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



September 17, 2018

Selena Evilsizor Planning and Development County of Santa Barbara 123 East Anapamu Street Santa Barbara, CA 93101

RE: County of Santa Barbara's Coastal Hazard Land Use Plan Policies and Coastal Zoning Ordinance Update – Coastal Resiliency Project

Dear Ms. Evilsizor,

Thank you for your continued coordination with Commission staff and your hard work on this important Local Coastal Program update. We truly appreciated the opportunities for Commission staff to provide comments (dated January 31, 2017 and August 31, 2017) on prior drafts of the subject update, and we are pleased with the changes made to the update since our last review. We would like to provide additional comments on the documents we received via email on August 31, 2018 before the scheduled Board of Supervisors hearing on November 6, 2018. Please find our comments and suggestions (shown in track-changes) in the attached Land Use Plan and Coastal Zoning Ordinance update documents.

Please do not hesitate to contact us to discuss any questions or concerns regarding these comments.

Sincerely.

Megan Sihkula Coastal Program Analyst

cc: Ashley Reineman, California Coastal Commission Michelle Wagner, California Coastal Commission Deanna Christensen, California Coastal Commission Barbara Carey, California Coastal Commission Dianne Black, County of Santa Barbara Allen Bell, County of Santa Barbara

Attachments: County's Coastal Hazard Land Use Plan document with September 2018 CCC Comments, County's Coastal Zoning Ordinance Update document with September 2018 CCC Comments

EXHIBIT 1 RESOLUTION OF THE SANTA BARBARA COUNTY BOARD OF SUPERVISORS COUNTY OF SANTA BARBARA, STATE OF CALIFORNIA

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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 ADAPATION TO THREATS RESULTING) FROM SEA LEVEL RISE AND COASTAL HAZARDS

RESOLUTION NO. 18-

CASE NO: 17GPA-00000-00004

WITH REFERENCE TO THE FOLLOWING:

- On January 7, 1980, by Resolution No. 80-12, the Board of Supervisors of the County of Santa A. Barbara (Board) adopted the Santa Barbara County Coastal Land Use Plan.
- The proposed amendments are consistent with the Coastal Act of 1976, the Santa Barbara County Β. 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 County Planning Commission staff report dated August 1, 2018, and hereby incorporated by reference.
- Citizens, Native American tribes, public agencies, public utility companies, and civic, education, C. 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.
- The County Planning Commission held a duly noticed hearing, in compliance with Government F. 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.
- The Board has held a duly noticed public hearing in compliance with Government Code Section G. 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, Coastal Hazard Screening Map, to the Coastal Land Use Plan, 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 topography₁₇ geologic <u>or</u>, flood <u>or fire hazards₁₇ coastal bluff or shoreline retreat₁₇ habitat areas₁₇ or steep slopes. However, <u>density densities</u> may be increased for affordable housing projects provided such projects are found consistent with all applicable policies and provisions of the Local Coastal Program.</u>

Planned Development

Policy 2-17: Use <u>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:</u>

- 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-<u>within</u> hazardous areas, <u>including reasonably foreseeable</u> <u>coastal hazards from sea level rise;</u>
- 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<u>time</u>" 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. <u>More than 10 feet were lost in a single event in Isla Vista in 2017.</u> 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 runup), 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

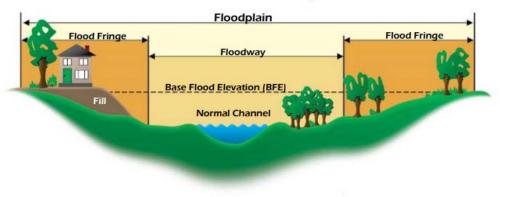
Flooding has occurred along Santa Barbara's South Coast in recent years, particularly in the Carpinteria Valley, sections of Montecito, and the Santa Barbara Airport area. Severe floods in 1969 undermined a section of U. S. 101 in Carpinteria. These flood hazards are progressively being eliminated in 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 flood 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 FloodpPlain 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 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.



Characteristics of a Floodplain

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 these policies in 2018 to specifically

reflect current science, regulate development, and protect-new development, coastal resources, and 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) |
|-------------------------|------------------------------|--------------------------------|
| Table 1. Sta Level Rise | 1 I Ujechons Ior Santa | Darbara County (menes) |

| Time Period | Low Sea Level Rise Scenario | <u>Medium Sea Level Rise</u> <u>Scenario</u> | <u>High Sea Level Rise</u> <u>Scenario</u> |
|----------------|--------------------------------|---|---|
| <u>By 2030</u> | <u>0.04</u> | <u>3.5</u> | <u>10.2</u> |
| <u>By 2060</u> | <u>2.8</u> | <u>11.8</u> | <u>27.2</u> |
| <u>By 2100</u> | <u>10.6</u> | <u>30.7</u> | <u>60.2</u> |

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.

