RESOLUTION NO. 2018 - 68

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF DEL MAR, CALIFORNIA, APPROVING THE AMENDMENTS TO THE EXISTING CERTIFIED DEL MAR LOCAL COASTAL PROGRAM LAND USE PLAN (LCPA 18-002) AND DIRECTING STAFF TO SUBMIT THE LOCAL COASTAL PROGRAM AMENDMENT TO THE COASTAL COMMISSION FOR CERTIFICATION.

WHEREAS, the Local Coastal Program Amendment is consistent with the City of Del Mar Coastal Hazards, Vulnerability, and Risk Assessment (Vulnerability Assessment) that was prepared for the City by Environmental Science Associates (ESA) with a supporting Addendum (2018) that explains the changes in the science since the initial assessment in 2016; and

WHEREAS, the Vulnerability Assessment identifies that future viability of the City of Del Mar is threatened by projected sea level rise, storm surge, coastal flooding, river flooding, or erosion and that long term planning is necessary to increase resiliency; and

WHEREAS, Del Mar is a coastal city with a certified Local Coastal Program (LCP) that is required pursuant to the California Coastal Act to contain hazard control policies and regulations to effectively address safe development, public access, habitat, wildlife, scenic views, priority land uses, wetlands, and agriculture; and

WHEREAS, on May 21, 2018, the City Council adopted a variety of local hazard mitigation strategies in the Del Mar Coastal Resiliency/Sea Level Rise Adaptation Plan ("Adaptation Plan"); and

WHEREAS, the City's existing certified Local Coastal Program (LCP) contains the City's existing shoreline hazard policies and regulations; and

WHEREAS, processing of a Local Coastal Program Amendment is necessary to add, modify, remove, and update the existing LCP to clarify the City's desired adaptation approach for long term resiliency and to remove any conflicts with the existing LCP; and

WHEREAS, on September 11, 2018, the Planning Commission recommended approval to the City Council of the Local Coastal Program Amendment (LCPA18-002); and

WHEREAS, the Local Coastal Program Amendment is subject to certification by the California Coastal Commission; and

WHEREAS, the City of Del Mar posted, mailed, and distributed a Notice of Availability for public review and provided all required notices of public hearing in accordance with California Code of Regulations Section 13515 requirements for public participation and agency coordination for Local Coastal Program Amendments; and

WHEREAS, the City of Del Mar provided additional mailed courtesy notice to all residents and owners within the areas identified as potentially vulnerable; and

WHEREAS, staff determined that the proposed Local Coastal Program Amendment is exempt from preparation of an environmental document pursuant to CEQA Guidelines Section 15061(b)(3) because this activity is covered by the general rule that CEQA only applies to projects which have the potential for causing a significant effect on the environment and based on the CEQA Guidelines Section 15265 Statutory Exemption (Adoption of Coastal Plans and Programs), which states that CEQA does not apply to activities and approvals pursuant to the California Coastal Act by any local government as necessary for the preparation and adoption of a Local Coastal Program because per the CEQA Guidelines the burden of CEQA compliance for this type of action shifts from the City to the Coastal Commission; and

WHEREAS, the City Council adopted a wide range of adaptation options and strategies to achieve compliance with the Coastal Act goals as set forth in Public Resources Code section 30001.5; and

WHEREAS, Del Mar's Adaptation Plan and local hazard mitigation strategy was designed to be in full compliance with Del Mar's Community Plan and certified Local Coastal Program, including the voter-approved Beach Protection Initiative as certified by the Coastal Commission; and

WHEREAS, the City's adaptation strategy includes proactive implementation of programs, including sand replenishment and management, and utilization of additional programs to protect the low lying properties (public and private) behind the first row of houses on the beach from ocean and river flooding through maintenance of a public beach, dredging of the river channel as needed, and other strategies to reduce the risk to these low lying areas; and

