CALIFORNIA COASTAL COMMISSION
SOUTH CENTRAL COAST DISTRICT
89 SOUTH CALIFORNIA ST., SUITE 200
VENTURA, CA 93001
(805) 585-1800

W11a

LCP-4-STB-20-0028-1 (COASTAL RESILIENCY)

AUGUST 26, 2021

EXHIBITS

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SUGGESTED MODIFICATIONS TO THE PROPOSED COASTAL LAND USE PLAN AMENDMENT LCP Amendment 4-STB-20-0028-1 (Coastal Resiliency)

Existing language of the certified Coastal Land Use Plan is shown in straight type. The County's proposed amendment language to the certified Coastal Land Use Plan is shown in ~~strikeout~~ and underline. Language recommended by Commission staff to be deleted is shown in ~~double strikeout~~. Language recommended by Commission staff to be inserted is shown in double underline.

SUGGESTED MODIFICATION NO. 1

The following policy of Section 3.2 Development shall be modified as follows:

Policy 2-17: ~~Use~~ All development shall use ~~of~~ flexible design concepts~~, including~~ (e.g., clustering of units~~,~~ and/or a mixture of dwelling types~~, etc.~~, setbacks) and flexible building design (e.g., flood proofing such as breakaway walls or elevated utilities) ~~shall be required~~ to accomplish ~~as much as possible all of~~ the following goals:

a. protection of the scenic qualities of the site;
b. protection of coastal resources~~, i.e.~~ (e.g., public access, water quality, habitat areas, and archaeological sites~~, etc.~~);
c. avoidance of siting ~~of~~ structures ~~on~~ within hazardous areas, including reasonably foreseeable coastal hazards from sea level rise if feasible, and otherwise to minimize risks to life and property in hazardous areas in compliance with all Local Coastal Program policies;
d. provision of public open space, recreation, and/or beach access;
e. preservation of existing healthy trees; and
f. provision of very low, low and moderate income housing ~~opportunities~~.

SUGGESTED MODIFICATION NO. 2

The following text of Section 3.3 Hazards shall be modified as follows:

3.3 HAZARDS

3.3.2 PLANNING ISSUES

Recent and historic events provide strong evidence of the vulnerability of certain coastal areas to natural hazards. Following saturating rains in the winter of 1978, large sections of the cliff face in Isla Vista fell into the sea, threatening several apartments; soil slippage caused a road washout in the community of Summerland; severe erosion occurred in graded areas above Summerland; several bluff top homes slid into the sea in the City of Santa Barbara; and flooding and heavy wave action damaged some homes along Miramar Beach. Also in 1978, an earthquake disrupted a rail line in the Ellwood area, produced numerous bluff slides and fissures along the South Coast, and caused considerable structural damage in the surrounding areas. These types of natural hazards along the County's coastline have continued to occur and are expected to increase with sea level rise. Recent significant events include bluff failure in Isla Vista and flash flooding in El Capitan Canyon in 2017 and the devastating debris flow and mudslides in Montecito in 2018.

The Coastal Act requires that the risks to new development from such occurrences be minimized. Moreover, it specifies that new development must be located and built neither to "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."

The County has an array of policies and regulations within its zoning, grading, and fire ordinances, and building code which address many of the concerns of the Coastal Act. In addition, Santa Barbara County has undertaken public works projects ~~in recent years~~ which now protect large areas that were previously vulnerable to flooding. Extensive creek channelizations in the Carpinteria Valley and the construction of upstream debris dams are two ~~recent~~ examples.

~~However, in spite of measures currently imposed by the County, recent problems with bluff top development and severe erosion in certain hillside agricultural areas suggest that more stringent controls are needed.~~

…

Coastal Hazards Exacerbated by Sea Level Rise

Global greenhouse gas emissions and resulting sea level rise from thermal expansion of ocean waters and melting ice sheets are predicted to increase and intensify beach and bluff erosion, coastal flooding, slope instability, wave uprush, and other coastal hazards. The magnitude and timing of these changes are not precisely known. However, the trend is clear and the need to incorporate sea level rise issues into coastal planning and permitting decisions is increasingly evident. The original Coastal Land Use Plan contained some policies to protect coastal resources and address coastal hazards. However, the County amended and expanded those policies in 2018 to specifically reflect current science, regulate development, and protect public access and other coastal resources consistent with the Coastal Act.

Sea Level Rise Projections

The National Research Council projected sea level rise through the end of this century in their 2012 publication "Sea Level Rise for the Coasts of California, Oregon, and Washington." Santa Barbara County refined the 2012 data for the county's coastline, as described in the 2017 "Santa Barbara County Sea Level Rise and Coastal Hazards Vulnerability Assessment." Table 1 shows the resulting low, medium, and high sea level rise scenarios for the Santa Barbara County coastline.

Table 1. Sea Level Rise Projections for Santa Barbara County (inches)

Time Period	Low Sea Level Rise Scenario	Medium Sea Level Rise Scenario	High Sea Level Rise Scenario
By 2030	0.04	3.5	10.2
By 2060	2.8	11.8	27.2
By 2100	10.6	30.7	60.2

Source: Santa Barbara County Sea Level Rise and Coastal Hazards Vulnerability Assessment, July 2017.

The California Ocean Protection Council (OPC) updated the sea level rise projections in 2017 using the best available science and modeling techniques. The California Natural Resources Agency used the updated information to update the probabilistic projections in its 2018 sea level rise guidance document. Table 2 shows the updated sea level rise projections for the Santa Barbara tidal gauge area and is adapted from the 2018 sea level rise guidance to present two scenarios OPC recommends evaluating. The low risk aversion scenario should be analyzed for projects that would have limited consequences or have a higher ability to adapt, such as unpaved trails, public accessways, and other small or temporary structures that are

easily removable and would not have high costs if damaged. The medium-high risk aversion scenario should be analyzed for decisions with greater consequences and/or lower ability to adapt, such as decisions regarding residential and commercial structures.

Table 2
Projected Sea Level Rise (~~inches~~feet) for the Santa Barbara Tidal Gauge

~~Year~~	~~Median~~	~~Likely Range~~	~~1-in-20 Chance~~	~~1-in-200 Chance~~
	~~*50% probability sea level rise meets or exceeds:*~~	~~*66% probability sea level rise is between:*~~	~~*5% probability sea level rise meets or exceeds:*~~	~~*0.5% probability sea level rise meets or exceeds:*~~
~~2030~~	~~3.6~~	~~2.4 - 4.8~~	~~6.0~~	~~8.4~~
~~2060~~	~~10.8~~	~~7.2 – 15.6~~	~~19.2~~	~~30.0~~
~~2100 – low emissions~~	~~14.4~~	~~7.2 – 24.0~~	~~34.8~~	~~63.6~~
~~2100 – high emissions~~	~~25.2~~	~~14.4 – 37.2~~	~~49.2~~	~~79.2~~

=	Probabilistic Projections (in feet) (based on Kopp et al. 2014)	
=	**Low Risk Aversion**	**Medium-High Risk Aversion**
=	*Upper limit of "likely range" (~17% probability SLR exceeds...)*	*1-in-200 chance (0.5% probability SLR exceeds…)*
2030	0.4	0.7
2040	0.7	1.1
2050	1.0	1.8
2060	1.3	2.5
2070	1.7	3.3
2080	2.1	4.3
2090	2.6	5.3
2100	3.1	6.6
2110*	3.2	6.9
2120	3.7	8.2
2130	4.2	9.5
2140	4.8	11.0
2150	5.3	12.6

Source: California Natural Resources Agency and California Ocean Protection Council, 2018, *State of California Sea-Level Rise Guidance*, 2018 Update.

**Most of the available climate model experiments do not extend beyond 2100. The resulting reduction in model availability causes a small dip in projections between 2100 and 2110, as well as a shift in uncertainty estimates (see Kopp et al., 2014). Use of 2110 projections should be done with caution and acknowledgement of increased uncertainty around these projections.*

Coastal Land Use Plan policies require use of the ~~"high"~~ appropriate risk aversion sea level rise scenario or best available science to analyze potential hazards to development. ~~The "high" sea level rise scenario (Table 1) most closely aligns with the Natural Resources Agency's "1-in-200 chance" scenario (Table 2).~~

The County is committed to using the best available science to analyze potential hazards to future development. It also acknowledges that the climate change science supporting these projections is being constantly refined and updated, and will reevaluate the County's vulnerability on a consistent basis based on evolving scientific understanding. If the sea level rise projections in Table 2 become outdated, the most current best available science must be used in lieu of the projections in Table 2.

…

Coastal Hazard Setbacks

Coastal Act Section 30253 requires that new development "minimize risks to life and property in areas of high geologic, flood, and fire hazard." New development and redevelopment in coastal hazard areas must be located outside or set back from hazardous areas when feasible, to minimize risks to life and property. The required coastal hazard setbacks vary depending upon the anticipated life of development. Different types of development have different anticipated lives and, therefore, different coastal hazard setbacks. For example, a coastal hazards analysis for a new structure with an anticipated life of 75 years shall evaluate the project site over 75 years, including the range of projected sea level rise over that period. Using that evaluation, the development would be set back or designed to avoid, or minimize if avoidance is infeasible, coastal hazards over 75 years (i.e., anticipated life of development).

Shoreline Protective Devices

Shoreline protective devices include seawalls, revetments, breakwaters, groins, ~~and~~ cliff retaining walls, and other devices designed to protect structures or other features. Shoreline protective devices vary in design and materials, ranging from the strategic placement of sandbags or rocks to vertical walls made of wood, concrete, or steel. They can protect development from short-term erosion and wave action, but can also obstruct and/or diminish public access to beaches, adversely impact the natural movement of sediments (e.g., sand, silt, and gravel) along the coastline, and result in the loss of beach widths and coastal habitat and resources.

Shoreline protective devices' adverse impacts on beach areas and local shoreline sand supply generally include:

- Losing sand and beach area through the device's physical encroachment on a beach,
- Accelerating bluff and shoreline erosion,
- Preventing new beach formation in areas where the bluff/shoreline would have otherwise naturally eroded, and
- Losing sand-generating bluff/shoreline materials that would have entered the sand supply absent the shoreline protective device.

The adverse impacts of shoreline protective devices can also create secondary adverse impacts such as the loss of natural habitat and visual resources as a result of beach, dune, and sand loss and the loss of horizontal beach access for recreation. If such adverse impacts

cannot be avoided, they may be mitigated through options such as providing equivalent new public access or recreational facilities and/or undertaking restoration of nearby beach habitat.

SUGGESTED MODIFICATION NO. 3

The following Land Division policy of Section 3.3 Hazards shall be modified as follows:

Policy 3-1: Subdivisions and certain lot line adjustments in areas subject to threats from sea level rise and coastal hazards shall only be permitted if each created parcel has a developable area that will comply with all applicable coastal hazard policies and standards of the LCP, will not require shoreline protection, and will not adversely impact coastal resources or public access. This policy shall only apply to lot line adjustments that would result in (1) an increased subdivision potential for any affected lot in the lot line adjustment, or (2) a greater number of residentially developable lots than existed before the lot line adjustment. This policy shall not apply to parcels created or adjusted for the sole purpose of providing open space or public access. For the purposes of this policy, the County shall use the "medium-high" risk aversion sea level rise scenario, as shown in ~~the Sea Level Rise Coastal Hazards Screening Areas Map in Appendix J~~ Table 2 (or the current best available science), and analyze potential hazards over a 100-year timeframe.

SUGGESTED MODIFICATION NO. 4

The following Shoreline Protection and Management policies of Section 3.3 Hazards shall be modified as follows:

Policy 3-3: Prior to emergency conditions, the County will encourage and work with landowners whose property is subject to threats from sea level rise and coastal hazards to develop appropriate adaptation strategies, such as protect (e.g., soft, non-structural measures), accommodate (e.g., floodproofing retrofits), and/or retreat (e.g., relocate or remove existing development). Where contiguous properties are subject to similar coastal hazards, landowners should develop coordinated adaptation strategies. The County shall seek solutions to shoreline hazards on a larger geographic basis (i.e., neighborhood or region-wide) than a single lot circumstance.

Policy 3-4: Shoreline protective devices shall only be permitted when required to serve coastal-dependent uses or protect existing principal structures or public beaches in danger from erosion, when sited and designed to eliminate or mitigate adverse impacts on local shoreline sand supply, when designed to avoid, or mitigate if avoidance is infeasible, adverse impacts to lateral beach access, biological resources, water quality, visual, and other coastal resources, and when no less environmentally damaging alternative exists. Shoreline protective devices shall be sited to avoid sensitive resources, and adverse impacts on all coastal resources shall be mitigated to the maximum extent feasible. ~~For the purposes of this policy, "existing structure" means a principal structure (e.g., residential dwelling, accessory dwelling unit, or public recreation facility) that was legally established on or before [effective date of the proposed sea level rise/coastal hazard LCP amendment].~~

SUGGESTED MODIFICATION NO. 5

The following Sea Level Rise Coastal Hazard Areas policies of Section 3.3 Hazards shall be modified as follows:

Policy 3-6: The Sea Level Rise Coastal Hazards Screening Areas Map (Appendix J) shall be used to identify coastal areas that require additional review and development standards to avoid, and if avoidance is not feasible, minimize, adverse impacts from sea level rise and coastal hazards. Properties located in areas not shown on the Coastal Hazards Screening Areas Map shall also be subject to policies requiring site-specific hazards analysis and avoidance or minimization of threats from sea level rise and coastal hazards if there is substantial evidence demonstrating that the site may be subject to reasonably foreseeable future coastal hazards.

Policy 3-8: All development within areas shown in the Sea Level Rise Coastal Hazards Screening Areas Map (Appendix J), or otherwise subject to coastal hazards pursuant to Policy 3-6, shall be sited and designed to avoid, and if avoidance is not feasible, minimize, existing or reasonably foreseeable future threats from sea level rise and coastal hazards without reliance on shoreline protective devices over the anticipated life of the development. (Refer to Coastal Land Use Plan Policy 3-10.) Utility infrastructure required for safe habitation (e.g., water, sewer, and onsite wastewater treatment systems) shall be set back at least the same distance as the development or otherwise designed to ensure provision of adequate services during the anticipated life of the development. Minor and/or ancillary development that does not require foundations or grading, does not adversely impact beach, dune, or other coastal resource stability, and can be readily removed or relocated (e.g., decks, fences, patios, and walkways) may be permitted within coastal hazard setback areas if consistent with the protection of coastal resources.

Policy 3-9: In areas of known coastal hazards, including those areas shown on the Sea Level Rise and Coastal Hazards Screening Areas Map (Appendix J), a site-specific Coastal Hazard Report shall be prepared according to the requirements in Appendix I of the Coastal Zoning Ordinance (Technical Guidelines for Preparation of a Coastal Hazard Report). The analysis shall identify any hazards affecting the proposed development using the best available science, any necessary mitigation measures, and contain substantial evidence that the project site, with mitigation, is suitable for the proposed development, including that adequate public or private services and resources (i.e., water, sewer, roads, etc.) will be available to serve the proposed development over the anticipated life of the development, and that the development will assure stability and structural integrity and adequately protect life and property from the identified hazards. Mitigation measures shall be applied to development when required to avoid or minimize impacts related to sea level rise and related coastal hazards.

Policy 3-10: Coastal hazard setbacks shall be determined based upon the anticipated life of development. The anticipated life of development shall be defined as follows:

a. Temporary structures, or moveable or expendable construction (e.g., trails, boardwalks, bike racks, playgrounds): 5 years
b. Ancillary development or amenity structures (e.g., shoreline restrooms, parking lots): 25 years.
c. Mobile homes: 30 years.
d. Residential or commercial structures, accessory dwelling units, or manufactured homes: 75 years.

e. Critical infrastructure (e.g., emergency medical facilities, bridges, water treatment plants, highways, railroads), subdivisions, and certain lot line adjustments per Policy 3-1: 100 years.

Notwithstanding Policy 1-3, where there are conflicts between this policy and coastal hazard setback policies or other provisions set forth in any community plans and/or existing ordinance, the most restrictive standard using the longest anticipated life of development or hazard analysis timeframe shall take precedence.

Policy 3-12: Development within coastal hazard areas shall be removed, relocated, or modified, and the area restored at the applicant's or property owner's expense, if:

(1) The structure, or portion thereof, has been damaged and designated in a final order (after all appeals and writs are completed) as currently and permanently unsafe for occupancy ~~unsafe to enter~~ by the County Building Official or designee due to coastal hazards, ~~or~~

(2) Essential services to the site can no longer feasibly be maintained (e.g., utilities and roads)~~.~~

(3) The development requires new and/or augmented shoreline protective devices to be safe that are not consistent with LCP or relevant Coastal Act policies.

Policy 3-13: Applicants or property owners receiving a Coastal Development Permit for development subject to existing or reasonably foreseeable future threats from sea level rise or coastal hazards and any related conditions of approval shall record a notice to property owner (NTPO) disclosing such threats and conditions. The NTPO shall notify current and future property owners of the: (1) conditions of approval of the Coastal Development Permit that authorized the development; (2) existing and reasonably foreseeable future threats from sea level rise and coastal hazards, including bluff retreat, erosion, wave run-up, and flooding/inundation and the results of any site-specific analysis thereof; and (3) potential for the public trust boundary to move inland, encompassing part or all of the development, ~~and~~ at which point the development or portion of it that is on public trust land will no longer be authorized pursuant to the County's coastal development permit. Any portion of the development on public land will then have to be removed, or properly permitted by ~~therefore requiring a permit from~~ the California Coastal Commission ~~or State Lands Commission to remain~~, and any future encroachment would also be subject to State Lands Commission's (or other trustee agency's) approval.

SUGGESTED MODIFICATION NO. 6

The following Bluff and Dune Protection policies of Section 3.3 Hazards shall be modified as follows:

Policy 3-4<u>14</u>: ~~In areas of new development, above-ground structures shall be set back a sufficient distance from the bluff edge to be safe from the threat of bluff erosion for a minimum of 75 years, unless such standard will make a lot unbuildable, in which case a standard of 50 years shall be used. The County shall determine the required setback. A geologic report shall be required by the County in order to make this determination. At a minimum, such geologic report shall be prepared in conformance with the Coastal Commission's adopted Statewide Interpretive Guidelines regarding "Geologic Stability of Bluff top Development."(See also Policy 4-5 regarding protection of visual resources.)21~~

All development on bluff top lots shall be sited a sufficient distance from the bluff edge to be safe from the threat of bluff erosion and slope instability, factoring in the effects of sea level rise using the ~~"high"~~ appropriate risk aversion sea level rise scenario as described in Table ~~1~~2 (or the current best available science), and without reliance on shoreline protective devices, over the anticipated life of the development. (Refer to Coastal Land Use Plan Policy 3-10 and Appendix I of the Article II, Coastal Zoning Ordinance for the anticipated life of development and technical guidance on calculating the bluff edge setback, respectively.) Utility infrastructure required for safe habitation (e.g., water, sewer, and onsite wastewater treatment systems) shall be set back from the bluff edge to at least the same distance as the development or otherwise designed to ensure provision of adequate services during the anticipated life of the development. In no case shall the required bluff edge setback be less than 25 feet.

Applications for development on bluff top lots shall include a site-specific Coastal Hazard Report prepared according to the requirements in Appendix I of the Coastal Zoning Ordinance (Technical Guidelines for Preparation of a Coastal Hazard Report).

Policy 3-~~7~~18: No development shall be permitted on the bluff face, except for engineered staircases or accessways ~~to provide~~ for public beach access, and pipelines for scientific research or coastal dependent industry~~. Drainpipes shall be allowed~~; such uses are permitted only where no other less environmentally damaging ~~drain system~~ alternative is feasible and the ~~drainpipes are~~ development is sited and designed ~~and placed~~ to ~~minimize~~ not contribute to erosion and minimize impacts to the bluff face, toe, and beach. Drainage devices extending over the bluff face shall not be permitted if the property can feasibly be drained away from the bluff face.

Policy 3-19: All development adjacent to dunes shall be sited and designed to prevent adverse impacts to coastal resources, assure structural stability of the development, and avoid, and if avoidance is not feasible, minimize, coastal hazards over the anticipated life of the development. Siting and design shall take into account the anticipated extent of the landward migration of foredunes over the anticipated life of the development. This landward migration shall be determined based upon historic dune erosion, storm damage, anticipated sea level rise, and foreseeable changes in sand supply.

SUGGESTED MODIFICATION NO. 7

The following Coastal Hazards Adversely Impacting Transportation Resources policy of Section 3.3 Hazards shall be modified as follows:

Policy 3-21: All Coastal Development Permit applications for new roads and road projects shall: (1) identify existing and reasonably foreseeable future coastal hazards, including flooding, storm surge, and sea level rise, and (2) set forth alternatives and adaptation measures to minimize risk and avoid shoreline protective devices over the anticipated life of the project, including evaluating retreat and causeways that allow for shoreline migration.

SUGGESTED MODIFICATION NO. 8

The following policy of Subsection 3.3.4 Hillside and Watershed Protection Policy shall be modified as follows:

Policy 3-1429: All development shall be sited and designed to: (1) ~~fit the~~ minimize alteration of existing site topography, soils, geology, hydrology, and any other natural existing conditions, and (2) be oriented so that grading and other site preparation is kept to an absolute minimum. Natural features, landforms, and native vegetation~~, such as trees,~~ shall be preserved to the maximum extent feasible. Areas of the site which are not suited for development because of known soil, geologic, flood, erosion, or other hazards, including those associated with sea level rise, shall remain in open space.

SUGGESTED MODIFICATION NO. 9

The following policy of Section 3.7 Coastal Access and Recreation shall be modified as follows:

Policy 7-9: New public access and public recreation uses and facilities (e.g., overlooks, trails, stairways and/or ramps, parks, and visitor-serving accommodations) may be allowed within areas potentially subject to coastal hazards, including sea level rise, provided that such uses and facilities are consistent with all applicable LCP policies and standards, ~~including those that~~ do not require shoreline protective devices and will not cause, expand, or accelerate instability of a bluff. Adaptive management measures specifying how maintenance, retrofit, removal, or relocation will take place over time as conditions change as a result of sea level rise shall be a condition of permit approval.

SUGGESTED MODIFICATION NO. 10

The following policy of section 3.9 Environmentally Sensitive Habitat Areas shall be modified as follows:

Policy 9-37: The minimum buffer strip for ~~major~~ streams and their associated riparian vegetation in rural areas, as defined by the Coastal ~~land use plan~~Land Use ~~Element of the Santa Barbara County Comprehensive~~ Plan, shall be presumptively 100 feet, and for streams and their associated riparian vegetation in urban areas, 50 feet. These minimum buffers may be ~~adjusted upward or downward~~ increased on a case-by-case basis when necessary to prevent significant disruption of habitat values given site-specific evidence provided in a biological report prepared by a qualified biologist. The minimum buffer strip may be decreased only to avoid precluding reasonable use of property. ~~The buffer shall be established~~ An increase to the buffer strip shall be based on an investigation of the following factors and after consultation with the California Department of Fish and ~~Game~~ Wildlife and Regional Water Quality Control Board ~~in order to. All buffers shall be sufficient to protect the biological productivity and water quality of streams, avoid significant disruption of habitat values, and to protect the habitat area, including the following habitat area characteristics~~:

1) existing vegetation, soil type and stability of stream and riparian corridors;

2) how surface water filters into the ground;

3) slope of the land on either side of the stream; ~~and~~

4) location of the 100-year flood plain boundary~~.~~;

5) consistency with adopted plans, particularly biology and habitat policies; and

6) landscape-scale habitat connectivity.