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

<u>Table 2</u> <u>Projected Sea Level Rise (inches) for the Santa Barbara Tidal Gauge</u>

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

Note: Before 2050, differences in sea-level rise projections under different emissions scenarios are minor but they diverge significantly past mid-century. After 2050, sea-level rise projections increasingly depend on the trajectory of greenhouse gas emissions globally (low versus high emissions scenarios).

The updated sea level rise projections in the Natural Resources Agency's guidance document support use of the "medium" sea level rise scenario for analyzing and permitting development. The "likely range" of sea level rise identified in the Natural Resources Agency's guidance document (Table 2) coincides with the "medium" scenario used in the County's Sea Level Rise and Coastal Hazards Vulnerability Assessment (Table 1). The "likely range" means that there is a 66% probability that sea level rise would fall between the range shown for each time period. Due to the relatively low

probability of the "high" sea level rise scenario occurring, the County uses the "medium" scenario to analyze potential hazards to future development projects. The County is committed to using the best available science to analyze potential hazards to future development projects. 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. Unless indicated otherwise within the policies of the Local Coastal Program, the County uses the "medium" sea level rise scenario to analyze potential hazards to future development projects.

Sea Level Rise Coastal Hazard Screening Map

The Sea Level Rise Coastal Hazard Screening Map (Appendix J) 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 may be is needed to assess potential adverse impacts. The Screening Map uses the "medium" sea level rise scenarios by the years 2030, 2060, and 2100. The low, medium, and high sea level rise scenarios can 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 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 lifetime of development. Different types of development have different anticipated lifetimes and, therefore, different coastal hazard setbacks. For example, a coastal hazards analysis for a new structure with an anticipated lifetime 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 lifetime 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 provide some protection for development from short-term erosion and wave action but can also obstruct and/or diminish public access to beaches, adversely implact the natural movement of sediments (e.g., sand, silt, and gravel) along the coastline, and result in the loss of beach widths, 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 and 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 lot line adjustments in areas subject to threats from sea level rise and coastal hazards shall only be permitted limited if the development of each created parcel can comply with all applicable hazard policies and standards of the LCP, will not require shoreline protection, or adversely impact as necessary to protect new development, coastal resources, and or public access. For the purposes of this policy, the County shall use the "high" sea level rise scenario for the 100-year timeframe to analyze potential hazards to the development on parcels that are proposed to be created through subdivisions or lot line adjustments, unless a parcel is proposed to be created for the purpose of providing open space or public access.

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 coastaldependent 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 mitigation if avoidance is infeasible, adverse impacts to lateral beach access, biological resources, water quality, visual, and other coastal resources, and when no less **Comment [CCC1]:** The Commission's Adaptation Guidance recommends that jurisdictions ensure that land divisions in hazardous areas only be allowed if it can be demonstrated that the lots will be safe from hazards for the longest timeframe possible/foreseeable. This is due to the fact that, unlike structures, land divisions are expected to last in perpetuity, so they should have to demonstrate more than the 75-year safety period applicable to a single-family dwelling.

environmentally damaging alternative exists. Shoreline protective devices shall be sited to avoid sensitive resources, and adverse impacts on all coastal resources shall be fully 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 January 1, 1977. [effective date of the proposed sea level rise/coastal hazard LCP amendment]

Suggested New Policy 1: The County shall encourage non-structural solutions to shoreline erosion, including such measures as beach replenishment, dune creation, removal of endangered structures, and prevention of land divisions on shorefront property subject to erosion. The County shall seek solutions to shoreline hazards on a larger geographic basis than a single lot circumstance.

Policy 3-35: To avoid the need for future protective devices that could <u>adversely</u> 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, <u>public access</u>, <u>such as boardwalks</u>, or where such restriction would cause the inverse condemnation of the <u>parcel lot</u> by the County.

Sea Level Rise Coastal Hazard Areas

Policy 3-6: The Sea Level Rise Coastal Hazards Screening Map (Appendix J) shall be used to identify coastal areas that require additional review and development standards to avoid and minimize adverse impacts threats from sea level rise and coastal hazards. Any areas subject to existing or reasonably foreseeable future threats from sea level rise and coastal hazards that are not designated on the map shall also be subject to the LCP policies and standards.

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 ten 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 Map and sea level rise scenario standard 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 Map needs an update, but has not been updated as of the time of action on the Coastal Development Permit application. However, if the County has not timely updated the maps, properties located in areas not shown on the Hazards Screening 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 3-8: All development within areas shown in the Sea Level Rise Coastal Hazards Screening Map, or otherwise subject to coastal hazards pursuant to Policies 3-6 and 3-7, 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 lifetime 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 lifetime of the development.

