

4.4 COASTAL HAZARDS

Preparation of a coastal hazards vulnerability assessment was undertaken to aid the Los Osos community in better understanding the impacts of climate-induced coastal hazards for future planning and development. As discussed in this section, coastal processes such as tidal inundation and coastal flooding combined with human alterations to the shoreline play a role in the evolution of coastal hazards. The impacts of coastal hazards have resulted in intensified seawater intrusion, coastal and creek flooding, diminished beaches, impacted wetlands, and saltwater intrusion into groundwater basins.

This Chapter summarizes the findings and recommendations in the Los Osos Community Plan Coastal Hazards Technical Report (Revell Coastal, 2016) (Technical Report), included in Appendix C of the EIR. The Technical Report provides a science-based assessment based on a compilation of existing data and information provided by the County of San Luis Obispo (County).

Based on the “significant but mitigable community level impacts and impacts on parcels #5 and #9 and related findings in Section 4.4.3, “Impact Analysis”, the environmental effects of the project will cause substantial adverse impacts on human beings, either directly or indirectly, including effects resulting from the location of the project in relation to an existing or reasonably foreseeable natural hazard (i.e., coastal hazards) or adverse physical environmental condition. Therefore, appropriate mitigation for the two impacted parcels could be a revised land use change to decrease density (i.e. from Recreation and Public Facilities to Open Space). Furthermore, the Draft Community Plan, as proposed, is not fully consistent with the Coastal Act, County LCP and CCC’s Sea Level Rise Policy Guidance or the County’s EnergyWise Plan recommendations to effectively accommodate for coastal hazards. Incorporation of the proposed Mitigation Measures (MMs) and Project Design Features (PDFs), including additional policies, programs, and standards, into the design, policies and related Mitigation and Monitoring Reporting Program (MMRP) of the LOCP and LOCP EIR will address these inconsistencies.

4.4.1. Setting

a. Physical Setting. The setting for the coastal hazard vulnerability assessment provided by Revell Coastal is the entire coastal community of Los Osos.

Los Osos is situated in San Luis Obispo County along the south central coast of California adjacent to the Morro Bay Estuary. The Morro Bay Estuary is formed by a large sandspit made of substantial sand dunes connecting with an engineered breakwater and jettied entrance to Morro Bay. Sediment for the sandy beaches and dunes comes primarily from the coastal watersheds, brought to the coast during flood events at lower stands of sea level and then moved onto and along beaches by waves and currents. Dunes were built primarily from wind transport. Sediment transport on the outer open coast is primarily from north to south and driven by the dominant wind and wave directions from the northwest. Inside Morro Bay, tides dominate the coastal processes along the Los Osos shoreline (Revell Coastal, 2016).

The Morro Bay watershed is a network of streams and creeks that drains rainfall and other freshwater from 48,000 acres of land into Morro Bay. The bay itself is an estuary, a place where freshwater from the land mixes with the ocean’s salty tides. The close connection between the watershed and the

estuary means that what happens on land greatly affects the health of the estuary. Morro Bay is one of the largest and least disturbed estuaries remaining in central and southern California. Its sheltered waters, salt marshes, and eelgrass beds provide rare and important habitat for a diverse array of fishes, birds, shellfish, and other life. The estuary also contributes significantly to the community's local economy and way of life, supporting vibrant urban centers, commercial and recreational fishing, boating, kayaking, bird watching, and other recreation (Revell Coastal, 2016).

Geology and Geomorphology. Los Osos is developed mainly over old aeolian deposits from late to middle Pleistocene. The low-lying areas around the community are largely composed of very young and young surface deposits, except for Morro Rock, which guards the entrance to Morro Bay harbor and the inlet to the estuary. Morro Rock is a large 23-million-year-old volcanic plug located just seaward of the beach barrier bar at the mouth and attached to the mainland by artificial fill. Morro Rock is a more or less circular intrusive plug of Tertiary Age rhyolite that is part of a 20-mile-long, primarily straight line of 14 intrusive plugs of varying sizes. A 10-mile-long Holocene sand bar and Morro sand dune complex close the estuary off at the narrow, northwest-trending San Luis Valley from the open ocean to form Morro Bay.

The Morro sand dune complex is made of Holocene aeolian deposits, composed of well-sorted windblown sand. These dunes along the western edge of Morro Bay were created during lower sea level in the Holocene (greater than 12,000 years ago) when fluvial inputs transported massive amounts of material to the coast. Wind transport formed the dunes over time, and they continue to be kept in balance by the sediment budget. Los Osos lies along the Los Osos Fault Zone, a very complex set of fault segments of Late Quaternary. This fault zone is bounded by the San Andreas Fault to the east and offshore by the San Gregorio-San Simeon-Hosgri Fault. Although these fault zones are not recently active, the tectonic movements along the central California coast do generate varying levels of block uplift and subsidence (Revell Coastal, 2016).

The net southward littoral transport found along much of the California coast does not occur within Morro Bay. Instead, the sand primarily moves onshore and offshore, with a reversing longshore component. This sand transport pattern produces a littoral cell¹ within Estero Bay, even though there is no submarine canyon in the area. The primary sand sinks for this cell appear to be the sand spit south of Morro Rock and the entrance to Morro Bay itself (Dingler et. al. 1982). The sources appear to be onshore transport in addition to sediment inputs from local creeks, which are assumed to be limited given the relatively small watershed (172 square kilometers) (Revell Coastal, 2016).

Sea Level Rise (Coastal Hazards). Sea levels are rising because of two factors related to increasing temperature caused by human-induced climate change. The first factor is the thermal expansion of the oceans. As ocean temperatures warm, the water in the ocean expands and occupies more volume, resulting in a sea level rise. The second factor contributing to sea level rise is the additional volume of water added to the oceans from the melting of mountain glaciers and ice sheets. It is predicted that, if all of the ice on earth were to melt, ocean levels would rise by approximately 225 feet above present-day levels. The rate at which ocean levels rise largely depends on the feedback loop between the melting of the ice, which changes the land cover from a reflective ice surface, and the open ocean water, which absorbs more of the sun's energy and increases the rate of ice melt. The Intergovernmental Panel on Climate Change (IPCC) has published scientific evidence demonstrating that,

¹ A littoral cell is a coastal compartment that contains a complete cycle of sedimentation, including sources, transport paths, and sinks.

because of the greenhouse gases (GHGs) already released into the atmosphere, sea levels will be rising for the next several thousand years. Given this long-term perspective, it is not a question of *whether* sea level rise will happen but *when* and at *what* it will happen. Sea level rise can increase flood risks in low-lying coastal areas and areas bordering rivers.

Coastal Processes. Tides and coastal flooding primarily define the coastal processes of Morro Bay and the Los Osos community. The following information on coastal processes is derived from the Technical Report (Appendix C).

Federal Emergency Management Agency (FEMA) maps delineate coastal and creek flood hazards as part of the National Flood Insurance Program. This program requires specific technical analysis of watershed characteristics, topography, channel morphology, hydrology, and hydraulic modeling to map the extent of existing watershed-related, and wave run-up-related flood hazards. These maps represent existing 100-year and 500-year flood hazards (a 1-percent and 0.2-percent annual chance of flooding, respectively). The maps are known as FIRMs (Flood Insurance Rate Maps), and they determine the extents and elevations of floods across the landscape.

The tides in Morro Bay are predominantly mixed semi-diurnal² and are composed of two low and two high water levels of unequal heights per 24.8-hour tidal cycle. The tides have a mean range of tide (MN) of 3.58 feet.³ Mean higher high water (MHHW) is referenced to 5.25 feet North American Vertical Datum (NAVD), and mean lower-low water (MLLW) is referenced to -0.08 feet NAVD. Tidal currents in Morro Bay contain both ebb and flood velocities, contributing to sediment deposition and erosion. Typically, the largest tide ranges in a year occur in late December to early January during king tides. The closest tide recorder has been in operation at Port San Luis since 1933. On longer time scales, sea level rise becomes increasingly important as increasing tides leads to tidal inundation of shorelines and elevated water levels which allow coastal flooding to reach areas farther inland

Waves are one coastal process, which cause coastal hazards. Waves that approach the Morro Bay estuary are characterized by three dominant modes. The northern hemisphere waves typically are generated by cyclones in the north Pacific during winter and bring the largest waves (up to 25 feet). The southern hemisphere waves are generated in the Southern Ocean during summer months and produce smaller waves with longer wave periods (> 20 seconds). However, most of the waves discussed above occur outside of Morro Bay, inside the bay, local wind waves are generated throughout the year as a result of storms coming ashore during winter or strong sea breezes during spring and summer (Wingfield and Storlazzi, 2007). Strong sea breezes generating local wind waves are the main source of wave impacts inside the Morro Bay Estuary, although given the limited surface water distance; wind wave generation is likely a small impact (<3 feet at 3 seconds).

Other Influences. The shoreline along Los Osos has been slightly altered by various activities. These human alterations have changed the natural functioning of the system. The two primary human alterations that have affected the overall coastline within Morro Bay are construction of Morro Bay Harbor and coastal armoring. In 1933, a man-made causeway was built that closed the north entrance of Morro Bay and connected Morro Rock with the mainland. The current Embarcadero area for the City of

² An area has a semi-diurnal tidal cycle if it experiences two high and two low tides of unequal size every lunar day. Many areas on the eastern coast of North America experience these tidal cycles. A "mixed semidiurnal tide cycle" is the lower middle of the cycle.

³ Orthometric height is for practical purposes "height above sea level," but the current NAVD88 datum is tied to a defined elevation at one point rather than to any location's exact mean sea level. This height methodology is commonly used in a sea level rise analysis.

Morro Bay was formed from the dredged material. Coastal armoring is the practice of using physical structures to protect shorelines from coastal erosion. Coastal armoring is relatively sparse across the Los Osos waterfront, because the Back Bay is shallow and protected from ocean waves. Within the project area, five small craft piers extend into the marsh, a T-pier is located at the boat launch area, and currently there are no coastal armoring structures built along the coastline.

Rates of seawater intrusion are affected primarily by ocean water levels, groundwater extraction, and aquifer permeability. An aquifer is an underground layer of water-bearing permeable rock, rock fractures, or unconsolidated materials (gravel, sand, or silt) from which groundwater can be extracted. The permeability of the aquifer is dependent on geology and the size of pore spaces and to what degree the pore spaces are connected. Grain shape, grain packing, and cementation affect permeability.