All buffers shall be sufficient to protect the biological productivity and water quality of streams, avoid significant disruption of habitat values, and to protect the habitat area. The required buffer shall extend from the outer extent of development (including fuel clearance required by the Fire Department) to the outer extent of the stream's riparian canopy, or the top of the stream bank if there is no riparian vegetation. ~~Riparian vegetation shall be protected and shall be included in the buffer.~~ Where riparian vegetation has previously been removed, except for channelization, inconsistent with (1) any policies or other applicable provisions of the LCP or (2) any provisions and conditions of existing, approved permits for the subject lot, the buffer shall ~~allow for the reestablishment of riparian vegetation~~ extend to ~~it's~~ the prior extent of the riparian vegetation to the greatest degree ~~possible~~ feasible.

SUGGESTED MODIFICATION NO. 11

The following definitions of Appendix A: Definitions shall be modified as follows:

Bluff (or Cliff): A scarp or steep face of rock, weathered rock, sediment and/or soil resulting from erosion, faulting, folding or excavation of the land mass, with at least 10 feet of vertical relief. (See Figure 1.) ~~In the Coastal Zone, the toe of a bluff is or may be subject to marine erosion.~~

Bluff Edge: The upper termination of a bluff, cliff, or sea cliff. In cases where the top edge of the bluff is rounded away from the face of the bluff, the bluff edge shall be defined as that point nearest the bluff face beyond which the general gradient of the ground surface increases ~~changes downward~~ more or less continuously until it reaches the general gradient of the bluff face ~~to the base of the bluff~~. (See Figure 2 below.) In a case where there is a step-like feature at the top of the bluff, the landward edge of the topmost riser shall be considered the bluff edge. (See Figure 3 below.) In cases where bluffs are undercut, the most undercut portion shall be considered as the defined bluff edge. (See Figure 4 below.) Artificial fill placed near the bluff edge, or extending over the bluff edge does not alter the position of the bluff edge. (See Figure 5 below.) Where a coastal bluff curves landward to become a canyon bluff, the termini of the coastal bluff edge shall be defined as a point reached by bisecting the angle formed by a line coinciding with the general trend of the coastal bluff line along the seaward face of the bluff, and a line coinciding with the general trend of the bluff line along the canyon facing portion of the bluff. (See Figure 6 below.)

…

Coastal Hazards: Natural hazards that adversely impact the coastline, including but not limited to:

Coastal Erosion: Short- and long-term shoreline changes caused by erosion related to storm events, wave action, currents, water, wind, or other natural events.

Coastal Flooding: Temporary flooding due to high water level events caused by one or more of the following: high tides, storm surge (a rise above normal water level during storms), and sea level rise.

Extreme Monthly Tidal Inundation: Routine tidal inundation expected at least once a month.

Inundation: The process of dry land becoming permanently drowned or submerged, such as from sea level rise.

Sea level rise: Change in the mean sea level due to an increase in the volume of ocean water.

Wave run up: The maximum vertical extent of wave action on a beach or structure, above the still water line.

~~**Existing Structure**~~

~~A structure that was legally established on or before [effective date of the proposed sea level rise/coastal hazard LCP amendment].~~

~~**Existing Principal Structure**~~

~~See "Existing Structure" and "Principal Structure."~~

…

Principal Structure: A structure (e.g., residential dwelling~~, accessory dwelling unit,~~ or public recreation facility) in which is conducted the principal use of the lot on which it is situated. In any residential, agricultural or estate district, any dwelling that is not accessory to the primary residential dwelling shall be deemed to be ~~the~~ a principal structure on the lot on which it is situated.

…

Shoreline Protective Devices

Constructed features such as seawalls, revetments, riprap, earthen berms, cave fills, cliff retaining walls, caissons, and bulkheads that block the landward retreat of the shoreline and are used to protect structures or other features from erosion, waves, and other coastal hazards.

…

SUGGESTED MODIFICATIONS TO THE PROPOSED IMPLEMENTATION PLAN/COASTAL ZONING ORDINANCE AMENDMENT LCP Amendment 4-STB-20-0028-1 (Coastal Resiliency)

Existing language of the certified Implementation Plan/Coastal Zoning Ordinance is shown in straight type. The County's proposed amendment language to the certified Implementation Plan/Coastal Zoning Ordinance is shown in ~~strikeout~~ and underline. Language recommended by Commission staff to be deleted is shown in ~~double strikeout~~. Language recommended by Commission staff to be inserted is shown in double underline. Text that describes the proposed changes is shown in *italics*.

SUGGESTED MODIFICATION NO. 12

Section 35-51D Economically Viable Use of Property shall be modified as follows:

Section 35-51D. Economically Viable Use of Property.

Where full compliance with all LCP policies and standards, including setbacks for coastal hazards, would preclude a~~ll~~ reasonable economic use of the property as a whole, the County may allow the minimum economic use and/or development of the property necessary to avoid an unconstitutional taking of private property without just compensation. There is no taking that needs to be avoided if the proposed development constitutes a nuisance or is otherwise prohibited pursuant to other background principles of property law (e.g., public nuisance, public trust doctrine, etc.). Continued use of an existing structure or other development, including with any permissible repair and maintenance, may provide a reasonable economic use.

…

SUGGESTED MODIFICATION NO. 13

Section 35-58 Definitions shall be modified as follows:

Section 35-58. Definitions.

Bluff (or Cliff): A scarp or steep face of rock, weathered rock, sediment and/or soil resulting from erosion, faulting, folding or excavation of the land mass, with at least 10 feet of vertical relief. (See Figure 1 below.)~~ In the Coastal Zone, the toe of a bluff is or may be subject to marine erosion.~~

Bluff Edge: The upper termination of a bluff, cliff, or sea cliff. In cases where the top edge of the bluff is rounded away from the face of the bluff, the bluff edge shall be defined as that point nearest the bluff face beyond which the general gradient~~ changes downward~~ of the ground surface increases more or less continuously ~~to the base~~ until it reaches the general gradient of the bluff face. (See Figure 2 below.) In a case where there is a step-like feature at the top of the bluff, the landward edge of the topmost riser shall be considered the bluff edge. (See Figure 3 below.) In cases where bluffs are undercut, the most undercut portion shall be considered as the defined bluff edge. (See Figure 4 below.) Artificial fill placed near the bluff edge, or extending over the bluff edge does not alter the position of the bluff edge. (See Figure 5 below.) Where a coastal bluff curves landward to become a canyon bluff, the termini of the coastal bluff edge shall be defined as a point reached by bisecting the angle formed by a line coinciding with the general trend of the coastal bluff line along the seaward face of the bluff, and a line

coinciding with the general trend of the bluff line along the canyon facing portion of the bluff. (See Figure 6 below.)

Coastal Hazards: Natural hazards that adversely affect the coastline, including but not limited to:

Coastal Erosion: Short- and long-term shoreline changes caused by erosion related to storm events, wave action, currents, water, wind, or other natural events.

Coastal Flooding: Temporary flooding due to high water level events caused by one or more of the following: high tides, storm surge (a rise above normal water level during storms), and sea level rise.

Extreme Monthly Tidal Inundation: Routine tidal inundation expected at least once a month.

Inundation: The process of dry land becoming permanently drowned or submerged, such as from sea level rise.

Sea level rise: Change in the mean sea level due to an increase in the volume of ocean water.

Wave run-up: The maximum vertical extent of wave action on a beach or structure, above the still water line.

~~**Existing Structure:** A structure that was legally established on or before [effective date of the proposed sea level rise/coastal hazard LCP amendment].~~

~~**Existing Principal Structure:** See "Existing Structure" and "Principal Structure."~~

Principal Structure: A structure (e.g., residential dwelling~~, accessory dwelling unit,~~ or public recreation facility) in which is conducted the principal use of the lot on which it is situated. In any residential, agricultural, or estate district, any dwelling that is not accessory to the primary residential dwelling shall be deemed to be ~~the~~ a principal structure on the lot on which it is situated.

Shoreline Protective Devices: Constructed features such as seawalls, revetments, riprap, earthen berms, cave fills, cliff retaining walls, caissons, and bulkheads that block the landward retreat of the shoreline and are used to protect structures or other features from waves, erosion, and other coastal hazards.

SUGGESTED MODIFICATION NO. 14

Section 35-67 Bluff and Dune Development shall be modified as follows:

Section 35-67. Bluff and Dune Development.

1. …

All development on bluff-top lots shall be sited a sufficient distance from the bluff edge to be safe from the threat of bluff erosion and slope instability, factoring in the effects of sea level rise, and without reliance on shoreline protective devices over the anticipated life of the development. [Refer to Coastal Land Use Plan Policy 3-10 and Appendix I (Technical Guidelines for Preparation of a Coastal Hazard Report) of the Article II, Coastal Zoning Ordinance for the anticipated life of development and technical guidance on calculating the bluff edge setback, respectively.] Utility infrastructure required for safe habitation (e.g., water, sewer, and onsite wastewater treatment systems) shall be set back from the bluff edge to at least the same distance as the development or otherwise designed to ensure

the provision of adequate services during the anticipated life of the development. In no case shall the required bluff edge setback be less than 25 feet.

…

4. Minor and/or ancillary development that does not require foundations or grading, does not adversely impact bluff stability, and can be readily removed and/or relocated (e.g., decks, fences, patios, and walkways) may be permitted within the bluff edge setback area if consistent with the protection of coastal resources. The minor and/or ancillary development shall be removed or relocated landward at the owner's expense when imminently threatened, or actually damaged, by coastal hazards. Shoreline protection devices are prohibited to protect these minor and/or ancillary structures from bluff retreat and other coastal hazards.

…

8. All development adjacent to dunes shall be sited and designed to prevent adverse impacts to coastal resources, assure structural stability of the development, and avoid, and if avoidance is not feasible, minimize, coastal hazards over the anticipated life of the development. Siting and design shall take into account the anticipated extent of the landward migration of foredunes over the anticipated life of the development. This landward migration shall be determined based upon historic dune erosion, storm damage, anticipated sea level rise, and foreseeable changes in sand supply. When permitted, development shall be conditioned to require noticing per Section 35-67A.7 and removal per Section 35-67A.6.

   Applications for development adjacent to dunes shall include a site-specific Coastal Hazard Report prepared according to the applicable requirements in Appendix I (Technical Guidelines for Preparation of a Coastal Hazard Report). The report is subject to review and approval by the County as part of the Coastal Development Permit application review process.

SUGGESTED MODIFICATION NO. 15

Section 35-67A Coastal Hazard Areas shall be modified as follows:

Section 35-67A. Coastal Hazard Areas

The following provisions apply to new development, including additions and redevelopment, in areas that are potentially subject to coastal hazards, including beaches and bluffs (see also Sections 35-61 and 35-67).

1. The Sea Level Rise Coastal Hazards Screening Areas Map (Appendix J to the Coastal Land Use Plan) shall be used to identify coastal areas that require additional review and development standards to avoid, and if avoidance is not feasible, minimize, adverse impacts from sea level rise and coastal hazards. Properties located in areas not shown on the Sea Level Rise Coastal Hazards Screening Areas Map shall also be subject to policies requiring site-specific hazards analysis and avoidance or minimization of threats from sea level rise and coastal hazards if there is substantial evidence demonstrating that the site may be subject to reasonably foreseeable future coastal hazards. Where the physical extent of a coastal hazard on the project site is different than those indicated on the Sea Level Rise Coastal Hazards Screening Areas Map, the Coastal Development Permit application shall describe and provide substantial evidence of the physical extent of the coastal hazard.

2. The County may act on a Coastal Development Permit application in compliance with LCP policies and standards, even if the Sea Level Rise Coastal Hazards Screening Areas Map (Appendix J to the Coastal Land Use Plan) needs an update, but has not been updated as of the time of action on the Coastal Development Permit application.

3. All development potentially subject to coastal hazards over its anticipated life, including but not limited to areas shown in the Sea Level Rise Coastal Hazards Screening Areas Map (Appendix J to the Coastal Land Use Plan), shall be sited and designed to avoid, and if avoidance is not feasible, minimize, existing or reasonably foreseeable future threats from sea level rise and coastal hazards without reliance on shoreline protective devices over the anticipated life of the development. (Refer to Coastal Land Use Plan Policy 3-10.) Utility infrastructure required for safe habitation (e.g., water, sewer, and onsite wastewater treatment systems) shall be set back at least the same distance as the development or otherwise designed to ensure the provision of adequate services during the anticipated life of the development.

4. In areas of known coastal hazards, including those areas shown on the Sea Level Rise Coastal Hazards Screening Areas Map (Appendix J to the Coastal Land Use Plan), a site-specific Coastal Hazard Report shall be prepared according to the requirements in Appendix I of the Coastal Zoning Ordinance (Technical Guidelines for Preparation of a Coastal Hazard Report). The analysis shall be prepared by a qualified California licensed professional (e.g., Professional Geologist, Engineering Geologist, Geotechnical Engineer, Civil Engineer, and/or Coastal Engineer, as applicable) and is subject to review and approval by the County as part of the Coastal Development Permit application review process. The analysis shall identify any hazards affecting the proposed project based on the best available science, any necessary mitigation measures, and contain substantial evidence that the project site, with mitigation, is suitable for the proposed development, including that adequate public or private services and resources (i.e., water, sewer, roads, etc.) will be available to serve the proposed development over the anticipated life of the development and that the development will assure stability and structural integrity and adequately protect life and property from the identified hazards. Mitigation measures shall be applied to development when required to avoid or minimize impacts related to coastal hazards and sea level rise.

5. Minor and/or ancillary development that does not require foundations or grading, does not adversely impact beach, dune or other coastal resource stability, and can be readily removed and/or relocated (e.g., decks, fences, patios, and walkways) may be permitted within the coastal hazard setback areas if consistent with the protection of coastal resources. The minor and/or ancillary development shall be removed or relocated landward at the owner's expense when imminently threatened, or actually damaged, by coastal hazards. Shoreline protection devices are prohibited to protect these minor and/or ancillary structures from erosion, flooding, and other coastal hazards.

6. Coastal Development Permits for development within coastal hazard areas potentially subject to coastal hazards over its anticipated life shall be conditioned to require that the permitted development will be removed, relocated, or modified, and the area restored at the applicant's or property owner's expense, if:

   a) The structure, or portion thereof, has been damaged and designated in a final order (after all appeals and writs are completed) as currently and permanently unsafe for occupancy ~~unsafe to enter~~ by the County Building Official or designee due to coastal hazards;

b) Essential services to the site can no longer feasibly be maintained (e.g., utilities and roads);

c) The development requires new and/or augmented shoreline protective devices that are not consistent with LCP or relevant Coastal Act policies.

The permit shall also specify that in the event that portions of the development fall to the beach or ocean before they are removed/relocated, the property owner will remove all recoverable debris associated with the development from the bluffs, beach, and ocean and lawfully dispose of the material in an approved disposal site, after acquiring a Coastal Development Permit for such removal, unless the County or Coastal Commission provides a written determination that no Coastal Development Permit is legally required.

7. Coastal Development Permits for new structures or redevelopment within coastal hazard areas potentially subject to coastal hazards over its anticipated life shall require the applicant to waive any right to claim that the development is entitled to shoreline protection under Public Resources Code Section 30235 or any analogous provision of this LCP.

~~7~~8. Applicants or property owners receiving a Coastal Development Permit for development subject to existing or reasonably foreseeable future threats from sea level rise or coastal hazards and any related conditions of approval shall record a Notice to Property Owner (NTPO) disclosing such threats and conditions. The NTPO shall notify current and future property owners of the: (1) conditions of approval of the Coastal Development Permit that authorized the development; (2) existing and reasonably foreseeable future threats from sea level rise and coastal hazards, including bluff retreat, erosion, wave run-up, and flooding/inundation and the results of any site-specific analysis thereof; and (3) potential for the public trust boundary to move inland, encompassing part or all of the development, at which point the development or portion of it that is on public trust land will no longer be authorized pursuant to the County's coastal development permit. Any portion of the development on public land will then have to be removed, or properly permitted by the California Coastal Commission, and any future encroachment would also be subject to State Lands Commission's (or other trustee agency's) approval ~~and therefore requiring a permit from the California Coastal Commission or State Lands Commission to remain~~.

SUGGESTED MODIFICATION NO. 16

Section 35-97.19 Development Standards for Stream Habitats shall be modified as follows:

Section 35-97.19 Development Standards for Stream Habitats.

1. The minimum buffer strip for ~~major~~ streams and their associated riparian vegetation in rural areas, as defined by the~~ land use plan~~ Coastal Land Use Plan, shall be presumptively 100 feet, and for streams and their associated riparian vegetation in urban areas, 50 feet. These minimum buffers may be ~~adjusted upward or downward~~ increased on a case-by-case basis when necessary to prevent significant disruption of habitat values given site-specific evidence provided in a biological report prepared by a qualified biologist. The minimum buffer strip may be decreased only to avoid precluding reasonable use of property. ~~The buffer shall be established~~ An increase to the buffer strip shall be based on an investigation of the following factors and after consultation with the California Department of Fish and ~~Game~~ Wildlife and Regional Water Quality Control Board ~~in order to. All buffers shall be sufficient to protect the biological productivity and water quality of streams, avoid significant disruption of habitat values, and to protect the habitat area, including the following habitat area characteristics~~:

a) existing vegetation, ~~S~~soil type and stability of stream and riparian corridors;

b) ~~H~~how surface water filters into the ground;

c) ~~S~~slope of the land on either side of the stream; ~~and~~

d) ~~L~~location of the 100-year flood plain boundary~~.~~;

e) consistency with adopted plans, particularly biology and habitat policies; and

f) landscape-scale habitat connectivity.

All buffers shall be sufficient to protect the biological productivity and water quality of streams, avoid significant disruption of habitat values, and to protect the habitat area. The required buffer shall extend from the outer extent of development (including fuel clearance required by the Fire Department) to the outer extent of the stream's riparian canopy, or the top of the stream bank if there is no riparian vegetation. ~~Riparian vegetation shall be protected and shall be included in the buffer.~~ Where riparian vegetation has previously been removed, except for channelization, inconsistent with (1) any policies or other applicable provisions of the LCP or (2) any provisions and conditions of existing, approved permits for the subject lot, the buffer shall ~~allow for the reestablishment of riparian vegetation~~ extend to ~~it's~~ the prior extent of the riparian vegetation to the greatest degree ~~possible~~ feasible.

SUGGESTED MODIFICATION NO. 17

Section 35-130 Subdivision of Land shall be modified as follows:

Section 35-130, Subdivision of Land

…

3. Subdivisions and certain lot line adjustments in areas subject to threats from sea level rise and coastal hazards shall only be permitted if each created parcel will ~~comply~~ have a developable area that complies with all applicable coastal hazard policies and standards of the LCP, will not require shoreline protection, and will not adversely impact coastal resources or public access. This policy shall only apply to lot line adjustments that would result in (1) an increased subdivision potential for any affected lot in the lot line adjustment, or (2) a greater number of residentially developable lots than existed before the lot line adjustment. This policy shall not apply to parcels created or adjusted for the sole purpose of providing open space or public access. For the purposes of this standard, the County shall use the "medium-high" risk aversion sea level rise scenario, as shown in Table I-1 in Appendix I (or the current best available science)~~the High Sea Level Rise Coastal Hazards Screening Areas Map (Appendix J to the Coastal Land Use Plan)~~ and analyze potential hazards over a 100-year timeframe.

SUGGESTED MODIFICATION NO. 18

Section 35-162 Nonconforming Buildings and Structures shall be modified as follows:

Section 35-162. Nonconforming Buildings and Structures.

If a building or structure is conforming as to use but nonconforming as to setbacks, height, lot coverage, or other requirements concerning the building or structure, such structure may remain as long as it is otherwise lawful, subject to the following regulations. Nonconforming buildings and structures include, but are not limited to, buildings and structures that do not comply with the coastal hazard standards or setbacks required for development in Section 35-67 (Bluff and Dune Development) and Section 35-6~~8~~7A (Coastal Hazard Areas).

1. Structural change, enlargement, or extension.

a. Enlargements or extensions allowed in limited circumstances.

1) Except as listed below or otherwise provided in this Article, a nonconforming structure shall not be enlarged, extended, moved, or structurally altered unless the enlargement, extension, etc., complies with the height, lot coverage, setback, and other requirements of this Article.

2) **Allowed structural alterations.**

…

e) Reasonable accommodation. Reasonable accommodation in compliance with Section 35-144Q (Reasonable Accommodation) may be allowed to remove barriers to fair housing opportunities for individuals with disabilities.

i) Subsection 1.a.2)e), above, shall not apply if a structure is nonconforming as to coastal hazard standards and setbacks and the proposed alterations qualify as redevelopment. Such improvements shall comply with all LCP policies and standards.

f) Structures threatened by coastal flooding. Elevating a nonconforming single or multiple-family dwelling and/or associated residential accessory structure to a required or desired flood protection elevation, as determined by the County Flood Control District, may be allowed pursuant to Subsection 1.a.2)d), above.

i) Subsection 1.a.2)f), above, shall apply even if a structure is nonconforming as to coastal hazard standards and setbacks and the proposed alterations to elevate the structure qualify as redevelopment. In such a case, the structure being elevated shall not be enlarged, extended, moved, or structurally altered beyond what is necessary to elevate the structure, but need not come into conformity with all LCP policies. Alterations necessary for elevating the structure must be permitted consistent with Subsection 1.a.3), below, and any Coastal Development Permit must comply with Subsections 6 through 8 of Section 35-67A (Coastal Hazard Areas) in addition to any other relevant policies.

3) Permit required. The issuance of a Coastal Development Permit in compliance with Section 35-169 (Coastal Development Permits) or Land Use Permit in compliance with Section 35- 178 (Land Use Permits), as applicable, is required

prior to the commencement of any structural alteration allowed in compliance with Subsections 1.a.1) or 1.a.2), above, unless the alteration is determined to be exempt in compliance with Section 35-169.2 (Applicability).

…

3. Damage in coastal hazard areas. The purpose of this section is to identify the standards for allowing the restoration or reconstruction of a structure that is nonconforming as to coastal hazard standards or setbacks and is damaged by fire, flood, earthquake or other natural disaster. However, buildings or structures damaged by a debris flow or other catastrophic event resulting in a significant change in topography or alteration of drainage features ~~would~~ may be eligible for a De Minimis Coastal Development Permit Waiver pursuant to Section 35-51C (De Minimis Waiver of Coastal Development Permit) of this Chapter.

…

SUGGESTED MODIFICATION NO. 19

Subsection 3 of Section 35-172.13 Additional Requirements shall be modified as follows:

3. ~~Seawalls and Shoreline Structures~~ Shoreline Protective Devices.

a. Shoreline protective devices shall only be permitted when required to serve coastal-dependent uses or protect existing principal structures or public beaches in danger from erosion, when sited and designed to eliminate or mitigate adverse impacts on local shoreline sand supply, when designed to avoid, or mitigate if avoidance is infeasible, adverse impacts to lateral beach access, biological resources, water quality, visual, and other coastal resources, and when no less environmentally damaging alternative exists. Shoreline protective devices shall be sited to avoid sensitive resources, and adverse impacts on all coastal resources shall be mitigated to the maximum extent feasible. ~~Seawalls shall not be permitted unless the County has determined that there are no other less environmentally damaging alternatives reasonably available for protection of existing principal structures. The County prefers and encourages non-structural solutions to shoreline erosion problems, including beach replenishment, removal of endangered structures and prevention of land divisions on shorefront property subject to erosion; and, will seek solutions to shoreline hazards on a larger geographic basis than a single lot circumstance. Where permitted, seawall design and construction shall respect to the degree possible, natural landforms. Adequate provision for lateral beach access shall be made and the project shall be designed to minimize visual impacts by the use of appropriate colors and materials.~~

b. Shoreline protective devices shall meet the following standards:

1) No other feasible, less environmentally damaging alternative exists, including but not limited to relocation or removal of the threatened development, beach nourishment, dune creation, non-structural drainage and native landscape improvements, or other similar non-structural options.

