



CHAPTER 3 -- THE LAND USE PLAN: RESOURCES AND DEVELOPMENT ISSUES AND POLICIES

3.4 HAZARDS MANAGEMENT

[Narrative](#)

Coastal Element Policies: Hazards

- 3.4-1 The County shall review all applications for Coastal Development permits to determine threats from and impacts on geologic hazards arising from seismic events, tsunami runup, landslides, beach erosion, expansive soils and subsidence and shall require appropriate mitigation measures to minimize such threats. In areas of known or potential geologic hazards, such as shoreline and bluff top lots and areas delineated on the hazards maps the County shall require a geologic investigation and report, prior to development, to be prepared by a licensed engineering geologist or registered civil engineer with expertise in soils analysis to determine if mitigation measures could stabilize the site. Where mitigation measures are determined to be necessary, by the geologist, or registered civil engineer the County shall require that the foundation construction and earthwork be supervised and certified by a licensed engineering geologist, or a registered civil engineer with soil analysis expertise to ensure that the mitigation measures are properly incorporated into the development.
- 3.4-2 The County shall specify the content of the geologic site investigation report required above. The specific requirements will be based upon the land use and building type as well as by the type and intensity of potential hazards. These site investigation requirements are detailed in Appendix 3.
- 3.4-3 The County shall review development proposals for compliance with the Alquist-Priolo Special Studies Zone Act (as amended May 4, 1975).
- 3.4-4 The County shall require that water, sewer, electrical, and other transmission and distribution lines which cross fault lines be subject to additional safety standards beyond those required for normal installations, including emergency shutoff where applicable.
- 3.4-5 The County shall require that residential, commercial and industrial structures be sited a minimum of 50 feet from a potentially, currently, or historically active fault. Greater setbacks may be required if warranted by local geologic conditions.
- 3.4-6 In tsunami-prone areas as illustrated on resource maps or land use maps the County shall permit only harbor development and related uses and these shall be allowed



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only if a tsunami warning plan has been developed. The County shall supply an early warning system.

- 3.4-7 The County shall require that new structures be set back a sufficient distance from the edges of bluffs to ensure their safety from bluff erosion and cliff retreat during their economic life spans (75 years). Setbacks shall be of sufficient distance to eliminate the need for shoreline protective works. Adequate setback distances will be determined from information derived from the required geologic investigation and from the following setback formula:

Setback (meters) = Structure life (years) x Retreat rate (meters/year)

The retreat rate shall be determined from historical observation (e.g., aerial photographs) and/or from a complete geotechnical investigation.

All grading specifications and techniques will follow the recommendations cited in the Uniform Building Code or the engineering geologists report.

- 3.4-8 Property owners should maintain drought-tolerant vegetation within the required blufftop setback. The County shall permit grading necessary to establish proper drainage or to install landscaping and minor improvements in the blufftop setback.
- 3.4-9 Any development landward of the blufftop setback shall be constructed so as to ensure that surface and subsurface drainage does not contribute to the erosion of the bluff face or to the instability of the bluff itself.
- 3.4-10 No development shall be permitted on the bluff face because of the fragility of this environment and the potential for resultant increase in bluff and beach erosion due to poorly-sited development. However, where they would substantially further the public welfare, developments such as staircase accessways to beaches or pipelines to serve coastal-dependent industry may be allowed as conditional uses, following a full environmental, geologic and engineering review and upon the determinations that no feasible less environmentally damaging alternative is available and that feasible mitigation measures have been provided to minimize all adverse environmental effects.
- 3.4-11 No development, except flood control projects, to protect existing structures, non-structural agricultural uses, and seasonal uses shall be permitted in the 100-year floodway unless mitigation measures in accordance with FEMA regulations are provided.
- 3.4-12 Seawalls, breakwaters, revetments, groins, harbor channels and other structures altering natural shoreline processes or retaining walls shall not be permitted unless judged necessary for the protection of existing development or public beaches or



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coastal dependent uses. Allowed developments shall be processed as conditional uses, following full environmental geologic and engineering review. This review shall include site-specific information pertaining to seasonal storms, tidal surges, tsunami runups, littoral drift, sand accretion and beach and bluff face erosion. In each case, a determination shall be made that no feasible less environmentally damaging alternative is available and that the structure has been designed to eliminate or mitigate adverse impacts upon local shoreline sand supply and to minimize other adverse environmental effects. The design and construction of allowed protective structures shall respect natural landforms, shall provide for lateral beach access, and shall minimize visual impacts through all available means.

- 3.4-13 All new development shall meet the requirements for fire protection and fire prevention as recommended by responsible fire agencies.