According to the Los Osos Community Services District's *2014 Seawater Intrusion Monitoring, Los Osos Valley Groundwater Basin Technical Memorandum* by Cleath-Harris Geologists, Inc., the lower aquifer of the Los Osos groundwater basin is currently experiencing seawater intrusion. The position of the seawater front was mapped in April 2010 after water quality data were collected from a series of 15 wells and the data revealed that seawater intrusion was occurring at a much faster rate than previously anticipated. The 2014 monitoring report revealed that seawater intrusion was occurring at a rate of 200 to 250 feet (horizontally) per year. The rate of seawater intrusion could render the community's only water resource unusable in five years, according to a plan recently prepared at the request of the County due to concerns with diminished water levels (CHG, 2014).

b. Regulatory Framework. Federal, state, and local regulations are intended to guide development, reduce adverse effects on sensitive resources, or offer general guidance on the protection of such resources. The following discussion summarizes the key laws, rules, and regulations that may relate to climate-induced coastal hazards. These rules may also set the standards (significance criteria or thresholds of significance, as described below under "Impact Analysis") by which potential project impacts are evaluated.

The issue of coastal hazards was scoped as part of the LOCP DEIR process by the County in an effort to adequately address the issue of coastal hazards in preparation for an amendment to the County's Local Coastal Program (LCP). Incorporating the analysis of coastal hazards, specifically tidal inundation and coastal flooding, into the environmental impact analysis for the LOCP will assist the County in meeting the requirements contained in California Coastal Act (CCA) Section 30253 (minimization of adverse impacts), as well as existing policies and ordinances of the LCP. Managing development to avoid coastal hazards is a key component of the County's LCP. Policies in the CCA, and corresponding policies and ordinances in the LCP, direct new development to reduce risks to life and property and to avoid substantial changes to natural landforms.

Taken as a whole, the California Environmental Quality Act (CEQA) is concerned about direct and indirect environmental impacts caused by locating a project proximate to an existing or reasonably foreseeable environmental hazard (in addition to the effects of the project on the environment). To conclude otherwise (i.e., to exclude coverage of risks to people's health and safety from environmental conditions or not address reasonably foreseeable environmental impacts) would run counter to the legislative intent that CEQA should "*provide a high-quality environment that at all times is healthful and pleasing.*" For example, if the impacts of coastal hazards on the project in turn cause the project to change the environment outside the project, such as by increasing erosion or damaging coastal habitats,

those changes would constitute legitimate CEQA impacts. Recognizing this, the CEQA analysis of coastal hazards is supported by CEQA Guidelines Section 15126.2(a), which requires the consideration of significant environmental effects of the proposed project. **Any policy responses to coastal hazards identified in the LOCP should provide solutions with the least impacts on coastal resources.**

The California Coastal Act. In partnership with local governments, the California Coastal Commission (CCC) has planning, regulatory, and permitting responsibilities over all “development” taking place within the coastal zone (a 1.5-million-acre area stretching 1,100 miles along the state’s coastline from Oregon to Mexico and around nine offshore islands). The Commission’s enabling legislation, the California Coastal Act of 1976, created a comprehensive coastal protection program grounded in partnerships between the CCC and local government jurisdictions (15 counties and 60 cities) within the coastal zone. The CCC, coastal cities and counties, and other state and federal agencies that have authorities within California’s coastal areas are grappling with how to best prepare for the impacts of climate change, including sea level rise, increased storm frequency and intensity, coastal erosion, and flooding. These impacts could result in devastating damage to coastal and marine habitats, wetlands, and water quality; expensive disruptions or long-term damage to coastal recreation and public access, and commercial and residential developments; and inundation of public facilities and infrastructure, including highways, bridges, airports, commercial harbors, ports, and water treatment and wastewater facilities, particularly those uses or resources that are coastal-dependent. Under CCA Section 30101, *“Coastal-dependent development or use means any development or use, which requires a site on, or adjacent to, the sea to be able to function at all.”*

Coastal Act Policies Related to Coastal Hazards. Both marine and terrestrial coastal resources are adversely affected by climate change and the resulting coastal hazards. The following policies in the CCA that are intended to protect coastal resources require the CCC to develop technical expertise and take planning and regulatory steps aimed at addressing climate change:

- *Protection of Recreation Uses – Section 30220: “Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.”*
- *Protection of Public Access – Section 30211: “Development shall not interfere with the public’s right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.”*
- *Protection of Marine Resources – Section 30230: “Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.”*
- *Protection of Biological Productivity – Section 30231: “The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with*

surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.”

- *Environmentally Sensitive Habitat Areas (ESHA) – Section 30240: “(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.”*
- *Prime Agricultural Land – Section 30241: Maintain prime agricultural land “(a) By establishing stable boundaries separating urban and rural areas, including, where necessary, clearly defined buffer areas to minimize conflicts between agricultural and urban land uses” and “(b) By limiting conversions of agricultural lands around the periphery of urban areas to the lands where the viability of existing agricultural use is already severely limited by conflicts with urban uses or where the conversion of the lands would complete a logical and viable neighborhood and contribute to the establishment of a stable limit to urban development.”*
- *Existing Development Location – Section 30250: “(a) New residential, commercial, or industrial development...shall be located within, contiguous with, or in close proximity to, existing developed areas able to accommodate it or, where such areas are not able to accommodate it, in other areas with adequate public services and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources...”*
- *Scenic and Visual Qualities – Section 30251: “The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance.”*
- *Technical Advice and Recommendations – Section 30006.5: “The Legislature further finds and declares that sound and timely scientific recommendations are necessary for many coastal planning, conservation, and development decisions and that the commission should, in addition to developing its own expertise in significant applicable fields of science, interact with members of the scientific and academic communities in the social, physical, and natural sciences so that the commission may receive technical advice and recommendations with regard to its decision making, especially with regard to issues such as coastal erosion and geology, marine biodiversity, wetland restoration, the question of sea level rise, desalination plants, and the cumulative impact of coastal zone developments.”*

Local Coastal Program Update Guide. In 2013, the CCC published the *Local Coastal Program (LCP) Update Guide*. Section 8 in Part 1 addresses coastal hazards and states the following:

“Hazard Components of LCPs should be upgraded to address emerging issues related to adapting to climate change. Since this Guide was first published, government at all levels continues to address impacts from climate change pursuant to the requirements of AB 32, the Global Warming Solutions Act of 2006. Executive Order (EO) S-13-08 was issued on November 14, 2008. The EO called on state agencies to develop California’s first strategy to identify and prepare for these expected climate impacts. In 2009, the California Department of Natural Resources published The California Climate Adaptation Strategy. A first step for any LUP [land use plan] update may be a vulnerability analysis....

“The National Academy of Sciences published a study Sea-Level Rise for the Coasts of California, Oregon, and Washington: Past, Present, and Future that makes independent projections of sea-

level rise along California’s coast for the years 2030, 2050, and 2100, taking into account regional factors that affect sea level. Such projections should be taken into account when requiring site-specific engineering and site analysis for development subject to sea level rise.” (LCP Update Guide – Part I – Section 8, Coastal Hazards, 2013)

Sea Level Rise Policy Guidance. In August 2015, the CCC adopted the *Sea Level Rise Policy Guidance* (hereafter Guidance) to aid jurisdictions in preparing for sea level rise in LCPs, CDPs, and regional strategies. The Guidance outlines specific issues that policymakers and developers may face as a result of sea level rise, such as extreme events, challenges to public access, vulnerability and environmental justice issues, and consistency with the CCA. The document also lays out the recommended planning steps to incorporate sea level rise into the legal context and planning strategies in order to reduce vulnerabilities and inform adaptation planning.

The Guidance has a strong emphasis on incorporating coastal hazards and sea level rise into LCP planning and using soft or green adaptation strategies. The following specific steps are outlined in the document (on page 18):

- Step 1. Establish the projected sea level rise ranges;*
- Step 2. Identify potential impacts from sea level rise;*
- Step 3. Assess the risks and vulnerabilities to coastal resources and development;*
- Step 4. Identify adaptation measures;*
- Step 5. Draft new LCP for certification with the CCC; and*
- Step 6. Implement, monitor, and revise the LCP as necessary.*

The Technical Report completed by Revell Coastal provides the County with the initial four steps outlined in the Guidance document. However, it should be clear that the vulnerability assessment addresses the community land uses in general, but then focuses on which parcels are going to be re-designated for more intensive development through proposed land use changes as part of the LOCP. Other sectors, including as wastewater and stormwater infrastructure, coastal access, and transportation, were also included in the vulnerability assessment which has been completed in support of the LCP amendment which will be required as part of the LOCP adoption process. The EIR is evaluating the impacts of new development/actions under the LOCP on the environment, not the environment’s effect (i.e., sea level rise) on existing habitat or existing facilities . Some of these types of infrastructure impacts include stormwater, which will likely have reduced capacity to convey rainfall during high tides.. Low lying roads, the waterfront and piers and other shoreline amenities will likely face increasing storm closures and eventually predictable tidal inundation which may require relocation or elevation to maintain the service of these existing structures.

The newly completed wastewater infrastructure, particularly the maintenance access and manholes may also become vulnerable as coastal flooding and inundation may add substantial volumes of water into the system and cause problems related to salt content, as well as to potentially overwhelm the system. The natural resources and access to the bay and resources are an important part of the quality of life in Los Osos. Sensitive habitats and access points will likely be exposed to increasing frequency and duration of flood extents, while tidal flooding may cause some of the accesses to be lost or vulnerable over time. This may affect the kayak launch sites and beaches in particular. The ability of many of the habitats to advance landward and increase in elevation exists in Los Osos, so the vulnerability could be low as long as any adaptation strategies don’t attempt to hold the line, but rather allow for the natural transgression.