2) Non-structural options (e.g., dune or bluff revegetation or beach nourishment) shall be prioritized over other protection methods. Where non-structural options are not feasible, soft protection methods (e.g., sand bags or revetments that are combined with dune restoration) shall be used and prioritized before any more significant hard shoreline protective devices (including, but not limited to,

seawalls, revetments, breakwaters, groins, bluff retention devices, etc.) are permitted.

3) Landscape-scale solutions on a larger geographic basis are prioritized over single-lot shoreline protective devices.

4) The proposed shoreline protective device shall be sited and designed to avoid, or, if avoidance is~~f~~ infeasible, mitigate adverse impacts on shoreline sand supply, public access, biological resources, and other coastal resources.

5) The siting, design, and construction shall preserve natural landforms and be visually subordinate to the natural character of the shoreline.

6) The proposed shoreline protective device shall not result in the loss of public trust lands or net loss of public beach access. ~~Where necessary to maintain existing public access in the future, the property owner shall grant lateral access if the shoreline protective device would adversely affect or result in the loss of public beach access.~~ The proposed shoreline protective device shall avoid encroachment upon any beach area that impedes lateral public access along the beach at any tide condition. If it is infeasible to avoid impeding lateral access along the beach at any tide condition, mitigation shall be required that provides equivalent lateral access to that portion of shoreline in an alternate location.

7) Colors, materials, and designs shall minimize visual impacts.

c. At a minimum, Coastal Development Permits for shoreline protective devices shall include conditions of approval that require the following:

1) Mitigation if avoidance of adverse impacts to shoreline sand supply, public access, biological resources, or other coastal resources is infeasible, which shall be reassessed and adjusted in 20-year increments to account for changing conditions. Permittees shall apply for a coastal development permit amendment or new coastal development permit prior to expiration of each 20-year mitigation period, proposing mitigation for coastal resource impacts associated with retention of the shoreline protective device beyond the preceding 20-year mitigation period, and such application shall include consideration of alternative feasible mitigation measures in which the permittee can modify or remove the shoreline protective device to lessen its impacts on coastal resources. Permittees may elect to identify appropriate mitigation measures in concert with regional-scale adaptation efforts.

2) Removal at such time as the existing structure, public beach, or use requiring protection is removed, redeveloped, ceases to exist, or the protection device is no longer needed for its permitted purpose, whichever comes first.

3) Recordation of a Notice to Property Owner (NTPO) to notify current and future property owners that the public trust boundary could move inland as a result of coastal forces including sea level rise such that the device, or portion of it, is no longer located on private property, and at which point the device or portion of it that is on public trust land will no longer be authorized pursuant to the County's coastal development permit. Any portion of the development on public land ~~may~~ will then have to be removed, or properly permitted by the Coastal Commission and either State Lands Commission or other trustee agency of the public tidelands, who may deny the permit(s) if the development substantially interferes with public trust uses of the land or is otherwise not in accordance with law.

SUGGESTED MODIFICATION NO. 20

Appendix I of the proposed Implementation Plan/Coastal Zoning Ordinance amendment shall be modified as follows:

APPENDIX I: TECHNICAL GUIDELINES FOR PREPARATION OF A COASTAL HAZARD REPORT

The following standards and guidelines are intended to clarify and assist with the preparation of a Coastal Hazard Report. This appendix also includes the methodology for calculating a site-specific bluff edge setback and preparing a wave run-up study. All of these standards and guidelines may not be applicable or necessary for an individual project on a specific site, based upon the initial analysis performed by a qualified ~~professional~~ California licensed engineer with expertise in coastal processes. The qualified professional must provide sufficient evidence to show that individual standards or guidelines do not apply to a specific site or proposed development.

The Sea Level Rise Coastal Hazard Screening Areas Map (Appendix J to the Coastal Land Use Plan) shows areas of the county coastline that are potentially subject to increased threats from sea level rise and coastal hazards, where further site-specific study is needed to assess potential adverse impacts. In accordance with Coastal Land Use Plan Policy 3-9, in areas of known coastal hazards, including those areas shown on the Sea Level Rise Coastal Hazard Screening Areas Map (Appendix J), a site-specific Coastal Hazard Report shall be prepared according to the requirements in this appendix. In accordance with Coastal Land Use Plan Policy 3-6, proposed development on properties located in areas not shown on the Sea level Rise Coastal Hazards Screening Areas Map shall also require a site-specific Coastal Hazard Report if there is substantial evidence demonstrating that the site may be subject to reasonably foreseeable future coastal hazards.

1. Sea Level Rise Projection Information.

   ~~The Sea Level Rise Coastal Hazard Screening Areas Map (Appendix J to the Coastal Land Use Plan) shows areas of the county coastline that are potentially subject to increased threats from sea level rise and coastal hazards, where further site-specific study is needed to assess potential adverse impacts. The Screening Areas Map shows the "high" sea level rise scenario possible by the years 2030, 2060, and 2100, based on projections described in the County's 2017 "Sea Level Rise and Coastal Hazards Vulnerability Assessment." Table I-1 below shows the low, medium, and high sea level rise scenarios. All three scenarios can be visually examined using the Coastal Resilience Mapping Portal available online through the Planning and Development Department website.~~

Table I-1. ~~Sea Level Rise Projections for Santa Barbara County (inches)~~Projected Sea Level Rise for the Santa Barbara Tidal Gauge (in feet)

~~Time Po~~	~~Low Sea Level Rise Scenario~~	~~Medium Sea Level Rise Scenario~~	~~High Sea Level Rise Scenario~~
~~By 2030~~	~~0.04~~	~~3.5~~	~~10.2~~
~~By 2060~~	~~2.8~~	~~11.8~~	~~27.2~~
~~By 2100~~	~~10.6~~	~~30.7~~	~~60.2~~

~~*Source:* Santa Barbara County Sea Level Rise and Coastal Hazards Vulnerability Assessment, July 2017.~~

=	Probabilistic Projections (in feet) (based on Kopp et al. 2014)	
=	**Low Risk Aversion**	**Medium-High Risk Aversion**
-	*Upper limit of "likely range" (~17% probability SLR exceeds...)*	*1-in-200 chance (0.5% probability SLR exceeds…)*
2030	0.4	0.7
2040	0.7	1.1
2050	1.0	1.8
2060	1.3	2.5
2070	1.7	3.3
2080	2.1	4.3
2090	2.6	5.3
2100	3.1	6.6
2110*	3.2	6.9
2120	3.7	8.2
2130	4.2	9.5
2140	4.8	11.0
2150	5.3	12.6

Source: California Natural Resources Agency and California Ocean Protection Council, 2018, *State of California Sea-Level Rise Guidance*, 2018 Update.

**Most of the available climate model experiments do not extend beyond 2100. The resulting reduction in model availability causes a small dip in projections between 2100 and 2110, as well as a shift in uncertainty estimates (see Kopp et al., 2014). Use of 2110 projections should be done with caution and acknowledgement of increased uncertainty around these projections.*

Table I-1 shows the sea level rise projections for the Santa Barbara tidal gauge area and is adapted from the 2018 California Ocean Protection Council (OPC) sea level rise guidance to present two scenarios OPC recommends evaluating. The low risk aversion scenario should be analyzed for projects that would have limited consequences or have a higher ability to adapt, such as unpaved trails, public accessways, and other small or temporary structures that are easily removable and would not have high costs if

damaged. The medium-high risk aversion scenario should be analyzed for decisions with greater consequences and/or lower ability to adapt, such as decisions regarding residential and commercial structures. If the sea level rise projections in Table I-1 become outdated, the most current best available science must be used in lieu of the projections in Table I-1.

2. Methodology for Calculating a Bluff Edge Setback:

(a) Identify bluff edge consistent with the Article II definition of "bluff edge."

(b) Determine a slope stability setback. Evaluate the stability of the bluff. If the slope exhibits a factor of safety of less than 1.5 for the static condition or 1.1 for the pseudostatic condition, then a "slope stability buffer" shall be established landward of the bluff edge. The slope stability buffer is the line landward of the bluff edge where the minimum factor of safety (1.5 static and 1.1 pseudostatic) can be met. When determining the slope stability buffer, the minimum factor of safety shall be achieved without the use of new or existing slope or shoreline protection devices.

(c) Determine the bluff erosion setback. A site-specific evaluation of the long-term bluff retreat rate at the site shall be conducted that considers not only historical bluff retreat data, but also acceleration of bluff retreat projected to occur under continued and accelerated sea level rise and any known site-specific conditions. The geologic evaluation must include the total scope of development (e.g., proposed grading, buildings, structures, landscaping, and associated irrigation). Such an evaluation shall be used to determine the distance from the bluff edge (or from the slope stability buffer line if applicable) that the bluff might reasonably be expected to erode over the anticipated life of the structure (refer to Coastal Land Use Plan Policy 3-10), factoring in sea level rise using the current best available science, and without the use of new or existing slope or shoreline protection devices. Analysis of the effect of sea level rise on erosion rate shall use the best available science and include an examination of the appropriate risk aversion sea level rise scenario, as shown in Table I-1 (or the current best available science), ~~"high" amount of the sea level rise expected~~ over the anticipated life of the development. Historic erosion rates can be determined by examination of historic records, surveys, aerial photographs, studies, or other evidence showing the location of the bluff edge through time. A minimum of 50 years' worth of historic data is generally used to evaluate historic erosion rates, but a greater time period may be warranted if the shoreline has changed dramatically due to natural forces or development.

(d) Determine the bluff edge setback by adding the slope stability and bluff erosion setback distances. Development shall be setback from the bluff edge the distance needed to: ensure slope stability (the slope stability setback); ensure the development is not endangered by erosion (the bluff erosion setback); and avoid the need for protective devices during the life of the structure.

3. Site Visit Report for Properties North of U.S. Highway 101.

As described in Section 3.3 (Hazards) of the Coastal Land Use Plan, features such as U.S. Highway 101 are considered in the Sea Level Rise Coastal Hazards Screening Areas Map as topographical features, not necessarily as barriers to sea level rise for parcels north of the freeway. Therefore, applications for development north of U.S. Highway 101

and within coastal hazard areas shown on the Sea Level Rise Coastal Hazards Screening Areas Map shall be evaluated for potential coastal hazards at the site, based on all readily available information and best available science. An initial site visit shall be conducted by a qualified professional hired by the applicant or property owner and shall result in a site visit report. If the County determines, based on the initial evaluation, ~~determines~~ that the proposed development may be subject to coastal hazards over its anticipated life~~time~~, a site-specific Coastal Hazard Report shall be prepared according to the requirements in these guidelines. The initial evaluation and/or study shall be subject to review and approval by the County as part of the Coastal Development Permit application review process.

Properties in Summerland may also be required to prepare a geology/soils report and a detailed drainage plan that minimize landslide, soil creep, and erosion hazards per the Summerland Community Plan.

4. Standards and Guidelines for Preparation of a Coastal Hazard Report that Includes Bluff-Top Erosion Risks:

A site-specific Coastal Hazard Report shall be required that is prepared by a qualified California licensed engineer with expertise in coastal processes. At a minimum, the Coastal Hazard Report shall examine the appropriate risk aversion sea level rise scenario, as shown in Table I-1 (or the current best available science), ~~"high" scenario of projected sea level rise~~ over the expected life of the structure ~~using the current best available science~~. The conditions that shall be considered in the hazard evaluation are: a seasonally eroded beach combined with erosion over the life of the structure, excluding the effects of any existing shoreline protective device; high tide conditions, combined with projections for sea level rise for the life of the structure; and storm waves from a 100-year event. The study shall provide maps and profiles that identify these conditions, as well as recommendations and alternatives to avoid, and if avoidance is not feasible, minimize, identified coastal hazards over the expected life of the structure. The study shall identify unavoidable coastal resource impacts and appropriate mitigation measures. Studies shall include an assessment of the availability of and potential risks to services to the site, including risks to public or private roads, stormwater management, water, sewer, electricity, and other utilities over the life of the development, considering sea level rise.

Coastal Hazard Reports shall include analysis of the physical impacts from coastal hazards and sea level rise that might constrain the project site and/or adversely impact the proposed development. Reports should address and demonstrate the site hazards and effects of the proposed development on coastal resources, including discussion, maps, profiles and/or other relevant information that describe the following:

(a.) Current conditions at the site, including the current:
- tidal range, referenced to an identified vertical datum
- intertidal zone
- inland extent of flooding and wave run-up associated with extreme tidal conditions and storm events
- beach erosion rates, both long-term and seasonal variability
- bluff erosion rates, both long-term and episodic

(b) Projected future conditions at the site, accounting for sea level rise over the anticipated life of the development, including the future:

- Shoreline, dune, or bluff edge, accounting for long-term erosion and assuming an increase in erosion from sea level rise
- intertidal zone
- inland extent of flooding and wave run-up associated with both storm and non-storm conditions

(c) Safety of the proposed structure to current and projected future coastal hazards, including:
- Identification of a building envelope on the site that avoids hazards
- Identification of options to minimize hazards if no building envelope exists that would allow avoidance of hazards
- Analysis of the adequacy of the proposed building/foundation design to ensure stability of the development relative to expected wave run-up, flooding and groundwater inundation for the anticipated life of the development in both storm and non-storm conditions
- Description of any proposed future sea level rise adaptation measures, such as incremental removal or relocation when threatened by coastal hazards

(e) Discussion of the study and assumptions used in the analysis including a description of the calculations used to determine long-term erosion impacts and the elevation and inland extent of current and future flooding and wave runup.

(f) For blufftop development, the report shall include a detailed analysis of erosion risks, including the following:
- To examine risks from erosion, the predicted bluff edge, shoreline position, or dune profile shall be evaluated considering not only historical retreat, but also acceleration of retreat due to continued and accelerated sea level rise and other climatic impacts. Future long-term erosion rates should be based upon the best available information, using resources such as the highest historic retreat rates, sea level rise model flood projections, or shoreline/bluff/dune change models that take rising sea levels into account. Additionally, proposals for blufftop development shall include a quantitative slope stability analysis demonstrating a minimum factor of safety against sliding of 1.5 (static) and 1.1 (pseudostatic, k=0.15 or determined through a quantitative slope stability analysis by a geotechnical engineer), whereby safety and stability must be demonstrated for the predicted position of the bluff and bluff edge following bluff recession over the identified project life, without the need for caissons or other protective devices. The analysis should consider adverse impacts both with and without any existing shoreline protective devices.

The ~~"high"~~ appropriate risk aversion sea level rise scenario, as shown in Table I-1 (or the current best available science) shall be examined to understand potential adverse impacts that may occur throughout the anticipated life of the development. ~~At a minimum, flood risk over the anticipated life of the development should be examined.~~ Additionally, the analysis should consider the frequency of future flooding impacts (e.g., daily impacts versus flooding from extreme storms only) and describe the extent to which the proposed development would be able to avoid, minimize, and/or withstand impacts from such occurrences of flooding. Studies should describe adaptation strategies that reduce hazard risks and neither create nor add to adverse impacts on existing coastal resources and that could be incorporated into the development.

5. Standards and Guidelines for Preparation of a Coastal Hazard Report that Includes Wave Run-up Risks:

A site-specific Coastal Hazard Report shall be required that is prepared by a qualified California licensed engineer with expertise in coastal processes. At a minimum, the Coastal Hazard Report shall examine the projected sea level rise ~~under the "high"~~ using the appropriate risk aversion sea level rise scenario, as shown in Table I-1 (or the current best available science), over the expected life of the structure~~, using the current best available science~~. The conditions that shall be considered in the hazard evaluation are: a seasonally eroded beach combined with erosion over the life of the structure, excluding the effects of any existing shoreline protective device; high tide conditions, combined with projections for sea level rise for the life of the structure; and storm waves from a 100-year event. The study shall provide maps and profiles that identify these conditions as well as recommendations and alternatives to avoid, and if avoidance is not feasible, minimize, identified coastal hazards over the expected life of the structure. The study shall identify unavoidable coastal resource impacts and appropriate mitigation measures. Studies shall include an assessment of the availability of and potential risks to services to the site, including risks to public or private roads, stormwater management, water, sewer, electricity, and other utilities over the life of the development, considering sea level rise.

Coastal Hazard Reports shall include analysis of the physical impacts from coastal hazards and sea level rise that might constrain the project site and/or adversely impact the proposed development. Studies should address and demonstrate the site hazards and effects of the proposed development on coastal resources, including discussion, maps, profiles and/or other relevant information that describe the following:

(a) Current conditions at the site, including the current:

- tidal range, referenced to an identified vertical datum
- intertidal zone
- inland extent of flooding and wave run-up associated with extreme tidal conditions and storm events
- beach erosion rates, both long-term and seasonal variability
- bluff erosion rates, both long-term and episodic
- Current Mean High Tide Line (MHTL) survey of the subject property (based on field data collected within the previous 12 months) that is prepared in accordance with the California State Lands Commission standards by a licensed professional land surveyor. Such surveys shall:
    - Use either the published Mean High Water elevation from a National Oceanic and Atmospheric Agency published tide station closest to the project or a linear interpolation between two adjacent tide stations, depending on the most appropriate approach in light of tidal regime characteristics.
    - Use the most current tidal epoch.
    - Use local, published control benchmarks to determine elevations at the survey site. Control benchmarks are the monuments on the ground that have been precisely located and referenced to the local tide stations and vertical datum used to calculate the Mean High Tide elevation.
    - Match elevation datum with tide datum.
    - Reference all elevations and contour lines to the North American Vertical Datum 1988 (NAVD88).
    - Note survey date, datum, and MHTL elevation.

- Be reviewed by the California State Lands Commission for completeness and accuracy.

(b) Projected future conditions at the site, accounting for sea level rise over the anticipated life of the development, including the future:
- shoreline, dune, or bluff edge, accounting for long-term erosion and assuming an increase in erosion from sea level rise
- intertidal zone
- inland extent of flooding and wave run-up associated with both storm and non-storm conditions

(c) Safety of the proposed structure to current and projected future coastal hazards, including:
- Identification of a building envelope on the site that avoids hazards
- Identification of options to minimize hazards if no building envelope exists that would allow avoidance of hazards
- Analysis of the adequacy of the proposed building/foundation design to ensure stability of the development relative to expected wave run-up, flooding and groundwater inundation for the anticipated life of the development in both storm and non-storm conditions
- Description of any proposed future sea level rise adaptation measures, such as incremental removal or relocation when threatened by coastal hazards

(d) Discussion of the study and assumptions used in the analysis including a description of the calculations used to determine long-term erosion impacts and the elevation and inland extent of current and future flooding and wave runup.

(e) For development on a beach, dune, low bluff, or other shoreline property subject to coastal flooding, inundation or erosion, the report shall include a detailed wave uprush and impact report and analysis, including the following:
- The analysis shall consider current flood hazards as well as flood hazards associated with sea level rise over the anticipated life of the development. To examine risks and adverse impacts from flooding, including daily tidal inundation, wave impacts, runup, and overtopping, the site should be examined under conditions of a beach subject to long-term erosion and seasonally eroded shoreline combined with a large storm event (1% probability of occurrence). Flood risks should take into account daily and annual high tide conditions, backwater flooding, water level rise due to El Niño and other atmospheric forcing, groundwater inundation, storm surge, sea level rise appropriate for the time period, and waves associated with a large storm event (such as the 100 year storm or greater). The analysis should consider impacts both with and without any existing shoreline protective devices.

~~At a minimum, the "high" scenario of projected sea level rise shall be examined to understand the potential adverse impacts that may occur throughout the anticipated life of the development.~~ Additionally, the analysis should consider the frequency of future flooding impacts (e.g., daily impacts versus flooding from extreme storms only) and describe the extent to which the proposed development would be able to avoid, minimize, and/or withstand impacts from such occurrences of flooding. Studies should describe adaptation strategies that reduce hazard risks and neither create nor add to impacts on existing coastal resources and that could be incorporated into the development.

ATTACHMENT 3
RESOLUTION OF THE SANTA BARBARA COUNTY BOARD OF SUPERVISORS
COUNTY OF SANTA BARBARA, STATE OF CALIFORNIA

IN THE MATTER OF ADOPTING AN AMENDMENT TO THE COASTAL LAND USE PLAN OF THE SANTA BARBARA COUNTY LOCAL COASTAL PROGRAM THAT ADDS POLICY LANGUAGE TO ALLOW FOR ADAPTATION TO THREATS RESULTING FROM SEA LEVEL RISE AND COASTAL HAZARDS	)	RESOLUTION NO. 18-_____ CASE NO: 17GPA-00000-00004

WITH REFERENCE TO THE FOLLOWING:

A. On January 7, 1980, by Resolution No. 80-12, the Board of Supervisors of the County of Santa Barbara (Board) adopted the Santa Barbara County Coastal Land Use Plan.

B. The proposed amendments are consistent with the Coastal Act of 1976, the Santa Barbara County Coastal Land Use Plan, the Santa Barbara County Comprehensive Plan, including the Community and Area Plans, and the requirements of California Planning, Zoning, and Development laws, as discussed in the Board Agenda Letters dated November 6 and December 11, 2018, and hereby incorporated by reference.

C. Citizens, Native American tribes, public agencies, public utility companies, and civic, education, and other community groups have been provided the opportunity for involvement in compliance with Government Code Section 65351.

D. The County communicated with Native American tribes in compliance with Government Code Sections 65352.3 and 65352.4.

E. In compliance with Government Code Section 65350.2, before a substantial amendment of the Comprehensive Plan, the Board is required to review and consider a groundwater sustainability plan or groundwater management plan, an adjudication of water rights, and/or an order or interim plan by the State Water Resources Control Board; however, such plans do not exist at the time of this action, thus the Board has satisfied its duties pursuant to Government Code Section 65350.5.

F. The Montecito Planning Commission held duly noticed hearings on May 16 and July 18, 2018, in compliance with Government Code Sections 65353 and 65854 on the proposed amendments at which hearing the amendments were explained and comments invited from the persons in attendance.

G. The County Planning Commission held duly noticed hearings on August 1 and August 29, 2018, in compliance with Government Code Section 65353 on the proposed amendments at which hearing the amendment was explained and comments invited from the persons in attendance, and has endorsed and transmitted a written recommendation to the Board of Supervisors in compliance with Government Code Section 65354.

H. The Board held duly noticed public hearings on November 6 and December 11, 2018, in compliance with Government Code Section 65355 on the proposed amendments at which hearing the proposed amendments were explained and comments invited from the persons in attendance.

NOW, THEREFORE, IT IS HEREBY RESOLVED as follows:

1. The above recitations are true and correct.

2. The Board now finds, consistent with the authority of Government Code Section 65358, that it is in the interest of orderly development of the County and important to the preservation of the health, safety, and general welfare of the residents of said County to amend Chapter 3, The

Resource Protection and Development Policies; amend Appendix A, Definitions of the Coastal Land Use Plan; amend Appendix C, References; and add a new Appendix J, Sea Level Rise and Coastal Hazard Screening Areas Map; to read as follows:

CHAPTER 3: THE RESOURCE PROTECTION AND DEVELOPMENT POLICIES

3.2 DEVELOPMENT

3.2.2 PLANNING ISSUES

Development Policies

Policy 2-12: The densities specified in the land use plan are maximums and shall be reduced if it is determined that such reduction is warranted by conditions specifically applicable to a site such as topography~~;~~, geologic ~~or~~, flood or fire hazards~~;~~, coastal bluff or shoreline retreat~~;~~, habitat areas~~;~~ or steep slopes. However, ~~density~~ densities may be increased for affordable housing projects provided such projects are found consistent with all applicable policies and provisions of the Local Coastal Program.

