue this practice and prohibit other public agencies from using toxic sprays or substances within the City limits (see Resource Conservation and Management Element Policy RC-4i). [Move to *Other Initiatives*.]~~

**C-PS-6a Protection against the spillage of crude oil, gas, petroleum products, or hazardous substances shall be provided in relation to any development or transportation of such materials. Effective containment and cleanup facilities and procedures shall be provided for accidental spills that do occur.**

~~**PS-6d C-PS-6b Siting of facilities handling hazardous waste.** Businesses and agencies that use, store, or produce hazardous materials shall train employees and other users in safe handling and storage procedures, and shall post current Occupational Safety and Health Act (OSHA) and Humboldt County hazardous materials requirements. Businesses shall also comply with Federal “community right-to-know” regulations. The City shall consider proximity to sensitive receptors, such as schools, hospitals and other health care facilities, day care centers, and other immobile populations, when reviewing new facilities and businesses involved in these activities.~~

~~**PS-6e Household and other small quantity generators.** Households and small businesses accumulate solvents and cleaners, petroleum products, pesticides, and other toxic substances that are potentially hazardous if spilled, released into the atmosphere, or ingested. The City shall maintain a list of toxic substances which should be avoided and publicize collection dates and locations where those substances can be disposed of properly. The City shall coordinate with the County Hazardous Materials Department~~

~~(Humboldt County) and the State Department of Toxic Substances Control (California Environmental Protection Agency) to ensure that collection sites are accessible to community residents.~~

~~The City shall also encourage property owners and real estate agents to remove hazardous materials, or disclose their presence, to purchasers as part of property transfers. Property purchasers should have the option of accepting certain materials, such as paint, or requesting removal and cleanup prior to the property transfer. [Move to *Other Initiatives*.]~~

~~PS-6f~~ **C-PS-6c** Hazardous waste management (recycling, treatment, disposal).

All commercial and industrial businesses and other operations that use, store, or produce hazardous materials, shall contract with a licensed hauler for pickup and disposal of waste materials, except for individual disposal complying with County, State and Federal requirements. All hazardous materials shall be stored in safe containers and locations, and use of these materials shall be in compliance with County, State and Federal standards.

~~PS-6g Hazardous materials education program. The City shall work with the Humboldt County Health Department and the California Department of Toxic Substances to develop educational materials explaining hazardous materials' impact on people, plants, and animals, and provide information on alternatives to hazardous materials. This information shall be made available to the public. [Move to *Other Initiatives*.]~~

~~**POLICY PS-7 CRIME PREVENTION AND RESPONSE**~~

~~**Objective.** Promote law enforcement agency and community group efforts to reduce crime and assure timely and effective responses to calls for service.~~

~~**PS-7a Development/building and site design standards for crime prevention.** Some criminal acts in and around buildings can be prevented or minimized by incorporating safety and security precautions into building and site design. These include a combination of onsite features such as alarm systems, secured entryways, lighting, and visible access. Crime prevention measures, such as providing alarm systems, security lighting, street numbers, and visibility for police surveillance, should be incorporated into, and around, new and renovated buildings. Gated communities hinder police and fire suppression access and shall be prohibited, consistent with Community Design Element policy.~~

~~**PS-7b Community-based policing.** Community-based policing has proven effective in reducing crime by involving citizens in crime prevention. The City Police Department provides training to business and neighborhood groups in how to discourage crime and best respond when crime occurs. The City shall continue to provide citizen training, maintain relationships with community groups, and encourage Business Emergency Services Teams (BESTs) to reduce crime and augment the essential services of the Police Department. Foot and bike~~

~~patrols shall be promoted to maximize interaction between citizens and police, to foster friendship, understanding, and mutual help.~~

~~PS-7c *Cooperative Law Enforcement.* There are three law enforcement agencies based in Arcata: The Arcata Police Department, the HSU Police Department, and the California Highway Patrol. These agencies work together, responding to incidents throughout the City. The City shall continue to cooperate with other law enforcement agencies to maximize public safety within its boundaries. The City Police Department shall be the primary response agency within City limits since it is the only agency directly accountable to the government and citizens of Arcata.~~

~~PS-7d *Independent review.* The Arcata Police Department has an established review procedure for investigating complaints against law enforcement personnel. Complaints may also be referred to the Humboldt County Grand Jury. [Revised by Ordinance No. 1377, September 2008]~~

~~PS-7e *Education and crime prevention funding.* The City recognizes that funds spent on education and crime prevention are more effective in reducing crime than funds spent on apprehending, prosecuting, and incarcerating criminals. The City shall pursue a long-term strategy of funding education and crime prevention programs.~~

## ~~POLICY PS-8 HUMAN HEALTH HAZARDS~~

~~Objective. Promote access to services and programs (prevention, treatment, and long term care) that will improve human health conditions for current and future populations. The City recognizes that its resources are limited but will work with other government agencies, non-profit organizations, social service and health care providers to help all residents meet and maintain basic physical and mental health. The City will serve as a model for other governmental entities that are addressing local health needs~~

~~PS-8a *Health care programs and facilities.* The City of Arcata does not directly provide health care programs or facilities; however, these facilities are operated in the City by a variety of health care providers and professionals, as well as non-profit and other organizations. The City shall allow health care facilities (such as clinics, counseling centers, and doctors offices) to be located in appropriate areas of the City, and encourage programs that serve all segments of the population.~~

~~PS-8b *Social services programs.* The City administers certain social services, such as temporary and permanent housing programs. Other public agencies, including the State of California, and Humboldt County, offer social services, such as public assistance, and food subsidy programs. There are also non-profit, religious, social, and other organizations, as well as businesses that offer social services such as counseling, educational, family assistance, child care, health education, and food subsidy programs. Social service needs shall be monitored,~~

~~through population trend analysis and other indicators, and information disseminated to other social service providers.~~

~~Larger employers shall be encouraged to provide childcare services. The City shall coordinate with other public agencies and service providers to avoid duplication of services and shall assist in coordination, planning, and evaluating social services delivery. Additional services, such as Travelers Aid, shall also be encouraged, either through City sponsorship or identification of appropriate service providers. Social service facilities shall be located in areas that are accessible to users.~~

~~The General Plan Housing Element goal is to provide housing opportunities for people of all income levels, through the development of a wide range of housing types. The Element also contains affordability and fair housing policies as well as design standards to serve the needs of all population segments. The Housing Element shall be implemented to promote affordable and accessible housing for segments of the population with limited financial resources and limited mobility.~~

~~PS-8c Needs of cultural groups and special populations. Cultural groups, such as Native Americans and other local ethnic populations, and special populations, such as those with physical and mental disabilities, may require more specialized services than those provided in community-wide programs. The City shall allow, where appropriate, use of public spaces for cultural group activities, and shall consider the needs of special populations in City programs, activities, and land use planning.~~

~~PS-8d *Improving community health.* Health care costs and other factors, such as lack of knowledge, limited mobility, and cultural beliefs, prevent certain segments of the community from seeking both preventative care and treatment for illness. This can lead to increased rates of infection and the spread of disease, which impact community health. Non-communicable diseases, such as alcoholism and substance addiction, worsen without treatment and can also impact community health. The City shall encourage low cost health providers to offer preventative, urgent, and continuing health care services, including alcoholism and substance abuse programs, that are accessible to all segments of the community.~~

~~Community health may be jeopardized by lack of free access to clean water and sanitation facilities. The City shall work with other government agencies, non-profit organizations, and social service providers to plan, develop, and maintain such facilities.~~

~~The City shall prohibit camping/living in areas such as the Arcata Community Forest, where clean water and sanitation facilities are not available. If feasible, the City may provide or permit a short-term camping area for unsheltered persons.~~

### Other Initiatives

- City Emergency Response Plan. The City shall maintain a comprehensive response plan for emergencies, including seismic events, tsunamis, slope failures, floods, storms, fires, and materials spills or contamination. The plan will provide for timely and coordinated response to emergencies that

threaten community residents, property, and vital services. The plan will identify City and other emergency response agencies that should be contacted, and also identify neighborhood resources available for more localized assistance and relief.

- Evacuation routes/transportation facilities. Emergencies such as floods, storms, fires, distantly generated tsunamis, and hazardous materials spills may necessitate immediate evacuation of affected areas.

A map of evacuation routes shall be included in City and neighborhood emergency response plans. These plans will also include evacuation methods for residents who are without, or unable to operate, vehicles. An emergency access plan shall be developed for access to the east side of town (east of State Route 101) after a major seismic event.

**APPLICATIONS FOR THE INCIDENT COMMAND SYSTEM:**

- Fires, hazardous materials (HAZMAT), and multicasualty incidents.
- Multijurisdiction and multi-agency disasters.
- Wide area search and rescue missions.
- Pest eradication programs.
- Oil spill response and recovery incidents.
- Single and multi-agency law enforcement actions.
- Air, rail, water, and ground transportation accidents.
- Planned events (celebrations, parades, concerts).
- Private sector emergency management programs.
- State or local major natural hazards management.