The Guidance document provides the following principles for addressing coastal hazards in the coastal zone (on pages 15-16):

Use Science to Guide Decisions (Coastal Act Sections 30006.5, 30335.5)

- *Acknowledge and address sea level rise as necessary in planning and permitting decisions.*
- *Use the best available science to determine locally relevant and context-specific sea level rise projections for all stages of planning, project design, and permitting reviews.*
- *Recognize scientific uncertainty by using scenario planning and adaptive management techniques.*
- *Use a precautionary approach by planning and providing adaptive capacity for the highest amounts of possible sea level rise.*
- *Design adaptation strategies according to local conditions and existing development patterns, in accordance with the Coastal Act.*

Minimize Coastal Hazards through Planning and Development Standards (Coastal Act Sections 30253, 30235, 30001, 30001.5)

- *Avoid significant coastal hazard risks to new development where feasible.*
- *Minimize hazard risks to new development over the life of authorized structures.*
- *Minimize coastal hazard risks and resource impacts when making redevelopment decisions.*
- *Account for the social and economic needs of the people of the state; assure priority for coastal-dependent and coastal-related development over other development.*
- *Ensure that property owners understand and assume the risks, and mitigate the coastal resource impacts, of new development in hazardous areas.*

Maximize Protection of Public Access, Recreation, and Sensitive Coastal Resources (Coastal Act Chapter 3 policies)

- *Provide for maximum protection of coastal resources in all coastal planning and regulatory decisions.*
- *Maximize natural shoreline values and processes; avoid expansion and minimize the perpetuation of shoreline armoring.*
- *Recognize that sea level rise will cause the public trust boundary to move inland. Protect public trust lands and resources, including as sea level rises. New shoreline protective devices should not result in the loss of public trust lands.*
- *Address other potential coastal resource impacts (wetlands, habitat, agriculture, scenic, etc.) from hazard management decisions, consistent with the Coastal Act.*
- *Address the cumulative impacts and regional contexts of planning and permitting decisions.*
- *Require mitigation of unavoidable coastal resource impacts related to permitting and shoreline management decisions.*
- *Consider best available information on resource valuation when mitigating coastal resource impacts.*

Maximize Agency Coordination and Public Participation (Coastal Act Chapter 5 policies; Sections 30006, 30320, 30339, 30500, 30503, 30711)

- *Coordinate planning and regulatory decision making with other appropriate local, state, and federal agencies; support research and monitoring efforts.*
- *Consider conducting vulnerability assessments and adaptation planning at the regional level.*

- Provide for maximum public participation in planning and regulatory processes.

Legal and Regulatory Background.

Ballona Wetlands Land Trust, et al. v. City of Los Angeles

In an opinion published on December 2, 2011, the Second District Court of Appeal held that the City of Los Angeles was not required to discuss the impact of sea level rise as a result of global climate change on a proposed mixed-use development project. At issue in the *Ballona Wetlands* case was whether an EIR should address as a significant effect the potential for sea level rise to flood a coastal project. The court opined that effects of the environment *on a project and the people using the project* are “neither consistent with CEQA’s legislative purpose nor required by the CEQA statute.” Instead, the Court said that CEQA is only concerned with whether a project causes effects on the environment and excluded effects that may be caused by locating people in proximity to an environmental hazard. However, a close inspection of the full array of CEQA provisions indicates that effects of the environment on people are, indeed, within the purview of the statute. CEQA covers the people who would be exposed to environmental hazards associated with the location of a project, consistent with the statute’s legislative intent. Because there is ambiguity resulting from a lack of an explicitly worded mandate, court decisions have gone both ways (Ascent Environmental, 2012).

Environmental Justice at the Local and Regional Level

In 2012, the Office of Attorney General of the California Department of Justice released a report on environmental justice and CEQA, titled *Environmental Justice at the Local and Regional Level Legal Background*, which seemed to controvert the *Ballona Wetlands* decision. The report stated that both Section 15126(a) and Appendix G of the State CEQA Guidelines require a lead agency to examine existing environmental conditions in the CEQA review process, and that these components of the State CEQA Guidelines play an important role in legally required environmental justice evaluations (Office of the California Attorney General, 2012). Under CEQA, “public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects” (PRC Section 21002). CEQA does not use the term “environmental justice.” Rather, CEQA centers on whether a project may significantly affect the physical environment. Under CEQA, human beings are an integral part of the “environment.” An agency is required to find that a “project may have a ‘significant effect on the environment’” if, among other things, “[t]he environmental effects of a project will cause substantial adverse effects on human beings, either directly or indirectly[.]” (PRC Section 21083, [b][3]; see also State CEQA Guidelines Section 15126.2 [noting that a project may cause a significant effect by bringing people to hazards]).

Sierra Club et al. v. City of Oxnard et al.

In June 2003, Hearthstone Homes Oxnard LLC filed a land use permit application with the City of Oxnard to amend the City’s general plan and specific plan. The application proposed to build a master planned residential/commercial mix of approximately 317 unincorporated acres north of Hueneme Road, in an area generally known as “Ormond Beach.” Among the objections from environmental groups to the environmental document were concerns regarding the sufficiency of consideration and mitigation of sea level rise. The City’s stated intention was to defer consideration of calculable sea level change impacts until individual FEMA-compliant building permits were sought and the possible future acquisition of part of the portions of the project. Unlike the *Ballona Wetlands Land Trust v. City of Los Angeles* (2011) case

where the City of Los Angeles rejected the Pacific Institute sea level rise findings in favor of the report of a local civil engineer, the Court in this case determined that the public and the City decision makers had a right to be informed of the expected location of average daily high tide over the life of this project (or at least within a scientifically expected range of average daily high tide), subject to the possible loss of the coastal wetlands entirely, because the wetlands will conceivably at some point have no further room to migrate in light of the construction and development of the project (Sierra Club et al. v. City of Oxnard et al., 2012).

California Building Industry Association v. Bay Area Air Quality Management District

CEQA requires an agency considering a project to evaluate and, if feasible, mitigate the project’s significant adverse environmental impacts. Some agencies and advocates have argued that CEQA also requires the “reverse analysis,” which is essentially examining the impacts of the environment on the project and mitigating potential effects on its new users and residents. The issue had been raised in several previous Court of Appeal decisions, each of which rejected requirements for reverse CEQA analysis.⁴ This decision reassures agencies conducting CEQA review of proposed projects (referred to as “lead agencies”) that, except in limited circumstances, they may properly focus on the project’s impacts on the environment and need not consider the reverse (Pillsbury, Winthrop, Shaw, Pittman, LLP, 2015). Despite this general rule, the Court cautioned that lead agencies must consider whether, by bringing project residents to a location where environmental hazards already exist, the project may exacerbate such conditions. The Court also noted that certain provisions in CEQA expressly require reverse CEQA analysis for specific types of projects. More specifically, the Court did not exclude all consideration of existing conditions from CEQA. An agency must “evaluate existing conditions in order to assess whether a project could exacerbate hazards that are already present.” The Court went on to state, “In those specific instances, it is the project’s impact on the environment—and not the environment’s impact on the project—that compels an evaluation of how future residents or users could be affected by exacerbated conditions.” This is consistent with CEQA Section 15126.2[a]. In addition, in a footnote, the Court explained that CEQA does not prohibit an agency from considering as part of an environmental review how existing conditions might affect a project’s future users or residents. However, it stopped short of suggesting that the agency should determine the significance of such impacts and requires mitigation (Pillsbury, Winthrop, Shaw, Pittman LLP, 2015).

County of San Luis Obispo Local Coastal Program Policy Document: Coastal Plan Policies. The County’s LCP addresses coastal hazards in Chapter 11 of the Coastal Plan Policies, various sections of the CZLUO, and the Estero Area Plan. Appendix G of the Estero Plan addresses methods for determining slope stability and erosion rate estimates, including consideration of sea level rise. The LCP also includes mapped combining designations for flood and geologic hazards, as well as Sensitive Resource Areas (SRAs) such as identified wetlands and terrestrial habitats. And the LCP contains policies and ordinances to implement Coastal Act requirements to protect sensitive wetlands and other habitats.

More specifically for coastal hazards, the County’s Coastal Plan Policies document includes the following policies, designed to address Coastal Act policies 30253 and 30235:

Policy 1: New Development

⁴ Baird v. County of Contra Costa (1995) 32 Cal. App. 4th 1464; City of Long Beach v. Los Angeles Unified School District (2009) 176 Cal. App. 4th 889; South Orange County Wastewater Authority v. City of Dana Point (2011) 196 Cal. App. 4th 1604; Ballona Wetlands Land Trust v. City of Los Angeles (2011) 201 Cal. App. 4th 455.

All new development proposed within areas subject to natural hazards from geologic or flood conditions (including beach erosion) shall be located and designed to minimize risks to human life and property. Along the shoreline new development (with the exception of coastal-dependent uses or public recreation facilities) shall be designed so that shoreline protective devices (such as seawalls, cliff retaining walls, revetments, breakwaters, groins) that would substantially alter landforms or natural shoreline processes, will not be needed for the life of the structure. Construction of permanent structures on the beach shall be prohibited except for facilities necessary for public health and safety such as lifeguard towers. [THIS POLICY SHALL BE IMPLEMENTED AS A STANDARD.]

Policy 2: Erosion and Geologic Stability

New development shall ensure structural stability while not creating or contributing to erosion or geological instability. [THIS POLICY SHALL BE IMPLEMENTED AS A STANDARD AND PURSUANT TO SECTION 23.07.086 OF THE CZLUO.]

Policy 3: Development Review in Hazard Areas

The county shall require a detailed review of development proposed within the geologic study area and flood hazard combining designations as indicated on the Land Use Element maps for the coastal zone. The review shall be performed by a qualified registered and/or certified engineering geologist and shall be adequately detailed to provide recommendations and conclusions consistent with this plan. Residential, commercial and industrial development shall be prohibited within the 100 year floodplain (1% chance of inundation in any year) as delineated in the Flood Hazard combining designation except for those areas within an urban reserve line. [THIS POLICY SHALL BE IMPLEMENTED PURSUANT TO SECTIONS 23.07.082, 23.07.084, 23.07.062 AND 23.07.066 OF THE CZLUO.]

Policy 4: Limitations on the Construction of Shoreline Structures

Construction of shoreline structures that would substantially alter existing landforms shall be limited to projects necessary for:

- a. protection of existing development (new development must ensure stability without depending upon shoreline protection devices);*
- b. public beaches and recreation areas in danger of erosion;*
- c. coastal dependent uses;*
- d. existing public roadway facilities to public beaches and recreation areas where no alternative routes are feasible.*

These structures shall be permitted provided they are sited and designed to eliminate or mitigate adverse impacts on local shoreline sand supply, fish and wildlife provided that non-structural methods (e.g., artificial nourishment) have been proven to be infeasible or impracticable.