WHEREAS, Del Mar's approach recognizes that the beach, river, and lagoon systems are public assets of importance beyond Del Mar and whereas the supporting technical documents prepared by ESA in 2018 (Sediment Management Plan and Lagoon Wetland Habitat Migration Assessment) will facilitate long term planning strategies to protect the community, reduce the risk of hazards, and plan ahead for protection of these coastal resources; and

WHEREAS, the City believes the adopted approach will be successful, is "feasible" within the meaning of the Coastal Act and City law, and will best meet both public and private goals for a significant period of time; and

WHEREAS, the City thoroughly evaluated planned retreat as a strategy for Del Mar in accordance with State guidance and concluded it is not necessary or feasible to achieve the Coastal Act and City goals and that it conflicts with the City's vision for the future, the voter-approved Community Plan, and the certified Local Coastal Program, which includes the voter-approved Beach Preservation Initiative; and

WHEREAS, the City further concluded that there is no clear net public benefit or current need, environmental or otherwise, for planned retreat because the City's adopted

adaptation strategies are sufficient; that planned retreat is not feasible in Del Mar due to the economic, environmental, engineering, social, political, and legal constraints and uncertainties; that the extremely high land value in Del Mar means that public acquisition of any property the City does not control will be difficult and cost prohibitive for the City to pursue; that alternative locations are not available for displaced residents or City infrastructure to relocate; that the existing shoreline protection for the "front row" homes and City property along the beachfront help protect lower lying public and private property from ocean flooding; that removal of the existing shoreline protection structures and the "front row" homes and City facilities would likely not alleviate the risk of flooding due to the lower elevation of the rest of the neighborhood; that there is a high threat of infrastructure failure if existing shoreline protection structures are removed; and that there is a high threat of legal risk if retreat of private property is pursued; and

WHEREAS, the City will reevaluate the associated necessity and feasibility of newly available adaptation options as appropriate using the best available data and State guidance when specific adaptation projects or amendments to the Adaptation Plan are considered at a future date.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Del Mar that the proposed Amendment to the existing certified Local Coastal Program Land Use Plan (LCPA 18-002) is hereby adopted (Exhibit "A").

BE IT FURTHER RESOLVED, that staff is hereby directed to submit the Local Coastal Program Amendment to the Coastal Commission for certification.

PASSED, APPROVED AND ADOPTED by the City Council of the City of Del Mar, State of California, at a Regular Meeting held on the 1st day of October 2018.

Dwight Worden, Mayor
City of Del Mar

APPROVED AS TO FORM:

Leslie E. Devaney, City Attorney
City of Del Mar

ATTEST AND CERTIFICATION:
STATE OF CALIFORNIA
COUNTY OF SAN DIEGO
CITY OF DEL MAR

I, ASHLEY JONES, Administrative Services Director/City Clerk of the City of Del Mar, California, DO HEREBY CERTIFY, that the foregoing is a true and correct copy of Resolution No. 2018-68, adopted by the City Council of the City of Del Mar, California, at a Regular Meeting held the 1st day of October, 2018, by the following vote:

AYES:	Mayor Worden, Council Member Haviland and Parks
NOES:	Deputy Mayor Druker
ABSENT:	Council Member Terry Sinnott
ABSTAIN:	None

Ashley Jones, City Clerk/Administrative Services Director

Exhibit "A"

CHAPTER I - INTRODUCTION

This document comprises the "Land Use Plan" portion of the Local Coastal Program for the City of Del Mar. The Land Use Plan is a compilation of the goals, policies and recommendations identified in the Del Mar Community Plan, various policy reports, the San Dieguito Lagoon Enhancement Program, as well as other goals and policies adopted by the City Council to guide future development within Del Mar.

A. Purpose

The purpose of the goals, policies and recommended programs presented in this Land Use Plan is to ensure that all land use and development activities within the City of Del Mar will be in conformance with the policies of the California Coastal Act of 1976, as amended. This Land Use Plan will be implemented and enforced by the City of Del Mar through the procedures set forth within this document and the City of Del Mar Municipal Code.