- Disaster preparedness coordination using the Standardized Emergency Management System. City staff responsible for emergency response shall be trained in Standardized Emergency Management System (SEMS) implementation, which is necessary to receive reimbursement from the State of California for disaster response related costs. This training includes instruction about the Incident Command System (ICS) which is used to manage emergency incidents or non-emergency events.

- Citizen training/Neighborhood and Business Emergency Services Teams. The City of Arcata Police Department coordinates the organization and training of Neighborhood Emergency Services Teams and Business Emergency Services Teams (NEST and BEST). The NEST program is essential for mobilizing neighborhood response to emergencies. The NEST program shall be expanded to all neighborhoods.

- The City shall maintain current seismic information that identifies fault zones and probable surface rupture areas.

- Arcata will experience ground-shaking during an earthquake. The City maintains seismic data files that identify areas where ground-shaking will most likely damage buildings and infrastructure.

- Public information and disclosure. The Humboldt Earthquake Education Information Center, at Humboldt State University, and the City of Arcata

have earthquake/tsunami awareness information that is available to the public. The Center and the City will continue to make the most current information available to help the community prepare for and respond to seismic events.

- Provide available information, including potential for site slippage, effects of groundwater on slopes and soils, erosion potential, and other hazards, to homebuilders prior to the start of construction.
- Floodplain Mapping. The City shall continue participating in the National Flood Insurance Program and maintain the most current Flood Insurance Rate Maps (FIRM) on file. The City shall also continue requesting that the Federal Emergency Management Agency provide hydrographic modeling (using the 1964 flood levels as a benchmark) and an update of flood mapping for the Mad River.
- Flood Insurance. Flood insurance is available from private insurers to compensate home and business owners for flood-related losses. Flood insurance rates are set by a site's proximity to mapped flood-prone areas. The City shall make information about flood-prone areas available to the public, to aid community residents and business owners in determining whether flood insurance should be purchased.
- Management of urban fire hazards (development/design standards). Structural fires demand immediate response from a combination of onsite and Fire Department resources in order to minimize injury and damage. Fire suppression devices such as extinguishers and sprinklers are important for initial response, reduce fire insurance premiums, and satisfy operations requirements for certain types of businesses. These devices are encouraged in new and renovated non-residential buildings and in all residential structures with more than four units, even when not required by fire and building code.
- All buildings should have adequate lighting, street numbering, and access to ensure rapid response by fire-fighting vehicles. To ensure urban fire safety, the City shall enforce the Uniform Building and Uniform Fire Codes (UBC & UFC) currently in effect, and the Universal Building Code when it is adopted.
- The Arcata Volunteer Fire Department takes an active role in reviewing new development for compliance with fire safety standards. The City shall continue to incorporate Fire Department review to ensure that driveways, turns-arounds, and other access ways have sufficient width, vertical clearance, and turn-around space for fire fighting vehicles.



- Water supply (fire flow). The City's fire hydrant system provides the primary source of water for fighting urban fires. The City shall maintain fire hydrant spacing so that no residential structure is more than 500 feet from a hydrant and no commercial or industrial structure is more than 300 feet from a hydrant. Each hydrant shall have adequate fittings and be capable of providing adequate water flows to meet Fire Department standards.
- The City shall maintain adequate fire flows in its water system. Open-water sources such as ponds, swimming pools, private storage tanks, and reservoirs may be used as a secondary water source by fire-fighting apparatus. These sources shall be equipped with appropriate filtering devices or strainers to prevent clogging of water pumps.
- Wildland fires in forested areas of the City can cause property damage and threaten nearby structures. The City shall encourage the Arcata Fire Department to maintain its mutual aid agreement with the California Department of Forestry and Fire Prevention (CDF) to insure rapid response to wildland fires.
- Fire suppression services. The Arcata Volunteer Fire Department's (AVFD) jurisdiction (shown as District #1 on the AVFD service area map) includes the City's incorporated, sphere of influence, and planning areas, except for an outlying area along Jacoby Creek Road. The AVFD maintains two fire stations to provide rapid response to all fire calls within its service area. They also maintain mutual aid agreements with the CDF and the Eureka Fire Department for rapid response to fires in outlying areas.
- Reduction of hazardous waste (source reduction). There are increasing numbers of environmentally safe materials and substances available that offer alternatives to hazardous materials. Improved water-based paints that replace oil and lead based paints, cellulose insulation materials that replace asbestos, and biodegradable antifreezes that replace glycol based coolants, are all examples of safer materials and substances currently in use. The City shall request information from County, State, and Federal agencies, as well as manufacturers and suppliers, regarding environmentally safe products and shall have a list of those products available to the public.
- Contaminated sites. There are sites in and around the City where wood product milling and production, vehicle and equipment storage and repair, agricultural production, and other uses may have resulted in site contamination. Materials such as lead based paints may also contribute to contamination. Many of these sites are inactive and may be appropriate for alternative uses. Environmental Site Assessments shall be required prior to development review and approval of potentially contaminated sites, and cleanup is required prior to reuse. The City shall record and map sites with known contamination.

- Use of potentially harmful materials on public lands and rights-of-way. The City of Arcata does not use toxic sprays or substances on vegetation in public lands or rights-of-way, and has been persuasive in stopping State agencies, such as Cal-Trans, from using toxic sprays along State rights-of-way within the City limits. The City shall continue this practice and prohibit other public agencies from using toxic sprays or substances within the City limits (see Resource Conservation and Management Element Policy RC-1i).
- Household and other small-quantity generators. Households and small businesses accumulate solvents and cleaners, petroleum products, pesticides, and other toxic substances that are potentially hazardous if spilled, released into the atmosphere, or ingested. The City shall maintain a list of toxic substances which should be avoided and publicize collection dates and locations where these substances can be disposed of properly. The City shall coordinate with the County Hazardous Materials Department (Humboldt County) and the State Department of Toxic Substances Control (California Environmental Protection Agency) to ensure that collection sites are accessible to community residents.
- The City shall also encourage property owners and real estate agents to remove hazardous materials, or disclose their presence, to purchasers as part of property transfers. Property purchasers should have the option of accepting certain materials, such as paint, or requesting removal and cleanup prior to the property transfer.
- Hazardous materials education program. The City shall work with the Humboldt County Health Department and the California Department of Toxic Substances to develop educational materials explaining hazardous materials' impact on people, plants, and animals, and provide information on alternatives to hazardous materials. This information shall be made available to the public.

### **~~6.3 IMPLEMENTATION MEASURES~~**

| #    | IMPLEMENTATION MEASURE   | RESPONSIBLE PARTY           | TIME FRAME |
|------|--|-----------------------------|------------|
| LU-4 | <del>Update seismic setbacks/structural requirements and hillside development standards (LUC Amendment)<br/>Update City land use code for setbacks from known faults and other hazards, geotechnical review and structural requirements, and hillside development standards.</del> | Community Development Dept. | Year 1     |

| #               | IMPLEMENTATION MEASURE  | RESPONSIBLE PARTY   | TIME FRAME         |
|-----------------|---|---|--------------------|
| <del>PS-1</del> | <del>Neighborhood and Business Emergency Services Teams (NEST and BEST)<br/>Promote the formation of NESTs in all neighborhoods and the formation of BESTs in business communities. The City Police Department shall have a designated NEST/BEST coordinator available to assist neighborhoods with NEST organization and training, and to supply training materials (such as the <u>Captain's Handbook Disaster Planning Guide</u>).</del>   | <del>Police Department</del>  | <del>Ongoing</del> |
| <del>PS-2</del> | <del>Emergency preparedness and response programs<br/>Maintain and distribute current information about seismic risks and emergency preparedness (such as living on shaky ground — <u>How to Survive Earthquakes &amp; Tsunamis on the North Coast</u>) distributed by the Humboldt Earthquake Education Center, HSU). Maintain Standardized Emergency Management System training for senior City staff, including Incident Command System, multi/inter-agency coordination, mutual aid, and operational area concepts.</del> | <del>City Manager's Office/Arcata Fire &amp; Police Departments</del>       | <del>Ongoing</del> |
| <del>PS-3</del> | <del>Floodplain mapping and management program<br/>Update floodplain mapping throughout the planning area, including continued participation with National Flood Insurance Program.</del>   | <del>Federal Emergency Management Agency</del>                              | <del>Year 5</del>  |
| <del>PS-4</del> | <del>Cooperative law enforcement/independent review Establish an ombudsman and/or police review commission for independent investigation and mediation of complaints, and for reviewing law enforcement procedures.</del>   | <del>District Attorney/ State AG/ Grand Jury/ Human Rights Commission</del> | <del>Year 5</del>  |
| <del>PS-5</del> | <del>Safer materials and substances list<br/>Maintain a list of safer materials and environmentally friendly substances to replace toxic substances and hazardous materials.</del>  | <del>Environmental Services Dept.</del>                                     | <del>Year 2</del>  |
| <del>PS-6</del> | <del>Education program for reduction of hazardous waste (resource reduction)<br/>The City shall compile information from County, State and Federal agencies, as well as from manufacturers and suppliers, regarding environmentally safe products and shall make that information available to the public.</del>  | <del>Environmental Services Dept.</del>                                     | <del>Ongoing</del> |
| <del>PS-7</del> | <del>Brownfield sites<br/>Record and map sites having known contaminants, contingent upon funds availability.</del>   | <del>Community Development Dept.</del>                                      | <del>Year 2</del>  |

| #               | IMPLEMENTATION MEASURE   | RESPONSIBLE PARTY  | TIME FRAME        |
|-----------------|--|--|-------------------|
| <del>PS-8</del> | <del>Hazard information and protection<br/>Complete the updates of the GIS base maps for hazards, and link a computer at the Permit Application Counter in Community Development to the GIS for public and staff access.</del> | <del>Environmental Services Dept./ Community Development</del> | <del>Year 1</del> |