Shoreline structures include revetments, breakwaters, groins, harbor channels, seawalls, cliff-retaining walls and other such structures that alter natural shoreline processes. Retaining walls shall be permitted only where necessary to stabilize bluffs where no less environmentally

damaging alternative exists or where necessary for those projects defined above. Where shoreline structures are necessary to serve the above, siting shall not preclude public access to and along the shore and shall be sited to minimize the visual impacts, erosive impacts on adjacent unprotected property, encroachment onto the beach and to provide public overlooks where feasible and safe. The area seaward of the protective devices shall be dedicated for lateral public access. The protective devices shall utilize materials which require minimum maintenance and shall specify within the plans the agencies or persons responsible for maintenance.

In addition to county review, most shoreline structures require review by federal and state agencies. These may include permits required by the federal Environmental Protection Agency, U.S. Army Corps of Engineers, U.S. Department of Fish and Wildlife, California Regional Water Quality Control Board, State Lands Commission, California Coastal Commission, etc. [THIS POLICY SHALL BE IMPLEMENTED AS A STANDARD.]

Policy 5: Design and Construction of Shoreline Structures

Shoreline structures developed consistent with Policy 4 (including projects for maintenance and repair) shall be designed and constructed to mitigate or eliminate effects on local shoreline sand movement and supply. Construction activities shall be carefully managed to minimize unnecessary effects on natural landforms and shoreline processes. Upland grading and drainage shall be designed and constructed to avoid adverse impacts on bluff lines by channeling drainage away from the bluff where feasible. [THIS POLICY SHALL BE IMPLEMENTED AS A STANDARD AND PURSUANT TO SECTION 23.05.090 OF THE CZLUO.]

Policy 6: Bluff Setbacks

New development or expansion of existing uses on bluffs shall be designed and set back adequately to assure stability and structural integrity and to withstand bluff erosion and wave action for a period of 75 years without construction of shoreline protection structures which would require substantial alterations to the natural landforms along bluffs and cliffs. A site stability evaluation report shall be prepared and submitted by a certified engineering geologist based upon an on-site evaluation that indicates that the bluff setback is adequate to allow for bluff erosion over the 75 year period. Specific standards for the content of geologic reports are contained in the Coastal Zone Land Use Ordinance. [THIS POLICY SHALL BE IMPLEMENTED PURSUANT TO SECTION 23.04.118 OF THE CZLUO.]

Policy 7: Geologic Study Area Combining Designation

The GSA combining designation in coastal areas of the county is amended to include all coastal bluffs and cliffs greater than 10 feet in vertical relief and that are identified in the Assessment and Atlas of Shoreline Erosion (DNOD, 1977) as being critical to future or present development. Maps clearly distinguish the different geologic and seismic hazards which the county covers by the GSA combining designation. These hazards shall include steep slopes, unstable slopes, expansive soils, coastal cliff and bluff instability, active faults, liquefaction and tsunamis. [THIS POLICY SHALL BE IMPLEMENTED BY DESIGNATING GSA AREAS ON THE COMBINING DESIGNATION MAPS AND PURSUANT TO SECTION 23.07.080 OF THE CZLUO.]

Hazards Policy 11: Areawide Shoreline Erosion and Bluff Retreat Management Plan

The County should seek grant funding and develop a program with a long-term comprehensive approach to avoid permanent armoring of the shoreline and to minimize impacts on the shoreline in existing developed areas. The program also should offer a means to address some area-specific constraints. This includes preparation of an Areawide Shoreline Erosion and Bluff Retreat Management Plan focusing on annual bluff erosion rates, bluff setbacks, emergency armoring procedures, shoreline protection standards, structural design, engineering, monitoring and maintenance. [THIS POLICY SHALL BE IMPLEMENTED AS A PROGRAM.]

Hazards Policy 12: Geologic Hazards Mapping

As part of the periodic update of an area plan, the draft plan shall include development of a dynamic Geologic Hazards Map consistent with the Safety Element and updated geologic information. [THIS POLICY SHALL BE IMPLEMENTED AS A PROGRAM.]

Title 23 of the CZLUO contains a variety of standards to implement these policies, including blufftop setbacks (23.04.118), shoreline structure requirements (23.05.090), and flood hazard and geologic study area standards (23.07.060-086).

ClimateWise: Integrated Climate Change Adaptation Planning in San Luis Obispo County. In 2010, key stakeholders, elected officials, city and county planners, land managers, public health officials, concerned citizens, scientists, and the Local Government Commission initiated a process to address climate change adaptation in San Luis Obispo County. As part of this process, scientists from the Geos Institute identified anticipated climate change impacts in the region and threats to socioeconomic and natural systems. The range of potential impacts presented was based on projections of climate change in the San Luis Obispo region using three of the best-available models and an emission scenario drawn from those used by the IPCC and downscaled to California. This resulted in a report entitled, *ClimateWise: Integrated Climate Change Adaptation Planning in San Luis Obispo County* (The GEOS Institute and Local Government Commission, 2010), which identified potential impacts specifically in the Morro Bay vicinity. The ClimateWise Report identifies the following potential impacts related to coastal hazards (on page 29):

Coastal storms can cause coastal flooding of low-lying areas—inundating economically important infrastructure such as the harbors of Morro Bay and Port San Luis. The erosive impact of storms could also cause severe damage to coastal developments and facilities. Both of these coastal hazards are expected to become greater threats to coastal areas as sea level rises. Beach erosion will increase in many areas and may require more frequent sand replenishment.

The ClimateWise Report recommends strategies for addressing coastal hazards, including identifying high-risk areas and mapping failing infrastructure to prioritize repairs and improvements, reassessing local land use policies, protecting habitats, and increasing monitoring.

County of San Luis Obispo EnergyWise Plan: Designing Energy and Climate Solutions for the Future. The County recognizes that global climate change will result in significant impacts locally and throughout California unless substantial steps are taken to reduce GHG emissions. In November 2011,

the County adopted the document titled, *EnergyWise Plan: Designing Energy and Climate Solutions for the Future* (PMC, 2011). According to the plan (on pages 7-4 and 7-11):

Areas in San Luis Obispo County most at risk for sea level rise include Cayucos, Morro Strand State Beach, Avila Beach/Port San Luis Harbor, the Pismo Dunes/Oceano area, and San Simeon State Beach. With nearly 100 miles of coastline in San Luis Obispo County, sea level rise is likely to have the following effects: Increased erosion of coastal bluffs and risk of additional cliff failures; higher storm surges and coastal flooding, making transportation and local infrastructure vulnerable to inundation during storms; increased infrastructure and maintenance costs to protect local harbors and ports from storm surges and sea level rise; loss of coastal wetlands due to permanent inundation; saltwater intrusion into coastal freshwater supplies that serve local residents and agricultural uses.

The *EnergyWise Plan* proposes near-term, mid-term, and long-term adaptation measures for sea level rise, including measures such as requiring all new coastal-fronting development to account for sea level rise, developing common metrics for communicating sea level rise to assist with development decisions, training staff and educating the general public, updating the LCP, and regional collaboration.

4.4.2 Vulnerability Assessment

A vulnerability assessment identifies, evaluates, and measures the vulnerabilities in a system and was conducted for the entire coastal community of Los Osos to evaluate how the project may affect coastal resources over time. For purposes of this LOCP analysis, only parcel locations and land use types were analyzed. The vulnerability assessment found that, overall, coastal flood-related hazards may result in moderate risks to land use in the community of Los Osos. Longer-term tidal inundation may cause portions of Los Osos to be vulnerable to exposure to coastal hazards and could require substantial investment in adaptation measures to reduce vulnerabilities. Coastal storm flooding may also cause larger community impacts, but impacts could be relatively short lived and may occur during times of high tides and precipitation events.

a. Methodology. For the vulnerability assessment, the Technical Report analyzed the planning horizons of 2025, 2040, and 2100 using a high worst-case scenario. The worst-case scenario was determined by the National Research Council (NRC) in the 2012 report, *Sea-Level Rise for the Coasts of California, Oregon, and Washington: Past, Present, and Future*. Specifically, the vulnerability assessment used projections from Table 5-3 in the NRC report for the San Francisco (Central Coast) region, which included the regional subsidence (-1.5 millimeters/year) for the area south of Cape Mendocino. Tectonics in this region change at Cape Mendocino, to the north is the Juan de Fuca subduction zone and to the south is the San Andreas transform fault zone. Using these planning horizons, equation B3 from Appendix B of the Guidance (California Coastal Commission 2015), and the findings of the NRC 2012 report for San Francisco region yields the following table of sea level rise elevations by planning horizon (**Table 4.4-1**). Since this analysis was completed, the California Ocean Protection Council (OPC) released updated sea-level rise guidance in 2018. The OPC encourages the use of best available science in decision-making to prepare for and reduce climate change impacts on coastal development and infrastructure. The OPC recommended probabilistic projections for the height of sea-level rise at Port San Luis, assuming high emissions, for use in low, medium-high, and extreme risk aversion decisions, included in the following table for comparison (Table 4.4-1). The Los Osos Community Plan vulnerability assessment analysis aligns with the OPC-recommended projections for use in medium risk aversion decisions.

Table 4.4-1. Estimated Sea Level Rise by Planning Horizon for Los Osos

Planning Horizon	For this vulnerability assessment	2018 Ocean Protection Council Recommended Probabilistic Projections		
		Low Risk Aversion (66% Probability)	Medium-High Risk Aversion (0.5% Probability)	Extreme Risk Aversion (H++ Scenario)
Existing conditions	0	-	-	-
2025	0.5'	-	-	-
2040	1.5'	0.7'	1.8'	2.6'
2100	5.5'	3.1'	6.7'	9.9'

Source: Revell Coastal, 2016; Ocean Protection Council (OPC), 2018.

Table 4.4-1. Estimated Sea Level Rise by Planning Horizon for Los Osos

Planning Horizon	Sea Level Rise (inches)	Sea Level Rise (feet)
Existing conditions	0	0
2025	9.6	0.5
2040	17.6	1.5
2100	65.5	5.5

Source: Revell Coastal, 2016.