Suggested New Policy 2: In areas of known coastal hazards, including those areas shown on the Coastal Hazards Screening Map, a site-specific Coastal Hazard Report shall be prepared according to

Comment [CCC2]: Commission staff continue to note that the Commission interprets "existing" development within the meaning of Coastal Act Section 30235 as development that was in existence when the Coastal Act was passed. In other words, Section 30235's directive to allow shoreline armoring in certain circumstances only applies to development that existed as of January 1, 1977. This interpretation is the most reasonable way to construe and harmonize Sections 30235 and 30253. which together evince a broad legislative intent to allow armoring for development that existed when the Coastal Act was passed, but avoid such armoring for new development now subject to the Act. This interpretation, which essentially "grandfathers" development that predates the Coastal Act, is also supported by the Commission's duty to protect public trust resources and interpret the Coastal Act in a liberal manner to accomplish its purposes.

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 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.

Policy 3-9: Any areas subject to existing or reasonably foreseeable future threats from sea level rise and coastal hazards that are not designated on the map shall also be subject to the LCP policies and standards.

Suggested New Policy 3: New beachfront development (including additions and redevelopment) along shoreline segments that lack coastal bluffs shall be set back a sufficient distance to ensure that the new beachfront development will be located outside of areas subject to existing or reasonably foreseeable future shoreline hazards (e.g., shoreline erosion, inundation, flooding, storm surge, sea level rise, and wave uprush) without reliance on a shoreline protective device over the anticipated life of the development. Applications for development on beach front 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 3-10: Coastal hazard setbacks shall be determined based upon using the following minimum anticipated lifetimes of development. The anticipated life of development shall be defined as follows:

- a. <u>Temporary structures</u>, or moveable or expendable construction (e.g., trails, boardwalks, bike racks, playgrounds): 5 years
- b. Ancillary development or amenity structures (e.g., structures, 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: 100 years.

Policy 3-11: A legally permitted building or structure that does not conform to the policies and standards of the LCP, including the 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 and the adversely impacted area restored at the applicant's or property owner's expense if:

(1) The structures are designated as unsafe for occupation or use due to coastal hazards; or

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

(3) Removal is required pursuant to LCP policies for sea level rise adaptation planning;

Comment [CCC3]: This policy has been moved and incorporated into New Policy 3-6 as the two concepts should be read together to provide notice that the map may not capture all coastal hazard areas that are subject to the coastal hazard policies and standards of the LCP. As proposed, Policy 3-6 suggests that only coastal hazards areas indicated on the map would be subject to the development standards herein.

- (4) The development encroaches onto public trust lands and the Coastal Commission, in coordination with the State Lands Commission, determines that such encroachment is not legally permissible; or
- (2)(5) The development requires new and/or augmented shoreline protective devices that conflict 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 waiver of future shoreline protection for development during the anticipated life of the structure and 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; and (2) existing and reasonably foreseeable future hazards associated with sea level rise and coastal hazards, including accelerated coastal bluff retreat, erosion, wave run up, and flood/inundation and the results of any site-specific analysis thereof.

Bluff and **Dune** Protection

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 and landward of the minimum bluff edge setback requirement to avoid existing or reasonably foreseeable future threats from sea level rise and coastal hazards without reliance on shoreline protective devices over the anticipated lifetime 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 from the bluff edge to at least the same distance as the development to ensure provision of adequate services during the anticipated lifetime 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 3-5<u>15</u>: Within the Drought-tolerant vegetation shall be maintained on all bluff-top areas seaward of the required bluff edge setback, drought tolerant vegetation shall be maintained, using native plants and materials to the maximum extent feasible. Minor Ggrading 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 The coastal bluff edge setback does not apply to development associated with passive public recreational uses (e.g., signs, benches, and trails) may be located within coastal bluff edge setbacks.

Comment [CCC4]: Commission staff continue to recommend including details regarding the NTPO requirement within the LUP. It is critically important for adaptation policies to succeed to include information regarding existing or reasonably foreseeable future threats from SLR or coastal hazards in the NTPO to properly notice property owners of known hazards associated with the development.

Comment [CCC5]: As proposed, this requirement could be read to only require development on bluff tops to be sited according to the *minimum* bluff edge setback requirement for all development. Commission staff recommend requiring a standard that allows flexibility for the County to require a larger bluff edge setback when appropriate.

Policy 3-6<u>17</u>: <u>All Development</u> and activity of any kind <u>beyond landward of</u> the required bluff edge setback shall be constructed to <u>iensure</u> 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<u>18</u>: No development shall be permitted on the bluff face, except for engineered staircases or accessways to provide <u>public</u> 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. Drainpipes shall be allowed only where no other less environmentally damaging drain system is feasible and the drainpipes are designed and placed to minimize <u>adverse</u> 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 lifetime of the development. Siting and design shall take into account the anticipated extent of the landward migration of foredunes over the anticipated lifetime 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. 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 Highway 101 shall be considered with a preference towards non-structural solutions, unless the structural solutions are less environmentally damaging.