# ~~NOISE ELEMENT~~

## ~~6.4 INTRODUCTION~~

~~The Noise Element is one of the seven required General Plan Elements that must be prepared by California cities and counties (Government Code Section 65302). The California General Plan Guidelines state that the Noise Element of the General Plan provides a basis for comprehensive local programs to control and abate environmental noise and to protect citizens from excessive exposure. The Noise Element is required to identify and appraise noise in the community and follow the guidelines adopted by the Office of Noise Control in the State Department of Health Services. Local governments must analyze and quantify noise levels, and the extent of noise exposure, through actual measurements or the use of noise modeling.~~

~~The air into which noise is emitted, and on which it travels, is a common resource of the community. It is a public good and as such its use, as well the responsibility of maintaining it, belongs to everyone.~~

~~**THE STATE OF CALIFORNIA GENERAL PLAN GUIDELINES\* FOR THE FUNDAMENTAL GOALS OF THE NOISE ELEMENT ARE:**~~

- ~~• To provide sufficient information concerning the community noise environment so that noise may be effectively considered in the land use planning process. In so doing, the necessary groundwork will have been developed so that a community noise ordinance may be utilized to resolve noise complaints.~~
- ~~• To develop strategies for abating excessive noise exposure through cost-effective mitigating measures in combination with zoning, as appropriate, to avoid incompatible land uses.~~
- ~~• To protect those existing regions of the planning area whose noise environments are deemed acceptable and also those locations throughout the community deemed "noise sensitive."~~
- ~~• To utilize the definition of the community noise environment, in the form of CNEL or Ldn noise contours as provided in the Noise Element for local compliance with the State Noise Insulation Standards. These standards require specified levels of outdoor to indoor noise reduction for new multi-family residential constructions in areas where the outdoor noise exposure exceeds CNEL (or Ldn) 60 dB.~~

~~(\*Appendix A of the Guidelines)~~

~~Loud noise is a health issue. The human ear is not designed to accommodate loud noise for long durations. Exposure to sounds louder than 90 decibels (e.g., a power lawnmower) for more than one or two hours begins to damage the inner ear. Therefore, all people, businesses, industry, and organizations have an obligation to respect the health and comfort of others, and to acknowledge that the effects of broadcasted noise are not limited to their own private property. In sharing the community's common resources, everyone has an obligation to respect the health of others in ways that are compatible with, and do not detract from, other uses. Noise levels from sources commonly found in the community are shown in Figure N-a.~~

~~Definitions of noise, potential effects on people, and existing ordinances. Noise, commonly defined as unwanted sound, is an environmental phenomenon to which people are exposed throughout life. Noise is among the most pervasive pollutants, a waste product generated primarily by human activities.~~

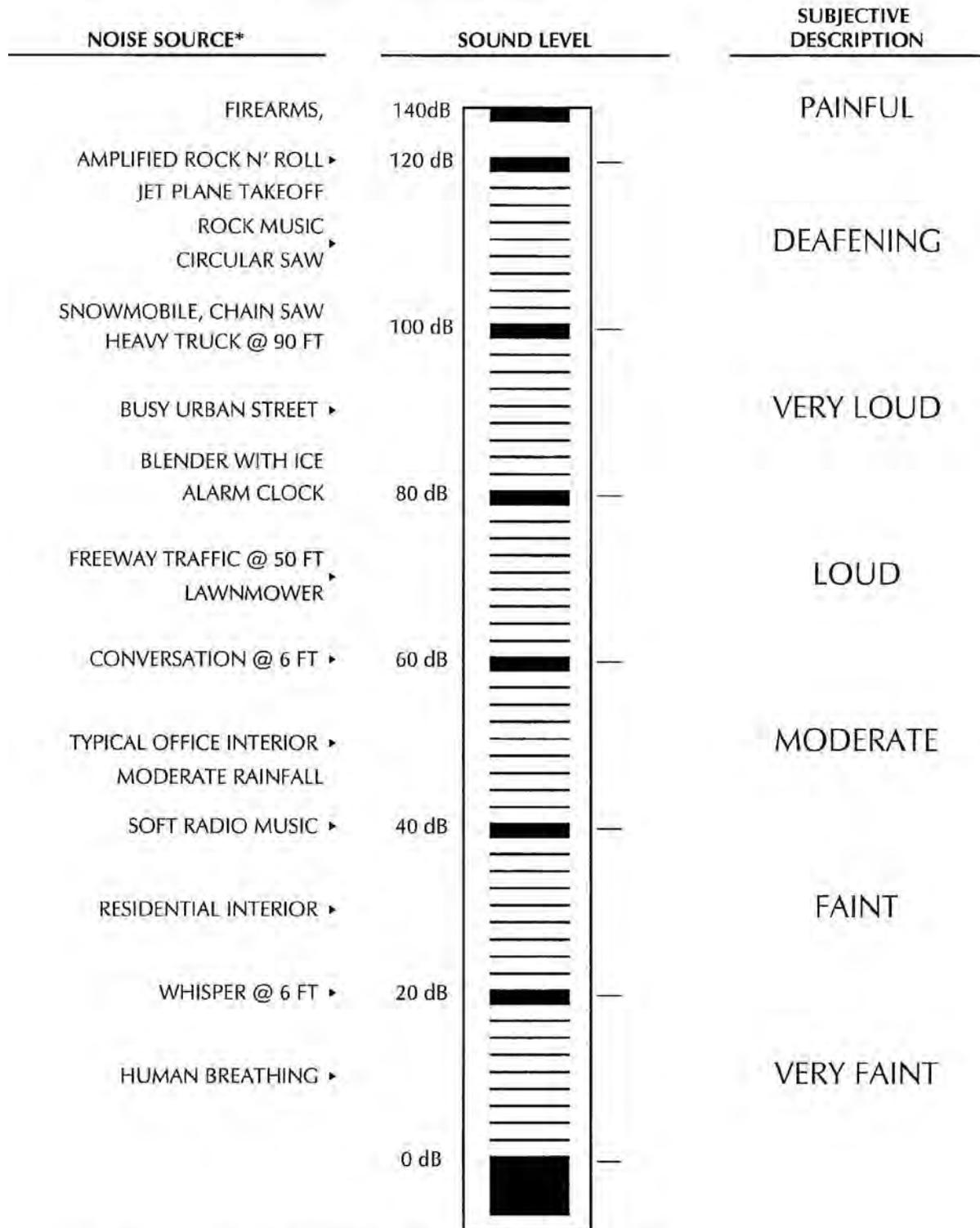
~~As urbanization and development have intensified globally, regionally, and locally in Arcata, noise levels have also increased. Studies have shown that increased noise levels have a direct adverse impact on the quality of home, work, and recreational environments.~~

~~In recognition of these adverse impacts, the Arcata City Council passed a Plaza Area Noise Ordinance (City Ordinance #1249) prohibiting unnecessary, excessive, and annoying noise from all sources. The Noise Ordinance states that excessive noise levels, offensive noise, and unreasonably disturbing noise are detrimental to the public health, welfare and safety and are contrary to the public interest. Detrimental noises interfere with: sleep, communication, relaxation, and the full use of private property; use and enjoyment of the Arcata Plaza by the general public; noise sensitive land uses, particularly residential apartments and lodging; and productive commerce. Detrimental noises contribute to hearing impairment and a range of adverse physiological stress conditions and adversely affect the value of real property.~~

~~It is the intent of the Noise Ordinance to protect the public health, comfort, convenience, safety, welfare, prosperity, peace, and quiet by reducing excessive noise levels and by prohibiting the generation of offensive, or unreasonably disturbing, noise.~~