Planned Development

Policy 2-17: ~~Use~~ All development shall use ~~of~~ flexible design concepts~~, including~~ (e.g., clustering of units~~;~~ and/or a mixture of dwelling types~~, etc.~~) and flexible building design (e.g., flood proofing such as breakaway walls or elevated utilities) ~~shall be required~~ to accomplish ~~as much as possible all of~~ the following goals:

a. protection of the scenic qualities of the site;
b. protection of coastal resources~~, i.e.~~ (e.g., public access, water quality, habitat areas, and archaeological sites~~, etc.~~);
c. avoidance of siting ~~of~~ structures ~~on~~ within hazardous areas, including reasonably foreseeable coastal hazards from sea level rise;
d. provision of public open space, recreation, and/or beach access;
e. preservation of existing healthy trees; and
f. provision of very low, low and moderate income housing ~~opportunities~~.

Note: No changes are proposed to other policies in this section.

3.3 HAZARDS

3.3.2 PLANNING ISSUES

Recent and historic events provide strong evidence of the vulnerability of certain coastal areas to natural hazards. Following saturating rains in the winter of 1978, large sections of the cliff face in Isla Vista fell into the sea, threatening several apartments; soil slippage caused a road washout in the community of Summerland; severe erosion occurred in graded areas above Summerland; several bluff top homes slid into the sea in the City of Santa Barbara; and flooding and heavy wave action damaged some homes along Miramar Beach. Also in 1978, an earthquake disrupted a rail line in the Ellwood area, produced numerous bluff slides and fissures along the South Coast, and caused considerable structural damage in the surrounding areas. These types of natural hazards along the County's coastline have continued to occur. Recent significant events include bluff failure in Isla Vista and flash flooding in El Capitan Canyon in 2017 and the devastating debris flow and mudslides in Montecito in 2018.

The Coastal Act requires that the risks to new development from such occurrences be minimized. Moreover, it specifies that new development must be located and built neither to "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."

The County has an array of policies and regulations within its zoning, grading, and fire ordinances, and building code which address many of the concerns of the Coastal Act. In addition, Santa Barbara County has undertaken public works projects ~~in recent years~~ which now protect large areas that were previously vulnerable to flooding. Extensive creek channelizations in the Carpinteria Valley and the construction of upstream debris dams are two ~~recent~~ examples.

~~However, in spite of measures currently imposed by the County, recent problems with bluff top development and severe erosion in certain hillside agricultural areas suggest that more stringent controls are needed.~~

Bluff and Beach Erosion

Bluff erosion is a potential hazard for new development and continues to be a recurring hazard for existing development in portions of the South Coast. The bluff areas along Del Playa Drive in Isla Vista, sections of More Mesa and Hope Ranch, and areas along Channel Drive and Padaro Lane are all subject to hazards due to bluff erosion. Because of this recurring threat, many retaining walls, groins, and sections of rip-rap have been needed to protect life and property. In the aftermath of the 1978 winter, property owners initiated additional protective measures, such as major seawall projects proposed for Isla Vista and Padaro Lane.

The County's policy on bluff development is handled on a case-by-case basis except in Isla Vista ~~and Hope Ranch~~. In Isla Vista, a 30-foot setback requirement exists. It is based on an engineering study that was undertaken in 1963 to determine cliff stability and related problems in the Isla Vista area. The study identified an average "natural" rate of cliff retreat at six inches per year and recommended that a value of twice the apparent retreat rate (12 inches) per year be applied for safety purposes, along with specific site drainage requirements. Assuming an average "economic life" of 30 years per structure, the County developed the 30-foot setback for the area~~. In Hope Ranch, a 50-foot setback is required under the provisions of the County's Zoning Ordinance #661.~~

~~The inadequacy of the present requirements with respect to the Coastal Act is especially apparent in Isla Vista, since new "protective devices" which may substantially alter natural landforms along bluffs and cliffs are now necessary to protect property.~~

Bluff areas adjacent to development at More Mesa have been eroding at an average rate of ten inches per year, while along a section of Padaro Lane bluff losses of up to two feet per year have been reported. More than 10 feet were lost in a single event in Isla Vista in 2017. These examples provide additional evidence why County setback standards should be strengthened in order to eliminate the possibility of needing new "protective devices" in areas where future development may occur.

~~While serious beach erosion occurred during the winter storms of 1978, damage was localized and temporary in most cases. Heavy river and stream flows replenished much of the losses. Existing and proposed flood control projects are not considered to have a significant impact on sand supply to the beaches that would require corrective measures.~~

Geologic Hazards

Geologic hazards include seismic hazards (surface ruptures, liquefaction, severe ground shaking, tsunami run-up), landslides, soil erosion, expansive soils, and subsidence. Since these hazards can ~~affect~~ adversely impact both life and property, additional siting criteria or special engineering measures are needed to compensate for these hazards.

The entire South Coast lies in an area of high seismic risk. Seismic, landslide, and tsunami hazards have been mapped by the County and are used by the Public Works Department to review development proposals. Where faults are identifiable, the County Public Works Department has been generally requiring a 50-foot setback from the fault, though precise setback decisions are made on a case-by-case basis. In addition, geologic and soil engineering reports may be required under ~~Grading Ordinance No. 1795~~ the County's Grading Ordinance (Chapter 14 of the Santa Barbara County Code of Ordinances) for obtaining a grading permit. These reports are used to identify geologic and soil problems and to establish conditions for siting and constructing structures where hazards or problems exist.

With the exception of a slope hazard area in Summerland, problems due to slope instability are generally confined to areas outside of the proposed urban development limits set forth in the land use plan. Although the coastal zone between Ellwood and Point Arguello is either hilly or mountainous with variable and complex geologic conditions, only low-intensity, nonurban land uses will be located in this area. Consequently, slope-related hazards will be minimized. Soil erosion is a slope-related hazard which has become more problematic in recent years because of extensive agricultural development on slopes of 30 percent or more. ~~A recent study conducted by the Agricultural Unit of the State Water Resources Control Board documents severe erosion in some areas of the South Coast where new orchards are being established.~~

The County Grading Ordinance ~~No. 1795 (as amended by Ordinance No. 2770)~~ provides exemptions for grading related to farming and agricultural operations. However, the County's Brush Removal Ordinance ~~(No. 2767)~~ Chapter 9A of the Santa Barbara County Code of Ordinances)~~, which applies to the South Coast,~~ does regulate removal of vegetation on parcels over five acres in size, and requires a permit and approval of drainage and erosion control devices before agricultural grading commences.

Flooding

Flooding has occurred along Santa Barbara's South Coast in recent years, particularly in the Carpinteria Valley, sections of Montecito, and the Santa Barbara Airport area. Severe floods in 1969 undermined a section of U. S. 101 in Carpinteria. These flood hazards are progressively being eliminated in the populated portions of Carpinteria Valley and other areas of the South Coast as a result of stream channelizations and the construction of debris dams and silt basins by the Santa Barbara County Flood Control and Water Conservation District, the U.S. Corps of Engineers, and by the U. S. Soil Conservation Service.

~~The U. S. Department of Housing and Urban Development Federal Emergency Management Agency (FEMA) through the National Flood Insurance Program has investigated the existence and severity of flood hazards in the unincorporated areas of Santa Barbara County. One of the objectives of this study is was to provide information to local planners in promoting sound land use and flood plain management. The Federal Insurance Administration has adopted the 100-year flood (the flood having a one percent chance of being equaled or exceeded in any given year) as the national standard for purposes of flood plain management. The 100-year "flood plain" is comprised of a "floodway" and a "floodway fringe". The floodway is the channel of a stream, plus any adjacent flood plain areas, which must be kept free of encroachment in order that the 100-year flood be carried without substantial~~

~~increases in flood heights. As minimum standards, increases in flood heights are limited to 1.0 foot, provided that hazardous velocities are not produced. The area between the floodway and the boundary of the 100-year flood is termed the floodway fringe. This area encompasses that portion of the floodplain that could be completely obstructed without increasing the water surface elevation of the 100-year flood more than 1.0 foot at any point.~~

~~County Flood Combining Regulations, administered by the Santa Barbara County Flood Control and Water Conservation District, regulate construction, excavation, and grading in a "designated" floodway. The designated floodway, as defined in Ordinance No. 661 the County's Floodplain Management Ordinance, only includes "land reasonably required to provide for the construction of a flood control project for passage of a flood against which protection is provided or eventually will be provided by said project including land necessary for construction of project levees." Thus, the restrictions are not as comprehensive as those recommended by HUD. In addition, the "FW" Flood Hazard Combining Regulations currently apply only to areas in Carpinteria and Goleta, along Atascadero Creek, and the Goleta Slough.~~

~~New regulations covering all development within the 100-year flood plain have been formulated.~~ The County adopted the Floodp~~P~~lain Management Ordinance, Chapter 15A of the County Code, ~~has been adopted in order~~ to comply with the requirements of the ~~HUD-sponsored~~ Federal Emergency Management Agency (FEMA) Federal Flood Insurance Program in which this County is participating. FEMA has adopted the 100-year flood (the flood having a one percent chance of being equaled or exceeded in any given year) as the national standard for purposes of floodplain management. The 100-year "floodplain" is comprised of a "floodway" and a "floodway fringe" as shown in Figure 4-1 below. The floodway is the channel of a stream, plus any adjacent floodplain areas, which must be kept free of encroachment in order that the 100-year flood can be carried without substantial increases in flood heights. The areas of a floodplain on either side of the designated floodway are termed the floodway fringe, and encroachments (e.g., landscaping, structures, and utilities) may be permitted in the fringe areas. Development proposed within Santa Barbara County's Coastal Zone that is located within the Flood Hazard Area Overlay District is reviewed to ensure compliance with the Floodplain Management Ordinance as well as the County LCP.

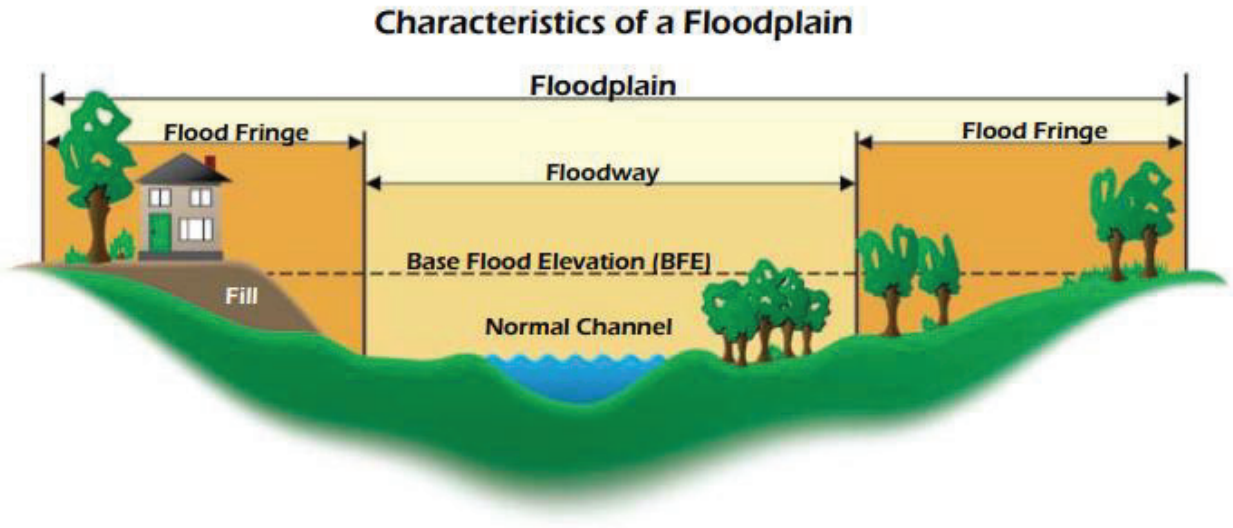

Figure 4-1. Characteristics of a Floodplain.

Source: FEMA Region 10 National Flood Insurance Program Floodplain Management Guidebook, 5th Edition, March 2009.

Coastal Hazards Exacerbated by Sea Level Rise

Global greenhouse gas emissions and resulting sea level rise from thermal expansion of ocean waters and melting ice sheets are predicted to increase and intensify beach and bluff erosion, coastal flooding, slope instability, wave uprush, and other coastal hazards. The magnitude and timing of these changes are not precisely known. However, the trend is clear and the need to incorporate sea level rise issues into coastal planning and permitting decisions is increasingly evident. The original Coastal Land Use Plan contained some policies to protect coastal resources and address coastal hazards. However, the County amended and expanded those policies in 2018 to specifically reflect current science, regulate development, and protect public access and other coastal resources consistent with the Coastal Act.

Sea Level Rise Projections

The National Research Council projected sea level rise through the end of this century in their 2012 publication "Sea Level Rise for the Coasts of California, Oregon, and Washington." Santa Barbara County refined the 2012 data for the county's coastline, as described in the 2017 "Santa Barbara County Sea Level Rise and Coastal Hazards Vulnerability Assessment." Table 1 shows the resulting low, medium, and high sea level rise scenarios for the Santa Barbara County coastline.

Table 1. Sea Level Rise Projections for Santa Barbara County (inches)

Time Period	Low Sea Level Rise Scenario	Medium Sea Level Rise Scenario	High Sea Level Rise Scenario
By 2030	0.04	3.5	10.2
By 2060	2.8	11.8	27.2
By 2100	10.6	30.7	60.2

Source: Santa Barbara County Sea Level Rise and Coastal Hazards Vulnerability Assessment, July 2017.

The California Ocean Protection Council updated the sea level rise projections in 2017 using the best available science and modeling techniques. The California Natural Resources Agency used the updated information to update the probabilistic projections in its 2018 sea level rise guidance document. Table 2 shows the updated sea level rise projections for the Santa Barbara tidal gauge area.

Table 2
Projected Sea Level Rise (inches) for the Santa Barbara Tidal Gauge

Year	Median	Likely Range	1-in-20 Chance	1-in-200 Chance
	50% probability sea level rise meets or exceeds:	*66% probability sea level rise is between:*	*5% probability sea level rise meets or exceeds:*	*0.5% probability sea level rise meets or exceeds:*
2030	3.6	2.4 - 4.8	6.0	8.4
2060	10.8	7.2 – 15.6	19.2	30.0
2100 – low emissions scenario	14.4	7.2 – 24.0	34.8	63.6
2100 – high emissions scenario	25.2	14.4 – 37.2	49.2	79.2

Source: California Natural Resources Agency and California Ocean Protection Council, 2018, *State of California Sea-Level Rise Guidance*, 2018 Update.

Coastal Land Use Plan policies require use of the "high" sea level rise scenario to analyze potential hazards to development. The "high" sea level rise scenario (Table 1) most closely aligns with the Natural Resources Agency's "1-in-200 chance" scenario (Table 2).

The County is committed to using the best available science to analyze potential hazards to future development. It also acknowledges that the climate change science supporting these projections is being constantly refined and updated, and will reevaluate the County's vulnerability on a consistent basis based on evolving scientific understanding.

Sea Level Rise Coastal Hazard Screening Areas Map

The County's Coastal Resiliency Project modeled and mapped sea level rise and related coastal hazards resulting from the low, medium, and high scenarios in Table 1. The model considers the County's unique coastline and topography, but the model results are not detailed enough to precisely predict coastal hazards at specific sites. Additionally, features such as Highway 101 were modeled as topographical features, not necessarily as barriers to sea level rise for parcels north of the freeway.

The model results inform the Sea Level Rise Coastal Hazard Screening Areas Map (Appendix J). The Screening Areas Map shows areas of the county coastline that are potentially subject to increased threats from sea level rise and coastal hazards, where further site-specific study is needed to assess potential threats.

The Sea Level Rise and Coastal Hazard Screening Areas Map in Appendix J shows the "high" sea level rise scenarios by the years 2030, 2060, and 2100. The Screening Areas Map is to be used for proposed development projects (e.g., new structures and development permitted by a Coastal Development Permit) in accordance with Policy 3-6, as well as subdivisions and certain lot line adjustments in accordance with Policy 3-1.

The low, medium, and high sea level rise scenarios can also be visually examined using the Coastal Resilience Mapping Portal available online at http://maps.coastalresilience.org/california/# or through the Planning and Development Department website at http://longrange.sbcountyplanning.org/programs/coastalresiliencyproject/ coastalresiliency.php.

The County will monitor measurable sea level rise locally and along the Pacific Coast as regional and global climate changes occur. It will compare results of the sea level rise monitoring against the sea level rise projections used in this LCP, and will update projections when needed. It will also update the Screening Areas Map using the best available science to show current and reasonably foreseeable future sea level rise and coastal hazards.

Coastal Hazard Setbacks

Coastal Act Section 30253 requires that new development "minimize risks to life and property in areas of high geologic, flood, and fire hazard." New development and redevelopment in coastal hazard areas must be located outside or set back from hazardous areas when feasible, to minimize risks to life and property. The required coastal hazard setbacks vary depending upon the anticipated life of development. Different types of development have different anticipated lives and, therefore, different coastal hazard setbacks. For example, a coastal hazards analysis for a new structure with an anticipated life of 75 years shall evaluate the project site over 75 years, including the range of projected sea level rise over that period. Using that evaluation, the development would be set back or designed to avoid coastal hazards over 75 years (i.e., anticipated life of development).

Shoreline Protective Devices

Shoreline protective devices include seawalls, revetments, breakwaters, groins, and cliff retaining walls. Shoreline protective devices vary in design and materials, ranging from the strategic placement of sand or rocks to vertical walls made of wood, concrete, or steel. They can protect development from short-term erosion and wave action, but can also obstruct and/or diminish public access to beaches, adversely impact the natural movement of sediments (e.g., sand, silt, and gravel) along the coastline, and result in the loss of beach widths and coastal habitat and resources.

Shoreline protective devices' adverse impacts on beach areas and local shoreline sand supply generally include:

- Losing sand and beach area through the device's physical encroachment on a beach,
- Accelerating bluff and shoreline erosion,
- Preventing new beach formation in areas where the bluff/shoreline would have otherwise naturally eroded, and
- Losing sand-generating bluff/shoreline materials that would have entered the sand supply absent the shoreline protective device.

The adverse impacts of shoreline protective devices can also create secondary adverse impacts such as the loss of natural habitat and visual resources as a result of beach, dune, and sand loss and the loss of horizontal beach access for recreation. If such adverse impacts cannot be avoided, they may be mitigated through options such as providing equivalent new public access or recreational facilities and/or undertaking restoration of nearby beach habitat.

3.3.3 POLICIES

Land Division

Policy 3-1: Subdivisions and certain lot line adjustments in areas subject to threats from sea level rise and coastal hazards shall only be permitted if each created parcel will comply with all applicable coastal hazard policies and standards of the LCP, will not require shoreline protection, and will not adversely impact coastal resources or public access. This policy shall only apply to lot line adjustments that would result in (1) an increased subdivision potential for any affected lot in the lot line adjustment, or (2) a greater number of residentially developable lots than existed before the lot line adjustment. This policy shall not apply to parcels created or adjusted for the purpose of providing open space or public access. For the purposes of this policy, the County shall use the "high" sea level rise scenario, as shown in the Sea Level Rise Coastal Hazards Screening Areas Map in Appendix J, and analyze potential hazards over a 100-year timeframe.

~~**Seawalls and Shoreline Structures**~~ **Shoreline Protection and Management**

Policy 3-2: The County shall collaborate with the Beach Erosion Authority for Clean Oceans and Nourishment (BEACON), local coastal cities, relevant state and federal agencies, and nonprofit organizations on shoreline management planning research and methods along the coastline of Santa Barbara County, including beach erosion from sea level rise and feasible sediment management solutions.

Policy 3-3: Prior to emergency conditions, the County will encourage and work with landowners whose property is subject to threats from sea level rise and coastal hazards to develop appropriate adaptation strategies, such as protect (e.g., soft, non-structural measures), accommodate (e.g., floodproofing retrofits), and/or retreat (e.g., relocate or remove existing development). Where

contiguous properties are subject to similar coastal hazards, landowners should develop coordinated adaptation strategies.

~~**Policy 3-1:** Seawalls shall not be permitted unless the County has determined that there are no other less environmentally damaging alternatives reasonably available for protection of existing principal structures. The County prefers and encourages non-structural solutions to shoreline erosion problems, including beach replenishment, removal of endangered structures and prevention of land divisions on shorefront property subject to erosion; and, will seek solutions to shoreline hazards on a larger geographic basis than a single lot circumstance. Where permitted, seawall design and construction shall respect to the degree possible natural landforms. Adequate provision for lateral beach access shall be made and the project shall be designed to minimize visual impacts by the use of appropriate colors and materials.~~

~~**Policy 3-2:** Revetments, groins, cliff retaining walls, pipelines and outfalls, and other such construction that may alter natural shoreline processes shall be permitted when designed to eliminate or mitigate adverse impacts on local shoreline sand supply and so as not to block lateral beach access.~~

Policy 3-4: Shoreline protective devices shall only be permitted when required to serve coastal-dependent uses or protect existing principal structures or public beaches in danger from erosion, when sited and designed to eliminate or mitigate adverse impacts on local shoreline sand supply, when designed to avoid, or mitigate if avoidance is infeasible, adverse impacts to lateral beach access, biological resources, water quality, visual, and other coastal resources, and when no less environmentally damaging alternative exists. Shoreline protective devices shall be sited to avoid sensitive resources, and adverse impacts on all coastal resources shall be mitigated to the maximum extent feasible. For the purposes of this policy, "existing structure" means a principal structure (e.g., residential dwelling, accessory dwelling unit, or public recreation facility) that was legally established on or before [effective date of the proposed sea level rise/coastal hazard LCP amendment].

Policy 3-~~3~~5: To avoid the need for future protective devices that could adversely impact sand movement and supply, no permanent above-ground structures shall be permitted on the dry sandy beach except facilities necessary for public health and safety, such as lifeguard towers, public access, such as boardwalks, or where such restriction would cause the inverse condemnation of the ~~parcel~~ lot by the County.

Sea Level Rise Coastal Hazard Areas

Policy 3-6: The Sea Level Rise Coastal Hazards Screening Areas Map (Appendix J) shall be used to identify coastal areas that require additional review and development standards to avoid and minimize adverse impacts from sea level rise and coastal hazards. Properties located in areas not shown on the Coastal Hazards Screening Areas Map shall also be subject to policies requiring site-specific hazards analysis and avoidance of threats from sea level rise and coastal hazards if there is substantial evidence demonstrating that the site may be subject to reasonably foreseeable future coastal hazards.

Policy 3-7: The County shall monitor sea level rise using the best available science, compare modeled projections against measurable changes in sea level, and report the results to the Board of Supervisors every five years, or sooner as necessary to incorporate new sea level rise science and information on coastal conditions. The County shall update the Sea Level Rise Coastal Hazards Screening Areas Map and sea level rise scenario standards if monitoring demonstrates a significant difference between modeled projections and measurable changes in sea level rise.

The County may act on a Coastal Development Permit application in compliance with LCP policies and standards, even if the Sea Level Rise Coastal Hazards Screening Areas Map needs an update, but have not been updated as of the time of action on the Coastal Development Permit application.