This Land Use Plan was certified by the Coastal Commission on March 18, 1993. Following certification of the corresponding Implementing Ordinances, the City will assume authority for the processing of Coastal Development Permits for most projects within Del Mar. Even after certification, the Coastal Commission will retain authority for processing coastal development permits for projects in areas known as "original jurisdiction". Original jurisdiction areas are generally those lands which are subject to tidal action or claims of public trust. The processing of such permits shall be consistent with the procedures set forth in the California Coastal Act.

B. History/Legal Authority

Paragraphs 1 through 5 [No change]

Chapter III identifies the hazardous natural conditions in Del Mar, including: coastal bluff failures, shoreline storm ~~water~~ damage, flooding (river and coastal), ~~and~~ runoff and slope erosion, and increased risks of flooding, beach loss, and coastal bluff erosion due to projected sea level rise. The Chapter also includes regulatory policies intended to minimize such hazards. The purpose of Chapter IV, the public access component of this Land Use Plan, is to ensure that the general public's opportunity to get to and enjoy the City's considerable coastal recreational resources is protected. Chapter V identifies recreation areas within and around the City and contains policies for improving recreational opportunities. Chapter VI is entitled Sensitive Lands and contains the policies intended to assure that the sensitive wetland and hillside habitat areas within the City are preserved and, where feasible, enhanced.

Figure I-A [No change]

Exhibit "A"

CHAPTER II – LAND USE DEVELOPMENT

A. Background [No change]

B. Land Use Development Goals and Policies – General [No change]

C. Land Use Development Goals and Policies- By District [No change]

Figure II-A [No change]

Land Use Designations/Allowed Uses

Figure II-B [No change]

CHAPTER III – HAZARD CONTROL

A. Background

The hazardous natural conditions existing in Del Mar include: coastal bluff failure, shoreline storm damage, flooding (river and coastal), ~~and~~ runoff and slope erosion, and increased risks of flooding, beach loss, and coastal bluff erosion due to projected sea level rise. Each of these is discussed in detail below.

1. Coastal Bluff Failure

The Del Mar area is made up of a variety of geological formations. These are shown on the accompanying Figure III-A, an exhibit of Geologic Formations of the Del Mar region prepared for the California Division of Mines and Geology and the California Department of Conservation. These formations include: beach sand (designated as (Qb) on the accompanying Figure; undifferentiated alluvium (Qal, Qsw); Bay Point Formation (Qbp); Torrey Sandstone (tt); Delmar Formation (Td); and Linda Vista Formation, quaternary nearshore deposits (Qln). Some of the hazards associated with these formations include the erosion of cliffs along horizontal planes of weak strata and vertical fracture planes, slumping of terrace material due to excessive surface drainage or subsurface water seepage and damage due to wave action at the base of coastal bluffs.

Bare slopes that lack vegetative cover are particularly susceptible to rilling, slumping and other related erosion problems. Excessive runoff from atop coastal bluffs coupled with the continued use of rail tracks located along the bluff top has resulted in a number of slope failures and potential failure points. Coastal bluff erosion in Del Mar is a problem which threatens the useful life of the ~~AT&SF Railway right-of-way~~ Los Angeles-San Diego-San Luis Obispo (LOSSAN) railroad corridor and the properties to the east and west of the tracks. The erosion also creates hazards which interfere with safe, pedestrian access to and along the shoreline.

The City's Coastal Hazards, Vulnerability, and Risk Assessment (Environmental Science Associates 2016) identified coastal bluff erosion as a local hazard and public safety concern in the near term for the LOSSAN railroad corridor that runs along the south beach and south bluff neighborhood districts and mid to long term vulnerability for the south bluff neighborhood district located eastward of the railroad corridor. Del Mar's north bluff and the low-lying bluffs at Powerhouse Park are similarly vulnerable, but do not contain railroad infrastructure.