~~Noise environment overview. Arcata has experienced change from its small, rural town beginnings to a growing, urban community with more intensive and diverse uses. Preservation of surrounding open spaces, and General Plan policies for more efficient land uses, have promoted in-fill urban development which intersperses residential uses (noise receptors) with commercial and industrial land uses (noise generators). The proximity of noise generators to noise receptors such as higher volume vehicle travel on local roadways has resulted in increased noise levels at receptor sites. Future development of commercial and industrial uses will increase the potential for future noise conflicts.~~

**FIGURE N-a A WORLD OF NOISE**



\* Unless otherwise noted, noise levels are measured at the source

~~A September 1997 community noise survey conducted as part of General Plan background studies showed that typical noise levels in noise sensitive areas of the City range from 46 dB to 63 dB Ldn. Traffic, local roadways, major roadways (including State Routes 101, 299 and 255), railroad operations, industrial activities, and neighborhood activities are the primary sources of background noise levels. Some residences have outdoor activity areas directly exposed to major noise sources (such as the railroad tracks, major roadways, and industrial areas) that exceed generally acceptable noise exposure criteria.~~

~~Noise complaints received by the City also measure noise levels. The Arcata Police Department has received increasing numbers of noise complaints over the last several years. Police activity reports show 866 noise complaints in 1995; 954 in 1996; and 1,043 in 1997, which is a twenty percent increase. Some of the most frequent noise complaints within the City of Arcata are associated with barking dogs, loud parties, boom boxes, car stereos, existing industrial activities, and existing on-site commercial noise sources such as outdoor speaker systems, street sweeping, and early morning garbage pickup. Some of these noises are considered infractions, and are covered in the penal code. Others are referred to other agencies, or determined to be unenforceable, and are not included in the complaint records.~~

~~Future noise environment overview. Community noise levels can increase with development. This is especially true for noise along major roadways, such as State Routes 101 and 299. The projected future noise controls are shown in Figure N-b. As development continues, there is a growing potential for noise increases due to commercial or industrial operations. It is now recognized that noise pollution can often be reduced through attenuation measures such as barriers, mufflers, and insulation, with little or no penalty to progress.~~







~~Responsibilities of a Noise Element. The Noise Element advances the ethic that a low noise level environment is a common resource that can be enjoyed by all, and that noise generated by some has the potential to negatively affect others. The Noise Element provides a mechanism for evaluating and mitigating the potential effects of noise on the community. It identifies potential noise sources that exceed acceptable standards and noise sources that may be considered annoying. It also provides criteria for determining acceptable noise exposure. The California General Plan Guidelines state that the Noise Element will be as detailed as necessary to describe the local situation and mitigate local noise problems. This means that the City is not limited to applying noise controls and noise reduction techniques to projects and other activities requiring City review and permits, but can address other noise generating activities in the community.~~

~~The Noise Element sets policy direction for evaluating the potential effects of noise due to new industrial processes or commercial noise sources. (Projected future noise contours are shown on Figure N-b.) Many times, however, noise sources are overlooked during the review process, or are added on-site at a later date. Once the project is approved, the administrative actions for responding to complaints of these noise sources generally fall outside of the City's review process. In these cases a noise ordinance is required in order to determine compliance with local standards or the potential for annoyance.~~

~~In the event of an individual being annoyed due to a neighbor's barking dog or an existing commercial activity, a noise ordinance would provide a complaint and enforcement mechanism. These types of noises, however, are most effectively addressed through educating community members about "good neighbor policies," since dog ownership, or existing commercial activities, are not subject to City review, and enforcement is usually considered as a last resort. Complaint and enforcement mechanisms include:~~

- ~~• Ordinance 1249, for the Plaza Area only.~~
- ~~• Penal code 415 - Disturbing the Peace.~~
- ~~• Land Use and Development Guide regulations.~~

~~**City responsibilities.** The City of Arcata can set an example for business and industry by considering the acoustic concerns and future noise impacts of City operations and business. The City can lead the way by demonstrating that ongoing operations and new noise-producing uses and products can meet specified noise criteria by making effective noise attenuation information available, and by providing a procedure for mediating noise disputes. The City can accomplish this by preferential purchasing of quieter equipment; reducing use of noisy equipment (as demonstrated by City Council action to eliminate the use of leaf blowers in certain public areas); limiting hours of operation for public works projects (except for emergencies) in residential areas; and incorporating acoustic materials and barriers in all new City facilities.~~



~~Public surveys on noise show that many people do not know how to effectively address noise issues. Community members in general appear to lack knowledge of how to reduce noise conflicts. There also seems to be a pattern of governmental agencies responding to noise complaints with little or no enforcement or action against noise violations. This pattern may be as typical of Arcata as other urban settings. To address this issue, procedures and educational materials are being developed, including a noise control manual.~~

~~**Community responsibilities.** The quality of the soundscape is a growing environmental concern and is an important aspect of the City's livability. To increase public awareness of achieving and maintaining a high quality soundscape, the community can draw on noise attenuation techniques, such as those in the Noise Control Manual.~~

~~One of the most effective ways to contribute to the solution is to be a good neighbor. Most importantly, this means taking responsibility for reducing noise at the source. Businesses and industry can contain noise generating uses and activities within buildings, or construct barriers so that noise does not reach adjacent areas. Residents should also consider how the noise they generate could affect others and reduce the level accordingly. Motorists and other vehicle operators should be conscientious of the potential for vehicle noise to disturb others. Figure N-c shows noise control measures for all neighbors and neighborhoods.~~

#### ~~Guiding Principles and Goals.~~

- ~~A. Reduce noise at the source.~~
- ~~B. Protect City residents from the harmful and disturbing effects of noise through controls on noise-producing activities.~~
- ~~C. Promote noise mitigation techniques in the design of both noise receptors and noise generators.~~
- ~~D. Encourage state-of-the-art land use planning methodologies and acoustic control techniques (refer to City Noise Control Manual) to reduce existing and potential noise conflicts.~~
- ~~E. Encourage cooperative and voluntary action by businesses and industry, to reduce noise omissions from annoying noise sources.~~
- ~~F. Promote mediation as a means of reducing noise complaints which result from existing noise sources.~~
- ~~G. Educate community residents about good neighbor policies, the benefits of reduced noise levels, and living in a community with a high quality soundscape.~~
- ~~H. Bring all noise sources into compliance with noise guidelines by strongly encouraging voluntary compliance, pursuing funding for noise attenuation measures to mitigate any financial hardships, and through enforcement of a Noise Ordinance.~~

~~FIGURE N-c NOISE CONTROL MEASURES~~

## 6.5 NOISE POLICIES

The Noise Element contains the following policies:

- ~~N-1 Noise Attenuation~~
- ~~N-2 Stationary Noise Sources and Levels~~
- ~~N-3 Transportation Noise Sources and Levels~~
- ~~N-4 Requirements for Acoustical Analysis~~
- ~~N-5 Intrusive and Intermittent Noise Sources~~

### ~~POLICY N-1 NOISE ATTENUATION~~

~~Objective. Reduce, or eliminate, noise impacts at their source by providing enclosures, barriers, and other on-site noise attenuation measures for noise generating activities. Monitor noise levels to ensure that acceptable noise levels are maintained on adjacent sites.~~

~~N-1a Noise attenuation measures. Noise attenuation measures, and stationary noise source controls shall include the use of barriers, setbacks, site design, baffles, enclosures, silencers, and improved facade construction techniques.~~

~~N-1b Noise attenuation guidelines. Noise attenuation measures and stationary noise source controls shall follow the guidelines provided in the technical document entitled: Noise Control Manual (which is considered an implementation measure).~~

~~N-1c Noise mitigation. Where noise mitigation measures are required, the emphasis of such measures shall be placed upon site planning and project design. The use of noise barriers shall be considered a means of achieving the noise standards only after all other practical design-related noise mitigation measures have been integrated into the project.~~

~~N-1d Noise level reduction. To reduce existing, objectionable, industrial, and stationary noise levels at the source, the City shall work with local industries to incorporate noise control technology through building and site design and engineering solutions. The City shall make available current acoustical attenuation techniques (Noise Control Manual) for new and retrofitted industrial development.~~

~~N-1e Noise standards enforcement. Enforcement of noise standards shall be accomplished through development and implementation of a noise control ordinance, post-project compliance testing, and through the use of mediation.~~

~~N-1f Mediation of noise conflicts. Where noise conflicts may occur, all affected parties shall strive to use innovative and positive solutions to solve these disputes, including the use of trained mediators. The City recognizes that~~

~~many noise issues can be resolved before they get to the complaint stage if there is a procedure for airing the issue with an impartial third party.~~

~~N-1g Resolution of noise disputes. The City shall establish positive ways to discuss and resolve noise issues and disputes, including the use of trained mediators.~~