Policy 3-8: All development within areas shown in the Sea Level Rise Coastal Hazards Screening Areas Map (Appendix J), or otherwise subject to coastal hazards pursuant to Policy 3-6, shall be sited and designed to avoid existing or reasonably foreseeable future threats from sea level rise and coastal hazards without reliance on shoreline protective devices over the anticipated life of the development. (Refer to Coastal Land Use Plan Policy 3-10.) Utility infrastructure required for safe habitation (e.g., water, sewer, and onsite wastewater treatment systems) shall be set back at least the same distance as the development to ensure provision of adequate services during the anticipated life of the development. Minor and/or ancillary development that does not require foundations or grading, does not adversely impact beach, dune, or other coastal resource stability, and can be readily removed or relocated (e.g., decks, fences, patios, and walkways) may be permitted within coastal hazard setback areas if consistent with the protection of coastal resources.

Policy 3-9: In areas of known coastal hazards, including those areas shown on the Sea Level Rise and Coastal Hazards Screening Areas Map (Appendix J), a site-specific Coastal Hazard Report shall be prepared according to the requirements in Appendix I of the Coastal Zoning Ordinance (Technical Guidelines for Preparation of a Coastal Hazard Report). The analysis shall identify any hazards affecting the proposed development using the best available science, any necessary mitigation measures, and contain substantial evidence that the project site, with mitigation, is suitable for the proposed development and that the development will adequately protect life and property from the identified hazards. Mitigation measures shall be applied to development when required to avoid or minimize impacts related to sea level rise and related coastal hazards.

Policy 3-10: Coastal hazard setbacks shall be determined based upon the anticipated life of development. The anticipated life of development shall be defined as follows:

a. Temporary structures, or moveable or expendable construction (e.g., trails, boardwalks, bike racks, playgrounds): 5 years
b. Ancillary development or amenity structures (e.g., shoreline restrooms, parking lots): 25 years.
c. Mobile homes: 30 years.
d. Residential or commercial structures, accessory dwelling units, or manufactured homes: 75 years.
e. Critical infrastructure (e.g., emergency medical facilities, bridges, water treatment plants), subdivisions, and certain lot line adjustments per Policy 3-1: 100 years.

Notwithstanding Policy 1-3, where there are conflicts between this policy and coastal hazard setback policies or other provisions set forth in any community plans and/or existing ordinance, the most restrictive standard using the longest anticipated life of development or hazard analysis timeframe shall take precedence.

Policy 3-11: A legally permitted building or structure that does not conform to coastal resource protection or coastal hazard standards or setbacks shall be considered a nonconforming building or structure. Nonconforming buildings and structures must be brought into conformance with all LCP policies and standards for new development when proposed development activities (e.g., reconstruction, alterations, and additions) would replace 50 percent or more of a nonconforming building or structure. The definition of "redevelopment" in Appendix A, Definitions, establishes standards for calculating this threshold.

Policy 3-12: Development within coastal hazard areas shall be removed, relocated, or modified, and the area restored at the applicant's or property owner's expense, if:

(1) The structure has been damaged and designated as unsafe to enter by the County Building Official or designee due to coastal hazards, or

(2) Essential services to the site can no longer feasibly be maintained (e.g., utilities and roads).

Policy 3-13: Applicants or property owners receiving a Coastal Development Permit for development subject to existing or reasonably foreseeable future threats from sea level rise or coastal hazards and any related conditions of approval shall record a notice to property owner (NTPO) disclosing such threats and conditions. The NTPO shall notify current and future property owners of the: (1) conditions of approval of the Coastal Development Permit that authorized the development; (2) existing and reasonably foreseeable future threats from sea level rise and coastal hazards, including bluff retreat, erosion, wave run-up, and flooding/inundation and the results of any site-specific analysis thereof; and (3) potential for the public trust boundary to move inland, encompassing part or all of the development and therefore requiring a permit from the California Coastal Commission or State Lands Commission to remain.

Bluff and Dune Protection

Policy 3-414: ~~In areas of new development, above-ground structures shall be set back a sufficient distance from the bluff edge to be safe from the threat of bluff erosion for a minimum of 75 years, unless such standard will make a lot unbuildable, in which case a standard of 50 years shall be used. The County shall determine the required setback. A geologic report shall be required by the County in order to make this determination. At a minimum, such geologic report shall be prepared in conformance with the Coastal Commission's adopted Statewide Interpretive Guidelines regarding "Geologic Stability of Bluff top Development."(See also Policy 4-5 regarding protection of visual resources.)21~~

All development on bluff top lots shall be sited a sufficient distance from the bluff edge to be safe from the threat of bluff erosion and slope instability, factoring in the effects of sea level rise using the "high" sea level rise scenario as described in Table 1, and without reliance on shoreline protective devices, over the anticipated life of the development. (Refer to Coastal Land Use Plan Policy 3-10 and Appendix I of the Article II, Coastal Zoning Ordinance for the anticipated life of development and technical guidance on calculating the bluff edge setback, respectively.) Utility infrastructure required for safe habitation (e.g., water, sewer, and onsite wastewater treatment systems) shall be set back from the bluff edge to at least the same distance as the development to ensure provision of adequate services during the anticipated life of the development.

Applications for development on bluff top lots shall include a site-specific Coastal Hazard Report prepared according to the requirements in Appendix I of the Coastal Zoning Ordinance (Technical Guidelines for Preparation of a Coastal Hazard Report).

Policy 3-515: ~~Within the~~ Drought-tolerant vegetation shall be maintained on all bluff-top areas seaward of the required bluff~~top~~ edge setback, ~~drought-tolerant vegetation shall be maintained,~~ using native plants and materials to the maximum extent feasible. Minor ~~G~~grading~~,~~ ~~as~~ that may be required to establish proper drainage ~~or to install landscaping, and minor improvements, i.e., patios and fences that do not impact bluff stability,~~ may be permitted. Surface water shall be directed away from the ~~top of the~~ bluff top or ~~be handled in a manner satisfactory~~ managed to prevent damage to the bluff by surface and percolating water.

Policy 3-16: Minor, at grade, easily removable development associated with passive public recreational uses (e.g., signs, benches, and trails) may be located within coastal bluff edge setbacks.

Policy 3-6~~1~~7: All ~~D~~development and activity of any kind ~~beyond~~ landward of the required bluff~~-top~~ edge setback shall be constructed to ensure that all surface and subsurface drainage shall not contribute to the erosion of the bluff face or the stability of the bluff itself.

Policy 3-~~7~~8: No development shall be permitted on the bluff face, except for engineered staircases or accessways ~~to provide~~ for public beach access, and pipelines for scientific research or coastal dependent industry~~. Drainpipes shall be allowed~~; such uses are permitted only where no other less environmentally damaging ~~drain system~~ alternative is feasible and the ~~drainpipes are~~ development is sited and designed ~~and placed~~ to minimize erosion and impacts to the bluff face, toe, and beach. Drainage devices extending over the bluff face shall not be permitted if the property can feasibly be drained away from the bluff face.

Policy 3-19: All development adjacent to dunes shall be sited and designed to prevent adverse impacts to coastal resources, assure structural stability of the development, and avoid coastal hazards over the anticipated life of the development. Siting and design shall take into account the anticipated extent of the landward migration of foredunes over the anticipated life of the development. This landward migration shall be determined based upon historic dune erosion, storm damage, anticipated sea level rise, and foreseeable changes in sand supply.

Coastal Hazards Adversely Impacting Transportation Resources

Policy 3-20: The County shall consult and coordinate with the California Department of Transportation to protect public access to the coast and to minimize adverse impacts of sea level rise on U.S. Highway 101 and State Route 217. Areas that will become regularly inundated by the ocean or are at risk of periodic inundation from storm surge and sea level rise shall be identified. A combination of structural and non-structural measures to protect public access and use of U.S. Highway 101 and State Route 217 shall be considered with a preference towards non-structural solutions, unless the structural solutions are less environmentally damaging.

Policy 3-21: All Coastal Development Permit applications for new roads and road projects shall: (1) identify existing and reasonably foreseeable future coastal hazards, including flooding, storm surge, and sea level rise, and (2) set forth alternatives and adaptation measures to minimize risk and avoid shoreline protective devices over the anticipated life of the project.

Policy 3-22: The County shall consult and coordinate with the Union Pacific Railroad to protect public access to the coast and to minimize current and future threats from sea level rise and coastal hazards on regional railway lines. Areas that will become regularly inundated by the ocean or are at risk of periodic inundation from storm surge and sea level rise shall be identified. A combination of structural and non-structural measures to protect local and regional access and use of railway transportation shall be considered with a preference towards non-structural solutions, unless the structural solutions are less environmentally damaging.

Note: No changes are proposed to other policies in this section except renumbering of policies as required.

3.3.4 HILLSIDE AND WATERSHED PROTECTION

Policies

Policy 3-~~14~~29: All development shall be sited and designed to: (1) ~~fit the~~ minimize alteration of existing site topography, soils, geology, hydrology, and any other existing conditions, and (2) be oriented so that grading and other site preparation is kept to an absolute minimum. Natural features, landforms, and native vegetation~~, such as trees,~~ shall be preserved to the maximum extent feasible. Areas of the site which are not suited for development because of known soil, geologic, flood, erosion, or other hazards, including those associated with sea level rise, shall remain in open space.

Note: No changes are proposed to other policies in this section except renumbering of policies as required.

3.4 VISUAL RESOURCES

3.4.3 POLICIES

Policy 4-5: In addition to that required for safety (see Policy 3-414), ~~further~~ larger bluff setbacks may be required for oceanfront structures to minimize or avoid adverse impacts on public views from the beach. Bluff-top structures shall be located as far landward as necessary ~~set back from the bluff edge sufficiently far~~ to ensure that the structure does not infringe on views from the beach except in areas where existing structures on both sides of the proposed structure already adversely impact public views from the beach. In such cases, the new structure shall be located no closer to the bluff's edge than the adjacent structures.

Note: No changes are proposed to other policies in this section.

3.6 INDUSTRIAL AND ENERGY DEVELOPMENT

Policy Implementation

Policy 6-9: Applicants for oil and gas processing facilities shall prepare and keep updated emergency response plans to address ~~deal with~~ the potential consequences of hydrocarbon leaks, ~~or~~ fires~~. These emergency response plans shall be approved by the~~, and facility impacts from increased coastal flooding and erosion due to sea level rise. The County's Office of Emergency ~~Services Coordinator~~ Management and Fire Department shall review and, if found to be adequate, approve these emergency response plans.

Pipelines

Policy 6-16: ~~The p~~Pipelines shall be sited and constructed in such a manner as to inhibit erosion, taking into account areas subject to likely future erosion during the anticipated lifespan of the pipeline as sea level rises.

Policy 6-20: When feasible, pipelines shall be routed to avoid coastal hazard areas, including those areas shown on the Sea Level Rise Coastal Hazards Screening Areas Map (Appendix J). If avoidance of these areas is infeasible, pipeline segments passing through such coastal hazard areas shall be isolated by shutoff valves.

Note: No changes are proposed to other policies in this section except renumbering of policies as required.

3.7 COASTAL ACCESS AND RECREATION

3.7.4 POLICIES

Policy 7-1: The County shall take all necessary steps to protect and defend the public's constitutionally guaranteed rights of access to and along the shoreline. At a minimum, County actions shall include:

a. Initiating legal action to acquire easements to beaches and access corridors for which prescriptive rights exist consistent with the availability of staff and funds;

b. Accepting offers of dedication which will increase opportunities for public access and recreation consistent with the County's ability to assume liability and maintenance costs;

c. ~~Actively s~~Seeking other public or private agencies to accept offers of dedications, having them assume liability and maintenance responsibilities, and allowing such agencies to initiate legal action to pursue beach access; and

d. Working with landowners to pursue new public access ways if existing easements or corridors are lost or inaccessible due to sea level rise or other coastal hazards.

Policy 7-8: For unavoidable adverse impacts to public access or recreation from new shoreline protection devices or new development, mitigation of adverse impacts through the addition of new public access, recreation opportunities, visitor-serving accommodations, Coastal Trail segments, or payment of fees to fund such improvements shall be required.

Policy 7-9: New public access and public recreation uses and facilities (e.g., overlooks, trails, stairways and/or ramps, parks, and visitor-serving accommodations) may be allowed provided that such uses and facilities are consistent with all applicable LCP policies and standards, including those that do not require shoreline protective devices and will not cause, expand, or accelerate instability of a bluff. Adaptive management measures specifying how maintenance, retrofit, removal, or relocation will take place over time as conditions change as a result of sea level rise shall be a condition of permit approval.

Policy 7-10: As County beach park development plans are updated, they shall incorporate measures to adapt to sea level rise over time and provide for the long-term protection and provision of public improvements, coastal access, public opportunities for coastal recreation, and coastal resources including beach and shoreline habitat. Where feasible, any facilities that are removed or reduced should be replaced at an appropriate location, to ensure public access and recreational resources are protected and enhanced.

Note: No changes are proposed to other policies in this section except renumbering of policies as required.

3.9 ENVIRONMENTALLY SENSITIVE HABITAT AREAS

3.9.4 ENVIRONMENTALLY SENSITIVE HABITAT AREA OVERLAY DESIGNATION

Habitat Type: Streams

Policy 9-37: The minimum buffer strip for major streams and their associated riparian vegetation in rural areas, as defined by the ~~land use plan~~Land Use Element of the Santa Barbara County Comprehensive Plan, shall be presumptively 100 feet, and for streams and their associated riparian vegetation in urban areas, 50 feet. These minimum buffers may be ~~adjusted upward or downward~~ increased on a case-by-case basis when necessary to prevent significant disruption of habitat values given site-specific evidence provided in a biological report prepared by a qualified biologist. The minimum buffer strip may be decreased only to avoid precluding reasonable use of property. ~~The buffer shall be established~~ An increase to the buffer strip shall be based on an investigation of the following factors and after consultation with the California Department of Fish and ~~Game~~ Wildlife and Regional Water Quality Control Board ~~in order to~~. All buffers shall be sufficient to protect the biological productivity and water quality of streams, avoid significant disruption of habitat values, and to protect the habitat area, including the following habitat area characteristics:

1) existing vegetation, soil type and stability of stream and riparian corridors;

2) how surface water filters into the ground;

3) slope of the land on either side of the stream; ~~and~~

4) location of the 100-year flood plain boundary~~.~~;

5) consistency with adopted plans, particularly biology and habitat policies; and

6) landscape-scale habitat connectivity.

The required buffer shall extend from the outer extent of development (including fuel clearance required by the Fire Department) to the outer extent of the stream's riparian canopy, or the top of the stream bank if there is no riparian vegetation. ~~Riparian vegetation shall be protected and shall be included in the buffer.~~ Where riparian vegetation has previously been removed, except for channelization, inconsistent with (1) any policies or other applicable provisions of the LCP or (2) any provisions and conditions of existing, approved permits for the subject lot, the buffer shall ~~allow for the reestablishment of riparian vegetation~~ extend to ~~it's~~ the prior extent of the riparian vegetation to the greatest degree ~~possible~~ feasible.

Note: No changes are proposed to other policies in this section.

APPENDIX A: DEFINITIONS

CHAPTER 3

3.3 HAZARDS

Bluff (or Cliff): A scarp or steep face of rock, weathered rock, sediment and/or soil resulting from erosion, faulting, folding or excavation of the land mass, with at least 10 feet of vertical relief. (See Figure 1.) In the Coastal Zone, the toe of a bluff is or may be subject to marine erosion.

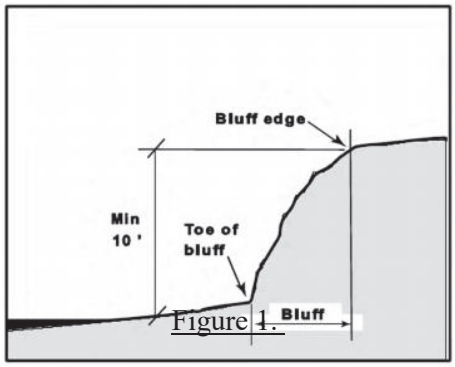

Figure 1.

Figure 1. Diagram of a Generalized Bluff

Bluff Edge: The upper termination of a bluff, cliff, or sea cliff. In cases where the top edge of the bluff is rounded away from the face of the bluff, the bluff edge shall be defined as that point nearest the bluff face beyond which the general gradient changes downward more or less continuously to the base of the bluff. (See Figure 2 below.) In a case where there is a step-like feature at the top of the bluff, the landward edge of the topmost riser shall be considered the bluff edge. (See Figure 3 below.) In cases where bluffs are undercut, the most undercut portion shall be considered as the defined bluff edge. (See Figure 4 below.) Artificial fill placed near the bluff edge, or extending over the bluff edge does not alter the position of the bluff edge. (See Figure 5 below.) Where a coastal bluff curves landward to become a canyon bluff, the termini of the coastal bluff edge shall be defined as a point reached by bisecting the angle formed by a line coinciding with the general trend of the coastal bluff line along the seaward face of the bluff, and a line coinciding with the general trend of the bluff line along the canyon facing portion of the bluff. (See Figure 6 below.)

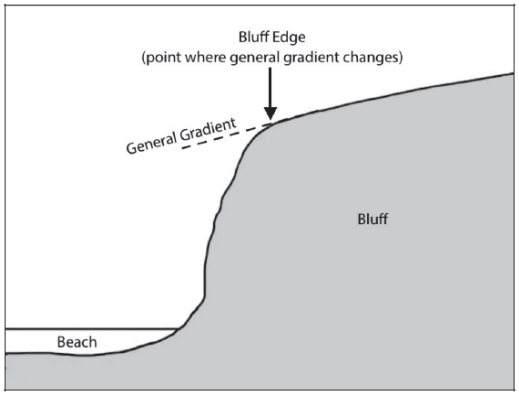

Figure 2. Rounded Bluff Edge

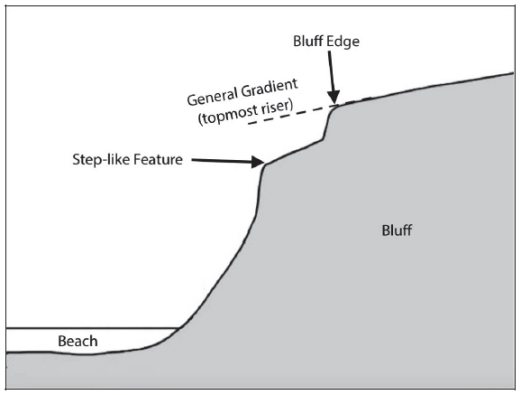

Figure 3. Bluff Edge with Step-like Feature

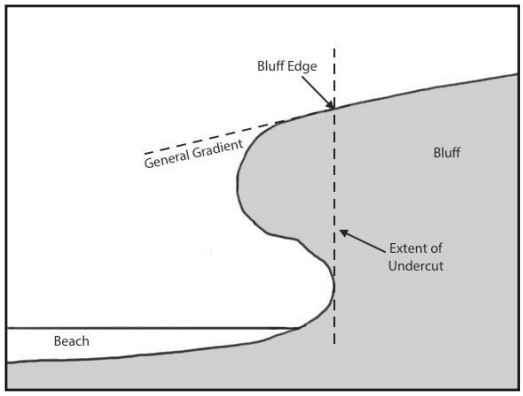

Figure 4. Diagram of an Undercut Bluff

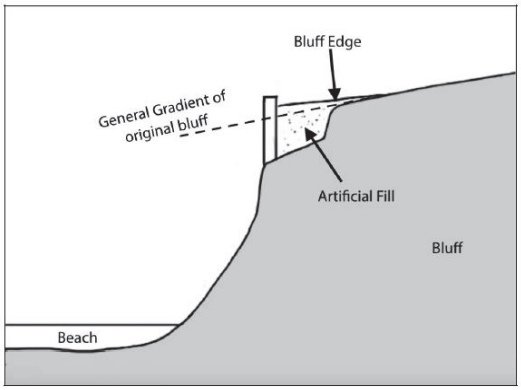

Figure 5. Bluff Edge with Artificial Fill

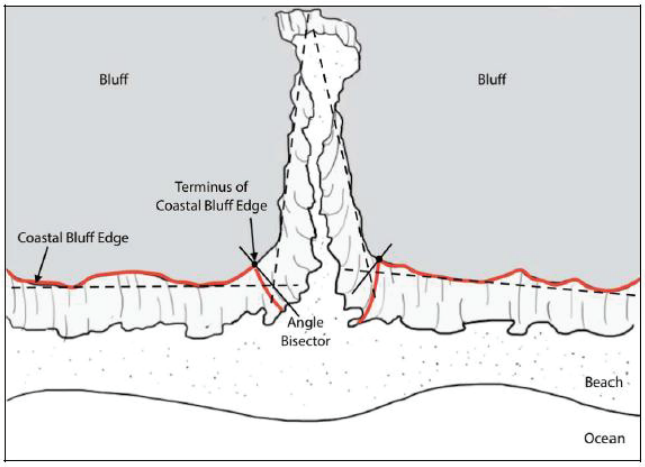

Figure 6. Coastal Canyon Bluff Edge

Coastal Hazards: Natural hazards that adversely impact the coastline, including but not limited to:

Coastal Erosion: Short- and long-term shoreline changes caused by erosion related to storm events, wave action, currents, water, wind, or other natural events.

Coastal Flooding: Temporary flooding due to high water level events caused by one or more of the following: high tides, storm surge (a rise above normal water level during storms), and sea level rise.

Extreme Monthly Tidal Inundation: Routine tidal inundation expected at least once a month.

Sea level rise: Change in the mean sea level due to an increase in the volume of ocean water.

Wave run up: The maximum vertical extent of wave action on a beach or structure, above the still water line.

Existing Structure

A structure that was legally established on or before [effective date of the proposed sea level rise/coastal hazard LCP amendment].

Existing Principal Structure

See "Existing Structure" and "Principal Structure."

Floodway and Floodway Fringe

The floodway is the channel of a stream, plus any adjacent flood plain area, that must be kept free of encroachment in order that the 100-year flood can be carried without substantial increase in flood height. As minimum standards, the Federal Insurance Administration limits such increases in flood heights to 1.0 foot, provided that hazardous velocities are not produced.

The area between the floodway and the boundary of the 100-year flood is termed the floodway fringe. The floodway fringe thus encompasses the portion of the flood plain that could be completely obstructed without increasing the water-surface elevation of the 100-year flood more than 1.0 foot at any point.

Hillside

Hillsides are defined as lands with slopes exceeding twenty percent.

Principal Structure: A structure (e.g., residential dwelling, accessory dwelling unit, or public recreation facility) in which is conducted the principal use of the lot on which it is situated. In any

residential, agricultural or estate district, any dwelling shall be deemed to be the principal structure on the lot on which it is situated.

Redevelopment

Development that consists of alterations to an existing structure that results in one or more of the following conditions:

1. Fifty percent or more of the structural components of exterior or interior walls (or vertical supports such as posts or columns when a structure has no walls) of a structure are replaced, structurally altered, reinforced, or removed.
2. Fifty percent or more of the foundation system is replaced, structurally altered, reinforced, or removed, including, but not limited to: perimeter concrete foundation, retaining walls, post and pier foundations, or similar element(s) that connect a structure to the ground and transfer gravity loads from the structure to the ground.
3. Fifty percent or more of the structural elements of the roof or floor framing are replaced, structurally altered, reinforced, or removed.
4. Alterations that do not individually meet one or more of the thresholds in subsections 1, 2, or 3, above, where those alterations combined with previous alterations undertaken on or after [effective date of the proposed Coastal Resiliency Project LCP amendment] would cumulatively meet or exceed one or more of the thresholds in subsections 1, 2, or 3, above.