Historically, the San Diego Association of Governments (SANDAG) and North County Transit District (NCTD) have responded to retreat of Del Mar's south bluff with multiple bluff stabilization projects. The City identified a range of adaptation measures in Del Mar's Sea Level Rise Adaptation Plan (Environmental Science Associates 2018) to help property owners, including the City, to plan ahead and address projected coastal bluff erosion and reduce the level of risk to people, property, and coastal resources. The City's preferred adaptation measure for the entire Del Mar shoreline is beach nourishment and retention of sand on the beach adjacent to the bluffs. Other adaptation measures for Del Mar's coastal bluffs generally include best management practices and relocation of public infrastructure and the railroad. The City discloses identified coastal hazards and protects the public health, safety, and general welfare in these vulnerable areas through application of the Coastal Bluff Overlay Zone (Del Mar Municipal Code Chapter 30.55) and the Beach Protection Initiative implemented by the Beach Overlay Zone (Del Mar Municipal Code Chapter 30.50).

2. Shoreline Storm Damage

There are several major contributing factors to coastal bluff erosion in Del Mar. These include: a loss of beach sand due to the combined effect of littoral drift and the reduced sand replenishment supplies, the erosive effect of sea wave attack, underground water seepage, surface runoff flowing into unprotected areas from irrigation systems, ~~and~~ overtaxed drainage systems, and sea level rise. Other factors include uncontrolled pedestrian access down the face of coastal bluffs and the frequent vibration and soils stress associated with passing railcars in the ~~AT & SF right-of-way~~ Los Angeles-San Diego-San Luis Obispo (LOSSAN) railroad corridor.

The continuing loss of beach sand significantly increases the susceptibility of beachfront development to winter storms and high water hazards. A decrease in sediment supply will reduce the width of Del Mar's beach, if sand replenishment programs are not implemented. Although protective devices may slow landward erosion, they can also cut off the landward sand supply.

A number of shoreline protective structures have been placed on Del Mar's beach in an attempt to protect beachfront properties from the damaging impacts associated with critically high tides and storm waves. These measures have varied from [sand] berms and riprap to more substantial concrete and timber, seawalls and other protective devices. They include: hazards from improper design; the potential for loose materials to become projectiles during storm conditions; the acceleration of beach erosion; and the displacement of sandy beach area.

A long-range, comprehensive approach to balance the need for protecting private properties from erosion while maximizing public access opportunities along the shoreline has been developed in the form of the Del Mar Beach Preservation Initiative (BPI). This ordinance was adopted by the Del Mar citizens in an initiative election in April of 1988. The City Council incorporated the provisions of the voter approved BPI into the Del Mar Municipal Code as the Beach Overlay Zone (BOZ). Many of the policies of the BOZ are applicable to the access policies in Chapter IV of this Land Use Plan. However, they are also applicable to the issues of minimizing hazards and have, therefore, been included here. Implementation of these policies, in addition to region-wide cooperative efforts regarding shoreline projects, is essential to avoid the adverse impacts of improperly designed and inappropriately sited shoreline protective structures.

3. Flooding (River and Coastal)

Portions of the San Dieguito River Valley and Floodplain are located within the northern portion of the City. These areas are located along the coastline and extend several miles inland. The area is highly susceptible to damage by storm wave impacts and flooding, flooding from upland areas and, on rare occasions, to tsunamis.

Much of the San Dieguito River Valley is within the 100-year floodplain as designated on Federal Insurance Rate Program Maps prepared by the Federal Emergency Management Agency. The ~~river~~ floodway and floodplain extend over previously developed and undeveloped land. The City protects the public health, safety, and general welfare in these areas through application of the Floodway Zone regulations (Del Mar Municipal Code Chapter 30.29) and Floodplain Overlay Zone regulations (Del Mar Municipal Code Chapter 30.56). The Floodway Zone regulations ~~of this Land Use Plan~~ prohibit the placement of fill or the development of permanent structures within the Floodway Zone where the hazards of flooding are the greatest. ~~Other policies regulate that development which is allowed within the~~ The Floodplain Overlay Zone regulations apply to the 100-year floodplains, which are the City's flood-prone areas that are subject to periodic inundation due to river or coastal flooding.