~~POLICY N-2 STATIONARY NOISE SOURCES AND LEVELS~~

~~Objective. Establish acceptable noise levels for land uses and activities that will protect community residents from the harmful effects of excessive noise exposure from stationary noise generators. Maintain interior and exterior noise standards that will achieve land use compatibility with respect to community noise.~~

~~N-2a Noise contour maps. The noise contour map (Figure N-b) and other estimates of noise source levels shall be used in conjunction with the noise source criteria to evaluate the feasibility of a proposed project.~~

~~N-2b New development of noise sensitive uses. New noise receptors shall not be allowed where the noise level from non-transportation noise generators will exceed noise level standards (Table N-1), unless effective noise mitigation measures that meet City standards are incorporated.~~

~~N-2c Noise created by new or proposed stationary noise sources. Noise created by new or proposed stationary noise sources, or the expansion or alteration of an existing use, shall be mitigated so as not to exceed noise level standards (Table N-1) at noise sensitive land uses. All noise generators not in compliance with these standards will be encouraged to mitigate impacts.~~

~~N-2d Acceptable noise levels. New construction and retrofits at existing buildings shall include appropriate insulation, glazing, and other sound attenuation measures so that they comply with standards contained in Table N-1. These standards are intended to set levels for external noise sources that could potentially impact a new dwelling or other noise-sensitive use.~~

~~TABLE N-1 NOISE STANDARDS FOR NEW PROJECTS AND RETROFITS~~

| LAND USE<br>Noise Level Descriptor                                 | EXTERIOR         |                  |                  | INTERIOR         |                  |                  |
|--|------------------|------------------|------------------|------------------|------------------|------------------|
|  | 7am-7pm          | 7-10pm           | 10 pm-7am        | 7am-7pm          | 7-10pm           | 10 pm-7am        |
| <del>Residences, Transient Lodging, Hospitals, Nursing Homes</del> |                  |                  |                  |                  |                  |                  |
| <del>Hourly L<sub>eq</sub></del>                                   | <del>55 dB</del> | <del>50 dB</del> | <del>45 dB</del> | <del>45 dB</del> | <del>40 dB</del> | <del>35 dB</del> |
| <del>Maximum</del>   | <del>75 dB</del> | <del>75 dB</del> | <del>70 dB</del> | <del>65 dB</del> | <del>65 dB</del> | <del>60 dB</del> |
| <del>Auditoriums, Theaters, Libraries, Schools, Churches</del>     |                  |                  |                  |                  |                  |                  |
| <del>Hourly L<sub>eq</sub></del>                                   | <del>55 dB</del> | <del>55 dB</del> | <del>n/a</del>   | <del>40 dB</del> | <del>40 dB</del> | <del>n/a</del>   |
| <del>Maximum</del>   | <del>75 dB</del> | <del>75 dB</del> | <del>n/a</del>   | <del>60 dB</del> | <del>60 dB</del> | <del>n/a</del>   |

- ~~1. The City can impose noise level standards which are up to 5 dB less than those specified above based upon determination of existing low ambient noise levels in the vicinity of the project site.~~
- ~~2. These noise level standards do not apply to residential units established in conjunction with industrial or commercial uses (e.g., caretaker dwellings).~~
- ~~3. The standards will be applied at the outdoor activity areas of the receiving land use, and at the building facade for upper floor receivers which do not have an outdoor activity area facing the noise source. Where no outdoor activity area is identified, the City has the option to apply only the interior noise level performance standards.~~

## ~~POLICY N-3 TRANSPORTATION NOISE SOURCES AND LEVELS~~

~~**Objective.** Establish acceptable noise levels, for land uses and activities, that will protect community residents from the harmful effects of excessive noise exposure due to transportation noise sources. Maintain interior and exterior noise standards that will achieve land use compatibility with respect to community noise.~~

~~**N-3a** New development of noise sensitive land uses. New development of noise receptors will not be permitted in areas exposed to existing or projected levels of transportation noise exceeding levels specified in Table N-2, unless exterior noise or noise levels in interior spaces can be reduced to meet City Standards (Table N-2).~~

~~**N-3b** Transportation noise. Transportation noise sources shall be periodically measured, and significant increases mitigated, so as not to exceed the levels specified in Table N-2 for outdoor activity areas or interior spaces of existing receptors.~~

~~**TABLE N-2 – MAXIMUM ALLOWABLE TRANSPORTATION NOISE SOURCES EXPOSURE**~~

| LAND USE                           | OUTDOOR ACTIVITY AREAS <sup>1</sup><br>$L_{dn}/CNEL, dB$ | INTERIOR SPACES   |                  |
|------------------------------------|--|-------------------|------------------|
|                                    |  | $L_{dn}/CNEL, dB$ | $L_{eq}, dB^{2}$ |
| Residential                        | 60 <sup>3</sup>  | 45                | --               |
| Transient Lodging                  | 60 <sup>4</sup>  | 45                | --               |
| Hospitals, Nursing Homes           | 60 <sup>3</sup>  | 45                | --               |
| Theaters, Auditoriums, Music Halls | --   | --                | 35               |
| Churches, Meeting Halls            | 60 <sup>3</sup>  | --                | 40               |
| Office Buildings                   | --   | --                | 45               |
| Schools, Libraries, Museums        | --   | --                | 45               |
| Playgrounds, Neighborhood Parks    | 70   | --                | --               |

- ~~1. Where the location of outdoor activity areas is unknown, the exterior noise level standard shall be applied to the property line of the receiving land use.~~
- ~~2. As determined for a typical worst case hour during periods of use.~~

- ~~3. Where it is not possible to reduce noise in outdoor activity areas to 60 dB  $L_{dn}$ /CNEL or less using a practical application of the best available noise reduction measures, an exterior noise level of up to 65 dB  $L_{dn}$ /CNEL may be allowed provided that available exterior noise level reduction measures have been implemented and interior noise levels are in compliance with this table.~~
- ~~4. In the case of hotel/motel facilities or other transient lodging, outdoor activity areas such as pool areas may not be included in the project design. In these cases, only the interior noise level criterion will apply.~~

~~N-3c Roadway projects. To minimize noise impacts, the following criteria may be used as a test of significance for roadway projects:~~

- ~~1. Where existing traffic noise levels are less than 60 dB  $L_{dn}$  at the outdoor activity areas of noise receptors, a +5 dB  $L_{dn}$  increase in noise levels due to a roadway improvement project will be considered significant.~~
- ~~2. Where existing traffic noise levels range between 60 and 65 dB  $L_{dn}$  at the outdoor activity areas of noise receptors, a +3 dB  $L_{dn}$  increase in noise levels due to a roadway improvement project will be considered significant.~~
- ~~3. Where existing traffic noise levels are greater than 65 dB  $L_{dn}$  at the outdoor activity areas of noise receptors, a +1.5 dB  $L_{dn}$  increase in noise levels due to a roadway improvement project will be considered significant.~~

#### ~~POLICY N-4 ACOUSTICAL ANALYSIS REQUIREMENTS~~

~~**Objective.** Establish a consistent procedure and framework for conducting and reviewing acoustical analyses.~~

~~N-4a Noise sensitive land uses. Where receptor land uses are potentially exposed to existing or projected exterior noise levels exceeding the levels specified in Table N-2 or the performance standards of Table N-1, an acoustical analysis shall be required as part of the environmental review process, so that noise mitigation may be included in the project design. An acoustical analysis prepared pursuant to the Noise Element shall:~~

- ~~1. Be the financial responsibility of the applicant.~~
- ~~2. Be prepared by a qualified person experienced in the fields of environmental noise assessment and architectural acoustics.~~
- ~~3. Include noise level measurements, with sufficient sampling periods and locations, to adequately describe local conditions and the predominant noise sources.~~
- ~~4. Estimate existing and projected cumulative (twenty years) noise levels in terms of  $L_{dn}$  or CNEL and/or the standards of Table N1, and compare these levels to the adopted policies of the Noise Element.~~
- ~~5. Recommend appropriate mitigation to achieve compliance with the adopted policies and standards of the Noise Element, giving preference to proper site planning and design over mitigation measures which require the construction of noise barriers or~~

~~structural modifications to buildings which contain noise-sensitive land uses.~~

- ~~6. Estimate noise exposure after prescribed mitigation measures are implemented.~~
- ~~7. Describe a post-project assessment program which could be used to evaluate the effectiveness of the proposed mitigation measures.~~

## ~~POLICY N-5 INTRUSIVE AND INTERMITTENT NOISE SOURCES~~

~~**Objective.** Protect community residents from the effects of excessive, intrusive, and intermittent noise. Set standards for intrusive and intermittent noise sources for both daytime and nighttime periods. Intrusive noise sources have a qualitative aspect that can be annoying. These sources may contain a tonal component which is absent from the existing general background noise. They may also be rhythmic, reoccurring or impulsive in nature, or comprised mainly of music or speech. Intrusive noise can result in annoyance or interference with sleep. These types of noise sources can include, but are not limited to, industrial processes, warning horns, backup alarms, and pressure release devices.~~

