CALIFORNIA COASTAL COMMISSION

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January 13, 1999

TO:

Commissioners and Interested Persons

FROM:

Tami Grove, Deputy Director

Charles Lester, District Manager

Rick Hyman, Coastal Program Analyst

SUBJECT: <u>SANTA CRUZ COUNTY: LOCAL COASTAL PROGRAM MAJOR</u>
<u>AMENDMENT NO. 2-98.</u> For public hearing and Commission action at its meeting of February 3, 1999, to be held at Hotel del Coronado.

SUMMARY OF STAFF REPORT

Description Of Amendment Request

Santa Cruz County is proposing the following changes to its certified Local Coastal Program:

A. Urban-like Development in Rural Areas

Amend the Land Use Plan portion of its Local Coastal Program to: recognize existing urban-like development in rural areas as conforming (new Policy 2.3.7)

- B. Geologic Hazards
- a. Amend the Land Use Plan (LUP) portion; and
- b. Amend the Implementation portion (IP) of its Local Coastal Program to:
- 1. Revise **definition of "development"** subject to geologic evaluation, bluff setbacks, beach/bluff erosion, and storm wave inundation (a. LUP policies 6.2.11 formerly 6.2.10; 6.2.12 formerly 6.2.11; 6.2.15; Glossary; b. IP Sections 16.10.040s, formerly 16.10.040p; 16.10.050; 16.10.070a; 16.10.070h, formerly g; 16.10.070(h)2)
- 2. Allow foundation repairs and some minor projects within **bluff setback zone** (a. LUP 6.2.13 new policy; 6.2.12 formerly 6.2.11; IP Section 16.10.070h)
- 3. Allow geologic and soil report review to occur after the discretionary approval, but before the building permit (IP Section 16.10.060A)
- Refine shoreline structure criteria (IP new Section 16.10.070(h)3: deleted section 16.10.070(h)5)
- 5. Change **setback for fault zones** from 50 feet to as close as 25 with proper studies (a. LUP policy 6.1.11; b. IP Section 16.10.070(b)2; 16.10.080(a)2)

- 6. Add new provisions to allow reconstruction of structures on coastal bluffs or due to storm wave inundation where damage has exceeded 50% (a. LUP policies 6.2.20, 6.2.21; b. IP new Section and table 16.10.070h4)
- 7. Add criteria for allowing **land divisions in floodplains** (LUP policy 6.4.5; IP Section 16.10.070f2)
- 8. Allow septic systems and leach fields in floodplains to serve new development on existing developed lots, but not to be expanded (LUP policy 6.4.9)
- 9. Add and clarify purposes and authorizations for "Geologic Hazards" chapter of *County Code* (IP new Sections 16.10.022, 16.10.025; revised Sections 16.10.010, 16.10.020)
- 10.Add conflict, liability disclaimer, and severability sections (IP Sections 16.10.035, 16.10.036, 16.10.037)
- 11. Delete special exemptions for 1989 Loma Preita earthquake (IP Section 16.10.040s, formerly 16.10.040p; 16.10.075 to be deleted; 16.10.095 to be deleted)
- 12. Change geologic assessment and report procedures (IP Section 16.10.060)
- 13. Subject some additional work on existing structures to Federal floodplain requirements (IP Section16.10.070(f)3)
- 14. Require basements to be elevated above 100 year flood level (IP Section 16.10.070(f)3vi, formerly(f)4)
- 15. Allow unlimited amount of space below 100 year flood plains to be enclosed (IP Section 16.10.070h(5)vi)
- 16. Require water and sewage systems to minimize or eliminate infiltration of flood waters into the system (IP new Section 16.10.070(f)6)
- 17. Prohibit new septic systems in floodways (IP new Section 16.10.070(g)4)
- 18. Require project denial if National Flood Insurance Program regulations are not met (IP Section 16.10.090)
- 19. Add very limited exceptions to flood criteria pursuant to federal guidelines (IP, new section 16.10.100D)
- 20. Add violation provision (IP Section 16.10.120A)
- 21. Reorganize and make other non-substantive editorial, procedural and definitional changes (a. LUP policies 6.2.8 deleted as redundant; 6.2.14 formerly 6.2.10; 6.2.12 deleted as separate policy; 6.2.14 formerly 6.2.13; 6.2.16; 6.2.18; new 6.2.18.1; Glossary; b. IP throughout entire Chapter 16.10)

This amendment was filed on December 11, 1998. These two items are part of a slightly larger package; the other component regarding replacement housing has been deemed "minor" and addressed in a companion staff report approved by the Commission on January 13, 1999. The standard of review of the land use plan amendments is that they must be consistent with the Coastal Act. The standard of review of the implementation amendments is that they must be consistent with and adequate to carry out the policies of the certified coastal land use plan.

Summary Of Staff Recommendation

Staff recommends that the Commission **approve** the proposed amendment (part A), addressing urban-like development in rural areas, as submitted by the County. This amendment can be considered "clean up" as it is similar to a previously approved amendment and will have no practical effect in the coastal zone (see findings on pages 9 and 10).

Staff recommends that the Commission **approve**, **only if modified** the second part of the amendment. This is an overhaul of the Geologic Hazards chapter of the zoning ordinance and concurrent revision of some Land Use Plan policies involving hazards. The impetus for the amendment is a FEMA mandate, but additional changes are proposed to address local concerns. By and large these amendments are non-controversial, of not much substance, and improvements over existing language and format. However, staff has identified four topics of concern, shown below and described in detail in the findings beginning on page 10. Each of these issues is easily addressed by modifications that County staff has already agreed to, summarized below and shown in full on pages 7 through 9:

ISSUE	SUBMITTAL	MODIFICATION
Definition of development subject to geologic rules	Would no longer include all non-habitable structures	Include other potentially hazardous projects.
Bluff setback	Has exemptions for minor projects	2. Ensure that these do not justify shoreline protection in future
Hazard assessment	May defer	Don't defer for appealable coastal projects
Shoreline structure criteria	Has good criteria, but lacking in staging area plans	Add criteria for staging area plans.

The following is a summary of recommended actions:

AMENDMENT PART	RESOLUTION	MODIFICATIONS	FINDINGS
A: Urban-like development in rural	A. Approve	N/A	Pages 9-10
B. Geologic			
a. Land Use Plan	B. & C. Deny, then approve with modifications	1a	Pages 10-21
b. Implementation	D. & E. Deny, then approve with modifications	1b, 2, 3, 4	Pages 10-21

Summary Of Issues And Comments

At the County hearings, the proposed geologic amendments elicited no comments. The only two comments on the "urban-like" amendment wanted it to go further to address rebuilds of non-conforming structures (the subject of Amendment # 3-98)

Additional Information

For further information about this report or the amendment process, please contact Rick Hyman or Charles Lester, Coastal Commission, 725 Front Street, Suite 300, Santa Cruz, CA 95060; Tel. (831) 427-4863.

TABLE OF CONTENTS

I. STAFF RECOMMENDATION: MOTIONS AND RESOLUTIONS	4
II. SUGGESTED MODIFICATIONS	7
III. RECOMMENDED FINDINGS	9
A. RECOGNIZE EXISTING URBAN-LIKE DEVELOPMENT IN RURAL AREAS AS	
CONFORMING	9
B. GEOLOGIC HAZARDS	11
C. CALIFORNIA ENVIRONMENTAL QUALITY ACT	22
ATTACHMENT	
Full Text Of Proposed Amendments	

I. STAFF RECOMMENDATION: MOTIONS AND RESOLUTIONS

MOTIONS AND RESOLUTIONS

The Commission needs to make five separate motions in order to act on this proposal:

A. APPROVAL OF LAND USE PLAN MAJOR AMENDMENT #2-98 Part A AS SUBMITTED

MOTION:

"I move that the Commission certify Major Amendment # 2-98 part A to the County of Santa Cruz Land Use Plan as submitted by the County."

Staff recommends a "YES" vote. An affirmative vote by a majority of the appointed commissioners is needed to pass the motion.

RESOLUTION:

The Commission hereby **approves** Major Amendment # 2-98 part A to the land use plan of the County of Santa Cruz as submitted for the specific reasons discussed in the recommended findings on the grounds that, as submitted, it meets the requirements of Chapter 3 of the Coastal Act. There are no feasible alternatives nor feasible mitigation measures available which would substantially lessen any significant adverse environmental effects which approval of the amendment would have on the environment.

B. DENIAL OF LAND USE PLAN MAJOR AMENDMENT #2-98 PART B AS SUBMITTED

MOTION:

"I move that the Commission certify Major Amendment # 2-98 part B to the County of Santa Cruz Land Use Plan as submitted by the County."

Staff recommends a "NO" vote. An affirmative vote by a majority of the appointed commissioners is needed to pass the motion.

RESOLUTION:

The Commission hereby **rejects** Major Amendment # 2-98 part B to the land use plan of the County of Santa Cruz as submitted for the specific reasons discussed in the recommended findings on the grounds that, as submitted, it does not meet the requirements of Chapter 3 of the Coastal Act. There are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse environmental effects which approval of the amendment would have on the environment.

C. APPROVAL OF LAND USE PLAN MAJOR AMENDMENT #2-98 PART B, IF MODIFIED

MOTION:

"I move that the Commission certify Major Amendment # 2-98 part B to the County of Santa Cruz Land Use Plan, if modified according to Suggested Modification 1a."

Staff recommends a "YES" vote. An affirmative vote by a majority of the appointed commissioners is needed to pass the motion.

RESOLUTION:

The Commission hereby **certifies** Major Amendment # 2-98 part B to the land use plan of the County of Santa Cruz, if modified according to Suggested Modification 1a, for the specific reasons discussed in the recommended findings on the grounds that, as submitted, the amendment and the land use plan as thereby amended meet the requirements of the Coastal Act. The amendment is consistent with applicable decisions of the Commission that guide local government actions pursuant to Section 30625(c) and approval will not have significant adverse environmental effects for which feasible mitigation measures have not been employed consistent with the California Environmental Quality Act.

D. DENIAL OF IMPLEMENTATION PLAN MAJOR AMENDMENT #2-98 PART B AS SUBMITTED

MOTION:

"I move that the Commission **reject M**ajor Amendment #2-98 part B to the Santa Cruz County Local Coastal Program Implementation Plan as submitted by the County."

Staff recommends a "YES" vote which would result in **denial** of this amendment as submitted. Only an affirmative (yes) vote on the motion by a majority of the Commissioners present can result in rejection of the amendment (otherwise the amendment is approved as submitted).

RESOLUTION:

The Commission hereby **rejects** Major Amendment #2-98 part B to the implementation plan of the Santa Cruz County local coastal program, as submitted, for the specific reasons discussed in the following findings, on the grounds that the amendment is not consistent with and not adequate to carry out the certified land use plan.

E. APPROVAL OF IMPLEMENTATION PLAN MAJOR AMENDMENT #2-98 PART B IF MODIFIED

MOTION:

"I move that the Commission **approve** Major Amendment #2-98 part B to the Santa Cruz County Local Coastal Program Implementation Plan, if it is modified according to Suggested Modifications 1b-4."

Staff recommends a "YES" vote which would result in **approval** of this amendment if modified. An affirmative vote by a majority of the Commissioners present is needed to pass the motion.

RESOLUTION:

The Commission hereby **approves** Major Amendment #2-98 part B to the Implementation Plan of the Santa Cruz County Local Coastal Program, for the specific reasons discussed in the following findings, on the grounds that, as modified by Suggested Modifications 1b through 4, the amendment conforms with and is adequate to carry out the certified land use plan. Approval of the amendment will not cause significant adverse environmental effects for which feasible mitigation measures have not been employed consistent with the California Environmental Quality Act.

II. SUGGESTED MODIFICATIONS

The Commission hereby suggests the following changes to the proposed Local Coastal Program amendments which are necessary to make the requisite findings. If the local government accepts each the suggested modifications within six months of Commission action, by formal resolution of the Board of Supervisors, the corresponding amendment portion will become effective upon Commission concurrence with the Executive Director finding that this has been properly accomplished.

1. a. Land Use Plan Glossary and b. IP Section 16.10.040 Definitions

- a. Revise new definition of "Development Activity" in the Glossary by adding the following underlined provision:
- (15) Any other project that will increase the number of people exposed to geologic hazard, or that may create a hazard or exacerbate an existing geologic hazard, may be determined by the Planning Director to constitute "development" for the purposes of geologic review.

and delete "development activities" from the table under the definition of "development:"

Development/Development Activities (LCP)
What is Development?..

b. Revise definition of "development/ development activities" in Section 16.10.040s by adding the following introductory language and additional provision:

For the purposes of this Chapter, and this chapter only, any project that includes activity in any of the following categories is considered to be development or development activity. This definition does not supersede the definition in Section 13.20.040 for purposes of determining whether a certain activity or project needs a coastal permit; some such activities or projects will still require coastal permits although they do not fall under this following specific definition:...

(15) Any other project that will increase the number of people exposed to geologic hazard, or that may create a hazard or exacerbate an existing geologic hazard, may be determined by the Planning Director to constitute "development" for the purposes of geologic review.

2. IP Section 16.10.070(h): Bluff Setback Exemptions

Revise Section 16.10.070(h)2 "Exemption" by renumbering the proposed text as "9(i) and adding the underlined subsection (ii):

(i.) Any project...

(ii) If a structure that is constructed pursuant to this exemption becomes unstable in the future due to erosion or slope instability,, the threat to the structure shall not qualify the parcel for a coastal bluff retaining structure or a shoreline protection structure. If the structure become hazardous it must be removed or relocated rather than be protected in place.

And revise Section 16.10.070(h)3(i), by adding the underlined wording at its end:

Note: Shoreline protection structures shall not be allowed where the existing structure to be protected did not meet the provisions of Section 16.10.070(h)1 when it was constructed because it was exempted from those provisions by Section 16.10.070(h)2.

3. IP Section 16.10.060: Assessment and Report Preparation and Review

Revise part (a) of this section by adding the following underlined provision:

Any required geologic, soil, or other technical report shall be completed, reviewed and accepted pursuant to the provisions of this section before any public hearing is scheduled and before any discretionary or development application is approved or issued. The County Geologist may agree to defer the date for completion, review, or acceptance of any technical report where the technical information is 1) unlikely to significantly affect the size or location of the project, and 2) the project is not in the area of the Coastal Zone appealable to the Coastal Commission. but in In no event shall such be deferred until after the approval or issuance of a building permit.

4. IP Section 16.10.070(h)3: Shoreline Structures

Revise by inserting the following additional underlined subsection:

(viii) Applications for shoreline protection structures shall include a construction and staging plan that minimizes disturbances to the beach, specifies the access and staging areas, includes a construction schedule that minimizes the time that equipment is present on the beach and that limits presence on the beach to periods of low visitor demand. The plan for repair projects shall include recovery of rock and other material that has been dislodged onto the beach.

III. RECOMMENDED FINDINGS

The Commission finds and declares for the following two parts of Santa Cruz County Major Amendment # 1-98:

A. RECOGNIZE EXISTING URBAN-LIKE DEVELOPMENT IN RURAL AREAS AS CONFORMING

This proposed amendment to the coastal land use plan, the 1994 General Plan and Local Coastal Program for the County of Santa Cruz, would recognize existing legal parcels outside of the urban services line that are less than one acre is size as conforming with the General Plan. The zoning of these parcels would be maintained in the R-1-5 to R-1-1 zone districts and the standards of these zone districts would apply.

The most relevant governing sections of the Coastal Act state:

- **30241:** The maximum amount of prime agricultural land shall be maintained in agricultural production to assure the protection of the areas agricultural economy, and conflicts shall be minimized between agricultural and urban land uses through all of the following:
- (a) By establishing stable boundaries separating urban and rural areas, including, where necessary, clearly defined buffer areas to minimize conflicts between agricultural and urban land uses....
- **30250(a.)**: New residential, commercial, or industrial development, except as otherwise provided in this division, shall be located within, contiguous with, or in close proximity to, existing developed areas able to

accommodate it or, where such areas are not able to accommodate it, in other areas with adequate public services and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources. In addition, land divisions, other than leases for agricultural uses, outside existing developed areas shall be permitted only where 50 percent of the usable parcels in the area have been developed

To address these policies the County is divided into urban areas and rural areas via an urban services line. For outside of the urban services line the *General Plan* shows residential designations of "Suburban Residential," "Rural Residential," and "Mountain Residential" with permitted densities ranging from 1 to 40 acres per dwelling unit. There are many parcels within these areas that are smaller than one acre. And many of these are in a zoning designation that allows parcels that are less than one acre (e.g., R-1-5 [5,000 sq. ft.] to R-1-1[acre].)

There have been three potential problems with this situation. One was that landowners could subdivide their land according to the zoning which would result in smaller parcels than the *General Plan* designation. This was addressed in the original certification by placing a minimum parcel size of 1 acre in the rural areas, no matter what the zoning says. New subdivisions are tightly regulated by a rural density matrix formula.

The second potential problem was that the zoning appeared on its face to be inconsistent with the land use plan designations, which would be a violation of state general plan law. To remedy this concern the County changed its zoning ordinance to specifically say that existing legal parcels in such zoning districts would be recognized as "conforming." (LCP Minor Amendment # 1-97)

The final potential problem was that even with this zoning change, it would appear that the lots would be non-conforming with regard to *General Plan* policies. From a practical perspective there may be more "hoops" to go through and more time and expense to do something on property that is "non-conforming." Therefore, the County is now proposing this amendment to affirm that these lots are "conforming."

This amendment simply adds specific *General Plan* language to conform to zoning provisions. This amendment does not change what could get built beyond what the previous amendment already corrected. A possible concern with this amendment is that the new "conforming" language could be interpreted as superseding the one-acre minimum standard. However, a review of the zoning maps in the coastal zone reveals that there are no parcels which could be so affected. Thus, this amendment can be approved as being consistent with the cited Coastal Act sections because it will not result in any change in intensity of use over what is already permitted.

B. GEOLOGIC HAZARDS

This proposed amendment would make numerous changes to the geologic hazard provisions of the local coastal program. Most of these by themselves would be considered "minor" amendments, as they do not change the kind, location, or density of use (see latter sections of this finding). Many are being made to conform to FEMA model floodplain ordinance; in fact, FEMA (Federal Emergency Management Agency) has dictated these changes.

The proposed amendment includes changes both to the coastal land use plan (1994 General Plan and Local Coastal Program for the County of Santa Cruz) and the coastal implementation program, which is portions of the County Code. The standard of review of the land use plan amendments is the Coastal Act; especially the following sections:

Section 30106. "Development" means, 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 (commencing with Section 66410 of the Government Code), and any other division of land, including lot splits, except where the land division is brought about in connection with the purchase of such land by a public agency for public recreational use; 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 Practice Act of 1973 (commencing with Section 4511).