4. Runoff and Slope Erosion [No change]

5. Sea Level Rise

Sea level rise is the increase in the elevation of the ocean surface. The City's Coastal Hazards, Vulnerability, and Risk Assessment (Environmental Science Associates 2016) identified that the City is vulnerable to sea level rise and the associated increased risk of flooding (river and coastal), storm surge, beach erosion, and coastal bluff erosion. With projected future climate change and sea level rise, Del Mar's vulnerabilities are projected to increase in both frequency and intensity, resulting in increased damage to much of Del Mar's shoreline, San Dieguito Lagoon, Los Penasquitos Lagoon, and the adjacent low-lying areas and coastal bluffs. Sea level rise is projected to impact the City's coastal resources and valued assets including public and private properties;

the public beach and beach access; lagoon habitat; and government infrastructure including the City's emergency services, roads, bridges, and other infrastructure.

Local sea level rise projections and effects are based on the 2012 National Research Council study "Sea Level Rise for the Coasts of California, Oregon, and Washington", which, subject to updates as appropriate, is considered the best available science for the State of California. However, the processes causing sea level rise and the science projecting sea level rise are inherently uncertain because the rate of sea level rise is highly dependent on whether global greenhouse gas emissions will be reduced. This means that the actual rate of sea level rise could be higher or lower than currently projected. The City has therefore adopted a flexible approach to monitor the change in conditions over time and to respond as appropriate when there is a significant and measurable change in conditions.

The City will continue to monitor the change in local shoreline conditions and utilize best available science to plan for and minimize coastal hazards, maximize protection of coastal resources, coordinate with regional, state, and federal agencies, and maximize public participation. Where significant changes in hazardous conditions are identified, adaptation measures will be considered to reduce the level of risk to people, property, and coastal resources consistent with Del Mar's Sea Level Rise Adaptation Plan (Environmental Science Associates 2018).

B. Shoreline Hazards – Goals and Policies

Goal III-A:

Establish a comprehensive program to protect shoreline areas susceptible to storm/flooding hazards by anticipating coastal hazards, monitoring and evaluating shoreline areas for significant trends and changes in conditions (i.e. repetitive flood losses, reduced sandy beach width, and bluff retreat), and taking appropriate action to reduce the risk and potential adverse effects.

Policies:

III-1 [No change]

III-2 Conserve the natural character of land, water, vegetative and wildlife resources within the community by ensuring that future development minimizes the disturbance of existing or natural terrain and vegetation, and does not create soil erosion, silting of lower slopes, slide damage, flooding problems and/or cutting or scarring, through application of the following policies:

a. Regulate development in accordance with the specific Beach Overlay Zone (BOZ), Floodway Zone (FW) and Floodplain Overlay Zone (FP) ~~Overlay Zone~~ regulations contained within ~~this chapter~~ Del Mar Municipal Code Chapters 30.50, 30.29, and 30.56 respectively.

b. Review all proposed drainage and irrigation systems for their ability to control runoff and seepage into downstream areas and to ensure that no significant erosion or the associated siltation of downstream resources will occur.

For purposes of this Land Use Plan, "significant erosion" shall mean the likelihood of removal of soil or the cutting, scarring, or filling of slopes, canyons, or bluff faces, or the silting of lower slopes brought about by runoff from surfaces during irrigation or from rainfall of an intensity and duration less than or equal to that of the 100-year period design storm.

c. Regulate development in proximity to coastal bluffs in accordance with the Coastal Bluff Overlay Zone Regulations contained within ~~this chapter~~ Del Mar Municipal Code Chapter 30.55.

d. In addition to the requirements of the Coastal Bluff regulations of this chapter, require the use of drought-tolerant plants in new and redevelopment projects throughout the City in order to minimize potential erosion impacts from irrigation, systems and to reduce water consumption.

e. Implement best management practices to minimize shoreline hazards.

f. Support relocation of the railroad and other public infrastructure from vulnerable bluff areas.