In addition, the 2019 Update for the San Luis Obispo County’s Multi-Jurisdictional Hazard Mitigation Plan (HMP) includes an updated vulnerability assessment surveying coastal flooding due to sea-level rise and storms using the OPC-recommended projections for use in extreme risk aversion decisions (H++ scenario) and the USGS Coastal Storm Modeling System (CoSMoS) version 3.1 for central California, released in 2019 (Wood, 2019). The CoSMoS maps are included and compared with the coastal flood hazard maps from this section in Appendix C for reference. For planning horizon years 2025-2050, the Revell maps identify larger estimates of flooded areas compared to the CoSMoS maps, even though the Revell maps are estimating lower levels of sea-level rise compared to the CoSMoS maps. This variation may be attributed to different assumptions in the modeling methodology. The CoSMoS map with projected sea-level rise of 9.8’ with 100-year flood levels includes the most flooded area out of all of the Revell and CoSMoS scenarios. The 5.5’ sea-level rise Revell map with 100-year flooding is comparable, with only a 24-acre difference in affected area, except for the flooding along Los Osos Creek. The Revell maps do not project flooding along the Los Osos Creek, however the CoSMoS maps do project flooding in this area.

In the Revell Coastal model used for this section, coastal flooding was derived from FEMA flood mapping, which includes consideration of storm surges, wind waves, and creek flooding from Chorro and Los Osos Creeks. After modeling these processes, the coastal bay storm base flood elevation was mapped by FEMA at a 13-foot elevation. Using a linear superposition method, the coastal bay storm effective base flood elevation was escalated using the sea level rise results from **Table 4.4-1**. Per standard FEMA practices, all elevations were rounded to the nearest half-foot. Results are shown in **Table 4.4-2** (Coastal Flooding: FEMA 100-Year Flood) and mapped for the Los Osos community in **Figure 4.4-2**.

Tidal inundation levels were determined using the Port San Luis, California Tidal Gage. As a conservative approach, a 100-year tide level (1-percent annual chance of occurrence) was selected as the baseline to reference sea level rise elevations. This tide elevation then was escalated, using the results shown in **Table 4.4-1**, to raise the tidal elevation to each planning horizon. Results of this escalation are shown in **Table 4.4-2** (Tidal Inundation – Port of San Luis 100-Year Tide Level) and mapped for the Los Osos community in **Figure 4.4-2**.

Table 4.4-2. Results of Coastal Flooding Analysis and Tidal Inundation		
Horizon	Sea Level Rise Elevation (NAVD feet)	Hazard Elevation (NAVD feet)
Coastal Flooding: FEMA 100-Year Flood		
2012	0	13
2025	0.5	13.5
2040	1.5	14.5
2100	5.5	18.5
Tidal Inundation – Port San Luis 100-Year Tide Level		
2015	0	7.64
2025	0.5	8.44
2040	1.5	9.10
2100	5.5	13.14

Source: Revell Coastal, 2016.

The coastal flooding and tidal inundation hazard zones were then spatially analyzed with the land use and parcel data to identify vulnerabilities with the results summarized in as **Table 4.4-3**. Spatially explicit map results are shown in **Figures 4.4-1 and 4.4-2**.



Figure 4.4-1. Coastal Hazards in the Community Plan Area

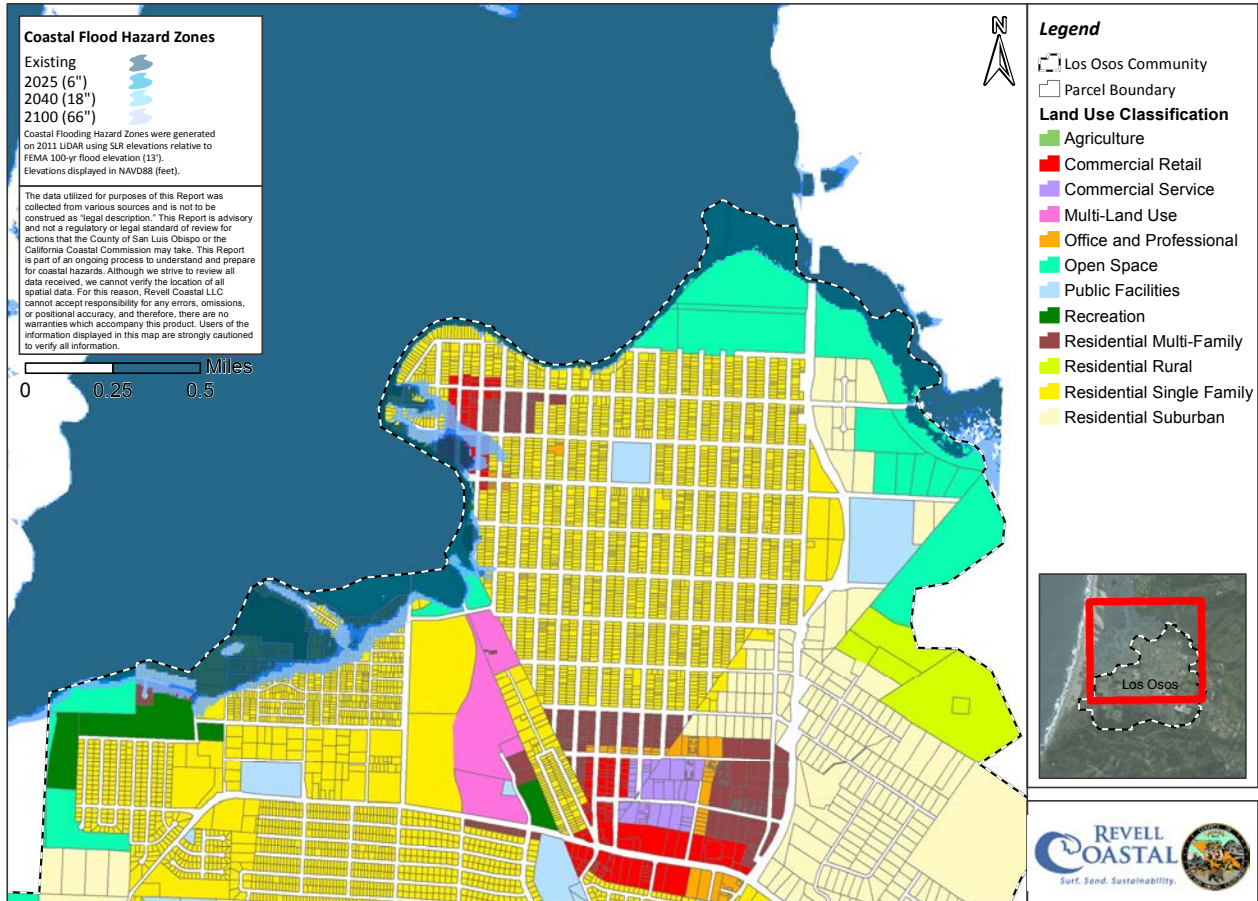


Figure 4.4-2. Coastal Hazard Impacts to Planned Land Uses

Table 4.4-3. Summary Results of Vulnerability Assessment

METRIC	# Parcels							Acreage						
	Residential	Open Space	Recreation	Commercial Retail	Whitehole	Public Facilities	Total	Residential	Open Space	Recreation	Commercial Retail	Whitehole	Public Facilities	Total
UNITS	count	count	count	count	count	count	count	Acres	Acres	Acres	Acres	Acres	Acres	Acres
Community Total	5698	23	15	196	9	11	5952	2888	168	129	92	110	75	3463
Coastal Flooding														
Existing conditions	263	15	7	17	5		307	31.2	36.7	24.9	2.9	35.0		130.7
2025	292	15	7	17	5		336	34.0	37.2	24.9	3.0	35.2		134.4
2040	322	15	8	25	7		377	40.5	38.4	24.9	3.5	35.6		143.0
2100	457	15	8	48	7		535	69.8	41.4	25.1	7.2	37.3		180.8
Tidal Inundation														
Existing conditions	102	14	6	1	5		128	5.7	18.1	17.8	0.0	28.9		70.5
2025	110	14	6	3	5		138	7.7	22.2	20.2	0.0	31.4		81.5
2040	124	14	7	4	5		154	9.7	25.8	22.4	0.2	32.4		90.5
2100	266	15	7	17	5		310	34.1	35.2	26.6	2.9	35.0		133.7

Source: Revell Coastal, 2016.

Findings. For purposes of the CEQA analysis, the vulnerability assessment analyzed land use acreages exposed to coastal flooding and tidal inundation. Coastal storm flooding will have a larger impact to the community, but the impacts are relatively short lived occurring primarily during high tides and precipitation events. For coastal storm flooding, damages could likely be cleaned up without having to implement more expensive adaptation measures. Under existing conditions, a total of 130.7 acres of existing land use is subject to coastal flooding. By 2040, with build out of the existing Community Plan, a total of 143 acres would be vulnerable to coastal flooding. Of this total acreage exposed to coastal flooding, 44 acres (or 30.7 percent) consists of developed land uses (either residential or commercial). By 2100 with 5 feet of sea level rise, the vulnerable acreage expands to 180.8 acres. Of those exposed, 77 acres (or 42.6 percent) affected would be residential or commercial development. Between 18 and 65.5 inches of sea level rise, the vulnerable acreage doubles. Regardless, the risk of coastal flooding to the community of Los Osos in 2100 is relatively small; potential impacts would affect only 2 percent of all residential development and 7.8 percent of commercial properties.

Tidal inundation would affect slightly fewer acres, particularly in the Open Space land use category, resulting in less intense impacts on passive recreational uses. Routine flooding of the salt marshes may actually enhance the overall wetland community if marshes are allowed to advance landward and accrete sediment. Under existing conditions, the highest numbers of acreages exposed to tidal inundation are in the land use categories of Whitehole (i.e. undefined land use), Open Space, and Recreation. By 2040 under build out for the existing Community Plan, a total of 90.6 acres would be exposed to tidal inundation, with 9.9 acres (10.9 percent) of this land affecting residential and commercial development. By 2100 with approximately 5 feet of sea level rise; 133.7 acres of land use would be affected, with 37 acres (or 27.7 percent) of tidal inundation affecting residential and commercial properties (Revell Coastal, 2016).