As used in this section, "structure" includes, but is not limited to, any building, road, pipe, flume, conduit, siphon, aqueduct, telephone line, and electrical power transmission and distribution line.

<u>Section 30235</u>: Revetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes shall be permitted when required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from erosion, and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply. Existing marine structures causing water stagnation contributing to pollution problems and fish kills should be phased out or upgraded where feasible.

Section 30253: New development shall:

- (1) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.
- (2) 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.

Section 30610.

Notwithstanding any other provision of this division, no coastal development permit shall be required pursuant to this chapter for the following types of development and in the following areas:...

- (g) (1) The replacement of any structure, other than a public works facility, destroyed by a disaster. The replacement structure shall conform to applicable existing zoning requirements, shall be for the same use as the destroyed structure, shall not exceed either the floor area, height, or bulk of the destroyed structure by more than 10 percent, and shall be sited in the same location on the affected property as the destroyed structure.
 - (2) As used in this subdivision:
- (A) "Disaster" means any situation in which the force or forces which destroyed the structure to be replaced were beyond the control of its owner.
- (B) "Bulk" means total interior cubic volume as measured from the exterior surface of the structure.
- (C) "Structure" includes landscaping and any erosion control structure or device which is similar to that which existed prior to the occurrence of the disaster.

The standard of review of the Implementation amendments is the certified land use plan, especially sections 6.1 "Seismic Hazards," 6.2 "Slope Stability", and 6.4 "Flood Hazards." Some of these policies are discussed below.

The components of this amendment have been grouped into the following topics. The first four components of the amendment raise conformance issues as will be discussed.

1. Definition of Development:

Effect of Amendment:

a. The proposed land use plan amendment retains the definition of "development" which corresponds to Coastal Act Section 30106 cited above. However, it then adds a separate definition of "development activity" which is less encompassing. Developments such as non habitable structures (e.g., not used for living purposes, such as storage sheds or stables), small habitable additions, remodels and repair projects that modify less than 50% of the total length of the exterior walls, less than 50% foundation modifications, will not fall under the definition of "development activity."

The amendment then goes on to substitute "development activity" for "development" in pertinent geologic policies (6.2.10 to be renumbered 6.2.11; 6.2.11 to be renumbered 6.2.12, and 6.2.15). This means that these policies will no longer to apply to those categories of "development" that are not defined as "development activities." Under renumbered policy 6.2.11 geologic assessments are only required for "development activities" in hazard areas, not other "development." Then, only "development activities," not other development, will have to comply with the 25 foot coastal bluff setback policy (renumbered 6.2.12). The policy (6.2.15) allowing development on lots of record in storm wave inundation or beach or bluff erosion areas under certain circumstances will only apply to "development activities." This appears to mean that other development will be allowed in these areas, without having to follow specified hazard criteria.

b. The implementation plan amendment includes an identical definitional change (Section 16.10.040s, formerly 16.10.040p). It basically states that only "development activities" are subject to the provisions of the "Geologic Hazards" chapter of the *County Code*. The implementation amendment does not substitute "development activity" for "development" as the land use plan amendment does; rather, it says that they are synonymous; i.e., throughout the chapter wherever "development" is used, it really means "development activity" only. This provision is broader than the land use plan change, which is limited to the three noted policies. For example, the proposed land use plan amendment does not change the requirements for project reviews in fault zones, liquefaction areas, and unstable slopes to apply to all "developments," while the proposed implementation amendment does.

Background: In order to understand the implications of this amendment, one must examine how the County coastal permit process operates. Under the Coastal Act, there is a definition of "development." All development needs a coastal permit, unless specifically exempted or excluded. All Coastal Act policies then apply to all permits to

the extent that they are applicable. Thus, for example in this case, a project susceptible to a hazard would be analyzed for consistency with the hazard policies, one that was not would not have to be. The Coastal Act also provides for local governments issuing coastal permit authority upon certification of local coastal programs. One of the tests of certification is adequacy to carry out the land use plan, which in turn must be consistent with the Coastal Act.

Santa Cruz County has definitions of "development" in both the land use plan (Glossary) and the *County Code* (Section 13.20.040) which are identical to the definition in the Coastal Act. The County requires coastal permits for all such development, which is otherwise not specifically exempted or excluded. Coastal permits are required to be consistent with land use policies and must follow certain certified sections of the *County Code* including the "Geologic Hazards" chapter. This amendment refines the definition of development that would be considered under this chapter. Thus, for example, a non-habitable structure such as a fence, storage shed, gazebo, or stable, may be defined as "development" and would need a coastal permit. However, it would not have to comply with some of the geologic hazard provisions in the land use plan nor most of those in the zoning ordinance.

The purpose of this amendment is to use County staff time more effectively to concentrate on projects where there may be impacts. The County has determined that the effect of the proposed change is that small projects may be approved without geologic assessment because no more people will be exposed to a geologic hazard, the development will not encroach closer to the identified hazard, and the hazard will not be more likely to occur as a result of the project.

Analysis: This more limited definition of "development activity" is built into the Geologic Hazards chapter of the County Code, which, in part, is used by County planners to evaluate coastal permits. Therefore, if developments are exempt from this chapter there is no way to ascertain whether they in fact do or do not put people or structures at greater risk. The proposed amendment is a de facto determination that they will not. However, the Coastal Commission knows from experience that even the most minor projects, at times, do have geologic hazard implications. For example, someone could install a fence at the edge of the bluff, which could continue eroding. The fence could be undermined, breaking off after a storm and hitting someone on the beach below or otherwise causing public access damage. This potential adverse impact may not be identified and mitigated because of the provisions of the proposed amendment. The applicant could even rebuild the fence without further review. Similarly, a hazardous condition could affect some of these small structures in a way that then requires extraordinary repairs that could have adverse impacts. They may even require seawalls, where no seawall would normally be allowed, as discussed in the following finding.

To its credit the County has included some measures to minimize these potential effects, but they do not completely eliminate the expressed concerns. One is the inclusion of a provision to require a Declaration of Restrictions to be recorded for non-habitable structures to acknowledge that any conversion to an habitable used shall be subject to the provisions of the Geologic Chapter (proposed new Code Section 16.10.070a). Unfortunately, this provision does not completely address the problematic scenarios suggested above, as they can occur whether the structure is habitable, non-habitable, or non-habitable but illegally being used in a habitable manner.

Second, the *County Code* has a proposed new section 16.10.070h2 which appears to say that even non-habitable structures not meeting the revised definition of development activity sometimes must be located more than 25 feet from the bluff (i.e., swimming pools, water tanks, unfavorable alteration of drainage patterns, grading, and all other projects where there is space to accommodate them outside the setback area). This is done by referring to these as "projects" not "development." Unfortunately, the previous sections in the Code referred to above give a contrary impression because they imply such projects are exempt (and they would be exempt from geologic assessment) without ever reaching this latter subsection. And again, there may be projects which still fall under this narrowed exception that deserve geologic review. This narrowed exception is discussed in the "Bluff Setback" section below.

Conformance Conclusions:

- a. Under the Coastal Act all defined development must comply with the cited policies. The certified 1994 General Plan and Local Coastal Program for the County of Santa Cruz has a set of geologic provisions which have been found consistent with the Coastal Act policies. Under the proposed land use plan amendment certain classes of development become exempt from having to follow certain provisions. This analysis shows that there is not complete assurance that the intent of the Coastal Act policies can still be carried out. Therefore, the proposed land use plan amendment must be denied as being inconsistent with the Coastal Act.
- b. Under the proposed implementation plan amendment, certain classes of development would no longer have to comply with the provisions of the Geologic Hazards chapter. Thus, there would no longer be a mechanism to ensure compliance with the land use plan's geologic policies. Since the Commission is denying changes to these policies which reduce their scope, the commensurate implementation policies can not be approved. Furthermore, as noted, other 1994 General Plan and Local Coastal Program for the County of Santa Cruz provisions retain a broader applicability than the proposed implementation amendments (policy 6.1.1 requires a review of geologic hazards for all discretionary development projects in designated fault zones, as does policy 6.1.4 for liquefaction hazards) and these are not even being proposed for amendment. Therefore, the proposed amendment to implementation must be denied as being inadequate to carry out the certified land use plan.

Remedies: There are a various approaches to address the noted deficiency in the proposed amendment. One approach would be not to have a separate definition of "development activity" from "development" to apply only to the hazards provisions. Rather, the one broader definition is retained, but case by case exemptions either from the requirements to prepare a geologic report and/or to follow all the geologic requirements are specified to be allowed. This would reduce the confusion inherent in having separate definitions of "development" and "development activity."

Another approach is to ensure that all "development" which requires a coastal permit within a hazard area is at least considered under geologic review. This would involve broadening the new definition of "development activity" to incorporate its intent; namely, that any other project that will increase the number of people exposed to geologic hazard, or that may create a hazard or exacerbate an existing geologic hazard, be considered "development" for the purposes of geologic review. This approach adds slightly more verbiage, but it retains the language and format of the amendment, requiring fewer modifications of the proposal. Under this approach it is also necessary to be explicit that this separate "development activity" definition does not supersede the general definition of "development" used elsewhere for purposes of coastal permit review. In conclusion:

- a. For the land use plan, the definition of development activity could be broadened in the manner just described. If so modified, according to Modification1a on page 7, then the land use plan as amended will remain consistent with the Coastal Act and the amendment can be approved.
- b. In turn, if the proposed Implementation amendment is so modified, according to Modification1b on page 7, it can be approved as being consistent with the land use plan as amended and modified.

2. Bluff Setbacks

Effect of Amendment

a. The proposed amendments to the 1994 General Plan and Local Coastal Program for the County of Santa Cruz add a new policy 6.2.13 to allow foundation repairs within the bluff setback zone. The bluff setback zone is defined as a minimum 25 feet from the edge of the bluff (policy 6.2.12 formerly 6.2.11). "This policy creates a means for existing dwellings located within the setback to repair/replace/ upgrade their foundations, consistent with protection of public health and safety and the retention of existing housing stock," according to the County staff report.

As noted above, a revision to the setback policy (6.2.12 formerly 6.2.11) is proposed so it applies to "development activities," not all "development." But wording is also proposed to encompass "non-habitable structures for which a building permit is required."

b. The proposed amendment to the implementation plan adds a new *Code* Section 16.10.070h1(iv)with similar foundation repair language. *Code* Section 16.10.070h1(ii) has a similar setback provision to the revised policy 6.1.12. A proposed new *Code* Section 16.10.070h2 appears to further limit those projects that can be within the setback. Some non-habitable structures that do not require a building permit are still not allowed in the setback area: those that could be located beyond the setback, unfavorably alter drainage patterns, or involve grading. The text goes on to give examples of what remains exempted (i.e., allowed in the 25 foot setback): "decks which do not require a building permit (i.e., are less than 18 inches high) and do not unfavorably alter drainage, play structures, showers (where run-off is controlled), benches, landscape boulders, statues, and gazebos which do not require a building permit."

Analysis: The County has attempted to allow only a very limited class of projects within the bluff setback area. The proviso that among these, only those that can not be located elsewhere on the property can be within the setback, helps ensure that the intent of the general setback policies is not compromised. Generally, the Commission concurs that the very limited exemptions are appropriate. However, the problem with this proposal is that these structures, once installed, could be considered "existing development." As erosion continues, the applicant then could apply for a seawall to protect these ancillary facilities which are now existing "development." Under the local coastal program (policy 6.2.16) and pursuant to the Coastal Act, existing development is generally allowed to be protected, if threatened. Whereas someone's house may be setback a sufficient distance to not warrant protection, these seaward structures could make the property eligible for protection. Savvy landowners whose existing house is setback beyond a threatened area but who are desirous of a seawall will first take advantage of this exemption to place gazebos, decks, etc. within the setback area. They will then apply for a seawall to protect this existing development, thwarting the intent of the cited land use plan policy.

Conformance Conclusions:

- a. The narrow exceptions to the blufftop setback policy proposed in the land use plan can be found consistent with the cited Coastal Act sections and are thus approved.
- b. Zoning regulations are typically more detailed than land use plan policies and include more procedural provisions. As noted there can be unintended consequences from these proposed exceptions. The result could be a conflict with land use plan policy

6.2.16. Therefore, the proposed amendment to the zoning ordinance is inadequate to carry out the certified land use plan and is denied.

Remedy: The zoning provision can be easily modified to ensure that exempted structures do not trigger the need for protective structures and are considered temporary, in that they can be removed or relocated. By adding such wording as shown in Modification 2 on page 8, the amended implementation plan, as modified, remains consistent with the land use plan as amended.

3. Deference of Geological Report

Effect of Amendment: Another component of the proposed amendment, involving Code Section 16.10.060A, changes the timing of geology, soil, or other technical report preparation. The current certified provisions state that the reports must be prepared prior to any public hearing or action on a discretionary permit, which would include a coastal permit. The proposed amendment allows the County Geologist to defer report preparation to any time prior to a building permit being issued if it is unlikely that the report could result in a significant change of the size or location of the project. The intent of this provision is to save the applicant the cost of technical geologic investigation prior to having a determination of whether the proposed project will be allowed for other reasons.

Analysis: There are three problems with this approach. First, it leaves the judgment as to what effect the technical report may have on the project to the County Geologist. While the County Geologist is no doubt well-qualified to make such predictions, the purpose of these reports is for outside consultants to provide more information and expertise than the County Geologist may have. Therefore, the Geologist may not have all the information necessary to make such a decision. Second, under the Coastal Act procedures, local government actions must be taken before there is any formal permit review by the Coastal Commission, such as through the appeal process. However, Coastal Commission staff often reviews proposed projects at an earlier stage, such as to offer comments under the California Environmental Quality Act or to the local government. In this latter case, future appeals can often be prevented. In order to perform such evaluations, Coastal Commission staff often needs to see the technical reports, which under the proposed amendment might not longer be prepared at this stage. Third, if there is an appeal, the Coastal Commission must make a decision based largely on the County record. If there is no report in the County file, it may prove difficult to render a decision. The Commission would almost automatically have to find "substantial issue" and then continue the matter until the technical information was available. This scenario would result in the inefficiencies and delays that the amendment is supposed to prevent.

Conformance Conclusion: For all of these reasons, the proposed amendment is not adequate to carry out the land use plan and must be denied.

Remedies: If this proposed amendment was simply deleted, then there would be no issue. However, the intent of the amendment is worthy, and in many circumstances (including always outside of the coastal zone) it would not cause Coastal Commission concerns. To address the noted coastal zone concerns, this provision could be worded so as not be to applicable to projects appealable to the Coastal Commission. With such a modification, as shown by Modification 3 on page 8, the proposed amendment can be approved as adequate to carry out the land use plan.

4. Shoreline Structure Criteria

Analysis: This component of the proposed amendment to the zoning ordinance relocates criteria for shoreline structures from section16.10.070(h)5 to a new Section 16.10.070(h)3 and rewords them. Generally, the new language better conforms to land use plan policy 6.2.16. However, as this is the implementation chapter, it should not just repeat policy language, it should contain procedures and details clear enough to adequately implement the policy. Missing are details on staging plans. Construction activities could have adverse impacts on beach access, for example, that would be inconsistent with land use plan policies. Therefore, this amendment component is denied as being inadequate to carry out the land use plan policy.

Remedy: Details about criteria for construction staging plans could be added to this section. If so modified, according to Modification 4, then the amended section is approved as being adequate to carry out the land use plan, as amended.

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5. Fault Setback

- a. The proposed amendment to *General Plan* policy 6.1.11 changes the setback for fault zones from 50 feet to as close as 25 with proper studies. This amendment reflects current geologic and geotechnical practice according to the County staff report. Therefore, it is approved as being consistent with Coastal Act sections 30253(1) & (2).
- b.. The proposed amendment to *Code* Sections 16.10.070(b)2 and 16.10.080(a)2) contain similar language and are, therefore, approved as consistent with the amended land use plan.

6. Reconstruction Where Damage Exceeds 50%

a. These proposed amendment components to 1994 General Plan and Local Coastal Program for the County of Santa Cruz policies 6.2.20 and 6.2.21 add new provisions to

allow reconstruction of structures on coastal bluffs or due to storm wave inundation where damage has exceeded 50%. All applicable regulations, including minimum setbacks have to be met; otherwise, only in-kind reconstruction is allowed and only if the hazard can be fully mitigated. This applies whether or not the damage is due to the hazard. Since Coastal Act Section 30610g allows reconstruction no matter what extent the damage and what the disaster, this provision is approved as consistent with the Coastal Act.

b. The proposed amendments to the implementation plan contain a new section and table 16.10.070h4 with similar language. They are approved as being consistent with and adequate to carry out the cited land use plan policies as amended.

7. Land Divisions In Floodplains

- a. This proposed component of the amendment to the 1994 General Plan and Local Coastal Program for the County of Santa Cruz adds and clarifies criteria for allowing land divisions in floodplains (Policy 6.4.5). Under the current policy each building site must be located out of the floodplain. The major change is a clarification that building sites include septic systems. This provision must be read in conjunction with a previous amendment (#1-98) that does not allow any density credit in a floodplain. Thus, new parcels lines may be within floodplains, but not new development, nor density credit for new development. As such, the proposed amendment is approved as consistent with Section 30253 of the Coastal Act.
- b. The proposed amendment to renumbered Section 16.10.070f2 of the *County Code* contains identical language to the land use plan amendment. It is thus approved as consistent with and adequate to carry out the land use plan as amended.

8: Septic Systems in Floodplains

This proposed component of the amendment to the 1994 General Plan and Local Coastal Program for the County of Santa Cruz makes two changes. First, policy 6.4.9 is reworded to state that septic systems to serve undeveloped parcels are not to be located in the floodway, nor in the rest of the floodplain if there is a suitable location outside of the floodplain. Under the current policy language, one can not install a septic system in the floodplain to serve new development. Thus, the proposed policy changes would in the future appear to allow a new system to be installed (1) if there is no suitable location outside of the floodplain and (2) to serve new development if the parcel is developed. This would have the effect, for example, of allowing someone to install a new system if there was one structure on a parcel and an applicant wanted to build a new house and convert the structure to a shed or guest house. This revision is being proposed to conform to federal and state regulations, and to reflect current practices. Any proposed system would still have to meet the various technical requirements of the

zoning ordinance to ensure protection of human health and biotic resources. This proposal, although shown as a local coastal program amendment should have minimal effect in the coastal zone. Almost all parcels entirely within the floodplain within the County's coastal zone are on sewers.