Shoreline Protective Devices

Constructed features such as seawalls, revetments, riprap, earthen berms, cave fills, and bulkheads that block the landward retreat of the shoreline and are used to protect structures or other features from erosion, waves, and other coastal hazards.

Watershed

Watersheds are defined as regions or areas drained by a network of surface or subsurface watercourses and, due to their connectivity, have the potential to adversely impact coastal streams, wetlands, estuaries, and groundwater basins through runoff and percolation.

APPENDIX C: REFERENCES

SECTION 3.3: HAZARDS

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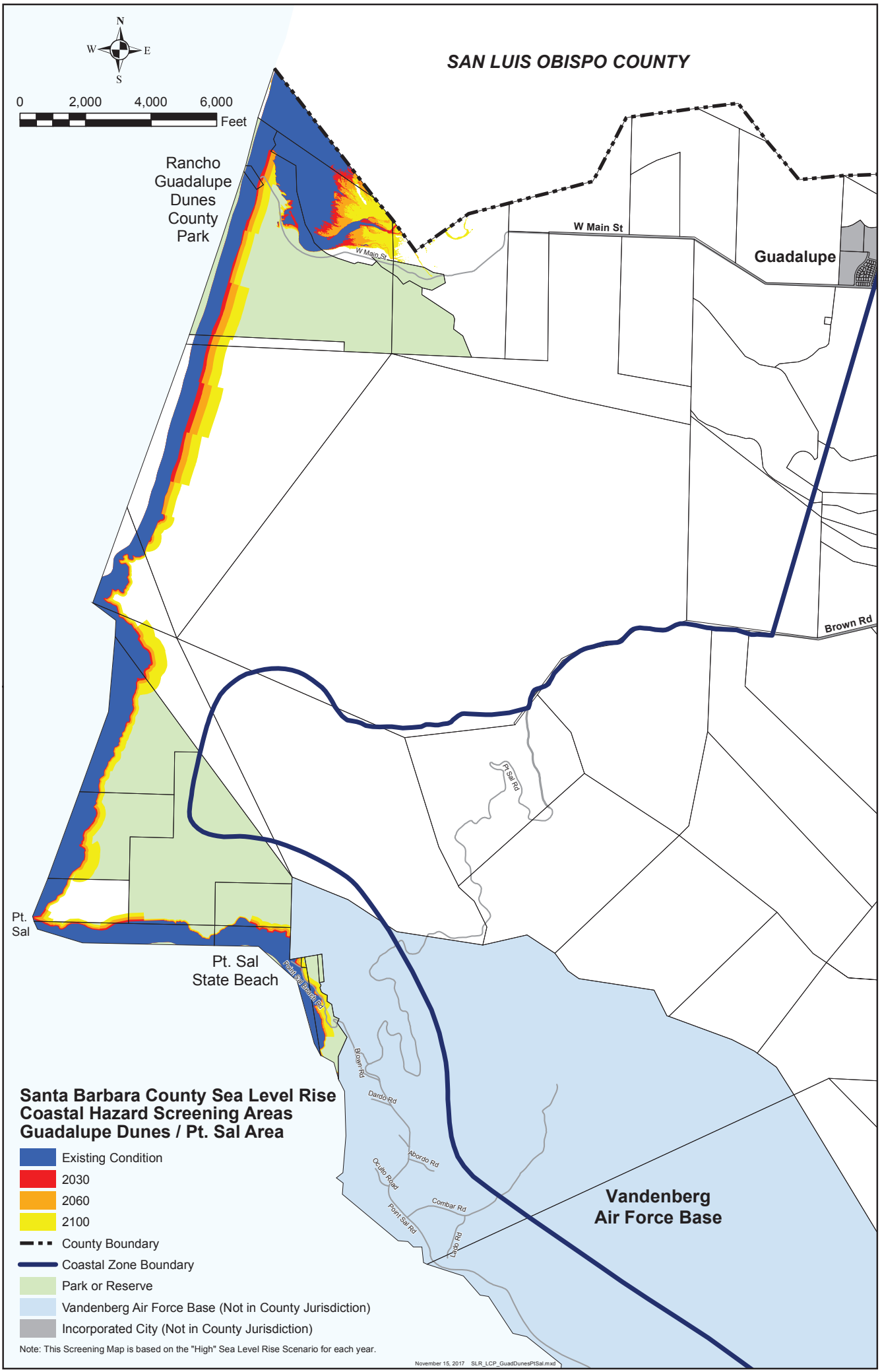
APPENDIX J: SEA LEVEL RISE COASTAL HAZARD SCREENING AREAS MAP

[See Next Page]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Oceano Road
Combar Rd
Point Sal Rd
Dardo Rd
Vandenberg Air Force Base
Santa Barbara County Sea Level Rise Coastal Hazard Screening Areas Guadalupe Dunes / Pt. Sal Area
Existing Condition
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2100
County Boundary
Coastal Zone Boundary
Park or Reserve
Vandenberg Air Force Base (Not in County Jurisdiction)
Incorporated City (Not in County Jurisdiction)
Note: This Screening Map is based on the "High" Sea Level Rise Scenario for each year.
November 15, 2017 SLR_LCP_GuadDunesPtSal.mxd


Santa Barbara County Sea Level Rise
Coastal Hazard Screening Areas
Vandenberg Coast
Existing Condition
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2100
Coastal Zone Boundary
Park or Reserve
Vandenberg Air Force Base
(Not in County Jurisdiction)
Note: This Screening Map is based on the "High" Sea Level Rise Scenario for each year.
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Vandenberg
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Ocean Beach County Park
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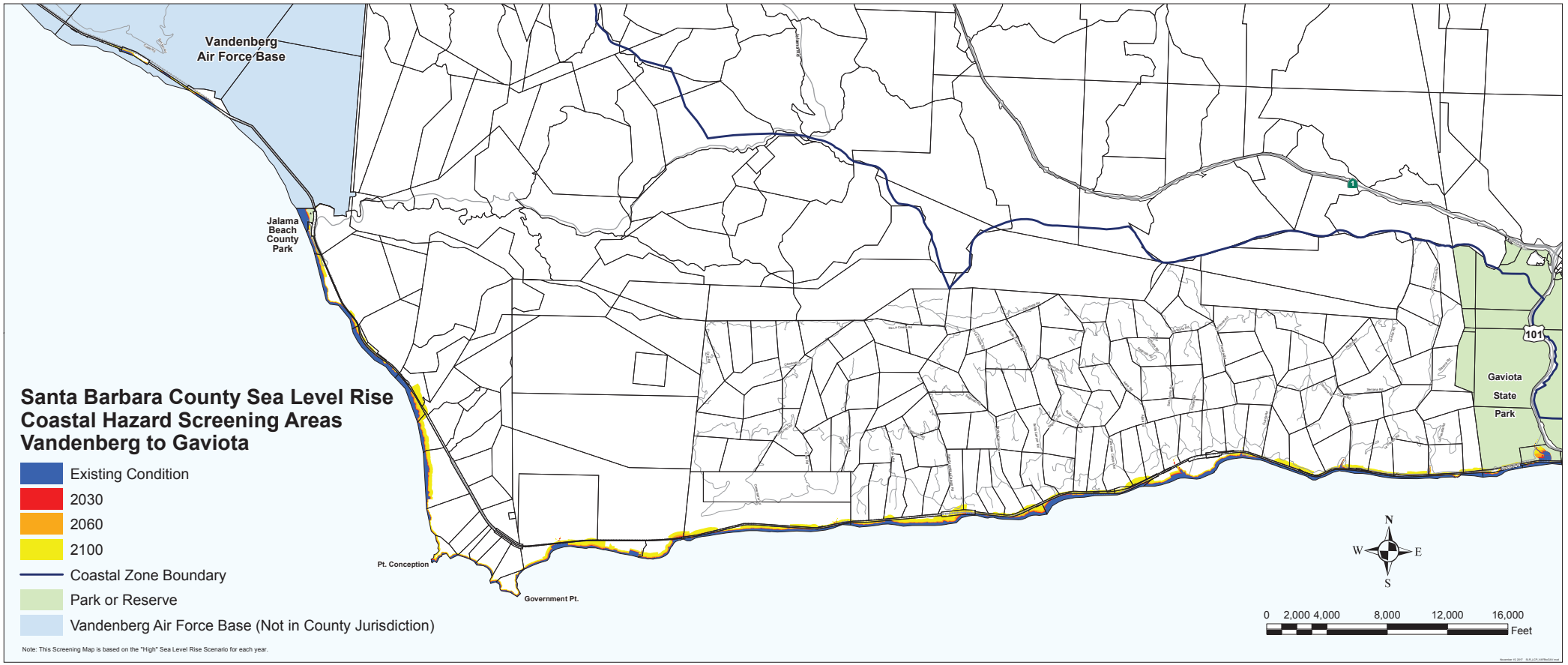
Vandenberg
Air Force Base
Jalama
Beach
County
Park
Pt. Conception
Government Pt.
Gaviota
State
Park
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1
Santa Barbara County Sea Level Rise
Coastal Hazard Screening Areas
Vandenberg to Gaviota
Existing Condition
2030
2060
2100
Coastal Zone Boundary
Park or Reserve
Vandenberg Air Force Base (Not in County Jurisdiction)
Note: This Screening Map is based on the "High" Sea Level Rise Scenario for each year.
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Gaviota State Park
Gaviota State Park
101
Arroyo Hondo Preserve
Refugio State Beach
El Capitan State Beach
El Capitan State Beach
101
Naples
Goleta
Santa Barbara County Sea Level Rise
Coastal Hazard Screening Areas
Gaviota to Goleta
Existing Condition
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Coastal Zone Boundary
Park or Reserve
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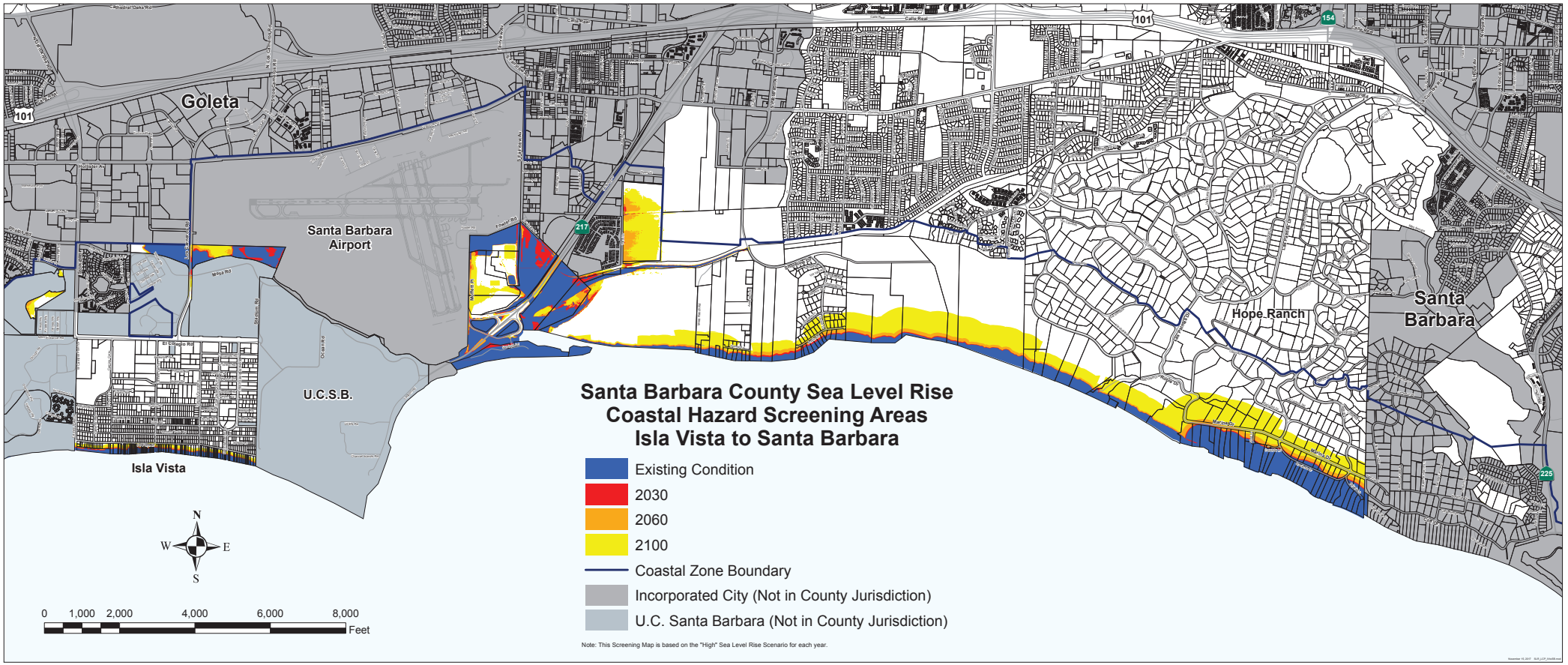
Note: This Screening Map is based on the "High" Sea Level Rise Scenario for each year.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Santa Barbara Airport
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Isla Vista
Hope Ranch
Santa Barbara
101
154
217
225
Calle Real
Santa Barbara County Sea Level Rise
Coastal Hazard Screening Areas
Isla Vista to Santa Barbara
Existing Condition
2030
2060
2100
Coastal Zone Boundary
Incorporated City (Not in County Jurisdiction)
U.C. Santa Barbara (Not in County Jurisdiction)
Note: This Screening Map is based on the "High" Sea Level Rise Scenario for each year.
N
W
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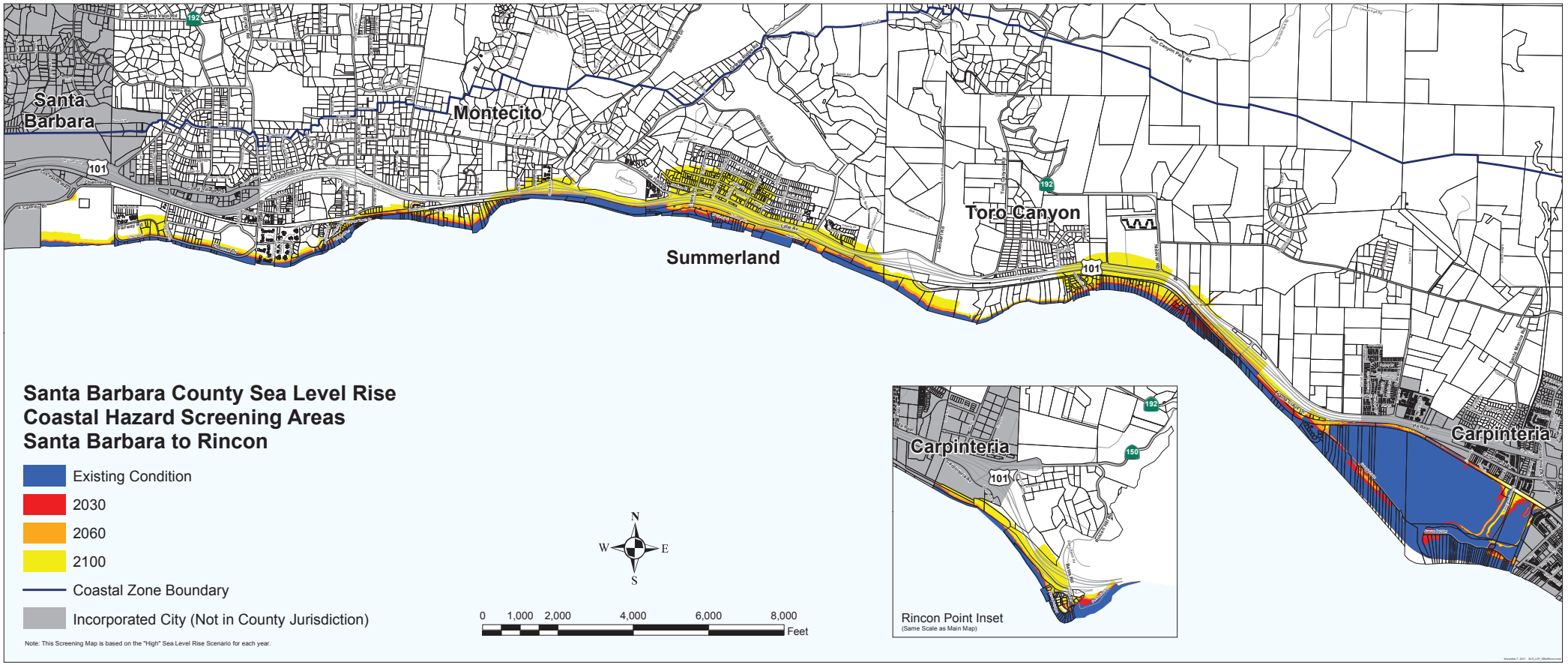
Feet



Santa Barbara County Sea Level Rise Coastal Hazard Screening Areas Santa Barbara to Rincon

- Existing Condition
- 2030
- 2060
- 2100
- Coastal Zone Boundary
- Incorporated City (Not in County Jurisdiction)

Note: This Screening Map is based on the "High" Sea Level Rise Scenario for each year.

3. All existing indices, section references, and figure and table numbers contained in the Coastal Land Use Plan are hereby revised and renumbered as appropriate to reflect the revisions enumerated above.

4. Except as amended by this Resolution, Chapter 3, The Resource Protection and Development Policies, Appendix A, Definitions of the Coastal Land Use Plan, and Appendix C, References, as well as all other components of the Coastal Land Use Plan, shall remain unchanged and shall continue in full force and effect.

5. In compliance with Government Code Section 65356, the above described change is hereby adopted as an amendment to the Coastal Land Use Plan of the Local Coastal Program and shall take effect and be in force upon the date that it is certified by the Coastal Commission pursuant to Public Resources Code Section 30514.

6. In compliance with Government Code Section 65357(a), the Clerk of the Board is hereby directed to send copies of the documents amending the Coastal Land Use Plan of the Local Coastal Program, including the diagrams and text, to all public entities specified in Government Code Section 65352 and any other public entities that submitted comments on the amendment to the Coastal Land Use Plan of the Local Coastal Program during its preparation.

7. In compliance with Government Code Section 65357(b), the Clerk of the Board is hereby directed to make the documents amending the Coastal Land Use Plan of the Local Coastal Program, including the diagrams and text, available to the public for inspection.

8. The Chair and the Clerk of this Board are hereby authorized and directed to sign and certify all maps, documents, and other materials in accordance with this Resolution to reflect the above described action by the Board.

PASSED, APPROVED, AND ADOPTED by the Board of Supervisors of the County of Santa Barbara, State of California, this _____ day of _____, 2018 by the following vote:

AYES:

NOES:

ABSTAIN:

ABSENT:

_____

DAS WILLIAMS, CHAIR
BOARD OF SUPERVISORS
COUNTY OF SANTA BARBARA

ATTEST:
MONA MIYASATO, COUNTY EXECUTIVE OFFICER
CLERK OF THE BOARD

By _____

Deputy Clerk

APPROVED AS TO FORM:
MICHAEL C. GHIZZONI
COUNTY COUNSEL

By _____
Deputy County Counsel

EXHIBIT 4
LCP-4-STB-20-0028-1

ATTACHMENT 4

ORDINANCE NO. _____

AN ORDINANCE AMENDING THE SANTA BARBARA COUNTY COASTAL ZONING ORDINANCE, ARTICLE II OF CHAPTER 35, ZONING, OF THE SANTA BARBARA COUNTY CODE BY AMENDING DIVISION 1, IN GENERAL; DIVISION 2, DEFINITIONS; DIVISION 3, DEVELOPMENT STANDARDS; DIVISION 5, OVERLAY DISTRICTS; DIVISION 7, GENERAL REGULATIONS; DIVISION 9, OIL AND GAS FACILITIES; DIVISION 10, NONCONFORMING STRUCTURES AND USES; DIVISION 11, PERMIT PROCEDURES; AND ADDING A NEW APPENDIX I, TECHNICAL GUIDELINES FOR PREPARATION OF A COASTAL HAZARD REPORT, TO ADD OR MODIFY TEXT THAT WOULD ALLOW THE COUNTY TO IMPLEMENT THE CORRESPONDING POLICY CHANGES IN THE COASTAL LAND USE PLAN WITH REGARD TO THREATS FROM SEA LEVEL RISE AND COASTAL HAZARDS.

Case No. 17ORD-00000-00015

The Board of Supervisors of the County of Santa Barbara ordains as follows:

SECTION 1.

DIVISION 1, In General, of Article II, the Santa Barbara County Coastal Zoning Ordinance, of Chapter 35, Zoning, of the Santa Barbara County Code, is amended to add a new Section 35-51D, Economically Viable Use of Property, to read as follows:

Section 35-51D. Economically Viable Use of Property.

Where full compliance with all LCP policies and standards, including setbacks for coastal hazards, would preclude all reasonable economic use of the property as a whole, the County may allow the minimum economic use and/or development of the property necessary to avoid an unconstitutional taking of private property without just compensation.

A Coastal Development Permit that allows a deviation from an LCP policy or standard to provide a reasonable economic use may be approved or conditionally approved only if the decision-maker finds that LCP-consistent uses would not provide an economically viable use of the property, and that the proposed development is consistent with the applicable zoning, is consistent with other laws or legal principles (e.g., is not a public nuisance), is the least environmentally damaging feasible alternative, and is the minimum necessary to avoid a taking. These findings are in addition to the findings required in Section 35-169 (Coastal Development Permits).

SECTION 2.

DIVISION 2, Definitions, of Article II, the Santa Barbara County Coastal Zoning Ordinance, of Chapter 35, Zoning, of the Santa Barbara County Code, is amended to add the following definitions to Section 35-58, Definitions, to read as follows:

Bluff (or Cliff): A scarp or steep face of rock, weathered rock, sediment and/or soil resulting from erosion, faulting, folding or excavation of the land mass, with at least 10 feet of vertical relief. (See Figure 1 below.) In the Coastal Zone, the toe of a bluff is or may be subject to marine erosion.

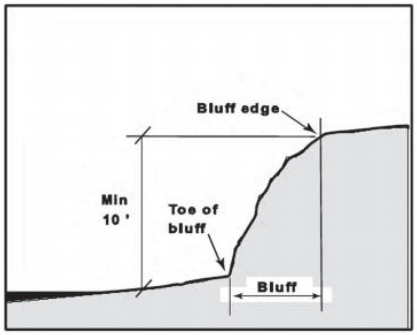


Figure 1. Diagram of a Generalized Bluff

Bluff Edge: The upper termination of a bluff, cliff, or sea cliff. In cases where the top edge of the bluff is rounded away from the face of the bluff, the bluff edge shall be defined as that point nearest the bluff face beyond which the general gradient changes downward more or less continuously to the base of the bluff. (See Figure 2 below.) In a case where there is a step-like feature at the top of the bluff, the landward edge of the topmost riser shall be considered the bluff edge. (See Figure 3 below.) In cases where bluffs are undercut, the most undercut portion shall be considered as the defined bluff edge. (See Figure 4 below.) Artificial fill placed near the bluff edge, or extending over the bluff edge does not alter the position of the bluff edge. (See Figure 5 below.) Where a coastal bluff curves landward to become a canyon bluff, the termini of the coastal bluff edge shall be defined as a point reached by bisecting the angle formed by a line coinciding with the general trend of the coastal bluff line along the seaward face of the bluff, and a line coinciding with the general trend of the bluff line along the canyon facing portion of the bluff. (See Figure 6 below.)