~~**N-5a** Intrusive noise. When intrusive noise sources have been identified, the detrimental effects (sleep interference or the potential for annoyance) shall be disclosed to neighboring receptor properties.~~

~~**N-5b** Noise levels due to non-transportation sources. Noise levels due to non-transportation sources which may be intermittent or recurring, impulsive noises, pure tones, or noises consisting primarily of speech or music, shall be subject to the criteria contained within Table N-1, with a 5 dB penalty applied to the criteria.~~

~~**N-5c** Rhythmic, reoccurring, or impulsive noise sources. When noise sources have been identified to be rhythmic, reoccurring, or impulsive in nature or comprised mainly of music or speech, they may comply with applicable noise level criteria and still be annoying to individuals. When these types of noise sources have been identified, they may be subject to additional mitigation or mediation.~~

~~**N-5d** Construction site tool or equipment noise. The following shall apply to construction noise from tools and equipment:~~

- ~~1. The operation of tools or equipment used in construction, drilling, repair, alteration or demolition shall be limited to between the hours of 8 A.M. and 7 P.M. Monday through Friday, and between 9 a.m. and 7 p.m. on Saturdays.~~
- ~~2. No heavy equipment related construction activities shall be allowed on Sundays or holidays.~~

~~This shall apply to construction noise from tools and equipment which are subject to the review of the City, and which may affect receptor uses. This policy~~

~~shall not apply to emergency work of public service utilities or by variance under a noise ordinance.~~

~~N-5e Stationary and construction equipment noise. All stationary and construction equipment shall be maintained in good working order, and fitted with factory approved muffler systems.~~

~~N-5f Noise Ordinance. The City of Arcata shall develop and adopt a City-wide noise ordinance. The ordinance shall contain noise level criteria consistent with the criteria contained within the noise element.~~

## ~~6.6 IMPLEMENTATION MEASURES~~

| #   | IMPLEMENTATION MEASURE   | RESPONSIBLE PARTY  | TIME FRAME |
|-----|--|--|------------|
| N-1 | <p><del>Citywide and downtown noise ordinances</del><br/> <del>Adopt a citywide noise ordinance to protect public health, safety, welfare, and quiet by reducing existing noise levels and prohibiting the generation of loud noise from new sources. Amend the existing downtown noise ordinance to be consistent with Noise Element standards.</del></p> | Police Department  | Year 1     |
| N-2 | <p><del>Noise Control Manual</del><br/> <del>Maintain and apply a Noise Control Manual that contains techniques for soundproofing new structures and muffling equipment and motors; promotes use of acoustic materials, barriers and setbacks; and requires acoustic analysis to determine potential noise impacts.</del></p>                              | Community Development Department/<br>Planning Commission | Year 1     |
| N-3 | <p><del>Education programs</del><br/> <del>The City shall maintain current information about noise monitoring and attenuation techniques effective in identifying and reducing noise.</del></p>  | Community Development Dept.                              | Ongoing    |
| N-4 | <p><del>Record of noise complaints</del><br/> <del>The Arcata Police Department shall maintain a record of noise complaints.</del></p>   | Arcata Police Dept.                                      | Ongoing    |
| N-5 | <p><del>Noise reduction inquiry procedure</del><br/> <del>The City recognizes that many noise issues can be resolved before they get to the complaint stage, if there is a procedure for airing the issue with an impartial third party.</del></p>   | Community Development Dept.                              | Year 1     |

# Glossary



## ~~GENERAL~~ COASTAL LAND USE PLAN GLOSSARY

~~[The General Plan Glossary has been replaced by Article 10 (Glossary) of the Land Use Code to promote consistency, per Ordinance No. 1377, September 2008, and is bound in a separate document.]~~

Annex, v. - To incorporate a land area into an existing district or municipality, with a resulting change in the boundaries of the annexing jurisdiction.

Appealable Development – The following actions taken by the City on a coastal development permit application may be appealed to the commission for only the following types of developments:

(1) Developments approved by the local government between the sea and the first public road paralleling the sea or within 300 feet of the inland extent of any beach or of the mean high tideline of the sea where there is no beach, whichever is the greater distance.

(2) Developments approved by the local government not included within paragraph (1) that are located on tidelands, submerged lands, public trust lands, within 100 feet of any wetland, estuary, or stream, or within 300 feet of the top of the seaward face of any coastal bluff.

(3) Developments approved by the City not included within part (1) or (2) that are located in a sensitive coastal resource area.

(4) Approval or denial of any development which constitutes a major public works project or a major energy facility.

Aquaculture - A form of agriculture as defined in Section 17 of the Fish and Game Code. Aquaculture products are agricultural products, and aquaculture facilities and land uses shall be treated as agricultural facilities and land uses in all planning and permit-issuing decisions governed by this Coastal Land Use Plan.

Archaeological - Relating to the material remains of past human life, culture, or activities.

Biological Productivity - Biological productivity generally refers to the amount of organic material produced per unit time.

Building - Any structure used or intended for supporting or sheltering any use or occupancy.

California Environmental Quality Act (CEQA) - A State law the City to regulate activities with consideration for environmental protection. If a proposed activity has the potential for a significant adverse environmental impact, an environmental impact report (EIR) must be prepared and certified as to its adequacy before taking action on the proposed project.

Caltrans - California Department of Transportation.

City - City with a capital "C" generally refers to the City of Arcata government or administration. City with a lower case "c" generally refers to the geographical area of the city, both incorporated and unincorporated territory (e.g., the city bikeway system).

**Coastal-Dependent Development – Any development or use which requires a site on, or adjacent to, the sea to be able to function at all.**

**Coastal-Related Development - Any use that is dependent on a coastal-dependent development or use.**

**Coastal Scenic Areas - Coastal scenic areas are these locally designated coastal vista points, coastal scenic view corridors, and coastal historic scenic resources described in Coastal Design Policy C-D-3b. The specific key viewshed characteristics of which are identified therein and consist of one or more of the following criteria:**

- 1. Broad views of special natural interest to the general public (e.g., Pacific Ocean, off-shore rocks, seacliffs, territorial views of State or National parks);**
- 1. Broad views of distinctive scenes resulting from unique contrasts or diversity between land use and/or landscape patterns (e.g., harbor activities and ocean, urban development and landscape); and**
- 2. Views of special cultural features (e.g., historical structures, significant public works structures, unique maritime settings).**

**Coastal View Corridor - A coastal view corridor is an extended coastal area along which a pedestrian or vehicle traveler may view scenic resources as described in Coastal Design Policy C-D-3b.**

**Coastal Zone, California - That area of the county under the jurisdiction of the California Coastal Act as set forth by Public Resources Code Section 30103 and as delineated by the Local Coastal Program prepared pursuant to the Act.**

**Collector - Relatively-low-speed, street that provides circulation within and between neighborhoods. Collectors usually serve short trips and are intended for collecting trips from local streets and distributing them to the arterial network.**

**Compatible - Capable of existing together without conflict or ill effects.**

**Commission - The California Coastal Commission.**

**"Cumulatively" or "Cumulative Effect" - The incremental effects of an individual project shall be reviewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.**

Conservation - The management of natural resources to prevent waste, destruction, or neglect.

Consistent - Free from variation or contradiction. Programs in the General Plan are to be consistent, not contradictory or preferential. State law requires consistency between a general plan and implementation measures such as the zoning ordinance.

Density, Residential - The maximum potential allowable number of permanent residential dwelling units per “net” acre of land.

Developable Acres, Net - The portion of a site that can be used for density calculations. For instance, public or private road rights-of-way are not included in the net developable acreage of a site.

Developable Land - Land that is suitable as a location for structures and that can be developed free of hazards to, and without disruption of, or significant impact on, natural resource areas.

Developed - Developed with a structure that is a principal or conditional use permitted under a parcel’s land use designation.

Development Requiring a Coastal Development Permit - On land, in or under water, the placement or erection of any solid material or structure; discharge or disposal of any dredged material or of any gaseous, liquid, solid, or thermal waste; grading, removing, dredging, mining or extraction of any materials; change in the density or intensity of use of land, including, but not limited to, subdivision pursuant to the Subdivision Map Act, and any other division of land, including lot splits; change in the intensity of use of water, or of access thereto; construction, reconstruction, demolition, or alteration of the size of any structure, including any facility of any private, public, or municipal utility; and the removal or harvesting of major vegetation other than for agricultural purposes, kelp harvesting, and timber operations which are in accordance with a timber harvesting plan submitted pursuant to the provisions of the Z’berg-Nejedly Forest Practices Act of 1973.

Dredge Spoils - Solid material, such as sand, silt, clay, or rock deposited municipal discharges , that is removed from the bottom of a water body to improve navigation.

Dredge, v - To remove mud or silt from the bottom of a water body using a large machine or implement.