Policy 3-21: All new roads and road projects that require a Coastal Development Permit shall identify existing and reasonably foreseeable future coastal hazards, including flooding, storm surge, and sea level rise and shall consider alternatives and adaptation measures to minimize risk and avoid shoreline protective devices over the anticipated lifetime 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 should be identified. A combination of structural and non-structural measures to protect local and regional access and use of railway transportation should 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 3-1429: All development shall be <u>sited and designed to fit the minimize altering alteration of existing</u> site topography, soils, geology, <u>and hydrology</u>, <u>and any other existing conditions</u> and 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 3-4<u>15</u>), further bluff setbacks may be required for oceanfront structures to minimize or avoid <u>adverse</u> impacts on public views from the beach. Bluff_top structures shall be <u>located as far landward as necessary needed</u> set back from the bluff edge sufficiently far to ionsure 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 <u>adversely</u> 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 <u>address deal with</u> the potential consequences of hydrocarbon leaks<u></u> 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 <u>Office of</u> Emergency <u>Services Coordinator</u> <u>Management</u> and Fire Department <u>shall review and</u>, if found to be adequate, approve these emergency response plans.

Pipelines

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

Suggested New Policy 4: When feasible, pipelines shall be routed to avoid coastal hazard areas, including those areas shown on the Coastal Hazards Screening Map. If avoidance of these areas is infeasible, pipeline segments passing through such coastal hazard areas shall be isolated by automatic shutoff valves.

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

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 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 pPursuinge 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, 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, 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 <u>and their associated riparian vegetation</u> in rural areas, as defined by the land use plan, shall be presumptively 100 feet, and for streams <u>and their associated riparian vegetation</u> in urban areas, 50 feet. These minimum buffers may be <u>adjusted upward</u> 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 An increase to the buffer strip shall be-established based on an investigation of the following factors and after consultation with the <u>California</u> Department of Fish and <u>Game Wildlife</u> and

Regional Water Quality Control Board. <u>All buffers shall be sufficient</u> in order to protect the biological productivity and water quality of streams, to avoid significant disruption of habitat values, and to be compatible with the continuance of the habitat area.÷

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.

Riparian vegetation shall be protected and shall be included in the buffer. 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. 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 ten 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.

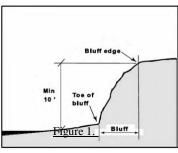


Diagram of a Generalized Bluff

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 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.)

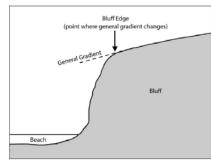


Figure 2. Rounded Bluff Edge

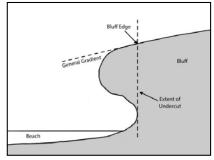


Figure 4. Diagram of an Undercut Bluff

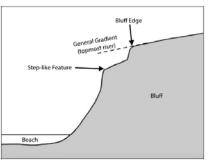


Figure 3. Bluff Edge with Step-like Feature

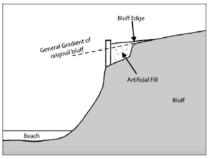


Figure 5. Bluff Edge with Artificial Fill

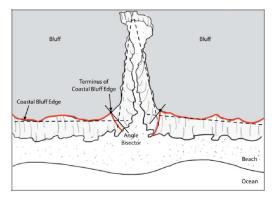


Figure 6. Coastal Canyon Bluff Edge

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.

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 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 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. <u>Fifty percent or more of the structural elements of the roof or floor framing are replaced,</u> <u>structurally altered, reinforced, or removed.</u>
- 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 January 1, 1977 [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, <u>due to their connectivity</u>, have the potential for to adversely impacts on coastal streams, wetlands, estuaries, and groundwater basins through runoff and percolation.

APPENDIX C: REFERENCES

SECTION 3.3: HAZARDS

American Society of Planning Officials, Planning Advisory Service, <u>Performance Controls for</u> <u>Sensitive Lands - A Practical Guide for Local Administrators</u>, Report #307, 308, prepared by Charles Thurow, William Toner, and Duncan Erley. June 1975.

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<u>Griggs, G, Árvai, J, Cayan, D, DeConto, R, Fox, J, Fricker, HA, Kopp, RE, Tebaldi, C, Whiteman, EA</u> (California Ocean Protection Council Science Advisory Team Working Group). Rising Seas in California: An Update on Sea-Level Rise Science. California Ocean Science Trust, April 2017.

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United States, Department of Commerce, Office of Coastal Zone Management, <u>Natural Hazard:</u> <u>Management in Coastal Areas</u>, November 1976.