III-3 Control the development of properties within the Bluff, Slope and Canyon (BSC) Overlay Zone to protect the health, safety and general welfare and to preserve scenic sandstone bluffs, related canyons, steep slopes and their downstream resources in accordance with the Del Mar Community Plan and Del Mar Municipal Code Chapter 30.52. ~~The regulations of the BSC Overlay Zone are cited in Chapter VI of this Land Use Plan entitled, Sensitive Lands.~~

III-4 [No change]

Beach Hazards/Public Access Policies

III-5 Continue to study and implement shoreline management and replenishment programs applicable to the Oceanside littoral cell through participation in the activities of the regional organizations and agencies including, but not limited to, the San Diego Association of Governments (SANDAG) and the ~~Beach Erosion Action Committee (BEACh)~~ San Diego Regional Climate Collaborative in order to replenish beach sand on a regular basis.

III-6 Minimize the loss of life and destruction of property from seismic, geologic, oceanographic and weather related causes by developing a ~~well coordinated~~ well-coordinated disaster plan which

includes preparation for earthquakes, tsunamis, and storm waves. Require new development to incorporate design measures that will reduce and where feasible eliminate the risk of extreme flooding damage to people and property, public and private.

III-7 Promote public safety, health and welfare, and provide for the protection of private property while protecting public access opportunities to and along the beach through enforcement of the provisions of the Beach Preservation Initiative as incorporated into the ~~following~~ Beach Overlay Zone Regulations in Del Mar Municipal Code Chapter 30.50. These regulations reflect a balance of the need to minimize risks and protect property and the desire to maximize public access opportunities. The following regulations of the Beach Overlay Zone are cited in their entirety here, in this Hazards section. However, because of many of the regulations do reflect maximization of public access opportunities, they are also referenced in Chapter IV entitled "Coastal Access".

[Beach Overlay Zone regulations are inserted here in existing LUP—No change]

III-8 Where seawalls or other shoreline protective devices are required for the protection of existing principal structures it shall be the City's policy to encourage their construction landward of the Shoreline Protection Area (SPA) line on private property. Proposals for the construction of shoreline protective devices shall be reviewed and processed in accordance with the ~~following~~ Setback Seawall Permits Regulations in Del Mar Municipal Code Chapter 30.51. ~~These Setback Seawall Permit Regulations are established to~~ which regulate beach uses east of the Shoreline Protection Area line. It is the intent to encourage seawalls or other type of protective devices when needed, to be constructed landward (east) of the Shoreline Protection Area (SPA) line.

[Remove: Setback Seawall Permit Regulations as inserted here in existing LUP. Replace with code reference as incorporated above.]

Section C. Coastal Bluffs and Vulnerable Slopes

~~**Goal III-B:**~~

~~Preserve Del Mar's fragile coastal bluffs as a visual resource and avoid the risks to life and property associated with bluff failure and shoreline erosion.~~

~~Policies:~~

~~**III-9**~~ Where a proposed development would lie at the top of, or in proximity to a coastal bluff, the Coastal Bluff Overlay Zone Regulations (Del Mar Municipal Code Chapter 30.55) ~~cited below and on subsequent pages shall~~ apply. For purposes of this Land Use Plan, a coastal bluff is defined as a steep escarpment with a slope gradient equal to or greater than an average of one foot vertical to one foot horizontal and a vertical rise of 15 feet or more, and which is located in an area that is periodically subject to ocean wave action. Based on best available science, the existing lower

coastal bluffs and adjacent slopes are projected to significantly erode landward. The areas of the City of Del Mar in which coastal bluffs are located are shown on Figure III-C. As shown on this Figure, the manufactured cut slope which follows the eastern edge of the ~~AT&SF Railway Right of Way~~ Los Angeles-San Diego-San Luis Obispo (LOSSAN) railroad corridor between the City's southern boundary and 15th Street is not considered to be a coastal bluff. ~~Therefore, the~~ However, the properties which lie to the east of such manufactured cut slope (south bluff neighborhood) ~~are not subject to the following coastal bluff regulations~~ are identified as vulnerable to sea level rise and coastal bluff erosion per the City's Coastal Hazards, Vulnerability, and Risk Assessment (Environmental Science Associates 2018). The City will continue to monitor changes in the rate of erosion of the lower coastal bluffs and any changes in projected erosion rates.