4.4.3 Impact Analysis

a. Methodology and Significance Thresholds. This impact analysis subsection presents the significance criteria against which potential impacts are evaluated and discusses potential impacts that would result from implementation of the proposed project. The significance criteria are based primarily on Appendix G of the State CEQA Guidelines. As defined by Section 15064.7(a) of the State CEQA

Guidelines, thresholds of significance are an identifiable quantitative, qualitative, or performance standard for a particular environmental effect.

Methodology. The significance criteria presented in this EIR provide the basis for determining whether the project would result in significant environmental effects, and as such are presented before the evaluation of potential impacts of coastal hazards.

In determining the significance of impacts, two levels of analysis were utilized. The first test was a policy (i.e. regulatory) comparison for consistency. This was accomplished by reviewing the proposed policies, programs, and standards of the LOCP for addressing coastal hazards against various Coastal Act policies and the Coastal Commission’s adopted *Sea Level Rise Policy Guidance* (2015); as well as existing LCP policies, programs, and ordinances. The second test was examining those parcels that would be re-designated for more intensive land uses than what is allowed under the Estero Area Plan, as agencies must evaluate existing environmental conditions in order to assess whether a project could exacerbate hazards that are already present.

“Significant effect on the environment” for purposes of this analysis is the substantial, or potentially substantial, adverse change in the environment, including an adverse change in exposure of people by a proposed project to a substantial, existing or reasonably foreseeable natural hazard or adverse physical environmental condition (State CEQA Guidelines Sections 15358 and §15002[g]). The “project” for purposes of this analysis is defined as the LOCP’s proposed policies that guide future development consistent with the land use pattern and buildout envisioned under the plan, and described more fully in Section 2.0 of this EIR. “Coastal hazards” for purposes of this analysis is a combination of coastal flooding and tidal inundation. The “environment” for purposes of this analysis is defined as both existing and future conditions of the study area.

Significance Thresholds. With respect to “coastal hazards,” there are no industry-standard quantifiable thresholds of significance in the state or for San Luis Obispo County specifically. Therefore (consistent with the CCC’s *Sea Level Rise Policy Guidance*), impacts generated by coastal hazards would be considered significant if build out of the LOCP would:

1. Conflict with the Coastal Act or an applicable plan, policy, or regulation adopted for the purpose of either implementing the Coastal Act, or reducing the impacts of sea level rise (i.e. coastal hazards)?
2. Place or adversely impact coastal resources and/or proposed development in the projected areas of coastal hazards exacerbated by sea level rise (i.e. coastal hazards)?

b. Impacts and Mitigation Measures

Impact CH-1 **Development under the Los Osos Community Plan would potentially conflict with the Coastal Act and applicable plans, policies, regulations and guidance approved by the California Coastal Commission for the purpose of protecting coastal resources and reducing the impacts of sea level rise (i.e. coastal hazards). Therefore, projected impacts of coastal hazards represent a Class II significant but mitigable impact.**

Consistent with the Coastal Act, the County’s LCP requires that new development minimize risks to human life and property and be designed to avoid shoreline structures that would substantially alter landforms or natural shoreline processes (Policy 1). New development must also ensure structural stability and not contribute to geological instability (Policy 2; CZLUO 23.07.086(c)).

The proposed LOCP recognizes that climate change and sea level rise is a “major threat” to the Morro Bay estuary, and that sea level rise could impact residences and businesses, as well as infrastructure such as road and wells, along the bay (LOCP 2.2.3). The draft plan also recognizes some, but not all, of the LCP’s existing policies that require the protection of sensitive coastal resources, such as terrestrial habitats and groundwater resources (Chapter 2). The plan does summarize the various combining designations relevant to Los Osos, including the Geologic Study Area (GSA), Flood Hazards (FH) and the Sensitive Resource Area (SRA) designation, especially that related to the Morro Bay Estuary and Shoreline (LOCP 4.5.6(A1)). Finally, the draft LOCP includes a proposed planning area standard 7.3(H) for shoreline development that mirrors the standard in the Estero Area Plan approved by the County and Coastal Commission in 2009. This standard addresses application requirements to address coastal hazards, bluff setbacks, seawalls and assumption of risk.

However, the proposed LOCP does not include sufficient policies, programs or standards to adequately implement the required coastal hazards or sensitive resource protection policies and standards of the Coastal Act and the LCP with respect to the projected impacts of sea level rise. In particular, other than brief discussion in section 2.2.3 and the reference to Appendix G of the Estero Area Plan, which does require consideration of sea level rise in calculating bluff retreat rates, there is no specific mention of sea level rise or requirements to account for its impacts, such as increased flooding and inundation, in the planning and design of new development. In addition, none of the suggested recommendations contained in the County’s EnergyWise Plan are included in the draft LOCP, nor does the draft LOCP include adequate policies, standards or programs that directly address the CCC *Sea Level Rise Policy Guidance*, including the suggested approaches for addressing sea level rise in an LCP. Therefore, the project, as proposed, does not minimize coastal hazards and related environmental resource impacts through planning and development standards or adequately protect coastal resources, in light of projected sea level rise (CCA Sections 30253, 30235; 30200 et seq; 30001, 30001.5). For example, it cannot be demonstrated that the project adequately accomplishes the following:

- Avoids significant coastal hazard risks to new development where feasible.
- Minimizes hazard risks to new development over the life of authorized structures.
- Minimizes coastal hazard risks and resource impacts when making redevelopment decisions.
- Accounts for the social and economic needs of the people of the state; assures priority for coastal-dependent and coastal-related development over other development.
- Ensures that property owners understand and assume the risks, and mitigate the coastal resource impacts, of new development in hazardous areas (California Coastal Commission, 2015).
- Protects the wetland resources of the Morro Bay Estuary.
- Protects public access resources along the Los Osos shoreline.

Mitigation Measures. Implementation of the mitigation measures below which includes development of Coastal Hazards policies and implementation mechanisms consistent with the California

Coastal Act, the Coastal Commission’s SLR Guidance Document, and existing County LCP requirements, will mitigate the above deficiencies in the LOCP to a less than significant level.

CH-1(a) Additional Plan Framework Text. The following text shall be incorporated within the updated LOCP to address Coastal Act requirements and ensure that impacts would be reduced to the extent possible (proposed new language is *italicized*):

1. Add the following sentence at the end of the second paragraph of section 2.2.3 (Environmental Resources, p. 2-4) that addresses Coastal Act sections 30230 and 30231 requirement to maintain, enhance and where feasible restore marine, wetland and estuary resources: *“Planning and development decisions, and new programs, should be implemented to assure the protection and maintenance of the Morro Bay estuary as sea level rises.”*
2. Add Coastal Plan Hazards 1-7, 11 and 12; and ESH Policies 7-10, 13 and 16 to policy summaries in section 2.4.
3. On page 2-16, add new subsection (B) to PS-3 to require consideration of future vulnerability in public services planning and development: *“PS-3(B): Address future vulnerability to sea level rise in planning and development of new public services and adaptive redevelopment of existing services.”*
4. Amend LU-1, to maintain hard *inland* edge and a soft *bayside* edge to protect future wetland and estuary function in light of sea level rise, and add a requirement to monitor sea level rise. Add a new program (LU-1.2 and reiterate as EN 1.7), to provide for no net loss of wetland acreage or biological and recreational function in Morro Bay Estuary in light of projected sea level rise:

LU-1. Maintain a hard inland urban edge around the community of Los Osos, surrounded by a well-managed community greenbelt, *and a soft bayside edge to protect future wetland and estuary function in light of sea level rise.*

A. *Prevent the net loss of wetland acreage or biological and recreational function of Morro Bay Estuary in Los Osos due to sea level rise by providing for natural inland migration of wetlands and protection and restoration of wetlands.*

B. *Monitor the trends in sea level rise at the Port San Luis tide gauge (NOAA ID #9412110, https://tidesandcurrents.noaa.gov/sltrends/sltrends_station.shtml?stnid=9412110)*

Program LU-1.1: Los Osos Greenbelt.

Program LU-1.2: Morro Bay Estuary Protection. The County should support the protection of wetland resources, which may become increasingly vulnerable to hard shoreline coastal hazard protection measures in light of sea level rise, by developing and implementing a strategy for achieving no net less of wetland acreage or biological and recreational function along the Los Osos shoreline. The County should

support efforts of public agencies, conservation organizations, and others to acquire easements and properties in fee along the shoreline, as well as the use of redevelopment/planned retreat strategies, and adaptive public access and recreation management plans to achieve wetland protection and hazard mitigation goals.

5. Add the Morro Bay Estuary to LU-2 as resource protection reason for concentrating and clustering development as follows:

LU-2. Concentrate or cluster development to protect contiguous environmentally sensitive areas *and the Morro Bay Estuary, including the habitat of rare, endangered and other sensitive species, and other biologically important communities.*

6. Add new program/language to assess and plan for vulnerability of public access resources in light of sea level rise (add new program 1.5 to follow policy CIR-1):

Program CIR-1.5. Sea Level Rise and Public Access. The County should protect public access resources by assessing their vulnerability to sea level rise and planning for their protection, including through planned retreat as necessary.

Plan Requirements and Timing. The Planning and Building Department shall add the recommended policies and language to the LOCP prior to Plan adoption.

Monitoring. Planning and Building shall ensure that the above changes are included in the LOCP prior to adopting the plan.

CH-1(b) New Text and Combining Designations to address Sea Level Rise. The following changes to Chapter 4 of the updated LOCP should be made to address Coastal Act requirements and ensure that impacts would be reduced to the extent possible:

1. Add mapped projected sea level rise zone to 4.5.3 FH designation:

4.5.3 Flood Hazard (FH)

Los Osos Creek. The flood-prone natural drainage course should be maintained in its natural state to protect native vegetation and wildlife habitats.

Sea Level Rise Flooding and Inundation Zone. This zone may be subject to increased flooding and inundation due to future sea level rise. New development and redevelopment within this zone should carefully assess and minimize potential hazards for the life of the development through siting, design consistent with CLZUO 23.07.060-066, and where necessary or appropriate, relocation of development. Intensification of development should be avoided.

2. Add text to 4.5.6(A) discussion of Morro Bay Estuary and Shoreline to recognize future vulnerability of wetland resources to rising sea levels.:

4.5.6. Sensitive Resource Area (SRA)

The following SRAs ...