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APPENDIX J: SEA LEVEL RISE COASTAL HAZARD SCREENING MAP

[See Next Page]

- 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

G:\GROUP\COMP\Comp Plan Elements\Legislation\AB 32\CAS\Adaptation\Coastal Resiliency Project\Phase 2 - CCC Grant 2015\Hearings\5 - CPC_August 2018\8-29-18\Enclosures

EXHIBIT 2

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, 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 35-51C, Reasonable Economic Use, to read as follows:

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. If an applicant asserts that the application of the policies and standards contained in the Local Coastal Program regarding use of property would constitute a taking of private property without just compensation, the applicant shall apply for an economically viable use determination that is to be processed in conjunction with the associated Coastal Development Permit application and shall be subject to the provisions of this section.

- A. Economically Viable Use Determination. The application for an economically viable use determination shall include the entirety of all parcels that are geographically contiguous and held by the applicant in common ownership at the time of the application. Before the application for an economically viable use determination is accepted for processing, the applicant shall provide the following information, unless the County determines that one or more of the particular categories of information is not relevant to its analysis and/or additional information is necessary:
- 1. The date the applicant purchased or otherwise acquired the property, and from whom.
- 2. The purchase price paid by the applicant for the property.
- 3. The fair market value of the property at the time the applicant acquired it, describing the basis upon which the fair market value is derived, including any appraisals done at that time.
- 4. The general plan, zoning or similar land use designations applicable to the property at the time the applicant acquired it, as well as any changes to these designations that occurred after acquisition.
- 5. Any development restrictions or other restrictions on use, other than government regulatory restrictions described in subsection 4 above, that applied to the property at the time the applicant acquired it, or which have been imposed after acquisition.
- 6. Any change in the size of the property since the time the applicant acquired it, including a discussion of the nature of the change, the circumstances and the relevant dates.
- 7. A discussion of whether the applicant has sold or leased a portion of, or interest in, the property since the time of purchase, indicating the relevant dates, sales prices, rents, and nature of the portion or interests in the property that were sold or leased.
- Any title reports, litigation guarantees or similar documents in connection with all or a portion of the property of which the applicant is aware.
- 9. Any offers to buy all or a portion of the property which the applicant solicited or received, including the approximate date of the offer and offered price.

- 10. The applicant's costs associated with the ownership of the property, annualized for each of the last five calendar years, including property taxes, property assessments, debt service costs (such as mortgage and interest costs), and operation and management costs.
- 11. Apart from any rents received from the leasing of all or a portion of the property, any income generated by the use of all or a portion of the property over the last five calendar years. If there is any such income to report it should be listed on an annualized basis along with a description of the uses that generate or has generated such income.
- 12. Any additional information that the County requires to make the determination.

Supplemental Findings for Approval of Coastal Development Permit. A Coastal Development Permit that allows a deviation from a policy or standard of the Local Coastal Program to provide a reasonable use may be approved or conditionally approved only if the appropriate governing body, either the Planning Commission or Board of Supervisors, makes the following supplemental findings in addition to the findings required in Section 35-169 (Coastal Development Permits):

- 1. Based on the economic information provided by the applicant, as well as any other relevant evidence, each use allowed by the Local Coastal Program policies and/or standards would not provide an economically viable use of the applicant's property.
- Application of the Local Coastal Program policies and/or standards would unreasonably interfere with the applicant's investment-backed expectations.
- 3. The use proposed by the applicant is consistent with the applicable zoning.
- 4. The use and project design, siting, and size are the minimum necessary to avoid a taking.
- 5. The project is the least environmentally damaging alternative and is consistent with all provisions of the certified Local Coastal Program other than the provisions for which the exception is requested.
- 6. The development will not be a public nuisance or violate other "background principles of the State's law of property," as that phrase was used in the U.S. Supreme Court's decision in *Lucas v. South Carolina Coastal Council*, 505 U.S. 1003, 1028-30 (e.g., public trust doctrine). If it would violate any such background principle of property law, the development shall be denied.

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 ten 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.

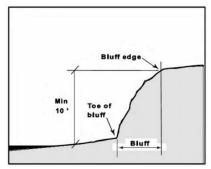


Figure 1. Diagram of a Generalized Bluff

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 bluff line along the canyon facing portion of the bluff. (See Figure 6 below.)

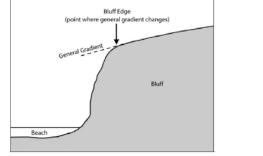


Figure 2. Rounded Bluff Edge

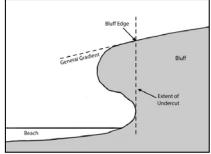


Figure 4. Diagram of an Undercut Bluff

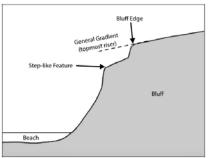


Figure 3. Bluff Edge with Step-like Feature

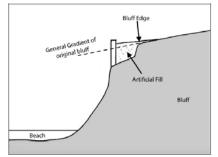


Figure 5. Bluff Edge with Artificial Fill

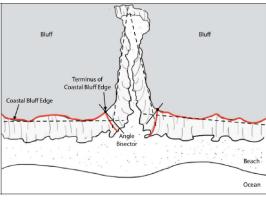


Figure 6. Coastal Canyon Bluff Edge

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.