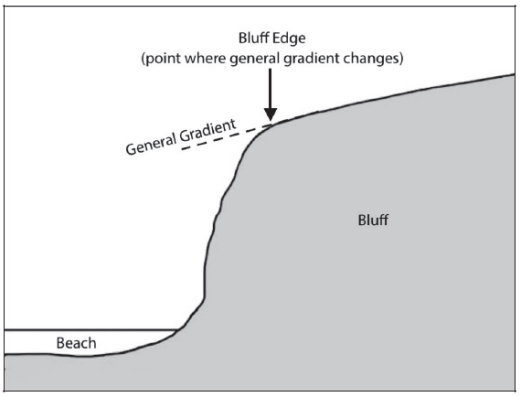


Figure 2. Rounded Bluff Edge

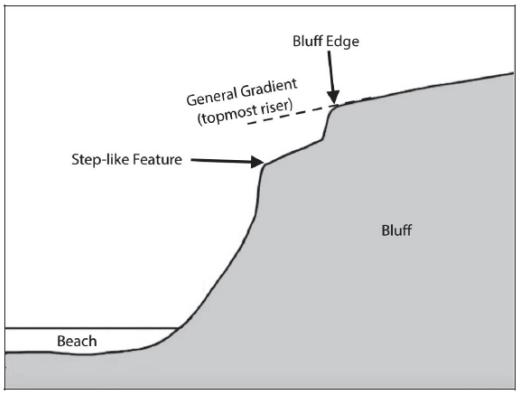


Figure 3. Bluff Edge with Step-like Feature

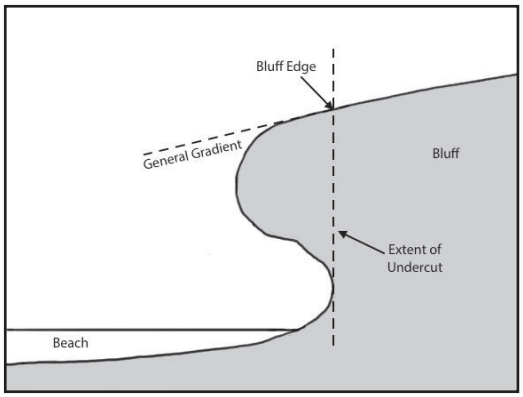


Figure 4. Diagram of an Undercut Bluff

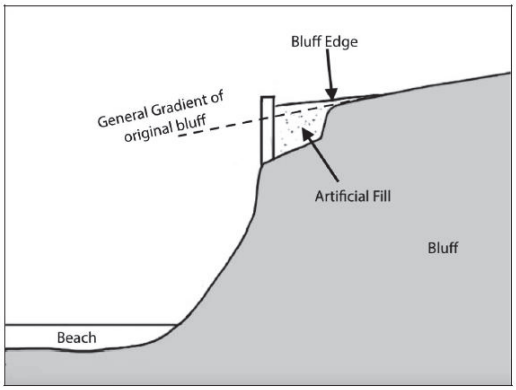


Figure 5. Bluff Edge with Artificial Fill

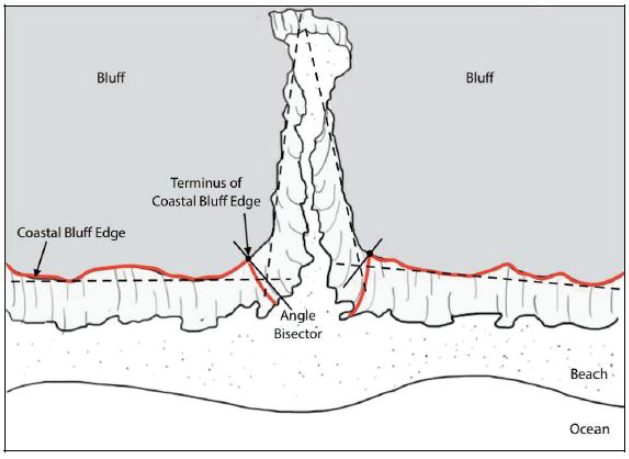


Figure 6. Coastal Canyon Bluff Edge

Coastal Hazards: Natural hazards that adversely affect the coastline, including but not limited to:

Coastal Erosion: Short- and long-term shoreline changes caused by erosion related to storm events, wave action, currents, water, wind, or other natural events.

Coastal Flooding: Temporary flooding due to high water level events caused by one or more of the following: high tides, storm surge (a rise above normal water level during storms), and sea level rise.

Extreme Monthly Tidal Inundation: Routine tidal inundation expected at least once a month.

Sea level rise: Change in the mean sea level due to an increase in the volume of ocean water.

Wave run-up: The maximum vertical extent of wave action on a beach or structure, above the still water line.

Existing Structure: A structure that was legally established on or before [effective date of the proposed sea level rise/coastal hazard LCP amendment].

Existing Principal Structure: See "Existing Structure" and "Principal Structure."

Principal Structure: A structure (e.g., residential dwelling, accessory dwelling unit, or public recreation facility) in which is conducted the principal use of the lot on which it is situated . In any residential, agricultural, or estate district, any dwelling shall be deemed to be the principal structure on the lot on which it is situated.

Redevelopment: Development that consists of alterations to an existing structure that results in one or more of the following conditions:

1. Fifty percent or more of the structural components of exterior or interior walls (or vertical supports such as posts or columns when a structure has no walls) of a structure are replaced, structurally altered, reinforced, or removed.
2. Fifty percent or more of the foundation system is replaced, structurally altered, reinforced, or removed, including, but not limited to: perimeter concrete foundation, retaining walls, post and pier foundations, or similar element(s) that connect a structure to the ground and transfer gravity loads from the structure to the ground.
3. Fifty percent or more of the structural elements of the roof or floor framing are replaced, structurally altered, reinforced, or removed.
4. Alterations that do not individually meet one or more of the thresholds in subsections 1, 2, or 3, above, where those alterations combined with previous alterations undertaken on or after [effective date of the proposed Coastal Resiliency Project LCP amendment] would cumulatively meet or exceed one or more of the thresholds in subsections 1, 2, or 3, above.

Shoreline Protective Devices: Constructed features such as seawalls, revetments, riprap, earthen berms, cave fills, and bulkheads that block the landward retreat of the shoreline and are used to protect structures or other features from waves, erosion, and other coastal hazards.

SECTION 3.

DIVISION 3, DEVELOPMENT STANDARDS, of Article II, the Santa Barbara County Coastal Zoning Ordinance, of Chapter 35, Zoning, of the Santa Barbara County Code, is amended to change subsection 3 of Section 35-59, General, to read as follows:

Section 35-59. General.

…

3. The densities specified in the Land Use Plan are maximums and shall be reduced if it is determined that such reduction is warranted by conditions specifically applicable to a site, such as topography~~;~~, geologic~~, or~~ flood, or fire hazards~~;~~ coastal bluff or shoreline retreat; habitat areas~~;~~ or steep slopes. However, densities may be increased for affordable housing projects provided such projects are found consistent with all applicable policies and provisions of the local Coastal Program.

….

SECTION 4.

DIVISION 3, DEVELOPMENT STANDARDS, of Article II, the Santa Barbara County Coastal Zoning Ordinance, of Chapter 35, Zoning, of the Santa Barbara County Code, is amended to change subsection 1 of Section 35-61, Beach Development, to read as follows:

Section 35-61. Beach Development.

1. To avoid the need for future shoreline protective devices that could adversely impact sand movement and supply, no permanent above-ground structures shall be permitted on the dry sandy beach except facilities necessary for public health and safety, such as lifeguard towers, and coastal public access facilities, such as boardwalks and trails, or where such restriction would cause the inverse condemnation of the lot by the County. Such development shall be designed to be relocated or removed if warranted by changing coastal conditions.

…

SECTION 5.

DIVISION 3, DEVELOPMENT STANDARDS, of Article II, the Santa Barbara County Coastal Zoning Ordinance, of Chapter 35, Zoning, of the Santa Barbara County Code, is amended to change Section 35-67, Bluff Development to read as follows:

Section 35-67. Bluff and Dune Development.

1. ~~In areas of new development, above ground structures shall be set back a sufficient distance from the bluff edge to be safe from the threat of bluff erosion for a minimum of 75 years, unless such standard will make a lot unbuildable, in which case a standard of 50 years shall be used. The County shall determine the required setback. A geologic report shall be required by the County in order to make this determination. At a minimum, such geologic report shall be prepared in conformance with the Coastal Commission's adopted Statewide Interpretive Guidelines regarding "Geologic Stability of Blufftop Development." (See also Policy 4 - 5 regarding protection of visual resources.)~~

   All development on bluff-top lots shall be sited a sufficient distance from the bluff edge to be safe from the threat of bluff erosion and slope instability, factoring in the effects of sea level rise, and without reliance on shoreline protective devices over the anticipated life of the development. [Refer to Coastal Land Use Plan Policy 3-10 and Appendix I (Technical Guidelines for Preparation of a Coastal Hazard Report) of the Article II, Coastal Zoning Ordinance for the anticipated life of development and technical guidance on calculating the bluff edge setback, respectively.] Utility infrastructure required for safe habitation (e.g., water, sewer, and onsite wastewater treatment systems) shall be set back from the bluff edge to at least the same distance as the development to ensure the provision of adequate services during the anticipated life of the development.

   Applications for development on bluff-top lots shall include a site-specific Coastal Hazard Report

prepared according to the requirements in Appendix I (Technical Guidelines for Preparation of a Coastal Hazard Report). The report is subject to review and approval by the County as part of the Coastal Development Permit application review process. When permitted, development shall be conditioned to require noticing per Section 35-67A.7 and removal per Section 35-67A.6.

2. In addition to that required for safety, ~~further~~ larger bluff setbacks may be required for oceanfront structures to minimize or avoid adverse impacts on public views from the beach. Bluff-top structures shall be ~~set back from the bluff edge sufficiently far~~ located as far landward as necessary to ensure that the structure does not infringe on views from the beach except in areas where existing structures on both sides of the proposed structure already impact public views from the beach. In such cases, the new structure shall be located no closer to the bluff edge than the adjacent structures.

3. Minor, at grade, easily removable development associated with passive public recreational uses (e.g., signs, benches, and trails) may be located within coastal bluff edge setbacks.

4. Minor and/or ancillary development that does not require foundations or grading, does not adversely impact bluff stability, and can be readily removed and/or relocated (e.g., decks, fences, patios, and walkways) may be permitted within the bluff edge setback area if consistent with the protection of coastal resources. The minor and/or ancillary development shall be removed or relocated landward at the owner's expense when imminently threatened by coastal hazards. Shoreline protection devices are prohibited to protect these minor and/or ancillary structures from bluff retreat and other coastal hazards.

~~3~~5. ~~Within the d~~Drought-tolerant vegetation shall be maintained~~.~~ on all bluff-top areas seaward of the required bluff edge setback, using native plants and materials to the maximum extent feasible. Minor ~~G~~grading~~, as~~ that may be required to establish proper drainage ~~or to install landscaping, and minor improvements, i.e., patios and fences that do not impact bluff~~ ~~stability,~~ may be permitted. Surface water shall be directed away from the ~~top of the~~ bluff top or ~~be handled in a manner satisfactory~~ managed to prevent damage to the bluff by surface and percolating water.

~~4~~6. Development and activity of any kind ~~beyond~~ landward of the required bluff edge setback shall be constructed to ensure that all surface and subsurface drainage shall not contribute to the erosion of the bluff face or the stability of the bluff itself.

~~5~~7. No new development shall be permitted on the bluff face, except for engineered staircases or accessways to provide public beach access, and pipelines for scientific research or coastal dependent industry; such uses are permitted only where no other less environmentally damaging alternative is feasible and the development is sited and designed to not contribute to erosion and to minimize impacts to the bluff face, toe, and beach. Drainage devices extending over the bluff face shall not be permitted if the property can feasibly be drained away from the bluff face.

8. All development adjacent to dunes shall be sited and designed to prevent adverse impacts to coastal resources, assure structural stability of the development, and avoid coastal hazards over the anticipated life of the development. Siting and design shall take into account the anticipated extent of the landward migration of foredunes over the anticipated life of the development. This landward migration shall be determined based upon historic dune erosion, storm damage, anticipated sea level rise, and foreseeable changes in sand supply. When permitted, development shall be conditioned to require noticing per Section 35-67A.7 and removal per Section 35-67A.6.

Applications for development adjacent to dunes shall include a site-specific Coastal Hazard Report prepared according to the applicable requirements in Appendix I (Technical Guidelines for Preparation of a Coastal Hazard Report). The report is subject to review and approval by the County as part of the Coastal Development Permit application review process.

SECTION 6.

DIVISION 3, DEVELOPMENT STANDARDS, of Article II, the Santa Barbara County Coastal Zoning Ordinance, of Chapter 35, Zoning, of the Santa Barbara County Code, is amended to add new Section 35-67A, Coastal Hazard Areas, to read as follows:

Section 35-67A. Coastal Hazard Areas

The following provisions apply to new development in areas that are potentially subject to coastal hazards, including beaches and bluffs (see also Sections 35-61 and 35-67).

1. The Sea Level Rise Coastal Hazards Screening Areas Map (Appendix J to the Coastal Land Use Plan) shall be used to identify coastal areas that require additional review and development standards to avoid and minimize adverse impacts from sea level rise and coastal hazards. Properties located in areas not shown on the Sea Level Rise Coastal Hazards Screening Areas Map shall also be subject to policies requiring site-specific hazards analysis and avoidance of threats from sea level rise and coastal hazards if there is substantial evidence demonstrating that the site may be subject to reasonably foreseeable future coastal hazards. Where the physical extent of a coastal hazard on the project site is different than those indicated on the Sea Level Rise Coastal Hazards Screening Areas Map, the Coastal Development Permit application shall describe and provide substantial evidence of the physical extent of the coastal hazard.

2. The County may act on a Coastal Development Permit application in compliance with LCP policies and standards, even if the Sea Level Rise Coastal Hazards Screening Areas Map (Appendix J to the Coastal Land Use Plan) needs an update, but has not been updated as of the time of action on the Coastal Development Permit application.

3. All development potentially subject to coastal hazards over its anticipated life, including but not limited to areas shown in the Sea Level Rise Coastal Hazards Screening Areas Map (Appendix J to the Coastal Land Use Plan), shall be sited and designed to avoid existing or reasonably foreseeable future threats from sea level rise and coastal hazards without reliance on shoreline protective devices over the anticipated life of the development. (Refer to Coastal Land Use Plan Policy 3-10.) Utility infrastructure required for safe habitation (e.g., water, sewer, and onsite wastewater treatment systems) shall be set back at least the same distance as the development to ensure the provision of adequate services during the anticipated life of the development.

4. In areas of known coastal hazards, including those areas shown on the Sea Level Rise Coastal Hazards Screening Areas Map (Appendix J to the Coastal Land Use Plan), a site-specific Coastal Hazard Report shall be prepared according to the requirements in Appendix I of the Coastal Zoning Ordinance (Technical Guidelines for Preparation of a Coastal Hazard Report). The analysis shall be prepared by a qualified California licensed professional (e.g., Professional Geologist, Engineering Geologist, Geotechnical Engineer, Civil Engineer, and/or Coastal Engineer, as applicable) and is subject to review and approval by the County as part of the Coastal Development Permit application review process. The analysis shall identify any hazards affecting the proposed project based on the best available science, any necessary mitigation measures, and contain substantial evidence that the project site, with mitigation, is suitable for the proposed development and that the development will adequately protect life and property from the identified hazards. Mitigation measures shall be applied to development when required to avoid or minimize impacts related to coastal hazards and sea level rise.

5. Minor and/or ancillary development that does not require foundations or grading, does not adversely impact beach, dune or other coastal resource stability, and can be readily removed and/or relocated (e.g., decks, fences, patios, and walkways) may be permitted within the coastal hazard setback areas if consistent with the protection of coastal resources. The minor and/or ancillary development shall be removed or relocated landward at the owner's expense when imminently threatened by coastal hazards. Shoreline protection devices are prohibited to protect these minor and/or ancillary structures from erosion, flooding, and other coastal hazards.

6. Coastal Development Permits for development within coastal hazard areas potentially subject to coastal hazards over its anticipated life shall be conditioned to require that the permitted development will be removed, relocated, or modified, and the area restored at the applicant's or property owner's expense, if:

   a) The structure has been damaged and designated as unsafe to enter by the County Building Official or designee due to coastal hazards;

   b) Essential services to the site can no longer feasibly be maintained (e.g., utilities and roads);

   The permit shall also specify that in the event that portions of the development fall to the beach or ocean before they are removed/relocated, the property owner will remove all recoverable debris associated with the development from the bluffs and ocean and lawfully dispose of the material in an approved disposal site, after acquiring a Coastal Development Permit for such removal.

7. Applicants or property owners receiving a Coastal Development Permit for development subject to existing or reasonably foreseeable future threats from sea level rise or coastal hazards and any related conditions of approval shall record a Notice to Property Owner (NTPO) disclosing such threats and conditions. The NTPO shall notify current and future property owners of the: (1) conditions of approval of the Coastal Development Permit that authorized the development; (2) existing and reasonably foreseeable future threats from sea level rise and coastal hazards, including bluff retreat, erosion, wave run-up, and flooding/inundation and the results of any site-specific analysis thereof; and (3) potential for the public trust boundary to move inland, encompassing part or all of the development and therefore requiring a permit from the California Coastal Commission or State Lands Commission to remain.

SECTION 7.

DIVISION 5, Overlay Districts of Article II, the Santa Barbara County Coastal Zoning Ordinance, of Chapter 35, Zoning, of the Santa Barbara County Code, is amended to change subsection 1 of Section 35-97.19, Development Standards for Stream Habitats, to read as follows:

Section 35-97.19 Development Standards for Stream Habitats.

1. The minimum buffer strip for major streams and their associated riparian vegetation in rural areas, as defined by the land use plan, shall be presumptively 100 feet, and for streams and their associated riparian vegetation in urban areas, 50 feet. These minimum buffers may be ~~adjusted upward or downward~~ increased on a case-by-case basis when necessary to prevent significant disruption of habitat values given site-specific evidence provided in a biological report prepared by a qualified biologist. The minimum buffer strip may be decreased only to avoid precluding reasonable use of property. ~~The buffer shall be established~~ An increase to the buffer strip shall be based on an investigation of the following factors and after consultation with the California Department of Fish and ~~Game~~ Wildlife and Regional Water Quality Control Board ~~in order to~~. All buffers shall be sufficient to protect the biological productivity and water quality of streams, avoid significant disruption of habitat values, and to protect the habitat area, including the following habitat area characteristics:

   a) existing vegetation, ~~S~~soil type and stability of stream and riparian corridors;

   b) ~~H~~how surface water filters into the ground;

   c) ~~S~~slope of the land on either side of the stream; ~~and~~

   d) ~~L~~location of the 100-year flood plain boundary~~.~~;

   e) consistency with adopted plans, particularly biology and habitat policies; and

   f) landscape-scale habitat connectivity.

The required buffer shall extend from the outer extent of development (including fuel clearance required by the Fire Department) to the outer extent of the stream's riparian canopy, or the top of the stream bank if there is no riparian vegetation. ~~Riparian vegetation shall be protected and shall be included in the buffer.~~ Where riparian vegetation has previously been removed, except for channelization, inconsistent with (1) any policies or other

applicable provisions of the LCP or (2) any provisions and conditions of existing, approved permits for the subject lot, the buffer shall ~~allow for the reestablishment of riparian vegetation~~ extend to ~~it's~~ the prior extent of the riparian vegetation to the greatest degree ~~possible~~ feasible.

…

SECTION 8.

DIVISION 7, General Regulations of Article II, the Santa Barbara County Coastal Zoning Ordinance, of Chapter 35, Zoning, of the Santa Barbara County Code, is amended to add subsection 3 to Section 35-130, Subdivision of Land, to read as follows:

Section 35-130, Subdivision of Land

1. In order to obtain approval for a division of land, the subdivider shall demonstrate that adequate water is available to serve the newly created lots except for lots to be designated as "Not A Building Site" on the recorded subdivision or parcel map.

2. As a requirement for approval of any proposed land division of agricultural land designated as AG-I or AG-II, the County shall make a finding that the long-term agricultural productivity of the land will not be diminished by the proposed division.

3. Subdivisions and certain lot line adjustments in areas subject to threats from sea level rise and coastal hazards shall only be permitted if each created parcel will comply with all applicable coastal hazard policies and standards of the LCP, will not require shoreline protection, and will not adversely impact coastal resources or public access. This policy shall only apply to lot line adjustments that would result in (1) an increased subdivision potential for any affected lot in the lot line adjustment, or (2) a greater number of residentially developable lots than existed before the lot line adjustment. This policy shall not apply to parcels created or adjusted for the purpose of providing open space or public access. For the purposes of this standard, the County shall use the "high" sea level rise scenario, as shown in the High Sea Level Rise Coastal Hazards Screening Areas Map (Appendix J to the Coastal Land Use Plan) and analyze potential hazards over a 100-year timeframe.

SECTION 9.

DIVISION 9, Oil and Gas Facilities of Article II, the Santa Barbara County Coastal Zoning Ordinance, of Chapter 35, Zoning, of the Santa Barbara County Code, is amended to change subsection 3 of Section 35-154, Onshore Processing Facilities Necessary or Related to Offshore Oil and Gas Development, to read as follows:

Section 35-154, Onshore Processing Facilities Necessary or Related to Offshore Oil and Gas Development.

…

3. Processing. No permits for development, including grading, shall be issued except in conformance with an approved Final Development Plan, as provided in Section 35-174 (Development Plans), ~~and~~ with Section 35-169 (Coastal Development Permits), and with the specific findings required by Public Resources Code Section 30260. In addition to the other information required under Section 35-174 (Development Plans), the following information must be filed with a Preliminary or Final Development Plan application.

   a. An updated emergency response plan to address ~~deal with~~ potential consequences and actions to be taken in the event of hydrocarbon leaks, ~~or~~ fires, and facility impacts from increased coastal flooding and erosion due to sea level rise. ~~These emergency response plans shall be approved by the~~ The County's Office of Emergency Services ~~Coordinator~~ and Fire Department shall review and, if found to be adequate, approve these emergency response plans.

b. A phasing plan for the staging of development which includes the estimated timetable for project construction, operation, completion, and abandonment, as well as location and amount of land reserved for future expansion.

…

SECTION 10.

DIVISION 10, Nonconforming Structures and Uses of Article II, the Santa Barbara County Coastal Zoning Ordinance, of Chapter 35, Zoning, of the Santa Barbara County Code, is amended to change Section 35-162, Nonconforming Buildings and Structures, to read as follows:

Section 35-162. Nonconforming Buildings and Structures.

If a building or structure is conforming as to use but nonconforming as to setbacks, height, lot coverage, or other requirements concerning the building or structure, such structure may remain as long as it is otherwise lawful, subject to the following regulations. Nonconforming buildings and structures include, but are not limited to, buildings and structures that do not comply with the coastal hazard standards or setbacks required for development in Section 35-67 (Bluff and Dune Development) and Section 35-68 (Coastal Hazard Areas).

1. Structural change, enlargement, or extension.

a. Enlargements or extensions allowed in limited circumstances.

1) Except as listed below or otherwise provided in this Article, a nonconforming structure shall not be enlarged, extended, moved, or structurally altered unless the enlargement, extension, etc., complies with the height, lot coverage, setback, and other requirements of this Article.