Second, this proposed amendment's intent is to prohibit expanding an existing system in the floodplain. This would have the effect, for example, of not allowing someone to add on to their house in a manner that required more sewage treatment capacity (e.g., adding a new bedroom), unless they could install a new system, could utilize an existing system outside of the floodplain, or utilize some alternative means of treatment.

These amendments represent means to protect human health from development in the floodplain. They are thus approved as being consistent with Coastal Act Section 30253(1).

9. Other Substantive and Procedural Changes

The proposed amendment to the implementation plan also would:

- Add and clarify purposes and authorizations for "Geologic Hazards" chapter of *County Code* (IP new Sections 16.10.022, 16.10.025; revised Sections 16.10.010, 16.10.020)
- Add conflict, liability disclaimer, and severability sections (IP Sections 16.10.035, 16.10.036, 16.10.037))
- Delete special exemptions for 1989 Loma Prieta earthquake (IP Section 16.10.040s, formerly 16.10.040p; 16.10.075 to be deleted; 16.10.095 to be deleted)
- Change geologic assessment and report procedures (IP Section 16.10.060)
- Subject some additional work on existing structures to Federal floodplain requirements (IP Section16.10.070(f)3)
- Require basements to be elevated above 100 year flood level (IP Section 16.10.070(f)3Vi formerly(f)4)
- Allow unlimited amount of space below 100 year flood plains to be enclosed (IP Section 16.10.070h(5)vi)
- Require water and sewage systems to minimize or eliminate infiltration of flood waters into the system (IP new Section 16.10.070(f)6)
- Prohibit new septic systems in floodways (IP new Section 16.10.070(g)4)
- Require project denial if National Flood Insurance Program regulations are not met (IP Section 16.10.090)
- Add very limited exceptions to flood criteria pursuant to federal guidelines (IP, new section 16.10.100D)
- Add violation provisions (IP Section 16.10.120A)

Many of these provisions are to render the ordinance more in line with the Federal model ordinance and federal regulations. These provisions are all approved as being consistent with related land use plan provisions (specifically, policies in sections 6.1 "Seismic Hazards," 6.2 "Slope Stability", and 6.4 "Flood Hazards.")

10. Other Editorial Matters

- a. The remaining proposed amendments to the 1994 General Plan and Local Coastal Program for the County of Santa Cruz are editorial in nature. For example, the revision deleting policy 6.2.8 removes a redundant policy. Therefore, these are all approved as consistent with the relevant cited Coastal Act policies.
- b. The remaining proposed amendments to the implementation plan also reorganize and make other non-substantive editorial changes, procedural changes, and add and revise other definitions. By themselves these amendments alone would be considered "minor." However, they are an integral part of this one amendment part which has major components as well. These revisions are located throughout Chapter 16.10. In some cases the wording change reflects more closely the corresponding land use plan language. These are approved as being consistent with and adequate to carry out the land use plan, as amended with the suggested modifications.

C. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

The County gave both these amendments "Negative Declarations" under CEQA, finding no adverse impacts. The Commission concurs, for the reasons discussed in these findings, and provided the four suggested modifications are made. As such, there are no additional feasible alternatives nor feasible mitigation measures available which would substantially lessen any significant adverse environmental effects which approval of the amendments, as modified would have on the environment.

SANTA CRUZ COUNTY: LOCAL COASTAL PROGRAM MAJOR AMENDMENT NO. 2-98

ATTACHMENT

FULL TEXT OF PROPOSED AMENDMENTS

PORTIONS WHICH ARE NEW ARE SHADED or UNDERLINED

DELETIONS ARE SHOWN BY STRIKE-OUTS

AMEND THE SANTA CRUZ COUNTY GENERAL PLAN/LOCAL COASTAL PROGRAM LAND USE PLAN BY ADDING SECTION 2.3.7 TO READ AS FOLLOWS:

2.3.7 Recognize existing legal residential parcels outside the Urban Services Line that are less than one acre in size as conforming with the General Plan/Local Coastal Program Land Use Plan. Maintain these parcels in the R-1-5 to R-1-40 zone district ands apply the site standards of the zone district to all development.

GENERAL PLAN/LOCAL COASTAL PROGRAM LAND USE PLAN AMENDMENTS

The following General Plan/Local Coastal Program Land Use Plan amendments are proposed to compliment the ordinance amendments proposed to Chapter 16.10 and to make the General Plan policies internally consistent.

Amend Table 2-2 as shown in the attachment:

Revisions proposed to address consistency concerns raised by California Coastal Commission.

6.1.11 Setbacks from Faults

(LCP) Exclude from density calculations for land divisions, land within 50 feet of the edge of the area of fault induced offset and distortion of an active or potentially active fault trace. Require 50-foot setbacks for all residential and 100-foot setbacks for all commercial, multi-residential, high occupancy, and critical structures from active or potentially active fault traces. In addition, all new habitable structures on existing lots of record shall be set back a minimum of fifty (50) feet from the edge of the area of fault induced offset and distortion of an active or potentially active fault trace. This setback may be reduced to a minimum of twenty-five (25) feet based upon paleoseismic studies that include observation trenches. Reduction of the setback may only occur when both the consulting engineering geologist preparing the study and the County Geologist observe the trench and concur that the reduction is appropriate. Critical structures and facilities shall be set back a minimum of one hundred (100) feet from active or potentially active fault traces, the edge of the area of fault induced offset and distortion of an active or potentially active fault trace.

Revision proposed to reflect current geologic and geotechnical practice.

6.2.8 Road Construction

(LCP) Require an engineering geology report and engineering supervision to ensure effective road construction where there have been severe washouts and landslides on private or public roads; and require geologic and engineering review of all proposed road construction in landslide prone areas.

Deletion of redundant policy; see Policy 6.2.1 and 6.2.2.

6.2.1410 Site Development to Minimize Hazards

October 14, 1998

Page 1

(LCP) Require all developments to be sited and designed to avoid or minimize hazards as determined by the geologic hazards assessment or geologic and engineering investigations.

Policy order changed for clarity.

6.2.1011 Geologic Hazards Assessment in Coastal Hazard Areas

(LCP) Require a geologic hazards assessment or full geologic report for all development proposals activities within coastal hazard areas, including all development activity within 100-feet of a coastal bluff. Other technical reports may be required if significant potential hazards are identified by the hazards assessment.

Revision proposed to reflect the proposed new definition of "development activity", and the order is changed for clarity.

6.2.1112 Setbacks from Coastal Bluffs

All development activities, including those which are cantilevers ed, and non habitable structures for which a building permit is required, portions of a structure shall be set back a minimum of 25 feet from the top edge of the bluff. A setback greater than 25 feet may be required based on conditions on and adjoining the site. The setback shall be sufficient to provide a stable building site over the 100-year lifetime of the structure, as determined through geologic and/or soil engineering reports. The determination of the minimum 100 year setback shall be based on the existing site conditions and shall not take into consideration the effect of any proposed shoreline or coastal bluff protection measures.

6.2.12 100 Year Site Stability

(LCP) The 100-year stability of the building site shall not be dependent upon structural engineering measures (such as shoreline protection, retaining walls or deep piers).

Adds proposed new definition "development activity", rewords policy 6.2.12 for increased clarity, and combines policies 6.2.11 and 6.2.12.

6.2.13 Exception for Foundation Replacement and/or Upgrade

(LCP) Foundation replacement and/or foundation upgrades that meet the definition of development activity shall meet the 25-foot minimum and 100-year stability setback requirements. An exception to those requirements may be granted for existing structures that are located partly or wholly within the setback if the Planning Director determines that:

- 1) the area of the structure that is within the setback does not exceed 25% of the area of the structure, OR
- 2) the structure cannot be relocated to meet the setback due to inadequate parcel size.

This policy creates a means for existing dwellings located within the setback to have the foundations repaired, replaced, or upgraded consistent with protection of public health and safety, and the retention of existing housing stock.

- 6.2.1314 Improvements Additions to Existing Structures
- (LCP) Improvements to existing structures located within the 25-foot minimum setback shall not encroach closer to the top of the bluff. All building aAdditions, including second story and cantilevered additions, shall comply with the setback requirements of 6.2.12.-25-foot setback.

Policy clarified. Improvements are already addressed by Policy 6.2.12.

- 6.2.15 New Development on Existing Lots of Record
- (LCP) Allow development activities in areas subject to storm wave inundation or beach or bluff erosion on existing lots of record, within existing developed neighborhoods, under the following circumstances:
 - (a) A technical report (including a geologic hazards assessment, engineering geology report and/or soil engineering report) demonstrates that the potential hazard can be mitigated over the 100-year lifetime of the structure. Mitigations can include, but are not limited to, building setbacks, elevation of the structure, friction pier or deep caisson foundation and foundation design;
 - (b) Mitigation of the potential hazard is not dependent on shoreline or coastal bluff protection structures, except on lots where both adjacent parcels are already similarly protected, and

Revisions to make policy consistent with 6.2.12.

- (c) Where a deed restriction indicating the potential hazards on the site and the level of prior investigation conducted is recorded on the deed with the County Recorder. The owner records a Declaration of Geologic Hazards on the property deed that describes the potential hazard and the level of geologic and/or geotechnical investigation conducted.
- Revision proposed to incorporate improved language for Declaration of Geologic Hazards.

6.2.16 Structural Shoreline Protection Measures

(LCP) Limit structural shoreline protection measures to structures which protect existing structures from a significant threat, vacant lots which through lack of protection threaten adjacent developed lots, public works, public beaches, or coastal dependent uses.

Require any application for shoreline protection measures to include a thorough analysis of all reasonable alternatives, including but not limited to, relocation or partial removal of the threatened structure, protection of the upper bluff or area immediately adjacent to the threatened structure, engineered shoreline protection such as beach nourishment, revetments, or vertical walls. Permit structural protection measures only if non-structural measures (e.g. building relocation or change in design) are infeasible from an engineering standpoint or not economically viable.

The protection structure must not reduce or restrict public beach access, adversely affect shoreline processes and sand supply, increase erosion on adjacent properties, or cause harmful impacts on wildlife and fish habitats or archaeological or paleontological resources.

The protection structure must be placed as close as possible to the development requiring protection and must be designed to minimize adverse impacts to recreation and to minimize visual intrusion.

Shoreline protection structures shall be designed to meet approved engineering standards for the site as determined through the environmental review process. Structural protection measures should only be considered where significant threat to an existing structure exists or where seawalls have been constructed on adjoining parcels.

Detailed technical studies will shall be required to accurately define oceanographic conditions affecting the site. All shoreline protective structures shall incorporate permanent survey monuments for future use in establishing a survey monument network along the coast for use in monitoring seaward encroachment or slumping of revetments or erosion trends.

No approval shall be given for shoreline protective structures that do not include permanent monitoring and maintenance programs. Such programs shall include a report to the County every five years or less, as determined by a qualified professional, after construction of the structure, detailing the condition of the structure and listing any recommended maintenance work. Maintenance programs shall be recorded and shall allow for County removal or repair of a shoreline

protective structure, at the owner's expense, if its condition creates a public nuisance or if necessary to protect the public health and safety.

Revisions made to make this policy section easier to read and for consistency with other proposed amendments.

6.2.18 Prohibit New Structures Public Services in Coastal Hazard Areas

(LCP) Exclude areas subject to coastal inundation, as defined by geologic hazards
assessment or full geologic report, from use for density calculations. Prohibit new
structures, public facilities, and Prohibit utility facilities and service transmission
systems in coastal hazard areas unless they are necessary for to serve existing
residences. or to serve vacant lots which through lack of protection threaten
adjacent developed lots, public facilities, public beaches or coastal dependent uses

6.2.18.1 Density Calculations

(LCP) Exclude areas subject to coastal inundation, as defined by geologic hazards assessment or full geologic report, from use for density calculations.

This language is moved from policy 6.2.18 into a separate paragraph and policy to increase clarity.

6.2.20 Reconstruction of Damaged Structures on Coastal Bluffs

(LCP) Permit reconstruction of structures on or at the top of a coastal bluff which are damaged as a result of coastal hazards, including slope instability and seismically induced landslides, or are damaged by non-coastal related hazards (fire, etc), and where the loss is less than 50 percent of the value, in accordance with the recommendations of the hazards assessment. Encourage relocation to a new footprint provided that the new location is landward of the previous site at the best possible site not affecting resources (e.g. the most landward location, or landward of the area necessary to ensure a stable building site for the minimum 100-year lifetime, or not necessitating a future shoreline protective structure).

When structures located on or at the top of a coastal bluff are damaged as a result of coastal hazards, including slope instability and seismically induced landslides, and where the loss is greater than 50 percent of the value, permit reconstruction if all applicable regulations can be met, including minimum setbacks. If the minimum setback cannot be met, allow only in-kind reconstruction, and only if the hazard can be mitigated to provide stability over a 100 year period.

For structures damaged by other than coastal hazards, where the loss is greater than 50%

of the value, allow in-kind reconstruction, subject to all regulations except for the minimum setback. Allow other than in-kind reconstruction only if the minimum setback is met.

Exemption: Public beach facilities and damage which results from non-coastal related hazards, such as fire, and replacements consistent with Coastal Act Policy 30610(g).

Revision made to address situations where damage to structures exceeds 50 %.

6.2.21 Reconstruction of Damaged Structures due to Storm Wave Inundation

Permit reconstruction of individual structures located in areas subject to storm wave inundation, which are damaged as a result of coastal hazards, and loss is less than 50 percent of the value, in accordance with recommendations from the geologic hazards assessment and other technical reports, as well as with policy 6.2.16. Encourage relocation to a new footprint provided that the new location is landward of the previous site at the best possible site not affecting resources (e.g. the most landward location, or landward of the area necessary to ensure a stable building site for the minimum 100 year lifetime, or not necessitating a future shoreline protective structure). If more than 75 percent of the neighborhood, structures and public facilities are damaged, reconstruction must take place in accordance with the requirements of policy 6.2.15.

When structures located in areas subject to storm wave inundation are damaged as a result of coastal hazards and the loss is greater than 50 percent of the value, permit reconstruction if all applicable regulations can be met. If the minimum setback cannot be met, allow only in-kind reconstruction, and only if the hazard can be mitigated to provide stability over a 100 year period.

For structures damaged greater than 50 percent of the value by other than coastal hazards, allow in- kind reconstruction which meets all regulations except for the coastal bluff setback. Allow other than in-kind reconstruction only if the minimum setback is met.

Exceptions: Public beach facilities and damage which results from non-coastal related hazards, such as fire, and replacements consistent with Coastal Act Policy 30610(g).

Revision made to address situations where damage to structures exceeds 50 %. The provision to neourage landward relocation is deleted because it often conflicts with efforts to minimize azard from slope failure. Also, the provision that applies to large scale damage of a eighborhood is deleted because it is too vague to be enforced. The reconstruction policy is dequate to enforce the coastal bluff setbacks and other regulations for both individual cases and cases where "neighborhoods" have been damaged.

- 6.4.5 New Parcels in 100-Year Floodplains
- (LCP) Allow the creation of new parcels, including those created by minor land division or subdivision, in 100-year floodplains only under the following circumstances:
 - (a) Demonstration that each proposed parcel contains at least one development site which is not subject to flood hazard.
 - (b) A deed restriction indicating the limits and elevations of the 100 year floodplain recorded with the County Recorder.
 - (a) A full hydrologic report and any other appropriate technical report must demonstrate that each proposed parcel contains at least one building site, including a septic system and leach field site, which is not subject to flood hazard, and that public utilities and facilities such as sewer, gas, electrical and water systems can be located and constructed to minimize flood damage and not cause a health hazard.
 - (b) A declaration indicating the limits and elevations of the one-hundred year floodplain certified by a registered professional engineer or surveyor must be recorded with the County Recorder.
 - (c) Adequate drainage to reduce exposure to flood hazards must be provided.
 - (d) Preliminary land division proposals shall identify all flood hazard areas and the elevation of the base flood.

Revision amplifies the requirements for the creation of building sites within floodplains, consistent with FEMA requirements.

- 6.4.9 Septic Systems, Leach fields, and Fill Placement
- (LCP) Prohibit the location of septic systems and leach fields serving new development within the 100-year floodplain.—Septic systems and leach fields to serve previously undeveloped parcels shall not be located within the floodway or the 100 year floodplain. Septic systems shall be designed to avoid impairment or contamination. Allow the placement of fill within the 100-year floodplain in the minimum amount necessary, not to exceed 50 cubic yards. Fill shall only be allowed and only as part of a permitted development and only if it can be demonstrated through environmental review—that the fill will not have cumulative adverse impacts on or off site. No fill is allowed in the floodway.

Revision proposed to reflect current regulatory (Federal, State and local) restrictions and limitations.

Amend the Glossary of the General Plan/Local Coastal Program Land Use Plan as follows:



October 14, 1998

Density Credit

(LCP) The number of dwelling units allowed to be built on a particular property determined by applying the designated general Plan and LCP Land Use designation density and implementing zone district to the developable portions of the property and to those non-developable portions of the property for which credit may be granted (see definition of Developable land). Where credit is allowed for a non-developable portion of the property, the dwelling units must be located in the developable portion of the property.

The following areas which are not developable land shall be granted density credit for development density.

Outside the USL and RSL

a) Land with slopes between 30 and 50 percent.

Inside the USL and RSL

- a) Land with slopes less than 30 percent in the required buffer setback from the top of the arroyo or riparian corridor, up to a maximum of 50 percent of the total area of the property which is outside the riparian corridor.
- b) The Board of Supervisors may allow a credit of up to 50 percent of the property within the 100-year floodplain if the proposal is: served by sewers; bordered by existing similarly developed lots, not at a density higher than the surrounding area, and will not increase the likelihood of downstream or upstream flooding. The property designated as a floodway does not qualify for density credit.

Countywide Credits

The following credits are subject to special site and/or development criteria and shall be granted full/density credit:

- a) Rare and endangered plant and animal habitats.
- b) Archaeological sites.
- c) Critical fire hazard areas.
- d) Buffer areas established between non-agricultural land uses and commercial agricultural land.
- e) Landslide areas determined by a geological study to be stable and suitable for development.
- f) Historic sites.