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.
- 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 January 1, 1977 [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 bulk heads 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 Section 35-59, General, Section 35-61, Beach Development, and Section 35-67, Bluff Development and to add new Section 35-68, Coastal Hazard Areas, 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.

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

Section 35-61. Beach Development.

1. To avoid the need for future shoreline protective devices that could <u>adversely</u> 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, <u>coastal public access</u>, <u>such as</u>

<u>boardwalks</u>, or where such restriction would cause the inverse condemnation of the lot by the County. <u>Such development shall be designed to be relocated if warranted by changing coastal conditions</u>.

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

Section 35-67. Bluff and Dune Development.

 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 landward of the minimum bluff edge setback requirement to avoid existing or reasonably foreseeable future threats from sea level rise and coastal hazards without reliance on shoreline protective devices over the anticipated lifetime 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 from the bluff edge to at least the same distance as the development to ensure provision of adequate services during the anticipated lifetime of the development.

Applications for development on bluff-top lots shall include a site-specific Coastal Hazard and Wave Run-up-Study Report prepared according to the requirements in Appendix I of the Coastal Zoning Ordinance (Technical Guidelines for Preparation of a Coastal Hazard Report). The reportstudy 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 35-68.8 and removal per Section 35-68.7.

- 2. In addition to that required for safety, further bluff setbacks may be required for oceanfront structures to minimize or avoid <u>adverse</u> 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 needed to ignsure 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. <u>Minor, at grade, easily removable development The coastal bluff edge setback does not apply to</u> <u>development</u>-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.
- 35. Within the-Drought-tolerant vegetation shall be maintained on all bluff-top areas seaward of the required bluff edge setback, drought tolerant vegetation shall be maintained, using native plants and materials to the maximum extent feasible. Minor Ggrading 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.
 - 46. 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.

- 57. No new development shall be permitted on the bluff face, except for engineered staircases or accessways to provide <u>public</u> 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. Drainpipes shall be allowed only where no other less environmentally damaging drain system is feasible and the drainpipes are designed and placed to minimize <u>adverse</u> 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 lifetime of the development. Siting and design shall take into account the anticipated extent of the landward migration of foredunes over the anticipated lifetime 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 35-68.8 and removal per Section 35-68.7.

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

Section 35-68. Coastal Hazard Areas

The following provisions apply to development proposed 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 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 impactsthreats from sea level rise and coastal hazards. Any areas subject to existing or reasonably foreseeable future threats from sea level rise and coastal hazards that are not designated on the map shall also be subject to the LCP policies and standards. Where the physical extent of a coastal hazard on the project site is different than those indicated on the Map, the Coastal Development Permit application shall explain and provide substantial evidence of the physical extent of the coastal hazard.
- 2. Any areas subject to existing or reasonably foresceable threats from sea level rise and coastal hazards that are not designated on the Sea Level Rise Coastal Hazard Screening Map shall also be subject to LCP policies and standards. Where the physical extent of a coastal hazard on the project site is different than those indicated on the Map, the Coastal Development Permit application shall explain the physical extent of the coastal hazard.
- 3. 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 Map needs an update, but has not been updated as of the time of action on the Coastal Development Permit application.
- 4. All new development (including additions and redevelopment) potentially subject to coastal hazards over its anticipated life, including but not limited towithin areas shown in the Sea Level Rise Coastal Hazards Screening Map, 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 lifetime 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 lifetime of the development.

Comment [CCC1]: This provision has been moved and incorporated into subpart (1) of this Section as the two concepts should be read together to provide notice that the map may not capture all coastal hazard areas that are subject to the coastal hazard policies and standards of the LCP. As proposed, subpart (1) of this SEction suggests that only coastal hazards areas indicated on the map would be subject to the development standards herein

- 4.5. In areas of known coastal hazards, including those areas shown on the Coastal Hazards Screening Map, 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. Applications for development within coastal hazard areas shown on the Sea Level Rise Coastal Hazards Screening Map shall be evaluated for potential coastal hazards at the site, based on all readily available information and best available science. The 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 and Wave Run up Study shall be prepared according to the requirements in Appendix I (Technical Guidelines for Preparation of a Coastal Hazard Report). 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.
- 6. 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.
- 7. 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 and the adversely affected area restored at the applicant's or property owner's expense if:
 - a) The structures are designated as unsafe for occupation due to coastal hazards;, or
 - b) Essential services to the site can no longer feasibly be maintained (e.g., utilities and roads);-
 - c) Removal is required pursuant to LCP policies for sea level rise adaptation planning:
 - d) The development encroaches onto public trust lands and the Coastal Commission, in coordination with the State Lands Commission, determines that such encroachment is not legally permissible; or
 - b)e) The development requires new and/or augmented shoreline protective devices that conflict 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 and ocean and lawfully dispose of the material in an approved disposal site, after acquiring a Coastal Development Permit for such removal.