Morro Bay Estuary and Shoreline

The purpose of the SRA standards for the following SRAs is to protect wetlands, riparian, and other sensitive habitat, and to provide required public access. *This SRA protection is even more important given projected sea level rise and the associated potential vulnerability of these resources.* The estuary and shoreline support...

3. Add SLR flooding and inundation projection map to Chapter 4.

Plan Requirements and Timing. The Planning and Building Department shall add the recommended policies, language and maps to the LOCP prior to Plan adoption.

Monitoring. Planning and Building shall ensure that the above changes are included in the LOCP prior to adopting the plan.

- CH-1(c) New Text to Address Circulation Vulnerability.** Add New Section 5.4 to Chapter 5 and new Program CIR-5 to Chapter 2 to address vulnerability of circulation network to sea level rise:

5.4 Sea Level Rise and Circulation.

The circulation system of Los Osos, including roads, bicycle facilities, and pedestrian and public accessways may be increasingly vulnerable as sea level rises. The County should pursue the assessment of the vulnerability of the circulation system to support the development of new strategies and public works investments to minimize impacts to circulation due to projected sea level rise (see Program CIR-5).

Program CIR-5. Assess the vulnerability of the Los Osos circulation system to sea level rise, including potential impacts to public access resources under CIR-1.5, to assure the maintenance of adequate community circulation and protection of public access to and along the shoreline through future planning and development decisions. Update the Community Plan to provide for continued public access, taking into account projected sea level rise for 100 years. Coordinate with transportation agencies to plan for and phase implementation of new road projects.

Plan Requirements and Timing. The Planning and Building Department shall add the recommended policies and language to the LOCP prior to Plan adoption.

Monitoring. Planning and Building shall ensure that the above changes are included in the LOCP prior to adopting the plan.

CH-1(d) Sea Level Rise Standards. Amend LOCP Planning Area Standards to address future sea level rise.

1. Amend Communitywide Standard 7.3 E(1) as follows:

Applicability. In the following locations or circumstances, development shall be clustered, ~~or~~ concentrated *or setback* as described below ...

2. Add language to Communitywide Standard 7.3E(2)(a) requiring an evaluation of projected sea level rise and impacts on a site for areas located within the Sea Level Rise Flooding and Inundation Zone FH overlay (Ch-1(b), based on the best available science, for the life of a project:

- a. *Application Content.* In addition to the application requirements of the Coastal Zone Land Use Ordinance or other sections of this Chapter, *the applicant shall submit an evaluation of projected sea level rise and impacts on a site for areas located within the Sea Level Rise Flooding and Inundation Zone FH overlay, based on the best available science, for the life of a project. In addition, the applicant shall submit, ...*

3. Add language to Communitywide Standard 7.3E(2)(c) requiring development to be setback from wetland vegetation as required by CZLUO or other sections of the LCP, plus an additional distance to provide for inland migration of wetland resources based on a professional assessment of projected sea level rise:

- c. *Setbacks.* In order to comply with Subsection 5.b above, structures may need to be set back a distance greater than the applicable minimum setbacks required by the Coastal Zone Land Use Ordinance or other sections of this Chapter. *In addition, development should meet all required wetland vegetation setbacks, plus an additional distance to provide for inland migration of wetland resources based on a professional assessment of projected sea level rise, using best available science.*

4. Add language to Standard 7.3E(2) to prohibit creation of new parcels that could not be developed consistent with required wetland setbacks taking into account projected sea level rise for 100 years:

Extent and Intensity of Development. *If required by the Review Authority, the number of dwelling units, intensity of development and site coverage shall be reduced to protection of identified sensitive features on or adjacent to the site. Creation of new lots that would be undevelopable with applicable wetland setbacks, taking into account*

100 years of projected sea level rise, are prohibited unless the purpose is to put them into open space.

5. Add language to Standard 7.3E(2) required finding that development shall not diminish the long-term sustainability of the biological resources, including taking into account projected sea level rise and related wetland retreat for the life of the project:

Required Finding. The land division or discretionary land use permit shall not be approved unless the Review Authority first finds, in addition to other required findings, that development shall not significantly disrupt or cause significant adverse environmental impacts to the preceding sensitive features, and shall not diminish the long - term sustainability of the biological resources, including taking into account projected sea level rise and related wetland retreat for the life of the project.

6. Add additional criteria to Communitywide Standard 7.3F to require that the maintenance, design and provision of public accessways consider projected sea level rise for at least 50 years:

F. Coastal Access and Recreation. Opportunities for public access to and along the coast shall be maximized as follows:

1. New development shall be required to provide public access and improvements to and along the coast, and shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization.
2. Public access and improvements to and along the coast shall be consistent with the Circulation Element, Chapter 5 (and corresponding policies in Chapter 2) of this plan, and the coastal access policies in Chapter 2, Section 2.5.4 of this plan.
3. Public access shall be consistent with protection of sensitive habitat and agriculture.
4. Any existing free public access to recreational areas shall be maintained.
5. New publicly - developed coastal access and recreation shall include requirements for resource monitoring and management, and provision of interpretive facilities at points of attraction, consistent with Chapter 23.04 of the Coastal Zone Land Use Ordinance.
6. *The design, provision and maintenance of public accessways shall take into account projected sea level rise for at least 50 years.*
7. *Existing accessways vulnerable to coastal hazards shall be maintained through planned retreat or other appropriate measures.*

7. Amend Standard 7.3(H) as follows:

H. **Shoreline Development.** New development or expansion of existing uses proposed to be located on or adjacent to a shoreline, beach or coastal bluff are subject to the following standards:

1. Application Content. In addition to the application requirements of the Coastal Zone Land Use Ordinance and other Estero Urban Area Plan Standards, applications for new development or expansion of existing uses proposed to be located on or adjacent to a shoreline, beach or coastal bluff, *or in the Sea Level Rise Flooding and Inundation Zone FH as applicable*, shall include the following:

- a. An analysis of beach erosion, wave run-up, inundation and flood hazards prepared by a licensed civil engineer with expertise in coastal engineering and a slope stability analysis, prepared by a licensed Certified Engineering Geologist and/or Geotechnical Engineer or Registered Civil Engineer with expertise in soils, in accordance with the procedures detailed by Appendix G of the Estero Area Plan. *In addition, the report shall assess the impact of projected sea level rise on these hazards, for the life of the project, based on the best available science.* The report shall include an alternatives analysis to avoid or minimize impacts to public access.
- b. On lots with a legally established shoreline protective device, the analysis shall describe the condition of the existing seawall; identify any impacts it may be having on public access and recreation, scenic views, sand supplies, and other coastal resources; and evaluate opportunities to modify or replace the existing armoring device in a manner that would eliminate or reduce these impacts. The analysis shall also evaluate whether the development, as proposed or modified, could be safely established on the property for a one hundred year period without a shoreline protective device, *taking into account projected sea level rise.*

.....

- d. Surveyed location of all property lines and the mean high tide line, *and projected MHT based on projected sea level rise for the life of the project*, by a licensed surveyor *familiar with coastal processes and tidal boundaries* along with written evidence of full consent of any underlying land owner, including, but not limited to the County, State Parks, and State Lands. If application materials indicate that development may impact or encroach on tidelands or public trust lands, the County shall consult with Coastal Commission staff regarding the potential need for a Coastal Development Permit from the Coastal Commission. *Upon encroachment, developments shall be required to be removed from public tidelands unless otherwise allowed to remain by an amendment to the original*

coastal permit and authorization by the California State Lands Commission.

....

2. **Bluff Setbacks.** The bluff setback is to be determined by the engineering geology analysis required in Subsection I.1.a. above and shall be adequate to withstand bluff erosion and wave action for a period of 100 years, *taking into account projected sea level rise*. In no case shall bluff setbacks be less than 25 feet. Alteration or additions to existing development that is nonconforming with respect to bluff setbacks that equals or exceeds 50 percent of the size of the existing structure, on a cumulative basis beginning July 10, 2008, shall not be authorized unless the entire structure is brought into conformance with this setback requirement and all other policies and standards of the LCP. On parcels with legally established shoreline protective devices, the setback distance may account for the additional stability provided by the permitted seawall, based on its existing design, condition, and routine repair and maintenance that maintain the seawall's approved design life. Expansion and/or other alteration to the seawall shall not be factored into setback calculations.

3. **Seawall Prohibition.** Shoreline and bluff protection structures shall not be permitted to protect new development. All permits for development on blufftop or shoreline lots that do not have a legally established shoreline protection structure shall be conditioned to require that prior to issuance of any grading or construction permits, the property owner record a deed restriction against the property that ensures that no shoreline protection structure shall be proposed or constructed to protect the development, and which expressly waives any future right to construct such devices that may exist pursuant to Public Resources Code Section 30235 and the San Luis Obispo County certified LCP. *The restriction shall also provide for the removal of the development if it is deemed uninhabitable by a public official due to coastal hazard risks, or if the development is otherwise in imminent danger. These restrictions shall be specifically disclosed in all real estate transactions.*

4. **Liability.** As a condition of approval of development on a beach or shoreline which is subject to wave action, erosion, flooding, landslides, or other hazards associated with development on a *shoreline*, beach or bluff, *taking into account projected sea level rise*, the property owner shall be required to execute and record a deed restriction which acknowledges and assumes these risks and waives any future claims of damage or liability against the permitting agency and agrees to indemnify the permitting agency against any liability, claims, damages or expenses arising from any injury or damage due to such hazards.

CH-1(e) Saltwater Intrusion Policies. Include policies that are outlined in the 2015 Updated Basin Plan for The Los Osos Groundwater Basin that establish a long-term strategy for addressing saltwater intrusion into aquifers, including limiting development or groundwater extraction that would use sensitive aquifers, as applicable.

Plan Requirements and Timing. The Planning and Building Department shall evaluate and include Basin Plan policies as appropriate to the LOCP prior to Plan adoption.

Monitoring. Planning and Building shall ensure that the above changes are included in the LOCP prior to adopting the plan.

Residual Impacts. Impacts will be reduced to a less than significant level after proposed mitigation.

Impact CH-2 Development under the Los Osos Community Plan would create a substantial, or potentially substantial, adverse change in the environment, including an adverse change in exposure of people by a proposed project to a substantial, existing or reasonably foreseeable, natural hazard or adverse physical environmental condition. Therefore, coastal hazard locations represent a Class II impact, as the impact is significant but mitigable.