The revision reflects changes made by the Board and Coastal Commission in 1994. Development Activity

(LCP) Any project that includes activity in any of the following categories is considered to be development activity:

- (1) The construction or placement of any habitable structure, including a manufactured home;
- (2) Any repair, reconstruction, alteration, addition, or improvement of a habitable structure that modifies or replaces more than 50 percent of the total length of the exterior walls, exclusive of interior and exterior wall coverings and the replacing of windows and doors without altering their openings. This allows a total modification or replacement of up to 50%, measured as described above, whether the work is performed at one time or as the sum of multiple projects during the life of the structure;
- (3) The addition of habitable space to any structure, where the addition increases the habitable space by more than fifty percent over the existing habitable space, measured in square feet. This allows a total increase of up to 50% of the original habitable space of a structure, whether the additions are constructed at one time or as the sum of multiple additions during the life of the structure;
- (4) An addition of any size to a structure that is located on a coastal bluff, dune, or in the coastal hazard area, that extends the structure in a seaward direction.
- (5) Installation of a new foundation for a habitable structure;
- (6) The repair, replacement, or upgrade of more than 50% of an existing foundation of a habitable structure, or an addition to an existing foundation that is more than 50% of the original foundation area. This allows repair, upgrading or addition of up to 50%, measured as described above, whether the work is performed at one time or as the sum of multiple projects during the life of the structure;
- (7) A division of land or the creation of one or more new building sites, except where a land division is accomplished by the acquisition of such land by a public agency for public recreational use;
- (8) Any change of use from a non-habitable structure to a habitable structure, according to the definition of "habitable" found in Section 16.10.040, or a change of use from any non-critical structure to a critical structure;
- (9) Any alteration of any structure posted "Unsafe to Occupy" due to geologic hazards,
- (10) Grading activities of any scale in the 100 year floodplain or the coastal hazard area, and any grading activity which requires a permit (pursuant to Chapter 16.20) elsewhere;

- (11) Construction of roads, utilities, or other facilities,
- (12) Retaining walls which require a building permit, retaining walls that function as a part of a landslide repair whether or not they require a building permit, seawalls, rip-rap erosion protection or retaining structures, and gabion baskets;
- (13) Installation of a septic system.
- (14) In the Special Flood Hazard Area, any human made change to developed or undeveloped real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation, drilling operations, or storage of equipment or materials. This is in addition to any activity listed in items 1-13.

This revision adds a definition of Development Activity which is only used in the Geologic Hazard section of Chapter 6, consistent with the definition required by FEMA and the proposed language revisions to Chapter 16.10 of the County Code.

Geologic Hazards Assessment

(LCP) A brief review summary of the possible geologic hazards present at the site conducted by the staff geologist.

Revision proposed for clarity.

Geologic Report, Preliminary

(LCP) A brief geologic investigation conducted by a registered geologist on contract with the County which assesses hazards in the San Andreas and San Gregorio Fault Zones for single family dwelling permits.

These reports are no longer acceptable for geologic review purposes.

Geologic Report, Full

(LCP) A complete geologic investigation conducted by a registered Certified Engineering geologist hired by the applicant, and completed in accordance with the County Geologic Report Guidelines

Revision recognizes change in report preparation requirements.

COUNTY OF SANTA CRUZ

STATE OF CALIFORNIA

T THE BOARD OF SUPERVISORS MEETING On the Date of October 27, 1998

REGULAR AGENDA Item No. 046



Upon the motion of Supervisor Wormhoudt, duly seconded by Supervisor Almquist, the Board, by unanimous vote, adopted Resolution No. 425-98 adopting amendments to Chapters 13.10 and 16.10 of the County Code and various sections of the General Plan/Local Coastal Program Use Plan regarding geologic hazards regulations; adopted Ordinance No. 4518 amending Section 13.10.700-D and Chapter 16.10 of the County Code relating to geologic hazards; directed staff to submit these revisions and amendments to the State of California Coastal Commission as part of the next 1998 "Rounds" package; with an additional directive that Section 6.4.9 of the General Plan/Local Coastal Program Land Use Plan Amendments add language to read: floodplain... "The capacity of existing septic systems in the 100 year floodplain or floodway shall not be increased."...; further directed Environmental Health to report back regarding changes made to County Code Chapter 7.38, Sewage Disposal, to make it consistent with amended language of General Plan/Local Coastal Program Land Use Plan 6.4.9; and further directed Planning staff to report back at the first meeting in August, 1999, regarding post-disaster policies and procedures

cc: CAO, California Coastal Commission, Planning

State of California, County of Santa Cruz-ss.

Susan A. Mauriello, Ex-officio Clerk of the Board of Supervisors of the County of Santa Cruz, State of alifornia, do hereby certify that the foregoing is a true and correct copy of the order made and entered in the Minutes of said Board of Supervisors. In witness thereof I have hereunto set my hand and affixed seal of said Board of Supervisors.

Page 2 of 2

Julia Mala , Deputy Clerk, on November 3, 1998.

SC Co 2-98

#26

CHAPTER 16.10

GEOLOGIC HAZARDS

Sections:

16.10.010	Purpose
16.10.020	Scope
1610.022	Statutory: Authorization
16 .10.025	Besign Description of the contraction of the second
16.10.030	Amendment Procedure
16 10 035	Conflict with Existing Regulations
16.10.036	Warning and Disclaimer of Liability
16.10.037	Severability
16.10.040	Definitions
16.10.050	Requirements for Geologic Assessment
16.10.060	Assessment and Report Preparation and Review
16.10.070	Permit Conditions
16.10.075	Foundation Design Requirements in Geologic Hazard Areas
16.10.080	Project Density Limitations
16.10.090	Project Denial
16.10.095	Permits for Repair of Earthquake Damaged Dwellings and Accessory
	Structures
16.10.100	Variance XXXXXXXXX
16.10.105	Notice of Geologic Hazards
16.10.110	Appeals
16.10.120	Violations
16.10.130	Fees

16.10.010 PURPOSE. The purposes of this chapter are:

- (a) Policy Implementation. To implement the policies of the National Flood Insurance
 Program of the Federal Insurance Administration, the State of California Alquist-Priolo
 Earthquake Fault Zonne and Special Studies Zones, the Santa Cruz County General Plan,
 and the Land Use Plan of the Local Coastal Program; and
- (b) **Public Health and Selets**. To minimize **injury** the loss of life, injury and damage to public and private property caused by the natural physical hazards of earthquakes, floods, landslides, and coastal processes; and
- (c) Development Standards. To set forth development standards to be achieved by for all applicable development and puniting activities in order to that will reduce public costs by

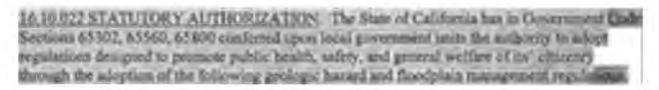
preventing inappropriate land uses and development in those areas where natural dynamic processes present a potential threat to the public health, safety, and welfare, and property; and

(d) Notice of Hazards. To assure that potential buyers are notified of property located in an area of special flood hazard, and to assure that those who occupy areas of special flood hazard assume responsibility for their actions. (Ord. 3340, 11/23/82; 3598, 11/6/84)

Provision added to conform to the FEMA model floodplain ordinance.

16.10.020 SCOPE. This chapter sets forth regulations and review procedures for development and construction activities including grading, septic systems installation, development permits, changes of use as specified in Section 16.10.040(s)8, building permits, minor land divisions, and subdivisions throughout the County as well as and particularly within mapped geologic hazards areas and areas of special flood hazard (SFHAs). These regulations and procedures shall be administered through a system of geologic hazard assessment, technical review, development and building permits. (Ord. 3340, 11/23/82; 3598, 11/6/84; 3635, 3/26/85)

The phrase Change of Use in the third line has been added because many non-habitable structures are no longer subject to this ordinance, and the conversion of structures from a non-habitable to a habitable use is a change that will be subject to the provisions of this ordinance.



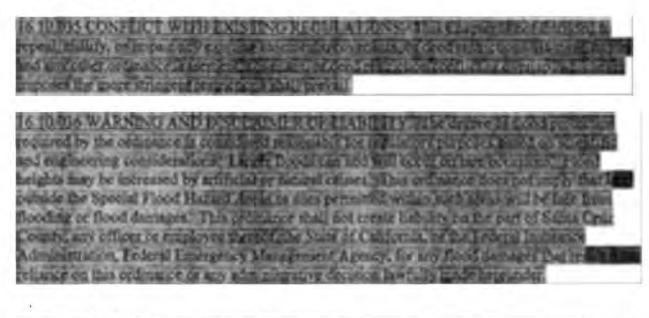
16.10.025 BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD

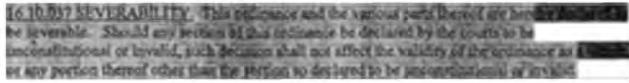
The areas of special flood hazard identified by the Federal Insurance Administration (FIA) of the Federal Emergency Management Agency (FEMA) in the Flood Insurance Study (FIS) dated April 15, 1986, and accompanying Flood Insurance Rate Maps (FIRMs) and Flood Boundary and Floodway Maps (FBFMs), dated April 15, 1986, and all subsequent amendments and/or revisions, are hereby adopted by reference and declared to be a part of this Chapter. This FIS and attendant mapping is the minimum area of applicability of the flood regulations contained in this Chapter, and may be supplemented by studies for other areas. The FIS, FIRMS, and FBFMS are on file at the County Government Center, Planning Department.

Sections 16.10.022 and 16.10.025 added to conform to the FEMA model floodplain ordinance.

Proposed Amendments to Chapter 16.10 January 13, 1999 MASTER LIST OF REVISIONS

16.10.030 AMENDMENT PROCEDURE. Any revision to this chapter which applies to the Coastal Zone shall be reviewed by the Executive Director of the California Coastal Commission to determine whether it constitutes an amendment to the Local Coastal Program. When an ordinance revision constitutes an amendment to the Local Coastal Program, such revision shall be processed pursuant to the hearing and notification provisions of Chapter 13.03 of the County Code and shall be subject to approval by the California Coastal Commission. (Ord. 3340, 11/23/82; 3598, 11/6/84)





Sections 16-10.035 - 16.10.037 added to conform with the FEMA model floodplain ordinance.

16.10.040 DEFINITIONS. For the purposes of this chapter, the following definitions apply:

(a) Accessory Use. Any use which is clearly incidental and secondary to the main use and does not change the character of the main use.

Definition added to conform to FEMA model floodplain ordinance.

(ab) Active. A geologic feature (fault or landslide) which shows evidence of movement, surface displacement, or activity within Hologene time (about the last 10,000 years). (referred to as "recent").

Proposed Amendments to Chapter 16.10 January 13, 1999 MASTER LIST OF REVISIONS

Revised to conform with the definition of active fault used in the State Alquist-Priolo Earthquake Fault Zone Act.

- (c) Addition. Improvement to an existing structure that increases the area, measured in square feet. The use of breeze ways, corridors, or other non-integral connections between structures shall not cause separate buildings or structures to be considered additions to an existing structure.
- (d) Adjacent / contiguous parcel. A parcel touching the subject parcel and not separated from the subject parcel by a road, street or other property.
- (be) Areas of special flood hazard. The one-hundred year floodplain and floodway An area having special flood hazard as identified by the Federal Insurance Administration, through the Federal Emergency Management Agency, and shown on an FHBM or FIRM map as Zone A, AO, A1-A30, AE, A99, VI-V30, VE or V. Also known as Special Flood Hazard Area (SFHA).
- (ef) Base Flood. A flood which has a one percent chance of being equaled or exceeded in any given year, that statistically could occur once in 100 years on average, although it could occur in any year. For flood insurance purposes one-hundred year flood and base flood have the same meaning.
 - Definitions revised to conform to the FEMA model floodplain ordinance.
- (g) <u>Basement</u>. For the purposes of this Chapter, any area of the building having its floor subgrade (below ground level) on all sides.
 - Definition added to conform to the FEMA model floodplain ordinance.
- (d) <u>Beach erosion</u>. Temporary or permanent reduction, transport or removal of beach sand by littoral drift, tidal actions, storms or tsunamis.
- (f) <u>Bulk</u>. Total interior cubic volume as measured from the exterior surface of the structure.
- (gi) <u>Certified Engineering Geologist</u>. A Registered Geologist who is licensed by the State of California to practice the sub-specialty of Engineering Geology.
- (hj) <u>Coastal Bluff</u>. A bank or cliff along the coast subject to coastal erosion processes. Coastal bluff refers to the top edge, face, and base of the subject bluff.

Adds clarifying language.

- (if) Coastal dependent uses. Any development or use which requires a site would not function or operate unless site on or adjacent to the sea to be functional.
- (i) <u>Coastal erosion processes</u>. Natural forces that cause the breakdown and transportation of earth or rock materials on or along beaches and bluffs. These forces include landsliding, surface runoff, wave action and tsunamis.
- (km) Coastal hazard areas. Areas which are subject to physical hazards as a result of coastal processes such as landsliding, er erosion of a coastal bluff, and inundation or erosion of a beach by storm and tsunami waves. These coastal hazard areas are designated on the Local Coastal Program Constraints Map and interpretive maps on file with the Planning Department.
- Coastal High Hazard Area. Means Areas subject to high velocity waters, including tidal and coastal inundation or tsunamis. These areas and base flood elevations are identified on a Flood Insurance Rate Map (FIRM) as Zones V1-30, VE or V.
- (mo) County geologist. A County employee planning staff member who is a registered geologist with the State of California (R.G.) and has been authorized by the Planning Director to implement assist in the administration of this chapter, or a registered geologist under contract by the County who has been authorized by the Planning Director to implement assist in the administration of this chapter. (Ord. 4090, 12/4/90)
- (no) County geologic advisor. A n individual whom is registered as a geologic with the state of California (R.G.), who is may be employed on contract with by the County to review geologic reports provide geologic as sizes.

Clarification of the above two definitions suggested by County Counsel.

- Critical structures and facilities. Structures and facilities which are subject to specified seismic safety standards because of their immediate and vital public need or because of the severe hazard presented by their structural failure. These structures include hospitals and medical facilities, fire and police stations, disaster relief and emergency operating centers, large dams and public utilities, public transportation and communications facilities, buildings with involuntary occupancy such as schools, jails, and convalescent homes, and high occupancy structures such as theaters, churches, office buildings, factories, and stores.
- Affined in section 18,70,040 (but, two or more instances of popular, percentive attention, addition, or improvement to a structure, over the course of five of modulities are in 18 the value of main artivities, when saided insertion, a qualitative or improvement to a structure, over the course of five of modulities.

of the market value of the structure, the activity as a whole shall be considered to be a "substantial improvement".

This provision is added to prevent large projects from being segmented into multiple projects that are each valued at less than 50 percent, in order to circumvent geologic review. A cap of five years is added to allow for bona fide, cumulative smaller improvements. Prevention of segmentation is added based on recommendation of County Counsel.

Development/development activities. The division of land or creation of new building sites, including lot splits, except where a land division is accomplished by the acquisition of such land by a public agency for public recreational use; the placement of or erection of any solid material or structure including a manufactured home on land, in or above water; additions of 500 feet or more in size; the construction of new structures, roads, utilities or other facilities; the substantial improvement of any structure including any facility of any private, public or municipal utility; grading activities, deposition of refuse debris or fill materials; and the installation of septic systems. Exemption: fences and other non habitable, accessory structures which do not require a grading permit; and residential additions under 500 square feet in size which do not require grading or Coastal Permit. These exemptions do not apply to any property located in a flood hazard area.

This definition is internally inconsistent, confusing to the public, and difficult to administer objectively and fairly. For example, the definition lists three different thresholds for what type of project constitutes "development": placement of any solid material, additions greater than 500 square feet, and "substantial improvement", without indicating when each threshold applies. It makes no distinction between habitable and non-habitable structures, which subjects barns and storage buildings to the same level of review as homes. Because the concept of "substantial improvement" is based on the market value of the structure, this term adds a subjective component to the definition of development.

Notwithstanding any other limitations contained in this section, any repair or reconstruction of a structure damaged as a result of the earthquake of October 17, 1989, or associated aftershocks, shall be deemed to be development activity subject to the provisions of this chapter if the property on which the structure is located has been posted unsafe to occupy due to geologic hazards affecting the property. Notwithstanding whether or not it constitutes "development" under this subsection, any repair or reconstruction of a habitable structure damaged as a result of the earthquake of October 17, 1989, or associated aftershocks, shall be subject to the notice requirements of Section 16.10.095, and any foundations within designated seismic, flood plain, or coastal hazard areas shall be subject to the design requirements of Section 16.10.075. (Ord. 4024, 10/24/89; 4080, 9/11/90)

This paragraph was originally included through the adoption of an emergency ordinance amendment to aid individuals in repairing homes damaged by the Loma Prieta earthquake. Nine years after the event, such short term recovery has been completed. Any unrepaired damages from the earthquake can be reviewed using standard procedures.

Development development activities. For the purposes of this Chapter, any project that includes activity in any of the following categories is considered to be development or development activity:

- The construction of Macamens of any Hallitable Structure districting a manufactured home.

- An addition of any size to a structure that is located on a coastal bluff, dune, or in the coastal hazard area, that extends the existing structure in a seaward direction;
- A REPROPOSITION OF THE PROPERTY OF THE PROPERT
- The repair, replacement, or upgrade of appealating figurilation of a habitable attracture that affects more than 50% of the Southander (measured in linear 1961 to perimener foundation), became feet for high foundations, or 50% of the soul number of piers), or at addition to an existing 5 confessor that adds more than 50% of the original foundation ners. This allow inputs, upgrade, or addition up to 50%, measured in described above, whether the work is performed at one turns or as the sum of much on projects during the life of the shortest.

- (7) A division of land or the creation of one or more new building sites, except where a land division is accomplished by the acquisition of such land by a public agency for public use;
- (8) Any change of use from non-habitable use to habitable use, according to the definition of "habitable" found in Section 16.10.040, or a change of use from any non-critical structure to a critical structure.
- (9) Any alteration of any structure posted "Unsafe to Occupy" due to geologic hazards;
- Grading activities of any scale in the 100 year floodplain or the coastal hazard area, and any grading activity which requires a permit pursuant to Chapter 16.20;
- (11) Construction of roads, utilities, or other facilities,
- (12) Retaining walls which require a building permit, retaining walls that function as a part of a landslide repair whether or not a building permit is required, sea walls, rip-rap erosion protection or retaining structures, and gabion baskets;
- (13) Installation of a septic system;
- Any human made change to developed or undeveloped real estate in the Special Flood Hazard Area, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation, drilling operations, or storage of equipment or materials. This is in addition to any activity listed in items 1-13.

This revised definition of development more clearly establishes a threshold for what is considered to be "development", and is therefore subject to geologic review, and what is not. This definition will provide for review of projects that increase the number of people exposed to potential hazards, such as new units and new lots, and projects that change the degree of risk, such as changes to the footprint that bring a structure significantly closer to a hazardous area.