8. Prior to issuance of a Coastal Development Permit for development in areas subject to existing or reasonably foreseeable threats from sea level rise and coastal hazards, applicants or property owners shall record a waiver of future shoreline protection for development during the anticipated life of the structure and 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; and (2) existing and reasonably foreseeable future hazards associated

with threats-from sea level rise and coastal hazards, including accelerated coastal bluff retreat, erosion, wave run up, and flooding/inundation and the results of any site-specific analysis thereof.

SECTION 4.

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 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 streams and their associated riparian vegetation in rural areas, as defined by the 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 by a biological report prepared by a qualified biologist. The minimum buffer strip may be decreased only to avoid precluding reasonable use of property. The An increase to the buffer strip shall be established based on an investigation of the following factors and after consultation with the California Department of Fish and Game Wildlife and California Regional Water Quality Control Board. in order All buffers shall be sufficient to protect the biological productivity and water quality of streams, to avoid significant disruption of habitat values, and to be compatible with the continuance of the habitat area.⁺
 - a. <u>Existing vegetation, Ssoil</u> type and stability of stream <u>and riparian</u> corridors.
 - b. How surface water filters into the ground.
 - c. Slope of land on either side of the stream.
 - d. Location of the 100-year flood plain boundary.
 - e. Consistency with adopted plans, particularly biology and habitat policies.
 - f. Landscape-scale habitat connectivity.

Riparian vegetation shall be protected and shall be included in the buffer. 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. 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 re-establishment of riparian vegetation to it's the prior extent of the riparian vegetation, to the greatest degree possible feasible.

SECTION 5.

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 change Section 35-130, Subdivision of Land, to read as follows:

- 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.

1. Subdivisions and lot line adjustments in areas subject to threats from sea level rise and coastal hazards shall only be permitted limited if the development of each created parcel can comply with all applicable hazard policies and standards of the LCP, will not require shoreline protection, or adversely impact as necessary to protect new development, coastal resources, and or public access. New lots shall be allowed only if: (1) the new lot(s) would be permanently protected for open space, public access, or other similar purposes consistent with the LCP, or 2) the new lot(s) each contain a buildable area in which development on new lots would comply with all applicable LCP hazard policies and standards. For the purposes of this policy, the County shall use the "high" sea level rise scenario for the 100-year timeframe to analyze potential hazards to the development on parcels that are proposed to be created through subdivisions or lot line adjustments, unless a parcel is proposed to be created for the purpose of providing open space or public access.

SECTION 6.

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 Section 35-154, Onshore Processing Facilities Necessary or Related to Offshore Oil and Gas Development, to read as follows:

- 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 <u>address deal with</u> 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 7.

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 policies and standards of the LCP, including 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.
 - 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.

Comment [CCC2]: The Commission's Adaptation Guidance recommends that jurisdictions ensure that land divisions in hazardous areas only be allowed if it can be demonstrated that the lots will be safe from hazards for the longest timeframe possible/foreseeable. This is due to the fact that, unlike structures, land divisions are expected to last in perpetuity, so they should have to demonstrate more than the 75-year safety period applicable to a single-family dwelling.

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).
 - 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).
 - 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.
 - 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.
 - 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.
- <u>f)</u> <u>Structures threatened by coastal flooding.</u> 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.

- Subsection 1.a.2)f), 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.
- **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.
 - 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, tThe 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.
 - **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 <u>LCP policies and standards.</u>
 - 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 8.

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 Section 35-172.13.3, Conditional Use Permits, Additional Requirements, Seawalls and Shoreline Structures, to read as follows:

3. Seawalls and Shoreline Structures Shoreline Protective Devices.

For purposes of this section, "existing principal structure" means a principal structure (e.g., residential dwelling, accessory dwelling unit, or public recreation facility) that was legally established on or before-January 1, 1977. [effective date of the proposed sea level rise/coastal hazard LCP amendment].

Comment [CCC3]: Commission staff continue to note that the Commission interprets "existing" development within the meaning of Coastal Act Section 30235 as development that was in existence when the Coastal Act was passed. In other words, Section 30235's directive to allow shoreline armoring in certain circumstances only applies to development that existed as of January 1, 1977. This interpretation is the most reasonable way to construe and harmonize Sections 30235 and 30253, which together evince a broad legislative intent to allow armoring for development that existed when the Coastal Act was passed, but avoid such armoring for new development now subject to the Act. This interpretation, which essentially "grandfathers" development that predates the Coastal Act, is also supported by the Commission's duty to protect public trust resources and interpret the Coastal Act in a liberal manner to accomplish its purposes.