Duplex - A detached building under single ownership that is designed for occupation as the residence of two families living independently of each other.

Dwelling Unit - A room or group of rooms (including sleeping, eating, cooking, and sanitation facilities, but not more than one kitchen), that constitutes an independent housekeeping unit, occupied or intended for occupancy by one household on a long-term basis.

Encourage - To stimulate or foster a particular condition through direct or indirect action by the private sector or government agencies.

Endangered Species - A species of animal or plant is considered to be endangered when its prospects for survival and reproduction are in immediate jeopardy from one or more causes.

Energy Facility - Any public or private processing, producing, generating, storing, transmitting, or recovering facility for electricity, natural gas, petroleum, coal, or other source of energy.

Enhance - To improve existing conditions by increasing the quantity or quality of beneficial uses or features.

Energy facility - Any public or private processing, producing, generating, storing, transmitting, or recovering facility for electricity, natural gas, petroleum, coal, or other source of energy.

Environmental Impact Report (EIR) - A report that assesses all the environmental characteristics of an area and determines what effects or impacts will result if the area is altered or disturbed by a proposed action.

Environmentally Sensitive Habitat Area (ESHA) – Any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities or developments.

Estuary - A coastal water body usually semi-enclosed by land, but which has open, partially obstructed, or intermittent exchange with the ocean and in which ocean water is at least occasionally diluted by fresh water runoff from the land.

Expressway - A divided multi-lane major arterial street for through traffic with partial control of access and with grade separations at major intersections.

Farm dwelling - A single-family residence occupied by the owner-operator on the farming operation site on which it is located and whose presence and occupancy is necessary to the operation of the agricultural uses at the site.

Feasible - Capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors.

Fill - Earth or other substance of material, including piling, placed for the purpose of erecting structures thereon.

Floor Area Ratio (FAR) - The gross floor area permitted on a site divided by the total net area of the site, expressed in decimals to two places. For example, on a site with 10,000 net sq. ft. of land area, a Floor Area Ratio of 1.00 will allow a maximum of 10,000 gross sq. ft. of building floor area to be built. On the same site, an FAR of 1.50 would allow 15,000 sq. ft. of floor area; an FAR of 2.00 would allow 20,000 sq. ft.; and an FAR of 0.50 would allow only 5,000 sq. ft.

Freeway - A high-speed, high-capacity, limited-access transportation facility serving regional and countywide travel. Freeways generally are used for long trips between major land use generators.

Geological - Pertaining to rock or solid matter.

Geologic Hazards - Include the following:

1. Seismic hazard areas delineated on fault maps as subject to potential surface rupture, on soil maps indicating materials particularly prone to shaking or liquefaction, and in local and regional seismic safety plans;
2. Tsunami runup areas identified on U.S. Army Corps of Engineers 100-year recurrence maps, by other scientific or historic studies, and other known areas of tsunami risk;
3. Landslide hazard areas delineated on slope stability maps and in local and regional geologic or safety plans;
4. Beach areas subject to erosion; and,
5. Other geologic hazards such as expansive soils and subsidence areas.

Goal -The ultimate purpose of an effort stated in a way that is general in nature and immeasurable.

Home Occupation - The conduct of business within a dwelling unit or residential site, employing occupants of the dwelling, with the business activity being subordinate to the residential use of the property.

Household - All those persons--related or unrelated--who occupy a single housing unit.

Housing Unit - The place of permanent or customary abode of a person or family. A housing unit may be a single-family dwelling, a multi-family dwelling, a

condominium, a modular home, a manufactured home, a mobile home, a cooperative, or any other residential unit considered real property under State law. A housing unit has, at least, cooking facilities, a bathroom, and a place to sleep. It also is a dwelling that cannot be moved without substantial damage or unreasonable cost.

Implementation Program - An action, procedures, program, or technique that carries out general plan policy. Implementation programs also specify primary responsibility for carrying out the action and a time frame for its accomplishment.

Implementing Actions - The ordinances, regulations, or programs which implement either the provisions of the certified local coastal program or the policies of this division and which are submitted pursuant to Section 30512 of the Coastal Act.

Infill Development - Development of vacant land (usually individual lots or left-over properties) within areas that are already largely developed.

Infrastructure - Public services and facilities, such as sewage-disposal systems, water-supply systems, other utility systems, and roads.

Land use plan or Coastal Land Use Plan - The relevant portion of a local government's general plan, or local coastal element which are sufficiently detailed to indicate the kinds, location, and intensity of land uses, the applicable resource protection and development policies and, where necessary, a listing of implementing actions.

Lateral Access - A recorded dedication or easement granting to the public the right to pass and repass over dedicicator's real property generally along the shoreline from the mean high tide line or the crest of the parallel bluff. Lateral accessways should be used for public pass and repass and passive recreational use, unless specified otherwise.

Levee - A bank constructed to control or confine flood waters.

Level of Service (LOS) - A scale that measures the amount of traffic a roadway may be capable of handling on a roadway or at the intersection of roadways. Levels range from A to F, with A representing the highest level of service.

Local Agency Formation Commission (LAFCo) - The countywide commission that reviews and evaluates all proposals for formation of special districts, incorporation of cities, annexation to special districts or cities, consolidation of districts, and merger of districts with cities. LAFCo is empowered to approve, disapprove, or conditionally approve such proposals.

Local coastal element - That portion of a general plan applicable to the coastal zone which may be prepared by local government pursuant to this division, or any additional elements of the local government's general plan prepared pursuant to Section 65303 of the Government Code, as the local government deems appropriate.

Local coastal program - A local government's (a) land use plans, (b) zoning ordinances, (c) zoning district maps, and (d) within sensitive coastal resources areas, other implementing actions, which, when taken together, meet the requirements of, and implement the provisions and policies of, this division at the local level.

Local Transportation Commission - The Humboldt County Local Transportation Commission is designated as the Humboldt County Association of Governments and is responsible for producing major transportation documents such as the Regional Transportation Plan, Bicycle Facilities Plan, and Comprehensive Transit Service Plan.

Maximum Extent Practicable (MEP) - is the standard for implementation of storm water management programs to reduce pollutants in storm water based on Clean Water Act § 402(p)(3)(B)(iii), to wit, "...controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system, design and engineering methods, and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants." Also, see California Water Resources Control Board Order WQ 2000-11, page 20 and *Defenders of Wildlife v. Browner*, 191 F.3d 1159 (9<sup>th</sup> Cir. 1999).

Minimize, v. - To reduce or lessen, but not necessarily to eliminate.

Mitigate, v. - To ameliorate, alleviate, or avoid to the extent reasonably feasible.

Mixed-use - Properties on which various uses, such as office, commercial, institutional, and residential, are combined in a single building or on a single site in an integrated development project with significant functional interrelationships and a coherent physical design. A "single site" may include contiguous properties.

Multiple Family Building - A detached building designed and used exclusively as a dwelling by three or more families occupying separate suites.

Neighborhood Park - City- or County-owned land intended to serve the recreation needs of people living or working within one-half mile radius of the park.

Parcel - A lot, or contiguous group of lots, in single ownership or under single control, usually considered a unit for purposes of development.

Peak Hour/Peak Period - For any given roadway, a daily period during which traffic volume is highest, usually occurring in the morning and evening commute periods.

Permit - Any license, certificate, approval, or other entitlement for use granted or denied by any public agency which is subject to the provisions of this coastal land use plan.

Person - Any individual, organization, partnership, or other business association or corporation, including any utility, and any federal, state, local government, or special district or an agency thereof.

Planning Area - The Planning Area is the land area addressed by the General Plan.

Policy -A specific statement in text or diagram guiding action and implying clear commitment.

"Prime agricultural land" means those lands that qualify as any of the following:

- (1) Rates as class I or class II in the Natural Resource Conservation Service land use capability classifications.
- (2) Qualifies for rating 80 through 100 in the Storie Index Rating.
- (3) Supports livestock used for the production of food and fiber and which has an annual carrying capacity equivalent to at least one animal unit per acre as defined by the United States Department of Agriculture.
- (4) Planted with fruit- or nut-bearing trees, vines, bushes, or crops which have a nonbearing period of less than five years and which will normally return during the commercial bearing period on an annual basis from the production of unprocessed agricultural plant production not less than two hundred dollars (\$200) per acre.
- (5) Returned from the production of unprocessed agricultural plant products an annual gross value of not less than two hundred dollars (\$200) per acre for three of the previous five years.

Public and Quasi-Public Facilities - Institutional, academic, governmental and community service uses, either publicly owned or operated by non-profit organizations.

**Public Works -**

1. All production, storage, transmission, and recovery facilities for water, sewerage, telephone, and other similar utilities owned or operated by any public agency or by any utility subject to the jurisdiction of the Public Utilities Commission except for energy facilities.
2. All public transportation facilities, including streets, roads, highways, public parking lots and structures, ports, harbors, airports, railroads, and mass transit facilities and stations, bridges, trolley wires, and other related facilities.
3. All publicly financed recreational facilities and any development by a special district.
4. All community college facilities.