It will also allow for review of projects that represent an advantageous time to build in hazard mitigation if it is needed, such as during major foundation modification, while not regulating projects that do not increase the hazard to people or the proximity of the hazard. For example, there is no need to regulate stables and storage buildings, minor foundation upgrades with no expansion of the footprint, or to review interior remodeling projects, relative to geologic hazards.

This definition has therefore been rewritten to accomplish five things:

- 1) to more clearly spell out that which does and does not constitute "development",
- 2) to eliminate geologic review of smaller projects that do not increase the exposure of people to hazards,
- 3) to allow for a cumulative accounting of multiple smaller projects that, taken together, should trigger geologic review,
- 4) to conform to FEMA regulations, and
- 5) to add three categories of projects that were not clearly covered in the old definition and that could increase public exposure to geologic hazards.

The majority of projects that were "development" according to the previous definition will continue to be subject to the requirements of this chapter, for example:

- all new habitable buildings, creation of new building sites, and roads, utilities, and septic systems.
- larger habitable additions, which will be measured based on increase in square footage, which is a more objective approach than the previous measure, which was increase in value.
- larger remodeling projects, which will be measured by the extent of the exterior structural renovation, rather than by 50% of the value. This does away with the subjective measure of value, and recognizes that even a 100% interior remodeling effort does not affect the number of people exposed to geologic hazard, the proximity to the hazard, or any other risk factor associated with the hazard.

The definition has been clarified to specifically include extensive (greater than 50%) foundation modifications. Also, three types of projects have been added to those previously covered by this definition: any modification of a structure that is posted Unsafe to Occupy due to geologic hazards, any project that is in the FEMA flood hazard area (as required by the FEMA regulations), and, since non-habitable structures are no longer considered to be development, any change of use from non-habitable to a habitable use.

Projects that are NOT considered to be development include new non-habitable structures and non-habitable additions, smaller habitable additions, remodels and repair projects that modify less than 50% of the total length of the exterior walls, less than 50% foundation modifications, and grading below the grading permit threshold that is also outside the coastal zone and flood hazard area.

(el) <u>Building Development envelope</u>. A designation on a site plan or parcel map indicating where buildings, access roads and septic systems are to be located.

Re-named to reduce confusion with an envelope that refers to the structure only.

- (Hu) Fault zones. A zone or zones of fracture designated in the Seismic Safety Element of on the General Plan or and the Local Coastal Program Land Use Constraints Maps, or other maps and source materials authorized by the Planning Director.
- (Fy) Fill. The deposition deposit of earth or any other substance or material by artificial means for any purpose, or the conditions resulting there from a fill taking place.
- (sw) Flood Boundary Floodway Map. The map adopted by the Board of Supervisors and used for land use planning and permit review on which the Federal Insurance Administration has delineated the areas of special flood hazard.
- (tx) <u>Flood control structure</u>. Any structure or material, including but not limited to a berm, levee, dam or retaining wall, placed in areas where flooding occurs, and constructed for the purpose of protecting a structure, road, utility or transmission line.
- (HV) Flood Insurance Rate Map (FIRM). The map adopted by the Board of Supervisors and used for insurance purposes on which the Federal Insurance Administration has delineated the special flood hazard areas, base flood elevations and the risk premium zones applicable to the community. The FIRM became effective on April 15, 1986 for insurance purposes.
- Flood Insurance Study. The official report on file with the Planning Department provided by the Federal Emergency Management Agency entitled, "The Flood Insurance Study Santa Cruz County, California" dated April 15, 1986 that includes flood profiles, the FIRM, the Flood Boundary Floodway Map, and the water surface elevation of the base flood. The report and accompanying maps are hereby adopted by reference and declared to be a part of this ordinance. The Flood Insurance Study is on file at the Planning Department
- (w2a) Floodplain. The relatively level land area on either side of a stream's banks that is subject to flooding. Any land area susceptible to being inundated by water from any source. The one-hundred year floodplain is used for planning purposes by Federal agencies and the County. For many larger and more densely populated drainages, the 100 year floodplain is designated on Flood Boundary and Floodway Maps prepared by the Federal Insurance Administration-and included on the Local Coastal Program Land Use Constraints Maps. See also "Area of Special Flood Hazard".

Definition revised to conform to the FEMA model floodplain ordinance.

(2b) Floodplain Administrator. The Planning Director, or single staff member that is designated by the Director, to manage the administration and implementation of the National Flood insurance Program regulations and the flood control provisions of this ordinance.

Definition added to conform to the FEMA model floodplain ordinance.

- (****) Floodproofing. Any combination of structural and non-structural additions, changes or adjustments to non-residential structures which reduce or eliminate flood damage to real estate or improved property.
- Floodway. The channel of a river or other watercourse and the adjacent land area required that have be least to project to carry and discharge the one-hundred year flood without cumulatively increasing the water surface elevation more that one foot at any point.

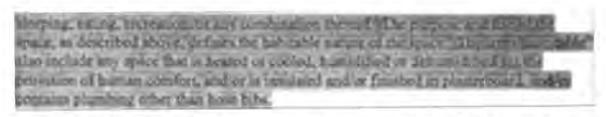
 Regulators Floodway.

Definition revised to conform to the FEMA model floodplain ordinance.

- Geologic hazard. A threat to life, property, or public safety caused by geologic or hydrologic processes such as flooding, storm wave inundation, landsliding, erosion, faulting, ground eracking, and secondary seismic effects including faulting, liquefaction, landsliding, tsunami or and ground shaking.
- (aa21) Geologic hazards assessment. A brief review present at a site conducted by the staff geologist.
- (bb) Geologic report, full. A complete geologic investigation conducted by a registered Certified Engineering Geologist hired by the applicant, and completed in accordance with the County Geologic Report Guidelines.

Revised to reflect state licensing of engineering geologists.

- (ee) Geologic report, preliminary. A brief geologic investigation conducted by a registered geologist on contract with the County which assesses hazards in the San Andreas and San Gregorio Fault Zones for single family dwelling permits.
- (dd Grading. Excavating or filling land, or a combination thereof.
- Habitable. For the purposes of this Chapter, any structure or portion of a structure, whether or not enclosed, that is usable for living purposes, which include working,



Definition added to clarify that, for geologic review purposes, habitable refers to all spaces regularly used by people. This definition combines the FEMA model ordinance definition and the definition used in the County Code Chapter 13.

- (ee) <u>Habitable floor</u>. Any floor usable for living purposes, which includes working, sleeping, eating or recreation, or combination thereof. For flood insurance purposes habitable floor and lowest floor have the same meaning.
- Hardship. For the purposes of administering Section 16.10.100, means the exceptional hardship that would result from failure to grant the requested Exception. The specific hardship must be exceptional, unusual, and peculiar to the property involved. Economic or financial hardship alone is not exceptional. Inconvenience, aesthetic considerations, personal preferences, or the disapproval of neighbors also cannot qualify as exceptional hardship, as these problems can be resolved through means other than granting an Exception, even if those alternative means are more expensive, require a property owner to build elsewhere, or put the parcel to a different use than originally intended or proposed.

Definition added to conform to the FEMA model floodplain ordinance. The demonstration of hardship is part of the process for considering exceptions to the federal flood hazard regulations and other provisions of this Chapter.

- (ff2k) High and very high liquefaction potential areas. Areas that are prone to liquefaction caused by ground shaking during a major earthquake. These areas are designated in the Seismic Safety Element of the General Plan and on maps which are on file with the Planning Department.
- Historic Structure. Any structure that is 1. Listed individually in the National Register of Historic Places, or preliminarily determined by the Secretary of the Interior to meet the requirements for such listing; 2. Certified as or preliminarily determined by the Department of the Interior to be contributing to the historical significance of a registered historical district or a district preliminarily determined to qualify as a historic district by the Secretary of the Interior; 3. Individually listed on the State Register of Historic Places which has been approved by the Secretary of the Interior; or, 4. Individually listed in the inventory of historic structures in a community with a historic preservation program that

has been cereficed **entries by tell approxies** state protection of objective by the steer clary of the Interior.

- (gg2m) <u>Hydrologic investigation</u>. A report prepared by a registered Certified Engineering geologist or civil engineer with expertise in hydrology which analyzes surface hydrology and/or groundwater conditions.
- (ii) <u>Landslide review zone</u>. An area designated as having a high potential for instability based on conditions such as the presence of old landslide deposits, very steep slopes, areas within or adjacent to fault zones and areas with adverse geologic structures. The mapped area has been adopted by Board resolution and is filed with the Planning Department.

Definition removed because the phrase does not appear elsewhere in the ordinance.

- (ij Littoral drift. The movement of beach sand parallel to the coast due to wave action and currents.
- (kk) <u>Littoral cell</u>. A continuous section of shoreline within which sand moves in a prevailing direction in response to seasonal current.

Definition removed because the phrase does not appear elsewhere in the ordinance.

- (H2) <u>Liquefaction</u>. The process whereby saturated, loose, granular materials are transformed by ground shaking during a major earthquake from a stable state into a fluid-like state.
- Lowest Floor. For flood purposes the lowest floor of the lowest enclosed area at a structure, including any basement.
 - An unfinished or flood resistant enclosure, below the lowest floor, that is usable solely for parking of vehicles, building access or storage in an area other than a basement area, for the purposes of this Chapter, is not considered a building's lowest floor, provided it conforms to applicable non-elevation design requirements, including, but not limited to:
 - (i) the well its engine mines about 18 per Section (16 % 0) (9/1/20 (8) (18)
 - (ii) the anchoring and constituction usite (3.8.25) methods (p. Section 16.10.070(f)(3)(ii)
 - (f)(5) and (f)(6).

For residential structures, all fully enclosed subgrade areas are prohibited as they are considered to be basements. This prohibits garages and storage areas that are below grade on all sides.

Definition added to conform to the FEMA model floodplain ordinance. Federal flood regulations require the lowest floor of residential structures in the floodplain to be elevated at least one foot above the base flood level as a flood mitigation measure.

- (mm2q) Manufactured home. A structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities. For floodplain management purposes the term "manufactured home" also includes park trailers, travel trailers and other similar vehicles placed on a site for greater than 180 consecutive days.
- (nn2r) Manufactured home park or subdivision. A parcel (or contiguous parcels) of land divided into two or more manufactured home lots for sale or rent.
- (2s) Mean Sea Level. The National Geodetic Vertical Datum (NGVD) of 1929, or other measurement, to which base flood elevations shown on a community's Flood Insurance Rate Map are referenced.

Definition added to conform to the FEMA model floodplain ordinance.

- (ee2t) <u>Multiple-residential structure</u>. A single structure containing four or more individual residential units.
- (pp20) Natural disaster. Any situation in which the force or forces of nature causing destruction are beyond the control of people.
- New Construction. For the purposes of Sections 16.10.070(f), (g), and (h), structures for which the start of construction commenced on or after April 15, 1986, including any subsequent improvements to such structures.

Definition added to conform to the FEMA model floodplain ordinance.

- (#200) Non-essential public structures. Public structures which are not integral in providing such vital public services as fire and police protection, sewer, water, power and telephone services.
- (2x) Obstruction. Includes, but is not limited to, any dam, wall, wharf, embankment, levee, dike, pile, abutment, protection, excavation, channelization, bridge, conduit, culvert, building, wire, fence, rock, gravel, refuse, fill, structure, vegetation or other material in

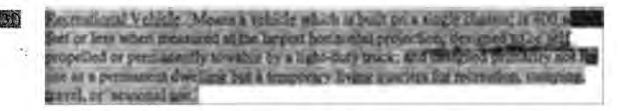
along, across, of projecting marany watercourse which may alter, impede, retain or change the direction and/or velocity of the flow of water, snare of collect debris, can be be the flow of water, or is likely to be carried downstream.

Definition added to conform to the FEMA model floodplain ordinance.

One-hundred year flood. A flood that statistically could occur once in 100 years on the average, although it could occur in any year. For flood insurance purposes one-hundred year flood and base flood have the same meaning.

Definition added to conform to the FEMA model floodplain ordinance.

- (se.2) <u>Planning Director</u>. The Planning Director of the south of the authorized employee.
- (# Public facilities. Any structure owned and/or operated by the government directly or by a private corporation under a government franchise for the use or benefit of the community.
- (uu 16) Recent. A geologic feature (fault or landslide) which shows evidence of movement or activity within Hologic improvement the last 10,000 years.)
- (*** Registered geologist. A geologist who is licensed by the State of California to practice geology.
- (www.) Registered George (Soils) Engineer. A civil engineer licensed in the State of California, experienced in the practice of soils and foundation engineering.
- S. C. Control of the Control of the

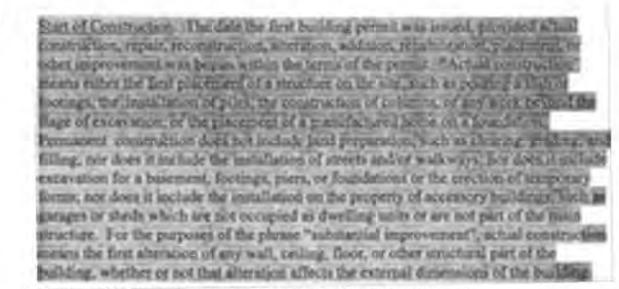


Definition added to conform to FEMA model floodplain ordinance.

- (xx) Shoreline protection structure. Any structure or material, including but not limited to riprap or a seawall, placed in an area where coastal processes operate., and constructed for the purposes of protecting a structure, road, utility or transmission lines.
- (yy) Soils investigation. A report prepared by a registered soils engineer, hired by the applicant, and completed in accordance with the County Soils Report Guidelines.

This term is synonymous with the term geotechnical investigation.

(3i) Special Flood Hazard Area (SFHA). See Area of Special Flood Hazard.



Definition added to conform to the FEMA model floodplain ordinance.

(z3k) Structure. means Anything constructed or erected which requires a location on the ground, including, but not limited to, a building, manufactured home, gas or liquid storage tank, or facility such as a road, retaining wall, pipe, flume, conduit, siphon, aqueduct, telephone line, electrical power transmission or distribution line.

Definition revised to conform to the FEMA model floodplain ordinance.

(31) <u>Substantial Damage</u>. Damage of any origin, sustained by a structure whereby the cost of restoring the structure to its before-damaged condition would equal or exceed 50 percent of the market value of the structure as it existed before the damage occurred.

Definition added to conform to the FEMA model floodplain ordinance. This definition makes it clear that any repair to a structure in the flood hazard area that is damaged more than 50 percent, must, by definition, meet FEMA rebuilding standards.

(aaa)

(3i)

(3m)

Substantial Improvement. means Any repair, reconstruction, rehabilitation, addition, alteration or improvement to a structure, or the cumulative total of such activities as defined in Section 16.10.040(r), the cost of which equals or exceeds 50 percent of the market value of the structure either immediately prior to the issuance of the building permit. before improvement or repair is started, or if the structure has been damaged and is being restored before the damage occurred. For the purposes of this definition,

"substantial improvement" is considered to occur when the first alteration of any wall, eeiling, floor or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure. This term includes structures that have incurred substantial damage teganiles to be actual repair work proposed of performed. This term does not include either any project or portion of a project for upgrading to upgrade an existing habitable structure to comply with existing durrent state or local health, sanitary, or safety code specifications which are solely incumination necessary to assure safe living conditions, any alteration of a structure listed on the National Register of Historic Places or a State—Inventory of Historic Places at a resolution of a structure, provided that the alteration will not preclude the structure's continued designation as an historic structure. [See also Cumulative Improvement) (Ord. 4080, 9/11/90)

Definition revised to conform to FEMA model floodplain ordinance, and to include the tracking of cumulative improvements performed over time. The concept of substantial improvement applies only to projects in the flood hazard area.

- Sub-surface geologic investigation. means A geologic report prepared by a registered geologist Certified Engineering geologist that provides information on sub-surface materials through trenching, test pits and borings. (Ord. 3340, 11/23/82; 3598, 11/6/84; 3892, 3/15/88; 3997, 6/6/89)
- 1860. (1220) E. Policia de Constanti de Caractina (1861).
- Miolation. The failure of a structure or other development to be fully compliant with the Chapter. A structure or other development without the elevation certificate, other certifications or required permits, or other evidence of compliance required in this Chapter is presumed to be in violation until such time as the required documentation has been provided.
- Wistercourse. A lake, river, otypk, organi, \$100, antitio, and other loods which feature cover which waters flowed broad periodically. Wistercourse includes appeal featly designated mass in which substantial flood darmon may began

Definitions 30, 3p, and 3q added to conform to the FEMA model floodplain ordinance.

16.10.050 REQUIREMENTS FOR GEOLOGIC ASSESSMENT

All development is required to comply with the provisions of this Chapter, specifically including but not limited to, the placement of manufactured homes in the areas designated as SFHAs in the Flood Insurance Study.

Section added to conform to the FEMA model floodplain ordinance.

(a) (b) Hazard Assessment Required. A geologic hazards assessment shall be required for all development activities and applications in the following designated areas: fault zones, landslide review zones, one-hundred year floodplains and floodways, and coastal hazard areas, except: as specified in subsections (b) (c) and (e) and (e), where a full geologic report will be prepared according to the County Guidelines for Engineering Geologic Reports, or where the County Geologist finds that there is adequate information on file. A geologic hazards assessment shall also be required for development activities requiring discretionary permits—which are located on slopes greater than 30 percent and development activities located in other areas of geologic hazard, as identified by the County Geologist or designee, using available technical resources, from environmental review, or from other field review.

The additional exceptions will streamline review by allowing projects that will need indepth studies by private consultants to proceed without first having a Geologic Hazard Assessment prepared.

(b) (c) Geologic Report Required. A preliminary geologic report shall be required for development applications for single-family dwellings in the Alquist-Priolo special studies zones.

The Preliminary Geologic Report, prepared by an outside consultant on contract to the Planning Department, has been eliminated. Single family dwellings in the fault zones can be more efficiently reviewed as part of the geologic hazard assessment process.

A full geologic report shall be required:

- 1. For all proposed land divisions and critical structures and facilities in the areas defined as Earthquake Fault Zones on the state Alquist-Priolo-special studies zones Eathquake Fault Zoning Act maps,
- 2. Whenever a significant potential hazard is identified by a geologic hazards assessment.

Language added for consistency with General Plan policy 6.1.3. No change to current practice.