According to *California Building Industry Association v. Bay Area Air Quality Management District (2015)*, lead agencies still must evaluate existing environmental conditions in order to assess whether a project could exacerbate hazards that are already present. At the same time, the Court upheld State CEQA Guidelines Section 15126.2(a), “Similarly, the EIR should evaluate any potentially significant impacts of locating development in other areas susceptible to hazardous conditions (e.g., floodplains, coastlines, wildfire risk areas) as identified in authoritative hazard maps, risk assessments or in land use plans addressing such hazardous areas”). These portions of Section 15126.2(a), the Court concluded, are valid to the extent they call for evaluating impacts *that change the environment*, if introducing the project and its residents may exacerbate existing environmental hazards. In other words, by placing the project (i.e., placing future residents in harm’s way) within areas experiencing coastal flooding and tidal inundation, the project will have a significant effect on exacerbating those same coastal hazards now and into the future. Therefore, the project will have an effect on the environment. According to the Court, considering how a project might worsen existing conditions—including effects of such worsened conditions on a project’s future users or residents—is consistent with this focus and with CEQA as a whole (Pillsbury Winthrop Shaw Pittman LLP, 2015).

Only those LOCP parcels that are along the Los Osos coastline (as described in the Technical Report) were evaluated for purposes of CEQA, with a particular focus on those that would be re-designated for more intensive land uses than what is allowed under the Estero Area Plan (Figure 4.4-3). According to **Table 4.4-4**, LOCP Parcels #1, #2, #3, #5, #9, #20, and #23 are presently experiencing coastal hazards impacts because of existing conditions (i.e., coastal flooding and tidal inundation). This equates to approximately 60 percent of the coastal community parcels analyzed experiencing a potentially significant impact from the environment. However, only LOCP Parcels # 4, 5, and 9 are proposed for a change in land use, with an associated increase in development intensity (i.e., upzoning). Out of these

three parcels, LOCP Parcel #5 is experiencing both coastal flooding and tidal inundation; LOCP Parcel #9 is experiencing coastal flooding now and is expected to be within the tidal inundation hazard zone by 2100; and LOCP Parcel #4 is expected to be within the coastal flooding hazard zone by 2100. (Revell Coastal, 2016).

The combination of existing conditions and increase in development intensity meets the definition of “significant effect on the environment,” which is the substantial, or potentially substantial, adverse change in the environment, including an adverse change in exposure of people by a proposed project to a substantial, existing or reasonably foreseeable, natural hazard or adverse physical environmental condition (State CEQA Guidelines Sections 15358 and 15002[g]). This is further substantiated in PRC Section 21083(b)(3). Therefore, project impacts on LOCP Parcels #4, #5 and #9 are considered “significant but mitigable.” The remaining LOCP parcels were either “neutral” due to a lack of development intensity (i.e., Open Space, which does not put residents or structures in harm’s way) or “less than” because of a “downzone” in proposed development intensity.

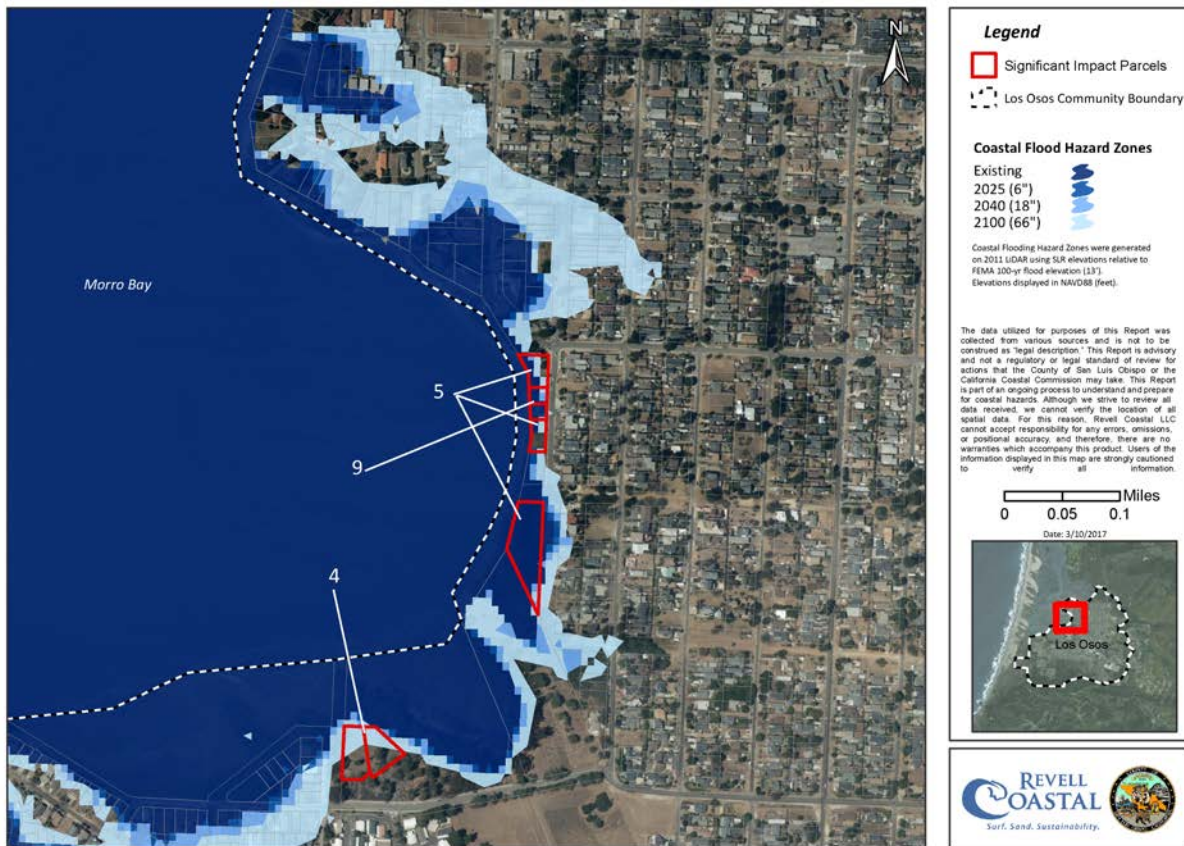


Figure 4.4-3. Significantly Impacted Parcels by Coastal Hazards

Table 4.4-4: Summary Results of Level of Impact (Significance) for Coastal Hazards Impacts

Community Plan Parcel #	Within Coastal Flood Hazard Zone	Within Coastal Tidal Hazard Zone	Impacted Within Project Buildout?	Existing Land Use	Proposed Land Use	Decreased/ Increased Intensity	Impacted Area and Increase in Density?	CEQA Level of Significance
1	Existing Conditions	Existing Conditions	Yes	No LU	OS	Neutral	No	Neutral
2	Existing Conditions	Existing Conditions	Yes	No LU	OS	Neutral	No	Neutral
3	Existing Conditions	Existing Conditions	Yes	RSF	OS	Decrease	No	Less Than
4	2100	No	Yes	No LU	RSF	Increase	Yes	Greater Than
5	Existing Conditions	Existing Conditions	Yes	OS	Rec	Increase	Yes	Greater Than
6a	No	No	No	RSF	Rec	Decrease	No	Less Than
9	Existing Conditions	2100	Yes	OS	PF	Increase	Yes	Greater Than
14	No	No	No	RR	OS	Decrease	No	Less Than
20	Existing Conditions	Existing Conditions	Yes	OS	OS	Neutral	No	Neutral
22	No	No	No	RSF	REC	Decrease	No	Less Than
23	Existing Conditions	Existing Conditions	Yes	RS	OS	Decrease	No	Less Than
25	No	No	No	RS	OS	Decrease	No	Less Than

Source: Revell Coastal, 2016.

Mitigation Measures. The following mitigation measure is required to ensure that impacts would be reduced to the extent possible:

CH-2(a) Parcels 4, 5 and 9 Development Limitations. Development of Community Parcels #4, 5 and 9 should follow appropriate setback and building standards to avoid future coastal hazards for the life of the proposed development without the use of shoreline protection devices.

Residual Impacts. Impacts will be reduced to a less than significant level after mitigation.

d. Cumulative Impacts. The evaluation of the LOCP in this EIR, which includes buildout of the Los Osos community, accounts for all of the expected and foreseeable growth in the Los Osos area. For that reason, project-specific impacts are considered the same as cumulative impacts. As described above, this includes significant but mitigation impacts related to coastal hazards and sea level rise. Impacts related to coastal hazards are expected to be less than significant through the implementation of proposed policies, including those included in the proposed LOCP. Cumulative impacts were evaluated comprehensively in this EIR at a programmatic level based on available information. As future applications for individual projects are submitted at a project level of detail, the precise evaluation of future project cumulative impacts would be coordinated through individual project-level environmental review as appropriate.

e. Subsequent Environmental Review for Future Development Projects in the Community Plan Area. Pursuant to CEQA Guidelines Section 15183, additional CEQA review is not required for projects that are consistent with the development density established by existing zoning, community plan or general plan policies for which an EIR was certified, except as might be necessary to examine whether there are project-specific effects which are peculiar to the project or its site. **Table 4.4-5** describes conditions under which future development in the study area would require additional CEQA review, pursuant to Section 15183.

Table 4.4-5. Conditions Under Which Future Development in the Community Plan Area Would Require Additional CEQA Review	
Condition	Impact to Address
<i>The future project is inconsistent with underlying General Plan and zoning designations.</i>	CH-1 and CH-2
<i>The future project is inconsistent with Community Plan policies or design guidelines.</i>	CH-1 and CH-2
<i>The future project would result in an impact peculiar to the project or parcel in any issue area. An effect is not considered peculiar if uniformly applied development policies or standards previously adopted by the County would substantially mitigate the environmental effect.</i>	Impact that is peculiar to the project or parcel
<i>The future project would result in an impact or impacts not analyzed above, including off-site or cumulative effects.</i>	Impact other than CH-1 and CH-2
<i>The future project would result in an impact or impacts analyzed above, but at a higher level of severity as a result of substantial new information not known at the time the EIR was certified.</i>	Worsened CH-1 and CH-2, as applicable
<i>The future project as proposed is within the Coastal Hazard Overlay</i>	CH-1 and CH-2