**Rare or Endangered Species - A species of animal or plant listed in: Sections 670.2 or 670.5, Title 14, California Administrative Code; or Title 50, Code of Federal Regulations, Section 17.11 or Section 17.2, pursuant to the Federal Endangered Species Act designating species as rare, threatened, or endangered.**

**Reclamation - The reuse of resources, usually those present in solid wastes or sewage.**

**Residential, Multiple Family - Usually three or more dwelling units on a single site, which may be in the same or separate buildings.**

**Residential, Single-family - A single dwelling unit on a building site.**

**Right-of-way - A strip of land occupied or intended to be occupied by certain transportation and public use facilities, such as roadways, railroads, and utility lines.**

**Riparian Vegetation - Vegetation commonly occurring adjacent to stream and river banks characterized by dense growth of trees and shrubs such as willows, alders, cottonwood, wax myrtle, big leaf maple, California laurel, red elderberry, etc.**

**River or Stream - A natural watercourse as designated by a solid line or dash and three dots symbol shown on the United States Geological Survey map most recently published, or any well-defined channel with distinguishable bed and bank that shows evidence of having contained flowing water as indicated by scourer deposit of rock, sand gravel, soil, or debris.**

**Sea - The Pacific Ocean and all harbors, bays, channels, estuaries, salt marshes, sloughs, and other areas subject to tidal action through any connection**

with the Pacific Ocean, excluding non-estuarine rivers, streams, tributaries, creeks, and flood control and drainage channels.

Second Unit - A Self-contained living unit, either attached to or detached from, and in addition to, the primary residential unit on a single lot. Sometimes called "Granny Flat."

Seismic - Caused by or subject to earthquakes or earth vibrations.

Sensitive coastal resource areas - Those identifiable and geographically bounded land and water areas within the coastal zone of vital interest and sensitivity.

"Sensitive coastal resource areas" include the following:

(a) Special marine and land habitat areas, wetlands, lagoons, and estuaries as mapped and designated in Part 4 of the coastal plan.

(b) Areas possessing significant recreational value.

(c) Highly scenic areas.

(d) Archaeological sites referenced in the California Coastline and Recreation Plan or as designated by the State Historic Preservation Officer.

(e) Special communities or neighborhoods which are significant visitor destination areas.

(f) Areas that provide existing coastal housing or recreational opportunities for low- and moderate-income persons.

(g) Areas where divisions of land could substantially impair or restrict coastal access.

Shall - That which is obligatory or necessary.

Should - Signifies a directive to be honored if at all feasible.

Single-family Dwelling, Attached - A dwelling unit occupied or intended for occupancy by only one household that is structurally connected with at least one other such dwelling unit.

Single-family Dwelling, Detached - A dwelling unit occupied or intended for occupancy by only one household that is structurally independent from any other such dwelling unit or structure intended for residential or other use.

Site - A parcel of land used or intended for one use or a group of uses and having frontage on a public or an approved private street. A lot.

Slope - Land gradient described as the vertical rise divided by the horizontal run, and expressed in percent.

Soil - The unconsolidated material on the immediate surface of the earth created by natural forces that serves as natural medium for growing land plants.

Solid Waste - Any unwanted or discarded material that is not a liquid or gas. Includes organic wastes, paper products, metals, glass, plastics, cloth, brick, rock, soil, leather, rubber, yard wastes, and wood, but does not include sewage and hazardous materials.

Special District - Any public agency other than a local government formed pursuant to general law or special act for the local performance of governmental or proprietary functions within limited boundaries. "Special District" includes, but is not limited to, a county service area, a maintenance district or area, an improvement district or improvement zone, or any other zone or area, formed for the purpose of designating an area within which a property tax rate will be levied to pay for a service or improvement benefitting that area.

Sphere of Influence - The probable ultimate physical boundaries and service area of a local agency (City or district) as determined by the Local Agency Formation Commission (LAFCo) of the County.

Standard -A specific, often quantified guideline, incorporated in a policy or implementation program, defining the relationship between two or more variables. Standards can often translate directly into regulatory controls.

Stream – See "River or Stream." For purposes of determining permit appeal jurisdictional status, "development within 100 feet of a stream" shall be measured landward commencing from the top of the bank of any stream mapped by USGS on the 7.5 minute quadrangle series, or identified in Figure RC-a. The bank of a stream shall be defined as the watershed and relatively permanent elevation or acclivity at the outer line of the stream channel which separates the bed from the adjacent upland, whether valley or hill, and serves to confine the water within the bed and to preserve the course of the stream. In areas where a stream has no discernable bank, the boundary shall be measured from the line closest to the stream where riparian vegetation is permanently established. For purposes of this application, channelized streams not having significant habitat value should not be considered.

Stream Transition Line - That line closest to a stream where riparian vegetation is permanently established.

Streets, Local - Local streets not shown on the Circulation Plan, Map, or Diagram, whose primary intended purpose is to provide access to fronting properties.

Structure - Includes, but is not limited to, any building, road, pipe, flume, conduit, siphon, aqueduct, telephone line, and electrical power transmission and distribution line.

Subdivision - The division of a tract of land into defined lots, either improved or unimproved, which can be separately conveyed by sale or lease, and which can be altered or developed.

Subsidence - The gradual settling or sinking of an area with little or no horizontal motion.

Support Facilities - Those facilities that provide ease of public use and maintenance of coastal accessways. Such facilities include signs, lighting, benches, trash receptacles, public telephones, restrooms, showers, bike security racks, public transit loading and unloading areas, parking areas, trail improvements, and fencing.

Tsunami - A large ocean wave generated by an earthquake in or near the ocean.

Undevelopable - Specific areas where topographic, geologic, and/or surficial soil conditions indicate a significant danger to future occupants and a liability to the City are designated as "undevelopable" by the City.

Urban Boundary - The urban boundary serves as the limit for which urban services such as sewer and water hookups may be extended.

Use - The purpose for which a lot or structure is or may be leased, occupied, maintained, arranged, designed, intended, constructed, erected, moved, altered, and/or enlarged in accordance with the Zoning Ordinance and General Plan land use designations.

Vacant - Lands or buildings that are not actively used for any purpose.

Vertical Access - A recorded dedication or easement granting to the public the privilege and right to pass and repass over dedicator's real property from a public road to the mean high tide line. Vertical accessways should be used for pass and repass and passive recreational use, unless specified otherwise.

Visitor-Serving Facilities - Public or private developments that provide accommodations, food and services, including hotels, motels, campgrounds, restaurants, and commercial-recreation developments such as shopping, eating, and amusement areas for tourists.

Watercourse - Natural or once natural flowing (perennially or intermittently) water including rivers, streams, and creeks. Includes natural waterways that have

been channelized, but does not include manmade channels, ditches, and underground drainage and sewage systems.

Watersheds - Regions or areas drained by a network of surface or subsurface watercourses and have the potential for impacts on coastal streams, wetlands, estuaries, and groundwater basins through runoff and percolation.

Wetland - Lands within the coastal zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, and fens. Wetlands shall be defined as land where the water table is at, near, or above the land surface long enough to promote the formation of hydric soils or to support the growth of hydrophytes, and shall also include those types of wetlands where vegetation is lacking and soil is poorly developed or absent as a result of frequent and drastic fluctuations of surface water levels, wave action, water flow, turbidity or high concentrations of salts or other substances in the substrate. Such wetlands can be recognized by the presence of surface water or saturated substrate at some time during each year and their location within, or adjacent to, vegetated wetlands or deep-water habitats. For purposes of this definition, the upland limit of a wetland shall be defined as co-terminus with either: (1) the boundary between land with predominantly hydrophytic cover and land with predominantly mesophytic or xerophytic cover; (2) the boundary between soil that is predominantly hydric and soil that is predominantly nonhydric; or (3) in the case of wetlands without vegetation or soils, the boundary between land that is flooded or saturated at some time during years of normal precipitation, and land that is not. For the purposes of this definition, the term "wetlands" shall not include wetland habitat created by the presence of and associated with agricultural ponds and reservoirs where: (1) the pond or reservoir was in fact constructed by a farmer or rancher for agricultural purposes; and (2) there is no evidence (e.g., aerial photographs, historical survey, etc.) showing that wetland habitat predated the existence of the pond or reservoir. Areas with drained hydric soils that are no longer capable of supporting hydrophytes shall not be considered wetlands.

Zoning - The division of a city or county by legislative regulations into areas, or zones, which specify allowable uses for real property and size restrictions for buildings within these areas; a program that implements policies of the General Plan.

Zoning Ordinance - an ordinance authorized by Section 65850 of the Government Code or, in the case of a charter city, a similar ordinance enacted pursuant to the authority of its charter.