A full geologic report and soils investigation shall be required. For all new reservoirs to serve major water supplies,

and-Prior to the construction of any new critical structure or facility in designated fault zones, An appropriate technical report (geologic, soils, and/or engineering) shall be required for road reconstruction of both public and private roads where landslides have occurred.

By deleting this language the requirement for technical reports for road reconstruction after landslide damage is changed from a blanket requirement to one that will apply only when a potential hazard exists, per 16.10.050(b).



New language codifies the existing policy that, when a property has been identified as unsafe pursuant to Chapter 12.10.070(l), the risks to health and safety are severe enough that new approvals should not precede preparation of the geologic report and mitigation of the hazard.

- (d) Retential Liquefaction Area. A full geologic report or soils report (as determined by the Planning Director) A site specific towes beating by a Certained Expressing Geologic and/or soil cogineer shall be required for all development applications for more than four residential units and for structures exact than one store in areas of high or very high liquefaction potential. Such a report shall also be required for residential development proposals of four units or less and non-residential projects where a significant liquefaction hazard is identified through environmental review. Development applications for four units or less, one story structures and non-residential projects shall be reviewed for liquefaction hazard through environmental review and/or geologic hazards assessment. When a significant hazard may exist, a site specific investigation shall be required.
- (e) Additional Report Requirements. Additional information (including but not limited to full geologic, subsurface geologic, hydrologic or soils required or other engineering investigations and reports) shall be required when a significant hazard or foundation requiring further investigation is identified. by the Planning Director as a result of the geologic hazards assessment, preliminary geologic report, full geologic report or environmental review of a development application. (Ord. 3340, 11/23/82; 3598, 11/6/84)

16.10.060 ASSESSMENT AND REPORT PREPARATION AND REVIEW.

(a) Timing of Geologic ReviewSubmittal requirements. Any required assessment, geologic, soil, or other technical report shall be completed, reviewed and accepted pursuant to the provisions of this section Prior to before any public hearing is scheduled and before any discretionary or development application is approved or issued. ‡The County Geologist may agree to defer the date for completion, review, or acceptance of any assessment or technical report where the technical information is unlikely to significantly affect the size or location of the project, but in no event shall such be deferred until after the approval or issuance of a building permit., approval or issuance of a development permit for a project requiring a geologic assessment or report.

Adds flexibility to the permit process by allowing the geologic and soil report review to occur after the discretionary approval, but before the building permit.

- 1. An application for a geologic hazards assessment or a preliminary geologic report shall include a plot plan showing the property boundaries and location of proposed development activities. Any other information deemed necessary by the County Geologist (including but not limited to topographic map, building elevations or grading plans) shall be submitted upon request.
- 2. An application for a geologic hazards assessment or a preliminary geologic technical report review constitutes a grant of permission for the Planning Director, or agents, to enter the property to the Planning Director and his or her designees for the purposes of administering this chapter responding to the application.
- (b) Report Preparation. The geologic hazards assessment shall be prepared by the County Geologist staff; the preliminary geologic report shall be prepared by a certified engineering geologist on contract with the County. Either Alternately, the assessment or report may be conducted by a registered private Certified Engineering Geologist at the applicant's choice and expense. Such reports privately prepared assessments shall, however, be subject to acceptance review and approval as specified in this section.
- (c) Report Acceptance. All geologic, geotechnical, engineering, and hydrologic reports or investigations submitted to the County as a part of any development application shall be found to conform to County report guidelines by the County Geologist. Where significant complexity of technical issues exists, the report shall be reviewed for adequacy by the County Geologic Advisor. The Planning Director may require an inspection in the field of all exploratory trenches, test pits, and borings excavated for a full geologic technical report.

Now that there is a Certified Engineering Geologist on staff it is no longer necessary to provide outside review service. This is streamlines the geologic report review process.

(d) Hazard Assessment or and Report Expiration. A geologic hazards assessment and all recommendations and requirements given therein, shall remain valid for three years from the date of completion unless a shorter period is specified in the report by the preparer preliminary geologic report, or a full geologic report shall be valid and all assessment or report requirements recommendations therein shall remain in effect for three years from the date of completion of the report review or report except. The statement of the large where a change in site conditions, development proposal, technical information or County policy significantly affects and thus invalidates the technical data, analysis, conclusions or requirements of the assessment or review or report; in which ease the Planting Director may require a new or revised assessment or review or report. (Ord. 3340, 11/23/82; 3598, 11/6/84)

Clarification of expiration dates for geologic reviews. No change to current practice.

16.10.070 PERMIT CONDITIONS

The recommendations of the geologic hazards assessment, preliminary geologic report, full geologic report, and of the recommendations of other technical reports (if evaluated and authorized by the Planning Director), shall be included as permit conditions of any permit or subsequently issued for the development -activity. In addition, the requirements enumerated described below for specific geologic hazards shall become standard conditions for development, building and land division permits and approvals. conditions and No development, building and land division permits or approvals shall be issued, and no final bass or parcel maps shall be recorded, unless such activity is in compliance with the requirements specified in a this section.



This provision allows non-habitable structures to be released from geologic review because it requires any subsequent conversion to habitable use to be subject to geologic review. This focuses geologic review efforts on habitable structures and simplifies the permit process for non-habitable structures.

(a) Fault Zones.

- 1. <u>Location</u>: New Development shall be located away from potentially hazardous areas as identified by the geologic hazards assessment, preliminary geologic report or full geologic report, and
- 2. Setbacks: Residential Habitable structures shall be set back a minimum of fifty feet from the edge of the area of fault induced offset and distortion of active and potentially active fault traces. This setback may be reduced to a minimum of twenty five feet from the edge of this zone, based upon paleoseismic studies that include observation trenches. Reductions of the required setback may only occur when both the consulting engineering geologist preparing the study and the County Geologist observe the trench and concur that the reduction is appropriate. and Critical structures and facilities shall be set back a minimum of one-hundred feet from the edge of the area of fault induced offset and distortion of active and potentially active fault traces.

Revised to reflect current geologic and geotechnical research and practice. Instead of an automatic setback of 50 feet from a fault trace, it is more appropriate that the setback be determined by the characteristics of the particular fault system and the site in question. Where the area of fault rupture and distortion around a fault is narrow, the setback may be reduced by the County Geologist, based on geologic information from the site. This revision adds flexibility without increasing risk.

3. Notice of Hazards: The developer and/or subdivider of a parcel or parcels in an area of known geologic hazards shall be required, as a condition of development approval and building permit approval, to record a Declaration of Geologic Hazards with the County Recorder. The Declaration shall include a description of describing the hazards on the parcel, and the level of prior geologic and/or geotechnical investigation conducted.

Language added for consistency with General Plan policy 6.1.3

4. Other Conditions: Other permit conditions, including but not limited to project redesign, elimination of building sites, and the delineation of building envelopes development envelopes, building setbacks and foundation requirements, shall be required as deemed necessary by the Planning Director.

(bc) Groundshaking

1. New Dams: New Dams shall be constructed according to high seismic design standards of the Dam Safety Act and as specified by structural engineering studies.

- 2. Public is actioned and Control Structures and facilities: All new public facilities and critical structures shall be designed to withstand the expected groundshaking during the design earthquake on the San Andreas fault or San Gregorio fault—where appropriate.
- 3. Other Conditions: Other permit conditions including but not limited to structural and foundation requirements shall be required as deemed necessary by the Planning Director.

(ed) High Liquefaction Potential Areas.

- 1. Permit Conditions: Permit conditions including, but not limited to, project redesign, elimination of building sites, building envelopes defineation of development professions and drainage and foundation requirements shall be required as deemed necessary by the Planning Director.
- 2. Notice of Fazards: The developer and/or subdivider of a parcel or parcels in an area of known geologic hazards shall be required to record a Declaration of development approval and reading permit approval, to record a Declaration of Geologic Hazards with the County Recorder. The Declaration and a description of describing the hazards on the parcel, and the level of prior geologic and/or peorechnical investigation conducted.

(de) Slope Stability

- 1. **Location**: All development activities shall be located away from potentially unstable areas as identified through the geologic hazards assessment, preliminary geologic report, full geologic report, soils report or many environmental assessment.
- 2. Creation of New Parcels Allow the creation of new parcels, including those ereated by minor land division or subdivision, in areas with potential slope instability as identified through a geologic hazards assessment, preliminary geologic report, full geologic report, soils report or attended environmental or including assessment only under the following circumstances:
 - (i) new building sites—and—,access roadways—and driveway shall not be permitted on states slopes exceeding thirty (30) percent grade.

Revised to be consistent with General Plan policies 6.3.1 and 6.3.9.

- (ii) A full geologic report and any other appropriate technical report shall demonstrate that each proposed parcel contains at least one building site and access which are not subject to the reasonable, significant or unsafe slope instability hazards, and that public utilities and facilities such as sewer, gas, electrical and water systems can be located and constructed to minimize landslide damage and not cause a health hazard.
- (iii) new building sites shall not be permitted which would require the construction of engineered protective structures such as retaining walls, diversion walls, debris walls or slough walls designed to mitigate potential slope instability problems such as debris flows, slumps or other types of landslides.
- 3. <u>Drainage</u>: Drainage plans designed to direct runoff away from unstable areas (as identified from the geologic hazards assessment or other technical report) shall be required. Such plans shall be reviewed and approved by the County Geologist.
- 4. <u>Leach Fields</u>: Septic leach fields shall not be permitted in areas subject to landsliding as identified through the geologic hazards assessment, environmental assessment, preliminary geologic report or full geologic report.
- 5. Road Reconstruction: Where washouts or landslides have occurred on public or private roads, road reconstruction shall meet the conditions of appropriate geologic, soils and/or engineering reports and shall have adequate engineering supervision.
- 6. Notice of Hazards: The developer and/or subdivider of a parcel or parcels in an area of known geologic hazards shall be required to record a Declaration of Geologic Hazards with the County Recorder. The Declaration shall include a description of describing the hazards on the parcel, and the level of prior geologic and/or geotechnical investigation conducted.
- 7. Other Conditions: Other permit conditions including but not limited to project redesign, building site elimination and the development of building and septic system envelopes, building setbacks and foundation and drainage requirements shall be required as deemed necessary by the Planning Director.

(ef) Floodplains

1. <u>Critical and Public Facilities</u>: Critical facilities and nonessential public structures and additions shall be located outside of the one-hundred year floodplain unless such facilities are necessary to serve existing uses, there is no other feasible location

and construction of these structures will not increase hazards to life on property within or adjacent to the floodplain.

- 2. <u>Creation of New Parcels</u>: Allow the creation of new parcels including those created by minor land division or subdivision in the one-hundred year floodplain only under the following circumstances:
 - (i) A full hydrologic report and any other appropriate technical report must demonstrate that each proposed parcel contains at least one building site inchicus. State system and call lide site which is not subject to flood hazard, and that public utilities and facilities such as sewer, gas, electrical and water systems can be located and constructed to minimize flood damage and not cause a health hazard.
 - (ii) A declaration indicating the limits and elevations of the one-hundred year floodplain certified by a registered professional engineer or surveyor must be recorded with the County Recorder. (Ord. 3635, 3/26/85)
 - (iii) Atakanshe arangayaka residuse ekiniskinse (dévérie sezángk munitarie jakansten
 - Preliminary land division propositis that Delember all delember and the elevation of the base flood.
- 3. Development structure and Design Requirements: All new development and substantial improvements within the 100-year floodplain shall meet the following criteria. Any addition, repair, reconstruction, renabilitation, alteration, or improvement of structures for which building permits were issued prior to April 15, 1986, when subject to the definition of "cumulative improvement", does not meet the definition of "substantial improvement" (pursuant to Section 16.10.040(r) and (3m)), is exempt from this section.

Sections 2 and 3 revised to conform to the FEMA model floodplain ordinance.

In Section 3, the added language makes a distinction between structures that had building permits issued prior to 1986, the year the FEMA flood maps and regulations were first adopted, and those that were issued after 1986. In the case where a structure received a permit after 1986, almost ANY improvement project now must comply with FEMA flood regulations (most notably, the elevation requirement). Previously, only projects that were considered "substantial improvement" had to comply. The fact that any post-1986 structure should already meet the regulations (since it was built after the first adoption of the FEMA maps and regulations) minimizes the impact of this change. However, it is still

the case that some very small projects such as repairs, alterations, etc., will trigger the requirement to meet the federal regulations.

- (i) location of proposed structures outside of the one-hundred year floodplain when a buildable portion of the property exists outside the floodplain;
- (ii) anchoring of foundations and the structures attached thereto to them by a method adequate to prevent flotation, collapse and lateral movement of the structures due to the forces to which they may be subjected that may occur during the base flood, including hydrostatic and hydrodynamic loads and the effects of buoyancy.

A project involving a manufactured home shall achieve this by one of the following methods:

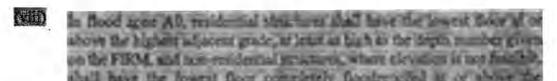
- (A) by providing an anchoring system designed to withstand horizontal forces of 15 pounds per square foot and up lift forces of 9 pounds per square foot; or,
- (B) by the anchoring of the unit's system, designed to be in compliance with the Department of Housing and Development Mobile Home Construction and Safety Standards.
- (iii) shall be constructed with materials and utility equipment resistant to flood damage and using construction methods and practices that minimize flood damage;
- shall be constructed with electrical, heating, ventilation, plumbing and air conditioning equipment and other service facilities that are designed and/or located to prevent water from entering or accumulating within the components during conditions of flooding;

Sections iii and iv added to conform to the FEMA model floodplain ordinance. No change to current practice.

(iiiv) In flood zones A-O and A-H, provide adequate drainage paths adequate to guide water away from structures and to reduce exposure to flood hazards. (Ord. 4071, 7/17/90)

Flood zones A-O and A-H are FEMA designations for areas where shallow flooding of one to three feet is expected during the 100 year flood.

- 4.(1) The residual specific points as the lowest habitable floor, including the basement, and the top of the highest horizontal structural member (joist or beam) which provides support directly to the lowest habitable floor, and all elements that function as a part of the structure, such as furnace, hot water heater, etc., shall be elevated above the one-hundred year flood level. Foundations shall be designed to minimize flood water displacement and flow damage. Where a piling or caisson foundation system is used the space below the lowest habitable floor shall be free of obstruction or be enclosed with woodconstructed lattice work or screens designed to collapse or be carried away under the stress of flood waters without jeopardizing the structural support Compliance with the elevation requirement shall be of the building. certified by a registered professional engineer, architect, or surveyor and submitted to the Planning Director prior to a subfloor building inspection. Failure to submit elevation certification may be cause to issue a stop work notice for a project. The Planning Director will maintain records of compliance with elevation requirements
- 5. Non-residential structures shall be floodproofed if elevation above the one-hundred year flood level in accordance with section 16.10.070(f)3(vi) is not feasible. Floodproofed structures shall:
 - (IA) be floodproofed so that below in the structure is watertight with walls substantially impermeable to the passage of water based on structural designs, specifications and plans developed or reviewed by a registered professional engineer or architect;
 - be capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and,
 - be certified by a registered professional engineer or architect that floodproofing standards and requirements have been complied with; the certification shall be submitted to the Planning Director and shall indicate the elevation to which floodproofing was achieved prior to a final building inspection. The Planning Director shall mission floodproofing requirements.



highestadjacent grade, at least as high as the depth number given on the FIRM.

Section added to comply with the FEMA model floodplain ordinance. No change to current practice.

- Require, for all new construction and substantial improvements that f Fully enclosed areas below the lowest floor that are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls allowing for the entry and exit of flood waters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect, or meet or exceed the following minimum criteria: shall provide (I) Either a minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided. The bottom of all openings shall be no higher that one foot above grade. Openings may be equipped with screens, louvers, valves or other coverings or devices provided that they permit the automatic entry and exit of flood waters; or Non-residential structures that are floodproofed in compliance with Section 16.10.070(f)(3)(vii) are an exception to this requirement.
- (ii) Be certified to comply with a local floodproofing standard approved by the Federal Insurance Administration.
- 7: Manufactured homes and additions to manufactured homes shall be anchored to resist flotation, collapse or lateral movement by one of the following methods:
 - (i) by providing an anchoring system designed to withstand horizontal forces of 15 pounds per square foot and up lift forces of 9 pounds per square foot; or,
 - (ii) by the anchoring of the unit's system, designed to be in compliance with the Department of Housing and Development Manufactured Home Construction and Safety Standards.

Standards regarding anchoring of manufactured homes moved to Section 3(ii) for clarity.

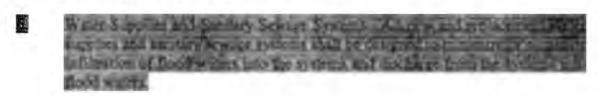
Recreational Vehicles: R.V's that are placed on a site that is within the A, A1-A30, AH, AO or AE zones as designated in the FIS, and that are not fully licensed and highway ready, shall meet the criteria given in 16.10.070(f)(3)(ii) and (3)(vi), unless they are on the site for less than 180 consecutive days. For the purposes of this ordinance, "highway ready" means on wheels or jacking system, attached to the site

by quick assembly sale in this should be unit they can be additions.

Section added to conform to the FEMA model floodplain ordinance.

85. Septic Systems Septic systems and leach fields shall not be located within the one-hundred year floodplain. Repair of existing systems that are located in the 100 and floodplain and be slowed with the approval of the County Health Officer.

The additional language brings 16.10 into conformance with the Environmental Health Services policies, which allow systems that are in the floodplain to be repaired or completely replaced at another location in the floodplain if the system is failing and there is no alternative location available.



Provisions #5 and #6 implement FEMA regulations regarding sewage disposal.

Placement of fill: Allow the placement of fill within the one-hundred year floodplain in the minimum amount necessary, not to exceed 50 cubic yards. Fill shall only be allowed if it can be demonstrated through environmental review that the fill will not have cumulative adverse impacts.

Streamlines the permit process by evaluating the effects of fill in the floodplain at the staff level rather than requiring environmental review.