2) **Allowed structural alterations.**

a) **Seismic retrofits allowed.** Seismic retrofits as defined in Section 35-58 (Definitions) and in compliance with Section 35-169.2 (Applicability) may be allowed but shall be limited exclusively to compliance with earthquake safety standards and other applicable Building Code requirements, including State law (e.g., Title 24, California Code of Regulations).

i) Subsection 1.a.2)a), above, shall not apply if a structure is nonconforming as to coastal hazard standards or setbacks and the proposed seismic retrofits qualify as redevelopment. Such seismic retrofits shall comply with all LCP policies and standards.

b) **Normal maintenance and repair**. Normal maintenance and repair may occur provided no structural alterations are made.

c) **Historical landmarks.** A structure that has been declared to be a historical landmark in compliance with a resolution of the Board may be enlarged, extended, reconstructed, relocated, and/or structurally altered provided the County Historical Landmarks Advisory Commission has reviewed and approved the proposed structural alterations and has determined that the proposed structural alterations will help to preserve and maintain the landmark in the long-term. However, such a structure shall not be enlarged, extended, reconstructed, relocated, and/or structurally altered if the nonconforming structure is inconsistent with any coastal resource protection policies of the LCP (regardless of historic status).

i) Subsection 1.a.2)c), above, shall not apply if a structure is nonconforming as to coastal hazard standards or setbacks and the proposed alterations would enlarge or extend the exterior or qualify as redevelopment. Such alterations shall comply with all LCP policies and standards.

d) Conforming residential uses and residential accessory uses. A nonconforming structure that is devoted to a conforming residential use or that is normally or historically accessory to the primary residential use may be structurally altered in a manner that is not otherwise allowed in compliance with Subsection 1.a.1), above, provided that the alteration does not result in a structure that extends beyond the existing exterior, and, for structures that are 50 years old or greater, the Director determines that the alteration will not result in a detrimental effect on any potential historical significance of the structure. However, such a structural alteration to a nonconforming structure shall be prohibited if the nonconforming structure and/or the structural alterations are inconsistent with any LCP coastal resource protection policies.

i) Subsection 1.a.2)d), above, shall not apply if a structure is nonconforming as to coastal hazard standards and setbacks and the proposed alterations qualify as redevelopment. Such alterations shall comply with all LCP policies and standards.

e) Reasonable accommodation. Reasonable accommodation in compliance with Section 35-144 (Reasonable Accommodation) may be allowed to remove barriers to fair housing opportunities for individuals with disabilities.

i) Subsection 1.a.2)e), above, shall not apply if a structure is nonconforming as to coastal hazard standards and setbacks and the proposed alterations qualify as redevelopment. Such improvements shall comply with all LCP policies and standards.

f) Structures threatened by coastal flooding. Elevating a nonconforming single or multiple-family dwelling and/or associated residential accessory structure to a required or desired flood protection elevation, as determined by the County Flood Control District, may be allowed pursuant to Subsection 1.a.2)d), above.

3) Permit required. The issuance of a Coastal Development Permit in compliance with Section 35-169 (Coastal Development Permits) or Land Use Permit in compliance with Section 35- 178 (Land Use Permits), as applicable, is required prior to the commencement of any structural alteration allowed in compliance with Subsections 1.a.1) or 1.a.2), above, unless the alteration is determined to be exempt in compliance with Section 35-169.2 (Applicability).

b. Accessory living quarters. No living quarters may be extended into an accessory structure located in the required front, side, or rear setbacks by any addition or enlargement.

c. Loss of nonconforming status.

1) An existing nonconforming structure that is enlarged, extended, moved, reconstructed, or structurally altered in violation of Subsection 1.a, above, shall no longer be considered to be nonconforming and the rights to continue the nonconforming structure shall terminate unless the enlargement, extension, moving, reconstruction, or structural alteration is specifically allowed by this Article.

2) If the rights to continue the nonconforming structure are terminated then the structure shall either be demolished or altered so that the structure may be considered a conforming structure. Failure by the owner to either demolish the structure or alter the structure so that it may be considered a conforming structure shall be considered a violation of this Article and subject to enforcement and penalties in compliance with Section 35-185 (Enforcement, Legal Procedures, and Penalties).

2. Damage. Except for a structure that is nonconforming as to coastal hazard standards and setbacks, t~~T~~he purpose of this section is to identify the standards for allowing the restoration or reconstruction of a nonconforming structure that is damaged by fire, flood, earthquake or other natural disaster …

3. **Damage in coastal hazard areas.** The purpose of this section is to identify the standards for allowing the restoration or reconstruction of a structure that is nonconforming as to coastal hazard standards or setbacks and is damaged by fire, flood, earthquake or other natural disaster. However, buildings or structures damaged by a debris flow or other catastrophic event resulting in a significant change in topography or alteration of drainage features would be eligible for a De Minimis Coastal Development Permit Waiver pursuant to Section 35-51C (De Minimis Waiver of Coastal Development Permit) of this Chapter.

a. A nonconforming structure damaged by fire, flood, earthquake, or other natural disaster may be restored or reconstructed to the same or lesser size in the same general footprint location, provided the restoration or reconstruction does not qualify as redevelopment.

b. Any restoration or reconstruction that qualifies as redevelopment shall comply with all applicable LCP policies and standards.

c. The restoration or reconstruction permitted above shall commence within 24 months of the time of damage and be diligently carried to completion. If the restoration or reconstruction of such building or structure does not commence within 24 months it shall not be restored or reconstructed except in conformity with all applicable LCP policies and standards.

SECTION 11.

DIVISION 11, Permit Procedures, of Article II, the Santa Barbara County Coastal Zoning Ordinance, of Chapter 35, Zoning, of the Santa Barbara County Code, is amended to change subsection 3, Seawalls and Shoreline Structures, of Section 35-172.13, Conditional Use Permits, Additional Requirements, to read as follows:

Section 35-172.13 Additional Requirements

…

3. ~~Seawalls and Shoreline Structures~~ Shoreline Protective Devices.

a. Shoreline protective devices shall only be permitted when required to serve coastal-dependent uses or protect existing principal structures or public beaches in danger from erosion, when sited and designed to eliminate or mitigate adverse impacts on local shoreline sand supply, when designed to avoid, or mitigate if avoidance is infeasible, adverse impacts to lateral beach access, biological resources, water quality, visual, and other coastal resources, and when no less environmentally damaging alternative exists. Shoreline protective devices shall be sited to avoid sensitive resources, and adverse impacts on all coastal resources shall be mitigated to the maximum extent feasible. ~~Seawalls shall not be permitted unless the County has determined that there are no other less environmentally damaging alternatives reasonably available for protection of existing principal structures. The County prefers and encourages non-structural solutions to shoreline erosion problems, including beach replenishment, removal of endangered structures and prevention of land divisions on shorefront property subject to erosion; and, will seek solutions to shoreline hazards on a larger geographic basis than a single lot circumstance. Where permitted, seawall design and construction shall respect to the degree possible, natural landforms. Adequate provision for lateral beach access shall be made and the project shall be designed to minimize visual impacts by the use of appropriate colors and materials.~~

b. Shoreline protective devices shall meet the following standards:

1) No other feasible, less environmentally damaging alternative exists, including but not limited to relocation or removal of the threatened development, beach nourishment, dune creation, non-structural drainage and native landscape improvements, or other similar non-structural options.

2) Non-structural options (e.g., dune or bluff revegetation or beach nourishment) shall be prioritized over other protection methods. Where non-structural options are not feasible, soft protection methods (e.g., sand bags or revetments that are combined with dune restoration) shall be used and prioritized before any more significant hard shoreline protective devices (including, but not limited to, seawalls, revetments, breakwaters, groins, bluff retention devices, etc.) are permitted.

3) Landscape-scale solutions on a larger geographic basis are prioritized over single-lot shoreline protective devices.

4) The proposed shoreline protective device shall be sited and designed to avoid, or, if avoidance if infeasible, mitigate adverse impacts on shoreline sand supply, public access, biological resources, and other coastal resources.

5) The siting, design, and construction shall preserve natural landforms and be visually subordinate to the natural character of the shoreline.

6) The proposed shoreline protective device shall not result in the loss of public trust lands or public beach access. Where necessary to maintain existing public access in the future, the property owner shall grant lateral access if the shoreline protective device would adversely affect or result in the loss of public beach access.

7) Colors, materials, and designs shall minimize visual impacts.

c. At a minimum, Coastal Development Permits for shoreline protective devices shall include conditions of approval that require the following:

1) Mitigation if avoidance of adverse impacts to shoreline sand supply, public access, biological resources, or other coastal resources is infeasible.

2) Removal at such time as the existing structure, public beach, or use requiring protection is removed, redeveloped, ceases to exist, or the protection device is no longer needed for its permitted purpose, whichever comes first.

3) Recordation of a Notice to Property Owner (NTPO) to notify current and future property owners that the public trust boundary could move inland as a result of coastal forces including sea level rise such that the device, or portion of it, is no longer located on private property, and at which point the device or portion of it that is on public trust land will no longer be authorized pursuant to the County's coastal development permit. Any portion of the development on public land may then have to be removed or properly permitted by the Coastal Commission and either State Lands Commission or other trustee agency of the public tidelands, who may deny the permit(s) if the development substantially interferes with public trust uses of the land or is otherwise not in accordance with law.

~~d. Revetments, groins, cliff retaining walls, pipelines and outfalls, and other such construction that may alter natural shoreline processes shall be permitted when designed to eliminate or mitigate adverse impacts on local shoreline sand supply and so as not to block lateral beach access.~~

…

SECTION 12.

The Appendices to the Santa Barbara County Coastal Zoning Ordinance, of Chapter 35, Zoning, of the Santa Barbara County Code, are amended to add a new Appendix I, *Technical Guidelines for Preparation of a Coastal Hazard Report*, to read as follows:

APPENDIX I: TECHNICAL GUIDELINES FOR PREPARATION OF A COASTAL HAZARD REPORT

The following standards and guidelines are intended to clarify and assist with the preparation of a Coastal Hazard Report. This appendix also includes the methodology for calculating a site-specific bluff edge setback and preparing a wave run-up study. All of these standards and guidelines may not be applicable or necessary for an individual project on a specific site, based upon the initial analysis performed by a qualified professional. The qualified professional must provide sufficient evidence to show that individual standards or guidelines do not apply to a specific site or proposed development.

1. Sea Level Rise Projection Information.

   The Sea Level Rise Coastal Hazard Screening Areas Map (Appendix J to the Coastal Land Use Plan) shows areas of the county coastline that are potentially subject to increased threats from sea level rise and coastal hazards, where further site-specific study is needed to assess potential adverse impacts. The Screening Areas Map shows the "high" sea level rise scenario possible by the years 2030, 2060, and 2100, based on projections described in the County's 2017 "Sea Level Rise and Coastal Hazards Vulnerability Assessment." Table I-1 below shows the low, medium, and high sea level rise scenarios. All three scenarios can be visually examined using the Coastal Resilience Mapping Portal available online through the Planning and Development Department website.

Table I-1. Sea Level Rise Projections for Santa Barbara County (inches)

Time Period	Low Sea Level Rise Scenario	Medium Sea Level Rise Scenario	High Sea Level Rise Scenario
By 2030	0.04	3.5	10.2
By 2060	2.8	11.8	27.2
By 2100	10.6	30.7	60.2

Source: Santa Barbara County Sea Level Rise and Coastal Hazards Vulnerability Assessment, July 2017.

2. Methodology for Calculating a Bluff Edge Setback:

   (a) Identify bluff edge consistent with the Article II definition of "bluff edge."

   (b) Determine a slope stability setback. Evaluate the stability of the bluff. If the slope exhibits a factor of safety of less than 1.5 for the static condition or 1.1 for the pseudostatic condition, then a "slope stability buffer" shall be established landward of the bluff edge. The slope stability buffer is the line landward of the bluff edge where the minimum factor of safety (1.5 static and 1.1 pseudostatic) can be met. When determining the slope stability buffer, the minimum factor of safety shall be achieved without the use of new or existing slope or shoreline protection devices.

   (c) Determine the bluff erosion setback. A site-specific evaluation of the long-term bluff retreat rate at the site shall be conducted that considers not only historical bluff retreat data, but also acceleration of bluff retreat projected to occur under continued and accelerated sea level rise and any known site-specific conditions. The geologic evaluation must include the total scope of development (e.g., proposed grading, buildings, structures, landscaping, and associated irrigation). Such an evaluation shall be used to determine the distance from the bluff edge (or from the slope stability buffer line if

applicable) that the bluff might reasonably be expected to erode over the anticipated life of the structure (refer to Coastal Land Use Plan Policy 3-10), factoring in sea level rise using the current best available science, and without the use of new or existing slope or shoreline protection devices. Analysis of the effect of sea level rise on erosion rate shall use the best available science and include an examination of the "high" amount of the sea level rise expected over the anticipated life of the development. Historic erosion rates can be determined by examination of historic records, surveys, aerial photographs, studies, or other evidence showing the location of the bluff edge through time. A minimum of 50 years' worth of historic data is generally used to evaluate historic erosion rates, but a greater time period may be warranted if the shoreline has changed dramatically due to natural forces or development.

(d) Determine the bluff edge setback by adding the slope stability and bluff erosion setback distances. Development shall be setback from the bluff edge the distance needed to: ensure slope stability (the slope stability setback); ensure the development is not endangered by erosion (the bluff erosion setback); and avoid the need for protective devices during the life of the structure.

3. Site Visit Report for Properties North of U.S. Highway 101.

As described in Section 3.3 (Hazards) of the Coastal Land Use Plan, features such as U.S. Highway 101 are considered in the Sea Level Rise Coastal Hazards Screening Areas Map as topographical features, not necessarily as barriers to sea level rise for parcels north of the freeway. Therefore, applications for development north of U.S. Highway 101 and within coastal hazard areas shown on the Sea Level Rise Coastal Hazards Screening Areas Map shall be evaluated for potential coastal hazards at the site, based on all readily available information and best available science. An initial site visit shall be conducted by a qualified professional hired by the applicant or property owner and shall result in a site visit report. If the initial evaluation determines that the proposed development may be subject to coastal hazards over its anticipated lifetime, a site-specific Coastal Hazard Report shall be prepared according to the requirements in these guidelines. The initial evaluation and/or study shall be subject to review and approval by the County as part of the Coastal Development Permit application review process.

Properties in Summerland may also be required to prepare a geology/soils report and a detailed drainage plan that minimize landslide, soil creep, and erosion hazards per the Summerland Community Plan.

4. Standards and Guidelines for Preparation of a Coastal Hazard Report that Includes Bluff-Top Erosion Risks:

A site-specific Coastal Hazard Report shall be required that is prepared by a qualified California licensed engineer with expertise in coastal processes. At a minimum, the Coastal Hazard shall examine the "high" scenario of projected sea level rise over the expected life of the structure using the current best available science. The conditions that shall be considered in the hazard evaluation are: a seasonally eroded beach combined with erosion over the life of the structure, excluding the effects of any existing shoreline protective device; high tide conditions, combined with projections for sea level rise for the life of the structure; and storm waves from a 100-year event. The study shall provide maps and profiles that identify these conditions, as well as recommendations and alternatives to avoid, and if avoidance is not feasible, minimize, identified coastal hazards over the expected life of the structure. The study shall identify unavoidable coastal resource impacts and appropriate mitigation measures. Studies shall include an assessment of the availability of and potential risks to services to the site, including risks to public or private roads, stormwater management, water, sewer, electricity, and other utilities over the life of the development, considering sea level rise.

Coastal Hazard Reports shall include analysis of the physical impacts from coastal hazards and sea level rise that might constrain the project site and/or adversely impact the proposed development. Reports should address and demonstrate the site hazards and effects of the proposed development on coastal

resources, including discussion, maps, profiles and/or other relevant information that describe the following:

(a.) Current conditions at the site, including the current:
- tidal range, referenced to an identified vertical datum
- intertidal zone
- inland extent of flooding and wave run-up associated with extreme tidal conditions and storm events
- beach erosion rates, both long-term and seasonal variability
- bluff erosion rates, both long-term and episodic

(b) Projected future conditions at the site, accounting for sea level rise over the anticipated life of the development, including the future:
- Shoreline, dune, or bluff edge, accounting for long-term erosion and assuming an increase in erosion from sea level rise
- intertidal zone
- inland extent of flooding and wave run-up associated with both storm and non-storm conditions

(c) Safety of the proposed structure to current and projected future coastal hazards, including:
- Identification of a building envelope on the site that avoids hazards
- Identification of options to minimize hazards if no building envelope exists that would allow avoidance of hazards
- Analysis of the adequacy of the proposed building/foundation design to ensure stability of the development relative to expected wave run-up, flooding and groundwater inundation for the anticipated life of the development in both storm and non-storm conditions
- Description of any proposed future sea level rise adaptation measures, such as incremental removal or relocation when threatened by coastal hazards

(e) Discussion of the study and assumptions used in the analysis including a description of the calculations used to determine long-term erosion impacts and the elevation and inland extent of current and future flooding and wave runup.

(f) For blufftop development, the report shall include a detailed analysis of erosion risks, including the following:
- To examine risks from erosion, the predicted bluff edge, shoreline position, or dune profile shall be evaluated considering not only historical retreat, but also acceleration of retreat due to continued and accelerated sea level rise and other climatic impacts. Future long-term erosion rates should be based upon the best available information, using resources such as the highest historic retreat rates, sea level rise model flood projections, or shoreline/bluff/dune change models that take rising sea levels into account. Additionally, proposals for blufftop development shall include a quantitative slope stability analysis demonstrating a minimum factor of safety against sliding of 1.5 (static) and 1.1 (pseudostatic, k=0.15 or determined through a quantitative slope stability analysis by a geotechnical engineer), whereby safety and stability must be demonstrated for the predicted position of the bluff and bluff edge following bluff recession over the identified project life, without the need for caissons or other protective devices. The analysis should consider adverse impacts both with and without any existing shoreline protective devices.

The "high" sea level rise scenario shall be examined to understand potential adverse impacts that may occur throughout the anticipated life of the development. At a minimum, flood risk over the anticipated life of the development should be examined. Additionally, the analysis should consider the frequency of future flooding impacts (e.g., daily impacts versus flooding from extreme storms only) and describe the extent to which the proposed development would be able to avoid, minimize, and/or withstand impacts from such occurrences of flooding. Studies should describe adaptation strategies that reduce hazard risks

and neither create nor add to adverse impacts on existing coastal resources and that could be incorporated into the development.

5. Standards and Guidelines for Preparation of a Coastal Hazard Report that Includes Wave Run-up Risks:

A site-specific Coastal Hazard shall be required that is prepared by a qualified California licensed engineer with expertise in coastal processes. At a minimum, the Coastal Hazard shall examine the projected sea level rise under the "high" scenario, over the expected life of the structure, using the current best available science. The conditions that shall be considered in the hazard evaluation are: a seasonally eroded beach combined with erosion over the life of the structure, excluding the effects of any existing shoreline protective device; high tide conditions, combined with projections for sea level rise for the life of the structure; and storm waves from a 100-year event. The study shall provide maps and profiles that identify these conditions as well as recommendations and alternatives to avoid, and if avoidance is not feasible, minimize, identified coastal hazards over the expected life of the structure. The study shall identify unavoidable coastal resource impacts and appropriate mitigation measures. Studies shall include an assessment of the availability of and potential risks to services to the site, including risks to public or private roads, stormwater management, water, sewer, electricity, and other utilities over the life of the development, considering sea level rise.

Coastal Hazard Reports shall include analysis of the physical impacts from coastal hazards and sea level rise that might constrain the project site and/or adversely impact the proposed development. Studies should address and demonstrate the site hazards and effects of the proposed development on coastal resources, including discussion, maps, profiles and/or other relevant information that describe the following:

(a) Current conditions at the site, including the current:
- tidal range, referenced to an identified vertical datum
- intertidal zone
- inland extent of flooding and wave run-up associated with extreme tidal conditions and storm events
- beach erosion rates, both long-term and seasonal variability
- bluff erosion rates, both long-term and episodic

(b) Projected future conditions at the site, accounting for sea level rise over the anticipated life of the development, including the future:
- shoreline, dune, or bluff edge, accounting for long-term erosion and assuming an increase in erosion from sea level rise
- intertidal zone
- inland extent of flooding and wave run-up associated with both storm and non-storm conditions

(c) Safety of the proposed structure to current and projected future coastal hazards, including:
- Identification of a building envelope on the site that avoids hazards
- Identification of options to minimize hazards if no building envelope exists that would allow avoidance of hazards
- Analysis of the adequacy of the proposed building/foundation design to ensure stability of the development relative to expected wave run-up, flooding and groundwater inundation for the anticipated life of the development in both storm and non-storm conditions
- Description of any proposed future sea level rise adaptation measures, such as incremental removal or relocation when threatened by coastal hazards

(d) Discussion of the study and assumptions used in the analysis including a description of the calculations used to determine long-term erosion impacts and the elevation and inland extent of current and future flooding and wave runup.

(e) For development on a beach, dune, low bluff, or other shoreline property subject to coastal flooding, inundation or erosion, the report shall include a detailed wave uprush and impact report and analysis, including the following:

- The analysis shall consider current flood hazards as well as flood hazards associated with sea level rise over the anticipated life of the development. To examine risks and adverse impacts from flooding, including daily tidal inundation, wave impacts, runup, and overtopping, the site should be examined under conditions of a beach subject to long-term erosion and seasonally eroded shoreline combined with a large storm event (1% probability of occurrence). Flood risks should take into account daily and annual high tide conditions, backwater flooding, water level rise due to El Niño and other atmospheric forcing, groundwater inundation, storm surge, sea level rise appropriate for the time period, and waves associated with a large storm event (such as the 100 year storm or greater). The analysis should consider impacts both with and without any existing shoreline protective devices.

At a minimum, the "high" scenario of projected sea level rise shall be examined to understand the potential adverse impacts that may occur throughout the anticipated life of the development. Additionally, the analysis should consider the frequency of future flooding impacts (e.g., daily impacts versus flooding from extreme storms only) and describe the extent to which the proposed development would be able to avoid, minimize, and/or withstand impacts from such occurrences of flooding. Studies should describe adaptation strategies that reduce hazard risks and neither create nor add to impacts on existing coastal resources and that could be incorporated into the development.

SECTION 13:

All existing indices, section references, and figure and table numbers contained in the Santa Barbara County Coastal Zoning Ordinance, Article II of Chapter 35, Zoning, of the Santa Barbara County Code, are hereby revised and renumbered as appropriate to reflect the revisions enumerated above.

SECTION 14:

Except as amended by this Ordinance, Division 2, Definitions, and Division 3, Development Standards, of the Santa Barbara County Coastal Zoning Ordinance, Article II of Chapter 35, Zoning, of the Santa Barbara County Code, shall remain unchanged and shall continue in full force and effect.

SECTION 15.

This ordinance and any portion of it approved by the Coastal Commission shall take effect and be in force 30 days from the date of its passage or upon the date that it is certified by the Coastal Commission pursuant to Public Resources Code 30514, whichever occurs later; and before the expiration of 15 days after its passage it, or a summary of it, shall be published once, together with the names of the members of the Board of Supervisors voting for and against the same in the *Santa Barbara News-Press*, a newspaper of general circulation published in the County of Santa Barbara.

PASSED, APPROVED, AND ADOPTED by the Board of Supervisors of the County of Santa Barbara, State of California, this ___ day of _____, 2018 by the following vote:

AYES:

NOES:

ABSTAIN:

ABSENT:

_____
DAS WILLIAMS, CHAIR
BOARD OF SUPERVISORS
COUNTY OF SANTA BARBARA

ATTEST:
MONA MIYASATO, COUNTY EXECUTIVE OFFICER
CLERK OF THE BOARD

By _____
Deputy Clerk

APPROVED AS TO FORM:
MICHAEL C. GHIZZONI
COUNTY COUNSEL

By _____
Deputy County Counsel