Future consideration of whether to amend the boundary of the Coastal Bluff Overlay Zone subareas will occur within 5 years and will take into account the effects of approved adaptation projects. This implementation program allows the City to have a flexible plan in place that can adjust as needed based on changes in local conditions and changes in projections based on best available science. On properties within the Coastal Bluff Overlay Zone that are vulnerable to projected hazards within a near to mid-term planning horizon, new development applications must consider the relationship between the economic life of proposed structure(s) and projected hazards.

> [Remove: the coastal bluff overlay zone regulations inserted here in existing LUP. Incorporated by reference above.]

Goal III-B:

Preserve Del Mar's ~~fragile~~ coastal bluffs as a visual resource and avoid the risks to life and property associated with bluff failure and shoreline erosion by anticipating erosion hazards, monitoring and evaluating shoreline areas for significant trends and changes in conditions (i.e. reduced sandy beach width and bluff retreat), and taking appropriate action to reduce the risk and potential adverse effects.

Policies:

III-9 Require all new development located on a coastal bluff or vulnerable slope to be setback from the coastal bluff edge a sufficient distance to ensure stability, ensure that it will not be endangered by erosion, and to avoid the need for protective devices during the economic life of the structure (minimum 75 years). Such setbacks must take into consideration projected long-term bluff retreat over the next 75 years, as well as slope stability. To assure stability, the development should maintain a minimum factor of safety of 1.5 against land sliding for the economic life of the structure. Alternative stability requirements may be approved to the satisfaction of the City Engineer and Building Official if an equivalent factor of safety is demonstrated.

III-10 Ensure development is sited and designed to avoid and mitigate impacts from sea level rise hazards associated with bluff erosion.

D. Runoff and Erosion Control

Goal III-C:

Protect resources and property located downstream from hillside and bluff areas from damage due to uncontrolled runoff by anticipating erosion hazards, monitoring and evaluating shoreline areas for significant trends and changes in conditions (i.e. reduced sandy beach width and bluff retreat), and taking appropriate action to reduce the risk and potential adverse effects.

Policies:

~~III-10~~ III-11 Minimize damage from runoff from all projects within the City by:

Subsections a through d and final paragraph [No change]

E. Flood Hazards

Goal III-D:

Minimize risks to life and property associated with flooding and flood waters by anticipating flood hazards, monitoring and evaluating shoreline areas for significant trends and changes in conditions (i.e. repetitive flood losses, reduced sandy beach width, and bluff retreat), and taking appropriate action to reduce the risk and potential adverse effects.

Policies:

Flood hazards shall be minimized through the application of the ~~following Flood Hazard Regulations.~~ Floodway Zone (Del Mar Municipal Code Chapter 30.29) and the Floodplain Overlay Zone (Del Mar Municipal Code Chapter 30.56), which rely on ~~Where these regulations make reference to~~ the most recently approved Federal Insurance Rate Map (FIRM) ~~or a designation taken from such a map, the most recent, approved FIRM shall be used.~~

Flood Hazard Regulations

~~III-11~~ III-12 Enhance public safety within the San Dieguito River Floodway by:

a. Prohibiting the construction of permanent structures or the placement of fill on either a temporary or permanent basis within designated floodway (FW) areas.

b. Prohibiting uses in the floodway which would constitute an unreasonable, unnecessary, undesirable, or dangerous impediment to the flow of floodwaters,

or which would cause a cumulative increase in the water surface elevation of the base flood of more than one foot at any point.

c. Requiring proposed development to be located, where feasible, so as to eliminate the need for protective devices such as seawalls, riprap, retaining walls, or other flood control devices.

d. Protecting public infrastructure and property from sea level rise and flooding risks.

e. Flood-proofing or relocating vulnerable public facilities, infrastructure, and utilities.

f. Dredging and maintaining the San Dieguito River channel to reduce river flood risks.

g. Utilizing living levees to reduce flood risk to adjacent low lying areas.