- 108. Lead Control Structures: Flood control structures shall be permitted only to protect existing development (including agricultural operations) where no other alternative is feasible or where such protection is needed for public safety. Such structures shall not adversely affect sand supply, increase erosion or cause flooding on adjacent properties or restrict stream flows below minimums necessary to maintain fish and wildlife habitats or be placed further than necessary from the development requiring protection.
- 119. Notice of Flavoria: The developer and/or subdivider of a parcel or parcels in an area of known geologic or flood hazards shall be required, as a subdivider of development approval, to record a Declaration of Geologic Hazards with the County Recorder. The Declaration shall menute a description of the developer and/or subdivider of a parcel or parcels in an area of known geologic or flood hazards shall be required, as a subdivider of the developer and/or subdivider of a parcel or parcels in an area of known geologic or flood hazards shall be required, as a subdivider of the developer and the developer and the developer and/or subdivider of the develope

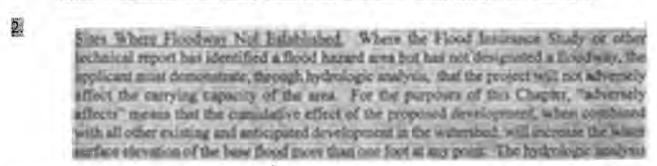
describing the hazards on the parcel or parcels and the level of prior hydrologic or geologic investigation conducted.

- 1210. Other Conditions: Other permit conditions, including but not limited to, project redesign, building site elimination, development of building and septic envelopes, and foundation requirements shall be required as deemed necessary by the Planning Director. When base flood elevation data are not provided in the Flood Insurance Study, the Planning Director shall obtain, review, and reasonably utilize the best base flood data available from Federal, State or other sources, as a basis for elevating residential structures and floodproofing non-residential structures, to at least one foot above the base flood level. Residential structures shall be elevated no less than two (2) feet above natural grade when base flood data do not exist. Non-residential structures may elevate or flood proof to meet this standard.
- 1311. Alteration or Relocation of Watercourse: Adjacent communities, the California Department of Water Resources and the Federal Emergency Management Agency shall be notified prior to any alteration or relocation of a major watercourse. The flood carrying capacity of any altered or relocated watercourses must be maintained.
- 1412. Permit Requirements: All other required state and federal permits must be obtained.

(fg) Permit Conditions - Floodways

Located within areas of Special Flood Hazard as established in 16.10.025, and within some areas not mapped as part of the Flood Insurance Study, are areas designated as floodways (see also 16.10.040 2d). The floodway is an extremely hazardous area due to the quantity and velocity of flood waters, the amount of debris which may be transported, and the high potential for erosion during periods of large stream flows. In the floodway the following provisions apply:

1. Development and Building Within Floodway Prohibited: All development activity, except for the reconstruction, repair, alteration or improvement of an existing structure, is prohibited within the floodway unless exempted by State or Federal laws. Any encroachment which would cause any increase in the base flood level is prohibited.



Proposed Amendments to Chapter 16.10 January 13, 1999 must identify the boundaries of the floodway, and the project must comply with the provisions of Section (g)1, above.

Section added to comply with FEMA model floodplain ordinance. The new language does not change the current practice.

setback from Floody at H Where neither a Set Hevanian or a floodway is not has been identified by the Flood Insurance Study or by a site special extrologic study, a minimum setback of 20 feet from the fop edge of the banks of a watercourse drainage course shall be maintained, and all development activities along a good storage area within the floodway are setback shall be prohibited. This floodway setback may be reduced by the Planning Director only if a full geologic, hydrologic and/or other appropriate technical report analysis demains in boundaries at the Rossian demonstrates that a smaller setback will not increase the susceptibility of the proposed development activity to flood related hazards, and there is no alternative location outside of the 20 foot setback. (See also Chapter 16.30, Riparian Protection, for vegetation related setbacks from streams.)

Clarifies setbacks from the floodway.

- Location of Septic Systems. New septic systems and leach fields shall not be located in the floodway. Repair of existing systems that are located in the floodway may be allowed with the approval of the County Health Officer.
- 35. Attention of Single 10 Hoodway: Reconstruction, repair, alteration or improvement of a structure in a floodway shall not cause any increase in the base flood elevation. Substantial improvements, regardless of cause, shall only be permitted in accordance with Section 16.10.070(f), above. Repair, reconstruction, alteration, or replacement of a damaged structure which does not exceed the ground floor square area of the structure before the damage occurred shall not be considered an increase in the base flood elevation.
- Permit Requirements All State Manufectured (1982), State and Tedeog Permits Bustops obtained.
- (gh) Coastal Bluffs and Beaches:
 - 1. Setteria in Areas Spirices of Coastal Bluel Freston: New development Profess in areas subject to coastal bluff erosion shall meet the following criteria:
 - (i) for all-development and for non-habitable structures, demonstration of the stability of the site, in its' current, pre-development application conditions

for a minimum fifty year lifetime of 100 years as determined from a technical report by either a geologic hazards assessment or a full geologic report.

Throughout this section the 50 year lifetime is changed to 100 years for consistency with General Plan policy 6.2.12.

(ii) for all development, including that which is cantilevered, and for non-habitable structures, a minimum setback shall be established at least 25 feet from the top edge of the coastal bluff, or alternatively, the distance necessary to provide a stable building site over a 100-year lifetime of the structure, whichever is greater, for all development activity (including pools), and greater setback, based on site conditions, if required by the hazards assessment or geologic report (Ord. 4346, 12/13/94);

Section revised conform to General Plan policy 6.2.12.

(iii) a determination by the Planning Director based on the hazards assessment or geologic report that the long-term stability of the site is not dependent on shoreline protection structures. except on lots where both adjacent parcels are already similarly protected. The determination of the minimum setback shall be based on the existing site conditions and shall not take into consideration the effect of any proposed protection measures, such as shoreline protection structures, retaining walls, or deep piers.

Revised to conform to General Plan policy 6.12.12.

- foundation replacement and/or foundation upgrades that meet the definition of development per 16.10.040(s) and pursuant to 16.10.040(r), shall meet the setback described in Section 16.10.070(h)(1), except that an exception to the setback requirement may be granted for existing structures that are wholly or partially within the setback, if the Planning Director determines that:
 - a) the area of the structure that is within the setback does not e25% of the total area of the structure, OR
 - b) the structure cannot be relocated to meet the setback because of inadequate parcel size.

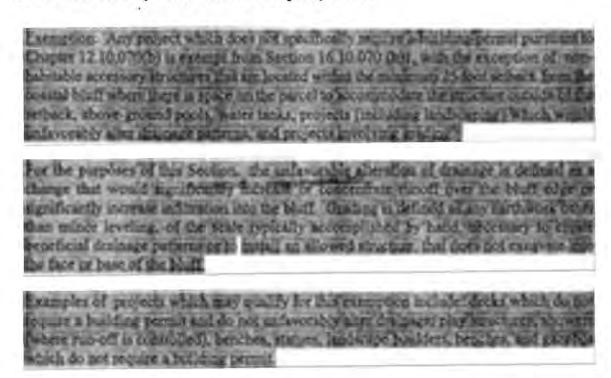
Section added to conform to General Plan policy 6.2.13.

(v) additions, including second story and cantilevered additions, shall comple with the minimum 25 foot and 100 year setback.

Section added to conform to General Plan policy 6.2.14.

- The developer and/or the subdivider of a parcel or parcels in an area subject to geologic hazards shall be required, as a condition of development approval and building permit approval, to recordation of a Declaration of Geologic Hazards with the County Recorder The Declaration shall include a description describing of the potential hazards on the site parcel and the level of prior geologic and/or percentage investigation conducted.
- (vi) approval of drainage and landscape plans for the site by the County Geologist.
- (whil) service transmission lines and utility facilities are to obtain a mission lines and utility facilities are to obtain the more presented as a contract of the contract o
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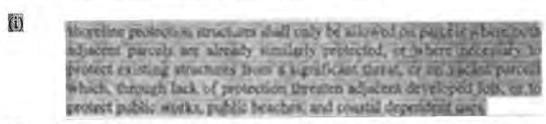
Section added to conform to General Plan policy 6.2.18.



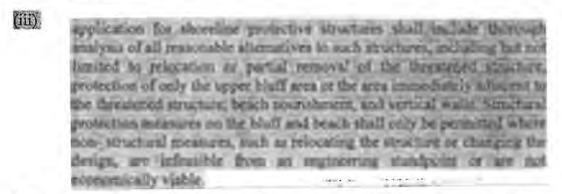
2

Additional language clarifies which types of materials and structures are allowed to be placed or constructed in the coastal bluff setback, and which are not. There are some very small projects that are not regulated by UBC; these projects do not require a building permit and are not normally reviewed by the Planning Department. For example, landscaping projects that include small soil mounds, sculptural rocks, benches and atgrade patios do not require any other permits or approvals. The additional language makes clear that these types of projects may be constructed within the setback as long as they do not involve more than minor grading (as defined) or adversely affect drainage.

2 3: Shoreline protection structures shall be governed by the following:



(ii) seawalls, specifically, shall only be considered where there is a significant threat to an existing structure and both adjacent parcels are already similarly protected.



- (iv) shoreline protection structures shall be placed as close as possible to the development or structure requiring protection.
- shoreline protection structures shall not reduce or restrict public beach access, adversely affect shoreline processes and sand supply, adversely impact recreational resources, increase erosion on adjacent property, create a significant visual intrusion, or cause harmful impacts to wildlife or fish habitat, archaeologic or paleontologic resources. Shoreline protection structures shall minimize visual impact by employing materials that blend with the color of natural materials in the area.

- (vi) all protection structures shall meet approved encineering standards a determined through environmental review:
- (Ni): all shoreline protection structures shall include a permanent. Course approved, monitoring and maintenance program.
- This All threat convert loved stained the parties of periods subting the fall terms

Section moved from later in the ordinance for more logical flow, and revised to conform with General Plan policy 6.2.16.

- Reconstruction of structures located on a coastal bluff which are damaged as a result of coastal hazards, and which sustained a loss exceeding 50 percent of their market value shall only be permitted in accordance with requirements of the geologic hazards assessment or geologic report and section i, ii, iv and v above. Where such damage is less than 50 percent of the market value of the structure, such repairs shall not be prohibited. Public beach facilities and damages resulting from non coastal related hazards, such as fire shall be exempt from the above provisions. The replacement of structures destroyed by natural disasters, except coastal landslides, are also exempt from the above provision if the proposed reconstruction:
 - (i) conforms with the existing zoning requirement;
 - (ii) is for the same use as the destroyed structure;
 - (iii) does not exceed the floor area, height or bulk of the destroyed structure by more than 10 percent;
 - (iv) is sited in the same location on the affected property as the destroyed structure;
 - (v) is accompanied by a recordation of a Declaration of Geologic Hazards with the County Recorder describing the potential geologic/coastal hazards on the site and level of prior investigation conducted.

4. Alteration of Damaged Structures. Reconstruction, repair, rebuilding, replacement, alteration, improvement, or addition to damaged structures located on a coastal bluff shall proceed according to the following chart:

Extent of	50% or more of the value of structure		Less than 50% of the value of structure.	
Cause of Damage (horiz, axis)	Coastal Hazards & Slope Instability	All Other Causes (fire, etc)	Coastal Hazards & Slope Instability	All Other Causes (fire, etc)
Location of Existing Structure (vertical axis)				
Existing Structure Meets Setback (less than 10% extends into setback)	Meet all regulations.	Exempt from regulations if repaired/replaced in kind. Otherwise meet all regulations.	Exempt from regulations if repaired/replaced in kind. Otherwise ineet all regulations.	Exempt from regulations if repaired/replaced in kind. Otherwise meet all regulations.
Existing Structure Does Not Meet Setback but Could by relocating.	Meet all regulations, including setback for existing structure.	To repair or replace in kind, meet all regulations except setback. Otherwise meet all regulations, including prescribed minimum setback.	Exempt from regulations if repaired/replaced in kind. Otherwise meet all regulations, including prescribed in inimum setback.	Exempt from regulations if repaired/replaced in kind. Otherwise meet all regulations including prescribed initimum setback.
Existing Structure Does Not Meet Setback and Cannot meet setback by relocating	If hazard can be mitigated to provide stability for a period of 100 years, repair or replace in kind. Meet all regulations except setback.	To repair or replace in kind, meet all regulations except setback. Otherwise meet all regulations, including prescribed minimum setback.	May repair or replace in kind. Hazards shall be mitigated to a level that provides stability for a period of 100 years, if feasible.	May repair or replace in kind. Hazards shall be mitigated to a level that provides stability for a period of 100 years, if feasible.
	Cannot be rebuilt even in kind, if hazard cannot be mitigated to a level that provides stability for a period of 100 years.		Projects in excess of "in-kind" shall meet all regulations.	Projects in excess of "in-kind" shall meet all regulations.

Public beach facilities are exempt from the provisions of this chart.

The revisions to Section #4 and the inclusion of the chart are for consistency with the General Plan policy 6.2.20.

Securifically including the placement of and construction on manufactured homes and substantial improvements shall meet the following criteria. For structures that had a building permit issued prior to Appl 15, 1986, any addition, repair reconstruction, rehabilitation, alteration or improvement, which, when subject to the definition of acumulative improvement, addes not meet the definition of substantial improvement; (pursuant to Sections 16, 10,040(a) and (3m)), is exempt from this section.

Revised to conform to the FEMA model floodplain ordinance. The added language makes a distinction between structures that had permits issued prior to 1986, the year the FEMA coastal hazard area maps and regulations were first adopted, and those that were issued after 1986. For the case where a structure received a permit after 1986, smaller projects now have to comply with FEMA coastal hazard regulations (most notably, the elevation and special foundation requirements) than was the case before the revision. This is because FEMA now includes almost size change to a post-1986 structure in the group that must meet the standards; previously, only projects that were considered "substantial improvement" were in this group. The fact that any post-1986 structure should already meet the regulations (since it was built after the first adoption of the FEMA maps and regulations) minimizes the impact of this change. However, it is still the case that some very small projects such as repairs, alterations, etc., will trigger the requirement to meet the federal regulations.

demonstration that the potential hazards on the site can be mitigated, as determined by the geologic hazards assessment or full geologic report and any other appropriate technical reports. Mitigations can include but are not limited to building setbacks, elevation of the proposed structure and utilization of a friction pier or deep eaisson foundation design;

Revised to conform with General Plan policy 6.2.15

- (ii) location of the proposed structure landward of the reach of mean high tide and outside of the area of storm wave inundation where a buildable portion of the property is outside of the area of storm wave inundation;
- (iii) elevation of all structures (including manufactured homes) on pilings and columns so that the bottom of the lowest structural member of the lowest floor (excluding the pilings or columns) and

- elements that function as part of the structure, such as furnace, hot water heater, etc., are elevated to or above the base flood level.
- (iv) anchoring of the pile or column foundation and structure attached thereto to prevent flotation, collapse and lateral movement due to the effect of wind and water loads acting simultaneously on all building components. Wind and water loading values shall each have a one percent chance of being equaled or exceeded in any given year (100-year mean recurrence interval);
- (v) a registered professional engineer or architect shall develop or review the structural design, specifications and plans for the construction, and shall certify that the design and methods of construction to be used are in accordance with accepted standards of practice for meeting the provisions of paragraphs (iii) and (iv) of this section prior to permit issuance;
- (vi) the space below the lowest floor shall either be free of obstruction or constructed with non-supporting breakaway walls, open wood lattice-work or insect screening intended to collapse under wind and water loads without causing collapse, displacement or other structural damage to the elevated portion of the building or supporting foundation system. For the purposes of this section, a breakaway wall shall be of non-masonry construction and have a design safe loading resistance of not less than ten (10) and no more than twenty (20) pounds per square foot. Use of breakaway walls which do not meet the above material and strength criteria may be permitted only if a registered professional engineer or architect certifies that the designs proposed will permit the breakaway wall to collapse under a water load less than that which would occur during the base flood and that the elevated portion of the building or supporting foundation system shall not be subject to collapse, displacement or other structural damage due to the effects of wind and water loads acting simultaneously on all building components. Such enclosed space shall be useable solely for vehicle parking, building access or storage, and shall not be a finished area or habitable area. used for human habitation and shall not exceed 300 square feet in area.

FEMA allows unlimited enclosed space as long as it is only used for parking, access, or storage.

- (vii) the use of fill for structural support of buildings is prohibited. (Ord. 4071, 7/17/90).
- (viii) the alteration of sand dunes which would increase potential flood damage is prohibited.

(ix) compliance with the provisions of paragraphs (iii) and (iv) above shall be certified by a registered professional engineer or architect and submitted to the Planning Director when the foundation work has been completed. Failure to submit elevation and structural certification may be cause to issue a stop-work notice for a project. The Planning director shall maintain certain the compliance with the devation requirements.



Added to conform to FEMA model floodplain ordinance. No effect on current practice.

- (xi) determination by the Planning Director on the basis of the geologic hazards assessment or geologic report that the mitigation of the hazards on the site is not dependent on shoreline protection structures except on lots where both adjacent parcels are already similarly protected.
- (xii) The developer and/or the subdivider of a parcel or parcels in an area subject to geologic hazards shall be required, as a condition of development approval and building permit approval, to record-ation of a Declaration of Geologic Hazards with the County Recorder The Declaration shall include a description describing of the protential geologic coastal hazards on the site parcel, and the level of prior records and/or geological investigation conducted.
- (xiii) All other required state and federal permits must be obtained. (Ord. 4071, 7/17/90)
- facilities, including the expansion of existing critical structures and facilities, and nonessential public structures shall be located outside areas subject to coastal hazards; unless such facilities are necessary to serve existing uses, there is no other feasible location, and construction of these structures will not increase hazards to life and property within or adjacent to coastal inundation areas.

- 5. Shoreline protection structures shall be limited to structures which protect existing residences and business or commercial structures, vacant lots which through lack of protection threaten adjacent developed lots, public works, public beaches, or coastal dependent uses. Structural protection measures shall be permitted only if non structural measures (i.e., building relocation or change in design) are infeasible from an engineering or economic standpoint. Seawall construction shall be considered only where a significant threat to an existing structure exists, where seawalls have been constructed on adjoining parcels and where rip rap would not adequately protect the structure. The protection structure shall be designed adequately to meet engineering standards based on the geologic hazards assessment or other detailed technical information. The protection structure shall not:
 - (i) reduce or restrict public beach access;
 - (ii) adversely affect shoreline processes and sand supply;
 - (iii) increase erosion on adjacent properties;
 - (iv) cause harmful impacts on wildlife and fish habitats;
 - (v) be placed further than necessary from the development requiring protection; or
 - (vi) create a significant visual intrusion.

This section moved to the Coastal Bluff and Beach section for more logical flow.

- 76. Creation of new Parcels and Location of New Building Sites: New parcels or building sites created by minor land divisions, subdivisions or development approvals or permits, and multi-residential structures in coastal hazard areas shall conform to the following criteria:
 - (i) demonstration by a full geologic report that each proposed building site on the parcel is not subject to any potential hazards and that each site meets the minimum setback given in 16.10.070(h)1, and the development as a whole will not subject persons to potential hazards;

Revised for consistency with General Plan policy 6.2.17.