- a. Shoreline protective devices shall only be permitted when required to serve coastal-dependent uses, protect existing principal structures or protect public beaches in danger from erosion, when designed to eliminate or mitigate adverse impacts on local shoreline sand supply, when designed to avoid adverse impacts to lateral beach access, biological resources, water quality, and visual resources, and when there is no less environmentally damaging alternative. Shoreline protective devices shall be sited to avoid sensitive resources, if feasible, and adverse impacts on all coastal resources shall be fully mitigated. 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:
 - No other feasible, less environmentally damaging alternative exists, including but not limited to relocation or removal of the threatened development, beach nourishment, dune creation, nonstructural 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.
 - 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 eliminate or mitigate adverse impacts on local shoreline sand supply, and to avoid, and if avoidance is infeasible, mitigate adverse impacts on other coastal resources impacts to the maximum extent feasible.
 - 5) The 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,
 - 7) Adequate lateral public beach access is provided-included where feasible.
 - 8) 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:
 - 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 20year increments to account for changing conditions.
 - 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.

- 3) A monitoring plan to identify the impacts of the shoreline armoring on the surrounding area and determine when a shoreline protective device is no longer needed for protection. The monitoring plan shall specify requirements for periodic inspection for structural damage, excessive scour, or other impacts from coastal hazards and sea level rise, impacts to shoreline processes and beach width (both at the project site and the broader area and/or littoral cell as feasible), and impacts to public access and the availability of public trust lands for public use.
- 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 9.

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 minimum requirements and guidelines are intended to clarify and assist with the preparation of a Coastal Hazard Report for beachfront and bluff-top development. This appendix also includes the methodology for calculating a site-specific bluff edge setback and preparing a wave run-up study.

1. Sea Level Rise Projection Information.

The Sea Level Rise Coastal Hazard Screening 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 may be is needed to assess potential adverse impacts. The Screening Map shows the "medium" 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 the medium sea level rise scenario, as well as the low and high scenarios. All three scenarios can be visually examined using the Coastal Resilience Mapping Portal available online through the Planning and Development Department website.

| Time Period | <u>Low Sea Level Rise</u> <u>Scenario</u> | <u>Medium Sea Level Rise</u> <u>Scenario</u> | High Sea Level Rise Scenario |
|----------------|--|---|------------------------------|
| <u>By 2030</u> | <u>0.04</u> | <u>3.5</u> | <u>10.2</u> |
| <u>By 2060</u> | <u>2.8</u> | <u>11.8</u> | <u>27.2</u> |
| <u>By 2100</u> | <u>10.6</u> | <u>30.7</u> | <u>60.2</u> |

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

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 psweeudostatic 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 pseuwedostatic) 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 sitespecific 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 lifetime 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 "medium" amount of the sea level rise expected over the anticipated lifetime 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 lifetime of the structure. In no case shall the required bluff edge setback be less than 25 feet.
- 3. <u>Guidelines and Minimum Requirements for Preparation of a Coastal Hazard Report and Wave Run-up</u> <u>Study for Blufftop Properties:</u>

A site-specific Coastal Hazard and Wave Run-up Study shall be required that is prepared by a qualified California licensed engineer with expertise in coastal processes. At a minimum, the Coastal Hazard and Wave Run-up Study shall examine the "medium" scenario of projected sea level rise over the expected lifetime 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 lifetime of the structure, excluding the effects of any existing shoreline protective device; high tide conditions, combined with projections for sea level rise for the lifetime 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 lifetime 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 lifetime 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
- <u>bluff erosion rates</u>, both long-term and episodic

b. Projected future conditions at the site, accounting for sea level rise over the anticipated lifetime 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 lifetime 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 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 lifetime, 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 "medium" sea level rise scenario shall be examined to understand potential adverse impacts that may occur throughout the anticipated lifetime of the development. At a minimum, flood risk over the anticipated lifetime 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.

4. <u>Guidelines and Minimum Requirements for Preparation of a Coastal Hazard Report and Wave Run-Up</u> <u>Study for Beachfront Properties:</u>

A site-specific Coastal Hazard and Wave Run-up Study shall be required that is prepared by a qualified California licensed engineer with expertise in coastal processes. At a minimum, the Coastal Hazard and Wave Run-up Study shall examine the projected sea level rise under the "medium" scenario, over the expected lifetime 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 lifetime of the structure, excluding the effects of any existing shoreline protective device; high tide conditions, combined with projections for sea level rise for the lifetime 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 lifetime 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 lifetime of the development, considering sea level rise.

Coastal Hazard and Wave Run-Up Studies 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 lifetime 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
- <u>intertidal zone</u>
- 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 lifetime 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.

f. 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 lifetime 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 "medium" scenario of projected sea level rise shall be examined to understand the potential adverse impacts that may occur throughout the anticipated lifetime 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 10:

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 11:

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 12.

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