~~III-12~~ **III-13** Ensure that ~~the~~ development ~~of real property which is subject to floodwaters~~ within the Floodplain Overlay Zone will not unreasonably obstruct flood ~~flow~~ waters; will not create a hazard to life, health, safety, or the general welfare; will reduce the need for the construction of flood control facilities that would be required if unregulated development occurs; and will minimize the cost of flood insurance to Del Mar residents. The following Floodplain (FP) Overlay Zone policies shall be applied to all applications for a Floodplain Development Permit. A Floodplain Development Permit shall be required for any new construction or substantial improvement to existing structures within the FP Overlay Zone ~~designated on Figure III-F~~. This overlay zone incorporates floodplain areas designated on the Federal Insurance Rate Map (FIRM) for the area as prepared by the Federal Emergency Management Agency ~~and updated in 1986~~. ~~That~~ The floodplain areas are generally depicted on the map that is included as Figure III-E.

Applications for Floodplain Development Permits shall be reviewed for consistency with the following requirements to be assured that new development will:

a. Be anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy;

b. Be constructed with materials and utility equipment resistant to flood damage;

c. Use methods and practices that minimize flood damage;

d. Have the lowest floor (including basement) of any residential structure elevated to or above the base flood elevation;

e. Have the lowest floor (including basement) of any nonresidential structure elevated to or above the base flood level or, together with attendant utility and sanitary facilities, be flood-proofed below the base flood level to the extent that the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy, as certified by a registered professional engineer or architect;

f. When located in an area of shallow flooding (Zones AO and VO on the community's FIRM), have the lowest floor (including basement) elevated to or above the depth number indicated on the most current FIRM; or if there is no depth number on the most current FIRM, be elevated at least two feet above the highest adjacent grade. As an alternative, nonresidential structures, together with attendant utility and sanitary facilities, may be flood-proofed to that level as specified in subsection "e" above;

g. When located in Zones AO and AH on the FIRM, have adequate drainage paths around structures situated on sloping ground, to guide floodwaters around and away from said structures;

h. Where a non-residential structure is to be flood-proofed, have the design and methods of construction in accordance with accepted standards of practice for flood-proofing or include the specific elevation in relation to mean sea level to which such structures are flood-proofed;

i. Have all new and replacement water supply and sanitary sewage systems designed to minimize or eliminate infiltration of flood waters into the system and discharges from the system into flood waters;

j. Have on-site waste disposal systems located to avoid impairment to them, or contamination from them, during flooding;

k. Have all electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding;

l. Have all fully enclosed areas below the lowest floor that are subject to flooding designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters with designs certified by a registered professional engineer or architect; or have at least two openings no more than one foot above grade with a total net area of at least one square inch per square foot of flooded area.

m. Not require the construction of flood protective works, including, but not limited to, artificial flood channels, revetments or levees.

~~III-13~~ III-14 The preceding floodplain development standards shall not apply to the undeveloped property known as the "railroad triangle" (APNs 299-071-02, 301-010-11; 301-032-5, 10, 11, 12; as shown on Figure III-G) and the floodplain portions of the southern properties in the Lagoon Overlay Zone. Said floodplain properties or areas may only be developed as follows:

a. The development is capable of withstanding periodic flooding, and does not require the construction of flood protective works, including but not limited to, filling, artificial flood channels, revetments or levees.

b. Existing environmentally sensitive habitat areas will not be disturbed, except for the purpose of restoration.

c. Increased flood flow velocities will not occur.

d. There will be no adverse water quality impacts to adjacent or downstream wetland areas.

III-15 Develop a fee recovery program to mitigate development impacts on coastal resources and fund adaptation projects that are consistent with the City's Adaptation Plan.

CHAPTER IV – COASTAL ACCESS [NO CHANGE]

CHAPTER V – RECREATIONAL OPPORTUNITIES [NO CHANGE]

CHAPTER VI – SENSITIVE LANDS [NO CHANGE]