(ii) determination by the Planning Director based on the geologic report that the long-term stability and safety of the development does not depend on or require shoreline protection structures;

determination through the environmental review process that the proposed development does not reduce or restrict public access and the proposed development does not require the construction of public facilities, structures, or service utility transmission structures lines in coastal hazard areas within the 25 foot of 100 year stability (whichever sepreater) setback;

Revised to be consistent with General Plan policy 6.2.17.

- (iv) The developer and/or the subdivider of a parcel or parcels in an area subject to geologic hazards shall be required; as a condition of development approval and building permit approval; to record-ation of a Declaration of Geologic Hazards with the County Recorder. The Declaration shall include a description describing of the potential hazards on the site parcel and the level of prior geologic and/or seetechnical investigation conducted.
- 7. Other permit conditions including, but not limited to, project redesign, building site elimination, development system envelopes, building elevation, foundation requirements and drainage plans shall be required as deemed necessary by the Planning Director. (Ord. 2088, 1/28/75; 2185, 9/23/75; 2258, 3/16/76; 2580, 8/8/78; 2631, 2/6/78; 3437, 8/23/83; 3598, 11/6/84; 3808, 4/15/86; 3892, 3/15/88; 3997, 6/6/89)

16.10.075 FOUNDATION DESIGN REQUIREMENTS IN GEOLOGIC HAZARD AREAS. Notwithstanding whether or not it constitutes "development" under the provisions of this Chapter, all any new or reconstructed foundations for habitable structures within designated seismic fault zones, 100 year flood plain, or coastal hazard area shall be designed by an engineer licensed by the State of California to perform structural calculations on buildings. (Ord. 4080, 9/11/90)

This section was inserted as part of an emergency ordinance amendment to ensure that foundations in geologic hazard areas would be engineered, even though other provisions of this ordinance were being modified to simplify the repair process for homes that were damaged by the Loma Prieta earthquake. The other special provisions that apply only to the Loma Prieta earthquake are being deleted; therefore this section that supports those special provisions is proposed for deletion as well. There is no net effect of removing this provision.

16.10.080 PROJECT DENSITY LIMITATIONS. The following requirements shall apply to density calculations for new building sites created through land division, subdivision, or other development approval or permit:

(a) Fault Zones

1. Exclusion from Density Calculations: The portion of a property within 50 feet of the edge of the area of fault induced offset and distortion of an active or potentially active fault trace shall be excluded from density calculations. Require a minimum 50 setback for all-residential structures and 100 setback for all-commercial, multi-residential structures, high occupancy, and critical-structures from active and potentially active fault traces.

Revised to reflect current geologic and geotechnical research and practice.

- 2. Creation of New Parcels and/or New Building Sites: Outside the Urban Services Line and Rural Services Line, a twenty gross acre minimum parcel size shall be required for the creation of new parcels within all State and County fault zones. The following standards shall apply to the creation of new parcels and/or building sites within State Alquist-Priolo Earthquake Fault Zones and County Seismic Review Zones:
- 3. In the State of County designated fault zones, the following density may be permitted:
 - (iii) All new structures shall Within the Urban Services Line and Rural Services Line, if building sites can be meet setbacks as specified in Section 16.10.070(b)2. set back 50 feet from active fault traces, the General Plan and Local Coastal Program Land Use designation shall serve as the controlling document for determining minimum allowable parcel sizes.
 - (ii) Outside of the Urban Services Line and the Rural Services line, a Twenty gross acre minimum parcel size shall be required. for the creation of new parcels. (A 50 foot fault trace setback is required in all cases, and no building shall be located on an active landslide.)

Sections 2 and 3 revised to conform to General Plan policy 6.1.12 and revised fault setback requirements in section 16.10.070(b)2.

(b) <u>Landslides and Steep Slopes</u>. The portion of a property with slopes over 30 percent in urban areas and 50 percent in rural areas, and the portion of a property within recent or active landslides, shall be excluded from density calculations. Landslide areas determined by a geologic report to be stable and suitable for development shall be granted full density credit.

- (c) <u>Floodways</u>. The portion of a parcel within the one-hundred year floodway shall be excluded from any density calculations.
- (d) <u>Floodplains</u>. The portion of a property within the one-hundred year floodplain shall be excluded from residential density calculations.

Revised to conform to General Plan policy 6.4.6.

- 2. A density credit of up to 50 percent of a property's acreage within the one-hundred year floodplain shall be allowed at the discretion of the Board of Supervisors for residential proposals, if the development proposal conforms to the following criteria:
 - (I) location within the Urban Services Line;
 - (ii) service by sewer;
 - (iii) existing similarly developed lots bordering the property;
 - (iv) proposal density no higher than the density of the surrounding area, or in the coastal zone, no higher than the density allowed by the Land Use Plan;
 - (v) proposal consistency with the character of the surrounding area;
 - (vi) determination by the County Geologist, based on the geologic hazards assessment, hydrologic investigation, or full geologic report, that the proposal will not cause adverse impacts on the upstream or downstream flooding.
- (e) <u>Coastal Hazards</u>. The portions of a property subject to coastal inundation, as determined by a geologic hazards assessment-or, geologic report, and the latest that the property of the subject to coastal inundation, as determined by a geologic hazards assessment-or, geologic report, and the latest that the latest
- 16.10.090 PROJECT DENIAL. A development permit or the location of a proposed development shall be denied if the Planning Director determines that geologic hazards cannot be adequately mitigated to within acceptable risk levels or the project would control with National Plood Insurance Program regulations. Development proposals shall be approved only if the project density reflects consideration of the degree of hazard on the site, as determined from the technical information as reviewed and approved by the Planning Director. (Ord. 3340, 11/23/82)

16.10.095 PERMITS FOR REPAIR OF EARTHQUAKE DAMAGED DWELLINGS AND ACCESSORY STRUCTURES WITHIN AREAS OF EARTHQUAKE RELATED GROUND FAILURE AND DESIGNATED SEISMIC HAZARD AREAS.

- Related Ground Failure. Notwithstanding any other provisions of this Chapter, a development permit for repair or reconstruction work constituting "development" under the provisions of this Chapter of dwellings and accessory structures within areas of ground failure outside the California Coastal Zone which were damaged as a result of the October 17, 1989 earthquake and its aftershocks may be approved even though there is an undetermined but potentially substantial risk from earthquake related ground failure, provided that:
 - (1) The Planning Director determines on the basis of a geologic assessment or report of the dwelling site that any potential risk associated with ground failure resulting from the October 17, 1989 earthquake (as documented in the geologic assessment or report) can only be evaluated by monitoring over time, and based on available information it does not appear to present a significant and immediate threat to life or of personal injury to persons residing on the subject property; and
 - (2) The Board of Supervisors has not determined that the area in which the dwelling is located is unsafe to occupy due to geologic hazards affecting the property; and
 - (3) The owner records a Declaration of Geologic Hazards with the County Recorder which describes the potential geologic hazards from any on-site or off-site geologic conditions, the level of prior geologic investigation conducted, and any geologic investigation in progress, and which includes agreement by the owner to assume all risks, waive all claims against the County. (Ord. 4048, 1/23/90; 4080, 9/11/90; 4149, 9/17/91; 4160, 12/10/91)
- (b) Repair and Reconstruction Not Requiring a Development Permit Within Areas of Earthquake Related Ground Failure. For repair and reconstruction of dwellings within areas of potential ground failure described in subsection (a) above for which no development permit is required under the provisions of this Chapter, the issuance of a building permit for such repair and reconstruction work shall be subject to proof of recordation of a Declaration of Geologic Hazards containing the information specified in paragraph (3) of subsection (a) above.
- (c) Repair and Reconstruction Not Requiring a Development Permit Within Designated Seismic Hazard Areas or on Parcels for Which a Geologic Report Has Been Prepared. For repair and reconstruction of dwellings within designated seismic hazard areas, or on any parcels for which a geologic report has been prepared, which does not require a development permit

under the provisions of this Chapter, the issuance of a building permit for such repair and reconstruction work shall be subject to proof of recordation of a Notice advising that a building permit is being obtained for repair of earthquake damage, the level of prior geologic investigation conducted, if any, and that the permit is being issued without any additional requirement for geologic review based on a determination that the repairs will not exceed 50 percent of the market value of the structure before it was damaged. (4080, 9/11/90; 4160, 12/10/91)

Section 16.10.095 was enacted as an emergency ordinance amendment to aid individuals in repairing homes damaged by the Loma Prieta earthquake. Nine years after the event, the short term recovery has been completed. Any unrepaired damages from the earthquake can be reviewed with standard procedures.

16.10.100 VARIANCE INCEDITIONS.

Revised to streamline the process by substituting the term "exception" for "variance" throughout this Section. "Variance" has specific meaning under California law. Government Code Section 65095 requires a public hearing for any application for a variance.

- (a) Request for Exception: A request for variance in exception to from the provisions of this chapter or the permit conditions may be considered by the Planning Director if the variance exception is necessary for repair or maintenance of erosion or landslide caused damages or if it can be demonstrated by geologic hazards assessment, geologic report or other technical information that the variance is necessary to mitigate a threat to public health, safety and welfare.
- (b) Reason for Request. A request for an variance exception shall state in writing the provision from which the variance reason why the exception is proposed fequested, the proposed substitute provisions, when the variance exception would apply, and its advantages the form of public health safety, or welfare that would be intigated.
- (c) As contemplated in this section, a variance shall be granted for alternative methods of construction for projects which could be constructed under the basic standards established in this chapter, but which, if a variance is granted, can be better and/or more economically designed and constructed than if a variance were not given. A variance shall not be granted if the variance would have the effect of allowing the construction of a project which would otherwise without the variance, not be possible under the provisions of the County Code.

Revised to remove Section (c), which is internally inconsistent, unnecessary, and confusing.

- (dc) Required Findings: In granting an variance exception, the Planning Director shall be guided by shall make the following findings:
 - 1. there are special circumstances or conditions affecting the property the that hardship, as defined in 16.10.040(2i), exists; and
 - 2. the project is necessary to mitigate a threat to public health, safety, or welfare:
 - the request is for the smallest amount of variance from the provisions of this Chapter as possible; and,
 - that adequate measures will be taken to ensure consistency with the purposes of this chapter and the County General Plan. (Ord. 3340, 11/23/82; 3598, 11/6/84)

Revised to require the Planning Director to make formal Findings, to incorporate the FEMA definition of "hardship", and to be consistent with Section (b).

- (d) Exceptions for projects in the Special Flood Hazard Area: For projects in the SFHAs the following additional procedures and provisions also apply:
 - Nature of enception. The exception order is set forth in this section of the endinance and based on the general principle of aroung law that properties portion for a parch of property and are not personal in nature. An exception may be greated for a parcel of property with physical characteristics so unusual that complying math the requirements of this ordinance would create an exceptional handship to the applicant or the surrounding property owners. The characteristics must be unuque for the property and not be shared by adjacent parcels. The unique characteristic must pertain to the land itself, not to the structure, its inhabitants, or the property involves.

The interest in protecting citizens from decoungris compelling, and the cost of invaring a structure built below flood level to interest that exceptions from the flood elevation or other health and safety requirements in the flood ordinance shall be granted in rare circumstances and poly-where no other alternative is available.

2. Criteria for exceptions.

- In considering requests for exceptions, technical evaluations, all other relevant information and standards specified in other sections of this Chapter shall be considered, including the following:
 - a. Danger that materials may be swept onto other lands to the injury of

others;

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- Susceptibility of the proposed structure and its contents to blood damage and the effect of such damage on the existing individual owner and future owners of the property:
- imporance an increase of the comment of the comment of the comments of the comments.
- A transmission of the second o
- A vailability of alternative locations for the proposed use, the second hot subject to flooding or erosion damage:
- e. Compatibility on chie manister was with baseing and land inner development.
- Relationship of the proposed use to the commence was the floodplain management program for that area:
- Safety of access to the purpose amounts of those to brothers and emergency vehicles:
- Expected heights, velocity, duration, rate of rise, and sections transport of the floodwater expected at the site; and
- Costs of providing powers with ferrors shows and should be continued to the continued of th
- Any applicant to whom a exception is granted shall be given written notice of the terms and conditions, if any, of the exception, and said notice shall also include the following:
 - That the immede of a exception to bombrack a structure below the base flood level will require in schalable ally belowing promining gates for thood inscrease up to another a Child in \$75 for \$100 grant belowing to covere or and
 - That such construction below the described length mercales assessed

c. That a copy of the written notice shall be recorded on the deed so that it appears in the chain of title of the affected parcel of land.

The Floodplate Administrator will maintain a record of all exognition actions, including partification for their exounters, and report such exceptions threed in its biretail is report submitted to the Federal Insurance Administration of of the Federal Insurance Administration of of the Federal Insurance Administration of the Insurance Insurance

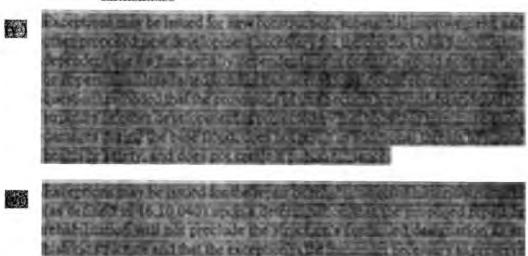
3. Conditions for exception.

- Exceptions may be issued for new construction, substantial improvement, and other proposed new development to be erected on a lot of one half acts or less in size continuous to and surrounded by lots and existing simulation points and below the base flood level, providing that the procedures of Sections 16 10 050, 16 10 070, and 16 10 080 of this ordinated hillywhere considered. As the lot size increases beyond one-half acre, the justification required for issuing the exception increases.
- (ii) Exceptions shall not be issued within any mapped regulatory floodway if any increase in flood levels during the base flood discharge would result from the project..
- Exceptions shall only be issued upon a determination that the exception is the financian increasing? considering the flood based, to lafford retted Minimum accessary? means to afford retted with a manifest of deviation from the requirements of this Chapter. For example, in the base of exceptions to an elevation requirement, exceptions need not be granted for permission for the applicant to build at grade, or even to whatever elevation the applicant proposes, but only to that elevation which will both provide retief and preserve the integrity of the proclass sy requirements.

(iv) Exceptions shall only be issued upon:

- Showing of good and sufficient cause;
- Determination that failure to grant the exception would result in a "hardship" (as defined in 16.10.040 of this ordinance) to the applicant; and
- Determination that the granting of an exception will not result in increased flood heights, additional threats to public safety, or extraordinary public expense; create a nuisance, cause fraud or

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Upon consideration of the factors in Section 16.10.100(d)2) and the purposes of this Chapter, conditions may be attached to the granting of exceptions as necessary to further the purposes of this Chapter.

Section 16.10.100 (d) is added to comply with the FEMA model floodplain ordinance. These special provisions apply only to Exceptions within the Special Flood Hazard Area.

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16.10.105 NOTICE OF GEOLOGIC HAZARDS IN CASES OF DANGEROUS CONDITIONS

(a) Whenever a geologic site inspection, geologic hazards assessment or full geologic report has disclosed identifies the presence of a geologic hazard that threatens life or property causes a site, building, structure, or portions thereof to be rendered unsafe or dangerous, then pursuant to the Uniform Code for the Abatement of Structural and Geologic Hazards as amended by subsection (I) of Section 12.10,070 of this Code, the Planning Director may decide to issue a Notice of Geologic Hazard and Order thereon, and may record a Notice of Geologic Hazard with the County Recorder. The Planning Director shall provide the owners of record of said parcels with (30) days written notice of the intention of the County to record a Notice of Geologic Hazards with the County Recorder and advise the owner(s) of a time, date and place at which the owner(s) may present evidence to the Planning Director why such Notice should not be recorded.

After the time specified in the notice of intention and after considering any evidence submitted by the owner(s) the Planning Director may cause to be filed for record with the County Recorder a Notice of Geologic Hazards specifying the names of the owners of record, and particularly describing the real property and the level of prior geologic investigation conducted and stating that the parcel(s) of land and/or structures so described is (are) subject to geologic hazards. In addition to the procedures for recording a Notice of Geologic Hazards,

(b) The Planning Director may initiate abatement procedures pursuant to the Uniform Code for the Abatement of Structural and Geologic Hazards as amended by Section 12.10.070(ahl) of the County Code. (Ord. 4336, 11/29/94; 4392A, 4/2/96)

The Uniform Code for the Abatement of Structural and Geologic Hazards, as amended by portions of Chapter 12.10.070, contains the procedures and due process provisions that apply to dangerous and unsafe sites and structures. The changes to this section revise 16.10 to be consistent with the Uniform Code by removing language that is conflicting or redundant.

16.10.110 APPEALS.

Except as otherwise provided herein, All appeals taken pursuant to the provisions of this chapter shall be made in conformance with the procedures of Chapter 18.10, including appeal of the requirement for geologic hazard assessment or technical report., provided, however, that aAll appeals taken concerning the decision to issue and record a Notice of Geologic Hazard pursuant to the provisions of Section 16.10.105 shall be governed by shall be made to the County's Hearing Officer in conformance with the procedures commencing with Section 501 of the Uniform Code For the Abatement of Structural and Geologic Hazards as amended by paragraphs 10 through 14 of

subsection (ah) of Section 12.10.070 of this Code. For this purpose, the procedures therein set forth are incorporated herein and made a part of this Chapter. (Ord. 2088, 1/28/75; 2281, 4/20/76; 3598, 11/6/84; 3808, 4/15/86; 4336, 11/29/94; 4392A, 4/2/96)

16.10.120 VIOLATIONS.

Compliance. No structure or land shall hereafter be constructed, located, extended, converted, or altered without full compliance with all the provisions of this Chapter and other applicable regulations. Nothing herein shall prevent the taking of lawful action as necessary to prevent or remedy any violation.

Added to conform to the FEMA model floodplain ordinance.

Actions Constituting Violation. In the event of a violation of this chapter or of the provisions of permit conditions as specified in this chapter, or if the permit has been exercised in a manner which creates a nuisance or is otherwise detrimental to the public health, safety and welfare, the permittee shall be given notice of such violation, and a reasonable time shall be specified for its correction. (Ord. 3340, 11/23/82; 3598, 11/6/84; 4392A, 4/2/96)

16.10.130 FEES. Fees for the geologic hazards assessment, preliminary geologic report other field reviews, applications for exceptions, and the review of technical reports by the County Geologic Advisor shall be set by resolution by the Board of Supervisors. (Ord. 3340, 11/23/82; 3598, 11/6/84; 3808)